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OPERATIONAL READINESS REVIEW PHASE-1 FINAL REPORT FOR WRAP-1

WILLIAM BOWEN

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U.S. Department of Energy Contract DE-AC06-87RL10930

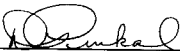
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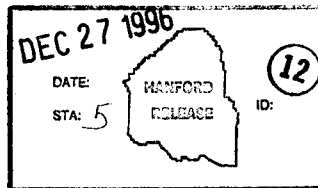
Abstract: This report documents the Operational Readiness Review for
WRAP-1 Phase-1 operations. The report includes all criteria, lines of
inquiry with resulting Findings and Observations. The review included
assessing operational capability of the organization and the computer
controlled process and facility systems.

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**WASTE RECEIVING AND PROCESS FACILITY (MODULE 1)
(WRAP 1)**

**OPERATIONAL READINESS REVIEW, PHASE 1 FINAL REPORT
(ORR, PHASE 1)**

**PERFORMED
NOVEMBER 4, 1996 to NOVEMBER 14, 1996**

**PREPARED BY
RUST FEDERAL SERVICES
OPERATIONAL READINESS REVIEW TEAM**

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SECTION I

SIGNATURE PAGE

**Waste Receiving and Processing Facility (Module 1)
Operational Readiness Review Final Report
Review Team Approval Signatures**

PERFORMED: November 4, 1996 to November 14, 1996

ISSUED BY: RUST FEDERAL SERVICES

APPROVED BY:

REVIEW TEAM LEADER:

W. W. Bowen

Date

REVIEW TEAM MEMBERS:

Date

Date

Date

Date

SECTION II

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The Waste Receiving and Processing (WRAP) Facility Operational Readiness Review was performed per *WHC-CM-5-34, Solid Waste Disposal Operations Administration, Section 1.4, Operational Readiness Activities*, and *WHC-IP-1048, Operational Readiness Activities, Section 1, Performance of Operational Readiness Reviews*. The ORR team concludes that the WRAP facility will be ready to operate after satisfactorily completing the Pre-start list of findings. (See Conclusions and Categorization Section V)

A Plan of Action (POA), which specifies the requirements for startup, was developed by the facility and approved by DOE-RL. From the approved POA, the ORR Implementation Plan (ORRIP) was developed and approved by the Review Team. The ORRIP was used to define and control the process by which the Review Team conducted its review. The scope of the ORR was limited to only the waste drum shipping/receiving, and NDE/NDA operations of the facility. Other facility operations will be evaluated for readiness at a later point in time. The ORR Review Team was comprised of personnel of various backgrounds and specialties. The Review Team was made up of individuals from RUST Federal Services, but independent of WRAP, as well as from most of the other contractors on the Hanford site.

The ORR consisted of documentation review, observing plant operations and drills, personnel interviews, hand-over-hand inspections, and facility walk-downs. Each Review Team member was assigned a review area based on their personal experience and knowledge base as well as what was required by the implementation plan.

At the conclusion of the field activity, the entire team reviewed and agreed on each of the findings and observations. The impact on safety, and whether or not each finding should be designated as a prestart or poststart condition was also discussed and agreed on by the entire team. Findings designated as safety significant are those items that effect personnel safety. Observations designated as safety significant are those items that if implemented would enhance personnel safety.

SECTION III

INTRODUCTION

INTRODUCTION

[Phase I of the WRAP operational plan is only for drum shipping/receiving and NDA/NDE. The Transuranic (TRU) Process Line, Low Level Waste (LLW) Process Line, Restricted Waste Management (RWM) Process Lines, TRUPAC storage and handling equipment, Box NDE/NDA, and any associated support equipment for these systems will not initially be operated, and therefore, will not be part of this initial review phase. Any reference to these systems is for information only, and has no bearing on this review, and will be so designated in text with [].

The purpose of this review was to ensure facilities, equipment, personnel, procedures, and management control systems are in place to operate WRAP 1 safely, efficiently, and in compliance with all applicable requirements. For the startup of a new Hazard Category 3 Nuclear Facility (WRAP 1) WHC-CM-5-34, *Solid Waste Disposal Operations Administration*, Section 1.4, *Operational Readiness Activities* required the performance of an ORR with Operations Office Manager as Approval Authority. By DOE RL decision, the Approval Authority was delegated to Waste Programs Division. The Review Type and Approval Authority are commensurate with the facility's potential impact on safety and its planned operations.

Based on WRAP's designation as a "new facility", the review scope was inherently broad. The ORR scope included all facilities, equipment, personnel, procedures, and management control systems needed to support or interface WRAP 1 operations and maintenance. Interfacing operations, activities, and organizations were reviewed to the extent in which they affected WRAP 1 or WRAP 1 affected them. The ORR reviewed specific requirements to the breadth defined in WHC-SD-WO26-PLN-002, *Plan-Of-Action For WRAP Module 1 Operational Readiness Review* and to the depth defined in WHC-SD-WO26-PLN-004 *Implementation Plan For WRAP Module 1 Operational Readiness Review*.

The ORR team was made of individuals from different contractors, and backgrounds. The Review Team was composed of the following disciplines: Engineering, Quality Assurance, Industrial and Nuclear Safety, Environmental Compliance, Conduct of Operations, Emergency Preparedness, Maintenance, and Management. During the months preceding the ORR, the entire team assigned required reading and training to become familiar with the facility and all applicable requirements for WRAP. Training included: Facility specific orientation; Facility tours to become familiar with the different systems and programs at WRAP, and conduct of ORRs

The review process and methodologies consisted of the following basic steps:

- Assigning Core Requirements to appropriate, qualified Review Team members.
- Asking the facility to perform an integrated cold run, manual cold run, emergency drills of fire, radiological release, and loss of power.
- Assessing the facility by use of the Criteria and Review Approaches presented in the ORRIP (assessments consisted of documentation review, observing operations and drills, hand-over-hand inspections, walkdowns, and personnel interviews).
- Documenting assessment performances, Findings, and Observations.

- Determining if Findings were to be classified either prestart or post-start.
- Presenting Findings and Observations and supporting tracking to closure if requested by the facility.

ABOUT THE FACILITY:

WRAP 1 is located at the intersection of 23rd and Dayton in the Hanford Site 200W Area. WRAP 1 will be used over time to receive, characterize, sample, treat, certify, package, and ship to storage or disposal (on-site and off-site), contact-handled (CH) TRU, TRU-Mixed, Suspect TRU, Low-Level Waste (LLW), and Low-Level Mixed Waste (LLMW). WRAP will accept CH radioactive waste in 208 liter (55-gallon) and 322 liter (85-gallon) drums, standard waste boxes (SWB), and boxes of similar size, although only drums will be opened.

Final Safety Analysis (FSAR currently at DOE RL for approval) has concluded WRAP can be operated without adverse health and safety effects on the public or maximally exposed onsite receptor personnel. The analysis evaluated such events as glovebox fires, glovebox explosions, container releases, container fires, container explosions, seismic events, strong winds, and criticality.

WRAP 1 is equipped with a waste shipping and receiving area, NDE/NDA area, a process area having glovebox enclosures for opening, sorting, sampling, treating, and packaging the contents of drums, a process support area, a control room, a sample management area, and an administrative area.

WRAP has multiple process paths depending on waste type (e.g., TRU, RMW, etc.) and package (e.g., drums, SWB, etc.). For example, boxes enter the NDE/NDA area but do not enter the process area. Following is a basic sequence for processing drums at WRAP: truck arrives at WRAP shipping and receiving area, drum pallet is off loaded, drums are bar coded, weighed, and either stored in the automated stacker/retriever or moved into the NDE/NDA area by automated guided vehicle (AGV), AGV sequentially transfers drum to NDE cell, Neutron Assay cell, and gamma energy assay cell, [AGV transfers drum to NDE/NDA airlock, drums pass through air lock into process area where a second AGV transfers drum to process roller conveyor, scissor-lift lifts drum to glovebox entry where door opens removing overpack lid, drum is removed from overpack and transferred in the glovebox to drum opening station, lid band is cut and lid is removed, drum is rotated to empty contents onto sorting table, manipulators are used to sort items and perform visual inspection, waste is returned to drum(s) and lid sealed in place, drum is swaged and transferred to compaction station, drum is compacted and transferred to new overpack drum, the full drum is then transferred by AGV to the process area air lock, the drum passes through the air lock where it is moved by AGV to appropriate NDE or NDA station,] drum is then moved by AGV to shipping and receiving area for transport or temporary storage.

The following sections provide more detail of the major areas within WRAP 1.

Shipping and Receiving

Waste containers are received at the WRAP 1 shipping and receiving area. This area contains battery-powered forklifts and AGV, powered conveyors, gravity conveyors used to assemble waste packages for the Waste Isolation Pilot Program (WIPP) in Carlsbad, New Mexico, an overhead crane, jib cranes and an automated stacker/retriever system used for

interim storage. Once received in the facility, waste containers are tracked using bar code labels.

After processing through WRAP 1, the low-level portion of the waste will be disposed of in the Hanford Site Low-Level Burial Grounds or, as in the case of some mixed waste, stored elsewhere in the Hanford Central Waste Complex awaiting further treatment. Transuranic waste will be held pending shipment to WIPP.

Nondestructive Examination and Nondestructive Assay

WRAP 1 provides NDE and NDA of incoming and outgoing waste containers to support waste characterization, verification, certification, and processing. Separate systems are provided for drums and boxes. NDA/NDE operations consist of the following:

- Penetrating radiation examination will be used to identify noncompliant materials (e.g., liquids, gas cylinders, and particulate's) to determine appropriate handling and treatment.
- Neutron spectroscopy assay (passive-active neutron system) to measure the quantity of TRU isotopes.
- Gamma energy assay to obtain isotopic information.

Process Area

[The Process Area consists of multiple glovebox lines for various waste streams (TRU, LLW, TRU, RMW), supercompactors, air locks, drum storage area, warm maintenance room, and AGV. WRAP 1 gloveboxes are used to open, sort, sample, repackage and perform limited treatment. Treatment consist of neutralization, depressurization, encapsulation, absorption, solidification, immobilization, and volume reduction of waste (i.e. supercompaction).]

Control Room

The WRAP 1 central control room is located on the upper level of the building allowing direct observation of portions of shipping and receiving, NDE/NDA, and process areas. The area will facilitate seven operators. The control room contains two NDE operator consoles, two transport/NDA controller consoles, dispatcher's console, telephone, public address system, printer, CCTV, alarm annunciator, and computers for the Data Management System (DMS), AGV, Process Control System (PCS), and Plant Management System (PMS). The PMS satisfies five basic objectives; (1) data acquisition, (2) data analysis, (3) process system surveillance, (4) inventory control, and (5) control and surveillance of building utilities (e.g. HVAC).

Process Support Area

Process support areas provide space for heating, ventilating, and air conditioning equipment, mechanical equipment, and electrical equipment used to support operations of the facility.

An electrical equipment room, located adjacent to the process area, contains the facility motor control centers and other electrical switch gear. Incoming electric power is brought to this room via an overhead bus from transformers located outside the facility.

The first floor mechanical room contains the compressed air system for plant and instrument air and is the location where the fire main water enters the facility.

Heating, ventilating, and air conditioning equipment is located in a second floor mechanical equipment room. The heating, ventilating, and air conditioning exhaust fans and HEPA filtration equipment are located adjacent to the process area. Two chiller/tower units are located outside the building. The air is exhausted through a stack located outside the facility.

Sample Management (Not in phase I ORR)

[The sample management area is located on the first floor of WRAP adjacent to the waste processing area. Individual containerized samples are manually transferred from the process area to the sample management area where they are stored, prepared, and packaged for transport to Hanford Site analytical laboratories for analysis. All samples are received in sealed containers, each having an external bar-code label used to correlate a sample to a waste drum. The sample management area is equipped with an operator terminal connected to the DMS, bar-code reader, sample storage, and refrigerated storage for volatile organic liquids.]

Administrative/Personnel Support Area

This area contains rest rooms, change rooms including an anti-contamination clothing change area, offices, lunch room, conference room, additional storage, and space for visitor control.

SECTION IV

ORR EVALUATION PROCESS

ORR EVALUATION PROCESS

This section of the report summarizes the ORR team conclusions for each Core Requirement. Details related to each individual criterion and approach are in section VII appendix E, Operational Readiness Review Implementation Plan. Those items considered to be findings and assigned as prestart are more fully identified in section V conclusions and categorization. Those items classified as post start findings and observations are included in their entirety in section VII appendix A and B.

Core Requirement 1: "There are adequate and correct procedures and safety limits for operating the process systems and utility systems."

The procedures reviewed were fundamentally correct and useable, but need to correct minor problems and discrepancies (F.1.3.1) Another look needs to be taken on what is expected from the operators and team leaders and how the procedures cover their tasks (F.1.5.1). This approach should pickup on the problems with the operators access to Data Management System (DMS) which is not in place and on the operations of the dock lock. As with any new facility repeated use will identify better organization and methods of operation. The alarm response procedures need further review for accuracy and need to provide guidance beyond the notification of supervision. The safety basis information was in the procedures, but was not effectively referenced to the source or clearly identified (F.1.2). When the findings for this core requirement are resolved the operating procedures will be adequate for operation.

Core Requirement 2: "Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed)."

The training program was effective at training the operations personnel. The problems that were identified dealt with the administrative portion of the program. Training qualification cards are an important part of demonstrating qualified operators. The problems noted on the qualification cards indicated a lack of proper controls which reduces the confidence in the training program as a whole. The instructor responsible for maintaining the qualification program is not as yet prepared due to his short time at WRAP and lack of facility specific knowledge. The instructor needs to place high priority on his personal qualifications (F.2.1). The instructor has collected comments on modules and updates are being scheduled. The training modules are generally correct, but have not been revised since initially released. Since their initial release, several changes have occurred. Operating procedures are now in place, and operating experienced has increased tremendously, but the training modules have not changed to reflect current conditions and expectations. In all, the training program needs attention to detail and administration, a qualified instructor, and revised training modules to bring the program to a level that adequately supports operations.

Core Requirement 3: "Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results, and selected interviews of operating and operations support personnel."

Based on interviews, the facility has the basics necessary to operate the facility, but has a heavy reliance upon key individual personnel to make it all work. The operators do understand how to follow the procedures and how the facility works, but many are not trained enough to deal with abnormal conditions or emergencies without direction from management. This appears to be a management style and not a deficiency. The facility has some very capable operators with a lot of knowledge, but they have not developed the skills to deal with abnormal conditions and aid management in dealing with them. An example of this is in the authorization basis training and knowledge level. The operators have had the training but did not see how it applied to them. They could not remember what the administrative controls were let alone what the consequences and response is for violating them. The facility will gain more knowledgeable and skilled operators as they conduct drills and operate the facility which was not available to them until recently. Thus the facility has an adequate knowledge level to operate, but they need to develop a knowledge level that provides for proper response to all operational scenarios described in authorization basis documents (F. 2&3.1).

Core Requirement 4: "Facility safety documentation is in place that describes the "safety envelope" of the facility. The safety documentation should characterize the hazards/risks associated with the facility and should identify mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks. Safety systems and systems essential to worker and public safety are defined and a system to maintain control over the design and modification of facilities and safety-related utility systems is established." (Combine with core requirement fourteen below)

Core Requirement 14 "A program is established to promote a site-wide culture in which personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements and, through their actions, demonstrate a high priority commitment to comply with these requirements."

The focus of inquiry for core requirements 4 and 14, were Safety Documentation and Safety Culture respectively. The assumption in Safety Documentation was that the SAR was an approved document, Safety Culture was a more subjective subject.

Facility safety documentation was in place to provide programmatic guidance for safety disciplines. The finding for systems support was associated with the location of the Area Radiation Monitors and their ability to function as designed. There were three observations associated with this core requirement. As the document is assumed to be approved for this activity these observations concern the presentation of concepts in the FSAR. Area one was criticality instrumentation, area two was Safety Management Plan, and area three was inventory control. Relocation of noted area radiation monitors will provide for compliance to FSAR requirements.

WRAP-I facility personnel have generally embrace the safety culture and the observations noted are not indicative of a programmatic failure. Safety Culture had no findings but four observations. Area one was training on authorization basis of WRAP, area two was safety awareness of workers, area three was awareness of workers to systems and particulate releases, and area four was concerned with management expectations and goals for safety performance.

Core Requirement 5: "A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition."

A review of the Affidavits which had been completed on this core requirement indicated that there were no Safety Class or Safety Significant systems. This is consistent with the WRAP 1 Facility Safety Analysis Report. The team decided that for this core requirement the personnel protection areas needed to be addressed. In a discussion with the Engineering Manager, it was decided the team should review the HVAC, Compressed Air, Electrical and personnel protection systems (i.e. machine shutoff's, crane controls, etc.) The team attempted to visually verify specific controls which provide personnel protection. For those areas which could not be directly reviewed, the programs which were in place which would check these systems were reviewed. HVAC interlocks to Continuous Air Monitors (CAM's) was found to be non-operational and the computer screens did not reflect actual conditions (F.5.1.1 & F.5.3.1). Several electrical components in the field did not conform to drawings and electrical motor circuit protection devices were not set properly (F.5.3.3. & F.5.3.4) The problem is not currently in place to assure operability of safety systems.

Core Requirement 6 "A process has been established to identify, evaluate, and resolve deficiencies and recommendations made by oversight groups, official review teams, audit organizations, and the operating contractor."

This core requirement called for establishment of a process that will identify, evaluate and resolve deficiencies and recommendations made by independent/ oversight groups.

It was confirmed that an approved self assessment procedure and plan is in place and is being implemented. Evidence of Independent oversight activity at WRAP exists. More oversight is scheduled in the coming year. The Waste Remediation Tracking System (WRTS) and the Hanford Action Tracking System (HATS) are in use at WRAP to track identified deficiencies to resolution.

Internal memo# 87000-95-WHH-007 dated Sept 21, 1995 provides a waiver of WHC-CM-4-46, Safety Analysis Manual. This manual defines Safety Class/Safety Significant, the basis for applying the graded approach. Safety Class is a driving force with regard to the implementation of Quality Assurance and oversight. The lack of Safety Class or Safety Significant designation impairs the oversight groups ability to determine where to apply resources and to what depth to look, although

the waiver to WHC-CM-4-46 is appropriate for WRAP systems. A Quality Assurance plan should be written that clarifies which processes, systems or data acquisition activities require greater levels of control and oversight. [Finding F.6.2.1]

Core Requirement 7 "A systematic review of the facility's conformance to applicable DOE orders has been performed, any nonconformance have been identified, and schedules for gaining compliance have been justified in writing and formally approved."

This core requirement called for a systematic review of the facilities conformance to applicable DOE Orders, identification of nonconformance and establishment of a compliance schedule. The focus of this requirement was on verifying that the implementing procedures were in-place, adequate and appropriate for use at WRAP. Actual compliance with implementing procedures was scrutinized under the other core requirements.

The review method employed by the consultant who coordinated and reported on this requirement was to send a questionnaire to each of the individuals identified as the expert for specific requirement or implementing procedure shown in the Solid Waste Division S/RID, WHC-IP-1120 rev 4.

The coordinator ran into difficulty in that some of the experts had changed responsibilities, or were unfamiliar with WRAP 1, or misunderstood what was being asked of them. There is a partial record of responses from the experts. Apparently some of the responses were verbal (in-person or by phone) and weren't recorded. In order to verify that their requirements and procedures were considered in the review, the majority of the experts from whom there was no recorded response were contacted. In all but one case [F.7.1.3] the expert confirmed that the requirement or implementing procedure was adequate and appropriate for WRAP 1.

The facility review failed to identify two items that were subsequently noted in the ORR [F.7.1.1 and F.7.1.2]. Finding F.7.1.1 dealt with WHC-SP-1131, The implementation plan for 10 CFR 830.120 The QA Rule. WRAP is not included in the scope, but is mentioned in an attachment as a project that has the potential to be classified a Nuclear Facility. Finding F.7.1.2 described an instance where the site architectural standard was changed and implemented by the FDNW designer, however the SWD implementing procedure required compliance with the obsolete and canceled design standard. The review did note that some requirements need to be incorporated into the S/RID.

Core Requirement 8 "Management programs are established, sufficient numbers of qualified personnel are provided, and adequate facilities and equipment are available to ensure operational support services (e.g., training, maintenance, waste management, environmental protection, industrial safety and hygiene, radiological protection and health physics, emergency preparedness, fire protection, quality assurance, criticality safety, and engineering) are adequate for operations."

Note: This core requirement requires review of support services management programs, personnel, facilities, and equipment which were established and procured specifically for the facility. Due to the many areas to be reviewed this core requirement was divided into twelve separate items and are presented as follows.

8.1. "There is an adequate emergency preparedness organization and program."

Personnel at the WRAP 1 facility have formed a strong emergency preparedness base in which to build on. Manuals are in place and personnel are trained to deal with emergencies that can occur during operation.

The current building emergency directors are well disciplined and handled themselves well during the drills they performed. There are, however, some items that need to be addressed in the areas of communication, emergency equipment, radiological control, ventilation control, additional drills before start-up, and facility emergency and hazards information training. These items have been explained in depth during the lines of inquiry and debriefings with facility personnel.

8.2 "There is an adequate engineering support organization and program including the cognizant/system engineer approach."

Areas of review included the engineering organizational structure and assigned areas of responsibility. The Engineering Manager was interviewed to establish a basic understanding of the engineering support organization. Cognizant engineers were contacted and areas of engineering responsibility were reviewed to assess adequacy of knowledge. The engineering was found to be qualified to support all aspects of facility operations.

8.3 "There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance."

The Environmental Management Program is developing in a satisfactory manner and is covering the needs of the WRAP facility. The "Environmental Protection" team are using supplemental resources to develop the necessary monitoring and documentation protocol to have a successful program. Many items identified during the ORR were completed during the review period and some issues to be completed prior to WRAP Phase II have been identified and will be tracked in the WRTS system. The daily, weekly and monthly inspections to be done are well developed and the "Regulatory File Checklist" will help to assure that documentation is maintained and kept in order.

8.4 "There is an adequate fire protection program."

Fire protection is generally recognized by the plant to be an important program that impacts every activity. During the ORR review of the fire protection program, three (3) finding were identified, primarily due to backup documentation:

- 1). The Fire Hazards Analysis (FHA) should be considered as a living document to be updated as changes in the plant take place, to insure the protection features of the facility are not compromised. This is especially true if the Safety Analysis Report (SAR) utilizes the FHA as the basis for identifying fire protection features of the facility. This document has not been updated and does not accurately reflect the facility following construction.
- 2). There is no program to insure the fire barriers are maintained. Although the persons interviewed were aware of the importance fire barriers are to the facility, nothing is in place to insure the fire barriers are not and/or will not be breached.
- 3). There were no backup calculations available to substantiate the statement that curbs are adequate to contain the largest spill plus the volume of water from the fire sprinkler system for a period of 20 minutes.

Additionally, there were six (6) observations made during the ORR. These observations are all covered by specific requirements, but were all areas in which the facility personnel are taking corrective action.

- 8.5 "There is an adequate maintenance organization, program and work control system."

A documented Maintenance Management Program does not exist within the WRAP facility. Some elements of a program structure is in place and is being utilized with varying degrees of adequacy. A WRAP Maintenance implementation plan should be prepared consistent with the requirements of WHC-CP-0851, Rev. 1 "Maintenance Implementation Plan for Solid Waste Management.

- 8.6 "There is an adequate quality assurance organization and program."

This Core Requirement evaluated the adequacy of Quality Assurance Organization and Program. The Solid Waste Division (SWD) has a QA Program Plan, but there is no QA plan specific to WRAP. WHC-CM-1, WHC-CM-5-34 and WHC-CM-5-36 have not been adopted by the prime contractor, FDH, but these documents have been referenced in the QA Program Plan. As a result responsibilities are no longer defined [Finding F.8.6.1.1]. The QA program at WRAP is poorly defined. WRAP is not included in the scope statement of WHC-SP-1131 (Implementation Plan for 10 CFR 830.120). There is no process in place to use a graded approach in the application of QA requirements [Finding F.8.6.1.2].

It was confirmed a programmatic issue exist's with respect to a document Quality Assurance plan, but the facility has a program in place that, in general terms, addresses audit, surveillance, management assessment, document reviews and quality assurance reports. The facility also has controls in place to ensure calibration traceable to NIST where appropriate. Closure of identified findings will provide an adequate Quality Assurance program for operation.

- 8.7 "Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment."

For phase 1 operations, the radiological concerns at WRAP are minimal. Unless there is a major process upset, there should be no unusual radiological hazards during phase 1 operations. Two areas were found to be less than adequate during the ORR. The first item was an improper response by the HPTs during an evacuation drill and the second was the air monitoring program was not properly supported by the required back up studies. Some observations were made that could help the facility get ready for the next phase of operations as well as help with phase one safety awareness. Although it was not written as a finding or an observation, prior to the commencement of operations, the facility identified the needs to post RWP's at the ACES station and throughout the facility as appropriate.

- 8.8 "Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses."

Core requirement 8.8 was to assess the facility's ability to operate safely by meeting all applicable requirements regarding industrial safety/hygiene. The review was conducted in three stages. The first stage was a thorough review of the affidavit packages supplied by the facility for this core requirement. The next stage was to interview management, safety professionals, and operators. The final stage was a "wall to wall" OSHA type inspection of the facility, accompanied by plant personnel. This core requirement was reviewed by HVAC Engineer, Electrical Engineer, Nuclear safety and industrial safety/hygiene personnel assigned to WRAP.

The review of the affidavit packages was satisfactory. During the second stage, when personnel were being interviewed, weaknesses were found that not all of the required information and facility specific training was flowing down to the workers. During the final stage, several items were observed that are potential OSHA nonconformance. In general the facility is in compliance with OSHA and correction noted will help ensure safe operations.

- 8.10 "There is a security organization and program that adequately supports the requirements WRAP operation."

The security program currently in place at WRAP-1 is being administered by the Building Administrators through verbal assignments by management. Facilities access is being controlled with time locks, omni locks, and entry sign in at the processing building. There is no administrative procedures that establishes the facility(s) controls or personnel responsibilities and asset protection requirements. Procedures need to be developed that meet the requirements of RLID 5632.1B for facility security and asset protection.

- 8.11 "There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline."

The configuration management systems in place for controlling configuration in both plant equipment (hardware) and the computer system programs (software) were reviewed. Specific policy requirements and discussions with plant personnel were conducted to assess if baseline conditions are met (per Solid Waste Procedures), facility staff are knowledgeable of the required change system and that the systems in place are being used properly.

- 8.12 "An adequate records management/document control program exists to assure that all important documents, records, and related information are maintained current and readily retrievable."

This Core requirement requires that an adequate records management/document control program exists to ensure that all documents and records are maintained current and retrievable.

Most of the vendor information has been down-graded from Vendor Information to Information Record by Project ECN# W-026-1012. This ECN failed to justify the impact of the change on the operation of the facility [Finding F.8.12.3.1]. Document Control is scanning information obtained from the incomplete file maintained by Projects.

The final approved project as-built drawings and calculations have not been turned over to Operations from the A-E (U.E. & C). Changes to most of the construction specifications will not be incorporated into the current revision. These specifications cannot be released into the Hanford System because they do not meet the requirements of WHC-CM-5-36 Ch 6-1 EP 1.2 para 2.8 [Finding F.8.12.3.2].

With the exceptions noted to vendor information and project documentation, the WRAP Records Management System adequately defines responsibilities, interfaces, and control requirements. Adequate control for changes, distribution and removal of record documents are present, but retrievability of documentation that is to be provided by the constructing contractors is currently an issue.

- 8.13 "There exists an occurrence reporting/root cause program."

The objective of Core Requirement 8.13 is to verify that an Occurrence reporting program and root cause analysis capability exists at WRAP. It was found that an Occurrence Reporting program has been established. WRAP has designated a qualified person to be the primary person for Occurrence reporting. He has the appropriate training, as do 3 other alternate occurrence reporting personnel. We noted that the lessons Learned and Corrective Action programs have not been implemented as yet, although were self identified by the facility [Findings F.8.13.3.1 & F.8.13.3.2]. Several events at WRAP have been evaluated so far, but none have met the reporting threshold. The facility recognizes that for a full scale root cause analysis they would need to bring in outside assistance.

Core Requirement 9 "A routine and emergency operations drill program, including program records, has been established and implemented."

The WRAP facility is not ready to commence operations with regard to Emergency Preparedness. There is required emergency equipment, which was identified by the facility, that is not in place. Drills also need to be run at the facility that will exercise the teamwork of operations, RCT's and engineering in the response to upset conditions that are not the large scale emergency events. A list of drills has been suggested and given to the facility for this purpose. Successful execution of these drills will prepare the facility for safe operation.

Core Requirement 10 "An adequate start-up or restart test program has been developed that includes adequate plans for graded operations testing to simultaneously confirm operability of equipment, the viability of procedures, and the training of operators."

The WRAP facility testing program missed some areas in the acceptance of the facility from construction. The interlock that causes HVAC to shutdown on a high CAM alarm was not tested. Some of the motor control center breaker load trip settings are set un-conservatively high. The fact that when power is lost to the HVAC computer control no change is sent to the control room computer brings into question if failure modes were thought of on certain systems. The above items are ones that the ORR discovered during it's review, which only include a selected number of operating systems. The program is in place for testing, and needs to be expanded consistent with the number and complexity of operating systems.

Core Requirement 11 "Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety." (Combine with core requirement thirteen below.)

Core Requirement 13 "There are sufficient numbers of qualified personnel to support safe operations."

The general Line of Inquiry for both core requirements was to review applicable materials, interview selected personnel, and observe facility activities such as the integrated cold run and the drills. A generic series of interview questions was developed to address the criterion for each core requirement. After completion of the interviews and research of the applicable documents, it is apparent that facility specific administrative policies and procedures are not complete, particularly in the area of position descriptions which define facility specific responsibilities and duties. This resulted in a general finding that is supported by numerous observations from other members of the ORR team. The staffing plan (BOE and Organization Chart) appear to be adequate. Some issues were found which included knowledgeable support staff for the computer systems, maintenance personnel have not been able to walk-down all their equipment, and there is a shortage of personnel necessary to complete and maintain the administrative procedures necessary under core requirement 11.

When the facility completes the unissued sections of their administration manual, and includes item findings from this ORR for quality assurance, security, responsibilities and duties of key positions, and maintenance, the administrative program will be appropriate for operations. In general the facility has adequate staff for operation, although review additional personnel required for computer systems, maintenance walkdowns, and administrative procedure maintenance could help ensure continuity of operations after start up.

Core Requirement 12 "The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations."

The conduct of operations of the facility is as expected of a start-up organization. The facility can operate with this level of conduct of operations with the understanding that constant improvement needs to be pursued. The only way to develop a "mature" organization is to operate a facility and strive for improvement. There are many resources on site that are available to assist in improvement of conduct of operations and the facility should make use of these. As noted in core requirement 9.0 more drills of an operational nature need to be run by the facility to develop the teamwork between organizations to respond to upset conditions and to develop the operators response and understanding of the plant on upset conditions.

Core Requirement 19 "The technical and management qualifications of contractor personnel, responsible for facility operations, are adequate."

The technical and management qualifications of the contractor personnel responsible for safe WRAP facility operations are adequate. The individual managers and leads have been selected partially because of their varied work experiences at Hanford and with the needed experience of performing in an operating mode will mature into a disciplined and an effective operations team. Management has been very responsive to inquirers, suggestions, and comments raised by the ORR even if not considered as a finding or observation by the ORR team. Many management systems within WRAP had been put in place during the final weeks of September 1996 and are not fully utilized at the time of the review. The team believes that the weaknesses identified in CR 19 are not of such significance that they should impact a successful start-up of March 31, 1997.

SECTION V

CONCLUSIONS AND CATEGORIZATIONS

CONCLUSIONS AND CATEGORIZATION OF FINDINGS/OBSERVATION

The ORR team reviewed all Findings and Observations and assessed their applicability into six(6) categories. The categories are Operational Capability, Training, Management Systems, Quality, Compliance, and Ergonomics/Design Features. The ORR team also evaluated whether the Finding or Observation was of personnel safety significance, and for Findings if resolution was required prior to Phase I start-up. The following tables 1 and 2 present a listing of all Findings/Observations with the designated category, noted whether resolution is recommended prior to start-up, and if safety significant is applicable.

Finding definition:

An area of non-compliance to recognized applicable requirement(s). May be classified as pre or post start

Observation definition:

Provide recommendations to improve operational excellence.

CATEGORY SUMMARIES

Operational Capabilities:

Integrated Cold Testing of all systems in the Shipping/Receiving and NDA/NDE areas and ORRT selected drills identified that the current staff is capable of conducting routine operations, but not ready to handle non-standard operating conditions. The control of work in the processing facility needs to be re-emphasized in some areas.

Some areas of the WRAP-1 design needs to be re-evaluated against the need to provide support to operational personnel. Some specific areas include the dependency of the computer interface during manual operations, usefulness of the computer monitoring system during unplanned system shutdown, and maintaining HVAC cleanliness in the Shipping/Receiving area during an emergency event where airborne contamination is present. The majority of the Findings in this category were classified as prestart and have worker safety implications.

Training:

The WRAP-1 Training Program is in place with the majority of the operational and management staff qualified or on track to be qualified near term. The Training documentation quality and filing needs to be bolstered in key areas along with qualification questions for testing of management. One finding and a few observations were related to personnel safety and will provide operational benefit when corrected.

Management Systems:

Facility management was found to be very participative and receptive to Findings, Observations, and comments made by the ORR team relative to management system effectiveness and operational performance. This is considered to be a key attribute for a successful operational organization. There were a significant number of Findings and Observations in this category. Communication from management to worker is not effective and some key communication tools are not in place or fully utilized. The responsibilities and interfaces for plant functions and programs were not defined nor communicated.

Quality:

Quality Assurance was recognized by the management team to be important but a documented Quality Assurance Program specific to WRAP-1 is not in place. As such several areas of Quality Assurance are not being adequately addressed or prioritized which will cause operational issues for the facility if not corrected.

Compliance:

The WRAP-1 facility was found to be generally in compliance with their contractual commitment to the Solid Waste SRIDs, although areas of non compliance were identified. The preparation of the facility readiness affidavits provided a self assessment for compliance to contractual requirements that was useful to the ORR team. Potential noncompliance's to Codes and Standards were identified which represent the majority of the Findings in this category. The need for a Security Program was also identified.

Ergonomics/Design Features:

The technology employed in the WRAP-1 design has caused the need to provide ergonomic evaluations for key operational areas of the facility. The ORR team identified a few key areas that need further evaluation, such as the Jib Crane control pendant, layout of the Shipping and Receiving office, and control room computer interfaces and operator stations. The findings and observation were considered safety related.

WRAP 1 OPERATIONAL READINESS REVIEW FOR PHASE 1 OPERATIONS FINDING CATEGORIES

OPERATIONAL CAPABILITY	TRAINING	MANAGEMENT SYSTEMS	QUALITY	COMPLIANCE	ERGONOMICS DESIGN FEATURES
F-1.1.(S) -PRE	F-2.1 -POST	F-8.1.10.1 -PRE	F-182.1	F-1.1.(S)	F-10.1.2.(S) -PRE
F-1.2.(S) -PRE	F-283.1.(S) -PRE	F-8.5.1.1 -PRE	F-5.1.1	F-5.3.3.(S) -PRE	F-5.3.4.(S) -PRE
F-1.5.1.(S) -PRE	F-1.5.1.(S) -PRE	F-8.5.1.2 -PRE	F-5.4.1	F-5.3.4.(S) -PRE	F-5.3.4.(S) -PRE
F-1.26.1(S) -PRE	F-1.26.1(S) -PRE	F-8.5.3.2(S) -PRE	F-6.2.1(S) -PRE	F-5.3.4.(S) -PRE	F-5.3.4.(S) -PRE
F-4.2.1(S) -PRE	F-4.2.1(S) -PRE	F-8.5.3.3(S) -PRE	F-7.1.1(S) -PRE	F-8.3.1 -PRE	F-8.3.1 -PRE
F-5.3.1(S) -PRE	F-5.3.1(S) -PRE	F-8.6.1.1 -POST	F-7.1.2 -POST	F-8.4.3.1 -POST	F-8.4.3.1 -POST
F-5.3.2(S) -POST*	F-5.3.2(S) -POST	F-8.10.2.2 -PRE	F-7.1.3 -POST	F-8.4.5.1(S) -PRE	F-8.4.5.1(S) -PRE
F-5.4.2(S) -PRE	F-5.4.2(S) -PRE	F-8.10.2.4 -PRE	F-7.1.4 -POST	F-8.4.11.(S) -PRE	F-8.4.11.(S) -PRE
F-8.1.1.(S) -POST	F-8.1.1.(S) -POST	F-8.13.3.1 -PRE	F-8.6.1.2(S) -POST	F-8.8.1.(S) -PRE	F-8.8.1.(S) -PRE
F-8.1.3.(S) -PRE	F-8.1.3.(S) -PRE	F-8.13.3.2 -PRE	F-8.7.20.1 -POST	F-8.8.8.1(S) -PRE	F-8.8.8.1(S) -PRE
F-8.1.4.(S) -PRE	F-8.1.4.(S) -PRE	F-9.3.1 -PRE	F-8.12.3.1 -PRE	F-8.8.8.3(S) -PRE	F-8.8.8.3(S) -PRE
F-8.1.5.(S) -PRE	F-8.1.5.(S) -PRE	F-11.1.1 -PRE	F-8.12.3.2 -PRE	F-8.10.2.1 -PRE	F-8.10.2.1 -PRE
F-8.1.6.(S) -PRE	F-8.1.6.(S) -PRE	F-13.1.1 -PRE	F-8.12.3.2 -PRE	F-8.10.2.2 -PRE	F-8.10.2.2 -PRE
F-8.2.1.(S) -PRE	F-8.2.1.(S) -PRE	F-19.2.1 -PRE	F-8.12.3.2 -PRE	F-8.11.1.1(S) -POST	F-8.11.1.1(S) -POST
F-8.2.2.1(S) -PRE	F-8.2.2.1(S) -PRE	F-19.2.1 -PRE	F-8.12.3.2 -PRE	F-8.11.1.2 -POST	F-8.11.1.2 -POST
F-8.8.8.2(S) -PRE	F-8.8.8.2(S) -PRE	F-19.2.1 -PRE	F-8.12.3.2 -PRE	F-8.11.3.1 -PRE	F-8.11.3.1 -PRE
F-9.1.1(S) -PRE	F-9.1.1(S) -PRE	F-19.2.1 -PRE	F-8.12.3.2 -PRE	F-10.1.1.(S) -PRE	F-10.1.1.(S) -PRE
F-12.1.1 -PRE	F-12.1.1 -PRE	F-19.2.1 -PRE	F-8.12.3.2 -PRE	F-10.1.1.(S) -PRE	F-10.1.1.(S) -PRE

CORE REQ. NO.

- 1 - Procedures (6)
2 - Training (2)
3 - OPS Knowledge (0)
4 - Safety Documents (1)
5 - Personal Safety Systems (7)
6 - Corrective Actions (1)
7 - Compliance (4)
- 8.1 - Emergency Preparedness (7)
8.2 - Engineering (0)
8.3 - Environmental (1)
8.4 - Fire (3)
8.5 - Maintenance (6)
8.6 - Quality (2)
8.7 - Health Physics (2)
8.8 - Industrial Safety (5)
8.10 - Security (5)
8.11 - Configuration Management (3)
8.12 - Records Management (2)
8.13 - Occurrence Reporting (2)
- 9 - Operational Drills (2)
10 - Startup/Restart (2)
11 - Organization (1)
12 - CONOPS (1)
13 - Staffing (1)
14 - Safety Culture (0)
19 - Management (1)

(S) Determined by ORR Team to be Safety Significant

*Prior to Phase 2

TABLE - 1

WRAP 1 OPERATIONAL READINESS REVIEW FOR PHASE 1 OPERATIONS
OBSERVATION CATEGORIES

OPERATIONAL CAPABILITY	TRAINING	MANAGEMENT SYSTEMS	QUALITY	COMPLIANCE	ERGONOMICS DESIGN FEATURES
0-1.7.1(s) 0-2.2.1(s) 0-2.4.1 0-5.3.2 0-8.1.1.1 0-8.1.4.2 0-8.3.3.2(s) 0-8.3.3.3 0-8.3.3.4(s) 0-8.5.4.7 0-8.7.6.1 0-8.7.17.1(s) 0-8.7.19.1(s) 0-9.3.1 0-10.1.1 0-12.1.1 0-12.1.3 0-12.1.4 0-12.1.8(s) 0-12.1.9(s) 0-12.1.10(s) 0-12.1.11(s) 0-14.6.1(s)	0-1.18.1 0-1.19.1 0-2.1.1 0-2.5.1 0-2.7.1(s) 0-2.8.1 0-2.9.1 0-2.12.1 0-2.13.1 0-2.15.1 0-2.16.1 0-3.1.1 0-3.2.1 0-3.4.1 0-8.1.4.1(s) 0-8.2.2.1 0-10.1.2 0-14.1.1(s) 0-12.1.8(s) 0-12.1.9(s) 0-12.1.10(s) 0-12.1.11(s) 0-14.6.1(s)	0-1.2.1(s) 0-1.6.1(s) 0-1.10.1(s) 0-1.13.1(s) 0-1.17.1(s) 0-1.20.1(s) 0-1.21.1(s) 0-1.23.1 0-4.1.1(s) 0-4.1.3 0-4.1.3 0-5.3.1 0-8.4.1(s) 0-8.5.1.1 0-8.5.1.2 0-8.5.1.3 0-8.5.1.4 0-8.5.1.5 0-8.5.1.6 0-8.5.1.8 0-8.5.1.10 0-8.5.3.1 0-8.5.3.2 0-8.5.3.3 0-8.5.3.4 0-8.5.3.5 0-8.5.3.7 0-8.10.1.1 0-8.11.1.2(s) 0-8.11.1.3(s) 0-9.1.1 0-11.1.1 0-14.9.1(s)	0-1.11.1 0-1.15.1 0-5.4.1 0-8.4.5.1(s) 0-8.5.1.9 0-8.5.23.1 0-8.5.3.8 0-8.7.11.1 0-8.11.3.1 0-8.11.3.2 0-8.11.3.3 0-19.2.1 0-1.11.1 0-1.15.1 0-5.3.3 0-5.3.4(s) 0-8.3.3.1 0-8.3.4.1 0-8.4.4.2(s) 0-8.4.9.1 0-8.11.3.1 0-8.5.1(s) 0-8.6.1.1 0-8.10.2.2 0-8.10.2.3 0-8.11.1.1(s) 0-8.11.1.4 0-12.1.2 0-12.1.5(s) 0-12.1.6 0-12.1.12(s) 0-14.1.2(s)	0-1.22.1 0-1.24.1 0-5.3.3 0-5.3.4(s) 0-8.3.3.1 0-8.3.4.1 0-8.4.4.2(s) 0-8.4.9.1 0-8.11.3.1 0-8.5.1(s) 0-8.6.1.1 0-8.10.2.2 0-8.10.2.3 0-8.11.1.1(s) 0-8.11.1.4 0-12.1.2 0-12.1.5(s) 0-12.1.6 0-12.1.12(s) 0-14.1.2(s)	0-8.7.9.1(s) 0-12.1.7

CORE REQ. NO.

- 1 - Procedures (15)
- 2 - Training (12)
- 3 - OPS Knowledge (3)
- 4 - Safety Documents (3)
- 5 - Personal Safety Systems (5)
- 9 - Corrective Actions (0)
- 8.1 - Compliance (0)
- 8.1 - Emergency Preparedness (3)
- 8.2 - Engineering (1)
- 8.3 - Environmental (5)
- 8.4 - Fire (6)
- 8.5 - Maintenance (19)
- 8.6 - Quality (0)
- 8.7 - Health Physics (5)
- 8.8 - Industrial Safety (2)
- 8.10 - Security (4)
- 8.11 - Configuration Management (7)
- 8.12 - Records Management (0)
- 8.13 - Occurrence Reporting (0)
- 9 - Operational Drills (2)
- 10 - Startup/Restart (2)
- 11 - Organization (1)
- 12 - CONOPS (12)
- 13 - Staffing (0)
- 14 - Safety Culture (4)
- 19 - Management (1)

(S) Determined by ORR Team to be Safety Significant

SECTION VI

LESSONS LEARNED

LESSONS LEARNED

The following items are recommendations from the WRAP-1 ORR team for phase-1 operations that are considered helpful to future ORRs:

1. The schedule for the ORR needs to be established consistent with a firm determination as to when turnover from construction will occur. The ORR start date was slipped many times due to construction delays which resulted in a large turnover of team members due to other programmatic commitments. The training for new member of the team resulted in additional costs and coordination challenges.
2. Utilize available electronic media to better prepare team members and provide more efficient document preparation. Computer disks for each core requirement need to be prepared including the format for all required documentation (findings, observations, and lines of inquiry), and require Each team member to use them.
3. The facility POC (point of contact) being a member of management and given the authority to schedule WRAP staff/events was very effective to utilize ORR team members to the fullest extent possible and only required 2-weeks in the facility to complete all reviews.
4. The daily debriefs included all ORR team members and facility management. This provided early information to the facility and also a forum for the team member to determine the proper course for the review.
5. The Implementation Plan for future ORRs should have criteria prepared consistent with the hazard classification of the facility and the types of hazards that the workers will be exposed to.
6. The WRAP-1 facility utilizes current computer technology for both process control and communication of facility status. Criteria for the performance requirements of these types of systems would provide the ORR team reviewer better information to asses operational performance.

SECTION VII

APPENDICES

APPENDIX A

FINDINGS

FINDINGS LISTING WITH NUMBER & PRE-START / POST-START CATEGORY

PRE/ POST	NUMBER	FINDINGS
PRE	1.1	Procedure control was found out of compliance with WHC-IP-0673 and WHC-CM-5-34, Section 3.22.
PRE	1.1.1	Selected facility operating procedures do not include all operating parameters needed for successful operation.
PRE	1.2	Authorization basis implementation in procedures is inadequate.
PRE	1.5.1	Operating procedures lack consistent technical based information needed for successful operation.
PRE	1.26.1	Operating procedures require concise information for precautions to assure operator awareness of risk potential.
POST	1&2.1	Record administration for operator logs, round sheets, and procedures is not understood or implemented per WHC-CM-5-36, Section 3.5.
POST	2.1	Administration and documentation for training programs has significant discrepancies per WHC-CM-5-34, Section 1.8.
PRE	2&3.1	Authorization basis and administrative controls training is inadequate.
PRE	4.2.1	The ARMs are located such that one is partially shielded from its function and the other is located such that inadvertent initiation is enhanced. Neither of these two are acceptable.
POST	5.1.1	The computer alarm record log not maintained as a QA record.
PRE	5.3.1	Interlock between the CAMs and the HVAC need to be checked on a routine basis in a PM.
POST	5.3.2	Screens in dispatch office for HVAC do not reflect actual conditions.
PRE	5.3.3	Motor circuit protective devices not set properly (per code).
PRE	5.3.4	Several installed electrical equipment and components in the field do not conform to what is described on the facility drawings.
PRE	5.4.1	ATP/ATRS and OTP/OTRs not complete.
PRE	5.4.2	Vendor supplied interlock between CAMs and HVAC needs to be completed.

PRE	6.2.1	An adequate system does not exist for the application of a graded approach.
PRE	7.1.1	The Compliance assessment failed to identify an area of noncompliance. WMC-SP-1131 does not address WRAP 1.
POST	7.1.2	The Compliance assessment failed to identify an area of noncompliance. WMC-CM-5-36, EP-1.3 cites an obsolete design standard.
PRE	7.1.3	The Compliance assessment failed to elicit a definitive response from the designated expert regarding the adequacy of CM-5-34, Chapter 1.10 inspection.
PRE	7.1.4	No corrective action schedule for gaining compliance on SRIDS items.
POST	8.1.1.1	BEP not available for all personnel.
POST	8.1.3.1	WRAP BEP not on HLAN.
PRE	8.1.4.1	Not all WRAP personnel have reviewed BEP.
PRE	8.1.5.1	Facility utility disconnects are not included on emergency boards or the BEP or the BEG.
PRE	8.1.5.2	Alarm and communication systems are not adequate to cover all WRAP facilities.
PRE	8.1.5.3	Not all emergency equipment identified in the Building Emergency Guide (BEG) are in service.
PRE	8.1.10.1	Facility Emergency Response Boards need to be updated/completed.
PRE	8.3.1.1	Agreement in place to document agreement for use of WMC-CM-7-5.
POST	8.4.3.1	FHA not current, doesn't reflect current status of facility.
PRE	8.4.5.1	Fire barriers not being maintained.
PRE	8.4.11.1	Controlling liquid run-offs during fire fighting.
PRE	8.5.1.1	WRAP has not developed, approved, or implemented a consolidated Management Maintenance Plan or Maintenance Implementation Plan (MIP).
PRE	8.5.1.2	The facility is without an affective, comprehensive maintenance MIP. Graded approach.
PRE	8.5.1.3	The facility had not developed or implemented a Cold Weather Protection (CWP) program, nor had they initiated CWP activities for the facilities.

PRE	8.5.3.1	Infrequent violations of release occur by maintenance personnel for multi-shift/day work activities.
PRE	8.5.3.2	Clear, concise criteria for segregating the planned versus unplanned work control process is missing.
PRE	8.5.3.3	Could not find clear policy on management expectations for procedure use.
POST	8.6.1.1	Responsibilities and interfaces are not well defined.
PRE	8.6.1.2	QA program at WRAP is poorly defined.
PRE	8.7.2.1	RTC personnel performing health physics duties during the EP drill failed to respond according to the requirements of the HSRCM training and qualification program.
POST	8.7.20.1	A documented air monitoring program is in place and is discussed in WHC-SD-WO26-TA-002. However, the technical basis for facility implementation is not in place.
PRE	8.8.1.1	HASP as it pertains to WRAP is inadequate.
PRE	8.8.8.1	Through-out the WRAP facility, sign to alert employees to hazards are not adequate.
PRE	8.8.8.2	Instances of PPE not available or utilized.
PRE	8.8.8.3	Some equipment is not properly guarded, anchored, or provided with adequate safety devices.
PRE	8.8.8.4	General OSHA potential noncompliances.
PRE	8.10.2.1	Security procedures for WRAP facilities do not exist.
POST	8.10.2.2	A process does not exist that provides for an annual review of the asset protection requirements for applicability and update of the asset protection agreement.
PRE	8.10.2.3	Posted signs do not exist that contain the appropriate information required for the security of the WRAP facility.
POST	8.10.2.4	Security procedures do not exist for processing classified waste.
POST	8.10.2.5	A computer sensitivity evaluation has not been conducted.
PRE	8.11.1.1	Use of configuration control drawings is not as outlined in the configuration control procedure.
POST	8.11.1.2	The software documentation supporting configuration control requirements need to be obtained.

PRE	8.11.3.1	Review of electrical and radiation monitoring configuration control drawings identified equipment and locations which did not match drawing.
POST	8.12.3.1	Vendor information has been down graded from CVI data to information record only.
POST	8.12.3.2	Changes to most of the C-1,2,3 specifications will not be incorporated into the current revision.
POST	8.13.3.1	Lessons learned program has not been formally implemented at WRAP.
POST	8.13.3.2	A corrective action program has not been implemented at WRAP.
PRE	9.1.1	More "operations" oriented drills need to be written and run for operations to become experienced at response to upset conditions.
POST	9.3.1	The drill critique information is not being passed on to the operators.
PRE	10.1.1	The HVAC for the NDE/MDA area did not shut down as designed when the alpha CAM for the area was put into a high alarm condition.
PRE	10.1.2	Push button controls for the jib crane are so hard to depress it causes physical pain/injury to the operator.
PRE	11.1.1	The WRAP facility specific policies and procedures do not adequately define the responsibilities and authorities of each position.
PRE	12.1.1	An official facility narrative log book is required and not being kept.
PRE	13.1.1	Insufficient staff exists for OJT on computer systems, maintenance procedures walkdowns, and personnel to maintain administrative procedures to maintain.
POST	19.2.1	Responsibilities for activities like lessons learned, occurrence reporting processing USQ is not clearly defined and communicated.

ORR FINDING FORM**Core Requirement Number and Statement: 1.0**

There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

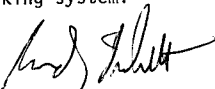
Criterion Number and Statement: N/A**Date: December 9, 1996****Finding Number: F.1.1****Finding:**

Procedure control was found out of compliance with WHC-IP-0673 and WHC-CM-5-34, section 3.22.

Discussion/Conclusion: The following discrepancies were noted:

- Unauthorized steps were written into an official copy of a procedure.
- Unauthorized steps were added to a working copy of a procedure which was used.
- One alarm response procedure was missing the authorization and approval document from the procedure file
- Procedure changes are not formally tracked
- Technical basis for the procedures is not documented in the procedure files

Resolution: The facility has already addressed the unauthorized steps written into procedures and has already documented their need for a procedure change tracking system.

Signatures:**Team Member: Team Leader: R. Pickett**

ORR FINDING FORM**Core Requirement Number and Statement: 1.0**

There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.1

There is an adequate number of up-to-date procedures in place which support the operating status of the facility.

Date: December 9, 1996

Finding Number: F.1.1.1

Finding:

Selected facility operating procedures do not include all operating parameters needed for successful operations.

Discussion/Conclusion: The following discrepancies were noted

- The truck dock lock is not covered by a procedure and there is some safety related equipment and configuration involved.
- One alarm response does not invoke the Building Emergency Plan in WRP1-AR-1600 page 2 for evacuating the facility.
- There are some discrepancies between the computer alarms identified in the procedures and in the software. A detailed review of the system alarms and alarm response procedures is required to correct the problem.

Resolution: None to date.

Signatures: 

Team Member:

Team Leader: R. Pickett

ORR FINDING FORM**Core Requirement Number and Statement: 1.0**

There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: N/A

Date: December 9, 1996

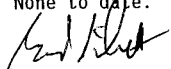
Finding Number: F.1.2

Finding: The Authorization Basis implementation into procedures is inadequate.

Discussion/Conclusion: The following discrepancies were noted

- No operational constraints exist for the shipping and receiving area to prevent stacking of drums (see page 2-22 of the facility description and page 3-29 for accident analysis which limits the height to 4 feet in their assumptions).
- The FSAR compliance matrix does not include preventive maintenance or surveillance procedures to show compliance with required equipment.
- TSR document is insufficient as a sole document to prove compliance with the Administrative Controls. The TSR document identifies the programs required but not what the requirements are for each program. It appears to be just a matter of paper compliance with the Administrative Control.
- TSR document is extensively a copy of what is written in the FSAR and as a separate document does little.
- Operating procedures which contain CPS limits associated with FSAR compliance do not reference the CPS or the FSAR in their reference section.

Resolution: None to date.

Signatures: 

Team Member: Team Leader: R. Pickett

ORR FINDING FORM**Core Requirement Number and Statement: 1.0**

There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: N/A

Date: December 9, 1996

Finding Number: F.1.5.1

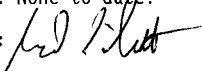
Finding:

Operating Procedures lack consistent technical based information needed for successful operations.

Discussion/Conclusion: The following discrepancies were noted

- Unable to locate basis for the facility Curie Inventory Alarm.
- Various procedures require operators to access the DMS, and they are unable to.
- JHA for OP-0908 was not similar to JHA's for other similar procedures.
- Pallet weight limit of 3500 lbs. is not consistent with the facility description of the system and operations which describe the pallets can be loaded to 4000 lbs and that the ASRS can handle 4250 lbs.
- Air handling units procedures do not indicate when the controls are to be put into auto after startup and lack the rigorous step-by-step procedure steps of other facility procedures for starting and stopping equipment.
- JHA for OP-1201 does not address the handling and moving of drums for receiving.
- OP-0502 does not address relocation of drum within the solid waste organization (identified by the facility).
- OP-0903 does not include the oscilloscope settings required to analyze the strike shape. Recommend placing a cover over the controls to prevent accidental changes which could affect the shape.
- OP-0903 does not address shutting down the oscilloscope to prevent damaging the screen by leaving it on continuously with consistent trace.
- AR-1101 need to add possible cause, partial loss of power.
- AR-1101 page 2 section III.2.E.(2) does not describe how to secure the PCS computer.
- OP-0501 does not describe how to check the battery charge is sufficient.
- OP-0502 does not reference the RCT procedure number which applies.
- OP-0503 does not include safety precautions or ppe for handling drums using drum handling equipment.
- OP-1101 procedures does not have you place the air handlers in automatic control.

Resolution: None to date.

Signatures: 

Team Member:

Team Leader: R. Pickett

ORR FINDING FORM**Core Requirement Number and Statement: 1.0**

There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.26

Procedures are clear, concise, and contain adequate information for users to understand and perform their activities effectively.

Date: December 9, 1996

Finding Number: F.1.26.1

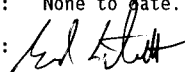
Finding:

Operating Procedures require concise information for precautions to assure operator's awareness of risk potential.

Discussion/Conclusion: The following discrepancies were noted

- Procedures do not include forklift precautions or guidance as to when a spotter is required.
- OP-0903 indicates a Danger area which is understood by the facility and marked, but the procedure does not effectively describe the danger area.
- OP-0903 has drum handling precautions which do not apply to the procedure.
- The facility used a checklist to help perform the integrated cold run which was not controlled or officially approved.
- OP-0503 Tool section missed listing the drum handling equipment.

Resolution: None to date.

Signatures: 

Team Member:

Team Leader: R. Pickett

ORR FINDING FORM**Core Requirement Number and Statement:**

- 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.
- 2.0 Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: N/A**Date:** December 9, 1996**Finding Number:** F. 1&2.1**Finding:**

Record administration for operating logs, round sheets, and procedures is not understood or implemented per WHC-CM-5-36 chapter 3-5.

Discussion/Conclusion: The following discrepancies were noted

- Secretaries, record specialist, Procedure Lead, and a procedure writer did not know how to control and disposition QA and required records when asked.
- One DARF for an alarm response procedure was found missing (this is a QA record).
- DARF's are not identified as QA records on any document for the facility.

Resolution: None**Signatures:** **Team Member:****Team Leader:** R. Pickett

ORR FINDING FORM**Core Requirement Number and Statement: 2.0**

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: N/A**Date: December 9, 1996****Finding Number: 2.1****Finding:**

Administration and documentation for training program has significant discrepancies (WHC-CM-5-34, section 1.8).

Discussion/Conclusion: The following discrepancies were noted:

- Not all training files are current.
- The training organization is not issuing monthly status report on qualified watchstanders.
- A qualification card for a team leader was lost and had to be re-generated.
- Operations Team Leader/Manager qualification card lack sufficient independent knowledge verification and relies on the trainee to initial for each individual training modules knowledge requirements.
- Several uncontrolled changes were found on the operators qualification cards.
- Several changes are required on the operations qualifications card to bring them current with operating procedures.
- The program lacks a total signature control program. The only qualified to sign list found was for OJT/OJE for the operators.
- Personnel responsible for keeping training records do not know that the training records must be retained on file for 3 years after their departure.
- The training modules have not been revised since they were originally approved to incorporate updated information and revisions.
- 2 Individual training plans were not signed and several interviewed operators were not familiar with their individual training plan.
- The instructor does not have the required operation qualifications included in his individual training plan as required.
- Several training files require an update job description.
- Several files have training extensions which have not been approved.
- The instructor does not have access to TMX.

Resolution: The training records were in process of being fixed but not completed during the review.

Signatures:**Team Member:****Team Leader: R. Pickett**

ORR FINDING FORM**Core Requirement Number and Statement:**

- 2.0 Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).
- 3.0 Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Criterion Number and Statement: N/A**Date:** December 9, 1996**Finding Number:** 2&3.1**Finding:**

The authorization basis and administrative controls training and knowledge level are inadequate.

Discussion/Conclusion: The following discrepancies were noted:

- Interviews revealed that operators do not know what the administrative controls are.
- Authorization Basis training is not included in the individual training modules where it applies.
- The instructor tasked with giving the training does not fully understand what encompasses the authorization basis outside what is in the lesson plan which only covered some of the administrative controls.
- There is no testing on the authorization basis for operators.
- There are seven administrative controls in the FSAR and the training only included five.
- The authorization basis material was not related to how the facility specifically meets the requirement and how it relates to the operator.

Resolution:**Signatures:** **Team Member:****Team Leader:** R. Pickett

ORR FINDING FORM**Core Requirement Number and Statement: 4**

Facility safety documentation is in place that describes the "safety envelope" of the facility. The safety documentation should characterize the hazards/risks associated with the facility and should identify mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks. Safety systems and systems essential to worker and public safety are defined and a system to maintain control over the design and modification of facilities and safety-related utility systems is established.

Criterion Number and Statement: 2

Systems and support system to be operated within authorization basis.

Date:

Finding Number: F.4.2.1

Finding:

The Area Radiation Monitors (ARM) are located such that one is partially shielded from performing its function and the other is located such that inadvertent initiation is enhanced. Neither of these 2 is acceptable.

Discussion/Conclusion:

The ARMs need to be moved such that they perform their function within acceptable ranges of detection. The shield wall on the north side prohibits the function of the arm in that a portion of its detection range is blocked.

The ARM by the roll up door is located in an area that through the receipt of waste can be inadvertently set off and therefore its function may be prematurely activated by incoming shipments sending the plant into an upset condition.

Resolution:

Signatures:



Team Member:

Team Leader: J. Locklair

ORR FINDING FORM**Core Requirement Number and Statement: 5**

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety systems and other instruments which monitor limiting conditions of operations or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Reference and Statement:

1. An adequate surveillance program is in place. Adequate documentation to support the implementation of this program is maintained.
2. An adequate test program is in place. Adequate documentation to support the implementation of this program is maintained.
8. Review of completed surveillances and/or tests are conducted to ensure that acceptance criteria are met and any trends are identified.

Finding Number: 5.1.1**Date: November 15, 1996****Finding:**

The alarms which are received in the Dispatch Office are recorded both on a printer (along with other data) and in a buffer file. Neither of these records is maintained formally as a QA record.

Discussion/Conclusion:

The record of alarms (either electronic or paper copies) is a QA record which needs to be collected and stored per the site requirements in CM-3-5 "Document Control and Records Management".

Resolution:

Establish a method for recovering and storing alarm logs and assign to appropriate individual(s).

Signatures:**Team Member:****Team Leader:** M. Enghusen

ORR FINDING FORM**Core Requirement Number and Statement: 5**

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety systems and other instruments which monitor limiting conditions of operations or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Reference and Statement:

3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.
11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Finding Number: 5.3.1

Date: November 21, 1996

Finding:

The Interlock between the CAMs and the HVAC shutdown needs to be checked on a routine basis. (Note this is also a finding in core requirement 5 criteria 4,5,6, and 9).

Discussion/Conclusion:

The interlock was not a part of the HVAC ATP or OTP. It was not a part of the vendor's submittal for the HVAC Controls ATP, and this was noted as part of the rejection of that submittal. Vendor's response to comment was not found.

The observed interlock PM was not conducted while the fans were operating per the direction of the Plant Management. As the Shipping and Receiving AHU remained off for the entire test, nothing was learned about the adequacy of the interlock.

Resolution:

Retest all of the CAMs and ensure all respond correctly and that the fans cannot be started when a CAM is alarming.

Signatures:

Team Member:


Team Leader: M. Enghusen

ORR FINDING FORM**Core Requirement Number and Statement: 5**

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety systems and other instruments which monitor limiting conditions of operations or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Reference and Statement:

3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.
11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Finding Number: 5.3.2

Date: November 21, 1996

Finding:

The screens in the Dispatch Office for the condition of the ventilation system at times will not reflect actual conditions.

Discussion/Conclusion:

Found that the HVAC was slow to respond to a computer command. Changes in HVAC equipment status took a very long time to appear on the computer screen. As an example, the fans that stopped due to the loss of power (during the drill) were shown as still running until power was restored, almost 30 minutes later. Only a temperature alarm identified a flow problem.

Resolution:

Some method of getting real time data for emergency conditions in the dispatchers' office needs to be assessed.

Signatures:

Team Member:


Team Leader: M. Enghusen

ORR FINDING FORM**Core Requirement Number and Statement: 5**

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety systems and other instruments which monitor limiting conditions of operations or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Reference and Statement:

3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.
11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Finding Number: 5.3.3

Date: November 15, 1996

Finding:

Motor Circuit protection devices not set properly.

Discussion/Conclusion:

Motor control circuit protector and overload heater settings must be evaluated for the nameplate values of loads being served. Two installed breakers does not conform to design drawings. Improperly terminated or damaged wire must be repaired/corrected. See details on attached electrical walk down comments (attached). During a walkdown of the electrical systems several problem areas were identified (see attachment).

Resolution:

All MCC's need to be inspected and set according to the required loads and code requirements.

Signatures:

Team Member:


Team Leader: M. Enghusen

Electrical Walkdown Findings

Dwg. H-2-131820, R5 (480V MCC One Line Sht.1) shows MCC-5-101, Cubicle 1A (CR-5-101 Pallet S/R) as having a 70AT thermal magnetic feeder breaker. What is installed is a 70A MCP motor circuit protector. A feeder breaker should be installed since an MCP only provides short circuit protection and no overcurrent protection for the #6 AWG wires. NEC 240-21(a).

The overload (O.L.) heaters are not properly sized in the following MCC cubicles as compared to the motor nameplate full load amps (FLA) that were checked during the walk through. (Note: Not all motors in the facility were accessible to be checked and exceptions may apply. Dwg. mark ups of items checked included in ORR files.) NEC 430-32(a)(1), 430-32(c)(1), and Manufacturer's Maint. Manual (Westinghouse Instruction Book I.B. 8920-1A, Part 7)

MCC#	CUBICLE		EXISTING SHOULD BE	
	#	LOAD	O.L.#	O.L.#
05-101	3A	CV-5-105	FH21	FH22
	5C	PF-5-101A	FH28	FH25
	6B	PF-5-101B	FH28	FH25
11-101	1C	P-11-101A	FH43	FH40
	2A	P-11-102A	FH34	FH33
	2B	P-11-101B	FH43	FH40
	2C	P-11-102B	FH34	FH33
11-102	1A	RF-11-101	FH49	FH48
	1B	SF-11-101	FH79	FH78
	2C	SF-11-201A	FH52	FH51
	2D	EF-11-202A	FH84	FH83
	3B	P-11-201	FH43	FH37
11-103	3C	EF-11-201A	FH45	FH43
	1B	EF-11-202B	FH84	FH83
	2A	SF-11-201B	FH52	FH51
	2E	SF-11-301	FH30	FH27
	2F	SF-11-401	FH49	FH48
	3A	RF-11-401	FH34	FH30
	3E	SF-11-501A	FH34	FH30
	3F	SF-11-501B	FH34	FH30

MCC-9-102, Cubicle 9C-2 (Supply Breaker to PP-9-103) has Phase C cable showing signs of overheating (discoloration of conductor and melting of the insulation). A bad connection is suspected. Also Phase B conductor has wire strands not secured under the terminal clamp. Suggest disconnecting cable, clean, remove or replace any damaged or oxidized parts; check breaker terminal and reterminate cable. NEC 110-14(a)

Wire strands on cables were found cut in order to fit into the connecting lugs in the following MCC Cubicles.

MCC-11-102, Cubicle 2D (EF-11-202A EXHST FAN)

MCC-11-103, Cubicle 1B (EF-11-202B EXHST FAN)

Retermine cables in properly sized lugs or terminals. NEC 110-14 and 110-14(a). (F)

A representative sample of motor circuit protector settings was made. Starters in MCC-11-102 Cubicles 1A, 1B, 2C, 2D, 3B, 3C, 4C, 4D and MCC-11-103 Cubicles 1B, 2A, 2B, 2E, 2F, 3A 3E, 3F were checked. In all but one case, the MCP settings were at maximum or near maximum. The present settings are more than the maximum 13 times motor FLA allowed without engineering evaluation. It would appear that the same exists in other MCCs. Motor Circuit Protectors of all operating loads must be properly adjusted. NEC 430-52(a)

ORR FINDING FORM**Core Requirement Number and Statement: 5**

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Number and Statement:

3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.
11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Finding Number: 5.3.4**Date:** November 18, 1996**Finding:**

Several installed electrical equipment and components in the field does not conform to what is described on the facility drawings. Engineering to evaluate and update drawings as necessary. See attached electrical walk through comments.

Discussion/Conclusion:

The affected drawings are released essential and support drawings that should reflect the "AS BUILT" conditions in the field; or the hardware must be corrected to match the design drawings. These drawings will be used for lock and tag verification which may lead to safety issues if not corrected.

Resolution:

No resolution prior to completion of ORR.

Signatures:**Team Member:****Team Leader:** M. Enghusen

ELECTRICAL WALKDOWN COMMENTS

Transformers T-13-101 and T-13-102 are not labeled with the facility equipment number but appear to be labeled with the utilities equipment number (C6620P and C6623P); however, the facility number is used on facility drawings and procedures.

The primary disconnect switches of transformers T-13-101 and T-13-102 are apparently labeled C8X581, C8X525, C8X578, C5X579. Dwg. H-2-131819, R6 (Master One Line) does not show this information.

SWGR SG-13-101 main breakers are apparently labeled F8X727 and F8X726. Dwg. H-2-131819, R6 (Master One Line) does not show this information.

Dwg. H-2-131820, Sht. 2, R6 (MCC One Line Diagram Sht. 2), shows MCC-7-101, Cubicle 1B (HU-7-304 Empty Drum Compactor) as having a 60AT breaker. Installed is a 40AT breaker.

MCC-7-101, Cubicle 1A is a SPARE with 3A MCP, Size 1 contactor and FH21 O.L. Dwg. H-4-131820, Sht. 2, R6 does not show this cubicle.

Dwg. H-2-131820, Sht. 3, R4 (MCC One Line Diagram Sht. 3), shows CV-09-101D NDE/NDA Drum Transfer Conveyor as a 1/2 HP motor. Installed is a 3/4 HP motor consistent with other similar conveyor motors.

In the NDE/NDA area, the wall mounted transformer/power panel units ND-06-101A through ND-06-106(?) do not have equipment labels on them. There are also no controlled panel schedules released for these panels.

Dwg. H-2-131820, Sht. 4, R9 (MCC One Line Diagram Sht. 4) shows PP-9-103 as outside of MCC-9-102. PP-9-102 is actually a part of MCC-9-102, Cubicle 10(?).

Update Dwg. H-2-131820, Sht. 5, R5 (MCC One Line Diagram Sht. 5) as follows:

Dwg. shows MCC-11-101 Cubicles 1A, 1B, 3B, 3C; and MCC-11-102 Cubicle 1C as having a 225AF breaker. Installed are Type HJD breakers which are 250AF breakers.

Dwg. also shows MCC-11-101 Cubicle 3A (PP-11-101 Power Panel) as having a 250AF/175AT breaker. Installed is a 400AF/250AT Type HKD breaker.

Dwg. also shows MCC-11-102, Cubicle 2F (EF-11-402 Exhaust Fan) as having a 150AF/70AT feeder breaker. Installed is 7A/MCP breaker.

Dwg. also shows that PP-11-104 in MCC-11-102 as a 100A, 24 Ckt. panel. Installed is a 225A, 42 Ckt. panel.

Dwg. also shows power panels PP-11-101, PP-11-102A, PP-11-102B fed from MCC-11-101 as 225A panels. Installed are 400A panels.

Dwg. H-2-131820, Sht. 5, R5 (MCC One Line Diagram Sht. 5) shows MCC-11-102 Cubicle 1B (SF-11-101 Supply Fan) as having a 100/MCP motor circuit protector. Installed is a 150AF/50AT Type HFD feeder breaker. An MCP should be installed.

MCC-11-102 Cubicle 2B "SPARE" label is missing on front panel.

Dwg H-2-131829, Sht. 1, R4 (Panel Schedules Sht. 1) describes PP-7-102 as having a 225A main breaker. There are no mains installed in the panel. Main lugs only (MLO).

Dwg also shows positions 31, 33, 35 and 37, 39, 41 as SPACE. Installed are two 3 pole, 20A breakers in those positions. Dwg. should also indicate that the breakers are all 3 pole breakers consistent with the descriptions used on other panel schedules.

Dwg H-2-131829, Sht. 2, R12 (Panel Schedules Sht. 2) describes PP-5-102, PP-7-101, PP-9-102, PP-9-103 as having a 225A main breaker. There are no mains installed in those panels. Main lugs only.

Dwg also shows the following:

In PP-7-101

20A in Ckt 41; a 30A is actually installed.

30A in Ckt 38; a 20A is actually installed.

Space in Ckt 40; a 20A is actually installed.

Space in Ckt 42; a 20A is actually installed.

In PP-9-101

20A/3 in Ckt 1,3,5; a 90A/3 is actually installed.

Dwg. H-2-131829, Sht. 3, R7 (Panel Schedules Sht. 3) describes PP-11-104 as having a 100A main breaker. There are no mains installed in the panel. Main lugs only.

Dwg. H-2-131827, Sht. 1, R4 (Lightning Protection Plan) shows a lightning protection down conductor located at the southeast corner of the building (drawing zone B8). None was installed.

ORR FINDING FORM**Core Requirement Number and Statement: 5**

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety systems and other instruments which monitor limiting conditions of operations or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Reference and Statement:

4. Acceptance Test Procedures have been completed and documented for all facility systems.
5. Operational Test Procedures have been completed and documented for all facility systems.
6. Cold Plant Integrated Testing has been completed and documented for all facility systems.
9. ATPS and OTPs contain acceptance requirements delineating the minimum standards acceptable for components and/or systems as appropriate.

Finding Number: 5.4.1**Date: November 15, 1996****Finding:**

All ATP/ATRs and OTP/OTRs for phase 1 of WRAP Module 1 need to be completed and issued (including the filled out copies of the OTPs). A local file of these documents should be established.

Discussion/Conclusion:

Could not find many of the ATP/ATRs that were supposed to be in the Project Files. Some of the OTP/OTRs have not been issued and the OTR appears not to include a filled out OTP section.

Resolution:

Complete the ATP/ATRs and OTP/OTRs (including completed forms from ATP/OTPs.)

Signatures:**Team Member:**
Team Leader: M. Engdhusen

ORR FINDING FORM**Core Requirement Number and Statement: 5**

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety systems and other instruments which monitor limiting conditions of operations or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Reference and Statement:

4. Acceptance Test Procedures have been completed and documented for all facility systems.
5. Operational Test Procedures have been completed and documented for all facility systems.
6. Cold Plant Integrated Testing has been completed and documented for all facility systems.
9. ATPS and OTPs contain acceptance requirements delineating the minimum standards acceptable for components and/or systems as appropriate.

Finding Number: 5.4.2

Date: November 15, 1996

Finding:

The Constant Air Monitor (CAM) interlock with the ventilation system needs to be verified. A Preventive Maintenance Procedure needs to be established and followed which would conduct this test for each CAM on a routine frequency. The PM needs to be conducted at all modes of operation and verify interlock will shut down the fan and will not allow restart (note this is already a finding under Criteria 1,2 and 8).

Discussion/Conclusion:

Vendor did not include testing of interlock between CAMs and HVAC. Submittal rejected with one of the comments being to provide the interlock. Suitable response from the vendor was not found.

Resolution:

Complete a PM on the CAM and HVAC interlocks for all cams and all operating conditions.

Signatures:

Team Member:

Team Leader: M. Engdusen

ORR FINDING FORM**Core Requirement Number and Statement: 6.**

A process has been established to identify, evaluate, and resolve deficiencies and recommendations made by oversight groups, official review teams, audit organizations, and the operating contractor.

Criterion Number and Statement: 2.

An adequate system exists and is implemented to identify, evaluate, and resolve deficiencies and recommendations made by oversight groups, official review teams, audit organizations, and WHC internal oversight.

Date: November 15, 1996

Finding Number: F.6.2.1

Finding:

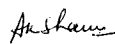
An adequate system does not exist for the application of the graded approach.

Discussion / Conclusion: There is no system or methodology to apply the graded approach in the application of Quality Assurance requirements at WRAP 1. WHC-CM-4-46 has been waived for WRAP. There are no Safety Class or Safety Significant structures, systems or components. These are key points of reference in applying QA requirements. A WRAP specific QA plan could clarify which systems or data acquisition activities in the plant require a greater level of control or oversight.

Recommendation: Develop a Quality Assurance Plan for WRAP 1. Pre start finding.

Resolution:

Signatures: 
Team Member: W. R. Thackaberry


Team Leader: A. K. Sharma

ORR FINDING FORM**Core Requirement Number and Statement: 7**

A systematic review of the facility's conformance to applicable DOE orders has been performed, any nonconformances have been identified, and schedules for gaining compliance have been justified in writing and formally approved.

Criterion Number and Statement: 1.

A compliance assessment has been completed, non compliances have been identified, and schedules for gaining compliance have been made.

Date: November 15, 1996

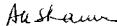
Finding Number: F.7.1.1

Finding:

The Compliance assessment failed to identify an area of noncompliance. WHC-SP-1131 does not address WRAP 1.

Discussion / Conclusion: WHC-SP-1131, the Implementation plan for 10 CFR 830.120(QA Rule) does not include WRAP 1 in the applicability section of the document. In an attachment listing projects under design or construction, Wrap is referred to as a potential nuclear facility under construction. This classification is inadequate if WRAP is now transitioning to an Operating Nuclear Facility.

RECOMMENDATION: revise WHC-SP-1131 to include WRAP as a Nuclear Facility. Prestart Finding.

Resolution:**Signatures:**

Team Member: A. K. Sharma



Team Leader: Bill Thackaberry

ORR FINDING FORM**Core Requirement Number and Statement: 7**

A systematic review of the facility's conformance to applicable DOE orders has been performed, any nonconformances have been identified, and schedules for gaining compliance have been justified in writing and formally approved.

Criterion Number and Statement: 1.

A compliance assessment has been completed, non compliances have been identified, and schedules for gaining compliance have been made.

Date: November 15, 1996

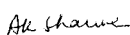
Finding Number: F.7.1.2

Finding:

The Compliance assessment failed to identify an area of noncompliance. WHC-CM-5-36, EP-1.3 cites an obsolete design standard.

Discussion / Conclusion: WHC-CM-5-36, EP-1.3 REV 8 section 2.1.1 requires H drawing conformance with SDC-1.3(confirmed on 11/13/96). SDC 1.3 has been canceled. The site wide version of the Standard Engineering Practice, WHC-CM-6-1, requires the use of ICF-KH A-E Standard General Manual sections GG-DWG-001 through 004. This is the standard in use by the FDNW designer.

RECOMMENDATION: Revise WHC-CM-5-36, EP-1.3 to allow the use of ICF KH A-E Standard General Manual sections GG-DWG-001 through 004. Post-start Finding.

Resolution:**Signatures:**

Team Member: A. K. Sharma

Team Leader: W. R. Thackaberry

ORR FINDING FORM**Core Requirement Number and Statement: 7**

A systematic review of the facility's conformance to applicable DOE orders has been performed, any nonconformances have been identified, and schedules for gaining compliance have been justified in writing and formally approved.

Criterion Number and Statement: 1.

A compliance assessment has been completed, non compliances have been identified, and schedules for gaining compliance have been made.

Date: November 15, 1996

Finding Number: F.7.1.3

Finding:

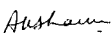
The Compliance assessment failed elicit a definitive response from the designated expert regarding the adequacy of WHC-CM-5-34 Ch 1.10, Inspection.

Discussion / Conclusion: The assessor coordinating the compliance review sent a uniform questionnaire via cc:mail to each of the requirement experts listed in the Requirement/Expert Matrix maintained by the Solid Waste Division. The majority of responses were sent via cc:mail. Some telephone conversations or in-person responses weren't documented. I was able to contact the majority of these experts. All but one of those contacted confirmed that they had spoken to John Wick and confirmed the applicability and adequacy of their requirement.

Paul Crane, the expert for section 1.10 of WHC-CM-5-34 would not confirm the adequacy of the procedure for implementation at WRAP. He acknowledged receiving the questionnaire. The cc:mail correspondence from Crane indicates that revisions to accommodate WRAP have been made to 3.7, 3.16, 3.18, 3.20, 3.22 and 3.24, but 1.10 has been omitted.

RECOMMENDATION: Recommendation: Evaluate the adequacy of WHC-CM-5-34 section 1.10 for implementation at WRAP. Pre-start Finding.

Resolution:

Signatures: 

Team Member: A. K. Sharma



Team Leader: W. R. Thackaberry

ORR FINDING FORM**Core Requirement Number and Statement: 7**

A systematic review of the facility's conformance to applicable DOE orders has been performed, any nonconformances have been identified, and schedules for gaining compliance have been justified in writing and formally approved.

Criterion Number and Statement: 1

A compliance assessment has been completed, non compliances have been identified, and schedules for gaining compliance have been made.

Date: November 15, 1996

Finding Number: F.7.1.4

Finding:

No corrective action schedule for gaining compliance on S/RID items.

Discussion / Conclusion: The LATA S/RID Compliance Assessment report states that the S/RID is in need of revision. 36 CFR 79, DOE O 232.1, DOE O 232.1-1, RLID 1300.1c need to be added to the document. No punch list items were identified. In addition items identified in this ORR assessment should also be added to the punchlist.

RECOMMENDATION: Recommendation: Add items to the punchlist addressing the need to update the SWD S/RID as well as the other findings associated with this core requirement. Pre-start Finding.

Resolution:

Signatures:

A. K. Sharma

W. R. Thackaberry

Team Member: A. K. Sharma

Team Leader: W. R. Thackaberry

ORR FINDING FORM**Core Requirement Number and Statement:** 8.1

There is an adequate emergency preparedness organization and program.

Criterion Reference and Statement: 1

Emergency and off-normal procedures effectively guide personnel in responding to single and multiple events.

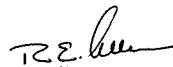
WHC-CM-5-36, Chapter 4-43

Date: November 18, 1996**Finding Number:** 8.1.1.1**Finding:**

During discussions with WRAP Facility personnel it was apparent that the Building Emergency Plan (BEP) was not readily available for all personnel.

Discussion/Conclusion:

WHC-CM-5-36, Chapter 4-43, 11.1, requires that facility personnel have sufficient copies of the BEP available for their review on an annual basis.

Resolution:**Signatures:****Team Member:****Team Leader:** R. Allen

ORR FINDING FORM**Core Requirement Number and Statement:** 8.1

There is an adequate emergency preparedness organization and program.

Criterion Reference and Statement: 3

An approved emergency plan and supporting documents exist and have been tested to ensure effective emergency preparedness and response. Provisions are in place to upgrade the Emergency Plan based on lessons learned from drills, exercises and actual emergencies. The emergency plan incorporates required emergency preparedness program features.

WHC-CM-5-36, Chapter 4-43

Date: November 18, 1996**Finding Number:** 8.1.3.1**Finding:**

The current revision of the WRAP Building Emergency Plan (BEP) was not on HLAN.

Discussion/Conclusion:

The electronic copy of the BEP is utilized by the Hanford Fire Department for emergency response. Need to ensure the current revision is maintained on HLAN.

Resolution:**Signatures:****Team Member:****Team Leader:** R. Allen

ORR FINDING FORM**Core Requirement Number and Statement: 8.1**

There is an adequate emergency preparedness organization and program.

Criterion Reference and Statement: 4

Facility Emergency Response personnel are trained to effectively respond and mitigate the consequences of emergencies. Facility non-emergency response personnel are adequately trained on emergencies situations. (Assessed under Core Requirement 2 and 3, provided here for information and completeness) Non-facility emergency response personnel are trained to respond to and support WRAP. NOTE: Only training that is unique to WRAP or describes WRAP's operations is to be assessed.

WHC-CM-5-36, Chapter 4-43/WHC-CM-5-36, Chapter 4-40

Date: November 18, 1996

Finding Number: 8.1.4.1

Finding:

Not all WRAP Facility personnel have reviewed the Building Emergency Plan (BEP).

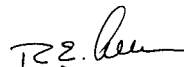
Discussion/Conclusion:

Facility personnel are required to review the BEP within 30 days after assignment to the building and annually thereafter. Utilization of the Facility Emergency and Hazards Information Checklist would accomplish this requirement.

Resolution:**Signatures:**

Team Member:

Team Leader: R. Allen



ORR FINDING FORM**Core Requirement Number and Statement:** 8.1

There is an adequate emergency preparedness organization and program.

Criterion Reference and Statement: 5

Facilities, equipment, and resources are in place and adequate to support emergency response operations and ensure the protection of all personnel (e.g., Emergency Operations Center, backup or alternative facilities, primary and backup communication, alarms adequate to notify personnel, transportation, medical treatment, respiratory equipment, exposure controls, instrumentation to measure exposure, etc.).

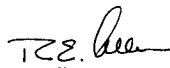
WHC-CM-5-36, Chapter 4-43

Date: November 18, 1996**Finding Number:** 8.1.5.1**Finding:**

The WRAP 1 facility utility disconnects are not included on Emergency Boards or in the Building Emergency Plan (BEP) and the Building Emergency Guide (BEG).

Discussion/Conclusion:

Place main disconnects for utility disconnects on the Facility Emergency Response Board and in the BEP and BEG.

Resolution:**Signatures:****Team Member:****Team Leader:** R. Allen

ORR FINDING FORM**Core Requirement Number and Statement:** 8.1

There is an adequate emergency preparedness organization and program.

Criterion Reference and Statement: 5

Facilities, equipment, and resources are in place and adequate to support emergency response operations and ensure the protection of all personnel (e.g., Emergency Operations Center, backup or alternative facilities, primary and backup communication, alarms adequate to notify personnel, transportation, medical treatment, respiratory equipment, exposure controls, instrumentation to measure exposure, etc.).

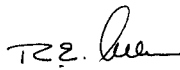
WHC-CM-5-36, Chapter 4-43

Date: November 18, 1996**Finding Number:** 8.1.5.2**Finding:**

Alarm and communication systems are not adequate to cover all WRAP facilities.

Discussion/Conclusion:

Evacuation, take cover, pax speakers are present at WRAP 1 but not at the administration building or maintenance building. Additional alarms/communication systems need to be installed to ensure sufficient coverage. All WRAP emergency notification systems need to be included in an annual preventative maintenance program.

Resolution:**Signatures:****Team Member:****Team Leader:** R. Allen

ORR FINDING FORM**Core Requirement Number and Statement:** 8.1

There is an adequate emergency preparedness organization and program.

Criterion Reference and Statement: 5

Facilities, equipment, and resources are in place and adequate to support emergency response operations and ensure the protection of all personnel (e.g., Emergency Operations Center, backup or alternative facilities, primary and backup communication, alarms adequate to notify personnel, transportation, medical treatment, respiratory equipment, exposure controls, instrumentation to measure exposure, etc.).

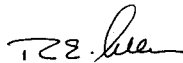
WHC-IP-1237, WRAP 1

Date: November 18, 1996**Finding Number:** 8.1.5.3**Finding:**

Not all emergency equipment identified in the Building Emergency Guide (BEG) are in service.

Discussion/Conclusion:

Need to review the BEG emergency equipment list and place necessary equipment in service or remove it from the BEG.

Resolution:**Signatures:****Team Member:****Team Leader:** R. Allen

ORR FINDING FORM**Core Requirement Number and Statement:** 8.1

There is an adequate emergency preparedness organization and program.

Criterion Reference and Statement: 10

Individuals and alternates are designated to perform all emergency roles using clear lines of succession.

WHC-CM-5-36, Chapter 4-43

Date: November 18, 1996**Finding Number:** 8.1.10.1**Finding:**

Facility Emergency Response Boards need to be updated/completed.

Discussion/Conclusion:

The WRAP 1 Facility Emergency Response Board list of the Building Emergency Organization needs to include individual work locations. The administration/maintenance building boards need to have all pertinent information added.

Resolution:**Signatures:****Team Member:****Team Leader:** R. Allen

ORR FINDING FORM**Core Requirement Number and Statement: 8.3**

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Criterion Number and Statement: 1

Environmental compliance programs are defined in formal policies, standards, and procedures.

DATE: 11/15/96

Finding Number: F.8.3.1.1

Finding:

There is no verifiable evidence that the environmental requirements of WHC-CM-7-5 are accepted.

Discussion/Conclusion:

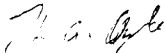
The S/RIDS that are to be by WRAP include the environmental compliance requirements. These requirements are found sitewide in WHC-CM-7-5, a level II controlled manual. At WRAP, these requirements are found in WHC-CM-5-36, Chapter 7-5. There is no verifiable evidence that other organizations (eg. FDH Environmental Services) has agreed to surrendering the responsibility for these requirements. There needs to be an agreement in place and documented that any requirements of WHC-CM-7-5 not duplicated in WHC-CM-5-36, Chapter 7-5 are waived.

Resolution:

No resolution had been made prior to the completion of the ORR.

Signatures:

Team Member:


Team Leader: Tom Quayle

ORR FINDING FORM**Core Requirement Number and Statment: 8.4**

There is an adequate Fire Protection Program.

Criterion Number and Statement: 3

All facility fire hazards are identified and evaluated on a continuing basis. A Fire Hazards Analysis is documented and complete.

Date: 18 November 1996**Finding Number: F.8-4.3.1****Finding:**

The Fire Hazards Analysis is not complete and does not reflect the current status of the facility.

Discussion / Conclusion: The following specific discrepancies were identified:

- 1) Page 19 was missing from the official document in Document Control. This page appears to include part of the description of the building construction.
- 2) Paragraph 4.0 C.1.a indicates that the design density for the Shipping and Receiving Area is .38 gpm/sq ft, however, actual design density was at .25 gpm/sq ft.
- 3) Paragraph 4.0 C.1.b indicates that the other areas of the plant were designed per the direction of the SDRD, referencing Specification Section 15300. The final design density for each area should be referenced.
- 4) Paragraph 4.0 D.1.b indicates that waste drums received are "vented". This contradicts paragraph 4.0 D.5.d which indicates that the drums are "sealed".
- 5) Egress routes, stairwells, elevators, ramps, egress paths are not adequately discussed in the FHA. Paragraph 4.0 E does not provide any specifics, only references NFPA 101 and the UBC as being the requirements.
- 6) Paragraph 4.0 C.5 is incorrect in the description of the dry pipe sprinkler system. The system is a separate system, not part of the wet pipe sprinkler system.
- 7) The covered porch area is not addressed in the FHA, however, could impact the protection of the building.
- 8) Paragraph 4.0 C.6 indicates there are automatic detectors, but does not indicate the level of protection provided by the detectors.
- 9) Paragraph 4.0 C.8.a indicates that there is "VESDA" air sampling system in the Control Room, but does not indicate the level of protection provided. The various alarm points should be discussed.
- 10) In paragraph 4.0 H.2, the Maximum Possible Fire Loss (MPFL) is discussed instead of the Maximum Foreseeable Loss (MFL). This does not provide the option of utilizing the HFD as the redundant system.
- 11) Paragraph 4.0 I.1 indicates that the HFD is expected to be 5 minutes. In actuality, the response time was 8 to 9 minutes, nearly twice as long.

- 12) Paragraph 4.0 K.1 indicates that WRAP Module 1 personnel will develop safety training for the employees.
- 13) Paragraph 4.0 L does not address off shift access to the facility.
- 14) There was no discussion of earthquake protection for the sprinkler systems in paragraph 4.0 M.
- 15) There was no discussion of the potential exposure to range fires in paragraph 4.0 N.
- 16) Appendix F to the FHA requested for deviation of RLIP 5480.7 paragraph 7a and 6430.1A, Section 0111-99.0.1 and 1161-2. There is no documentation that these requests were ever closed out. This documentation should be attached to the FHA.

Resolution:

Recommend revision of the FHA to reflect the facility in the current configuration.

Signatures:**Team Member:****Team Leader: D. Oar**

ORR FINDING FORM**Core Requirement Number and Statement: 8.4**

There is an adequate Fire Protection Program.

Criterion Statment and Number: 5

Fire protection systems and equipment are available as specified in fire protection program documents.

Date: 18 November 1996**Finding Number: F.8-4.5.1****Finding:**

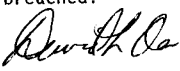
Fire barriers are not being maintained.

Discussion / Conclusion: The following discrepancies were identified regarding the maintenance of the fire barriers:

- 1) Work packages are not being reviewed to insure fire barriers are not breached.
- 2) No procedure is in place to inspect fire barriers at least every two (2) years.
- 3) Fire rated doors, swinging type, are not being inspected at least every six (6) months.

Resolution:

Develop procedures to perform the required inspections and maintenance on fire barriers and fire barrier components. Provide a means of reviewing Work Packages to insure fire barriers are not breached.

Signatures:**Team Member:**
Team Leader: D. Oar

ORR FINDING FORM**Core Requirement Number and Statement: 8.4**

There is an adequate Fire Protection Program.

Criterion Number and Statement: 11

Means of controlling liquid run-offs from a credible fire are provided so that contaminated (including non-radiological contaminants) liquids, including potentially contaminated water resulting from fire fighting operations, will not escape to the environment.

Date: 18 November 1996

Finding Number: F.8-4.11.1

Finding:

Calculations were not available to substantiate statements made indicating that adequate containment was designed into the facility in waste handling areas. No documentation was provided for other areas of the facility.

Discussion / Conclusion: The Uniform Building Code (UBC), Article 307.2.4.1, requires that drains shall be designed to handle the maximum worst-case spill from a single largest container plus the volume of fire protection water from the system over the minimum design area for a period of 20 minutes. D.O.E. Order 6430.1A and RLID 5480.7 (dated 1/17/94) require that any liquid effluents resulting from a discharge of the building fire water suppression system would be pumped to portable transfer containers. The liquid would be sampled and directed to appropriate on-site storage or disposal unit. The code of record for the facility and WHC-CM-5-34, Section 1.3, imposes the requirements of the UBC and DOE RLID.

Resolution:**Signatures:**

Team Member:

Team Leader: D. Oar

ORR FINDING FORM**Core Requirement Number and Statement: 8.5**

There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1

The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

WHC-CM-5-36, Section 3.6, Operations Maintenance Requirements; Section 2.11, Work Management; WHC-IP-1120, SWD S/RID

Interviewed: Manager (T. Orgill), Work Control Team Lead (M. Ibatuan)

Date: November 15, 1996

Finding Number: 8.5-1.1

Finding:

WRAP I has not developed, approved, or implemented a consolidated Maintenance Management Plan, or Maintenance Implementation Plan (MIP).

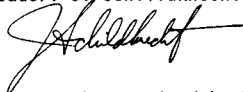
Discussion/Conclusion: The facility states they are exempted by their S/RID. Present facility plan is based on 3.6/CM-5-34, and is inadequate.

Resolution: WRAP should prepare and issue a comprehensive Maintenance Management Plan that documents a facility approach to major program elements.

Signatures:

Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this finding appears to be required by WHC-SP-0851, Rev. 1 and should be addressed by WRAP facility management.

Signature: Wm. Lamer WRAP ORR Team Leader

ORR FINDING FORM**Core Requirement Number and Statement: 8.5**

There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement 8.5.1

The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed CM-5-34, Sections 3.6 and 2.11, and IP-1120, Ch. 10, SWD S/RID (Maint.)

Interviewed Manager (T. Orgill), Team Leader (M. Ibatuan), Maint. Person-in-Charge (PIC) (C. Johnson).

Date: November 15, 1996

Finding Number: 8.5-1.2

Finding:

The facility is without an effective, comprehensive Maintenance Management Plan, or MIP.

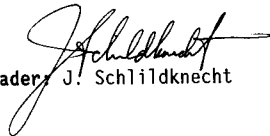
Discussion/Conclusion: A graded approach application is not documented, so level of detail/depth in the program elements is difficult to address (define).

Resolution: WRAP 1 should develop an effective Maintenance Management Plan implementing a graded approach.

Signatures:

Team Member:

Team Leader: J. Schliedknecht



Date: November 26, 1996

Upon further review this finding appears to be required by WHC-SP-0851, Rev. 1 and should be addressed by WRAP facility management.

Signature: Wm Bauer WRAP ORR Team Leader

ORR FINDING FORM**Core Requirement Number and Statement: 8.5**

There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1

The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed WHC-CM-8-7, Section 220, and CM-5-34, Sect. 3.6.

Interviewed Manager (T. Orgill), and Work Control Lead (M. Ibatuan).

Date: November 15, 1996

Finding Number: 8.5-1.3

Finding:

The WRAP facility had not developed or implemented a Cold Weather Protection (CWP) program, nor had they initiated CWP activities for the facilities, upon the arrival of the ORR team.

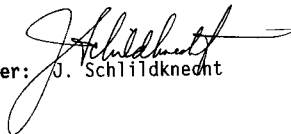
Discussion/Conclusion: This was previously documented by report from FDH ConOps to DOE on Nov. 1, 1996. The facility could not produce CWP plans, procedures, or checklists when requested. Upon inquiry, WRAP management began some CWP actions.

Resolution: Develop a CWP plan and conduct CWP activities.

Signatures:

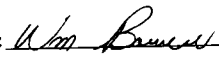
Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this finding appears to be required by WHC-SP-0851, Rev. 1 and should be addressed by WRAP facility management.

Signature:  WRAP ORR Team Leader

ORR FINDING FORM**Core Requirement Number and Statement: 8.5**

There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3

An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, 2.11. Interviewed WC Team Lead (M. Ibatuan).

Date: November 15, 1996

Finding Number: 8.5-3.1

Finding: Infrequent violations of work release occur by maintenance personnel for multi-shift/day work activities, especially when using "general scope" work packages.

Discussion/Conclusion: On occasion, work packages have not been returned to the work control center prior to end of shift, and work is continued the following day.

Resolution: This must be rectified by policy clarification and enforcement.

Signatures:

Team Member:

Team Leader: J. Schilddkhecht

Date: November 26, 1996

Upon further review this finding appears to be required by WHC-SP-0851, Rev. 1 and should be addressed by WRAP facility management.

Signature: Wm. Bauer WRAP ORR Team Leader

ORR FINDING FORM**Core Requirement Number and Statement: 8.5**

There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3

An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-3-5, 2.11.

Interviewed WC Team Leader (M. Ibatuan).

Date: November 15, 1996

Finding Number: 8.5-3.2

Finding:

Clear and concise criteria for segregating planned, unplanned work activity is missing.

Discussion/Conclusion: Section 2.11 discusses the screening process for the purpose of determining when work should be planned or unplanned. This process guidance refers to the "old J-3" work as a category of work not requiring planning.

Resolution: Develop clear and concise criteria.

Signatures:

Team Member:

Team Leader: J. Schildknecht

Date: November 26, 1996

Upon further review this finding appears to be required by WHC-SP-0851, Rev. 1 and should be addressed by WRAP facility management.

Signature: W. J. Lawrence WRAP ORR Team Leader

ORR FINDING FORM**Core Requirement Number and Statement: 8.5**

There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3

An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, 2.11, 3.6, and IP-1140/IP-0673.

Interviewed Craft (M. Althaus, R. Dohaniuk, M. Zilar), Maintenance Engr. (E. Allen).

Date: November 15, 1996

Finding Number: 8.5-3.3

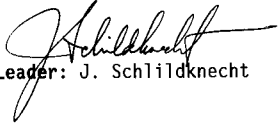
Finding: Could not find clear policy on management's expectations for procedure use.

Discussion/Conclusion: Site procedure (CM-3-5, Section 12.5) has specific requirements: continuous use or reference use. Craft indicated that clear guidance has not been given, or understanding is poor. The statement "procedure compliance is mandatory" is not adequate guidance. Procedures and work packages did not contain procedure use requirements for lack of other communication.

Resolution: Determine and implement procedure use requirements.

Signatures:

Team Member:


Team Leader: J. Schildknecht

Date: November 26, 1996

Upon further review this finding appears to be required by WHC-SP-0851, Rev. 1 and should be addressed by WRAP facility management.

Signature:  WRAP ORR Team Leader

ORR FINDING FORM

Core Requirement Number and Statement: 8.6

There is an adequate quality assurance organization and program.

Criterion Number and Statement: 1

The quality assurance program is clearly defined and documented, has well defined interfaces and responsibilities, and includes a well defined system for audits, surveillances, document review, corrective action, and follow up. There are procedures for systematic reviews and audits, including self-assessments.

Date: November 15, 1996

Finding Number: F.8.6.1.1

Finding:

Responsibilities and interfaces are not well defined.

Discussion / Conclusion: The document defining responsibilities (WHC-CM-1) that is referenced in the SWD QA Program Plan (WHC-CM-5-34 Sec 1.9) has not been adopted by FDH rendering the responsibilities section of SWD QA Program Plan deficient. In conjunction with this line of inquiry it was also noted that WHC-CM-5-34 and WHC-CM-5-36 were not included with the list of manuals to be adopted by FDH.

Recommendation: 1) Issue an alternate responsibilities description for use until such time as FDH reestablishes a Charters and Responsibilities document.
2) Adopt WHC-CM-5-34 and WHC-CM-5-36. Post Startup Findings

Resolution:

Signatures: *W. R. Thackaberry*

Team Member: W. R. Thackaberry

A. K. Sharma

Team Leader: A. K. Sharma

ORR FINDING FORM

Core Requirement Number and Statement: 8.6

There is an adequate quality assurance organization and program.

Criterion Number and Statement: 1

The quality assurance program is clearly defined and documented, has well defined interfaces and responsibilities, and includes a well defined system for audits, surveillances, document review, corrective action, and follow up. There are procedures for systematic reviews and audits, including self-assessments.

Date: November 15, 1996

Finding Number: F.8.6.1.2

Finding:

The QA program at WRAP is poorly defined.

Discussion / Conclusion: The primary driver for QA involvement at this time is the approval designator (WHC-CM-3-5 section 12.7) on document reviews. There is no process to apply the graded approach in the application of QA requirements. This is a site wide problem that is aggravated by the fact that CM-4-46 has been waived for WRAP. WRAP has declared that the facility has no Safety Class/Safety Significant Equipment. Without this designation to trigger Quality Assurance involvement the application of QA resources is subjective and minimal. There is no Quality Assurance participation in the JCS planning work package preparation area.

WRAPs omission from WHC-SP-1131 and the deficiency in the Roles & Responsibilities area are addressed in separate findings.

Recommendation: Develop a WRAP specific QA Plan that describes the appropriate scope of QA activity in the facility. Prestart Finding

Resolution:

Signatures:

*W. R. Thackaberry**A. K. Sharma*

Team Member: W. R. Thackaberry

Team Leader: A. K. Sharma

ORR FINDING FORM**Core Requirement Number and Statement: 8.7**

Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment.

Criterion Number and Statement: 2

Personnel performing health physics duties have successfully completed HSRCM training and qualification program.

DATE: November 15, 1996

Finding Number: 8.7.2.1

Finding:

RTC personnel performing health physics duties during the EP drill failed to respond according to the requirements of the HSRCM training and qualification program.

Discussion/Conclusion:

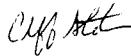
RCT response during the EP drill was not acceptable. The RCTs evacuated the building without portable instruments or EP kits. Because of this oversight RCT support was requested from CWC and took over 20 minutes to arrive. The RCTs did not enquire if any other personnel were in the NDA/NDE or Shipping/Receiving areas at the time of the spill. The RCTs required prompting to collect nasal smears from the contaminated worker. Nasal smears are required procedurally, by WRP1-OP-1204, when facial contamination is detected.

Resolution:

No resolution prior to completion of the ORR.

Signatures:

Team Member:


Team Leader: Cliff Stephan

ORR FINDING FORM**Core Requirement Number and Statement: 8.7**

Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public and the environment.

Criterion Number and Statement: 20

A documented, acceptable air monitoring program is in place, and is supported by sufficient studies (eg. air flow patterns, particle size, etc.).

DATE: 11/15/96

Finding Number: F.8.7.20.1

Finding:

The air monitoring program is not supported by studies.

Discussion/Conclusion:

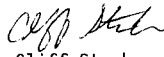
A documented air monitoring program as discussed in WHC-SD-W026-TA-002 is in place. However, the program is not supported properly by studies such as air flow patterns, and particle size.

Resolution:

No resolution had been made prior to the completion of the ORR.

Signatures:

Team Member:


Team Leader: Cliff Stephan

ORR FINDING FORM**Core Requirement Number and Statement: 8.8**

Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

Criterion Number and Statement: 1.

A formal safety and health program has been developed which includes procedures and policies consistent with DOE Orders and OSHA.

Date: 11/15/96

Finding Number: 8.8-1.1

Finding:

The Health and Safety Plan (HASP) as it pertains to the WRAP facility is inadequate.

Discussion/Conclusion:

The following are examples of the lack of sufficient detail, information in the HASP which indicate that Criteria 1 for this core requirement has not been achieved satisfactorily:

1. Section 10 of the HASP is the program for confined spaces. However there is no mention of the WRAP facility. 29CFR1910.120(b)(4)(ii)(I)
2. Section 12 of the HASP is the program for Emergency Actions and Response. There is a statement in the HASP that this will apply to the WRAP after it is operational. However, in order to be ready to become operational, it should be applicable now. 29CFR1910.120(b)(4)(ii)(H)
3. Section 15 of the HASP is the section that is unique to WRAP. This section has several items that are not correct such as:
 - a. P. 15.0 "It is the responsibility of the managers and each employee to become familiar with the total and current inventory of the chemicals in WRAP at any given time." As this is a unattainable goal, the statement needs to reflect the idea that individuals need to know what chemicals they may be working with.

- b. P. 15.3 "Drums, boxes, and overpack containers arrive at a facility, are off-loaded by mechanical means ... and additionally, opening and package removal in the case of overpack container receipt." The lighter drums may be off loaded other than by mechanical means, there will be no opening of containers in the Shipping and Receiving area.
- c. P. 15.3 "Drum or box weighing may or may not be performed." All drums will go through the infeed conveyor where they will be weighed to verify the shippers documentation.
- d. P. 15.3 "Tables 15-1 and 15-32 ..." There is no table 15-32.
- e. The tables go from 15-2 to 15-4. Was there supposed to be a table 15.3?

29CFR1910.120(b)(4)(iv)

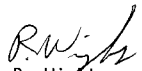
In conclusion: The WRAP-1 Health and Safety Plan needs to be updated and implemented prior to start-up of the WRAP facility.

Resolution:

As a resolution prior to completion of the ORR, the correction of the HASP as it relates to the WRAP facility has been entered into the WRTS tracking system with a completion date of 12/31/96.

Signatures:

Team Member:


Team Leader: R. Wight

ORR FINDING FORM**Core Requirement Number and Statement: 8.8**

Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

Criterion Number and Statement: 8.

As a minimum Industrial Safety, Industrial Hygiene, and Nuclear Safety should have assessed the following:

A - 1. Work area is safe, free of tripping hazards, clean, appropriate signs posted ...

Date: 11/15/96

Finding Number: 8.8-8.1

Finding:

Throughout the WRAP facility, Administration building, and maintenance shop, signage to alert employees to hazards is not sufficient to support safe operations.

Discussion/Conclusion:

The following are examples of the lack of sufficient signage to promote safe operations of WRAP:

1. Several areas in the WRAP facility have been evaluated and found to be confined spaces. However, these spaces are not posted. The spaces need to be posted at all entrances. Particularly the NDE X-Ray vaults and the small air handlers in the HVAC room. 29CFR1910.146(c)(2)
2. In the maintenance shop (building 2620) there are a pedestal grinder, belt grinder, drill Press that appear to be operational with no caution sign for eye protection required during operation. 29CFR1910.145(c)(2)
3. The panel in front of the AS/RS is properly marked with a "DANGER-480 VOLTS" sign. However, there are similar panels by the AS/RS, Storage carousel that only have a small sticker that says "480 VOLTS". All of the signs for the similar panels should be alike in stating the danger involved. Although OSHA only requires the sticker on panels containing voltages over 600 volts, it would be a best management practice to have the danger signs on all of the panels with 480 volts. Also, in order to be consistent with the marking that is presently on the one panel, having the other panels match the signage would be a best management practice. 29CFR1910.135(b)(1), .145

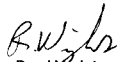
4. Although the outline of the AGV travels on the floor is clearly marked by a solid yellow line, there is no explanation for what the line indicates, or the nature of the hazard involved. 29CFR1910.176(a)
5. The storage of compressed gas at a facility is governed by the Compressed Gas Association (CGA) pamphlet 1 by reference from 29CFR1910.101 and WHC-CM-5-36, Chapter 1-10, Section WKS 14. The requirements for compressed gas in storage includes: All empty cylinders clearly marked as such, compressed gas storage area must clearly identify the name of the gas(es) that may be stored in the area, and no smoking signs must be posted at all gas storage areas. Contrary to these requirements, the gas storage area by the maintenance shop has no postings as does the area in the NDE/NDA area where the Nitrogen duars are stored.
6. Standing on the North side of the wall by the TRU-PAC loading area there is no visible exit sign to indicate egress from the facility. 29CFR1910.37(q)
7. Throughout the WRAP facility there are "Caution, Automated Guided Vehicle" signs posted on the walls. As a caution sign, these should be in bright yellow with black lettering. Instead they are in white with black lettering. 29CFR1910.144(a)(3)
8. In the areas where there are crane operations taking place there needs to be posted the standard hand signals for the crane operators and spotters (riggers). There are none posted in the facility at this time. DOE-RL-92-36, P. 12.8.3 (Hanford Hoisting and Rigging Manual)
9. At the rear of the AS/RS area, there is ample opportunity for an individual to walk into the travel path of the AS/RS. There is an electric eye to shut off the machine should any one unknowingly enter this area. However, this slows down the operation as the AS/RS would then need to be brought back up to speed. A recommendation would be to paint a line on the floor or post the area as a keep out zone and make individuals aware of the electric eye so they would not shut down the operation.

Resolution:

No resolution prior to completion of the ORR

Signatures:

Team Member:


Team Leader: R. Wright

ORR FINDING FORM**Core Requirement Number and Statement: 8.8**

Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

Criterion Number and Statement: 8.

A-6. As a minimum Industrial Safety, Industrial Hygiene, and Nuclear Safety should have assessed the following: Personal Protective Equipment/clothing provided.

Date: 11/15/96

Finding Number: 8.8-8.2

Finding:

Several instances throughout the facility where Personal Protective Equipment (PPE) is not available or not utilized.

Discussion/Conclusion:

A. The following are examples of when PPE was not available in the facility when the hazard was such as to warrant having the PPE ready for the workers:

1. In the Shipping/Receiving area, there is a designated battery charging station for forklifts. However there is no emergency eye wash available in the area. 29CFR1910.132(a)
2. Eye protection around machinery in maintenance shops was not visible. 29CFR1910.132(a)
3. There is no issuing station or collection station for control of respirators in the facility. 29CFR1910.134(b) & (e)

B. The following were examples of when the PPE was available, but the employees were observed to be not wearing it as required:

1. Workers observed under the jib crane working and observing operation without hard hats. 29CFR1910.135(a)
2. Workers observed not wearing seat belts when operating forklifts. WHC-CM-5-36, Chapter 1-10, Sect. WKS 27, P. 3.7.9
3. Workers observed without gloves on hands when pushing a drum off the AGV to the drum grabber device. 29CFR1910.138(a)
4. WRAP employee observed picking up wood outside of building in a mouse infested area with bare hands. 29CFR1910.138(a)

- c. During a pre-job briefing, 2 operators were observed to leave the briefing before the discussion of required PPE for the job was commenced. 29CFR1910.132

In conclusion: The WRAP facility needs to continue their efforts at establishing the need for proper PPE throughout the facility. The attitude and culture of the employees needs to be improved so that use of PPE is not neglected.

Resolution:

No resolution of this finding during the ORR.

Signatures:

Team Member:

Team Leader:  R. Wight

ORR FINDING FORM**Core Requirement Number and Statement: 8.8**

Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

Criterion Number and Statement: 8.

As a minimum Industrial Safety, Industrial Hygiene, and Nuclear Safety should have assessed the following:

- A-4. Machine guards are in place, physical safety systems operational/functional and can not be inadvertently bypassed and safety devices provided .

Date: 11/15/96

Finding Number: 8.8-8.3

Finding:

Throughout the WRAP facility, and maintenance shop, equipment is not properly guarded, anchored or provided with adequate safety devices in accordance with all OSHA requirements.

Discussion/Conclusion:

The following are examples of equipment that needs further attention in order to operate safely:

1. In the maintenance shop there is a belt sander and a drill press that appear to have been used that are not securely anchored. 29CFR1910.212(b)
2. In the Northwest corner of the HVAC room there is a pump that is used on the Glycol recovery system with an unguarded opening approximately 2" X 4" that would allow access to the rotating shaft. 29CFR1910.219(c)(2)
3. The two forklifts in the shipping/receiving area have no indication they were inspected prior to use, what the next scheduled maintenance time should be, one was missing the operators manual, there is no daily inspection checklist available, and there is no back-up warning device. 29CFR1910.178(q)(7); DOE-RL-92-36, Section 6.0; WHC-IP-1252 (HASP), P. 4.3
4. The pendants on the two jib cranes in the shipping/receiving area are very heavy to hold and the pressure needed to hold the button for operations is excessive. This causes fatigue for the operator in a very short time. The pendants are tied to electrical conduit for support by a piece of scrap electrical wire. WHC-CM-5-36, Chapter 4-40, Section 3.2; NEC 70 Art. 300-11(b)

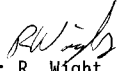
5. In the by-pass mode, the AS/RS has no safety restraints. There is an administrative control in the procedure not to use the AS/RS in this mode in normal operations, but to recover from upset it may be necessary. When the AS/RS is in this mode, there are no safety restraints and operations would be extremely hazardous as the operator would be very close to the machine and the heavy barrels overhead. (Best management practice)
6. There are no hard stops for the jib cranes when swinging the booms. (Best management practice)
7. The floor in the shipping/receiving area is very slippery and when it becomes wet will be a hazard. There are no awnings or methods of keeping moisture from rain or snow from entering the facility during inclement weather if the roll up door need to be opened for receipt/shipment. (This is realized by the facility, and work orders are being prepared to mitigate the problem with a special paint.) 29CFR1910.22; WHC-CM-5-36, Chapter 1-10, Section 18
8. In the NDE/NDA area there are several lights on the GEA and IPAN units to indicate different stages of operation. These signs can not be seen from most of the floor area. Also, They all have green, yellow, and red lights but the lights do not mean the same thing for the different pieces of equipment. WHC-CM-5-36, Chapter 1-10, Sections 28 and 29

Resolution:

No resolution prior to completion of the ORR

Signatures:

Team Member:


Team Leader: R. Wight

ORR FINDING FORM**Core Requirement Number and Statement: 8.8**

Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

Criterion Number and Statement: 8.

A-1. Work area is safe ...

Date: 11/15/96

Finding Number: 8.8-8.4

Finding:

Throughout the WRAP facility, including the maintenance shop, the following were noted as possible discrepancies with respect to OSHA requirements.

Discussion/Conclusion:

The following are items that require further evaluation to determine all OSHA requirements have been satisfied prior to operating the facility safely:

1. The following is not adequate for the forklift battery charging area in the Shipping/Receiving area: There is no spill kit for neutralizing electrolyte, no emergency eye wash station or eye protection provided, and the area is not protected from nearby vehicle traffic.
29CFR1910.178
2. On the walls around the GEA and IPAN units there are support struts for conduit etc. that extend down to under 5' from the floor (Head bumping area), that extend out from the wall 1.5". This area is an area that operators will occasionally have to walk in with restricted access between the vaults and the wall. 29CFR1910.122(b)
3. At the loading dock on the East of the WRAP facility, the distance from the dock to the ground is exactly 4'. This requires proper guarding but the chain used as a restraining device dips to a height of 30". The required height is 42" +/- 3". 29CFR1910.23(c)(1) Additionally, it was observed during the cold run that the chain protecting the loading dock was not replaced by the workers until it was pointed out to them that they needed the chain for protection at the dock. This is reported in Core Requirement 14 - Safety Culture.
4. There is a protective post at the Southeast end of the Empty Infeed Conveyor. However the conveyor protrudes approximately 6" beyond the protection of the post. This area is a heavy vehicle area as the forklift must maneuver in this area to place the drum pallets in the AS/RS.

5. The 'SWP' room was observed to be full of empty cardboard boxes and clutter. This was cleaned up after being brought to the attention of the facility. 29CFR1910.22(a)
6. During the integrated cold run, the drum handler was parked in the area marked as keep clear for the roll up fire door. 29CFR1910.22(b) This is also reported in Core Requirement 14 (Safety Culture)
7. Several doors at the WRAP facility and one at the maintenance shop that lead directly to the outside of the building are not covered to prevent snow and ice build-up. 29CFR1910.37(g)(3) This item is also reported under Core Requirement 8.4 (fire protection)

Resolution:

Resolution not complete for all items prior to completion of ORR.

Signatures:

Team Member:

Team Leader:  R. Wight

ORR FINDING FORM**Core Requirement Number and Statement:** 8.10

Security Organization and Procedures-There is a security organization and program that adequately supports the requirements.

Criterion Reference and Statement: 2

Procedures and controls that assure safe and reliable operations are employed in the conduct of security activities.

Finding Number: 8.10.2.1**Date:** November 13, 1996**Finding:**

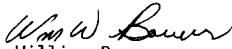
Security Procedures for WRAP facilities do not exist per the requirements of RLID 5632.1B.

Discussion/Conclusion:

Responsibilities and interfaces are not defined.

Resolution:

Prepare an administrative procedure for inclusion into the WRAP administration manual that addresses the security requirements of RLID 5632.1B. Use the lines of inquiry used for the review as a basis for the procedure. WHC-CM-5-36 Section 4-33 also needs to be revised to include facility security requirements.

Signatures:**Team Member:****Team Leader:**  William Bowen

ORR FINDING FORM**Core Requirement Number and Statement:** 8.10

Security Organization and Procedures-There is a security organization and program that adequately supports the requirements.

Criterion Reference and Statement: 2

Procedures and controls that assure safe and reliable operations are employed in the conduct of security activities.

Finding Number: 8.10.2.2**Date:** November 13, 1996**Finding:**

A process does not exist that provides for an annual review of the asset protection requirements for applicability and update of the asset protection agreement (RLID 5632.1B, Section 7.1d)

Discussion/Conclusion:

An annual review of the security requirements for the facility assets needs to be conducted to assure the current level of security is being applied.

Resolution:

A process needs to be established for the review of asset protection agreement, including the annual update and submittal of the asset protection agreement. This could be included in the security program administrative procedure.

Signatures:**Team Member:**


Team Leader: William Bowen

ORR FINDING FORM**Core Requirement Number and Statement:** 8.10

Security Organization and Procedures-There is a security organization and program that adequately supports the requirements.

Criterion Reference and Statement: 2

Procedures and controls that assure safe and reliable operations are employed in the conduct of security activities.

Finding Number: 8.10.2.3**Date:** November 13, 1996**Finding:**

Posted signs do not exist that contain the appropriate information required for the security of the WRAP facility (Sections 7.4a and 7.1d)

Discussion/Conclusion:

Posted signs need to be located at facility entrance/egress points that provide the appropriate security requirement for WRAP facilities.

Resolution:

In conjunction with Security personnel determine the appropriate signs and location for all WRAP facilities.

Signatures:**Team Member:**
Team Leader: William Bowen

ORR FINDING FORM**Core Requirement Number and Statement:** 8.10

Security Organization and Procedures-There is a security organization and program that adequately supports the requirements.

Criterion Reference and Statement: 2

Procedures and controls that assure safe and reliable operations are employed in the conduct of security activities.

Finding Number: 8.10.2.4**Date:** November 13, 1996**Finding:**

Security procedures do not exist for processing classified waste.

Discussion/Conclusion:

The special security requirements needed for processing classified waste have not been documented or implemented (Section 7.1g and sd-W026-FDC-001)

Recommended Resolution:

Develop both an administrative procedure and operational procedures that implement the security requirements of processing safeguards categories IV attractiveness level six. This is the lowest safeguards category and if implemented appropriately would eliminate the need for a vulnerability assessment by the Security Organization. Special attention must be given to how sensitive data is handled in the shipping/receiving area and process control room.

Signatures:**Team Member:**
Team Leader: William Bowen

ORR FINDING FORM**Core Requirement Number and Statement:** 8.10

Security Organization and Procedures-There is a security organization and program that adequately supports the requirements.

Criterion Reference and Statement: 2

Procedures and controls that assure safe and reliable operations are employed in the conduct of security activities.

Finding Number: 8.10.2.5**Date:** November 13, 1996**Finding:**

A computer sensitivity Evaluation has not been conducted per WHC-CM-5-36.

Discussion/Conclusion:

Same as recommended resolution.

Recommended Resolution:

A determination must be made for every computer as to whether it hosts or stores sensitive or essential material

Signatures:**Team Member:**
Team Leader: William Bowen

ORR FINDING FORM**Core Requirement Number and Statement: 8.11**

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criterion Number and Statement:

- 1 Configuration Management procedures/policy exists and are clearly communicated and understood by all levels of the organization. Appropriate graded approach is utilized consistent with the safety class of process and utility equipment/systems.
2. Responsibilities and interfaces for configuration management are clearly defined. (assessed under Core Requirement 11, provided here for information and completeness)
5. An administrative program is in place to ensure that modifications are analyzed, documented, approved by appropriate personnel and organizations, and reflected in design drawings, revised operations, training, and maintenance procedures.
9. Programs are defined, and procedures are in place to specify methods for identifying, addressing, and reconciling questions concerning alterations to the design, function, or method of performing the function of a structure, system, or component as described in the authorization basis.

Date: November 18, 1996**Finding Number: F.8.11.1.1****Finding:**

The use of configuration control drawings is not as outlined in the configuration control procedure. The configuration control for the WRAP 1 facility needs to be communicated and followed.

Discussion / Conclusion: During discussions and interviews, the approach for using release station drawings (and any applicable ECNs) for configuration control was stated correctly. However, during discussions with various groups the actual use of non-controlled drawings (even computer CAD drawings) was identified as being used for lock an tag as well as drawing changes. Copies of drawings will be made available on stick files, however, the correct use of these files by ensuring there are no ECN's against the drawing.

Resolution: All personnel involved with Configuration Control need to be retrained to ensure that the system is used properly. This should also be reenforced with a plant directive (letter) which outlines the process to be used .

Signatures:**Engineering Team Leader:**  Mark Enghusen

ORR FINDING FORM**Core Requirement Number and Statement: 8.11**

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criterion Number and Statement:

1. Configuration Management procedures/policy exists and are clearly communicated and understood by all levels of the organization. Appropriate graded approach is utilized consistent with the safety class of process and utility equipment/systems.
2. Responsibilities and interfaces for configuration management are clearly defined. (assessed under Core Requirement 11, provided here for information and completeness)
5. An administrative program is in place to ensure that modifications are analyzed, documented, approved by appropriate personnel and organizations, and reflected in design drawings, revised operations, training, and maintenance procedures.
9. Programs are defined, and procedures are in place to specify methods for identifying, addressing, and reconciling questions concerning alterations to the design, function, or method of performing the function of a structure, system, or component as described in the authorization basis.

Date: November 18, 1996

Finding Number: F.8.11.1.2

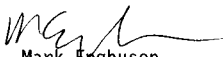
Finding:

The software documentation supporting configuration control requirements need to be obtained. The copies of the software should be labeled and located in the controlled cabinets. A recovery and backup plan needs to be developed.

Discussion / Conclusion: Per the requirements for Software Configuration Control, WHC-IP-1237, copies of the software are to be kept in a locked cabinet. Upon inspection of the cabinet, copies of most of the software systems were not found. In addition, a software backup and recovery plan has not been written.

Resolution: Obtain copies of the software and place into cabinets. Prepare a backup and recovery plan.

Signatures:

Engineering Team Leader:  Mark Enghusen

ORR FINDING FORM**Core Requirement Number: 8.11**

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criterion Number and Statement:

3. Documents, drawings, and other references which define the facility configuration are readily available, authorized, properly controlled and are used in designing plant changes, preparing facility procedures, troubleshooting, etc.
4. Management ensure that changes to the facility are warranted and properly controlled.
6. The configuration of systems as contained on as-built drawings have been physically verified.
7. Procedures and management policies for changes to the facility are properly executed.
10. Temporary modification are controlled to ensure facility configuration is maintained.

Date: November 18, 1996**Finding Number: F.8.11.3.1****Finding:**

A review of the electrical and rad monitoring configuration control drawing identified equipment and equipment location which did not match drawings.

Discussion / Conclusion: During a walkdown and inspection of the electrical systems several errors were identified on the drawings and on electrical cabinet settings which would impact configuration control parameters.

Resolution: The drawings need to be updated and the MCC settings need to be set (as originally outlined in ATP).

Signatures:**Engineering Team Leader:**  Mark Engdusen

ORR FINDING FORM**Core Requirement Number and Statement: 8.12**

An adequate records management/document control program exists to assure that all important documents, records, and related information are maintained current and readily retrievable.

Criterion Number and Statement:

3. The records management program includes processes, interfaces and responsibilities for controlling design bases and technical documents, such as calculations, specifications, drawings, vendor manuals, records of maintenance, test results, etc.
4. Necessary documents are kept current and legible and are either available at appropriate plant locations or can be provided in a timely manner.

Date: November 15, 1996

Finding Number: F.8.12.3.1

Finding:

The majority of the vendor information submitted on Project W-026 has been down graded from Vendor Information to Information Record status. Information records are kept in Project files. They will not be maintained/preserved as Vendor Information and listed on soft reporting.

Discussion / Conclusion: Most of the vendor information has been down graded from CVI to IR (information Record) by Project ECN W-026-1012. The justification on the ECN failed to address the impact on Operation of the facility. This means that the information the submittals contained received a lesser amount of review and aren't available as CVI data on soft reporting. SWD is scanning information obtained from the incomplete file maintained by Projects. The submittal file that has been accumulated by the Project will be turned over to Operations. However, the project file is not complete. Only FDNW Submittal Document Control has a complete set of submittal files.

* Complete, less materials already sent to CVI file.
Operations needs access to all vendor information necessary for operation, maintenance, repairs or modifications for plant equipment and facilities.

Recommendation: Revise ECN W-026-1012 to change the classification of submittals from "information record" to "Vendor Information" for all submittals. Post Start Finding.

Resolution:

Signatures: *WR Thackaberry*

Team Member: WR Thackaberry

AK Sharma

Group Leader: AK Sharma

ORR FINDING FORM**Core Requirement Number and Statement: 8.12**

An adequate records management/document control program exists to assure that all important documents, records, and related information are maintained current and readily retrievable.

Criterion Number and Statement: 3

The records management program includes processes, interfaces and responsibilities for controlling design bases and technical documents, such as calculations, specifications, drawings, vendor manuals, records of maintenance, test results, etc.

Date: November 15, 1996

Finding Number: F.8.12.3.2

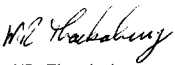
Finding:

Changes to Most of the C1 Specification (construction of facility/gloveboxes) and all of C2 (NDE) and C3 (NDA) will not be incorporated into the current revision. The specifications will thus be ineligible for release into the document control database as required.

Discussion / Conclusion: Only those sections of the C1 spec dealing with the computer will have ECNs incorporated. The balance of plant will not. The project will turn over a marked up spec to operations to facilitate traceability of ECNs. Only these two sections of the project construction spec may be released into the Hanford system. Specification sections that cover items such as NDE/NDA, HEPA filters, glove boxes will not have outstanding ECNs incorporated and hence will not be released into the Hanford System. This is contrary to WHC-CM-5-36 CH 6-1 EP 1.2 para 2.8 which states "Upon turnover, the vendor design contractor, or A-E that provides engineering services shall be required to provide engineering specifications with all changes incorporated and released into the DCS document control database"

RECOMMENDATION: Comply with the requirements of WHC-CM-5-36 CH 6-1 EP 1.2 para 2.8, incorporate changes and release the design documents. Post Start Finding

Resolution:

Signatures: 

Team Member: WR Thackberry



Group Leader: AK Sharma

ORR FINDING FORM**Core Requirement Number and Statement: 8.13**

There exists an occurrence reporting/root cause program.

Criterion Number and Statement: 3.

The "lessons learned" which are developed as a result of the program implementation and root cause analysis shall be incorporated into the corrective action system to prevent recurrence.

Date: November 15, 1996

Finding Number: F.8.13.3.1

Finding:

A Lessons Learned Program has not been implemented at WRAP 1.

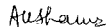
Discussion / Conclusion: The affidavit lists "Implement CAEG and Lessons Learned per WHC-CM-5-34, Section 1.22" as a punchlist item. This was confirmed. Metzger stated that no formal Lessons Learned program has been developed yet. So far the only Lessons Learned activity is to designate selected lessons Learned bulletins received by the facility as required reading. The affidavit states that Carla Thibault is responsible for administering lessons learned program. This is no longer the case. Mark Ibutuan has recently been designated to administer CAEG and lessons learned.

Resolution: RECOMMENDATION: Develop and implement a Lessons Learned program for the Facility.

Signatures:



Team Member: W. R. Thackaberry



Team Leader: A. K. Sharma

ORR FINDING FORM**Core Requirement Number and Statement: 8.13**

There exists an occurrence reporting/root cause program.

Criterion Number and Statement: 3

The "lessons learned" which are developed as a result of the program implementation and root cause analysis shall be incorporated into the corrective action system to prevent recurrence.

Date: November 15, 1996**Finding Number: F.8.13.3.2****Finding:**

A corrective Action program has not been implemented at WRAP 1.

Discussion / Conclusion: A Corrective Action Program has not been implemented yet. At this time any action that is identified in the facility as a result of a self assessment or independent assessment is submitted to Phyllis Roe for input into WRTS.**RECOMMENDATION:** Develop and implement a Corrective Action program for the Facility. Post Start Finding**Resolution:****Signatures:** **Team Member:** W. R. Thackaberry**Team Leader:** A. K. Sharma

ORR FINDING FORM**Core Requirement Number and Statement: 9.0**

A routine and emergency drill program, including program records, has been established and implemented.

Criterion Reference and Statement: 1

The drill program adequately plans, schedules, prepares, conducts, critiques, and documents drills.

DOE Order 5500.3A, Section 11,c(12)(A) Drills are of sufficient scope and frequency to ensure adequate response capability in all applicable areas.

Date: November 14, 1996

Finding Number: F.9.1.1

Finding:

More "operations" orientated type drills need to be written and run for operations to become experienced at response to upset conditions/events.

Discussion/Conclusion:

Drills should be created with objectives which develop and maintain individual and team skills in response capability. The WRAP operations group has focused and practiced emergency preparedness type drills. The below drills will enable the operations group to practice as a team and build teamwork with RCT's and engineering to respond to off normal conditions and events that are not the "large scenarios" seen in the emergency preparedness type drills. Knowledge about how the plant responds will also be gained by both operations and engineering when these drills are prepared and run.

Resolution:

Suggested new drills should include but are not limited to:

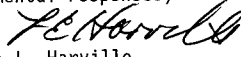
1. Loss of plant instrument air
2. Failure of the plant air dryer
3. Loss of electrical bus SG-13-101 bus 1
4. Failure of an exhaust fan without the corresponding loss of the supply fan for the same area
5. High area radiation monitor alarm
6. High CAM alarm
7. Contaminated individual
8. Glycol leak in the chilled water cooling system that leaks into the floor drain in the mechanical equipment room (environmental responses)

Signatures:

Team Member



Team Leader: L. Harville



ORR FINDING FORM**Core Requirement Number and Statement:** 9.0

A routine and emergency operations drill program, including program records, has been established and implemented.

Criterion Reference and Statement: 3

Critique results are used to improve the drill program, personnel response, and the facility emergency plan.

Finding Number: 9.3.1**Date:** November 14, 1996**Finding:**

The drill critique information is not being passed on to the operators.

Discussion/Conclusion: Per CM-5-34 (1.5, 5.3) Emergency and Operational drill critique results will be used to improve the facility drill program, personnel response and emergency plans.

Resolution:

The drill critique information should be passed on to the operators by the facility by whatever method they see fit to use.

Signatures:**Team Member:****Team Leader:** L. Harville

ORR FINDING FORM**Core Requirement Number and Statement: 10**

An adequate startup or restart test program has been developed that includes adequate plans for graded operations testing to simultaneously confirm operability of equipment, the viability of procedures, and the training of operators.

Criterion Reference and Statement: 1

An adequate startup or restart program is in place.

CM-5-36 (4.2) The startup test program shall confirm operability of equipment.

Date: November 14, 1996

Finding Number: 10.1.1

Finding:

The HVAC for the NDE/NDA area did not shutdown as designed when the Alpha CAM for that area was put into a high alarm condition.

Discussion/Conclusion:

The H&V for the NDE/NDA area is designed to shutdown on a high alarm from the Alpha CAM to prevent the spread of contamination. This did not happen.

Resolution:

Repair system.

Signatures:

Team Member:


Team Leader: L. Harville

ORR FINDING FORM**Core Requirement Number and Statement: 10**

An adequate startup or restart test program has been developed that includes plans for graded operations testing to simultaneously confirm operability of equipment, the viability of procedures, and the training of operators.

Criterion Reference and Statement: 10

An adequate startup or restart program is in place.

CM-5-36 (4.2) The startup test program shall confirm operability of equipment.

Finding Number: 10.1.2**Finding:**

The push button controls for the jib crane are so hard to depress it causes physical pain/injury to the operator.

Discussion/Conclusion:

Same as above.

Resolution:

Repair/replace jib crane controls/push buttons

Signatures:

Team Member:

Team Leader: L. Harville

ORR FINDING FORM**Core Requirement Number and Statement: 11**

Functions assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for safety.

Criterion Number and Statement: 1

Policies/procedures exist defining the responsibility, authority, accountability, and reporting relationships of each management position, exempt position, non-exempt position, bargaining unit, and direct support personnel (e.g., Environmental Compliance, Fire Protection, Engineering Maintenance, QA, Health Physics, Training, Industrial Hygienist, Industrial Safety, Nuclear Safety, Laboratories, Security, Records management, Projects, Occurrence Reporting, Emergency Preparedness, etc.).

Date: November 19, 1996

Finding Number: 11.1.1

Finding:

The WRAP facility specific policies and procedures do not adequately define the responsibilities and authorities of each position.

Discussion/Conclusion:

Conduct of Operations Chapter 1 Operations Organization and Administration requires that the policies and procedures of the facility shall specify the requirements and that the responsibilities for implementing the requirements be clearly defined.

The WRAP facility specific Administrative Manual WHC-IP-1237 is currently not complete, and doesn't set out specific requirements by functional area or responsibilities by position. The position descriptions are generally generic site-wide type position descriptions and most do not contain site specific requirements. The position descriptions examined lacked facility specific requirements and position duties such as ORPS facility reporting requirement designations, BED designations, identification of Facility owner/work release authority for contractor activities, and administration of Lessons Learned. The Position Descriptions need to be reviewed and updated by management to include specific duties and responsibilities.

Resolution:

Complete the unissued sections of IP-1237 and review the facility requirements for additional areas/procedures that need to be added to the manual. Up-date the position descriptions with site specific responsibilities and duties for each position to ensure that all facility requirements are addressed, clearly defined, and assigned to a position.

Signatures:

Team Member:

Team Leader: V. Magnus



ORR FINDING FORM**Core Requirement Number and Statement: 12**

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 12

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.13, Control of equipment and system status. (Alarm status shall be noted in the Facility Logbook.)

3.16, Alarm Management. (Alarms shall be documented in the Facility Logbook.)

3.17, Logkeeping. (A narrative logbook shall be maintained.)

(Entries in the Narrative logbook shall be clear, concise, complete and legible.)

(the author of any logbook entry shall be identifiable.)

(Logbooks shall be reviewed daily by the Operations Manager/Team Leader.)

Date: 11/14/96

Finding Number: 12.1.1

Finding:

An "official" facility narrative logbook is not being kept.

Discussion / Conclusion: A practice log is being kept in the control room. This log is neither official, formal, or legal. A major portion of the facility has been turned over to operations and an "official" facility logbook is required to be in place.

Resolution: An "official" facility plant logbook should be started by operations.

Signatures:

Team Member:


Team Leader: L. Harville

ORR FINDING FORM**Core Requirement Number and Statement: 13**

There are sufficient number of qualified personnel to support safe operations.

Criterion Number and Statement: 1

There is an adequate number of qualified personnel for the mission of the facility.

DATE: 11/15/96**Finding Number: F.13.1.1****Finding:**

Insufficient staff exists to ensure the following: Sufficient OJT on computer systems, Maintenance procedure walkdowns, and personnel to maintain administrative procedures.

Discussion/Conclusion:

From individual interviews two areas of concern were brought out. 1) There has not been enough OJT training on the computer systems to allow for efficient operations. 2) The maintenance personnel have not been able to walk down some specific systems to adequately perform OJT on them.

The facility needs to re-evaluate the staffing required after readiness for operations is attained. Special attention must be given to the computer systems used for monitoring, central and process upsets.

Resolution:

No resolution had been made prior to the completion of the ORR.

Signatures:**Team Member:****Team Leader: Vic Magnus**

ORR FINDING FORM**Core Requirement Number and Statement: 19**

The technical and management qualifications of contractor personnel, responsible for facility operations, are adequate..

Criterion Number and Statement: 2

Adequate documentation of management qualifications is available.

DATE: 11/15/96

Finding Number: F.19.2.1

Finding:

Responsibilities for activities like Lessons Learned, Occurrence Reporting, Processing USQ, is not clearly defined and communicated.

Discussion/Conclusion:

In interviews with the WRAP management team, a general weakness was observed when asking questions such as: Who is responsible for the administration of Lessons Learned, Occurrence Reporting or Process of the USQ, inconsistent answers were given indicating that the plant is not sure of who is responsible for the various areas.

Resolution:

No resolution had been made prior to the completion of the ORR.

Signatures:

Team Member:


Team Leader: Chuck Wolfe

APPENDIX B

OBSERVATIONS

OBSERVATION LISTING WITH NUMBER

NUMBER	OBSERVATION
1.2.1	The CPS and CSER have an inventory limit which is not identified in the procedures.
1.6.1	Alarm responses are effective at invoking the building emergency plan as appropriate except in WRP1-AR-1600 page 2, section III.2.E.(2) should evoke the building emergency plan to evacuate the building.
1.7.1	Not all of the components, software configuration, and experience exist to fully support procedural compliance and effective operations.
1.10.1	CSER 96-018 and CPS limits are incompletely identified in operating procedures for standard waste drums.
1.11.1	Discrepancies between computer alarms and alarms in procedures.
1.13.1	Discrepancies between computers software alarms and procedures alarms.
1.15.1	Because of new status new process for periodically review procedures was observed.
1.17.1	A Safety Basis Compliance Matrix exists to aid in TSR implementation in procedure, but the process relies on the cognizant engineer's, document reviewer's, and management's knowledge of TSRs to ensure they are incorporated into procedures.
1.18.1	Use of redlined and goldenrod controlled copies of procedures by NDE technicians and operators in the field.
1.19.1	No procedure is in place to specify who determines training for procedural changes.
1.20.1	Process to inform procedure writers of errors in place but not utilized.
1.21.1	Matrix exists to aid in FSAR and regulatory implementation in procedure, but the process is not proceduralized.
1.22.1	Plant had an informal label on their jib crane controls not referenced specifically by any procedure.
1.23.1	Not all procedures and procedure changes are written in accordance with an approved writers guide.
1.24.1	One current procedure's approval and validation form was missing when the procedure file was reviewed.
2.1.1	Personnel did not comply with the process for changing procedures.
2.2.1	Training modules require revision to include all operating procedures.
2.4.1	Administrative controls were not included in the appropriate Individualized Training Modules and the operators could not state the AC's.
2.5.1	There is no program for formal control of who can sign various parts of the qualification cards.

2.7.1	The team leader/manager qualification package appears to be insufficient to demonstrate a persons performance.
2.8.1	The cognizant engineers have not received sufficient cross-training to provide the facility with backups.
2.9.1	Vendor information system has not be established and procedures were not in place for the training modules when they were developed.
2.11.1	Personnel unfamiliar with staging area location.
2.12.1	Training records not updated adequately
2.13.1	Training matrix needs to be updated.
2.14.1	Program of training requirements for temporary/contract personnel is in place but not fully complied with.
2.15.1	Instructor inadequately trained to perform facility specific training.
2.16.1	Maintenance personnel indicated that they are not informed effectively as to the "why's" of their procedures.
3.1.1	Administrative procedure knowledge weakness.
3.2.1	Oral board questions need to cover all facility aspects.
3.4.1	Examination references need to use current drawings and procedures.
4.1.1	Criticality instrumentation is contained in Section 6.6 and leads the reader to believe that the criticality alarm system installed in the WRAP facility is operational.
4.1.2	The areas chosen in the Management Safety Program are not well defined.
4.1.3	Section 5.4.1 of FSAR, inventory control utilizes the accident inventory and establishes limits in the TSR. If proposed activity exceeded the accident envelope, to proceed after analysis a change to the TSR would be required also.
5.3.1	Start and stop of the fans is not a problem and should not have been written out of the preventive maintenance. Changes to the preventive maintenance checks on operating equipment should be reviewed and approved by the cognizant engineer or person knowledgeable on the system.
5.3.2	During a walkdown of the ventilation system, it was difficult to identify the condition of some of the controls.
5.3.3	Noted other electrical items involving equipment labeling, consistency in use of phase color coding, and an observation on the present installation of emergency lights to possibly improve maintenance efficiency.
5.3.4	Several installed electrical equipment and components in the field do not conform to what is described on the facility drawings.

5.4.1	Chilled Water Glycol System Operational Test Procedure and all other OTR's need to be completed and distributed.
8.1.1.1.1	Signs #1, for designated staging area, and #2, for alternate staging area, are not identified.
8.1.4.1	Facility trainers did not fully understand the facility personnel Emergency Preparedness requirements and the associated Emergency Preparedness training record retention requirements.
8.1.4.2	There is an adequate emergency preparedness organization and program. During the assessment of the 3 emergency response drills 9 areas were identified that needed attention.
8.2.2.1	Need for more training (including OJT) for the programming engineers. They should also be cross trained to ensure a backup cog engineer is trained for each system.
8.3.3.1	The facility needs a recycling accumulation area for batteries and fluorescent tubes.
8.3.3.2	The materials storage room off the loading dock has inadequate housekeeping. The door needs a point of contact on it. The log sheets on the waste accumulation drum should be in a permanent holder to keep pages clean and intact.
8.3.3.3	Spill portable response cart was not complete
8.3.3.4	Plant needs to have a designated and certified shipper prior to operation.
8.3.4.1	The maintenance shop materials storage cabinet has a sign: "Hazardous Waste".
8.4.1.1	The FHA does not accurately reflect the time required for the HFD to respond to an alarm at the facility.
8.4.4.1	Fire barriers are not identified with 2" high red lettering on white background.
8.4.4.2	Exit doors on the west side of the building have no protection from inclement.
8.4.5.1	ATP not completed.
8.4.8.1	Surveillance of the fire alarm control panel (when in trouble condition) was not included on the daily surveillance and no log entries have been made to the daily log.
8.4.9.1	A Hazardous Materials Management Plan (HMMP) has not been developed to include a facility site plan designating the following 6 items.
8.5.1.1	Overall responsibilities and authority for many major elements of the maintenance management program are not stated or well defined, limited to those found in 3.6/CM-5-34, or where called out in process guidance documents.
8.5.1.2	WRAP 1 has not clearly established maintenance program objectives and goals in relationship to Plant Operations missions.

8.5.1.3	Interviewed employees could not produce a documented job/position description. Not certain of their performance expectations relative to assignments.
8.5.1.4	The facility Self-Assessment program is weak in the area of addressing Maintenance Program elements. Facility personnel involved in activities do not adequately define or document these activities/results.
8.5.1.5	The Maintenance "organization" is not integrated appropriately, creating less than optimum coordination and communication on "common" discipline issues.
8.5.1.6	The facility has not developed effective indicators (CM Backlog, PM Overdue) that can measure and trend PM/CM ratio, and changing levels of work type.
8.5.1.7	Address certified tester (craft) for backflow preventors; change, then test/inspect SRV on the compressed air receiver; review site-wide procedures referenced for use on H&R (load testing, major inspections).
8.5.1.8	There is evidence that the WRAP facility does not intend to use Predictive Maintenance (PdM) within their PM program.
8.5.1.9	Without a comprehensive Maintenance Management Plan, facility management cannot demonstrate that effective periodic program review occur or are planned.
8.5.1.10	The existing facility Self-Assessment Program (1.11) does not effectively address the maintenance program.
8.5.3.1	The 2.11 document is lacking with respect to work prioritization.
8.5.3.2	The work control process does not adequately identify a prioritization system, based on risk, safety, or plant reliability, that can be used to schedule work.
8.5.3.3	The material coordinator phase of planning work needs to be integrated into the process guidance document, 2.11.
8.5.3.4	In the screening process, to be performed by the WCC/Validator. There is not enough criteria presented for this decision process, which eventually determines the depth of planning required.
8.5.3.5	This entire procedures development and approval process needs to be thoroughly reviewed. Craft did not receive final versions to see if comments were appropriately inserted, history files did not contain marked up draft copies, validation signatures not those of people who perform the work, and issued procedures in the approved file without release signature and date.
8.5.3.6	Post-Maintenance Test (PMT) policies/requirements are not well defined at WRAP 1.
8.5.3.7	No overall responsibilities are delineated. Cog Engineers and Operations education and involvement necessary.
8.5.3.8	2.11 does not adequately address policy for documenting and retaining history of completed maintenance.

8.7.6.1	The WRAP decontamination room is not included as part of Phase 1.
8.7.9.1	During the integrated cold run WRAP personnel were observed leaning on drums and using drums for writing surfaces. These practices are not ALARA.
8.7.11.1	The way functional tests (box NDE and drum NDE systems) are currently documented it is difficult to find all of the paper work documenting the tests. Also, operating procedures require checks/inspections verified daily, but do not identify the checks/inspections.
8.7.17.1	During the EP drill the Alpha CAM did not secure the ventilation system.
8.7.19.1	The current location of Area Radiation Monitors (ARM) RIAH-506 and RIAH-507 within the Shipping and Receiving area is not adequate.
8.8.5.1	There is a documented baseline assessment of the facility for phase 1 operations by Industrial Hygiene, but not one by Industrial Safety.
8.8.7.1	Although a facility unique Hazard Communication program exists at the WRAP facility, the information is not being effectively communicated to all employees at the facility.
8.10.1.1	A point of contact (POC) from the Security Organization with an interface agreement has not been defined.
8.10.2.1	An RL approved asset protection agreement does not exist.
8.10.2.2	Procedures do not exist that check to assure that WRAP facilities are locked per the noted times in the Asset Protection Agreement.
8.10.2.3	Modem accountability per WHC-CM-5-36 has not been completed for all computer systems used in the WRAP Control room. The process control computer modem evaluation needs to be completed.
8.11.1.1	During discussions with various individuals the use of the USQ process was known but some questions arose as the control of the USQ forms and exactly when it will be used. A re-training program should be given to cover any changes to the FSAR and to remind personnel of the requirements. Some analysis of the changes in the FSAR and the changes which have occurred to the facility prior to FSAR approval should be evaluated.
8.11.1.2	Training on Configuration control requirements needs to be given to ensure the systems are used correctly. A formal process should be established to ensure the drawings are the most up to date and are routinely checked.
8.11.1.3	The Computer System and Data Base Administrators need to be formally identified along with their responsibilities.
8.11.1.4	Project files SD-WM-RPT-060 will need to be updated upon completion of the Phase 2 and 3 projects to include these documents.
8.11.3.1	Remainder of the drawings (other than the 62 already released) to support the facility need to be released.

8.11.3.2	Drawings are not being stamped "as built" until ECNs are issued to the drawings.
8.11.3.3	Component Identification Worksheet & Design Service Request forms are not in the drawing files. There is a diagram in CM-5-24, Section 2.2 that shows the Component Identification Worksheet being filled out but no wording to match the diagram.
9.1.1	The "facility drill coordinator" gets a large amount of support from at least one contract individual. Without the outside support of the contract individual the facility would not be able to support this function.
9.3.1	Utilization of operators and RCT's as drill controllers should be incorporated into the drill program.
10.1.1	When power was lost to SG-13-101 bus #2 the it was not detected by the computer system.
10.1.2	Documentation of OJT in the training records in not rigorous and contain numerous crossouts, and other administrative errors that are unacceptable for training records.
11.1.1	The position descriptions examined lacked facility specific requirements and position duties such as ORPS facility reporting requirement designations, BED designations, identification of Facility owner/work release authority for contractor activities, and administration of Lessons Learned.
12.1.1	An official drawing file for operations has not been established.
12.1.2	During the cold run X-ray technicians were using a white copy of procedure 0904 that had red pen and ink changes/additions made to it.
12.1.3	A discrepancy between final drum weight read at the discharge conveyor and the computer indication exists.
12.1.4	More radios are required for efficient communications. A long term solution should be evaluated, such as to expand the phone system.
12.1.5	Safe condition checks on tagouts are not being documented consistently.
12.1.6	A daily report is not being written per CM-5-34.
12.1.7	A desk or some other sort of station needs to be setup in the shipping and receiving area for operators to keep the paperwork together and lay the procedures on when in use.
12.1.8	Unauthorized operator aids are posted.
12.1.9	PAX system does not extend to the maintenance or administrative buildings.
12.1.10	Housekeeping in the material staging area, clean SWP, and used SWP rooms is unacceptable.
12.1.11	PAX speakers in the NDE/NDA area need to be balanced/adjusted to be understood.
12.1.12	The area under the arc of the jib crane should be marked.

14.1.1	Training on the authorization basis is not complete.
14.1.2	Safety awareness of workers inadequate.
14.6.1	Not all personnel are aware of the potential radiological consequences of a particulate release.
14.9.1	Management expectations and goals for safety performance not developed.
19.2.1	Checklist for documentation of 'PIC' training unclear.

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.2 Operating procedures adequately and correctly incorporate the identified ACs, SRs, and CPSs for operating process and utility systems.

Date: December 9, 1996

Observation Number: 1.2.1

Observation:

Only CPS limits apply to the operating procedures and SR do not exist for WRAP 1. The CPS limits are identified except for the one noted below in the appropriate procedures in the safety section but the reference section does not list the CPS or SAR document. Also, there is no checks for the CPS limit except for what checks the computer performs.

The CPS and CSER have an inventory limit which is not identified in the procedures (fissile material <20% of the volume is limited to 100 g instead of 200 g).

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.6 Operating, Alarm response, and emergency operating procedures are adequately linked and consider the emergency plan.

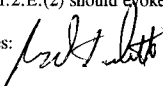
Date: December 9, 1996

Observation Number: 1.6.1

Observation:

Alarm responses are effective at invoking the building emergency plan as appropriate except in WRP1-AR-1600 page 2 III.2.E.(2) should evoke the building emergency plan to evacuate the building

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.7 Operating procedures reflect the current configuration of systems.

Date: December 9, 1996

Observation Number: 1.7.1

Observation:

Most procedures were adequate to perform their intended purpose, but not all of the components, software configuration, and experience exist to fully support procedural compliance and effective operations. Specific examples are the facility has identified equipment that they are procuring to support procedure requirements, the software has not been configured to give access to the Data Management System as required by procedures, and the logbooks for recording information required by the procedures is not in place.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.10 All safety requirements set forth in the FSAR and CSER have been implemented into operating procedures as appropriate.

Date: December 9, 1996

Observation Number: 1.10.1

Observation:

CSER 96-018 and CPS limits are incompletely identified in operating procedures for standard waste drums. Current operating procedures identify that a drum is not to have more than 200g of fissile material, but the CSER and CPS say the maximum fissile material limit is

(1) fissile material $\geq 20\%$ of container volume - 200 g

(2) fissile material $< 20\%$ of container volume - 100 g

Also, applicable operating procedures do not reference the FSAR, CSER, or CPS when these limits are included in the procedure.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.11 Procedures adequately describe all alarm response actions.

Date: December 9, 1996

Observation Number: 1.11.1

Observation:

There are some discrepancies between the computer alarms and alarms identified in procedures. A detailed review of the system alarms and alarm response procedures is required to correct the problems.

Many alarm responses simply require management notification which could easily be corrected by operator action such as actions to clear a rope switch. This approach tends to inhibit operators from analyzing abnormal conditions and being able to respond to them, because they rely solely upon the management to resolve their problems.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.13 Procedures adequately describe all alarm conditions.

Date: December 9, 1996

Observation Number: 1.13.1

Observation:

Several alarms were found upon review of the computer software that could not be located in a procedure, and some alarms in procedures could not be found in the software. An extensive review of all the alarms/cautions/information alarms is needed and be cross-referenced to alarm response procedures.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.15 A program is in place that ensures the periodic review, revision, and approval of procedures.

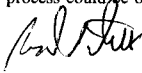
Date: December 9, 1996

Observation Number: 1.15.1

Observation:

An administration program is in place to periodically review procedures. However, due to the new status of the facility, no process could be observed.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.17 A program is in place to ensure that changes to technical safety requirements are reflected in procedures.

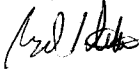
Date: December 9, 1996

Observation Number: 1.17.1

Observation:

A Safety Basis Compliance Matrix exists to aid in TSR implementation in procedure, but the process relies on the cognizant engineer's, document reviewer's, and management's knowledge of TSRs to ensure they are incorporated into procedures.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.18 Controls are established and implemented that ensure only current and accurate procedures are available for distribution and use by plant personnel, including their use in training programs.

Date: December 9, 1996

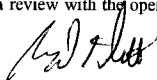
Observation Number: 1.18.1

Observation:

Procedures used were current. However, the NDE procedure used by the NDE technicians was an old but current copy (made more than a month earlier) with redline steps added to the procedure. Operators used the goldenrod controlled copies in the field for their procedures.

One operator interviewed was unfamiliar with the facility specifics for obtaining accurate procedures, but the operator knew only to use a goldenrod copy. One operator indicated that controlled copies of procedures were "red-lined" to document required changes and subsequent red-lined controlled copies were found. The facility conducted a review with the operators on the procedure process for approval, change, and expectations.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.19 As part of the process for maintaining procedures current and accurate, time is provided for training before significant procedure changes are put into effect.

Date: December 9, 1996

Observation Number: 1.19.1

Observation:

No training has been conducted due to a change to a procedure. The Operations Manager has the responsibility for identifying what procedure changes require training, but there appears to be some confusion on who is to make the decision.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.20 A process is in place which requires users of procedures to inform procedure writers of errors in procedures or difficulty in using procedures, and suggestions for improving procedure content or format.

Date: December 9, 1996

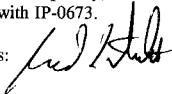
Observation Number: 1.20.1

Observation:

A process was recently put in place but has not been utilized. The past practice has been to verbally or through informal writeups communicate changes to the cognizant engineers who would initiate the changes. An informal system exists to track these changes but it does not meet the requirements of IP-0673 (this deficiency was noted by the facility).

All personnel interviewed indicated they had an informal process which did not meet the requirements of WHC-IP-0673. Subsequently, the facility has reviewed the process with operators and the procedure writers to bring it in line with IP-0673.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.21 A program is in place to ensure that the FSAR and regulatory-type commitments are reflected in procedures and remain in effect.

Date: December 9, 1996

Observation Number: 1.21.1

Observation:

A Safety Basis Compliance Matrix exists to aid in FSAR and regulatory implementation in procedure, but the process relies on the cognizant engineer's, document reviewer's, and management's knowledge. New procedures are designated as approval designators ESQ to help insure compliance.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.22 The Plant is properly labeled and labels/procedures match.

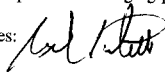
Date: December 9, 1996

Observation Number: 1.22.1

Observation:

The Plant had an informal label (which is not reference specifically by any procedure) on their jib crane controls near the discharge conveyor, but all procedure reflected the current labels in the field. The facility is still in the process of hanging permanent labels and signs to replace their temporary labels and signs.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.23 All procedures and procedure changes are written in accordance with an approved writers guide.

Date: December 9, 1996

Observation Number: 1.23.1

Observation:

The document change process from IP-0673 was not in use until this month. All previous change requests were verbally communicated to the cognizant engineer who would revise or modify the procedure. The current procedures do not meet the current format requirements of IP-0673. The technical basis section has not been incorporated into the format mainly due to the recent revision of IP-0673 which added the requirement.

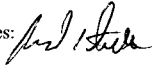
Links to the technical basis of a procedure is missing or lacking as described by IP-0673. Part of the cause was the requirement was added recently to IP-0673. The procedures will require review and updating to correct this.

Procedure development files are missing the review comments and the required technical basis information.

OP-0903 has an action step in the safety section and not in the procedure section.

SV-1603 does not include record handling instructions.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Criterion Number and Statement: 1.24 Procedures are verified and validated prior to use.

Date: December 9, 1996

Observation Number: 1.24.1

Observation:

One current procedure's approval and validation form was missing when the procedure file was reviewed. This was corrected by getting a new DARF approved for the procedure.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.1

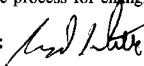
Training emphasizes required responses to: procedural inadequacies, procedural conflicts, unexpected results, and inadequate guidance. Training also includes SWD policy on the authority to deviate from written procedures during an emergency, if necessary, to protect personnel and equipment or to maintain safe condition.

Date: December 9, 1996

Observation Number: 2.1.1

Observation:

The training program covers this requirement adequately. Interviews, though, revealed that personnel did not comply with the process for changing procedures.

Signatures: 

Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM**Core Requirement Number and Statement: 2.0**

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.2

Training material address technical fundamentals.

Date: December 9, 1996

Observation Number: 2.2.1

Observation:

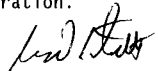
The material is fundamentally accurate, but requires revision to include operating procedures which are currently not part of the Individual Training Modules, standard personal protective equipment required for routine evolutions, and update some minor technical information which is inaccurate.

Training files have no reference to the technical information used to develop the training outside of the task analysis.

There is no plan in place to revise the training packages despite extensive comments in the files and known required technical changes.

The operations team leaders identified that the training packages required updating and work to correct technical problems and reflect current operations and configuration.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM**Core Requirement Number and Statement: 2.0**

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.4

Training emphasizes procedural compliance, ACs, SRs, and CPSs.

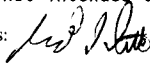
Date: December 9, 1996

Observation Number: 2.4.1

Observation:

While procedure compliance and CPS limits were effectively emphasized, administrative controls (AC) were not included in the appropriate Individualized Training Modules and the operators could not state the AC's. Authorization Basis training was conducted but failed to reach the operators and is not intended to be a part of future training.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.5

Qualification programs are in place that provide qualification standards and procedures (e.g., signature control, exam control, classroom seminars, practical factors, pass/fail threshold) for personnel associated with the facility.

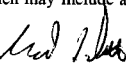
Date: December 9, 1996

Observation Number: 2.5.1

Observation:

While the facility had a list of names authorized to sign for OJT, there is no program or formal control of who can sign various parts of the qualification cards. Several qualification cards had signatures of the cognizant engineer and a previous trainer along with several informal modifications to the qualification cards such as items lined out and line outs not initialed, and informal modifications not explained or formally approved. The examinations were adequately controlled and secure except for the team leader board questions. The team leader board questions appear to have been developed and written by a team leader who was not qualified yet. Note, the facility did have to start somewhere, but the board questions need to be developed by a group of experts which may include an unqualified team leader with extensive operations experience.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.7

Performance-based training programs have been developed for personnel associated with the facility.

Date: December 9, 1996

Observation Number: 2.7.1

Observation:

The training adequately addresses the training required for the operator's specific duties and responsibilities. However, the Team Leader/Manager qualification package appears to be insufficient to demonstrate a persons performance for the following reasons: Team Leaders are not required to perform the OJT that the operators perform; satisfactory compliance with the individual module requirements only requires the trainees initials and not and OJT/OJE or other system expert verification; only two performance demonstrations are required as a minimum. (Note: interviews with team leaders did show a high level of facility knowledge)

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.8

The scope and content of training programs are adequate to ensure that job assignments can be performed in a manner that supports facility and personal safety.

Date: December 9, 1996

Observation Number: 2.8.1

Observation:

The scope and content of the training programs is adequate for all personnel except for the cognizant engineers. The cognizant engineers have not received sufficient cross-training to provide the facility with backup engineers.

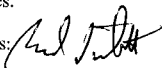
Training was sufficient to support the facility operations and maintenance, but the knowledge level of the facility hazards and emergency response showed some weaknesses and inconsistencies.

The training did not sufficiently meet the intent of 5-34 section 1.12 part 5.7 for Hazards Communication. Specifically, forklift (no backing signal) and crane operation hazards, future radiological and chemical hazards, confined spaces, missing Facility Hazard Checklist normally used by facilities, and areas to avoid during NDE and NDA operations and how they are marked. Note: the training plan file had a significant of information which addressed some of the deficiencies which was not incorporated into the training observed.

The facility needs to take the next steps and provide the training and information for operators to ask the questions "What if" and answer the questions as to "Why". The operators do not have the training and have the ability to analyze abnormal conditions as well as inform the management.

The training modules do not cover the responsibilities of the control room operator outside of following procedures.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.9

As-built drawings and the latest revision of approved procedures were used in the development of training.

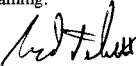
Date: December 9, 1996

Observation Number: 2.9.1

Observation:

Training was developed based on the best available information. The vendor information system has not been established, as-built drawing were not completed, and procedures were not in place for the training modules when they were developed. The cognizant engineers provided the technical information they had from the vendors and expected operations. However, there is no formal or apparent plan in place to update current comments, facility configuration, and procedures. Specific comments: qualification cards refer to some procedures which were deleted, and as-built drawings and vendor information now exists for reviewing and updating training.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.11

Facility non-emergency response personnel are adequately trained in required actions during emergency situations.

Date: December 9, 1996

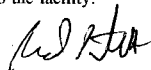
Observation Number: 2.11.1

Observation:

Non-emergency personnel were familiar with their required actions during an emergency, however, during an emergency response drill, a few people seemed unfamiliar with the location of the staging area.

Review of training records indicated that the non-emergency personnel had received the required training, however, some individuals at the facility had not received the training (facility orientation) within two weeks of reporting to the facility.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.12

Qualification records are accurate and complete.

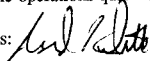
Date: December 9, 1996

Observation Number: 2.12.1

Observation:

Overall, the training records complied with the facilities requirements but have suffered from inattention by management until recently. Several Individual Training Plans (ITP) required update or were in the process of being updated. Two ITPs have not been reviewed by the manager and the employee. Several training extensions and exceptions had not been approved. One individual had his old facility's job description and no description of his current position. The instructor's ITP incorrectly deleted the requirement for him to qualify each of the operations qualification which is required by 5-34.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.13

Preexisting SWD training programs have been modified as necessary to account for new procedures, systems, and equipment associated with the facility.

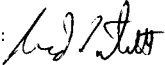
Date: December 9, 1996

Observation Number: 2.13.1

Observation:

The training matrix of the 5-34 manual has incorporated much of the required training for the facility and more information has been identified for further changes which will be incorporated into the next change.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.14

Training requirements for temporary employees, contract personnel, and visitors are established and are appropriate for the tasks assigned.

Date: December 9, 1996

Observation Number: 2.14.1

Observation:

Program is in place but not complied with. The facility has not maintained the individual training plan for contractors/vendors as required. There are no training records at the facility identifying their task and what training is required of them for their specific task. A review of training reports indicated that not all had the required Visitor/Vendor training (course #000090).

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.15

The instructors are qualified/certified and knowledgeable of the subject matter taught.

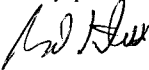
Date: December 9, 1996

Observation Number: 2.15.1

Observation:

The instructor has been in the facility only 6 weeks and is currently inadequately trained to perform any facility specific training. The instructor has not reviewed his Individual Training Plan and was not aware of what was required of him. His training record indicated that he has over ten courses to complete before he is qualified for his current position. The instructors previous background does indicate that he is an effective instructor, but he lacks the facility specific training to be an effective instructor without a facility expert on hand.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 2.0

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Criterion Number and Statement: 2.16

Personnel are kept cognizant of site/facility policies and procedure changes that affect their activities.

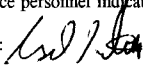
Date: December 9, 1996

Observation Number: 2.16.1

Observation:

Maintenance personnel indicated that they are not informed effectively as to the "why's" of their procedures.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 3

Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Criterion Number and Statement: 1

The level of operations and direct support personnel's knowledge, skill, and abilities are adequate to operate in compliance with the WRAP-1 operating and administrative procedures, as evidenced by selective interviews of personnel, review of examinations and examination results by the RT.

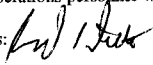
Observation Number: 3.1.1

Date: December 9, 1996

Observation:

The team leaders have an excellent understanding of the facility, procedures, procedure compliance, but some have weaknesses on administrative procedures and responsibilities (specifically, one team leader was unaware of IP-1237, the facilities own administrative manual, and several managers were unaware who was responsible for occurrence reporting and lessons learned).

Several operations personnel were unfamiliar with the Service Required Tag program.

Signatures: 

Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 3

Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Criterion Number and Statement: 2

Examinations given to personnel are adequate in their depth and breadth of subject matter as it pertains to the operation under review and the assigned duties of personnel.

Date: December 9, 1996

Observation Number: 3.2.1

Observation:

The examinations were adequate for the facility, however, there are a significant number of comments and recommendations for improvements which are on file and have not been addressed. The oral board questions for a team leader met the requirements of 5-34 section 1.8 but did not sufficiently meet the intent in all cases, specifically: no questions were asked which significantly covered how the facility design, operations, or procedures may be changed; no board questioned probed into criticality safety requirements and procedures; and the board questions in theory almost exclusively focused on radiological theory and did not probe significantly into the mechanical, electrical, or computer theory (i.e. audio sensor operation, computer communications, system interfacing, distributed control system fundamentals, radio communication theory, or optical equipment) which is vital to the operations of the facility.

The electrical system training module exam had an excessive amount of true/false questions (almost half).

Signatures:

Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 3

Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Criterion Number and Statement: 4

Current drawings and procedures were used in exam development.

Observation Number: 3.4.1

Date: December 9, 1996

Observation:

The current drawings and procedures were not available during some of the test development, and there are no current plan in place to update the training modules.

Signatures:



Team Member:

Team Leader: R. Pickett

ORR OBSERVATION FORM

Core Requirement Number and Statement: 4

Facility safety documentation is in place that describes the "safety envelope" of the facility. The safety documentation should characterize the hazards/risks associated with the facility and should identify mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks. Safety systems and systems essential to worker and public safety are defined and a system to maintain control over the design and modification of facilities and safety-related utility systems is established.

Criterion Number and Statement: 1

1. The authorization basis for operation has been established, reviewed, and approved by WHC.

Date:

Observation Number: O.4.1.1.

Observation: Section 5.4.1 of the TSR utilizes the accident inventory and establishes that number as a TSR. If a proposed activity were to be evaluated under WHC-CM-5-34, Section 1.21 and the activity exceeded the envelope, not only would a USQ exist which required analysis but a TSR change would also have to be submitted. I suggest that consideration be given to the approach utilized in WHC-SD-WM-TSR-001 Section 5.4.

Signatures:



Team Member:

Team Leader: J. Locklair

ORR OBSERVATION FORM

Core Requirement Number and Statement: 4

Facility safety documentation is in place that describes the "safety envelope" of the facility. The safety documentation should characterize the hazards/risks associated with the facility and should identify mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks. Safety systems and systems essential to worker and public safety are defined and a system to maintain control over the design and modification of facilities and safety-related utility systems is established.

Criterion Number and Statement: 1

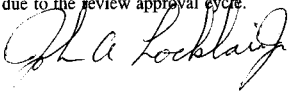
1. The authorization basis for operation has been established, reviewed, and approved by WHC.

Date:

Observation Number: O.4.1.2.

Observation: TSR section 5.2.4 calls out a management safety program which is currently ill defined. It is suggested that a caveat be added due to the potential for TSR violation if a procedural nonconformance occurs. Additionally if a USQ determines an activity may be outside of the authorization basis not only will justification be added to the envelope a TSR change will have to occur. This may not be to the advantage of either DOE or the facility due to the review approval cycle.

Signatures:



Team Member:

Team Leader: J. Locklair

ORR OBSERVATION FORM

Core Requirement Number and Statement: 4

Facility safety documentation is in place that describes the "safety envelope" of the facility. The safety documentation should characterize the hazards/risks associated with the facility and should identify mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks. Safety systems and systems essential to worker and public safety are defined and a system to maintain control over the design and modification of facilities and safety-related utility systems is established.

Criterion Number and Statement: 1

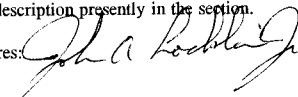
1. The authorization basis for operation has been established, reviewed, and approved by WHC.

Date:

Observation Number: O.4.1.3.

Observation: The criticality instrumentation section does not make a clear statement that the system is not required for the proposed inventory and is not operational. It could be interpreted that the system is operational by the description presently in the section.

Signatures:



Team Member:

Team Leader: J. Locklair

ORR OBSERVATION FORM

Core Requirement Number and Statement: 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Number and Statement:

3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.
11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Observation Number: 5.3.1

Date: November 18, 1996

Observation:

During the Preventive Maintenance check on the CAM-HVAC interlocks, it was decided by plant management not to have the fans operational during the PM. The concern was to reduce the impact on the stop and start of the fans during the PM. The actual interlock was therefore not checked (Finding F1 for this core requirement) and only the CAM response to a high level was observed. Discussions with the Cog Engineer indicated that start and stop of the fans is not a problem and should not have been written out of the PM. Changes to the Preventive Maintenance checks on operating equipment should be reviewed and approved by the cognizant engineer or person knowledgeable on the system.

Signatures:

Team Member:


Team Leader: M. Enghusen

ORR OBSERVATION FORM

Core Requirement Number and Statement: 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Number and Statement:

3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.
11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Observation Number: 5.3.2

Date: November 18, 1996

Observation:

During a walkdown of the ventilation system, it was difficult to identify the condition of some of the controls. Ventilation indicators for mechanical actuators should be used to assist operators in assessing conditions (controlled as operator aid).

Signatures:

Team Member:

Team Leader: M. Enghusen



ORR OBSERVATION FORM

Core Requirement Number and Statement: 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Number and Statement:

3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.
11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Observation Number: 5.3.3

Date: November 18, 1996

Observation:

Noted other electrical items involving equipment labeling, consistency in use of phase color coding, and an observation on the present installation of emergency lights to possibly improve maintenance efficiency. See attached electrical walk through comments (attached).

Signatures:

Team Member:

Team Leader: M. Engelsen



ELECTRICAL WALKDOWN COMMENTS

Transformers T-13-101 and T-13-102 are not labeled with the facility equipment number but appear to be labeled with the utilities equipment number (C6620P and C6623P); however, the facility number is used on facility drawings and procedures.

A nameplate showing the Primary, Secondary, KVA, Impedance information of transformers T-13-101 and T-13-102 should be provided on the transformers. None could be found.

The primary disconnect switches of transformers T-13-101 and T-13-102 are apparently labeled C8X581, C8X525, C8X578, C5X579. Dwg. H-2-131819, R6 (Master One Line) does not show this information.

SWGR SG-13-101 main breakers are apparently labeled F8X727 and F8X726. Dwg. H-2-131819, R6 (Master One Line) does not show this information.

Dwg. H-2-131820, Sht. 2, R6 (MCC One Line Diagram Sht. 2), shows MCC-7-101, Cubicle 1B (HU-7-304 Empty Drum Compactor) as having a 60AT breaker. Installed is a 40AT breaker.

MCC-7-101, Cubicle 1A is a SPARE with 3A MCP, Size 1 contactor and FH21 O.L. Dwg. H-4-131820, Sht. 2, R6 does not show this cubicle.

Dwg. H-2-131820, Sht. 3, R4 (MCC One Line Diagram Sht. 3), shows CV-09-101D NDE/NDA Drum Transfer Conveyor as a 1/2 HP motor. Installed is a 3/4 HP motor consistent with other similar conveyor motors.

In MCC-9-101, Cubicle 3C (CV-9-104A DRUM AIRLOCK CONVEYOR), the overload relay reset button extension rod has fallen off inside the cubicle.

In the NDE/NDA area, the wall mounted transformer/power panel units ND-06-101A through ND-06-106(?) do not have equipment labels on them. There are also no controlled panel schedules released for these panels.

Dwg. H-2-131820, Sht. 4, R9 (MCC One Line Diagram Sht. 4) shows PP-9-103 as outside of MCC-9-102. PP-9-102 is actually a part of MCC-9-102, Cubicle 10(?).

MCC-9-102, Cubicle 6D (Spare) has overload relay reset push button extension rod broken inside cubicle.

Update Dwg. H-2-131820, Sht. 5, R5 (MCC One Line Diagram Sht. 5) as follows:

Dwg. shows MCC-11-101 Cubicles 1A, 1B, 3B, 3C; and MCC-11-102 Cubicle 1C as having a 225AF breaker. Installed are Type HJD breakers which are 250AF breakers.

Dwg. also shows MCC-11-101 Cubicle 3A (PP-11-101 Power Panel) as having a 250AF/175AT breaker. Installed is a 400AF/250AT Type HKD breaker.

Dwg. also shows MCC-11-102, Cubicle 2F (EF-11-402 Exhaust Fan) as having a 150AF/70AT feeder breaker. Installed is 7A/MCP breaker.

Dwg. also shows that PP-11-104 in MCC-11-102 as a 100A, 24 Ckt. panel. Installed is a 225A, 42 Ckt. panel.

Dwg. also shows power panels PP-11-101, PP-11-102A, PP-11-102B fed from MCC-11-101 as 225A panels. Installed are 400A panels.

Dwg. H-2-131820, Sht. 5, R5 (MCC One Line Diagram Sht. 5) shows MCC-11-102 Cubicle 1B (SF-11-101 Supply Fan) as having a 100/MCP motor circuit protector. Installed is a 150AF/50AT Type HFD feeder breaker. An MCP should be installed.

Dwg. H-2-131820, Shts. 5&6 (MCC One Line Diagrams) shows MCC-11-102 and MCC-11-103 rated at 42,000 AIC. A Westinghouse Seltronic MC3800 breaker is installed in MCC-11-102 Cubicle 2A (AH-11-201A) and in MCC-11-103 Cubicle 1A (AH-11-201B) that are rated 30,000A AIC at 480V.

MCC-11-102 Cubicle 2B "SPARE" label is missing on front panel.

The facility phase color coding of ungrounded conductors is Red, Yellow, Blue for Phase A, B, C respectively. There are several places where this pedigree was not followed. Found in the following MCC Cubicles.

<u>MCC #</u>	<u>CUBICLE</u>	<u>LOAD</u>
07-101	3B-2	PP-7-101
11-101	2E	C-13-101A
	2D	C-13-101B
11-102	1B	SF-11-101
	2C	SF-11-201A
	3C	EF-11-201A
11-103	2A	SF-11-201B
	3A	RF-11-401

In MCC-11-103 Cubicle 1A (AH-11-201B), breaker terminal guard was not installed. Laying on top of breaker in cubicle.

Load descriptions on the MCCs for air handler heaters and AGV battery chargers are misleading. Can be enhanced if the word "HEATERS" or "BATTERY CHARGER" is added to the front label. e.g. present MCC cubicle label reads "AH-11-201A AIR HANDLER UNIT" where as the load is "AH-11-201A HEATERS"; or present label reads "GV-09-101 Automated Guided Vehicle" where as the load is "GV-09-101 BATTERY CHARGER".

Dwg H-2-131829, Sht. 1, R4 (Panel Schedules Sht. 1) describes PP-7-102 as having a 225A main breaker. There are no mains installed in the panel. Main lugs only (MLO).

Dwg also shows positions 31, 33, 35 and 37, 39, 41 as SPACE. Installed are two 3 pole, 20A breakers in those positions. Dwg. should also indicate that the breakers are all 3 pole breakers consistent with the descriptions used on other panel schedules.

Dwg H-2-131829, Sht. 2, R12 (Panel Schedules Sht. 2) describes PP-5-102, PP-7-101, PP-9-102, PP-9-103 as having a 225A main breaker. There are no mains installed in those panels. Main lugs only.

Dwg also shows the following:

In PP-7-101

- 20A in Ckt 41; a 30A is actually installed.
- 30A in Ckt 38; a 20A is actually installed.
- Space in Ckt 40; a 20A is actually installed.
- Space in Ckt 42; a 20A is actually installed.

In PP-9-101

- 20A/3 in Ckt 1,3,5; a 90A/3 is actually installed.

Dwg. H-2-131829, Sht. 3, R7 (Panel Schedules Sht. 3) describes PP-11-104 as having a 100A main breaker. There are no mains installed in the panel. Main lugs only.

Dwg. H-2-131827, Sht. 1, R4 (Lightning Protection Plan) shows a lightning protection down conductor located at the southeast corner of the building (drawing zone B8). None was installed.

Wall mounted battery powered emergency flood lights are presently hard wired to the lighting circuit serving the area. As these fixtures age through graceful degradation (3-4 years), maintenance will become more intensive than a routine bulb change as charger boards, batteries, etc. begin to fail which will require a tag out of the entire lighting circuit supplying the unit in order to do the maintenance. It may be helpful to eventually install locking receptacles and pigtails on these units for quick and easy removal and replacement.

Have also found that the emergency power packs used in the emergency fluorescent fixtures may also become a high maintenance item (after 3-4 years). May consider using emerg. wall mounted flood lights instead. If the WRAP1 has many of these fixtures, here's some information that may be helpful based on FMEF experiences: over time (usually much less than what the manufacturer advertises) and depending on the amount of discharge cycles, the power packs were found to become less reliable in providing the required 90 minute supply at a satisfactory illumination level; it takes an average of 1-1/2 hours to replace one fluorescent battery pack; each battery pack costs approximately \$120; a tag out of the lighting circuit is necessary to replace the battery pack; there is a high percentage rate of failures if the new battery packs were stored in spares or by the supplier for a long time without a charge; FMEF had used Lithonia PS500 and PS700 battery packs.

ORR OBSERVATION FORM

Core Requirement Number and Statement: 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Number and Statement:

3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.
11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Observation Number: 5.3.4

Date: November 18, 1996

Observation:

Several installed electrical equipment and components in the field contain missing or broken parts; misleading labels or wire color coding that are not consistent. Consider use of flexible cord and locking receptacles for emergency light fixtures to facilitate maintenance. See attached electrical walk through comments.

Signatures:

Team Member:

Team Leader: M. Enghusen



ELECTRICAL WALKDOWN COMMENTS

A nameplate showing the Primary, Secondary, KVA, Impedance information of transformers T-13-101 and T-13-102 should be provided on the transformers. None could be found.

In MCC-9-101, Cubicle 3C (CV-9-104A DRUM AIRLOCK CONVEYOR), the overload relay reset button extension rod has fallen off inside the cubicle.

MCC-9-102, Cubicle 6D (Spare) has overload relay reset push button extension rod broken inside cubicle.

Dwg. H-2-131820, Shts. 5&6 (MCC One Line Diagrams) shows MCC-11-102 and MCC-11-103 rated at 42,000 AIC. A Westinghouse Seltronic MC3800 breaker is installed in MCC-11-102 Cubicle 2A (AH-11-201A) and in MCC-11-103 Cubicle 1A (AH-11-201B) that are rated 30,000A AIC at 480V.

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In MCC-11-103 Cubicle 1A (AH-11-201B), breaker terminal guard was not installed. Laying on top of breaker in cubicle.

Load descriptions on the MCCs for air handler heaters and AGV battery chargers are misleading. Can be enhanced if the word "HEATERS" or "BATTERY CHARGER" is added to the front label. e.g. present MCC cubicle label reads "AH-11-201A AIR HANDLER UNIT" where as the load is "AH-11-201A HEATERS"; or present label reads "GV-09-101 Automated Guided Vehicle" where as the load is "GV-09-101 BATTERY CHARGER".

Wall mounted battery powered emergency flood lights are presently hard wired to the lighting circuit serving the area. As these fixtures age through graceful degradation (3-4 years), maintenance will become more intensive than a routine bulb change as charger boards, batteries, etc. begin to fail which will require a tag out of the entire lighting circuit supplying the unit in order to do the maintenance. It may be helpful to eventually install locking receptacles and pigtails on these units for quick and easy removal and replacement.

Have also found that the emergency power packs used in the emergency fluorescent fixtures may also become a high maintenance item (after 3-4 years). May consider using emerg. wall mounted flood lights instead. If the WRAP1 has many of these fixtures, here's some information that may be helpful based on FMEF experiences: over time (usually much less than what the manufacturer advertises) and depending on the amount of discharge cycles, the power packs were found to become less reliable in providing the required 90 minute supply at a satisfactory illumination level; it takes an average of 1-1/2 hours to replace one fluorescent battery pack; each battery pack costs approximately \$120; a tag out of the lighting circuit is necessary to replace the battery pack; there is a high percentage rate of failures if

the new battery packs were stored in spares or by the supplier for a long time without a charge; FMEF had used Lithonia PS500 and PS700 battery packs.

ORR OBSERVATION FORM

Core Requirement Number and Statement: 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Criterion Number and Statement:

4. Acceptance Test Procedures have been completed and documented for all facility systems.
5. Operational Test Procedures have been completed and documented for all facility systems.
6. Cold Plant Integrated Testing has been completed and documented for all facility systems.
9. ATPS and OTPs contain acceptance requirements delineating the minimum standards acceptable for components and/or systems as appropriate.

Observation Number: 5.4.1

Date: November 18, 1996

Observation:

During a reviewed of the Chilled Water Glycol System Operational Test Procedure (draft from the J drive)a punch list item was found that stated the report is not completed. This, and all other OTR's, need to be completed and distributed.

Signatures:

Team Member:

Team Leader: M. Engstusen



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.1

There is an adequate emergency preparedness organization and program.

Criterion Number and Statement: 1

Emergency and off-normal procedures effectively guide personnel in responding to single and multiple events.

Reviewed CM-5-36, Chapter 4-43

Date: November 18, 1996

Observation Number: 8.1.1.1

Observation:

Signs #1, for designated staging area, and #2, for alternate staging area, are not identified. Install signs per procedure.

Signatures:

Team Member: M. Aichle

Team Leader: R. Allen



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.1

There is an adequate emergency preparedness organization and program.

Criterion Number and Statement: 4

Facility Emergency Response personnel are trained to effectively respond and mitigate the consequences of emergencies. Facility non-emergency response personnel are adequately trained on emergencies situations. (Assessed under Core Requirement 2 and 3, provided here for information and completeness) Non-facility emergency response personnel are trained to respond to and support WRAP. NOTE: Only training that is unique to WRAP or describes WRAP's operations is to be assessed.

Reviewed CM-5-36, Chapter 4-43

Date: November 18, 1996

Observation Number: 8.1.4.1

Observation:

During discussions with the facility trainer it was apparent he did not fully understand the facility personnel Emergency Preparedness training requirements and the associated Emergency Preparedness training record retention requirements.

Signatures:

Team Member: M. Aichle

Team Leader: R. Allen



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.1

There is an adequate emergency preparedness organization and program.

Criterion Number and Statement: 8.1

Facility Emergency Response personnel are trained to effectively respond and mitigate the consequences of emergencies. Facility non-emergency response personnel are adequately trained on emergencies situations. (Assessed under Core Requirement 2 and 3, provided here for information and completeness) Non-facility emergency response personnel are trained to respond to and support WRAP. NOTE: Only training that is unique to WRAP or describes WRAP's operations is to be assessed.

Reviewed CM-5-36, Chapter 4-43

Date: November 18, 1996

Observation Number: 8.1.4.2

Observation:

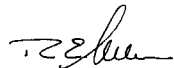
During the assessment of three (3) facility emergency response drills, the following areas were identified as needing attention:

1. The management and accountability of personnel at the staging area. It was uncertain who was in charge and also there was a general lack of order (primarily by construction personnel). It was clear during the post event critique that not all personnel were aware of the designated and alternate staging areas.
2. Communication between the facility BED and the Fire Department prior to entering the WRAP 1 building needs to be re-emphasized.
3. The control room annunciator panel fire alarm window did not alarm during the first fire alarm, but did during the second fire alarm.
4. The overall use of prompts during drill performance needs to be evaluated and improved.
5. The requirements for nasal smears and DTPA shots needs to be re-emphasized in training and lessons learned.
6. The current available decontamination facility needs to be re-emphasized with facility personnel.
7. Need to ensure all appropriate personnel are included in corrective action plan/response (i.e.; environmental and industrial hygiene for potential chemical spill).
8. Need to ensure that current copies of the Building Emergency Plan, Building Emergency Guide, and the facility and site-wide on-call lists are maintained at Emergency Command Posts.
9. Additional training on the use of fire alarm pull boxes.

Signatures:

Team Member: M. Aichle

Team Leader: R. Allen



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.2

There is an adequate engineering support organization and program including the cognizant/system engineer approach.

Criterion Number and Statement: 2, 4, and 5

2. Adequate training, including WRAP specific training, is provided to the engineers. (assessed under Core Requirement 2 and 3, provided here for information and completeness)
4. Goals, objectives, and standards for performance of engineering support activities are adequately established, communicated, and reinforced. (assessed under Core Requirement 11, provided here for information and completeness)
5. The effectiveness and level of expertise of engineering support are periodically and adequately assessed. (assessed under Core Requirement 13, provided here for information and completeness)

DATE: 11/15/96

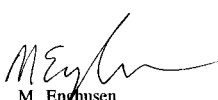
Observation Number: O.8.2.2.1

Observation:

During discussions with operators, engineers, and management, it was recognized that there is a need for more training (including OJT) for the programming engineers. The programming engineers should be cross trained to ensure a back-up Cog engineer is trained for each system. Some Cog Engineers need training on the software programs to provide an understanding of the interfaces. (Case in point, how the electrical fan displays may or may not reflect actual operating conditions.)

Signatures

Team Leader: W. Bowen


Group Leader: M. Enghusen

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Criterion Reference and Statement: 8.3.3. There is a formal waste program that describes procedures, roles, and responsibilities for identifying, characterizing, and managing all waste streams.

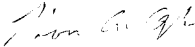
Date: November 14, 1996

Observation Number: 8.3.3.1

Observation:

The facility needs a recycling accumulation area for batteries and fluorescent tubes so that these materials will be properly managed as waste.

Signatures:



Team Member:

Team Leader: T. Quayle

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Criterion Reference and Statement: 8.3.3. There is a formal waste program that describes procedures, roles, and responsibilities for identifying, characterizing, and managing all waste streams.

Date: November 14, 1996

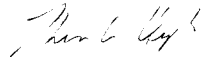
Observation Number: 8.3.3.2

Observation:

The materials storage room off the loading dock has inadequate housekeeping. A point of contact needs to be identified and the required information posted on the door. The log sheets on the waste accumulation drum should be in a permanent holder to keep pages clean and intact.

Signatures:

Team Member:


Team Leader: T. Quayle

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Criterion Reference and Statement: 8.3.3. There is a formal waste program that describes procedures, roles, and responsibilities for identifying, characterizing, and managing all waste streams.

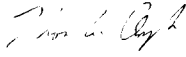
Date: November 14, 1996

Observation Number: 8.3.3.3

Observation:

The portable spill response cart is not complete. Some required materials were not in the cart, there was no inventory of materials in the cart, and it was not sealed with a tamper seal to show nothing has been removed. The cart should be complete before start-up. Personnel who will use the cart needs to be given OJT with it including simulation of materials and disposables.

Signatures:



Team Member:

Team Leader: T. Quayle

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Criterion Reference and Statement: 8.3.3. There is a formal waste program that describes procedures, roles, and responsibilities for identifying, characterizing, and managing all waste streams.

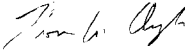
Date: November 14, 1996

Observation Number: 8.3.3.4

Observation:

The plant must have a certified "shipper" before receiving the first drum per 40 CFR 264.71(b) or 40 CFR 265.71(b). Establish a program for the management of shipping and receiving of waste, i.e.: paperwork and files for proper documentation. verify that the training matrix is updated to include "waste shipper" classification and that the appropriate people are certified.

Signatures:


Team Leader: T. Quayle

Team Member:

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Criterion Reference and Statement: 8.3.4. There is a formal waste minimization program and plan

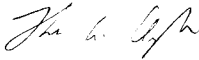
Date: November 14, 1996

Observation Number: 8.3.4.1

Observation:

On the maintenance shop materials storage cabinet there is a sign labeled: "Hazardous Waste". The materials in the cabinet are not waste. Suggest removing the sign to prevent non-hazardous materials being treated as hazardous wastes.

Signatures:



Team Member:

Team Leader: T. Quayle

OBSERVATION

Core Requirement Number and Statement: 8.4 There is an adequate Fire Protection Program.

Criterion Number and Statement: 1 The Hanford Fire Department (HFD) is cognizant of WRAP's needs and have taken appropriate actions to meet.

Date: 18 November 1996

Observation Number: O.8-4.1.1

Observation: The FHA does not accurately reflect the time required for the HFD to respond to an alarm at the facility. To be closed with Finding 8-4.3.1, Item 11.

Signatures:



Team Member:

Team Leader: D. Oar

OBSERVATION

Core Requirement Number and Statement: 8.4 There is an adequate Fire Protection Program.

Criterion Number and Statement: 4 Requirements of NFPA and Life Safety Code are specified, implemented, and maintained.

Date: 18 November 1996

Observation Number: O.8-4.4.1

Observation: Fire barriers are not identified with 2" high red lettering on white background.

Signatures:



Team Member:

Team Leader: D. Oar

OBSERVATION

Core Requirement Number and Statement: 8.4 There is an adequate Fire Protection Program.

Criterion Number and Statement: 4 Requirements of NFPA and Life Safety Code are specified, implemented, and maintained.

Date: 18 November 1996

Observation Number: O.8-4.4.2

Observation: Exits on the West side of the building have no protection from inclement weather and are not commonly utilized. Procedures should be developed to insure that snow and ice are removed from exit egress paths.

Signatures:



Team Member:

Team Leader: D. Oar

OBSERVATION

Core Requirement Number and Statement: 8.4 There is an adequate Fire Protection Program.

Criterion Number and Statement: 5 Fire protection systems and equipment are available as specified in fire protection program documents.

Date: 18 November 1996

Observation Number: O.8-4.5.1

Observation:

Acceptance Test Procedures (ATP) were not completed.

- 1) Could not locate documentation that the dry pipe sprinkler system was pneumatically tested following installation of the air compressor.
- 2) Could not locate documentation that the high pressure alarm switch on the dry pipe sprinkler system was tested following termination to the fire alarm system.

Signatures:



Team Member:

Team Leader: D. Oar

OBSERVATION

Core Requirement Number and Statement: 8.4 There is an adequate Fire Protection Program.

Criterion Number and Statement: 8 Procedures/policies provide for appropriate notifications of fire protection system outages.

Date: 18 November 1996

Observation Number: O.8-4.8.1

Observation: Surveillance of the fire alarm control panel (when in trouble condition) was not included on the daily surveillance and no log entries have been made to the daily log.

Signatures:

Team Member:


Team Leader: D. Oar

OBSERVATION

Core Requirement Number and Statement: 8.4 There is an adequate Fire Protection Program.

Criterion Number and Statement: 9 Provisions are made for the proper storage of radioactive, flammable, and combustible materials.

Date: 18 November 1996

Observation Number: O.8-4.9.1

Observation: A Hazardous Materials Management Plan (HMMP) has not been developed to include a facility site plan designating the following items:

- 1) Storage and use areas.
- 2) Maximum amount of each material stored or used in each area.
- 3) Range of container sizes.
- 4) Locations of emergency isolation and mitigation valves and devices.
- 5) Product conveying piping containing liquids or gases, other than utility-owned fuel gas lines and low pressure fuel gas lines.
- 6) On and off positions of valves for valves which are of the self-indicating type.

Signatures:

Team Member:


Team Leader: D. Oar

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed CM-5-34, Section 3.5, Operations Organization and Administration, and Sections 3.6 Operations Maintenance Requirements, 2.11, Work Management.

Interviewed Maintenance Craft, Maintenance Engineers (E. Allen, C. Warren), Work Control team members (M. Ibatuan, C. Stockard).

Date: November 15, 1996

Observation Number: 8.5.1.1

Observation: Overall responsibilities and authority for many major elements of the maintenance management program are not stated or well defined, and are only limited to those found in 3.6/CM-5-34, or where called out in process guidance documents. The facility would benefit by establishing these assignments and expectations in a management plan for Maintenance, then implementing through position descriptions.

Signatures:

Team Member:

Team Leader:  J. Schildknecht

Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed CM-5-34, Sections 3.5, 3.6, 2.11, and IP-1120, SWD S/RID.

Interviewed several employees in Maintenance and Maintenance Support roles (Work Control, Scheduling, Procedure Coordination).

Date: November 15, 1996

Observation Number: 8.5.1.2

Observation: WRAP 1 has not clearly established maintenance program objectives and goals in relationship to Plant Operations missions. There is no evidence of management developed group goals, or supporting indicators and measures (PI/PM) that can advertise progress, successes, or shortcomings. Use MIP to address. Establish WRAP 1 maintenance program objectives and goals, and use performance indicators to status.

Signatures:

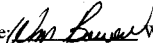
Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed CM-5-34, all sections pertaining to maintenance elements.

Interviewed Manager (T. Orgill), Lead (M. Ibatuan), Maint. Engineer (E. Allen), Procedure Coordinator (J. Kersten), Engr. Manager (J. Bottenus).

Date: November 15, 1996

Observation Number: 8.5.1.3

Observation: Some personnel interviewed indicated that their roles were "self-made", and that they were not certain of their performance expectations relative to assignments. Overlapping responsibilities made it unclear as to exact authority. None of the interviewed employees could produce a documented job/position description. Develop specific job or position descriptions for maintenance and support personnel.

Signatures:

Team Member:

Team Leader:  J. Schildknecht

Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed CM-5-34, all applicable sections, including Sect. 1.11 (Self-Assess.).

Interviewed Manager (T. Orgill), WC Lead (M. Ibatuan), Maint. PIC (C. Johnson, C. Warren), craft (R. Dohaniuk, M. Althaus).

Observed POD and POW meetings.

Date: November 15, 1996

Observation Number: 8.5.1.4

Observation: The facility Self-Assessment program is weak in the area of addressing Maintenance Program elements. There appears to be adequate involvement by management, leads, and PICs' with regard to reviewing work processes, observing field activities, and making work area tours. However, the facility personnel involved in these activities do not adequately define or document these activities/results. Develop/implement an effective management observation/assessment program that is well documented.

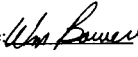
Signatures:

Team Member:

Team Leader:  J. Schildknecht

Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed facility organization charts.

Interviewed Managers (T. Orgill, J. Riddelle), Team Lead (M. Ibatuan), Maintenance Engineers (E. Allen, C. Warren), PIC (C. Johnson)

Date: November 15, 1996

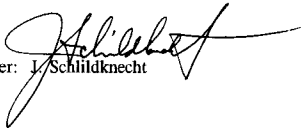
Observation Number: 8.5.1.5

Observation: The Maintenance "organization" is not integrated appropriately. Maintenance engineers (3), Work Control staff, and other maintenance support personnel, report to a separate management line from the maintenance craft personnel, creating less than optimum coordination and communication on "common" discipline issues. WRAP 1 should create a Maintenance Program Manager position, reporting to the Plant Manager, having control of Craft, Work Control, Planning, and Maintenance Engineering.

Signatures:

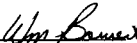
Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed CM-5-34, sections 2.11, 3.6

Reviewed PKG. WI-96-00715-W (P4).

Interviewed Work Control Team Lead (M. Ibatuan), PIC (C. Johnson), Maintenance Engineer (E. Allen)

Date: November 15, 1996

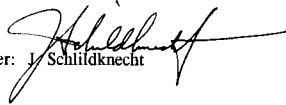
Observation Number: 8.5.1.6

Observation: The facility has not developed effective indicators (CM Backlog, PM Overdue) that can measure and trend PM/CM ratio, and changing levels of work type. As WRAP is a new facility, there is very little existing corrective maintenance, or modification work. This is an area that can be expanded on in a MIP. Establish an effective tool, such as performance indicators, for controlling and trending CM activities.

Signatures:

Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed maintenance procedures for Crane and Rigging, Recall lists for back-flow prevention devices, maint./test activities for HEPA filters (HVAC).

Discussions with the Crane and Rigging central group (DYNCORP), the Site Water Purveyor (D.Rohl), and the Third Party Inspector-Pressure Vessels (J. Densley).

Date: November 15, 1996

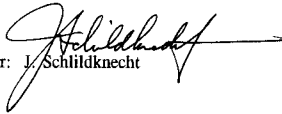
Observation Number: 8.5.1.7

Observation: Address certified tester (craft) for back-flow preventer's; change, then test/inspect SRV on the compressed air receiver; review site-wide procedures referenced for use on H&R (load testing, major inspections).

Signatures:

Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Review of CM-5-34, 2.11 and 3.6.

Interviewed Work Control staff, Maintenance Engineers (E. Allen, C. Warren), and Manager (T. Orgill).

Date: November 15, 1996

Observation Number: 8.5.1.8

Observation: There is evidence that the WRAP facility does not intend to use Predictive Maintenance (PdM) within their PM program. The only reference to management's expectations for use of PdM is in a related ORR affidavit ("they won't use"). CM-5-34, 3.6, shows PdM as one of the three types of maintenance elements to be implemented. Clarify this position in a management plan (MIP), giving consideration to use in special applications.

Signatures:

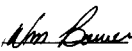
Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed CM-5-34, Section 3.6.

Interviewed Manager (T. Orgill), Work Control Lead (M. Ibatuan), Maintenance Engrs. (E. Allen, C. Warren).

Date: November 15, 1996

Observation Number: 8.5.1.9

Observation: Without a comprehensive Maintenance Management Plan, facility management cannot demonstrate that effective periodic program reviews occur or are planned. There are no clear program element baseline criteria identified by the facility, nor is there a policy for documenting periodic reviews. Policy and criteria for periodic program element reviews should be defined in a MIP.

Signatures:

Team Member:

Team Leader:  Schildknecht

Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.1 The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventative maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.

Reviewed CM-5-34, Sect. 1.11, 2.11, and 3.6.

Interviewed Manager (T. Orgill), Work Control Lead (M. Ibatuan), Manager (J. Riddelle), Maint. Engr. (E. Allen).

Date: November 15, 1996

Observation Number: 8.5.1.10

Observation: The existing facility Self-Assessment Program (1.11) does not effectively address the maintenance program. There are some activities presently performed by the plant that can be credited to this program. Self-Assessment of Maintenance should be defined in the Maintenance Management Plan, or MIP, and then implemented via an expanded program in 1.11/CM-5-34.

Signatures:

Team Member:

Team Leader: J Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3 An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, section 2.11.

Interviewed WC Team Lead (M. Ibatuan).

Date: November 15, 1996

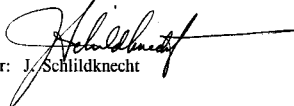
Observation Number: 8.5.3.1

Observation: The 2.11 document is lacking with respect to work prioritization. The facility Work Control process is adequately developed and implemented for work identification, planning, performance, tracking, and close-out. Add a prioritization system to the Work Control process.

Signatures:

Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3 An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, 2.11, 3.6.

Interviewed WC Team Leader (M. Ibatuan).

Date: November 15, 1996

Observation Number: 8.5.3.2

Observation: The work control process does not adequately identify a prioritization system, based on risk, safety, or plant reliability, that can be used to schedule work. Priority was not discussed at the PODs' when lining up work order or preference. Work activity was rearranged with no reference to priority. Implement an effective priority system for planning, scheduling, and performing work.

Signatures:

Team Member:

Team Leader:  J. Schildknecht

Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3 An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, Section 3.1, Material Control, and Sections 2.11, 3.6.

Interviewed Material Control Spec. (P. Gotterbarn), Maintenance Engr. (E. Allen).

Date: November 15, 1996

Observation Number: 8.5.3.3

Observation: The material coordination phase of planning work needs to be integrated into the process guidance document, 2.11. Material, tools, spare parts, etc., are being identified and obtained for planned work by the material coordinator.

Signatures:

Team Member:

Team Leader: J. Schliddknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3 An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, 2.11, 3.6.

Observed Pre-job safety meetings (2).

Interviewed Maintenance Engrs. (E. Allen), Maint. PIC (C. Johnson), Manager (T. Orgill).

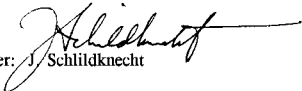
Date: November 15, 1996

Observation Number: 8.5.3.4

Observation: In the work control screening process, preliminary hazards identification is to be performed by the WCC/Validator. There is not enough criteria presented for this decision process, which eventually determines the depth of planning required. Eventually, the facility will implement the automated Enhanced Work Planning (EWP) process, that will aid in up-front hazards risk assessment. Until then, create finite criteria for hazards I.D. within the work control process document.

Signatures:

Team Member:

Team Leader:  Schildknecht

Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature: 

WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3 An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, 2.11, 3.6; reviewed IP-1140/IP-0673, Procedure Development Guides.

Reviewed several p.m. and cal procedures:

WRP1-CI-0501

WRP1-PMI-1107

WRP1-PMI-1101

WRP1-PMI-0501, and more.

Interviewed Procedure Writer/Maintenance Engineers (E. Allen, C. Warren), Procedure Coordinator (J. Kersten).

Date: November 15, 1996

Observation Number: 8.5.3.5

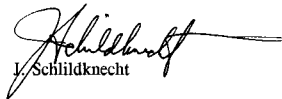
Observation: Craft field validated maintenance procedure drafts, but did not receive final versions to see if comments were appropriately inserted. Procedure history files did not contain marked up copies of draft procedures or comment records. The "validation" signatures on pm procedures were those of the Manager, Ops & Maint., not those of people who perform the work. Also, the Procedure Coordinator has issued procedures to the approved file, but states that she is not signing release and date due to having "inadequate time" to do editorial review. This entire procedure development and approval process needs to be thoroughly reviewed.

Signatures:

Team Member:

Date: November 26, 1996

Team Leader: J. Schildknecht



Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3 An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, 2.11, 3.6, and Section 3.13, Control of Equipment and system Status.

Interviewed Manager (T. Orgill), Work Control Lead (M. Ibatuan), Work Control Clerk (C. Stockard).

Date: November 15, 1996

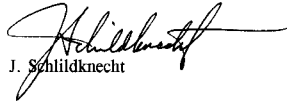
Observation Number: 8.5.3.6

Observation: Post-Maintenance Test (PMT) policies/ requirements are not well defined at WRAP I. There are only slight references in the 3.6 procedure, and the only other reference is ineffectively tucked away in 3.13, an Operations guidance procedure. Employees responsible for specifying or conducting P-MT are uncertain of the principles for Retest/PMT. P-MT should be an element of the Maintenance Management Plan, with more specific requirements clarified in 2.11, Work Management.

Signatures:

Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3 An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, 2.11, 3.6, and Section 3.13, Control of Equipment and system Status.

Interviewed Manager (T. Orgill), Work Control Lead (M. Ibatuan), Work Control Clerk (C. Stockard).

Date: November 15, 1996

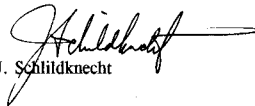
Observation Number: 8.5.3.7

Observation: No overall responsibilities for post-maintenance testing are delineated. Cog Engineers and Operations education and involvement necessary.

Signatures:

Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

OBSERVATION

Core Requirement Number and Statement: 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Criterion Number and Statement: 8.5.3 An adequate formal work control process provides:

- A. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
- B. Formal work authorization, job planning, scheduling, and backlog measures.
- C. Work controlled by written procedures using qualified personnel.
- D. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
- E. Clear definition of responsibilities for initiating work request, approving completed work, and to ensure that work is completed as scheduled, are in place.

Reviewed CM-5-34, 2.11, 3.6.

Interviewed Maintenance Engr. (E. Allen), Work Control Lead (M. Ibatuan).

Date: November 15, 1996

Observation Number: 8.5.3.8

Observation: CM-5-34, Section 2.11 does not adequately address WRAP policy for documenting and retaining history of completed maintenance. Indications are that the facility plans for an informal history program, primarily as a responsibility for the Maint. Engr., as part of component field files. Establish/implement policy for equipment history.

Signatures:

Team Member:

Team Leader: J. Schildknecht



Date: November 26, 1996

Upon further review this item observation appears to be appropriate by WHC-SP-0851, Rev. 1.

Signature:  WRAP ORR Team Leader

ORR OBSERVATION Form

Core Requirement Number and Statement: 8.7

Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment.

Criterion Number and Statement: 6

Facility radiological procedures/policies, or equivalent, are adequate to protect the worker, public, and the environment (e.g., surveying and monitoring, use of radiation sources, operating radiation-generating devices, using radiation monitoring equipment, etc.)

Date: November 21, 1996

Observation Number: O.8.7.6.1

Observation:

The WRAP decontamination room is not included as part of Phase 1. Therefore, a back-up decontamination facility should be identified when decontamination cannot be achieved with the emergency decontamination kits.

As the WRAP decontamination room is currently designed it will not be functional for Phase 2 or Phase 3 work. The current design requires a person to dress in PPE to exit the decontamination room. An engineering change notice should be drafted and issued to change the entrance and exits points of the decontamination room so a person does not have to enter the process area to leave the decontamination room.

Signatures:

Team Member:


Team Leader: C. Stephan

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.7

Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment.

Criterion Number and Statement: 9

An ALARA program has been established and successfully implemented. ALARA program has taken into account all facets of exposure reduction (e.g., posting hot spots, shielding, special tools, monitoring, traffic routing, location of office areas and work stations, protection from transient radiation, adequate communications)

Date: November 21, 1996

Observation Number: O.8.7.9.1

Observation:

During the integrated cold run, WRAP personnel were observed leaning on drums and using drums for writing surfaces. As these drums are to be handled as if they were contaminated, this would not be in accordance with ALARA practices.

Signatures:

Team Member:

Team Leader: C. Stephan



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.7

Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment.

Criterion Number and Statement: 11

Fail safe interlocks are used, tested, and documented on radiation generating devices, and barriers are adequately used to ensure the safety of operators and other personnel.

Date: November 15, 1996

Observation Number: 8.7.11.1

Observation:

Functional tests of the box NDE and drum NDE systems were performed. However, as the tests are currently documented, it is difficult to find all of the paper work documenting the functional tests. Additionally, the operating procedures require that the 6 month checks/inspections be verified daily, but the procedures do not identify the checks/inspections. The interlock checks/inspections should be included in a procedure and incorporated into the plant recall system.

Signatures:

Team Member


Team Leader: C. Stephan

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.7

Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment.

Criterion Number and Statement: 17

Radiological protection/measurement instruments (fixed and portable, air monitoring, radiation, filter, personnel, etc.) are properly tested and calibrated.

Date: November 21, 1996

Observation Number: 8.7.17.1

Observation:

During the EP drill the Alpha CAM did not secure the ventilation system. (this was also reported as a part of finding 10.1.2)

Signatures:

Team Member


Team Leader: C. Stephan

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.7

Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment.

Criterion Number and Statement: 19

Instrumentation is adequate to meet facilities needs (range, type, location, number, air flow rate, etc.).

Date: November 21, 1996

Observation Number: 8.7.19.1

Observation:

The current locations of Area Radiation Monitors (ARM) RIAH-506 and RIAH-507 within the Shipping and Receiving area are not adequate. RIAH-507 is located behind a shield wall, and RIAH-506 is located such that an inadvertent alarm could sound when receiving drums at the south shipping and receiving roll up door. In addition to the location of monitors, there is a concern that the monitors do not visibly indicate that they are operational. Workers should be able to visibly verify the devices are operating when they enter a monitored area.

Signatures:

Team Member:


Team Leader: C. Stephan

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.8

Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

Criterion Number and Statement: 5

Sufficient work place surveillance exists to seek and track safety and health hazards. Regular and periodic audits are conducted to assess work place conditions.

Date: 11/15/96

Observation Number: O.8-8.5.1

Observation:

The WRAP facility has had an Industrial Hygiene baseline assessment completed and documented of the portions of the facility to be operated during phase 1 operations. However, there has been no documented baseline assessment of the facility for phase 1 operations by Industrial Safety. It should be noted however, that Industrial Safety walkthroughs have been accomplished, and safety items are being tracked and completed.

WHC-CM-5-36, Chapter 1-10, Section WKS 3, P. 3.0

Signatures:

Team Member:

Team Leader: R. Wight

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.8

Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

Criterion Number and Statement: 7

A system exists and is utilized whereby employees may identify safety and health hazards to their manager for corrective action without fear of reprisal. Employees are aware of their access rights to information including medical and monitoring records and Material Safety Data Sheets.

Date: 11/15/96

Observation Number: O.8-8.7.1

Observation:

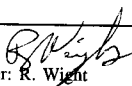
Although a facility unique Hazard Communication program exists at the WRAP facility, (IP 1237, Sect. 1.2) the information is not being effectively communicated to all employees at the facility as evidenced by the following:

1. Three out of three workers interviewed were not sure where the MSDS books were located in the facility. They were also unsure of what, if any hazardous chemicals were located in their work areas. 29CFR1910.1200(g)(8), .1200(h)
2. In the maintenance shop the MSDS book was located inside a flammable storage cabinet. (not in plain sight or easily obtainable) 29CFR1910.1200(g)
3. In the maintenance facility, two of the items in the facility and on the inventory sheet did not have an MSDS in the book. (E-6100 adhesive, and P-10 compressed gas). In the WRAP facility there is a water testing kit in the air compressor room that had three chemicals in the kit, none of which were found in the MSDS book. 29CFR1910.1200(g)
4. The bulletin boards throughout the facility are not complete for all of the information that the employees need to know. This is known by the facility and is being tracked to completion. 29CFR1910.1200(h)
5. There has been no facility specific hazard communication training to the employees other than pre-job briefings, but these are not always complete for identifying all the hazards to be found on a job. 29CFR1910.1200(h)(3)

Signatures:

Team Member:

Team Leader: R. Wight



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.10

Security Organization and Program: There is a security organization and program that adequately supports the requirements.

Criterion Number and Statement: 1

The organizational structure is clearly defined and staffing and resources are sufficient to accomplish tasks assigned to the organizational element. Responsibilities, authority, and interfaces for each organizational position are clearly defined and understood.

Observation Number: 8.10.1.1

Date: November 14, 1996

Observation:

A point of contact (POC) from the Security Organization with an interface agreement has not been defined.

Develop a memorandum of understanding with security as to who their POC is and what services they will provide to assure a compliant security program for WRAP-I. The asset protection agreement does not provide or define security organizations commitments or services that are to be provided.(RLID 5632.1B,Section 8.2).

Signatures:



Team Member:

Team Leader: William Bowen

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.10

Security Organization and Program: There is a security organization and program that adequately supports the requirements.

Criterion Number and Statement: 2

Procedures and controls that assure safe and reliable operations are employed in the conduct of security.

Observation Number: 8.10.2.1

Date: November 14, 1996

Observation:

An RL approved asset protection agreement does not exist.

Request security to help expedite the RL approval with the agreement.

Signatures:

Team Member:


Team Leader: William Bowen

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.10

Security Organization and Program: There is a security organization and program that adequately supports the requirements.

Criterion Number and Statement: 2

Procedures and controls that assure safe and reliable operations are employed in the conduct of security.

Observation Number: 8.10.2.2

Date: November 14, 1996

Observation:

Procedures do not exist that check to assure that WRAP facilities are locked per the noted times in the Asset Protection Agreement.

Prepare administrative procedures for the building administrator and operational surveillance procedures to include checking for locked doors and securing of security areas and equipment.

Signatures:

Team Member:

Team Leader: William Bowen



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.10

Security Organization and Program: There is a security organization and program that adequately supports the requirements.

Criterion Number and Statement: 2

Procedures and controls that assure safe and reliable operations are employed in the conduct of security.

Observation Number: 8.10.2.3

Date: November 14, 1996

Observation:

Modem accountability per WHC-CM-5-36 has not been completed for all computer systems used in the WRAP Control room. The process control computer modem evaluation needs to be completed.

Signatures:

Team Member:


Team Leader: William Bowen

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.11

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criterion Number and Statement:

1. Configuration Management procedures/policy exists and are clearly communicated and understood by all levels of the organization. Appropriate graded approach is utilized consistent with the safety class of process and utility equipment/systems.
2. Responsibilities and interfaces for configuration management are clearly defined. (assessed under Core Requirement 11, provided here for information and completeness)
5. An administrative program is in place to ensure that modifications are analyzed, documented, approved by appropriate personnel and organizations, and reflected in design drawings, revised operations, training, and maintenance procedures.
9. Programs are defined, and procedures are in place to specify methods for identifying, addressing, and reconciling questions concerning alterations to the design, function, or method of performing the function of a structure, system, or component as described in the authorization basis.

Observation Number: O.8.11.1.1

Date: November 18, 1996

Observation:

During discussions with various individuals, the use of the USQ process was known but some questions arose as to the control of the USQ forms and exactly when it will be used. The USQ process does not apply (per SWD procedure) until the DOE approval of the WRAP 1 Facility Safety Analysis Report (FSAR). A re-training program should be given to cover any changes to the FSAR and to remind all personnel of the requirements. Some analysis of the changes in the FSAR and the changes which have occurred to the facility prior to FSAR approval should be evaluated.

Signatures:



Team Member:

Team Leader: Mark Enghusen

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.11

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

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9. Programs are defined, and procedures are in place to specify methods for identifying, addressing, and reconciling questions concerning alterations to the design, function, or method of performing the function of a structure, system, or component as described in the authorization basis.

Observation Number: O.8.11.1.2

Date: November 18, 1996

Observation:

The use of released drawings for Configuration Control was discussed during interviews with plant personnel. The tools for using the released drawings for configuration control (i.e., soft reporting checks for outstanding ECNs and current drawing revisions) are in place but need to be communicated. Some training on Configuration Control requirements needs to be given to ensure the systems are used correctly.

There is work initiated to get a set of released drawings available to the plant in two locations. A formal process should be established to ensure the drawings are the most up to date and are routinely checked (i.e. no marks, redlines, torn pages, etc.).

Signatures:

Team Member:

Team Leader:  Mark Engdusen

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.11

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criterion Number and Statement:

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2. Responsibilities and interfaces for configuration management are clearly defined. (assessed under Core Requirement 11, provided here for information and completeness)
5. An administrative program is in place to ensure that modifications are analyzed, documented, approved by appropriate personnel and organizations, and reflected in design drawings, revised operations, training, and maintenance procedures.
9. Programs are defined, and procedures are in place to specify methods for identifying, addressing, and reconciling questions concerning alterations to the design, function, or method of performing the function of a structure, system, or component as described in the authorization basis.

Observation Number: O.8.11.1.3

Date: November 18, 1996

Observation:

During the discussion on computer systems Configuration Control, the people responsible for controlling the software changes and inventory were known by the responsible engineers and managers. A formal identifier was not available (or at least provided to the ORR) and should be prepared which states the Computer System and Data Base Administrators along with their responsibilities.

Signatures:

Team Member:

Team Leader: Mark Enghusen



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.11

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criterion Number and Statement:

1. Configuration Management procedures/policy exists and are clearly communicated and understood by all levels of the organization. Appropriate graded approach is utilized consistent with the safety class of process and utility equipment/systems.
2. Responsibilities and interfaces for configuration management are clearly defined. (assessed under Core Requirement 11, provided here for information and completeness)
5. An administrative program is in place to ensure that modifications are analyzed, documented, approved by appropriate personnel and organizations, and reflected in design drawings, revised operations, training, and maintenance procedures.
9. Programs are defined, and procedures are in place to specify methods for identifying, addressing, and reconciling questions concerning alterations to the design, function, or method of performing the function of a structure, system, or component as described in the authorization basis.

Observation Number: O.8.11.1.4

Date: November 18, 1996

Observation:

Per the requirements of SWD procedure WHC-SD-5-34, Section 2.1 chapter 5.2 and 5.3, the project files are supposed to be updated to include a the documents presented is section 5.3. The Project Files (WHC-SD-WM-RPT-060) will need to be updated upon completion of the Phase 2 and 3 projects to include these documents.

Signatures:

Team Member:

Team Leader:  Mark Engelsen

ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.11

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criterion Number and Statement:

3. Documents, drawings, and other references which define the facility configuration are readily available, authorized, properly controlled and are used in designing plant changes, preparing facility procedures, troubleshooting, etc.
4. Management ensure that changes to the facility are warranted and properly controlled.
6. The configuration of systems as contained on as-built drawings have been physically verified.
7. Procedures and management policies for changes to the facility are properly executed.
10. Temporary modification are controlled to ensure facility configuration is maintained.

Observation Number: O.8.11.3.1

Date: November 18, 1996

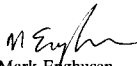
Observation:

During the ORR review for Phase 1, only 62 of the drawings were released to support operation of the facility. The remainder of the drawings for the facility need to be completed and in place prior to operation. This is being done but at this time but needs to be verified at some later date.

Signatures:

Team Member:

Team Leader: Mark Enghusen



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.11

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criterion Number and Statement:

3. Documents, drawings, and other references which define the facility configuration are readily available, authorized, properly controlled and are used in designing plant changes, preparing facility procedures, troubleshooting, etc.
4. Management ensure that changes to the facility are warranted and properly controlled.
6. The configuration of systems as contained on as-built drawings have been physically verified.
7. Procedures and management policies for changes to the facility are properly executed.
10. Temporary modification are controlled to ensure facility configuration is maintained.

Observation Number: O.8.11.3.2

Date: November 18, 1996

Observation:

Per the requirements of WHC-CM-5-36, Chapter 6-1, EP-1.3, subsection 2.6, the released drawings are supposed to be stamped 'AS BUILT' until such time as an ECN for changes is issued against the drawing. All future drawings should include this stamp even after field verification and the drawings which have already been released should be evaluated for need of including this stamp.

Signatures:

Team Member:

Team Leader: Mark Enghusen



ORR OBSERVATION FORM

Core Requirement Number and Statement: 8.11

There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criterion Number and Statement:

3. Documents, drawings, and other references which define the facility configuration are readily available, authorized, properly controlled and are used in designing plant changes, preparing facility procedures, troubleshooting, etc.
4. Management ensure that changes to the facility are warranted and properly controlled.
6. The configuration of systems as contained on as-built drawings have been physically verified.
7. Procedures and management policies for changes to the facility are properly executed.
10. Temporary modification are controlled to ensure facility configuration is maintained.

Observation Number: O.8.11.3.3

Date: November 18, 1996

Observation:

During a review of the AS BUILT drawing files, the Component Identification Worksheet and Design Service Request forms were not in the files. The Component Identification Worksheet use is not spelled out within the procedure, WHC-CM-5-24, section 2.2, as to when it would be completed. There is a diagram which shows it being filled out but no wording to match the diagram. A reason for not having these forms should be written and placed into the files for future.

Signatures:

Team Member:


Team Leader: Mark Engelsen

ORR OBSERVATION FORM

Core Requirement Number and Statement: 9

A routine and emergency operations drill program, including program records, has been established and implemented.

Criterion Reference and Statement: 1

The drill program adequately plans, schedules, prepares, conducts, and documents drills.

Date: November 15, 1996

Observation Number: 9.1.1

Observation:

The "facility drill coordinator" gets a large amount of support from at least one contract individual. Without the outside support of the contract individual the facility would not be able to support this function.

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 9

A routine and emergency operations drill program, including program records, has been established and implemented.

Criterion Reference and Statement: 3

Critique results are used to improve the drill program, personnel response, and the facility emergency plan.

CM-5-34, Section 1.5

Date: November 15, 1996

Observation Number: 9.3.1

Observation:

Utilization of operators and RCTs as drill controllers should be incorporated into the drill program. The insight given by having the operators and RCTs help write, run, and critique the drills on their peers is very worthwhile and will improve both the drill scenarios and the staff response to drills.

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 10

An adequate startup or restart test program has been developed that includes adequate plans for graded operations testing to simultaneously confirm operability of equipment, the viability of procedures, and the training of operators.

Criterion Number and Statement: 1

An adequate startup or restart program is in place.

CM-5-36 (4.2)

Date: November 15, 1996

Observation Number: 10.1.1

Observation:

When power was lost to SG-13-101 bus #2 which removed power from most of the facility H&V units the computer system indication of the facility status did not detect this. The control room operator from all available indication could not tell that the H&V was lost, in fact computer indication was that it was still running. This is per the design of the H&V control system, but is unacceptable from a Conduct of Operations standpoint at a minimum and should be corrected. The control room operator needs to have the indication of when H&V loses power or shutdown in a timely manner.

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 10

An adequate startup or restart test program has been developed that includes adequate plans for graded operations testing to simultaneously confirm operability of equipment, the viability of procedures, and the training of operators.

Criterion Number and Statement: 1

An adequate startup or restart program is in place.

CM-5-36 (4.2)/IP-1026 Appendix L, On-the-job training has been conducted during the startup test program.

Date: November 15, 1996

Observation Number: 10.1.2

Observation:

Documentation of OJT in the training records is not rigorous and contain numerous crosscuts, and other administrative errors that are unacceptable for training records.

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 11

Functions assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for safety.

Criterion Number and Statement: 1

Policies/procedures exist defining the responsibility, authority, accountability, and reporting relationships of each management position, exempt position, non-exempt position, bargaining unit, and direct support personnel (e.g., Environmental Compliance, Fire Protection, Engineering Maintenance, QA, Health Physics, Training, Industrial Hygienist, Industrial Safety, Nuclear Safety, Laboratories, Security, Records management, Projects, Occurrence Reporting, Emergency Preparedness, etc.).

Date: November 19, 1996

Observation Number: 11.1.1

Observation:

Position Descriptions are generally generic site-wide type position descriptions and most do not contain site specific requirements. The position descriptions examined lacked facility specific requirements and position duties such as ORPS facility reporting requirement designations, BED designations, identification of Facility owner/work release authority for contractor activities, and administration of Lessons Learned. The Position Descriptions need to be reviewed and updated by management to include specific duties and responsibilities.

Signatures:

Team Member:

Team Leader: V. Magnus



ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.7. Shift Routine and Operating PracticesCM-5-34 (3.7, 4.18)

Date: November 15, 1996

Observation Number: 12.1.1

Observation:

An official drawing file for operations has not been established. Drawings used for operational decisions should be marked "FV" (field verified).

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.8. Control Area Practices

Date: November 15, 1996

Observation Number: 12.1.2

Observation:

During the "cold run" X-ray technicians were using a white copy of the approved procedure 0904 but the copy had red pen & ink changes/additions made to it. The procedure change process should be used to correct the procedures when required.

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.8. Control Area Practices

Date: November 15, 1996

Observation Number: 12.1.3

Observation:

A discrepancy between the final drum weight of 36Kg as read at the discharge conveyer and the computer indicated weight in the control room of 63Kg needs to be resolved. This discrepancy could be an indication of the wrong drum. If not corrected it will be ignored by operations thus eliminating a backup check that the right drum is being processed.

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.9, CommunicationCM-5-34 (3.9, 4.1.2)

Date: November 15, 1996

Observation Number: 12.1.4

Observation:

During observation of the "cold run" and daily operations the lack of radios was evident. More radios are required to allow operations of the facility to proceed in an efficient manner. Safety is also a consideration here. During upset conditions and causality events a lack of communication capability would cause undue risk to the staff and the facility.

An improvement/expansion in the phone system should be considered as a long term option to resolve this issue.

Signatures:

Team Member:



Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.14. Lockout and TagoutCM-5-36 (WKS 8.1)

Date: November 15, 1996

Observation Number: 12.1.5

Observation:

Safe condition checks for multiple tags are not being documented consistently. At times there is one signature for the safe condition check of multiple tags. At times a separate signature is made for each tag.

Recommend the signature for the safe condition check denote which tags it is for ie., John Doe (tags 1,3,5) or John Doe (tags 1 through 5).

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.16, Alarm ManagementCM-5-34 (3.16, 6.2.2)

Date: November 15, 1996

Observation Number: 12.1.6

Observation:

Spurious Alarms greater than one day old are to be reported in the daily report. The daily report is NOT being written at this time. Note: there are no spurious alarms greater than one day old.

A daily report should be written if only for the facility's staff information and update of the plants status and goals.

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.17, Logkeeping

Date: November 15, 1996

Observation Number: 12.1.7

Observation:

A desk or some other sort of station needs to be setup in the shipping and receiving area for operators to keep the paperwork together and lay the procedures on when in use. A rolling cart might be acceptable. The operators input for this should be requested and used for resolution.

Signatures:

Team Member:

Team Leader: L. Harville



ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.22. Operator Aid PostingCM-5-34 (3.22, 4.2)

Date: November 15, 1996

Observation Number: 12.1.8

Observation:

Unauthorized operator aids are posted for the bar code reader/scanner to scan various commands at various locations in the plant. These bar code sheets of paper are taped to the walls at the drum infeed and outfeed conveyers. These "aids" should be made official and posted in a professional manner.

Signatures:



Team Member:

Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.9. Communication

Date: November 15, 1996

Observation Number: 12.1.9

Observation:

The PAX system does not extend to the maintenance shop and the administrative building. The PAX system is the means used for emergency notifications and announcements. This vital communications link needs to be extended to all the buildings that facility personnel are in to ensure these announcements are heard and the required actions taken.

Signatures:

Team Member:



Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.7, Shift Routine and Operating PracticesCM-5-34 (3.7, 4.5)

Date: November 15, 1996

Observation Number: 12.1.10

Observation:

Housekeeping in the clean and used SWP rooms is unsatisfactory. Housekeeping in the material staging room (by the loading dock) is also unsatisfactory.

Signatures:

Team Member:



Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.9, Communication

Date: November 15, 1996

Observation Number: 12.1.11

Observation:

The PAX system speakers in the NDE/NDA area need to be adjusted/balanced to be understandable.

Signatures:

Team Member:

Team Leader: L. Harville



ORR OBSERVATION FORM

Core Requirement Number and Statement: 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criterion Number and Statement: 1

The facility has implemented the CM-5-34 Conduct of Operations chapters specifically the following.

3.24. Equipment and Piping Labeling

Date: November 15, 1996

Observation Number: 12.1.12

Observation:

The area under the arc of the jib crane should be marked to caution/warn individuals to wear hard hats, steel toed shoes, ie., the correct PPE when entering that area when the jib crane is in operation.

Signatures:

Team Member:


Team Leader: L. Harville

ORR OBSERVATION FORM

Core Requirement Number and Statement: 14

A program is established to promote a site-wide culture in which personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements and, through their actions, demonstrate a high priority commitment to comply with these requirements.

Criterion Number and Statement: I

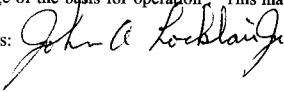
1. Procedures and training programs are in place to promote safety awareness, ownership of personal safety, and communications about safety is commonplace.

Date:

Observation Number: O.14.1.1.

Observation: Training on the authorization basis is brief and does not contain the majority of the commitments contained in the accident analysis. These are very important for plant personnel to know. Awareness is the key to operation of the facility in a safe efficient manner. Some plant personnel were extremely weak in the knowledge of the basis for operation. This may be a training problem.

Signatures:



Team Member:

Team Leader: J. Locklair

ORR OBSERVATION FORM

Core Requirement Number and Statement: 14

A program is established to promote a site-wide culture in which personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements and, through their actions, demonstrate a high priority commitment to comply with these requirements.

Criterion Number and Statement: 1

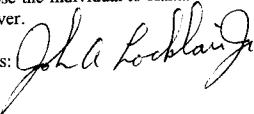
1. Procedures and training programs are in place to promote safety awareness, ownership of personal safety, and communications about safety is commonplace.

Date:

Observation Number: O.14.1.2.

Observation: While observing an activity involving connex boxes, there are indications that the concern management has for safety is not being fully considered or applied at the worker level. Employees were observed picking up wood cribbing after watching mice run out from under the boxes. Doing so without gloves may expose the individual to Hanta virus. This awareness of hazard was verbally passed on to the employee by the observer.

Signatures:



Team Member:

Team Leader: J. Locklair

ORR OBSERVATION FORM

Core Requirement Number and Statement: 14

A program is established to promote a site-wide culture in which personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements and, through their actions, demonstrate a high priority commitment to comply with these requirements.

Criterion Number and Statement: 6

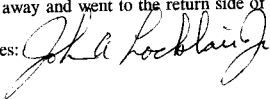
6. WRAP personnel demonstrate a conservative approach to operational activities and their decisions reflect a sense of responsibility for safety and environmental protection. The Master Safety Rules are understood and followed.

Date:

Observation Number: O.14.6.1.

Observation: During the drill, it is not clear whether all personnel are aware of the potential radiological consequences of a particulate release in the shipping receiving area. The ventilation system clearly presents an opportunity for contamination holdup or redistribution. This was indicated when the operator tried to get one airspace away and went to the return side of the air handling system.

Signatures:



Team Member:

Team Leader: J. Locklair

ORR OBSERVATION FORM

Core Requirement Number and Statement: 14

A program is established to promote a site-wide culture in which personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements and, through their actions, demonstrate a high priority commitment to comply with these requirements.

Criterion Number and Statement: 9

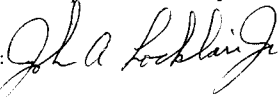
9. The goals and objectives of WHC-SWD encourage excellence in activities and include specific objectives for the continued enhancement of the safety culture.

Date:

Observation Number: O.14.9.1.

Observation: Management has to date expended little effort in developing its expectations and goals for safety performance and improvement for the operation of the facility.

Signatures:



Team Member:

Team Leader: J. Locklair

ORR OBSERVATION FORM

Core Requirement: 19

The technical and management qualifications of contractor personnel, responsible for facility operations, are adequate..

Criterion Number and Statement: 2

Adequate documentation of management qualifications is available.

DATE: 11/15/96

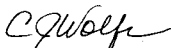
Finding Number: O.19.2.1

Observation:

The checklist for documenting the Person-In-Charge training requirements is unclear.

When the checklists for course 306550 were reviewed for Person-IN-Charge training requirements it was not clear what the date meant. Does it mean the date the reevaluation is to take place or is it the date that the evaluation was completed? This needs to be clarified.

Signatures:



Team Member:

Team Leader: C. Wolfe

APPENDIX C

LINE OF INQUIRY

Core Requirement 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Approach 1 Review the Plant Operating Procedures that are critical to the operation of the Shipping and Receiving, NDE/NDAs, and Control Room. Assure that the procedures were prepared in accordance with the SMD Writers Guide and incorporate the FSAR Technical Safety Requirement Administrative Controls and the Critical Safety Evaluation Report requirements.

Criteria 1.1 There is an adequate number of up-to-date procedures in place which support the operating status of the facility.

Criteria 1.2 Operating procedures adequately and correctly incorporate the identified ACs, SRs, and CPSS for operating process and utility systems.

Criteria 1.5 Technical details are correct and consistent between procedures, drawings, system descriptions, training, etc.

Criteria 1.10 All safety requirements set forth in the FSAR and CSER have been implemented into operating procedures as appropriate.

Criteria 1.14 Procedures are within the bounds of the authorization basis.

Criteria 1.16 A program is in place that provides a visible means to ensure evaluation and approval of temporary changes, by management and/or engineering, and timely removal when the purpose is superseded.

Criteria 1.17 A program is in place to ensure that changes to technical safety requirements are reflected in procedures.

Criteria 1.23 All procedures and procedure changes are written in accordance with an approved writers guide.

Criteria 1.24 Procedures are verified and validated prior to use.

Criteria 1.26 Procedures are clear, concise, and contain adequate information for users to understand and perform their activities effectively.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 1.1	WRP1-OP-0501, WRP1-OP-0502, WRP1-OP-0503, WRP1-OP-0506, WRP1-OP-0903, WRP1-OP-0904, WRP1-OP-0908, WRP1-OP-1101, WRP1-OP-1201, WRP1-OP-1601, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, and WRP1-AR-1600	The procedures in place are adequate for supporting facility operations except for truck docking. The truck docking is not covered by a procedure and there is some safety related equipment and configuration involved.		X
2. CR 1.2	WRP1-OP-0501, WRP1-OP-0502, WRP1-OP-0503, WRP1-OP-0506, WRP1-OP-0903, WRP1-OP-0904, WRP1-OP-0908, WRP1-OP-1101, WRP1-OP-1201, WRP1-OP-1601, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, and WRP1-AR-1600	Only CPS limits apply to the operating procedures and SR do not exist for WRAP 1. The CPS limits are identified in the appropriate procedures in the safety section but the reference section does not list the CPS or SAR document where the limit is. There is no checks for the CPS limit except for what checks the computer performs and the source document for the CPS is not identified as a reference for the procedure.	X	
3. CR 1.5	WRP1-OP-0501, WRP1-OP-0502, WRP1-OP-0503, WRP1-OP-0506, WRP1-OP-0903, WRP1-OP-0904, WRP1-OP-0908, WRP1-OP-1101, WRP1-OP-1201, WRP1-OP-1601, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, WRP1-AR-1600, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, and WRP1-AR-1600	Technical information has been found to be correct except for the following: - Unable to locate basis for the Facility Curie Inventory Alarm. - Various procedures require operators to access the DMS, and they are unable to. - JHA for OP-0908 was not similar to JHA's for other similar procedures. - Pallet weight limit of 3500 lbs. is not consistent with the facility description of the system and operations which describe the pallets can be loaded to 4000 lbs and that the ASRS can handle 4250 lbs. - Several caution alarms and informational alarms are not covered by the alarm response procedure as discussed in WHC-SD-WM-RRR section 3.0 (see attachment for more details). Additional non technical comments are attached.	X	
4. CR 1.10	WRP1-OP-0501, WRP1-OP-0502, WRP1-OP-0503, WRP1-OP-0506, WRP1-OP-0903, WRP1-OP-0904, WRP1-OP-0908, WRP1-OP-1101, WRP1-OP-1201, WRP1-OP-1601, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, and WRP1-AR-1600. CSER 96-018, Criticality Prevention Specification (titled: "TRANSURANIC WASTE STORAGE IN 2336-W"), WHC-SD-WM-TSR-007, and WHC-SD-W026-SAR-002	CSER 96-018 and CPS limits are incompletely identified in operating procedures for standard waste drums. Current operating procedures identify that a drum is not to have more than 200g of fissile material, but the CSER and CPS say the maximum fissile material limit is (1) fissile material >= 20% of container volume - 200 g (2) fissile material < 20% of container volume - 100 g Also, applicable operating procedures do not reference the FSAR, CSER, or CPS when these limits are included in the procedure.		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
5. CR 1.14	(Same as above)	Current procedures are within the bounds of the authorization basis.	X	
6. CR 1.16	WHC-DM-5-34 section 3.22 and WHC-IP-0673	Current procedures do not allow for temporary changes. All changes are processed as permanent changes.	X	
7. CR 1.17	WHC-DM-5-34 section 3.22 and WHC-IP-0673	Current procedures require the cognizant engineer and management to ensure that ISR's and other requirements are met based on their training and understanding of the requirements.	X	
8. CR 1.23	WHC-DM-5-34 section 3.22 and WHC-IP-0673	The document change process from IP-0673 was not in use until this month. All previous change requests were verbally communicated to the cognizant engineer who would revise or modify the procedure. The current procedures do not meet the current format requirements of IP-0673. The technical basis section has not been incorporated into the format mainly due to the recent revision of IP-0673 which added the requirement. The caution, note, and warning statements are not formatted per IP-673, but are better than the format in IP-0673.	X	
9. CR 1.24	WRP1-OP-0501, WRP1-OP-0502, WRP1-OP-0503, WRP1-OP-0506, WRP1-OP-0903, WRP1-OP-1201, WRP1-OP-1601, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, and WRP1-AR-1600	All procedure revisions have been validated and verified. Some modifications have not been included in the format in accordance with the written guidance and is based on a determination of the procedure writer. One current procedure's approval and validation form was missing when the procedure file was reviewed.		X
10. CR 1.26	WRP1-OP-0501, WRP1-OP-0502, WRP1-OP-0503, WRP1-OP-0506, WRP1-OP-0903, WRP1-OP-0904, WRP1-OP-1201, WRP1-OP-1601, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, and WRP1-AR-1600.	Most procedures were adequate to perform their intended purpose, but not all of the components, software configuration, and experience exist to fully support procedural compliance and effective operations. Specific examples are the facility has identified equipment that they are procuring to support procedure requirements, the software has not been configured to give access to the Data Management System as required by procedures, and the logbooks for recording information required by the procedures is not in place.	X	

Core Requirement 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Approach 2 Review critical procedures to assure all operating modes for processing are addressed, including emergency conditions and recovery from process upset. Assure alarm response guidance and equipment/component labeling provides for appropriate personnel response and system recovery.

Criteria 1.1 There is an adequate number of up-to-date procedures in place which support the operating status of the facility.

Criteria 1.3 Procedures adequately address all possible operating modes for the facility (this is includes packaging and transportation activities e.g., transport, storage, records, etc.).

Criteria 1.4 Procedures provide operability and availability requirements for all systems and equipment operating modes.

Criteria 1.5 Technical details are correct and consistent between procedures, drawings, system descriptions, training, etc.

Criteria 1.6 Operating, Alarm response, and emergency operating procedures are adequately linked and consider the emergency plan.

Criteria 1.7 Operating procedures reflect the current configuration of systems.

Criteria 1.11 Procedures adequately describe all alarm response actions.

Criteria 1.13 Procedures adequately describe all alarm conditions.

Criteria 1.14 Procedures are within the bounds of the authorization basis.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 1.1 & CR 1.6	WRP1-OP-0501, WRP1-OP-0502, WRP1-OP-0503, WRP1-OP-0504, WRP1-OP-0903, WRP1-OP-0904, WRP1-OP-0908, WRP1-OP-1101, WRP1-OP-1201, WRP1-OP-1601, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, WRP1-AR-1600, and WRP1-SV-1601.	Alarm responses are effective at invoking the building emergency plan as appropriate except in WRP1-AR-1600 page 2 III.2.E.(2) should evoke the building emergency plan to evacuate the building	X	
2. CR 1.3	(Same as above)	Procedures were adequate addressing different operating modes.	X	
3. CR 1.4	(Same as above)	Procedures were adequate.	X	
4. CR 1.5	(Same as above)	Procedures are technically sound with the following problems: - All hand initiated procedures do not indicate when the controls are to be put into auto after startup and lack the rigorous step-by-step procedure steps of other facility procedures for starting and stopping equipment. - JHA for OP-1201 does not address the handling and moving of drums for receiving. Attached are some non-technical comments.	X	
6. CR 1.7	(Same as above)	Procedures reflect current configuration except as discussed in CR 1.26 of approach 1.	X	
7. CR 1.11 & 1.13	(Same as above)	Several caution and information alarms are not referenced in alarm response procedures as discussed in CR 1.5 of approach 1.		X
8. CR 1.14	(Same as above)	Procedures are adequate.	X	

Core Requirement 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Approach 3 Observe operation of Shipping and Receiving, NDE/NDA, and Control Room process systems for utilization of procedures for startup, operation, and shutdown. (This should be conducted with the process testing of core requirements 5 and 10, or the on-the-job training (OJT) and/or performance demonstrations of core requirements 2 and 3.)

Criteria 1.1 There is an adequate number of up-to-date procedures in place which support the operating status of the facility.

Criteria 1.3 Procedures adequately address all possible operating modes for the facility (this is includes packaging and transportation activities e.g., transport, storage, records, etc.).

Criteria 1.4 Procedures provide operability and availability requirements for all systems and equipment operating modes.

Criteria 1.7 Operating procedures reflect the current configuration of systems.

Criteria 1.8 When appropriate, the sequence for conducting operations and plant equipment line-ups is specified and understood.

Criteria 1.9 Procedures, as applicable, address normal and off-normal events.

Criteria 1.14 Procedures are within the bounds of the authorization basis.

Criteria 1.18 Controls are established and implemented that ensure only current and accurate procedures are available for distribution and use by plant personnel, including their use in training programs.

Criteria 1.22 The Plant is properly labeled and labels/procedures match.

Criteria 1.26 Procedures are clear, concise, and contain adequate information for users to understand and perform their activities effectively.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 1.1	Observation of the Integrated Cold run.	Procedures adequately cover the facility operations except for preparing to load/unload a truck at the truck dock. Different size trucks require different actions to safely configure it for loading/unloading.	X	
2. CR 1.3	Observation of the Integrated Cold run.	Procedures adequately cover different operating modes.	X	
3. CR 1.4	Observation of the Integrated Cold run.	Procedures were adequate	X	
4. CR 1.7	Observation of the Integrated Cold run.	Procedures did not reflect current configuration of the facility. Specifically, the narrative logbook is not in place per procedures, access to the Data Management System is not in place for the operators, the logbook is not in place for information and an NDA logbook is not in place per procedures.		X
5. CR 1.8	Observation of the Integrated Cold run.	Procedures were adequate	X	
6. CR 1.9	Observation of the Integrated Cold run.	Procedures were observed to be adequate for normal and off-normal events.	X	
7. CR 1.14	Observation of the Integrated Cold run.	Procedures were observed to be within the bounds of the authorization basis	X	
8. CR 1.18	Observation of the Integrated Cold run.	Procedures used were current. However, the NDE procedure used by the NDE technicians was an old procedure (current one made more than a month earlier) with redline steps added to the procedure. Operators used the goldenrod controlled copies in the field for their procedures.	X	
9. CR 1.22	Observation of the Integrated Cold run.	The Plant had an informal label (which is not reference specifically by any procedure) on their jib crane controls near the discharge conveyor, but all procedure reflected the current labels in the field. The facility is still in the process of hanging permanent labels and signs to replace their temporary labels and signs.	X	
10. CR 1.26	Observation of the Integrated Cold run.	Procedures are adequate and safe, but require more changes to correct minor details and information	X	

Core Requirement 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Approach 4 Confirm that the requirements of Solid Waste Disposal Operations Administration (WHC-CM-5-34) and Plant Operating Procedures Writers Guide (WHC-IP-0673 rev.1) are implemented for procedure review, revision, approval, temporary changes, currency, validation and walk down prior to use.

Criteria 1.15 A program is in place that ensures the periodic review, revision, and approval of procedures.

Criteria 1.16 A program is in place that provides a visible means to ensure evaluation and approval of temporary changes, by management and/or engineering, and timely removal when the purpose is superseded.

Criteria 1.17 A program is in place to ensure that changes to technical safety requirements are reflected in procedures.

Criteria 1.18 Controls are established and implemented that ensure only current and accurate procedures are available for distribution and use by plant personnel, including their use in training programs.

Criteria 1.19 As part of the process for maintaining procedures current and accurate, time is provided for training before significant procedure changes are put into effect.

Criteria 1.20 A process is in place which requires users of procedures to inform procedure writers of errors in procedures or difficulty in using procedures, and suggestions for improving procedure content or format.

Criteria 1.21 A program is in place to ensure that the FSAR and regulatory-type commitments are reflected in procedures and remain in effect.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 1.15	WHC-CM-5-34 section 3.22 and WHC-IP-0673	An administration program is in place to periodically review procedures. However, due to the new status of the facility, no process could be observed.	X	
2. CR 1.16	WHC-CM-5-34 section 3.22 and WHC-IP-0673	Temporary procedure changes are not allowed by procedure and by the facility management.	X	
3. CR 1.17	WHC-CM-5-34 section 3.22 and WHC-IP-0673	A Safety Basis Compliance Matrix exists to aid in TSR implementation in procedure, but the process relies on the cognizant engineer's, document reviewer's, and management's knowledge of TSRs to ensure they are incorporated into procedures.	X	
4. CR 1.18	WHC-CM-5-34 section 3.22 and WHC-IP-0673	Goldenrod copies of the procedure are the utilized copies of the manual and controlled electronic copies are available on a read only directory. However, quality assurance records are not being maintained per WHC-CM-5-36 chapter 3-5 section 9.0 as required (RIDS system).	X	
5. CR 1.19	WHC-IP-0673 section 9.0	No training has been conducted due to a change to a procedure. The Operations Manager has the responsibility for identifying what procedure changes require training.	X	
6. CR 1.20	WHC-CM-5-34 section 3.22 and WHC-IP-0673	A process was recently put in place but has not been utilized. The past practice has been to verbally or through informal writeups communicate changes to the cognizant engineers who would initiate the changes. An informal system exists to track these changes but it does not assess the requirements of IP-0673 (this deficiency was noted by the facility).	X	
7. CR 1.21	WHC-CM-5-34 section 3.22 and WHC-IP-0673	A Safety Basis Compliance Matrix exists to aid in FSAR and regulatory implementation in procedure, but the process relies on the cognizant engineer's, document reviewer's, and management's knowledge. New procedures are designated as approval designators ESQ to help insure compliance.	X	

Core Requirement 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Approach 5 Review current Solid Waste Disposal Operations Administration Manual procedures to assure they reflect WRAP-1 and implemented appropriately in facility specific administrative and operational procedures.

Criteria 1.6 Operating, Alarm response, and emergency operating procedures are adequately linked and consider the emergency plan.

Criteria 1.9 Procedures, as applicable, address normal and off-normal.

Criteria 1.11 Procedures adequately describe all alarm response actions.

Criteria 1.13 Procedures adequately describe all alarm conditions.

Criteria 1.25 Administrative procedures (e.g., WHC-CM-5-34) have been updated to reflect WRAP 1.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 1.6	WHC-CM-5-34 sections 3.22, 3.16, 1.8, 1.12 and 3.7, WHC-IP-1237, section 1.3, and WHC-IP-0263-WRP1, WRP1-OP-0501, WRP1-OP-0502, WRP1-OP-0503, WRP1-OP-0506, WRP1-OP-0903, WRP1-OP-0904, WRP1-OP-0908, WRP1-OP-1101, WRP1-OP-1201, and WRP1-OP-1601.	Administrative procedures were adequately incorporated into the operating and alarm response procedures.	X	
2. CR 1.6, 1.9, 1.13, & 1.11	WHC-CM-5-34 sections 3.22, 3.16, and 3.7, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, WRP1-AR-1600, and WRP1-SV-1601.	Procedures are adequate.	X	
6. CR 1.25	WHC-CM-5-34 sections 3.22, 3.16, 1.8, 1.12 and 3.7	WRAP 1 is identified in WHC-CM-5-34	X	

Core Requirement 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Approach 6 Verify facility has proper labels on equipment, in facility as required.

Criteria 1.5 Technical details are correct and consistent between procedures, drawings, system descriptions, training, etc.

Criteria 1.22 The Plant is properly labeled and labels/procedures match.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC- 1. CR 1.5 & CR 1.22	WHC-OM-5-34, section 3.24 WHC-IP-1237 H-2-131892 sht 1, rev 3 H-2-131893 sht 1, rev 4 H-2-131893 sht 2, rev 5 H-2-131894 sht 1, rev 3 H-2-131892 sht 1, rev 3 H-2-131892 sht 1, rev 2 H-2-131893 sht 2, rev 2 H-2-131897 sht 1, rev 2 H-2-131897 sht 2, rev 3 WRP1-OP-0501, WRP1-OP-0506, WRP1-OP-0502, WRP1-OP-0908, WRP1-OP-0904, WRP1-OP-0503, WRP1-AR-0500, WRP1-AR-0900, WRP1-AR-1000, WRP1-AR-1101, WRP1-AR-1600, WRP1-AR-1200, WRP1-AR-1800, WRP1-AR-1300, WRP1-AR-1101 through 1105, and WRP1-OP-0101	An informal label was found on the jib crane controls for the discharge conveyor. Some alarm labels do not accurately match between the alarm response procedure and the alarm tags (see attached list). All other labeling was accurate and appropriate	X	

Core Requirement 1.0 There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Approach 7 Interview personnel to verify the administrative control, adequacy, and approval process for procedures.

Criteria 1.1 There is an adequate number of up-to-date procedures in place which support the operating status of the facility.

Criteria 1.5 Technical details are correct and consistent between procedures, drawings, system descriptions, training, etc.

Criteria 1.10 All safety requirements set forth in the FSAR and CSER have been implemented into operating procedures as appropriate.

Criteria 1.17 A program is in place to ensure that changes to technical safety requirements are reflected in procedures.

Criteria 1.18 Controls are established and implemented that ensure only current and accurate procedures are available for distribution and use by plant personnel, including their use in training programs.

Criteria 1.19 As part of the process for maintaining procedures current and accurate, time is provided for training before significant procedure changes are put into effect.

Criteria 1.20 A process is in place which requires users of procedures to inform procedure writers of errors in procedures or difficulty in using procedures, and suggestions for improving procedure content or format.

Criteria 1.22 The Plant is properly labeled and labels/procedures match.

Criteria 1.24 Procedures are verified and validated prior to use.

Criteria 1.26 Procedures are clear, concise, and contain adequate information for users to understand and perform their activities effectively.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 1.5 & 1.10	T. K. Orgill (Operations Manager), E. A. Vermeulen (NPD), S. L. Kooiker (Procedure Lead), C. S. Thibault (Procedure Writer), P. L. Owens (NPD), S. L. Metzger (Operations Team Lead), and J. F. Schorzman (Operations Team Lead)	ALL personnel were confident that their procedures were accurate and technically sound.	X	
2. CR 1.22	(same as above)	ALL personnel were confident in the facilities labeling and markings.	X	
3. CR 1.1	(same as above)	An operator identified that the truck docking is not covered by a procedure for shipping and receiving and felt that it should not be.		X
4. CR 1.18	(same as above)	One operator interviewed was unfamiliar with the facility specifics for obtaining accurate procedures, but the operator knew only to use a spindented copy. One operator indicated that controlled copies of procedures were "red-lined" to document required changes and subsequent controlled copies were found. The facility conducted a review with the operators on the procedure process for approval, change, and expectations.		X
5. CR 1.19	(same as above)	No one has received training as a result of a procedure change.	X	
6. CR 1.20	(same as above)	ALL personnel interviewed indicated they had an informal process which did not meet the requirements of WHC-IP-0673. Subsequently, the facility has reviewed the process with operators and the procedure writers to bring it in line with IP-0673.		X
7. CR 1.17	T. K. Orgill (Operations Manager), S. L. Kooiker (Procedure Lead), C. S. Thibault (Procedure Writer), S. L. Metzger (Operations Team Lead), and J. F. Schorzman (Operations Team Lead)	ALL personnel identified the cognizant engineers, procedure reviewers, and management as knowledgeable and able to identify all requirements as part of their normal procedure review process.	X	
8. CR 1.24	T. K. Orgill (Operations Manager), E. A. Vermeulen (NPD), S. L. Kooiker (Procedure Lead), C. S. Thibault (Procedure Writer), P. L. Owens (NPD), S. L. Metzger (Operations Team Lead), and J. F. Schorzman (Operations Team Lead)	ALL personnel indicated that they use approved and validated procedures and have been actively involved in the process. Furthermore, they all felt they have taken extra precautions to ensure the procedures were safe and useable.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
9. CR 1.26	(Same as above)	All personnel were confident in their procedures but were aware that they had improvements to make as they get more operating experience.	X	

Core Requirement 2.0 Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Approach 1 Review the training program for WRAP-1 to assure Operator facility specific qualifications have been prepared and implemented, including conforming to the HAMTC union contractual commitments.

Criteria 2.5 Qualification programs are in place that provide qualification standards and procedures (e.g., signature control, exam control, classroom seminars, practical factors, pass/fail threshold) for personnel associated with the facility.

Criteria 2.6 An effective system for tracking the expiration of qualifications and the notification for requalification has been implemented.

Criteria 2.7 Performance-based training programs have been developed for personnel associated with the facility.

Criteria 2.8 The scope and content of training programs are adequate to ensure that job assignments can be performed in a manner that supports facility and personal safety.

Criteria 2.10 Qualification programs are in place that provide qualification standards and procedures for training direct support personnel (Facility Emergency Response Personnel, Engineering Personnel, Environmental Compliance, Fire Protection, Maintenance, Quality Assurance, Health Physics, Training, Industrial Hygiene, Industrial Safety, Nuclear Safety, Laboratory Support, Security, Records Management/Configuration Control, and Occurrence Reporting).

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 2.5	WHC-CM-5-34 section 1.8 and all the test and qualification records of operations personnel.	While the facility had a list of names authorized to sign for OJT, there is no program or formal control of who can sign various parts of the qualification cards. Several qualification cards had signatures of the cognizant engineer and a previous trainer along with several informal modifications to the qualification cards such as items lined out and line outs not initialed, and informal modifications not explained or formally approved. The examinations were adequately controlled and secure except for the team leader board questions.	X	
2. CR 2.6	WHC-CM-5-34 section 1.8, all of the test and qualification records of operations personnel, 1 team leaders individual training plan and 2 operators individual training plans	An effective tracking system is in place for the personnel assigned to the facility.	X	
3. CR 2.7	Qualification Package for WRAP 1 Shipping and Receiving Operator, Qualification Package for WRAP 1 Control Room Operator, Qualification Package for WRAP 1 Operations Team Leader/Manager, WHC-CM-5-34, section 1.8, WRAP1 TASK TO TRAINING MATRIX, and Task Analysis Worksheet.	The training adequately addresses the training required for the operator's specific duties and responsibilities. However, the Team Leader/Manager qualification package appears to be insufficient to demonstrate a persons performance for the following reasons: Team Leaders are not required to perform the OJT that the operators perform; satisfactory compliance with the individual module requirements only requires the trainees initials and not and OJT/OJE or other system expert verification; and only two performance demonstrations are required as a minimum. (Note: Interviews with team leaders did show a high level of facility knowledge)		X
4. CR 2.8	(same as above)	The scope and content of the training programs is adequate for all personnel except for the cognizant engineers. The cognizant engineers have not received sufficient cross-training to provide the facility with backup engineers.	X	
5. CR 2.10	WHC-CM-5-34 section 1.8, 12 individual training plans, and Facility Training Matrix from TMX.	The facility has an effective procedure and documentation for all the facility personnel using the TMX system and the individual training plan to identify and track the required training.	X	

Core Requirement 2.0 Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Approach 2 Review the training program for WRAP-1 to verify that the qualification, continuing training, requalification, OJT, and training record requirements of WHC-OM-5-34 including a formal tracking system have been effectively implemented. Assure that temporary and contract personnel training needs have been addressed.

Criteria 2.3 Training programs for requalification are in place.

Criteria 2.5 Qualification programs are in place that provide qualification standards and procedures (e.g., signature control, exam control, classroom seminars, practical factors, pass/fail threshold) for personnel associated with the facility.

Criteria 2.6 An effective system for tracking the expiration of qualifications and the notification for requalification has been implemented.

Criteria 2.11 Facility non-emergency response personnel are adequately trained in required actions during emergency situations.

Criteria 2.12 Qualification records are accurate and complete.

Criteria 2.14 Training requirements for temporary employees, contract personnel, and visitors are established and are appropriate for the tasks assigned.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 2.3	WHC-CM-5-34, section 1.8	Program is in place.	X	
2. CR 2.5	WHC-CM-5-34 section 1.8	While the facility had a list of names authorized to sign for OJT, there is no program or formal control of who can sign various parts of the qualification cards. Several qualification cards had signatures of the cognizant engineer and a previous trainer along with several informal modifications to the qualification cards such as items lined out and line outs not initiated, and informal modifications not explained or formally approved. The examinations were adequately controlled and secure except for the team leader board questions.	X	
3. CR 2.6	(Same as above)	An effective tracking system is in place for the personnel assigned to the facility, however, training for the contractors/vendors at the facility are not tracked per 5-34 section 1.8 appendix A. The facility did not have any training tracking forms for contractors/vendors and several of the contractors/vendors had not completed the required Visitor/Vendor training.		X
4. CR 2.12	WHC-CM-5-34, section 1.8 and 12 individual training records	Overall, the training records complied with the facilities requirements but have suffered from inattention by management until recently. Several Individual Training Plans (ITP) required updates or were in the process of being updated. Two ITPs have not been reviewed by the manager and the associated training and testing questions and exceptions had not been approved. One individual had his old facility's job description and no description of his current position. The instructor's ITP incorrectly deleted the requirement for him to qualify each of the operations qualification which is required by 5-34.	X	
5. CR 2.14	WHC-CM-5-34, section 1.8 appendix A and 6 contract personal training information on Soft Reporting.	Program is in place but not completed with. The facility has not maintained the individual training plan for contractors/vendors as required. There are no training records at the facility identifying their task and what training is required of them for their specific task. Several of the contractors/vendors have not completed the required Visitor/Vendor training.		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
6. CR 2.11	Facility Orientation Plan and lecture guide and WMC-CW-5-34, section 1.8 appendix A	The facility orientation covers the emergency actions as part of the course along with hazards communications and was adequate for informing non-emergency personnel of their required actions.	X	

Core Requirement 2.0	Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).
Approach 3	Review training material to assure it is based on current facility configuration and validated procedures. Include interviews of the various operations and support staff to ensure personnel are trained and knowledgeable in their areas of responsibility including procedure utilization and compliance. Include reviewing the one time Vendor information training and it's inclusion into the appropriate training package(s). Observe a demonstration of on-the-job training, performance demonstrations, and review exam bank questions.
Criteria 2.1	Training emphasizes required responses to: procedural inadequacies, procedural conflicts, unexpected results, and inadequate guidance. Training also includes SMD policy on the authority to deviate from written procedures during an emergency, if necessary, to protect personnel and equipment or to maintain safe condition.
Criteria 2.2	Training material address technical fundamentals.
Criteria 2.4	Training emphasizes procedural compliance, ACs, SRs, and CPSS.
Criteria 2.7	Performance-based training programs have been developed for personnel associated with the facility.
Criteria 2.8	The scope and content of training programs are adequate to ensure that job assignments can be performed in a manner that supports facility and personal safety.
Criteria 2.9	As-built drawings and the latest revision of approved procedures were used in the development of training.
Criteria 2.11	Facility non-emergency response personnel are adequately trained in required actions during emergency situations.
Criteria 2.15	The instructors are qualified/certified and knowledgeable of the subject matter taught.
Criteria 2.16	Personnel are kept cognizant of site/facility policies and procedure changes that affect their activities.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 2.1	Qualification Package for WRAP 1 Control Room Operator, qualification Package for WRAP 1 Shipping and Receiving Operator, Qualification Package for WRAP 1 Operations Team Leader/Manager, and WRAP 1 Technical Staff Training Requirements Checklist. Interviews with 3 NPO's, 2 procedures writers, 2 instrument technicians and 2 millwrights, 2 team leaders, and Operations Manager.	The training program covers this requirement adequately. Interviews, though, revealed that personnel did not comply with the process for changing procedures.	X	
2. CR 2.2	Individual Training Modules (ITM) and examinations for Shipping and Receiving, AGV, ASRS, Electrical system, Jib Crane, and Drum NDA. OJT qualification cards for maintenance	The material is fundamentally accurate, but requires revision to include operating procedures and update some minor technical information which is inaccurate.	X	
3. CR 2.4	Individualized Training Modules for Shipping and Receiving and Drum NDA and interviews with 3 NPO's and 2 team leaders.	While procedure compliance and CPS limits were effectively emphasized, administrative controls (AC) were not included in the appropriate Individualized Training Modules and the operators could not state the AC's. Authorization basis training was conducted but failed to reach the operators and is not intended to be a part of future training.		X
4. CR 2.7	Interviews with 2 instrument technicians, 2 millwrights, 3 NPO's and 2 team leaders, Qualification Package for WRAP 1 Control Room Operator, Qualification Package for WRAP 1 Shipping and Receiving Operator, Qualification Package for WRAP 1 Operations Team Leader/Manager, and all of the maintenance OJT cards.	Interviews indicated that the OJT and Performance Demonstrations were utilized and effective.	X	
5. CR 2.8	Qualification Package for WRAP 1 Control Room Operator, qualification Package for WRAP 1 Shipping and Receiving Operator, Qualification Package for WRAP 1 Operations Team Leader/Manager, and WRAP 1 Technical Staff Training Requirements Checklist. Interviews with 3 NPO's, 2 procedures writers, 2 team leaders, 2 instrument technicians, 2 millwrights, 2 Radiological Control Technicians, and Operations Manager. Facility Orientation training package and class	Training was sufficient to support the facility operations and maintenance, but the knowledge level of the facility hazards and emergency response showed some weaknesses and inconsistencies. (i.e. inconsistent responses on what facility hazards exist, facility operations and emergency response, confined spaces, and operations and expectations, radiological hazards and expectations, present/future chemical and waste hazards)		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
6. CR 2.9	Individualized Training Modules for Shipping and Receiving, Adv, ASKS, Electrical system, Jib Crane, and Drum AOA. Interviews with 2 Team Leaders and 1 Instructor.	Training was developed based on the best available information. The vendor information system has not been established, as-built drawings were not completed, and procedures were not developed for the training modules when they were developed. The contractor did not provide the technical information they had from the vendors and expected operations. However, there is no formal or apparent plan in place to update current comments, facility configuration, and procedures. Specific comments: qualification cards refer to some procedures which were deleted, and as-built drawings and vendor information now exists for reviewing and updating training.	X	
7. CR 2.11	Interviews with 1 secretary and 2 instrument technicians. Observation of an Emergency Response Drill, Radiological Spill and Fire.	Non-emergency personnel were familiar with their required actions during an emergency, however, during an emergency response drill, a few people seemed unfamiliar with the location of the staging area.	X	
8. CR 2.15	Interview with instructor and review of his training record.	The instructor has been in the facility only 6 weeks and is currently inadequately trained to perform any facility specific training. The instructor has not reviewed his Individual Training Plan and was not aware of what was required of him. His training record indicated that he has over ten courses to complete before he is qualified for his current position. The instructors previous background does indicate that he is an effective instructor, but he lacks the facility specific training to be an effective instructor without a facility expert on hand.		X
9. CR 2.16	Interviews with 3 WPO's, 2 procedure writers, 2 team leaders, and Operations Manager. WMC-OR-5-33, section 3.22 and section 3.20 and WMC-IP-0673.	A required reading exists and weekly procedure change summaries are put into required reading which meets the requirement. However, the required reading program has not been implemented. Change summaries had been implemented 1 week prior to the ORR and some personnel were unfamiliar with the programs.	X	
10. CR 2.16	Interviews with 2 instrument technicians and 2 millwrights.	Maintenance personnel indicated that they are not informed effectively as to the "why's" of their procedures.	X	

Core Requirement 2.0 Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Approach 4 Conduct a sample review of training records for the various direct operational and support staff to verify that the training have been identified for each individual and that these requirements have been satisfied.

Criteria 2.8 The scope and content of training programs are adequate to ensure that job assignments can be performed in a manner that supports facility and personal safety.

Criteria 2.10 Qualification programs are in place that provide qualification standards and procedures for training direct support personnel (Facility Emergency Response Personnel, Engineering Personnel, Environmental Compliance, Fire Protection, Maintenance, Quality Assurance, Health Physics, Training, Industrial Hygiene, Industrial Safety, Nuclear Safety, Laboratory Support, Security, Records Management/Configuration Control, and Occurrence Reporting).

Criteria 2.11 Facility non-emergency response personnel are adequately trained in required actions during emergency situations.

Criteria 2.12 Qualification records are accurate and complete.

Criteria 2.13 Preexisting SMD training programs have been modified as necessary to account for new procedures, systems, and equipment associated with the facility.

Criteria 2.14 Training requirements for temporary employees, contract personnel, and visitors are established and are appropriate for the tasks assigned.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 2.8 & 2.10	12 Individual Training Plans (ITP) and training records.	The proper training and courses has been identified for each individual to perform their required tasks. Several individuals are in the process of completing various courses and qualifications.	X	
2. CR 2.11	12 Individual Training Plans (ITP) and training records.	Review of training records indicated that the non-emergency personnel had received the required training, however, one individual at the facility had not received the training (facility orientation) within two weeks of reporting to the facility.	X	
3. CR 2.12	12 ITP and training records.	Overall, the training records complied with the facilities requirements but have suffered from inattention by management until recently. Several ITP required update or were in the process of being updated. Two ITPs have not been reviewed by the manager and the employee. Several training extensions and exceptions have not been approved. One individual had his old facility's job description and no description of his current position. The instructor's ITP incorrectly deleted the requirement for him to qualify each of the operations qualification which is required by 5-34.		X
4. CR 2.13	WHC-CM-5-34, section 1.8 appendix A, 12 ITPs and training records.	The training matrix of the 5-34 manual has incorporated much of the required training for the facility and more information has been identified for further changes which will be incorporated into the next change.	X	
5. CR 2.14	Soft Reporting training reports for 6 contract personnel. WHC-CM-5-34, section 1.8 appendix A.	No facility specific contractor training records were found at the facility as required. A review of training reports indicated that not all had the required Visitor/Vendor training (course #000090).		X

Core Requirement 2.0 Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Approach 5 Review facility defining documentation to ensure a training organization and program are defined and include interviews of selected training personnel to assure they are knowledgeable in their areas of responsibilities.

Criteria 2.2 Training material address technical fundamentals.

Criteria 2.15 The instructors are qualified/certified and knowledgeable of the subject matter taught.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC- 1. CR 2.2	WHC-CM-5.34 section 1.8 appendix A	The instructor is not required to have any training in fundamentals which is required of operating personnel he trains.		X
2. CR 2.15	WHC-CM-5.34 section 1.8 appendix A	The instructor is new to the facility and has not achieved the required facility knowledge and training. Furthermore, the instructor is not familiar with his individual training plan or any other plans for him to become qualified as required.		X
3.				

Core Requirement 2.0 Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Approach 6 Observe classroom training that supports facility operation. Look at effectiveness of the trainer and applicability of the lesson plan and training aids in providing information that is readily usable in the field.

Criteria 2.1 Training emphasizes required responses to: procedural inadequacies, procedural conflicts, unexpected results, and inadequate guidance. Training also includes SMD policy on the authority to deviate from written procedures during an emergency, if necessary, to protect personnel and equipment or to maintain safe condition.

Criteria 2.8 The scope and content of training programs are adequate to ensure that job assignments can be performed in a manner that supports facility and personal safety.

Criteria 2.17 Training aids are adequate to support hands-on and practical demonstration training.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 2.1	N/A	No training of this nature was observed during the ORR.	N/A	
2. CR 2.8	Facility Orientation Training conducted by D. Watson, Facility Orientation Training plan and file, and WHC-CW-5-34 section 1.12 and 1.8	The training did not sufficiently meet the intent of 5-34 section 1.12 part 5.7 for Hazards Communication. Specifically, forklift (no backing signal) and crane operation hazards, future radiological and chemical hazards, confined spaces, missing Facility Hazard Checklist normally used by facilities, and areas to avoid during NDE and NDA operations and how they are marked. Note: the training plan file had a significant of information which addressed some of the deficiencies which was not incorporated into the training observed.		X
3. CR 2.8	Authorization Basis Training conducted by D. Watson, Authorization Basis Training plan, and WHC-SD-026-SAR-002 rev 0	The training indicated that their are 5 Administrative controls and actually their are seven, Reporting deviations form TSRs, Safety management program, Staffing requirements, Contractor responsibility, Organization and management, Criticality safety program, and Inventory control (see section 5.5.1 through 5.5.7). The trainer was unfamiliar with what documents encompass the authorization basis. The training did not demonstrate how the facility was meeting the administrative controls or how to find out. The training did not show how the authorization basis applied to their work effectively. No training plan development file or information could be found.		X
4. CR 2.17	Facility Orientation Training and Authorization Basis Training	The only training aid used was overhead projector slides. The slides were effective at communicating information, but the facility has computer projection equipment to display the same information which would enhance the presentation.	X	

- Core Requirement 3.0** Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.
- Approach 1** Review and assess test material to verify it adequately reflects training content. Verify pass/fail criteria for test material is clearly defined, with results utilized in determining personnel qualifications.
- Criteria 3.2** Examinations given to personnel are adequate in their depth and breadth of subject matter as it pertains to the operation under review and the assigned duties of personnel.
- Criteria 3.4** Current drawings and procedures were used in exam development.
- Criteria 3.5** Exams are based on current technically descriptive documents such as procedures, FSAR, CSER, vendor information, processing requirements, facility drawings, and hazard analysis.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 3.2	Individual Training Module test records for the following modules: AGV, ASRS, Shipping and Receiving, Drum NDA, Electrical System, and Jib Crane. Team Leader board questions for 1 team leaders board. WHC-CW-5-34, section 1.8	The examinations were adequate for the facility, however, there are a significant number of comments and recommendations for improvements which are on file and have not been addressed. The oral board questions for a team leader met the requirements of 5-34 section 1.8 but did not sufficiently meet the intent in all cases, specifically: no questions were asked which significantly covered how the facility design, operations, or procedures may be changed; no board questions probed into criticality safety requirements and procedures; and the board questions in theory almost exclusively focused on radiological theory and did not probe, significantly, into the mechanical, electrical, or computer aspects of the design. The oral board questions did not address the design of communications, system interfacing, distributed control system fundamentals, radio communication theory, or optical equipment which is vital to the operations of the facility.	X	
2. CR 3.4	Individual Training Modules for the following modules: AGV, ASRS, Shipping and Receiving, Drum NDA, Electrical System, and Jib Crane.	The current drawings and procedures were not available during some of the test development, but there is no current plan in place to update the training modules.		X
3. CR 3.5	Individual Training Modules for the following modules: AGV, ASRS, Shipping and Receiving, Drum NDA, Electrical System, and Jib Crane.	Exams require review, update, and file development to match the current technical information and documents. The exams are based on their records and not the current documents and their records and no development files were created to support the examinations.	X	
4.				

Core Requirement 3.0 Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Approach 2 Review and assess test material to verify it adequately tests for an understanding of system capabilities, limitations, and procedures.

Criteria 3.1 The level of operations and direct support personnel's knowledge, skill, and abilities are adequate to operate in compliance with the WRAP-1 operating and administrative procedures, as evidenced by selective interviews of personnel, review of examinations and examination results by the RT.

Criteria 3.2 Examinations given to personnel are adequate in their depth and breadth of subject matter as it pertains to the operation under review and the assigned duties of personnel.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC- 1. CR 3.1 & 3.2	Individual Training Modules for the following modules: AGV, ASRS, Shipping and Receiving, Drum NDA, Electrical System, and Jib Crane. Review of 8 NPD training records, 2 team leaders training records, and the Operations Managers records.	Review of examinations and results indicated that the exams and exam results were adequate.		X
2.				

Core Requirement 3.0

Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Approach 3 Conduct interviews with operations personnel to verify they have an adequate understanding of technical fundamentals, procedures, procedure compliance, allowed emergency actions, ACGs, and CPSSs.

Criteria 3.1

The level of operations and direct support personnel's knowledge, skill, and abilities are adequate to operate in compliance with the WRAP-1 operating and administrative procedures, as evidenced by selective interviews of personnel, review of examinations and examination results by the RI.

Criteria 3.2

Examinations given to personnel are adequate in their depth and breadth of subject matter as it pertains to the operation under review and the assigned duties of personnel.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 3.1	Interview of Operations Manager and 2 Operations Team Leads	The team leaders have an excellent understanding of the facility, procedures, procedure compliance, but have some weaknesses on administrative procedures and responsibilities (specifically, one team leader was unaware of IP-1237, the facilities own administrative manual, and the several managers were unaware who was responsible for occurrence reporting and lessons learned).	X	
2. CR 3.1	Interview of 3 NPOs	Interviews revealed different levels of knowledge, and it was sufficient. However, the operators lack the knowledge to help the team leaders with administrative conditions and administration as well as form an effective working team.	X	
3. CR 3.1	Interview of 1 Procedure Lead and 1 Procedure Writer	Their knowledge was adequate and they understand how the procedure process works and its deficiencies, but they did not understand the record handling requirements for dispositioning quality assurance records (RIDS system).		X
4. CR 3.2	Interview of 2 Operations Team Leads and 3 NPOs	Examinations appear to have effectively tested the personnel knowledge.	X	

Core Requirement 3.0 Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Approach 4 Observe operations during Core Requirement 5 and 10 to evaluate the effectiveness of training.

Criteria 3.3 On the job observations of selected operations and operations support personnel convey the Impression that personnel are competent and able to operate the plant in accordance with all applicable procedures.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC- 1. CR 3.3	Integrated Cold Run	Observation of the integrated cold run indicated that the personnel were knowledgeable and capable of operating the facility in accordance with their procedures. The major weakness noted was the safety precautions required for operation of the Jib Cranes.		X
2.				

Core Requirement 3.0 Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Approach 4 Observe operations during Core Requirement 5 and 10 to evaluate the effectiveness of training.

Criteria 3.3 On the job observations of selected operations and operations support personnel convey the impression that personnel are competent and able to operate the plant in accordance with all applicable procedures.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 3.3	Integrated Cold Run	Observation of the integrated cold run indicated that the personnel were knowledgeable and capable of operating the facility in accordance with their procedures. The major weakness noted was the safety precautions required for operation of the Jib Cranes.		x
2.				

Core Requirement 3.0 Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Approach 5 Ensure facility personnel are trained on current fire and emergency information and are knowledgeable of their responsibilities during emergency conditions.

Criteria 3.1 The level of operations and direct support personnel's knowledge, skill, and abilities are adequate to operate in compliance with the WRAP-1 operating and administrative procedures, as evidenced by selective interviews of personnel, review of examinations and examination results by the RT.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 3.1	Facility Orientation Training and training plan, Observation of 2 Fire alarm response and 1 contamination spill and fire drill.	Some personnel appeared to be unclear as to the primary and alternate staging areas. The BED interface on the first fire drill was not clearly understood by the fire department. An operator was hesitant about pulling the fire alarm for the drill and had to figure out how to activate the fire pull box. The RCT's failed to quickly assess the radiological situation and promptly decontaminate personnel. Someone forgot to bring the visitor log on one of the evacuations to account for personnel (the log was not recovered at any point during the drill).		X
2.				

Core Requirement 3.0 Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Approach 6 Interview personnel to determine their knowledge of information regarding the various types of facility hazards and stop work authority.

Criteria 3.1 The level of operations and direct support personnel's knowledge, skill, and abilities are adequate to operate in compliance with the WRAP-1 operating and administrative procedures, as evidenced by selective interviews of personnel, review of examinations and examination results by the RI.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. CR 3.1	Interview with 2 instrument technicians, 2 RCTs, and 2 millwrights.	These individuals had a fair understanding of the facility hazards but did not know all of the hazards. The maintenance personnel rely solely on the work package for their source of information of hazards and do not know where to find information on confined spaces. Individuals were aware of their stop work authority.	X	
2. CR 3.1	1 Secretary	The secretary did not know any hazards associated with the facility outside of the endocrine treatment area and it was because she did not go into the hazardous areas.	X	
3.				

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WRAP-1 Phase 1 Operational Readiness Review

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Core Requirement 4.0

Facility safety documentation is in place that describes the "safety envelope" of the facility. The safety documentation should characterize the hazards/risks associated with the facility and should identify mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks. Safety systems and systems essential to worker and public safety are defined and a system to maintain control over the design and modification of facilities and safety-related utility systems is established.

Criterion Number and Statement: 1.

The authorization basis for operation has been established, reviewed, and approved by WHC.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 1.	Ron Koll Lynn Seamons WHC-SD-W026-SAR-002	The WRAP FSAR, WHC-SD-W026-SAR-002, was reviewed prior to the start of Readiness Review activities. The document in it's latest version has been approved by Westinghouse Hanford Company and submitted to DOE-RL for approval. The expected date for completion of DOE review is 12-31-96. There were no findings associated with the criteria #1, however there were observations that may impact the management of the facility. Specifically commitments contained or iterated within the criticality chapter and the TSR section. Criticality instrumentation is contained in section 6.6 and leads the reader to believe that the criticality alarm system installed in the WRAP facility is operational. It's discussion does not point out that the system is not required to be operational due to the limited quantity of fissile material contained within the facility. This oversight may lead to misinterpretation by oversight groups. Section 5.2.4 of the TSR section calls out a Management Safety Program that is to be developed, implemented, and maintained. It is commendable that the facility is anticipating the impacts of the DNFSS recommendation 95-2. It should be pointed out that the areas chosen are not well defined. Additionally, a procedural violation within the areas chosen may result in a TSR violation. It is suggested that a caveat be added, much as previously used and approved in other ESBIs, that "...a procedural violation may constitute a nonconformance but does not constitute a TSR violation, as long as the corrective action commitment is implemented." It may be advantageous to utilize WHC-CM-5-34, Section 1.21. Section 5.4.1, inventory control utilizes the accident inventory and establishes limits in the TSR. If a proposed activity was to be evaluated under WHC-CM-5-34 Section 1.21 and it exceeded the accident envelope, to proceed after analysis a change to the TSR would be required also. I suggest that consideration be given to the approach utilized in WHC-SD-WM-TSR-001 Section 5.4.		

Criterion Number and Statement: 2.

Systems and support system to be operated within authorization basis.

SUBJECT/ACTIVITY REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 2.	Ron Koll WHC-SD-W026-SAR-002 WHC-IP-1252 WHC-CM-5-34 WHC-CM-5-36	The systems for the shipping and receiving operation support the Phase One operation. There are concerns relative to observations during the cold run that safety for all aspects is not being applied at the worker level. Observation one, forklift drivers are not consistently utilizing the restraint system installed in the vehicle. Observation two, the powered drum handler was parked in a "Keep Clear" zone after use. Observation three, based upon conversations with Radiological protection and touring with same, some of the visual warning indicators within the facility are not visible from all areas. Some visual signals can only be determined from the reflection off the facility walls. The facility apparently relies heavily on audible signals. There are three indicators close together in one area on the north wall representing three different areas, this may lead to confusion. There is a concern that there are no air monitors located near the RTR box enclosures. Since the opportunity for release may be greater during handling of boxes than the major feed stream of drums, it is suggested that air monitors also be located in this area. Boxes do not offer the same integrity as drums and require human interface for the activity. During the cold run, roles and responsibilities were clearly assigned and discussed in the prejob meeting. Each procedure was identified. Safety equipment and concerns were identified and discussed. (PPE, RGD, AGV) Two employees left the meeting before it was over, although one employee did return. Finding one, the area radiation monitors, in their present location present problems. The ARM on the north wall is partially shielded which prevents it from performing it's intended function. The ARM on the south wall is located next to the roll up doors and may be inadvertently set off by incoming shipments. I could not find any technical data supporting their location.		

Criterion Number and Statement: 3.

Documentation provides for the protection of the worker and the public.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 3.	Ron Koll WHC-IP-1252 WHC-SD-W026-SAR-002 WHC-EP-0063 WRP1-OP-0502	Use of the Waste Acceptance criteria provides criteria for the basis of accident analysis contained in the FSAR. The analysis concludes that programmatic implementation of DOE requirements protects the worker. The analysis also concludes that the public is impacted in a minimal fashion due to worst case events postulated in the FSAR document. The procedure for receipt of waste at wrap reinforces the commitment to worker protection.		

Criterion Number and Statement: 4.

Documentation is in accordance with applicable administrative and regulatory requirements for this type of facility.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 4.	Ron Koll WHC-SD-W029-SAR-002	The FSAR supports a Hazard Category 3 designation, with flexibility to update and upgrade the classification based upon compliance with DOE Nuclear safety directives. The documentation adheres to the graded approach prescribed in the DOE directive 5480.23, Nuclear Safety Analysis Reports.		

Criterion Number and Statement: 5.

Program is in place to update the SAR/TSR and to evaluate impact of changes or errors to the authorization basis to the authorization basis.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 5.	None WHC-CM-5-34	SWD has in place the mechanism to make changes to the authorization basis through section 1.15 of WHC-CM-5-34, which is implemented at the facility level. Changes are controlled through section 1.24, the USQ process. This complies with the SWD SRDS.		

Criterion Number and Statement: 6.

A program is in place that identifies workplace hazards and the information is used in planning and conducting facility work.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 6.	Tom Ogill WHC-IP-1252	Through Safety Meetings and prejob meetings the identification of work place hazards are actively discussed. There is also a log in the administrative area that supports the identification of hazards for management action. Additionally the workforce appears to take an interest in identifying areas for consideration and improvement. Management is actively aware and takes an active role in promoting awareness of hazards.		

Core Requirement 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Interpretation: This Core Requirement applies to Acceptance Testing, Operational Testing, safety related system operability and condition tests, and Surveillance program. The Maintenance Program and Calibration Program will be assessed under Core Requirement 8.5.

Criteria: 1. An adequate surveillance program is in place. Adequate documentation to support the implementation of this program is maintained.

2. An adequate test program is in place. Adequate documentation to support the implementation of this program is maintained.

8. Review of completed surveillances and/or tests are conducted to ensure that acceptance criteria are met and any trends are identified.

Approach:

1. The authorization basis(FSAR) for WRAP-1 has classified the facility as Hazard Category 3 with no safety class or safety significant systems. Administrative technical specifications and Criticality driven inventory controls are defined in the FSAR. Review the implementing procedures for these specifications and controls to assure that the worker safety aspects are addressed and that the responsible technical support staff for the procedures are knowledgeable of the requirements.
2. WRAP-1 is not required to conduct surveillances of safety class systems or equipment. Review surveillance procedures process areas to assess if the appropriate amount of rigor is being applied considering complexity, man-machine interfaces, and lack of operating data for this type of facility.
4. Interview configuration management, maintenance, operation, environmental compliance, and radiological controls personnel to verify adequate an understanding of test, inspection, surveillance, corrective and preventive maintenance, modification and post-maintenance testing responsibilities, including a working knowledge of the various organizational interfaces and flow of information/data.
7. Ensure authorities are identified that can approve changes in the mode of operation, changes in system operational performance, and changes to the various components(even component changes) that comprise the process. Confirm that the configuration management control processes include the development of operational history documentation that can be used to help provide guidance to assure mission success.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F OR O?
Identify program for safety system checks.	Plant controlled surveillance program	A WRAP 1 Preventive Maintenance program is in place as is a Tickler system which will identify when checks to systems are required. Safety checks are included in these systems. A list of PM's and Ticklers was provided.	No
Review of completed surveillances for adequacy.	Completed PM's on cranes (96-0086) and fork lift batteries (96-0085).	The acceptance criteria were mostly to conduct as outlined in procedure and record on data sheets. Appropriate indications were noted on data sheets per procedure.	No
Review alarm log record keeping.	Discussions with programming engineer	The alarms received in the dispatch office are recorded on a printer in the computer office. The alarms are also (or will soon) be stored in a buffer inside the computer. There is not procedure in place to collect the alarm data (electronic or paper copies) and store as QA records.	Finding.

Core Requirement 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Interpretation: This Core Requirement applies to Acceptance Testing, Operational Testing, safety related system operability and condition tests, and Surveillance program. The Maintenance Program and Calibration Program will be assessed under Core Requirement 8.5.

Criteria: 3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.

11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Approach:

6. Review and assess the methods used to track the status of the operability, availability, and mode of operation of systems including communication of worker safety information as it relates to the varying modes of operation.
7. Ensure authorities are identified that can approve changes in the mode of operation, changes in system operational performance, and changes to the various components (even component changes) that comprise the process. Confirm that the configuration management control processes include the development of operational history documentation that can be used to help provide guidance to assure mission success.
8. Review the operation of the HVAC system, including procedures and characteristic testing, to assure that the radiological boundary control requirements are met; this includes radiological contamination migration for all modes of operation.
9. Review operability of: Critical systems; Compressed Air System; Fire Suppression System; Radiation Detection and Control Devices.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F O R O?
Do Flow Diagrams show proper flow patterns?	HVAC Flow diagrams: H-2-131892 sht 1, rev 3 H-2-131893 sht 1, rev 4 H-2-131893 sht 2, rev 5 H-2-131894 sht 1, rev 2 H-2-131895 sht 1, rev 3 H-2-131896 sht 2, rev 2 H-2-131896 sht 1, rev 2 H-2-131897 sht 2, rev 3 H-2-131897 sht 1, rev 2	The flow diagrams show that consideration was given to assure air flow from clean to less clean. An interlock is provided from the Shipping and Receiving NDE/NDAs CAM to shut down ventilation upon detection of contamination. No additional means (HEPA exhaust, air locks) is shown to protect the Administration area or the environment from contamination in the Shipping and Receiving and NDE/NDAs Areas.	No
Have the design air flows been achieved?	WRAP Test and Balancing Report, AABC, vendor submittal 483	The balancing report shows that the intended flows were achieved.	No
Did a test prove the interlock between the CAMs and HVAC?	HVAC Operational Test Procedure WHC-SD-W026-OTP-001, Rev. 0; HVAC Operational Test Report WHC-SD-W026-OTR-001, Rev. 0; WRAP Test and Balancing Report, AABC, vendor submittal 483; Vendor Submittal 1572, ATP for HVAC Controls	The interlock was not a part of the HVAC ATP or OTP. It was not a part of the vendor's submittal for the HVAC Controls ATP, and this was noted as part of the rejection of that submittal. Vendor's response to comment was not found.	No
Does the Control Room have adequate status of HVAC equipment?	Reviewed the RTAP computer screen for providing status on HVAC systems, through discussions and demonstrations by the Control Room Operators. Reviewed responses during Electrical Loss Drill.	Found that the HVAC was slow to respond to a computer command. Found that changes in HVAC equipment status took a very long time to appear on the computer screen. As an example, the fans that stopped due to the loss of power were shown as still running until power was restored, almost 30 minutes later. During the Partial Electrical Loss Drill, the fans were OFF for over 1 1/2 minutes before the dispatch office knew the fans were off. Only a temperature alarm identified a flow problem.	Finding
Is adequate instrumentation and labeling exist in the HVAC Room to provide status of equipment?	Walkdown of the HVAC Room	Found suitable Pressure and Temperature gauges. Would suggest better labeling of valve and damper positions.	

Is the importance of correct air flows understood?	Discussions with the HVAC COG.	It is clear that the HVAC COG understands the importance of maintaining flow from clean to less clean. Any changes (ECNs) would certainly be carefully reviewed for affect on this criteria. The COG desires surveillances to assure proper pressurizations throughout the plant including between Shipping and Receiving and the Administration Area.	
Do Operational Procedures and drawings include starting / stopping fans in the correct order?	WRP1-OP-1101, Operation of the HVAC System; H-2-131898 Sheets 1 and 2, HVAC Sequence of Events	These documents reflect the correct interlocks and starting/stopping orders to prevent reversals of flow.	
Does the CAM - HVAC interlock work?	Witnessed functional test, including pre-job meeting, of the Alpha and Beta CAMs in the Shipping and Receiving area and the NDE/NDA area.	Procedure focused on the CAMs themselves and the signals to the Control Room. HVAC interlock was a secondary objective. The PM was not conducted while the fans were operating per the direction of the Plant Management. This was not discussed with the Cog Engineer. As the Shipping and Receiving AHU remained off for the entire test, nothing was learned about the adequacy of the interlock. The PM was not conducted while the fans were operating per the direction of the Plant Management at the planning meeting to protect the fans from a stop and start operation. This was not discussed with the Cog Engineer who indicated that these fans already operate in a start and stop mode and that the PM should impact reliability of the fans.	Finding and Observation
Does the CAM - HVAC interlock work?	Witnessed Pre-drill briefing and Post-drill briefing for spill scenario	HVAC did not automatically shut off. Operator (within 2 minutes) went to MCC and shut off fans.	Finding
Is the CAM-HVAC interlock mentioned in the alarm response?	WRP1-AR-1200/A-1 Radiological Control Alarm Response	Procedure includes verification of CAM interlock with HVAC.	No
Is a program in place to test safety systems.	Check PM implementation and Discussions with HVAC Cog Engineer.	A PM system is available which includes the CAM and HVAC interlock system is in place.	No

Does the electrical distribution system conform to facility design drawings and meet NEC code requirements.	Facility Drawings: H-2-131819, Sht.1, R6 H-2-131820, Sht.1, R5 H-2-131820, Sht.2, R6 H-2-131820, Sht.3, R4 H-2-131820, Sht.4, R9 H-2-131820, Sht.5, R5 H-2-131820, Sht.6, R5 H-2-131823, Sht.1, R7 H-2-131829, Sht.1, R4 H-2-131829, Sht.2, R12 H-2-131829, Sht.3, R7 H-2-131826, Sht.1, R3 H-2-131827, Sht.1, R4 H-2-131828, Sht.1, R3 Field walkdown and inspection of electrical SWGR, MCCs and selected panels. United Engineers Elec. Calculations EC-3 and EC-4. Selected construction specs.	See Attachment 1 for comments on Electrical walk down.	Findings and Observations See attachment.
Was there an NEC inspection performed on WRAP1? Have violations, if found, been corrected?	Telecom with NEC inspector RG Dykeman. Review NEC inspection reports: 2184, 3011, 4371, 4492, 5019, 5177, 5178, 6049, 6087, 6110.	Randy Dykeman, Fluor-Daniel NW, indicated that NEC inspection have been and are still being done on WRAP1 until construction is completed. The NEC inspection reports to this date have shown that the equipment inspected were accepted for service and violations found have been corrected and closed out. The inspectors were S. Sovern, D. Wallace, R. Dykeman.	No.

Core Requirement 5 A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Interpretation: This Core Requirement applies to Acceptance Testing, Operational Testing, safety related system operability and condition tests, and Surveillance program. The Maintenance Program and Calibration Program will be assessed under Core Requirement 8.5.

Criteria-4. Acceptance Test Procedures have been completed and documented for all facility systems.

5. Operational Test Procedures have been completed and documented for all facility systems.

6. Cold Plant Integrated Testing has been completed and documented for all facility systems.

9. ATPS and OTPs contain acceptance requirements delineating the minimum standards acceptable for components and/or systems as appropriate.

Approach:

3. Review ATPs and OTPs to verify the adequacy of the administrative control program for test record retention and retrieval process, documentation for completion of testing and operational turnover. Verify that all tests were reviewed and approved by appropriate organization and departments.

5. Verify ATPs and OTPs have acceptance criteria defined, and the testing verified that they were met. Review the OTPs to assure the various modes of operation (automated, semi-remote, manual remote and local) have been addressed and identify man-machine interface as it relates to worker safety.

ORR NOTE: ATP and OTP were also checked under Core Requirement 8.6. Systems considered to be related to personnel safety were reviewed under this Core Requirement.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F OR O?
Is the HVAC OTP complete?	Reviewed HVAC Operational Test Procedure WHC-SD-W026-OTP-001, Rev. 0, and HVAC Operational Test Report WHC-SD-W026-OTR-001, Rev 0.	Report and Procedure were issued at the same time (Same EDT). Copy of procedure with data pages filled out is retained by the release station at WRAP. The appropriate sections of data were filled out and signatures were entered. Parts for the Process Area were not filled out.	Finding
Is the HVAC ATP complete?	AABC, Vendor Submittal no. 483, Testing and Balancing Report	Noted that Chilled water temperatures were not entered. This is recognized exception in the report.	Observation

Does the HVAC ATP/OTP prove the safety features (i.e. interlocks for shutdown)?	Reviewed HVAC Operational Test Procedure WHC-SD-W026-OTP-001, Rev. 0; HVAC Operational Test Report WHC-SD-W026-OTR-001, Rev. 0; and WRAP Test and Balancing Report, AABC, Vendor Submittal no. 483.	The Acceptance Criteria for the HVAC operational test is quite vague: "The data recorded on Data Sheets DS1 through DS4 will be reviewed against system requirements and parameters to ascertain acceptable system performance and operation." Acceptance ranges are not given on the data sheets. The conclusion of the Test Report is that the systems are controllable from the RTAP screens. The report does not explicitly state that the data gathered is acceptable. The COG's signature on the report suggests that it probably is acceptable. The balancing report also confirms that the required air flow are achieved. Varying modes of operation does not affect these reports. No testing of the Smoke Detector or CAM interlock was found.	Finding
Is the HVAC Controls ATP complete?	Vendor Submittal 1572, ATP for HVAC Controls	Multiple submittal but no final approved ATP. No evidence on an ATP.	Finding
Does the HVAC Controls ATP verify the interlock between CAMs and HVAC?	Vendor Submittal 1572, ATP for HVAC Controls	Vendor did not include testing of interlock between CAMs and HVAC. Submittal rejected with one of the comments being to provide the interlock. Suitable response from the vendor was not found.	Finding
Is the Chilled Water ATP complete?	Reviewed Chilled Water Glycol System Operational Test Procedure (draft from the J drive)	Recognized punch list item that the report is not completed.	Observation
Is the Compressed Air ATP complete?	Verified existence of vendor files for Compressed Air.	Because of multiple submittal, could not verify completeness or adequacy.	Finding
Are ATP/ATRs and OTP/OTRs completed and available.	Check for copies of ATP/ATR and OTP/OTR. (Files for Cold Run Test Procedure, Compressed Air System and Health Physics instrumentation.)	Could not find many of the ATP/ATRs that were supposed to be in the Project Files. Some of the OTP/OTRs have not been issued and the OTR appears not to include a filled out OTP section.	Finding
Do ATP/OTP state acceptance criteria.	Review available documentation.	A Test Specification document was written which states the requirements for each system.	No

Core Requirement 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Interpretation:

This Core Requirement applies to Acceptance Testing, Operational Testing, safety related system operability and condition tests, and Surveillance program. The Maintenance Program and Calibration Program will be assessed under Core Requirement 8.5.

Criteria: 7.

The configuration management, maintenance, operation, environmental compliance, and radiological programs document program requirements and organizational responsibilities for testing, inspecting, surveilling, performing corrective and preventive maintenance, modifying and post-maintenance testing of systems.

Approach:

1. The authorization basis(FSAR) for WRAP-1 has classified the facility as Hazard Category 3 with no safety class or safety significant systems. Administrative technical specifications and Criticality driven inventory controls are defined in the FSAR. Review the implementing procedures for these specifications and controls to assure that the worker safety aspects are addressed and that the responsible technical support staff for the procedures are knowledgeable of the requirements.
2. WRAP-1 is not required to conduct surveillances of safety class systems or equipment. Review surveillance procedures process areas to assess if the appropriate amount of rigor is being applied considering complexity, man-machine interfaces, and lack of operating data for this type of facility.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F OR O?
Review of program requirements in available manuals.	Review of response affidavits provided to review team.	Program requirements are delineated in SWD and other Hanford Site documents and manuals.	No

Core Requirement 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Interpretation: This Core Requirement applies to Acceptance Testing, Operational Testing, safety related system operability and condition tests, and Surveillance program. The Maintenance Program and Calibration Program will be assessed under Core Requirement 8.5.

Criteria: 10. Administrative controls are established to maintain test records.

Approach:

1. The authorization basis(FSAR) for WRAP-1 has classified the facility as Hazard Category 3 with no safety class or safety significant systems. Administrative technical specifications and Criticality driven inventory controls are defined in the FSAR. Review the implementing procedures for these specifications and controls to assure that the worker safety aspects are addressed and that the responsible technical support staff for the procedures are knowledgeable of the requirements.
2. WRAP-1 is not required to conduct surveillances of safety class systems or equipment. Review surveillance procedures process areas to assess if the appropriate amount of rigor is being applied considering complexity, man-machine interfaces, and lack of operating data for this type of facility.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F OR O?
Assess test record retention.	Review storage of work packages which are used to conduct PM and Ticklers.	Packages are stored in locked fireproof safe and the record retention requirements were known by controlling personnel (at present a contract person).	No

Core Requirement 6

A process has been established to identify, evaluate, and resolve deficiencies and recommendations made by oversight groups, official review teams, audit organizations, and the operating contractor.

Criteria:

1. Self assessment procedures and systems exist and are in use.
2. An adequate system exists and is implemented to identify, evaluate, and resolve deficiencies and recommendations made by oversight groups, official review teams, audit organizations, and WHC internal oversight.
3. Independent oversight organizations have clearly defined and understood responsibilities for WRAP oversight and have discharged their responsibilities for performing health, safety, and environmental protection audits of WRAP consistent with their organizational responsibilities.
4. Scope and frequency of audits/assessments are defined and followed.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY		
			YES	N	O
1. Is there an approved self assessment procedure in place for WRAP?/ provide Procedure number.	QA:WHC-CM-5-34 sec 1.11/Don Volkman WHC-IP-1237 sec 1.2, WRAP Self Assessment Program ECO:Environmental Self Inspection(draft)/Harlan Boynton SAFETY: Graham	There is an approved self assessment procedure. The Environmental Self Inspection Procedure should be approved this week. Safety has no self assessment procedure in place. However, Safety Professionals do participate as team members on facility self assessments. Safety issues are prominent in the checklist used for housekeeping assessments.	X		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	N O
2. Is the self assessment procedure being implemented?	WHC-IP-1237, SEC 1.2, WRAP Facility Self Assessment Schedule FY 97, Self Assessment Program Tour Report W1-SS-96-01, Volkman Boynton Ibatuan	QA: The procedure has been implemented within the SWD but may not have been implemented at WRAP yet since the first phase of the facility was only recently turned over. The procedure provides for assessments to be done Jan thru June and July thru Dec. No part of the facility was under Operations in the Jan-June period. Volkman expects assessment activity in the July-Dec period. He directed us to check with Barb Johnson to see if any have been completed. Johnson says she has seen nothing from WRAP so far. Environmental: Procedure in draft as of 11/8/96 Safety: No procedure Facility: WHC-IP-1237 sec 1.2, WRAP Self Assessment is approved and has been in use since 10/96. W1-SS-96-01 looked at housekeeping Area A in 2336W NDE/NDA & SHIPPING/RECEIVING. Mark Graham of Safety participated in this assessment.	X	
3. Identify the systems for tracking and resolving deficiencies identified by oversight organizations.	Don Volkman Harlan Boynton, ECO Jeff Riddelle, Production & Training Mgr Mark Graham, Industrial Safety	VOLKMAN: HATS and WRTS are used for tracking items that he is aware of. HATS is used for formal items like audit findings. HATS isn't "user friendly" so WRTS is used for in house items such as self assessment findings. BOYNTON: All of his actions and findings are tracked to resolution in WRTS. RIDDLELLE: Items identified on assessments, inspections, etc. that aren't corrected with in a day or two are put into WRTS. GRAHAM: Findings from an industrial Hygiene Baseline Assessment were input into WRTS. IBATUAN: All findings go into WRTS.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY		
			YES	N	O
4. Are responsibilities for independent oversight organizations clearly defined and understood by the personnel responsible for implementation?		CM 5-36 sec 1.9, 4.3.2 states that independent assessment is performed by the FEB. The possibility exists that contracted agencies may also be given that responsibility. That approach is not currently endorsed in the SWD QA program Plan	X		
5. Is there objective evidence that oversight organizations have performed independent audits/assessments?	Volkman Boynston Graham	QA: There is no FEB activity scheduled in the Facility thru Sept of 97. May be scheduled for Dec of 97. ENVIRONMENTAL: Andrea Prignano of Environmental Services came in and created the Regulatory file Checklist which resulted in some actions for the ECO to complete. These actions were tracked in WPTS. SAFETY:1 Reviewed a copy of the IH assessment performed in Sept 96 to confirm that the assessment took place.	X		
6. Has a audit/assessment schedule been developed and implemented?	QA:WRAP 1 FY 97 Second Quarter Surveillance Schedule/Dave Vance ECO:ECG Assessment/Report Action Schedule FY97 SAFETY: Memo from Don Hart NUCLEAR SAFETY: Schedule from R. Koll FACILITY: Facility Self Assessment Schedule FY97	QA has an assessment schedule for 2nd quarter of FY97. The ECO has inspections and reviews scheduled weekly, monthly, quarterly, biannually and annually. Safety: an Industrial Hygiene Annual Assessment is scheduled to be completed in Sept 97. NUCLEAR SAFETY: Koll has scheduled Nuclear Safety Operational Safety assessments in WRAP in Dec 96, Mar, June and Sept of 97. FACILITY: WRAP has a 12 month schedule with 3 to 5 assessments per month.	X		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY		
			YES	N O	
7. Has an independent assessment been performed at WRAP?	Volkman Riddelle Boynton Graham	QA: No independent assessments have been performed at WRAP so far. FEB has the scope to perform at a later date. ENVIRONMENTAL: Andrea Prignano assessed the plants regulatory file and came up with a checklist to get it in compliance with Permit requirements. SAFETY: Graham reports that Industrial Hygiene did a Industrial Hygiene Baseline assessment for the plant in Sept of 96.	X		
8. How do you apply a graded approach to quality requirements since CM-4-46 has been waived? Is there a procedure in place for safety classification?	Volkman, Norton	They use CM-3-5 section 12.7, approval designators to involve QA. There is no process to apply the graded approach in the application of QA requirements. This is a site wide problem that is aggravated by the fact that CM-4-46 has been waived for WRAP. RECOMMENDATION: Develop a WRAP specific QA Plan. (Prestart Finding)		X	

Core Requirement 7

A systematic review of the facility's conformance to applicable DOE orders has been performed, any nonconformances have been identified, and schedules for gaining compliance have been justified in writing and formally approved.

Interpretation:

This Core Requirement is to review and assess the facility's performance of a compliance review against SWD contractual requirements.

Actual verification of compliance with SWD contractual requirement is performed under all other Core Requirements.

Criteria:

1. A compliance assessment has been completed, non compliances have been identified, and schedules for gaining compliance have been made.

Approach 1 Review and assess documentation of the facility's compliance assessment.

Approach 2 Review and assess corrective action schedules

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Has a systematic review for compliance to applicable DOE orders been performed?	Waste Repackaging and Processing Facility Module I (WRAP-1) S/RIDS Compliance Assessment CC:MAIL communications/interviews by J Wick Expert List, WHC-IP-1120 S/RID/ Steve Norton, Jack Kasper (Parsons)	LATA was contracted to perform the assessment. The LATA report has a attachments dealing with open items identified in a previous training matrix review and problems with the micro S/RIDS. Per Norton the training matrix review is no longer valid since the DOE order that drove this has been dropped from the S/RIDS. The Micro S/RIDS was rejected by RL so comments regarding it are moot. I noted the some of the Experts may not have understood what they being asked when Wick sent out his query letter. Some of the responses indicated that a regulation was applicable but didn't indicate whether WRAP's procedures would be in compliance. Norton's position is that the SWD S/RID addresses the universe of regulations that could apply to the processing of solid waste at Hanford. Since the requirements applicable to WRAP would be a subset of the SWD S/RID and also since 5-34 and 5-36 were written to implement the SWD S/RID, one only has to decide what regulations are applicable. The implementing procedures already exist. The only caveat is that they have to make sure that WRAP hasn't been specifically excluded from the existing procedure. (Kasper) SMEs were to verify nothing changed since S/RID was approved and that there are no other requirements applicable to WRAP that aren't already addressed in the S/RID. The experts queried were on a list provided by Hamilton.	X	
1(continued)		I reviewed the correspondence file included in the backup information to confirm that all experts responded. I contacted the majority of experts for whom no response was evident. All those contacted confirmed that the requirement for which they were responsible was applicable to and adequate for the operation of WRAP except as noted in checklist item 7 below.		
2. Has the review been documented and is it retrievable?	LATA TASK REPORT L-96-212	The review was documented on LATA Task report L-96-212. The report was included as part of the CR 7 back-up data. Some of the responses from experts were retained on disk.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3. Does the assessment examine all commitments made in the S/RID?	Solid Waste Disposal Internal Requirements with Experts dated 9/24/96, Solid Waste Disposal Contractual Requirements dated 9-11-96, WHC-IP-1120 rev 4, S/RIDs Compliance Assessment c:mail correspondence on disk, Telecons and interviews with A Aughey, E Adams, Irwin, R Allen, H Boynton, S Kooiker, B Broomfield	Yes. The expert for each requirement source listed in WHC-IP-1120 APP A, S/RIDs basis documents was polled and asked to verify that their S/RID requirements were applicable to WRAP-1 and adequately addressed. I noted several regulations (40 CFR 60, 40 CFR 61, WAC 352-11) were omitted from in the expert list matrix.. The appropriate expert explained that the omitted regulations were superseded by WACs or in the case of SEPA, implemented by the State through the RCRA permit. These WACs were considered in the assessment.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
4. Have areas of noncompliance been documented?	LATA TASK REPORT L-96-212, WHC-SP-1131, WHC-CM-5-36 EP 1.3	No punch list items were identified. However, the assessment states that the S/RID in need of revision. 36 CFR 79, DOE O 232.1, DOE O 232.1-1, RLJD 1300.1c need to be added to the document. In the course of interviews the following observations were made: 1) WHC-SP-1131, IMPLEMENTATION PLAN FOR 10 CFR 830.120 does not include WRAP (a nuclear facility) in the applicability section. It is described in an attachment as a "projectwith the potential to be classified as a nuclear facility". RECOMMENDATION: revise WHC-SP-1131 to include WRAP as a Nuclear Facility. Restart Finding. 2) WHC-CM-5-36, EP-1.3 REV 8 section 2.1.1 requires H drawing conformance with SDC-1.3(confirmed on 11/13/96). SDC 1.3 has been canceled. The site wide version of the Standard Engineering Practice, WHC-CM-6-1, requires the use of ICF KH A-E Standard General Manual sections GG-DWG-001 through 004. This is the standard in use by the FDH designer. RECOMMENDATION: Revise WHC-CM-5-36, EP-1.3 to allow the use of ICF KH A-E Standard General Manual sections GG-DWG-001 through 004. Post-start Finding.		X
5. Were the individuals who performed the assessment knowledgeable of the requirements and facility operation?	A Aughey	The individuals performing the assessment are the designated Solid Waste Division Experts for the specific regulations or internal implementing requirement. The list is available on SWDs N: drive. Experts are designated by division management and communicated to the 5-36 manual administrator for listing on N: drive.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
6. Were all requirements in the SWD S/RIDs presented to a SME for compliance consideration?		SMEs were sent a questionnaire letter with the matrix showing the requirements that they were responsible for. The matrix reflects the requirements in WHC-IP-1120 except as noted and addressed above (3).	X	
7. Was a definitive response returned on all queries?	S/RIDs Compliance Assessment cc:mail correspondence on disk/J Wick, A Aughey, E Adams, R Irwin, R Allen, H Boynton, S Kookier, B Broomfield, N Daniel, P Crane.	The majority of responses were via cc:mail. Some telecon or in-person responses weren't documented. I was able to contact the majority of these experts. All but one of those contacted confirmed that they had spoken to John Wick and confirmed the applicability and adequacy of their requirement. Paul Crane, the expert for section 1.10 of WHC-CM-5-34 would not confirm the adequacy of the procedure for implementation at WRAP. He acknowledged receiving the questionnaire. The cc:mail correspondence from Crane indicates that revisions to accommodate WRAP have been made to 3.7, 3.16, 3.18, 3.20, 3.22 and 3.24, but 1.10 has been omitted. Recommendation: Evaluate the adequacy of WHC-CM-5-34 section 1.10 for implementation at WRAP. Pre-start Finding.		X
8. Does a compliance Review Corrective Action Schedule exist?	ORR AFFIDAVIT for Core Requirement 7	No punchlist items were identified in the review by LATA. Recommendation: Add items cited above items 4 and 7 to the punchlist. Pre-start Finding.		X

CORE REQUIREMENT 8.1

CORE REQUIREMENT: 8.1 There is an adequate emergency preparedness organization and program.

CRITERIA:

8.1.1 Emergency and off-normal procedures effectively guide personnel in responding to single and multiple events.

APPROACH: 1, 2

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.1.1 The building emergency plan is based on facility-specific safety analyses of potential abnormal conditions and covers the range of credible emergencies. (DOE 5500.3A, Section 11.b.(1); DOE/RL-94-02)	FSAR WRAP 1 WMC-SD-PRP-HA-027, WRAP 1, Hazards Assessment WMC-CN-0263-WRAP-1, Building Emergency Plan WMC-CN-5-36, SMD Internal Requirements Emergency Management Procedures Tom Orgill Steve Metzger	Based on Safety Criteria Plan and Guide is based on FSAR and Hazards Analysis EAR reflects Hazards Analysis.	Meets Criteria No Action Required
8.1.1.2 Current copies of emergency management documentation (building emergency plan; and emergency recognition and classification, protective action guidance and initial emergency response procedures) are available to the building emergency response organization. (DOE 5500.3A, Section 11.d.(1); WMC-CN-5-36)	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1, Building Emergency Guide WMC-CN-5-36 Tom Orgill Steve Metzger	Copies are located at the Event Command Post for access during emergencies.	Meets Criteria No Action Required
8.1.1.3 Current copies of the building emergency plan are available to the building occupants for their review. (WMC-CN-5-36)	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1, WMC-CN-5-36 Tom Orgill Steve Metzger	Copies are located and the ECP Operations Manager's Office, Plant Manager's Office. Not all personnel have reviewed the RED as required as per Tom Orgill, and Steve Metzger	Establish required reading for the RED as per WMC-CN-5-36, Chapter 4-43, 11.1 for all building personnel

8.1.1.4 The current copy of the facility-specific "Recognition and Classification of Emergencies" procedure is available for use by emergency response personnel. [DOE 5500-3A, Section 11.c.(3); Best Management Practice] Note: Although the WMC Emergency Preparedness organization is responsible for the issuance of the facility-specific "Recognition and Classification of Emergencies" procedure, the facility is responsible for ensuring that the procedure is implemented during emergency events.	WMC-CN-5-36	The "Emergency Action Levels" are located at the event command post for ready usage by the emergency organization members. Other designated personnel are on distribution including the WRAP 1 On-Call briefcase.	Meets Criteria No Action Required
8.1.1.5 The current copy of the area-specific "Initial Response for Declared Emergencies" procedures is available for use by emergency response personnel. [DOE 5500-3A, Section 11.c.(6); DOE 5500-3A, Section 11.c.(6)(c); DOE/RL-94-02; Best Management Practice] Note: Although the WMC Emergency Preparedness organization is responsible for the issuance of the area-specific "Initial Response for Declared Emergencies" procedure, the facility is responsible for ensuring that the procedure is implemented during emergency events.	WMC-CN-5-36	The "Initial Response for Declared Emergencies" is located at the Event Command Post for ready usage by Emergency Organization Members.	Meets Criteria No Action Required
8.1.1.6 Provisions and procedures are in place for facility evacuation. [DOE 5500-3A, Section 11.c.(6)(c); DOE/RL-94-02]	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1, WMC-CN-5-36	Procedures are in place to conduct evacuation drills and the WRAP 1 Building Emergency guide has a section dedicated to evacuation	Meets Criteria No Action Required
8.1.1.7 A system for personnel accountability is in place. [DOE 5500-3A, Section 11.c.(6)(c); DOE/RL-94-02]	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1	Responsibilities of Staging Area Manager, Accountability Aide and directions is stated in the Building Emergency Guide	Meets Criteria No Action Required
8.1.1.8 Primary and alternate staging areas have been identified for the facility. [WMC-CN-5-36]	WMC-CN-4-43, 11.1, Page 4	Signs are identified per group at the Staging Area. But do not have the # 1 or 2 signs at the designated or alternative staging areas.	Sign #1 for designated and #2 for alternative staging area are not identified. Install signs per procedure

CRITERIA:

8.1.2 Procedures (operations, maintenance, alarm response, RADCON, administrative, etc.) are adequately linked and consider the Emergency Plan.

APPROACH: 2

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.2.1 Alarms notify all affected personnel of emergencies. Plant announcing systems ensure full coverage of the facility. [29FR1910 Part 165(b)(1)]	WHC-OM-0263-WRAP-1 WHC-IP-1237, WRAP 1 Tom Orgill Steve Metzger	Evacuation, Take Cover, Pax Speakers are present at WRAP 1 but not at the Administrative Building or Maintenance Building. There is currently no verification of coverage on an annual basis.	At a minimum install Pax speakers in the Administrative & Maintenance Buildings for intercom capabilities during emergencies. Develop an annual Pax system test with personnel at stations in key location to listen to Pax speakers.
8.1.2.2 Preventative maintenance is performed on evacuation/take cover alarms by the responsible maintenance organization in accordance with established preventative maintenance procedures. [Best Management Practices] [DOE 5500.3A, Section 11.c.(10)(d); DOE/RL-94-02]	WHC-OM-0263-WRAP-1 WHC-IP-1237, WRAP 1 Tom Orgill Steve Metzger	Audible testing is performed on a monthly basis. Notification to test is sent over the area crash phone system.	An annual test is needed with personnel located at designated areas to listen to alarms.
8.1.2.3 Evacuation/take cover alarms are audibly tested at a predesignated time each month. This requirement is incorporated into preventative maintenance programs. [Best Management Practices] [DOE 5500.3A, Section 11.c.(10)(d); DOE/RL-94-02]	WHC-OM-0263-WRAP-1 WHC-IP-1237, WRAP 1 Tom Orgill Steve Metzger	Audible testing is performed on a monthly basis. Notification to test is sent over the area crash phone system.	An annual test is needed with personnel located at designated areas to listen to alarms.
8.1.2.4 Plant Operating, Alarm, Administrative and RADCON procedures support the WRAP 1 Emergency Plant and Emergency Response Guide. Procedures give detailed directions to plant personnel for specific operations within the plant. [WHC-IP-0263-WRAP-1, Attachment A]	WHC-OM-0263-WRAP-1 WHC-IP-1237, WRAP 1 OPS POP Emergency Response Guide. RCT POP Tom Orgill Steve Metzger	Alarm Response Procedures, Plant Operating Procedures and Radiological procedures exist and are in place. Procedures are adequately labeled to support emergency response conditions.	Meets Criteria No Action Required

CRITERIA:

8.1.3 An approved emergency plan and supporting documents exist and have been tested to ensure effective emergency preparedness and response. Provisions are in place to upgrade the Emergency Plan based on lessons learned from drills, exercises and actual emergencies. The emergency plan incorporates required emergency preparedness program features.

APPROACH: 2, 3

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.3.1 The building emergency plan is based on facility specific safety conditions and covers the range of credible emergencies. [DOE 5500.3A, Section 11.b.(1); DOE/RL-94-02]	FSAR WRAP 1 WHC-SD-PRP-HA-027 WHC-CM-0263-WRAP-1 WHC-CM-5-36 Tom Orgill Steve Metzger	Emergency drills are established per requirements and performed. Example: Observed Emergency drill, contamination spread. The scenario caused an Emergency Action Level and personnel responded as per WHC-CM-5-36, 4-43, 2.6.	Meets Criteria No Action Required
8.1.3.2 The building emergency plan is updated or verified at least annually. [DOE 5500.3A, Section 11.c.(13)(b); WHC-CM-5-36; DOE/RL-94-02]	WHC-IP-0263-WRAP-1, Page 1 Tom Orgill Steve Metzger	New facility, Page 1 addresses requirement annual review and update. Plan has been updated to Rev. 1	Meets Criteria No Action Required
8.1.3.3 The building emergency plan is approved by WHC Emergency Management, Hanford Fire Department, and the Building and Safety Director. [WHC-CM-5-36; DOE/RL-94-02]	WHC-IP-0263-WRAP-1, Page 1 Tom Orgill Steve Metzger	Approval verified per WHC-IP-0263-WRAP-1, Page 1	Meets Criteria No Action Required
8.1.3.4 There is a distribution and control system which assures that all copies of the building emergency plan is kept current. [DOE 5500.3A, Section 11.c.(13)(b); WHC-CM-5-36; DOE/RL-94-02]	WHC-IP-0263-WRAP-1, Rev. 1 WHC-IP-1237, Rev. 0 Tom Orgill Steve Metzger	Copies are controlled through Company Internal publication process.	Meets Criteria No Action Required
8.1.3.5 An electronic copy of the approved building emergency plan is sent to WHC Emergency Management for publication on the Hanford Local Area Network (HLAN). [WHC-CM-5-36]	WHC-CM-0263-WRAP-1 WHC-IP-1237, WRAP 1 Tom Orgill Steve Metzger	The Emergency Plan, Rev. 0 is currently on HLAN, Currently Rev. 1 is not on HLAN for ready access by the Hanford Fire Dept.	Electronic copy to Northern Area ECC is needed to place on HLAN

CRITERIA:

8.1.4 Facility Emergency Response personnel are trained to effectively respond and mitigate the consequences of emergencies (assessed under Core Requirement 2 and 3, provided here for information and completeness). Facility non-emergency response personnel are adequately trained on emergencies situations (assessed under Core Requirement 2 and 3, provided here for information and completeness). Non-facility emergency response personnel are trained to respond to and support WRAP. NOTE: only training that is unique to WRAP or describes WRAP's operations is to be assessed.

APPROACH: 5, 9

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.4.1 A program is established for the initial and ongoing training of emergency response personnel appointed by the building emergency director. (DOE 5500.3A, Section 11.c.(11)(b); DOE/RL-94-021) NOTE: The WMC Emergency Management organization is responsible for establishing and maintaining the building emergency director and bomb search team training program.	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-OM-5-36, Chapter 4-43 Dave Watson Steve Metzger Tom Orgill Phoebe Koep	Personnel are trained for BED training, Staging Area training, and by participating in monthly drills. WMC-OM-5-36, 11.1 6.0 (5) BED training is tracked by TMK system, while the remaining Emergency Organization members are trained by conducting drills/other in house training. Administrative files are kept by the appropriate facility secretaries.	Meets Criteria No Action Required
8.1.4.2 All members of the building emergency response organization receive initial training and participate in ongoing training. Skill levels and participation must be demonstrated and identified, completed, and documented prior to assignment to perform the task independently. (DOE 5500.3A, Section 11.c.(11)(b); DOE/RL-94-021) NOTE: Course #020288 for initial building emergency director training; course #037510.	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-OM-5-36 Dave Watson Steve Metzger Tom Orgill Phoebe Koep	Personnel are trained for BED training, BED training, and by participating in monthly drills.	Facility training instructor needs to become more familiar with Emergency Preparedness training requirements.
8.1.4.3 All members of the building emergency response organization participate in continuing training on at least an annual basis. (DOE 5500.3A, Section 11.c.(12)(d); DOE/RL-94-021)	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-OM-5-36, Chapter 4-43 Dave Watson Steve Metzger Tom Orgill Phoebe Koep	Personnel are trained for BED training, BED training, and by participating in monthly drills. Organizational Support Personnel files other than BED are kept with the Emergency Preparedness Coordinator.	Meets Criteria No Action Required

8.1.4.4. Training records for each individual appointed by the building emergency director are maintained per requirements of the training program. (DOE 5500.3A, Section 11.c.(11)(b); WMC-CN-5-36; WMC-IP-1018) NOTE: The WMC Emergency Management organization is responsible for submitting the building emergency director and bomb search team training records.	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-CN-5-36, Chapter 4-43 Dave Watson Steve Metzger Tom Orgill Phoebe Koep	RED and Building Emergency Organization training is maintained through the secretary. No Facility Information and Hazards Checklist is in place. The WRAP 1 training instructor was not aware of required training.	Review requirements with instructor. Review locations of records maintained by secretary.
8.1.4.5 The facility personnel have reviewed the building emergency plan within 30 days after assignment to the building and annually thereafter. (WMC-CN-5-36)	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-CN-5-36, 4-43, 11.1 Dave Watson Steve Metzger Tom Orgill	There are no records that show this is being performed. The training instructor was not aware of this requirement.	Implement Facility Emergency and Hazards Information Checklist for documentation.
8.1.4.6 Facility personnel completing a review of the building emergency plan is documented on the Facility Emergency and Hazard Information Checklist and forwarded to the training instructor for the training records program. (WMC-CN-5-36; WMC-IP-1018)	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-CN-5-36, 4-40, 2.1 Dave Watson Steve Metzger Tom Orgill	A checklist does not currently exist. The training instructor was not aware of this requirement.	Develop facility specific training.

CRITERIA:

8.1.5 Facilities, equipment, and resources are in place and adequate to support emergency response operations and ensure the protection of all personnel (e.g., Emergency Operations Center, backup or alternative facilities, primary and backup communication, alarm adequate to notify personnel, transportation, medical treatment, respiratory equipment, exposure controls, instrumentation to measure exposure, etc.

APPROACH: 5

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.5.1 Alarms notify all affected personnel of emergencies. Plant announcing systems ensure full coverage of the facility. [29CFR1910 Part 165(D)(1)]	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1 Tom Orgill Steve Metzger	Evacuation, Take Cover, Pax Speakers are present at WRAP 1 but not at the Administrative Building or Maintenance Building. There is currently no verification of coverage on an annual basis.	At a minimum install Pax speakers in the Administrative & Maintenance Buildings for intercom capabilities during emergencies. Develop an annual Pax system test with personnel at stations in key location to listen to Pax speakers.
8.1.5.2 Preventative maintenance is performed on evacuation/take cover alarms by the responsible maintenance organization in accordance with established preventative maintenance procedures. [DOE 5500.3A, Section 11.c.(10)(d)]	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1 Tom Orgill Steve Metzger	Audible testing is performed on a monthly basis. Notification to test is sent over the area crash phone system.	An annual test is needed with personnel located at designated areas to listen to alarms.
8.1.5.3 Evacuation/take cover alarms are audibly tested at a pre-designated time each month. This requirement is incorporated into preventative maintenance procedures. [DOE 5500.3A, Section 11.c.(10)(d)]	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1 Tom Orgill Steve Metzger	Audible testing is performed on a monthly basis. Notification to test is sent over the area crash phone system.	An annual test is needed with personnel located at designated areas to listen to alarms.
8.1.5.4 Emergency equipment, as identified in the respective building emergency plan, is inventoried, tested, and serviced on a periodic basis. Inventories and tests are documented (and posted where applicable). [DOE 5500.3A, Section 11.c.(10)(d)]	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1	The following items are not presently in service per the WMC-IP-1237, Building Emergency Guide. Put in service or take off list in the Building Emergency Guide.	The following items are not presently in service per the WMC-IP-1237, Building Emergency Guide. *Decontamination shower not yet in service. *Crash Phone location is missing for 2740-W in BEP. *SCBA are not in locations specified in Building Emergency Guide. *No spill Kits available (on WRTS) *Eye Wash not in service.
8.1.5.5 The building emergency director has ensured that vehicles are available to move all personnel from the facility. This may be accomplished by a combination of government owned and private vehicles. [WMC-IP-1237, DOE/RL-94-021]	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1	Personnel are segregated and designated for transportation purposes in personal and government vehicles.	Meets Criteria No Action Required

CRITERIA:

APPROACH: 8

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.6.1 The building emergency plan is coordinated and developed in accordance with WMC-CN-4-43 and WMC-IP-1010. IDOE 5500.3A, Section 11.b.(1); WMC-CN-5-36; DOE/RL-94-021	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-CN-5-36 WMC-SD-PRP-HA-027	Format per WMC-IP-0263-GEN, preparing BEP's and directed by 11.1 (2.1)	Meets Criteria No Action Required
8.1.6.3 The current copy of the facility-specific "Recognition and Classification of Emergencies" procedure is available for use by emergency response personnel. IDOE 5500.3A, Section 11.b.(3); DOE/RL-94-021; DOE/RL-94-023; DOE/RL-94-027 Note: Although the WMC Emergency Preparedness organization is responsible for the issuance of the facility-specific "Recognition and Classification of Emergencies" procedure, the facility is responsible for ensuring that the procedure is implemented during emergency events.	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-CN-5-36 WMC-SD-PRP-HA-027	The plant's Emergency Action are found on Safety Analysis Requirements and the facilities Hazards Assessment.	Meets Criteria No Action Required

CRITERIA:

8.1.7 Emergency drills and exercises are conducted prior to WRAP operation and are periodically conducted thereafter to test and verify the adequacy of the emergency plan. (assessed under Core Requirement 9, provided here for information and completeness)

APPROACH: 4, 1

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.7.1 A program is established and implemented for the planning, scheduling, preparation, conduct, control, critique, and documentation of facility drills associated with emergency response. (DOE 5500.3A, Section 11.c.(12)(c); WMC CM-5-36; DOE/RL-94-02; WMC-IP-1018)	WMC-CM-5-36, 4-43, 11.1 WMC-CM-5-34, 1.5	All areas addressed in WMC-CM-5-34, 1.5, Emergency/Operational Drill Program.	Meets Criteria No Action Required
8.1.7.2 Facility emergency drills are held in accordance with the schedule coordinated with the WMC Emergency Management organization. The drills are of a scope and frequency to ensure response capability in all areas applicable to the facility. (DOE 5500.3A, Section 11.c.(12)(c); WMC-CM-5-36; DOE/RL-94-02)	WMC-CM-5-36, 4-43, 11.1 WMC-CM-5-34, 1.5	All areas addressed in WMC-CM-5-34, 1.5, Emergency/Operational Drill Program.	Meets Criteria No Action Required
8.1.7.3 A Pre-Drill Report is submitted at least two weeks before the drill and a Post-Drill Report is submitted within two weeks of completion of the drill. (WMC-CM-5-36; DOE/RL-94-02)	WMC-CM-5-36, 4-43, 11.1	Review of affidavit information and actual drill observed showed that the two week submittal is not being performed.	Submittal to Northern Area ECC two weeks in advance of drill and after drill is not being performed. Submit two weeks in advance.

8.1.7.4 Facility emergency drills include simulated events to test response to radiological and hazardous material monitoring (spills, airborne releases, sampling, etc.), fires, loss of vital equipment, facility evacuation and accountability, and security emergencies. IDOE 5500.3A, Section 11.c.(12)(c); WMC-DM-5-361 NOTE: Facilities staffed at all times conduct at least one of the following drills for each shift crew: - fire, evacuation, take cover at 1 per year. - security, loss of utilities, hazardous material, contamination spread, and criticality at one per year for each type in facilities where there is a credible potential on the emergency. - simulated radiological release (Plutonium Finishing Plant only). - bomb threat at one per year in hazardous facilities with bomb threat emergency action levels. With concurrence of the area WMC Emergency Management representative, drills may be combined using credible scenarios. Actual events may be documented to meet drill requirements. (WMC-DM-5-36)	WMC-DM-5-36, 4-43, 11.1 WMC-DM-5-34, 1.5	The facility has submitted and approved a FY 97 WRAP 1 Emergency/Operational Drill Schedule meeting requirements listed in WMC-DM-5-36, 4-43, 11.1 and WMC-DM-5-34, 1.5	Meets Criteria No Action Required
8.1.7.5 Simulated response during facility drills is minimized wherever possible, the limitations from and the scope to the simulated event are the same as if the event were real. IDOE 5500.3A, Section 11.c.(12)(d)	WMC-DM-5-34, 1.5	Stimulated facility drills are minimized as per Emergency/Operational Drill Program. Observations of drill verified personnel responded as if this was a real event.	Meets Criteria No Action Required
8.1.7.6 Every drill has a formal critique with all players, controllers, and evaluators and the results are documented. IDOE 5500.3A, Section 11.c.(12)(b)(6); DOE/RL-94-02	WMC-DM-5-34, Section 1.5, SMD Operations Administrative Manual	Drills are formally criticized with drill participants.	Meets Criteria No Action Required
8.1.7.7 A system of deficiency identification, evaluation, and follow-up is established to ensure weaknesses and deficiencies are corrected. IDOE 5500.3A, Section 11.c.(12)(e); DOE/RL-94-02	WMC-DM-5-34, Section 1.5	Post Drill Critiques are held and corrective actions are placed on SMD/WRTS tracking system.	Meets Criteria No Action Required

CRITERIA:

8.1.8 Hazard assessment are prepared, documented, and maintained which considers emergency events that could affect WRAP.

APPROACH: 6, 8

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.8.1 The building emergency plan is based on facility-specific safety analyses of potential abnormal conditions and covers the range of credible emergencies. IDOE 5500.3A, Section 11.b.(1); DOE/RL-94-027	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-OM-5-36 WMC-OM-5-34, Section 1.5 WMC-SD-PRP-HA-027 FSAR WRAP 1	Based on Safety Criteria The Emergency Plan and Guide are based on the FSAR and Hazards Analysis. The Emergency Action Levels WMC-OM-5-36, Chapter 4-43, 2.2 reflect responses to above criteria.	Meets Criteria No Action Required
8.1.8.2 The current copy of the facility-specific "Recognition and Classification of Emergencies" procedure is available and used by emergency response personnel. IDOE 5500.3A, Section 11.c.(3); Best Management Practice) Note: Although the WMC Emergency Preparedness organization is responsible for the issuance of the facility-specific "Recognition and Classification of Emergencies" procedure, the facility is responsible for ensuring that the procedure is implemented during emergency events.	WMC-OM-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-OM-5-34, Section 1.5 WMC-SD-PRP-HA-027 FSAR WRAP 1	Based on Safety Criteria The Emergency Plan and Guide are based on the FSAR and Hazards Analysis. The Emergency Action Levels WMC-OM-5-36, Chapter 4-43, 2.2 reflect responses to above criteria.	Meets Criteria No Action Required

CRITERIA:

8.1.9 Responsibility is assigned to an individual for coordination of facility and site emergency response planning, and for maintaining the emergency management program documentation current, including the emergency plan and emergency plan implementing procedure (assessed under Core Requirement 11, provided here for information and completeness)

APPROACH: 7, 1

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.9.1 The building emergency plan is coordinated and developed in accordance with DOE 5500.3A and 11.B.(1); WMC-CN-5-36)	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-CN-5-36, Chapter 4-43 Tom Orgill Jeff Riddelle	Steve Metzger is currently the Building Emergency Coordinator. A contractor is performing most of the administrative duties. The Operations Manager has stated that a permanent Drill Coordinator is proposed.	Meets Criteria No Action Required
8.1.9.2 The building emergency plan is updated or verified at least annually, DOE 5500.3A, Section 11.c.(13)(b); WMC-CN-5-36)	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-CN-5-36, Chapter 4-43 Tom Orgill Jeff Riddelle	Steve Metzger is currently the Building Emergency Coordinator. A contractor is performing most of the administrative duties. The Operations Manager has stated that a permanent Drill Coordinator is proposed.	Meets Criteria No Action Required
8.1.9.3 The building emergency plan is approved by WMC Emergency Management, Hanford Fire Department, and the building emergency director. (WMC-CN-5-36)	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-CN-5-36, Chapter 4-43 Tom Orgill Jeff Riddelle	Steve Metzger is currently the Building Emergency Coordinator. A contractor is performing most of the administrative duties. The Operations Manager has stated that a permanent Drill Coordinator is proposed.	Meets Criteria No Action Required
8.1.9.4 An electronic copy of the approved building emergency plan is sent to WMC Emergency Management for publication on the Hanford Local Area Network (HLAN). (WMC-CN-5-36)	WMC-CN-0263-WRAP-1 WMC-IP-1237, WRAP 1 WMC-CN-5-36, Chapter 4-43 Tom Orgill Jeff Riddelle	Steve Metzger is currently the Building Emergency Coordinator. A contractor is performing most of the administrative duties. The Operations Manager has stated that a permanent Drill Coordinator is proposed. Rev. 1 is not in the system, Rev. 0 is currently in the system.	Needs to coordinate electronic copy distribution with the Northern Area ECC.

CRITERIA:

8.1.10 Individuals and alternates are designated to perform all emergency roles using clear lines of succession.

APPROACH: 10, 1

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.10.1 Individuals and alternates are designated to perform all emergency roles. (DOE 5500.3A, Section 11.c.1)	WHC-CN-0263-WRAP-1 WHC-IP-1237, WRAP 1 WHC-CN-5-36, Chapter 4-43 Tom Orgill Jeff Riddelle	The WRAP 1 Facility Emergency Response Board includes a list of the Building Emergency Organization and alternates. The Administrative Building has a Facility Emergency Board at the entryway but there is no information posted.	Need to update Building Emergency Organization List to include individual work locations. Add information to Emergency Board at Administrative Building.
8.1.10.2 Responsibilities for each person in the building emergency response organization are well defined. (DOE 5500.3A, Section 11.c.1)	WHC-CN-0263-WRAP-1 WHC-IP-1237, WRAP 1 WHC-CN-5-36, Chapter 4-43 Tom Orgill Jeff Riddelle	Responsibilities for members of the WRAP 1 Building Emergency Organization are defined in the Building Emergency Guide.	Meets Criteria No Action Required
8.1.10.3 Building emergency response organization personnel selection is based on assignments similar to normal day to day responsibilities and the individual's ability to properly analyze data, assess situations, and make decisions under high stress conditions. (DOE 5500.3A, Section 11.c.1)	WHC-CN-0263-WRAP-1 WHC-IP-1237, WRAP 1 WHC-CN-5-36, Chapter 4-43 Tom Orgill Jeff Riddelle	Job descriptions were considered when selecting emergency organization members. BEO is operation manager and operations team leaders. The communicator is the occurrence reporter.	Meets Criteria No Action Required
8.1.10.4 Additional support personnel such as Health Physics, Maintenance, Engineering, or Hazardous Material Coordinators have been identified as a part of the building emergency response organization as needed. [WHC-IP-1010]	WHC-CN-0263-WRAP-1 WHC-IP-1237, WRAP 1 WHC-CN-5-36, Chapter 4-43 Tom Orgill Jeff Riddelle	Support personnel are identified on the Building Emergency Organization List.	Meets Criteria No Action Required
8.1.10.5 A listing of the complete building emergency response organization including positions, names, work locations, and telephone numbers is maintained separate from the building emergency plan in an internally controlled facility document. (WHC-CN-5-36)	WHC-IP-1237, WRAP 1 WHC-CN-5-36, Chapter 4-43 Tom Orgill Jeff Riddelle	A list of the WRAP 1 Building Emergency Organization is included on Facility Emergency Response Board. Issued to appropriate Emergency Management.	Update the Building Emergency Organization List to include individual work locations.

8.1.10.6 The listing of the complete building emergency response organization will be updated if changes have occurred and WMC Emergency Management is notified within 30 days of the change. (WMC-DW-5-36)	WMC-IP-1237, WRAP 1 WMC-DW-5-36, Chapter 4-43 The Building Emergency Organization Listing Tom Orgill Jeff Riddelle	Northern Area ECC and OMC are notified by delivered hard copy revision.	Meets Criteria No Action Required
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CRITERIA:

8.1.11 Emergency response personnel are selected based on assignments similar to normal day-to-day responsibilities and the individual's ability to properly analyze data, assess situation, and make decisions under high stress conditions.

APPROACH: 1

CRITERIA	REFERENCE DOCUMENTS	ASSESSMENT	ACTION ITEMS
8.1.11.1 Building emergency response organization personnel selection is based on assignments similar to normal day to day responsibilities and the individual's ability to properly analyze data, assess situations, and make decisions under high stress conditions. (DOE 5500.3A, Section 11.c.1)	WMC-IP-1237	Job descriptions were considered when selecting Emergency Organization Members. Example BED: Operations Manager and Operations Team Leader Communicator: Occurrence Reporter	Meets Criteria No Action Required

Approach:

1. Interview individuals responsible for implementation of the emergency preparedness program. Ensure that the emergency preparedness program includes the necessary elements of staffing, management support, resources, training, and planning, to cope with emergencies.
2. Review procedures (operations, maintenance, surveillance, RADCON, administrative, etc.) to verify that emergency and off-normal event are sufficiently linked to the emergency plan. Through discussions with operations personnel and facility managers, confirm knowledge of emergency/off-normal operating procedures. During conduct of the ORR evaluate how personnel utilize procedures during event drills.
3. Review the Emergency Plan and supporting documentation and compare to the requirements of the FSAR, Health and Safety Plan (HASP), Hazards Baseline Assessment, TSR, and CSER. Ensure that provisions are in place to incorporate drills and actual emergency lessons learned into the Emergency Plan.
4. Review procedures and training material for non-facility emergency response personnel (e.g., fire department, ambulance, hazmat team, security, etc.) to assure WRAP-1 has been included, noting it's unique processes.
5. Review the Emergency Plan for commitment and definition of facility, equipment, and resources for emergency response. Conduct a site walk through to ensure medical, fire, hazmat, radiological response, and monitoring equipment are in place. Review surveillance procedures for emergency response equipment to ensure their continued maintenance and ensure up-to-date contact names and telephone numbers are provided at all times.
6. Interview personnel responsible for classification of emergencies to determine if the classification scheme is consistent with operating procedures and technical specifications.
7. Perform walk down of facilities and equipment, review procedures and interview appropriate onsite and, as necessary, offsite personnel to verify that provisions are adequate and in place for transportation and treatment of contaminated/injured personnel, fire/rescue support, and protection of security personnel during emergencies.
8. Review Hazard Analysis for WRAP to ensure a comprehensive hazard assessment has been conducted and that the emergency plan is responsive to the full spectrum of accidents.
9. Review procedures (operations, maintenance, surveillance, RADCON, administrative, etc.) to verify that emergency and off-normal event are sufficiently linked to the emergency plan. Through discussions with operators and operations managers, confirm operator knowledge of emergency/off-normal operating procedures. During conduct of the ORR evaluate how personnel utilize procedures during event drills.
10. Ensure up-to-date contact names and telephone numbers are provided at all times.

Core Requirement 8.2 There is an adequate engineering support organization and program including the cognizant/system engineer approach.

Criteria:

1. The organizational structure is clearly defined and staffing and resources are sufficient to accomplish tasks assigned to the organizational elements. (assessed under Core Requirement 11, provided here for information and completeness)
3. Responsibilities, authority, and interfaces for each organizational position are clearly defined and understood. (assessed under Core Requirement 11, provided here for information and completeness)

Approach:

1. Obtain and review programs, processes, and procedures which control engineering work and confirm appropriate checks and balances exist which would preclude or correct errors (e.g., design, procedure, etc.), standard engineering practices and approaches are employed.
2. Interview engineering support personnel to confirm their understanding of governing and applicable programs/procedures. Include confirming their knowledge of applying these programs and procedures to the processing requirements of WRAP-1.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F O R ?
Are areas of responsibility identified within engineering?	Discussion with Jay Bottenus	A primary and backup cognizant engineer has been identified for each major area of the facility.	No.
Are areas of responsibility identified within engineering?	Discussions with Operators and Crafts.	The operators and crafts knew the responsible engineers for the computer systems and the facility systems. The assignments are known and the engineers are available for discussions.	No.

Core Requirement 8.2 There is an adequate engineering support organization and program including the cognizant/system engineer approach.

Criteria:

2. Adequate training, including WRAP specific training, is provided to the engineers. (assessed under Core Requirement 2 and 3, provided here for information and completeness)
4. Goals, objectives, and standards for performance of engineering support activities are adequately established, communicated, and reinforced. (assessed under Core Requirement 11, provided here for information and completeness)
5. The effectiveness and level of expertise of engineering support are periodically and adequately assessed. (assessed under Core Requirement 13, provided here for information and completeness)

Approach:

1. Obtain and review programs, processes, and procedures which control engineering work and confirm appropriate checks and balances exist which would preclude or correct errors (e.g., design, procedure, etc.), standard engineering practices and approaches are employed.
2. Interview engineering support personnel to confirm their understanding of governing and applicable programs/procedures. Include confirming their knowledge of applying these programs and procedures to the processing requirements of WRAP-1.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F O R O ?
Are engineering support personnel adequately trained.	Discussions with Jay Bottenus, Steve Metzger, operators, crafts and engineers.	The software engineers (program engineers) need more training to ensure Primary and Backup cognizant engineers for each software system are available. Some OJT is still needed. There is a general trend to rely on vendor contracts to fix or upgrade programs. The facility engineers are ready to support the facility however some training of the program system interfaces should be conducted to ensure the cog engineers understand operation of their systems will be displayed to the other systems programs.	Observation.
Are goals, objectives an standards communicated and reinforced.	Interview with Jay Bottenus (Engineering Manager).	Goals and objectives are stated in staff meetings. As needed, emergency meetings are called. Engineering level of expertise and adequacy are determined through the required review of changes made to assigned areas which includes the Engineering manager. Yearly reviews of performance are conducted.	No

Core Requirement 8.2 There is an adequate engineering support organization and program including the cognizant/system engineer approach.

Criteria:

6. Actions and controls within engineering support demonstrate that WRAP configuration control is maintained and a configuration management system is in place that ensures drawings, procedures, safety equipment lists, FSAR, training materials, etc. are kept current. (assessed under Core Requirement 8.13, provided here for information and completeness)
7. Procedures and controls that ensure safe and reliable WRAP operations are adequately employed in the conduct of engineering activities.
8. Engineering adequately support the WRAP mission.
9. Standard engineering practices, principals, convention, and approaches are employed.

Approach:

1. Obtain and review programs, processes, and procedures which control engineering work and confirm appropriate checks and balances exist which would preclude or correct errors (e.g., design, procedure, etc.), standard engineering practices and approaches are employed.
2. Interview engineering support personnel to confirm their understanding of governing and applicable programs/procedures. Include confirming their knowledge of applying these programs and procedures to the processing requirements of WRAP-1.
3. Through discussions with maintenance, operations, and management develop an understanding of the adequacy of engineering. Determine backlog of work and the time to complete. Determine if responsibility for completing work is clearly defined.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F O R O ?
Evaluate adequacy of Engineering Support.	Discussions with operations, crafts and plant management.	Per the discussions, the engineers are more than adequate to support WRAP 1, Phase 1, operation. However, support of Phase 1 along with supporting construction of Phase 2 and 3 may be difficult. There is a general programming deficiency due to lack of time to adequately train on systems. (Training was postponed for the ORR and has been scheduled for the week following.)	Observation
Are standard engineering practices/conventions/approaches used.	Work control documents/manuals.	The changes to facility will follow the work control Engineering Change Notice (ECN) process for facility changes as identified in the site manuals. The software changes follow a configuration process developed for WRAP 1 (both systems evaluated in core requirement 8.11). The change approval process requires the review and approvals from other groups as required.	No.

Are standard engineering practices/conventions/approaches used.	Discussions with cognizant engineers.	Both software and Hardware changes were reviewed with engineers. Knowledge of methodology and process was more than acceptable.	No.
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Core Requirement 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Approach

1. Review documentation, interview staff, and make field observations to ensure the WRAP Environmental Compliance program address all activities necessary to implement environmental policies.
2. Ensure all procedures (normal and off-normal) that could impact the environment are reviewed by WRAP Environmental Compliance.
3. Ensure environmental compliance procedures are technically correct, current, and have a level of detail appropriate for the activities to which they apply.

Criteria 8.1 Environmental compliance programs are defined in formal policies, standards, and procedures.

Criteria 8.14 Personnel in Environmental Compliance have the needed knowledge, skills, and abilities to conduct the program. (assessed under Core Requirement 2 and 3, provided here for information and completeness)

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, various sections WHC-CM-5-36, chap. 7-5 WHC-IP-1237				
1. Review Environmental Compliance Program implementation method	Harlan Boynton, WRAP ECO	- Regulatory file checklist establishes path to follow in facility self assessments and compliance reviews - WRAP must finalize and release sections 3.2 and 5.1 of IP-1237 (WRAP Administrations Manual)		X
2. Verify adequacy of personnel training	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer Dave Watson, WRAP training	Training plan and files for Boynton and Lewis reviewed and they are up to date on requirements	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3. Review training plan and records	Phoebe Koep, WRAP sec'y Dave Watson, WRAP training	Training files in engineering building and plant reviewed. A system is in place to develop ITPs and schedule updates. Numerous employee files reviewed.	X	
4. Verify WRAP Environmental Compliance reviewed procedures that could impact environment	Harlan Boynton, WRAP ECO Carla Thibault, WRAP Engineering	All IP, OP, and MP procedures are reviewed & signed off by WRAP Env. Compliance.	X	

Core Requirement 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Approach Review the air quality program to ensure that a plan for monitoring air-effluent sources has been formalized in a document and has received appropriate review and approval.

Criteria 8.2 A plan for monitoring air-effluent sources has been formalized in a document and has received appropriate review and approval.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-EP-0885 WHC-EP-0438 1. Review Facility Effluent Monitoring Plan WHC-EP-0885 (the FEMP)	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer	Meets requirements. OBSERVATION - ensure annual review of FEMP is done before Phase II.	X	
2. Stack monitoring requirements	Larry Diediker, RUST Air & Water Services	Verify test results on stack monitoring before Phase II. OBSERVATION - contact Air & Water Services to establish monitoring process for stack monitoring		X

Core Requirement 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Approach

Review documentation, make field observations, and interview staff to ensure there is a formal, facility-wide waste program in place that describes procedures and roles and responsibilities for identifying, characterizing, and managing all waste streams.

Criteria 8.3 There is a formal waste program that describes procedures, roles, and responsibilities for identifying, characterizing, and managing all waste streams.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-36 chap. 7-5 WHC-IP-1159 WHC-SD-EN-WAP-006 WHC-SD-W026-PLN-005 WHC-SD-W026-PLN-006 WHC-SD-W026-PLN-007 WRPI-OPs, various				
1. Review waste program documentation	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer	Waste program is delineated in surveillance and operating procedures. Field files are established for documentation.	X	
2. Review regulatory file, records & implementing procedures	Andrea Prignano, RUST Project Services	Extensive checklist was developed to oversee the regulatory files. Files and affidavits were reviewed with help of the checklist. The checklist will help in future self assessments.	X	

Core Requirement 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Approach Review documentation, make field observations, and interview staff to ensure there is a formal waste minimization program and plan.

Criteria 8.4 There is a formal waste minimization program and plan.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-DOE\RL-91-31 WHC-DOE\RL-95-103 WHC-CM-5-36, chap. 7-5 WHC-CM-EP-0496				
1. Review waste min plan requirements	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer	WRAP has internal procedures to implement Waste Min. & Pollution Prevention requirements - see WHC-IP-1237	X	
2. Determine site wide Pollution Prevention (P2) Plan requirements	Pete Segall, Waste Minimization	DOE/RL-91-31 eliminated requirements for individual facilities to have plans. WRAP is covered in the site P2 plan.	X	

Core Requirement 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Approach

1. Review documentation, interview staff, and make field observations to ensure that inventory control procedures are in place for monitoring and limiting the type and quantity of toxic and chemical materials purchased and procedures are established and implemented to assure the release of toxic and chemical materials to the environment are within the limits of approved permits.
2. Review spill plans that involve emergency responses and notification, to make certain that up-to-date contact names and telephone numbers are provided at all times.

Criteria 8.5

There is a formal program that defines the use of chemicals and toxic materials. Inventory control procedures are in place for monitoring and limiting the type and quantity of chemicals and toxic materials purchased. Procedures are established and implemented to prevent the release of toxic chemical materials to the environment.

Criteria 8.6

There are response action plans or equivalent documents that outline the nature and scope of the response action program and outline the specific responsibilities for, and procedures to assess, all releases potentially subject to reporting and notification requirements.

Criteria 8.16

Intra-building waste movements are made under a documented control system that provides for positive tracking of package movement, and movement approval.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, chap. 3-4 WHC-CM-5-36 chap 1-12 WHC-IP-1237, sect. 1.3 WHC-IP-0263-WRP1 WHC-IP-1251 WHC-IP-1237 WRP1-OPs, various				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Review program to prevent releases, spill plans and notification protocol.	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer	Emergency Plan and Emergency Guide provide procedures to follow for response and notifications. OBSERVATION: ECO was not contacted in the Emergency drill of 11/11. Building Emergency Director must be trained to contact ECO in event of releases.		X
2. Review the procedures on the management of chemicals.	Harlan Boynton, WRAP ECO	Program documented in the Hazcom Program (WHC-CM-5-34, sect. 1.12)	X	
3. Trace procedure for tracking movement of packages		WRP1-OPs are in place to govern all movements and tracking requirements. PRE-START REQUIREMENT: facility must have certified shipper in place before first drums are accepted.		X
4. Observe Emergency Drill.		Drill done on 11/11/96. Drill critique was done, written up and is included in CR-8.1	X	
5. Verify EPCRA reporting practices have been established	Diane Zaloudek, RUST Environmental Management Services	WRAP has developed the necessary steps to transmit appropriate information to support sitewide EPCRA reporting with assistance from Ms. Zaloudek.	X	

Core Requirement 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Approach

1. Review all permits and studies, ensure no additional permits or studies are required. Ensure all permit requirements and actions have been completed or are captured within the compliance program.
2. Review the pre-operational baseline assessment of environmental radioactivity levels to verify that measurable changes in radioactive levels can be determined.

Criteria 8.7

All required permits for construction and operations are possessed and associated requirements in effect (e.g., air, water, waste, TSD, etc.).

Criteria 8.11

Environmental sampling programs are conducted to establish a baseline for radioactivity in the environment in the vicinity of WRAP for use as a basis of comparison in the event of an excursion involving the plant.

Criteria 8.15

WRAP's impact has been assessed by independent monitoring groups (well monitoring, site air monitoring, etc.) and appropriate actions have been taken to accommodate.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-6, chap. 7-5 WHC-CM-7-4 WHC-SD-WM-TI-788 DOE/RL-91-16 WD-1 DOE/RL-93-15 DOE/RL-93-16 DOE/RL-93-18 DOE/RL-93-94 DOE/RL-95-82 DOE/RL-95-93 DOE/RL-96-41				
1. Review monitoring requirements	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer	Environment tal sampling and monitoring developed (see 2 & 3 below).	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Interview Near Field Monitoring group	John Dorian, Near Field Monitoring	Preoperation Environmental Survey Report: Solid Waste Operations Complex (WHC-SD-WM-TI-788) has been developed for Solid Waste, including the WRAP facility. PRE-START REQUIREMENT: Verify final approval of WHC-SD-WM-TI-788.		X
3. Verify routine and annual monitoring plans are in place	Ron Mitchell, Near Field Monitoring	Routine Operational Monitoring program is site wide funded and managed. WRAP monitoring is rolled into the ROM program for FY1997.	X	
4. Status permitting requirements and ongoing activities.	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer Joel Williams, RUST Project Services	Routine permits in order and documented. Plant is operating on Part A interim status, Part B revision is in process and is expected to be issued by 12/97.	X	

Core Requirement 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Approach

1. Review procedures and observe operations of equipment used for sampling, monitoring, and analyzing hazardous substances to ensure WRAP has the ability to determine if releases are occurring, can collect data for notification and reporting as directed by Federal and state requirements and can characterize waste.
2. Review documentation, make field observations, and interview staff to ensure there is a formal, facility-wide waste program in place that describes procedures and roles and responsibilities for identifying, characterizing, and managing all waste streams.

Criteria 8.8 All environmental reviews and studies have been performed (e.g., NEPA, etc.)

Criteria 8.10 Hazardous substances are monitored, sampled, and analyzed in order to support making notifications and reporting reportable quantities to authorities.

Criteria 8.13 Procedures are in place that describe how to operate the equipment used to sample and analyze.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-EP-0885 DOE/RL-95-82 DOE/EIS-FS-SA2 WHC-CM-5-36 chap. 7-5 WHC-IP-1237 SEPA Environmental checklist				
1. Review sampling plans and notification & reporting protocol	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer	WHC-IP-1237 section 3.2 covers sampling and analysis protocol. PRESTART FINDING: section 3.2 must be signed off and formally issued.		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Interview evolution of NEPA/SEPA requirements	Chuck Eccleston, RUST NEPA Gary Wells, RUST Air and Water Services	All NEPA/SEPA activities are complete. The supplemental analysis (DOE-EIS-FS-SA2) evaluated WRAP changes and verified NEPA documentation.	X	

Core Requirement 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Approach Review the pre-operational baseline assessment of environmental radioactivity levels to verify that measurable changes in radioactive levels can be determined.

Criteria 8.9 A system is in place and implemented to provide estimates of quantities and assess the integrated impact of releases of hazardous material on WRAP personnel, the public, and the environment.

Criteria 8.12 Equipment and resources for sampling and analysis of environmental media are in place to provide assurance that significant releases from WRAP are not occurring and radioactive or hazardous materials are not accumulating in the environment. Verify the data can be analyzed in a timely manner.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-EP-0885 WHC-SD-W026-TI-003 WHC-SD-W026-PLN-006				
1. Identify system to provide estimates and impacts of releases	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer	WHC-SD-W026-TI-003 provides the air emissions source term; the FEMP covers the sample monitoring plan, which combined with sample monitoring data provides the estimate of emitted quantities and population dose estimates.	X	
2. Determine methods in place for environmental monitoring	Paula Davis-Vedder, FDH Environmental Integration	cc:Mail (Ms. Davis-Vedder to C. Lewis) verifies that liquid releases do not require monitoring; FEMP covers method for air emissions monitoring	X	yn

Core Requirement 8.3

There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Approach Review all permits and studies, ensure no additional permits or studies are required. Ensure all permit requirements and actions have been completed or are captured within the compliance program.

Criteria 8.11 Environmental sampling programs are conducted to establish a baseline for radioactivity in the environment in the vicinity of WRAP for use as a basis of comparison in the event of an excursion involving the plant.

Criteria 8.15 WRAP's impact has been assessed by independent monitoring groups (well monitoring, site air monitoring, etc.) and appropriate actions have been taken to accommodate.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-6, chap. 7-5 WHC-CM-7-4 WHC-SD-WM-TI-788				
1. Review monitoring requirements	Harlan Boynton, WRAP ECO Chris Lewis, WRAP Cognizant Engineer			
2. Interview on Near Field Monitoring group	John Dorian, RUST Near Field Monitoring	WHC-SD-WM-TI-788 was developed for Solid Waste. This includes WRAP and must be issued to complete this criterion.		X
3. Verify routine and annual monitoring plans are in place	Ron Mitchell, RUST Near Field Monitoring	Routine Operational Monitoring program will cover WRAP monitoring. This is sitewide funded and managed.	X	

Core Requirement 8.4 There is an adequate Fire Protection Program.

Criteria 1 The Hanford Fire Department (HFD) is cognizant of WRAP's needs and have taken appropriate actions to meet.

Approach 6 Interview the Fire Department to ensure they are cognizant of WRAP's needs and have taken all appropriate actions.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, Sec. 1.3 FIRE PROTECTION 29 CFR 1910 (OSHA), ANSI 535.1-5, SUBPART L				
1. Is the HFD aware of the special hazards at WRAP?	Pre Fire Plan for Building	The Pre Fire Plan located at the HFD and in the facility does identify special hazards anticipated to be present in the WRAP 1 facility.	XXX	
29CFR1910.156(c)(4)	Person Contacted: Pat McKenna Kay Humphreys			
2. Is special equipment required to fight fire at WRAP facility identified and available?	Pre Fire Plan for Building	Pre Fire Plans identified special hazards that might be present in the building.	XXX	
29CFR1910.156(d)	Person Contacted: Pat McKenna			
3. Is HFD response within 5 minutes of an alarm?	Observed a fire alarm evacuation of the facility on Monday, 11 Nov. 96. HFD response required 8 minutes from the time of the alarm to arrive at the facility.	Finding: The FHA does not accurately reflect the required time for HFD to respond to a fire alarm from the WRAP facility. Revise the FHA to reflect the time required for HFD response.		XXX
WRAP 1 FHA Para 4.01.1.	Personal Observation			

Core Requirement 8.4 There is an adequate Fire Protection Program.

Criteria 2 Administrative procedures are established to control specific fire hazards.

Approach 1 Identify and review procedures related to fire protection. Verify that procedures are in place for combustible and flammable materials, hot work including cutting and welding, smoking, and fire protection system impairments. Inspect existing conditions to determine implementation of the identified procedures.

SUBJECT/ACTIVITY REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, Sec. 1.3 FIRE PROTECTION 29 CFR 1910 (OSHA), ANSI 535.1-5, SUBPART E				
1. Are documented housekeeping inspections performed monthly to ensure equipment and materials are maintained in an orderly arrangement at all times?	"Daily Surveillance Person contacted: Tom Orgill		XXX	
WHC-CM-5-34, Section 1.3, Para 5.1.3(5.6)				
2. How is the 18" minimum clearance between the top of storage frames and sprinkler heads maintained?	Physical walkdown of the area. Person contacted: Tom Orgill	High ceilings and fixed storage racks ensure that storage items will not interfere with sprinkler heads.	XXX	
WHC-CM-5-34, Section 1.3, Para 5.1.3(5.6)				
3. How are combustible materials limited in quantity to current needs?				
WHC-CM-5-34, Section 1.3, Para 5.1.3(5.6)	Person contacted: Tom Orgill	Inventory sheets are being established for each cabinet and Work Packages reviews will ensure excess quantities of combustible materials are not procured. Additionally, to reduce inventories of combustible materials, the plant is standardizing the materials required for maintenance.	XXX	
4. Are combustible materials separated from ignition sources?				
WHC-CM-5-34, Section 1.3, Para 5.1.3(5.6)	Person contacted: Tom Orgill	Combustible materials are kept in separate cabinets from those containing ignition sources.	XXX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
5. Are all wood products utilized (except ladders and scaffolding) pressure treated with UL Listed fire retardant material? WHC-CM-5-34, Section 1.3, Para 5.1.3(5.6)	Person contacted: Tom Orgill	Wood products are not generally utilized within WRAP 1. Items that are crated and/or palletized will have the wood products removed from the building as soon as practical.	XXX	
6. Are non-combustible materials used whenever possible? WHC-CM-5-34, Section 1.3, Para 5.1.3(5.6)	Person contacted: Tom Orgill	Yes	XXX	
7. Are portable heaters UL Listed? WHC-CM-5-34, Section 1.3, Para 5.1.3(5.2)	Person contacted: Tom Orgill	No portable heaters are not required.	XXX	
8. Is the Fire Marshall consulted regarding the size and spacing of portable heaters prior to procurement? WHC-CM-5-34, Section 1.3, Para 5.1.3(5.2)	Person contacted: Tom Orgill	No heaters have been procured. Any requirements for portable heaters will have Fire Marshall/FPPOC input prior to procurement.	XXX	
9. Are procedures in place to insure hotwork is conducted in a safe manner? WHC-CM-5-34, Section 1.3, Para 5.1.3(	Person contacted: Tom Orgill	Use of the Hot Work Permit insures safe work practices are utilized.	XXX	

Core Requirement 8.4 There is an adequate Fire Protection Program.

Criteria 3 All facility fire hazards are identified and evaluated on a continuing basis. A Fire Hazards Analysis is documented and complete.

Approach 2 Review the Fire Hazards Analysis to determine that all facility areas and fire hazards are included. Determine that operating parameters were considered, including unusual operations, ventilation requirements, maintenance activities, and radiation control parameters.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, Sec. 1.3 FIRE PROTECTION 29 CFR 1910 (OSHA), ANSI 535.1-5, SUBPART L				
1. Is the description of the building construction in the FHA accurate and complete?	Person contacted: Larry Anderlini	Page nineteen (19) missing from document. Sub-paragraphs e and f appear to be missing.		XXX
WHC-CM-5-34, Sec 1.3, Para 5.2 2. Is essential safety class equipment identified in the FHA?		Paragraph 4.0 B states that "there are no safety class systems..."	XXX	
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini			

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3. Are fire protection features of the facility fully identified in the FHA? WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini Kay Humphrys	--Paragraph 4.0.C.1.a states that the design density of the sprinkler system in the Shipping and Receiving Areas is .38 gpm/sq ft. Actual design density is at .25 gpm/sq ft per sprinkler design drawings submitted by the contractor. --Paragraph 4.0.C.1.b indicates that other areas of the plant were designed per direction of the SDRD, referencing Specification Section 15300. The final design density should be referenced. --Paragraph 4.0.C.5 is incorrect in the description of the dry pipe system. The dry pipe sprinkler system is a stand alone system is not "fed by the building wet pipe system". --The covered porch area is not addressed in the FHA, however, this area could impact the remainder of the building. --Paragraph 4.0.C.6 indicates there are automatic detectors, but does not indicate the type of detector and therefore does not provide the level of protection provided. --Paragraph 4.0.C.8.a indicates that there is a "VESDA" air sampling system in the Control Room, but does not indicate the level of protection provided. The various alarm points should be discussed.		XXX
4. Are fire hazards within the facility identified in the FHA? WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini	--Paragraph 4.0.D.1.b contradicts paragraph 4.0.D.5.d--are drums vented or sealed?? --Paragraph 4.0.1.b: What controls are available to limit pyrophorics brought into the facility? --Paragraph 4.0.E.5.c: Could not verify that NEC Class 1 Div 1 was used as described.		XXX

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
5. Are life safety considerations fully identified in the FHA? WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini	Egress routes (i.e. stairs, corridors, ramps, elevators, etc.) are not adequately discussed in the FHA. Appendix C provides a list of codes applicable to the facility, however there is no discussion of which features are provided.		XXX
6. Is critical process equipment fully identified in the FHA?		Discussion of Critical Process Equipment is not in depth. The critical process equipment should be re-evaluated.		XXX
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini		XXX	
7. Is high value property identified in the FHA?				
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini			XXX
8. Is the estimated Maximum Foreseeable Loss (MFL) evaluated in the FHA?		The Maximum Possible Fire Loss (MPFL) was utilized in the initial FHA. The current S/RID utilized the MFL which allows credit for HFD response in the evaluation.		XXX
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini			XXX
9. Is fire department response properly identified in the FHA?		Based on actual alarm response, the HFD requires 8-10 minutes to respond to an emergency call. This is nearly double the time taken credit for in the FHA.		XXX
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini		XXX	
10. Is the recovery potential properly evaluated in the FHA?				
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini			XXX
11. Is the potential for a toxic, biological and/or radiological incident due to fire evaluated in the FHA?				
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini		XXX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
12. Has emergency planning been identified in the FHA?		Procedures for emergency planning should be referenced in paragraph 4.0 K. At the time the FHA was developed, there were no emergency plans developed.		XXX
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini			
13. Have security considerations related to fire protection been identified in the FHA?		Paragraph 4.0 L does not address off-shift access to the facility.		XXX
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini			
14. Have natural hazards (earthquake, flood, wind) been evaluated for their impact on fire in the facility?		Paragraph 4.0 M does not discuss earthquake protection for the fire sprinkler systems.		XXX
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini			
15. Have exposure fire potential been evaluated in the FHA?		Paragraph 4.0 N does not discuss range fires, which is the most probable condition to occur.		XXX
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini			
16. Are any outstanding requests to D.O.E. which were taken credit for in the FHA?		Appendix F to the FHA requested for deviation of RLIP 5480.7 paragraph 7a and 6430.1A, Section 0111-99.0.1 and 1161-2. There is no documentation that these requests were approved by D.O.E.		XXX
WHC-CM-5-34, Sec 1.3, Para 5.2	Person contacted: Larry Anderlini			
17. Is the FHA available in Document Control as a Controlled Document?		The FHA that was developed as part of the initial design documents and has not been entered into Document Control as a facility safety document.		XXX
	Person contacted: Larry Anderlini			

Core Requirement 8.4 There is an adequate Fire Protection Program.

Criteria 4 Requirements of NFPA and Life Safety Code are specified, implemented, and maintained.

Approach 5 Inspect the facility to observe existing conditions for compliance to fire protection requirements, such as: 1) Proper portable fire extinguishers are mounted, marked and operable. 2) Activities site access is clear and unobstructed for emergency vehicle response. 3) Fire hydrants are accessible. 4) Exits are arranged and maintained to provide free unobstructed egress from the facility. 5) Exit routes are clearly marked and illuminated where required. 6) Emergency lighting is provided and operable where required. 7) Proper storage of radioactive, flammable and combustible material.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, Sec. 1.3 FIRE PROTECTION 29 CFR 1910 (OSHA), ANSI 535.1-5, SUBPART E & L				
1. Is a written emergency action plan covering designated actions to be taken to ensure employee safety from fire and other emergencies available to all employees. 29 CFR 1910.138 (a)(1)	WHC-IP 0263-WRP1, "Building Emergency Plan for the Wrap 1 Facility Complex". Person Contacted: Scott Anderson Judy Kersten	Document last revised 6/26/96 indicating periodic review of the procedures contained therein.	XXX	
2. Is documentation available to demonstrate that a review of emergency actions for each employee was made upon initial assignment to the facility.?	Facility Orientation Course No. 306750 Person contacted: Tom Orgill		XXX	
29 CFR 1910.138 (b)(4)(ii)/WHC-CM-5-34, Section 1.3, Para 3.3				
3. Are Fire Area separations, i.e. fire barriers, of at least one-hour resistance rating?	Drawing No. H-2-818276 Person contacted: Kay Humphrys		XXX	
29 CFR 1910.37(b)(1)/FHA Para 2.0 E.1.b.				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
4. Are the exterior way of the exit access protected from potential obstructions due to weather and/or are procedures in place to insure the exit access is maintained clear? 29 CFR 1910.37(g)(3)	Walkdown Person contacted: Tom Orgill	Exits on the West side of the building have no protection and are not commonly utilized. To meet the intent of this requirement, procedures should be developed to surveil the exits at least daily to verify no obstructions, such as snow and ice and/or tumbleweeds, exist.		XXX
5. Are there any changes in elevation which create a tripping hazard in the path of egress? 29 CFR 1910.37(j)/NEPA 101	Walkdown Person contacted: Kay Humphrys Scott Anderson		XXX	
6. Are procedures in place to continuously maintain the automatic sprinkler system in a reliable condition at all times? 29 CFR 1910.37(m)	Memorandum of Understanding with HFD Person contacted: Kay Humphrys Tom Orgill Pat McKenna		XXX	
7. Is there documentation available to verify at least the last two (2) periodic maintenance inspections for the automatic fire suppression and detection systems. 29 CFR 1910.37(m) & (n)/WHC-CM-5-34, Section 1.3, Para 5.1.2	Person contacted: Scott Anderson Tom Orgill	The plant has not been in operation long enough for historical records to be maintained. Records will be kept by Operations personnel.	XXX	
8. Are emergency action plans in place that address emergencies that may reasonably be expected, such as toxic chemical releases, floods, fires, etc.? 29 CFR 1910.38	Reviewed WCH-IP 12137, Section 1.3, "Building Emergency Guide for Wrap 1". Persons Contacted: Scott Anderson Judy Kersten	Scott Anderson had no hesitation in locating the Guide.	XXX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
9. Following an evacuation of the facility, was the plant able to account for or otherwise verify that all employees were in a safe area? 29 CFR 1910, Subpt E, App.	Observation	Observed both the emergency preparedness drill and the actual fire alarm that sounded on Monday, 11 Nov 96.	XXX	
10. Is there evidence that fire extinguishers are maintained fully charged and in operable condition and kept in their designated places at all times? 29 CFR 1910.157(c)(4)/WHC-CM-5-34, Section 1.3, Para 5.1.3 (4.2)	Document No. WRP1-SV-1703, "Inspection of Safety/Emergency Response Equipment" Walkdown Person contacted: Kay Humphrys	Tags on extinguishers were current as evidenced by tags on extinguishers being initialed and dated.	XXX	
11. Are fire barriers clearly identified (using red lettering that is at least 2" high on white background)? WHC-CM-5-34, Section 1.3, Para 5.1.3 (4.2)	Walkdown Person contacted: Scott Anderson Kay Humphrys	The plant was unaware of this requirement--fire barriers will be labeled.		XXX
12. Are fire doors and smoke dampers identified and numbered? WHC-CM-5-34, Section 1.3, Para 5.1.3 (6.5)	Walkdown Person contacted: Kay Humphrys		XXX	
13. Are drawings available that show the location of all fire barriers for each building provided with fire barriers? WHC-CM-5-34, Section 1.3, Para 5.1.3 (6.5)	Drawing No. H-2-818276 Person contacted: Kay Humphrys		XXX	
14. Are procedures in place the and documents available that demonstrate that emergency lights are operationally tested at least monthly? WHC-CM-5-34, Section 1.3, Para 5.1.3 (6.4)	WRP1-PM1-1603, "Emergency Light Inspection and Testing". Person contacted: Kay Humphrys		XXX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
15. Are procedures in place that minimize the exposure of radioactive, flammable and combustible material? WHC-CM-5-34, Section 1.3, Para 5.1.3 (5.6)				
16. Are exit stairways enclosed by fire barriers of at least 1 hour fire rating? NFPA 101, Para 5	Drawing No. H-2-818276 Person contacted: Kay Humphrys		XXX	

Core Requirement 8.4 There is an adequate Fire Protection Program.

Criteria 5 Fire protection systems and equipment are available as specified in fire protection program documents.

Approach 4 Verify that construction has implemented the Fire Protection requirements identified in Construction specifications through design and installation.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, Sec. 1.3 FIRE PROTECTION 29 CFR 1910 (OSHA), ANSI 535.1-5, SUBPART L			XXX	
1. Portable extinguishers shall be visually inspected monthly. 29 CFR 1910.157(e)(2)	Walkdown WRP1-SV-1703, "Inspection of Safety/ Emergency Response Equipment" Person contacted: Kay Humphrys		XXX	
2. The employer shall assure that portable fire extinguisher are subjected to an annual maintenance check. 29 CFR 1910.157(e)(3)	Memorandum of Understanding with HFD Person contacted: Kay Humphrys		XXX	
3. The employer shall assure that stored dry chemical extinguishers that require a 12-year hydrostatic test are emptied and subjected to applicable maintenance procedures every 6 years. 29 CFR 1910(e)(4) WHC-CM-5-34, Section 1.3, Para 5.1.3 (4.2)	Memorandum of Understanding with HFD Person contacted: Kay Humphrys Pat McKenna		XXX	
4. The employer shall assure that standpipes are located or otherwise protected against damage. 29 CFR 1910.157(b)	Walkdown Person contacted: Kay Humphrys		XXX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
5. The employer shall conduct proper acceptance tests on all automatic sprinkler systems, including but not limited to: 1) flushing of underground connections; 2) Hydrostatic tests of the piping system; 3) Air tests in dry-pipe systems; 4) Dry-pipe valve operation; 5) Test of drainage facilities. 29 CFR 1910.159(c)(3)	Acceptance Test Procedure (ATP) W-026 Person contacted: Kay Humphrys	1) Could not locate documentation that the dry pipe sprinkler system was pneumatically tested following installation of air compressor. 2) Could not locate documentation that the high pressure alarm switch on the dry pipe sprinkler system was tested following termination to the fire alarm system.		XXX
6. The employer shall properly maintain automatic sprinkler systems IAW NFPA 13. 29 CFR 1910.159(c)(2) WHC-CM-5-34, Section 1.3, Para 5.1.3 (4.2)	Memorandum of Understanding with HFD Person contacted: Kay Humphrys Pat McKenna		XXX	
7. The employer shall assure that all devices and equipment installed in the facility are approved for the purpose for which they are intended. 29 CFR 1910.164(b)(1)	Person contacted: Kay Humphrys Larry Anderlini Scott Anderson	Project specifications required that all devices and equipment in the facility be approved for the purpose for which they were intended.	XXX	
8. The employer shall maintain all alarm and detection systems in an operable condition. 29 CFR 1910.164(c)(1) WHC-CM-5-34, Section 1.3, Para 5.1.3 (4.2)	Memorandum of Understanding with HFD Person contacted: Kay Humphrys Pat McKenna		XXX	
9. The employer shall assure that the servicing, maintenance and testing of fire detection systems are performed by trained personnel. 29 CFR 1910.164(c)(4) WHC-CM-5-34, Section 1.3, Para 5.1.3 (4.2)	Memorandum of Understanding with HFD Person contacted: Kay Humphrys Pat McKenna		XXX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
10. All modifications or additions that affect new or existing fire barriers shall be reviewed and approved by the fire protection point of contact (EPPOC) in the "aligned" safety group.	Person contacted: Kay Humphrys Tom Orgill	Could find no evidence that work packages are being reviewed to insure fire barriers are not breached.		XXX
WHC-CM-5-34, Section 1.3, Para 5.1.3 (6.5)				
11. Fire doors and fire and smoke dampers shall be identified and numbered.	Walkdown		XXX	
WHC-CM-5-34, Section 1.3, Para 5.1.3 (6.5)	Person contacted: Kay Humphrys			
12. Drawings that show the location of all fire barriers shall be prepared for each building provided with fire barriers.	Drawing No. H-2-818276		XXX	
WHC-CM-5-34, Section 1.3, Para 5.1.3 (6.5)	Person contacted: Kay Humphrys			
13. Fire dampers shall be inspected and tested every 2 years per NFPA 90A, App B.	WRP1-PMI-1001		XXX	
WHC-CM-5-34, Section 1.3, Para 5.1.3 (4.2)	Person contacted: Kay Humphrys			
14. Fire and smoke barriers shall be inspected every 2 years to ensure that they are capable of providing the necessary control of smoke or fire.	Person contacted: Kay Humphrys	Could not locate evidence that fire barriers are scheduled to be inspected every two (2) years.		XXX
WHC-CM-5-34, Section 1.3, Para 5.1.3 (4.2)				
15. Fire doors shall be inspected and maintained every 6 months.	WRP1-PMI-1002, "Coiling Fire Rated Doors and Shutters"	Could not locate evidence that fire rated swinging doors are scheduled for maintenance at least every 6 months.		XXX
WHC-CM-5-34, Section 1.3, Para 5.1.3 (4.2)	Person contacted: Kay Humphrys			

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
16. Gauges on automatic fire sprinkler systems shall be checked weekly/monthly.	WRP1-SV-1703, "Inspection of Safety/Emergency Response Equipment" Person contacted: Kay Humphrys		XXX	

Core Requirement 8.4 There is an adequate Fire Protection Program.

Criteria 6 A pre-fire plan is in place and it reflects the current conditions in the facility.

Approach 7 Ensure a Pre-Fire Plan is in place which adequately encompasses the facility.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-534, Sec. 1.3 FIRE PROTECTION 29 CFR 1910 (OSHA), ANSI 535.1-5, SUBPART L				
1. It is suggested that pre-fire planning be conducted by local fire department...in order for them to be familiar with the work place and processing hazards	Rapid Response Action Plans (Pre-Fire Plans) have been developed for all buildings in the facility. Person contacted: Pat McKenna		XXX	
29 CFR 1910.156 (2)				
2. Develop and maintain pre-fire plans for all facilities.	Rapid Response Action Plans (Pre-Fire Plans) have been developed for all buildings in the facility. Person contacted: Pat McKenna		XXX	
RLID 5480.7 (1/17/94), para 6.3.h				

Core Requirement 8.4 There is an adequate Fire Protection Program.

Criteria 7 A qualified cognizant individual is identified as the single point of contact for WRAP's fire systems and fire protection program.

Approach 3 Review the fire protection program and assure the requirements for periodic review are identified. Review work control procedures to confirm the requirement for Independent Safety review (fire protection) in the modification approval cycle. Interview engineering and Safety personnel to determine the level of understanding of the review process.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, Sec. 1.3 FIRE PROTECTION 29 CFR 1910 (OSHA), ANSI 535.1-5, SUBPART L				
1. Is the fire protection cognizant engineer identified for the facility?	Person contacted: Kay Humphrys Larry Anderlini	Kay Humphrys is identified as the cognizant engineer for fire protection systems at the facility.	XXX	
2. Is the Fire Protection Point of Contact (FPPOC) within the Solid Waste identified?	Person contacted: Kay Humphrys Larry Anderlini	Larry Anderlini is identified as the FPPOC within Solid Waste for the facility.	XXX	

Core Requirement 8.4 There is an adequate Fire Protection Program.**Criteria 8** Procedures/policies provide for appropriate notifications of fire protection system outages.

Approach 1 Identify and review procedures related to fire protection. Verify that procedures are in place for combustible and flammable materials, hot work including cutting and welding, smoking, and fire protection system impairments. Inspect existing conditions to determine implementation of the identified procedures.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, Sec. 1.3 FIRE PROTECTION 29 CFR 1910 (OSHA), ANSI 535.1-5, SUBPART L				
1. Are procedures in place to immediately notify the HFD and the FPPOC of any discrepancy that restricts and/or renders any fire alarm or fire suppression system inoperable?	Person contacted: Scott Anderson Tom Orgill	The fire suppression systems are monitored by the fire alarm system, which is a supervised system. In the event of either an alarm or a trouble condition in the system, the signal is automatically sent to the HFD.	XXX	
WHC-CM-5-34, Section 1.3, Para 5.1.3(4.3)				
2. Are procedures in place to surveil the fire alarm control panel at least once each shift in the event that a trouble condition exists?	Person contacted: Tom Orgill	This has not been previously identified to Operations--a revision to WRP1-SV-1601 will be made to include statusing the fire alarm control panel daily whenever there is a "TROUBLE" condition on the panel and recording the status.		XXX
WHC-CM-5-34, Section 1.3, Para 5.1.3(4.3) NFPA 72, Para 7				

Core Requirement 8.4 There is an adequate Fire Protection Program.**Criteria 10** Fire emergency procedures are established and implemented.

Approach 1 Identify and review procedures related to fire protection. Verify that procedures are in place for combustible and flammable materials, hot work including cutting and welding, smoking, and fire protection system impairments. Inspect existing conditions to determine implementation of the identified procedures.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, Sec. 1.3 FIRE PROTECTION 29 CFR 1910 (OSHA), ANSI 535.1-5, SUBPART E				
1. Does the Emergency Action Plan identify emergency escape procedures and emergency escape route assignments.	WHC-IP-0263-WRP1, "Building Emergency Plan"		XXX	
29 CFR 1910.38(a)(2)(ii)	Person contacted: Tom Orgill			
2. Does the Emergency Action Plan identify procedures to be followed by employees who remain to operate critical plant operations before the evacuate?	WHC-IP-0263-WRP1, "Building Emergency Plan"		XXX	
29 CFR 1910.38(a)(2)(iii)	Person contacted: Tom Orgill			
3. Does the Emergency Action Plan identify procedures to account for all employees after emergency evacuation has been completed?	WHC-IP-0263-WRP1, "Building Emergency Plan"		XXX	
29 CFR 1910.38(a)(2)(iii)	Person contacted: Tom Orgill			
4. Does the Emergency Action Plan identify rescue and medical duties for those employees who are to perform them?	WHC-IP-0263-WRP1, "Building Emergency Plan"		XXX	
29 CFR 1910.38(a)(2)(iv)	Person contacted: Tom Orgill			

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
5. Does the Emergency Action Plan identify the preferred means of reporting fires and other emergencies? 29 CFR 1910.38(a)(2)(v)	WHC-IP-0263-WRP1, "Building Emergency Plan" Person contacted: Tom Orgill		XXX	
6. Does the Emergency Action Plan identify names or regular job titles of persons or department who can be contacted for further information or explanation of duties under the plan? 29 CFR 1910.38(a)(2)(vi)	WHC-IP-0263-WRP1, "Building Emergency Plan" Person contacted: Tom Orgill		XXX	

Core Requirement 8.4 There is an adequate Fire Protection Program.

Criteria 11 Means of controlling liquid run-offs from a credible fire are provided so that contaminated (including non-radiological contaminants) liquids, including potentially contaminated water resulting from fire fighting operations, will not escape to the environment.

Approach 4 Verify that construction has implemented the Fire Protection requirements identified in Construction specifications through design and installation.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34, Sec. 1.3 FIRE PROTECTION UNIFORM BUILDING CODE (UBC), ARTICLE 307.2.4.1				
1. Drains shall be designed to handle the maximum worst-case spill from the single largest container plus the volume of fire protection water from the system over the minimum design area for a period of 20 minutes.	Project W-026 Wrap Module 1 Detailed Design Report, Page 7. Person contacted: Larry Anderlini Kay Humphrys	Calculations to support statements made in Detailed Design Report were not available at the facility.		XXX
UBC Article 307.2.4.1				
2. Any liquid effluents resulting from a discharge of the building fire water suppression system would be pumped to portable transfer containers. The liquid would be sampled and directed to an appropriate on-site storage or disposal unit.	Person contacted: Larry Anderlini Kay Humphrys	Calculations to support statements made in Detailed Design Report were not available at the facility.		XXX
DOE/RLID 5480.7				
3. Assessments shall include an evaluation of the water runoff.		The Plant has not been in operation for 1 year and therefore no assessments have been made.	XXX	
WHC-CM-5-34, Section 1.3, Para 5.3	Person contacted: Larry Anderlini			

Core Requirement 8.5 MAINTENANCE: There is an adequate maintenance organization, program, and work control system.

Approach Policy and procedure reviews, task observations, personnel interviews, field tours, etc.

Criteria *Maintenance Management Plan *Organization and administration *Maintenance Program Elements *Technical Support *Work Control *System Status *Material Control *Inventory Management *Performance Assessment *Maintenance Rework *Maint. Facilities

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
1A. Maintenance Management Plan					
a. WRAP 1 has developed, implemented, and documented a program with a Maintenance Management Plan and/or a MIP.	Reviewed CM-5-34, Section 3.6, Operations Maintenance Requirements; Section 2.11, Work Management; WHC-IP-1120, SWD S/RID Interviewed: Manager (T. Orgill), Work Control Team Lead (M. Ibatuan)	WRAP 1 has not developed, approved, or implemented a consolidated Maintenance Management Plan, or Maintenance Implementation Plan (MIP). The facility states they are exempted by their S/RID. Present facility plan is based on 3.6/CM-5-34, and is inadequate. WRAP should prepare and issue a comprehensive Maint. Mngmnt. Plan that documents a facility approach to major program elements. DOE O 4330.4B is an excellent "good practice" standard to use for this program plan. The facility does cover some elements of a good program, but mostly through process guidance documents (like Work Management, Material Control).			X
b. The maintenance program is developed and implemented using a graded approach (depth/detail) based on cost/safety.	Reviewed CM-5-34, Sections 3.6 and 2.11, and IP-1120, Ch. 10, SWD S/RID (Maint.) Interviewed Manager (T. Orgill), Team Leader (M. Ibatuan), Maint. Person-in-Charge (PIC)(C. Johnson).	The facility is without an effective, comprehensive Maintenance Management Plan, or MIP, and therefor managers and personnel are hindered in describing current or targeted performance objectives for implementing policies, practices, and processes. A graded approach application is not documented, so level of detail/depth in the program elements is difficult to address (define).			X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
1B. Organization and Administration					
a. Responsibilities and authority for all levels of the maintenance organization is clearly defined and understood by maintenance personnel.	Reviewed CM-5-34, Section 3.5, Operations Organization and Administration, and Sections 3.6 Operations Maintenance Requirements, 2.11, Work Management. Interviewed Maintenance Craft, Maintenance Engineers (E. Allen, C. Warren), Work Control team members (M. Ibatuan, C. Stockard).	Overall responsibilities and authority for many major elements of the maintenance management program are not stated or well defined, and are only limited to those found in 3.6/CM-5-34, or where called out in process guidance documents. The facility would benefit by establishing these assignments and expectations in a management plan for Maintenance, then implementing thru position descriptions..		X	
b. Policies, goals, and objectives concerning the conduct of maintenance are formally established.	Reviewed CM-5-34, Sections 3.5, 3.6, 2.11, and IP-1120, SWD S/RID. Interviewed several employees in Maintenance and Maintenance Support roles (Work Control, Scheduling, Procedure Coordination).	WRAP I has not clearly established maintenance program objectives and goals in relationship to Plant Operations missions. There is no evidence of management developed group goals , or supporting indicators and measures (PI/PM) that can advertise progress, successes, or shortcomings. Craft and some leads/managers were at a loss to describe adequately. Use MIP to address.		X	
c. Maintenance personnel clearly understand their authority, responsibility, accountability, and interface with other groups.	Reviewed CM-5-34, all sections pertaining to maintenance elements. Interviewed Manager (T. Orgill), Lead (M. Ibatuan), Maint. Engineer (E. Allen), Procedure Coordinator (J. Kerston), Engr. Manager (J. Bottenus).	Some personnel interviewed indicated that their roles were " self-made", and that they were not certain of their performance expectations relative to assignments. Overlapping responsibilities made it unclear as to exact authority. None of the interviewed employees could produce a documented job/position description		X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
d. Maintenance staff and support personnel are qualified and available to adequately support operations.	Reviewed Craft training files, TMX Interviewed Manager (T. Orgill), Craft (R. Dohaniuk), Work Control Lead (M. Ibatuan), Craft P.I.C. (C. Johnson), Manager (J. Riddell).	Mandatory, special, and OJT training is provided and documented for all maintenance personnel. Support staff training is adequate, but could be improved by "required reading" or task checkout for positions such as procedure coordinator, work control clerk, etc. The plant needs to resolve the issue of support for a certified backflow preventer tester, or BAT. Also, the work control process is "stressed" in the area of Person-in-Charge (PIC) support. All maintenance engineers should be PIC qualified.	X (with comment)		
e. Effective implementation and control of maintenance activities are achieved by periodically observing and assessing performance.	Reviewed CM-5-34, all applicable sections, including Sect. 1.11 (Self-Assess.). Interviewed Manager (T. Orgill), WC Lead (M. Ibatuan), Maint. PIC (C. Johnson, C. Warren), craft (R. Dohaniuk, M. Althaus). Observed POD and POW meetings.	There appears to be adequate involvement by management, leads, and PICs' with regard to reviewing work processes, observing field activities, and making work area tours. However, the facility personnel involved in these activities do not adequately define or document these activities/results. The facility Self-Assessment program is weak in the area of addressing Maintenance Program elements.		X	
f. The maintenance program utilizes an effective feedback program, such as performance appraisals, safety meetings, and bulletins.	Observed 2 staff/safety meetings. Interviewed Managers (T. Orgill, J. Riddell), Work Control Lead (M. Ibatuan), PIC (C. Johnson).	Maintenance craft feel that feedback from management on facility and site issues is adequate. Staff and safety meetings, including agenda topics, are documented. Craft feel comfortable with the performance appraisal process and schedule. However, support staff do not have adequate job performance requirements to permit fair evaluations. The facility has not yet identified a Lessons-Learned coordinator or developed a plant LL Bulletin policy/process.	X (with comment)		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
g. Management conducts periodic inspections of equipment and facilities to assure sound plant condition.	Reviewed CM-5-34, all applicable sections. Interviewed Managers (T. Orgill, J. Riddell), PICs' (C. Warren, C. Johnson).	There is no evidence that the facility currently schedules or conducts periodic Facility Condition Inspections (OK, new facility). These inspections, when added to routine maintenance programs, are critical to mid-term and long-term planning and budgeting. The facility should prepare now to implement a facility condition inspection program after start-up. Take advantage of field observations and work area tours already being conducted by documenting activities/results on specific checklists.	N/A (with comment)		
h. Organization structure is established in a manner that best supports the needs of plant operations.	Reviewed facility organization charts. Interviewed Managers (T. Orgill, J. Riddell), Team Lead (M. Ibanan), Maintenance Engineers (E. Allen, C. Warren), PIC (C. Johnson)	The Maintenance "organization" is not integrated appropriately. Maintenance engineers (3), Work Control staff, and other maintenance support personnel, report to a separate management line from the maintenance craft personnel, creating less than optimum coordination and communication on "common" discipline issues. There is expressed concern from the affected staff. WRAP I should create a Maintenance Program Manager position, reporting to the Plant Manager, having control of Craft, Work Control, Planning, and Maintenance Engineering.		X	
1C. Maintenance Program Elements					

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FNDD
a. The facility preventive maintenance (PM) program contributes to maximum performance and reliability of systems and equipment important to operations.	Reviewed Master Equipment List (MEL), an Equipment Design Life Matrix Report for WRAP 1 (by UE&C), PM/Calibration Summary report, PM/Cal Recall (JCS/PMS), numerous PM procedures. Interviewed Manager (T. Orgill), Maintenance Engineer (E. Allen), Cog Engineers (K. Humphrey, R. Jordal), and Work Control Team Lead (M. Ibaruan).	The facility appears to implement an effective PM program, utilizing a mix of PM and Corr. Maint. (CM), or Run-to-Fail, with repair and spare parts techniques. Essential and Balance-of-plant equipment PM is based on analysis of manufacturer and vendor recommendation, and from research by the Maintenance Engineers. Much of the plant essential systems are of high design integrity, with redundant component support. While the overall philosophy and implementation of PM program at WRAP is sound, the philosophy and techniques are not declared or supported in a management plan. The MEL should include matrix info referring to declared maintenance action/technique for specific sys/comp. The only reference to WRAP intentions for R-T-F was found in an ORR Affidavit.	X (with comment)		
b. PM, such as lubrication, is performed at predetermined times or intervals to maximize equipment availability and to prevent breakdown.	Reviewed MEL, PM procedures, PM recall reports, and CM-5-34, Sect. 2.11, Work Management. Interviewed Maintenance Engineers (E. Allen, C. Warren), Cog. Engrs. (K. Humphrey, R. Jordal), and Work Control team personnel.	PM and calibration activities are appropriately identified, scheduled, and performed per periodicity defined in PMS data base. Note: PM procedures and recall information are still outstanding for the Maintenance Shop equipment (compressor, etc.), the WRAP facility glycol pumps (4), and the Switchgear breakers/accessories. Plant personnel are aware of these open actions.	X (with comment)		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
c. The PM Program consists of all systematically planned and scheduled actions performed for preventing equipment failure.	Reviewed above referenced documents. Interviewed numerous Maintenance and Maintenance Support personnel (see item above).	The PM program is well bounded by PM actions for equipment (essential and balance-of-plant) to support preventive and corrective maintenance. The PM program is managed in the WRAP 1 work control system (JCS/PMS). Overall philosophy for PM/CM (run-to-fail) needs to be expanded beyond definitions in CM-5-34, 3.6; use Management Plan.	X (with comment)		
d. The corrective maintenance (CM) program adequately addresses the repair of failed or inoperable equipment.	Reviewed CM-5-34, Sect. 2.11, and above referenced documents. Interviewed numerous Maintenance and Maintenance Support personnel (see above).	The CM program adequately addresses corrective activities through the work control system at WRAP 1. Expand on overall CM philosophy in a facility Maint. Management Plan.	X (with comment)		
e. Corrective maintenance activities are properly controlled, trended and managed.	Reviewed CM-5-34, sections 2.11, 3.6 Reviewed PKG. WI-96-00715-W (P4). Interviewed Work Control Team Lead (M. Ibatuan), PIC (C. Johnson), Maintenance Engineer (E. Allen)	The facility controls Corrective Maintenance (CM) work activities via the Work Control system defined in CM-5-34, 2.11. However, the facility has not developed effective indicators (CM Backlog, PM Overdue) that can measure and trend PM/CM ratio, and changing levels of work type. The only available corrective work package reviewed was actually a "modification". The facility has no budget for mod work, so it appears that modification work is being categorized incorrectly. As WRAP is a new facility, there is very little existing corrective maintenance, or modification work. This is an area that can be expanded on in a MIP.		X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
f. Adequate maintenance activities for plant systems, such as crane and rigging, cross-connect control, HEPA filters are planned, scheduled and performed.	Reviewed maintenance procedures for Crane and Rigging. Recall lists for backflow prevention devices, maint/test activities for HEPA filters (HVAC). Discussions with the Crane and Rigging central group (DYNCORP), the Site Water Purveyor (D. Rohl), and the Third Party Inspector-Pressure Vessels (J. Densley).	WRAP I has appropriately identified and scheduled (recall) maintenance and test activities for special facility systems/components. All backflow preventers (cross-connect control) are listed for annual test. OPEN action items: address certified tester (craft) for backflow preventers; change, then test/inspect SRV on the compressed air receiver; review site-wide procedures referenced for use on H&R (load testing, major inspections).		X (see comments)	
g. The facility utilizes an effective predictive maintenance (PdM) program to enhance the PM/CM program.	Review of CM-5-34, 2.11 and 3.6. Interviewed Work Control staff, Maintenance Engineers (E. Allen, C. Warren), and Manager (T. Orgill).	There is evidence that the WRAP facility does not intend to use Predictive Maintenance (PdM) within their PM program. However, the only reference to management's expectations for use of PdM is in a related ORR affidavit ("they won't use"). CM-5-34, 3.6, shows PdM as one of the three types of maintenance elements to be implemented. Clarify this position in a management plan (MIP), giving consideration to use in special applications.		X	
h. An adequate instrument calibration program is in place, supported by an established recall system and procedures. All required instruments are calibrated.	Reviewed CM-5-34, Sections 2.11, 3.6; CM-5-36, Ch. 4.2, Sect. QR 12.0, Control of Instruments. Reviewed facility JCS/PMs instrument calibration recall list, and other calibration procedures/data sheets. Interviewed Manager (T. Orgill), Maintenance Engineer (E. Allen), Work Control Lead (M. Ithuan), WC clerk (C. Stockard), Cog Engrs (R. Jordal, K. Humphrey).	All WRAP I facility calibration activities have been identified and are represented on the recall data base. Calibration activities are supported by applicable working-level procedures, facility specific and site-common. NOTE: site-common procedure inventory is not being managed in accordance with CM-3-5/12.5. Care should be taken to assure periodic review and proper change control. Site procedures used should be converted to facility inventory control.	X (see note)		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
i. Instrument calibration by accurate data sheets reflecting proper set points, tolerances, etc.	Reviewed random sample of Drum Conveyor Weight Scale and HVAC system/component instrument calibration procedures, and recall data base vs. procedure data sheets. Interviewed Maintenance Engr. (E. Allen), Work Control clerk (C. Stockard), and Cog Engrs (K. Humphrey, R. Jordal).	A random sampling of instrument calibration set-points, ranges, and tolerances for instrumentation indicated that they are accurate, and technically based on the plant design/operating criteria for the system, coupled with manufacturer data (accuracy, range).	X		
j. Instruments/equipment are labeled or tagged or otherwise controlled to indicate due date of next calibration.	Same as above.	Plant instrument calibration labeling is performed in accordance with procedures CM-5-34, 2.11 and CM-5-36, 4-2, QR 12.0. Next due dates are managed in the JCS/PMS data base for instrument calibrations. No deficiencies discovered.	X		
k. Measurement and Test Equipment (M&TE) calibrations are traceable to national standards.	Review of CM-5-34, Sect. 2.11 and 3.6; CM-5-36, Ch. 8-7, Section 803. Interviewed Instrument Tech. (M. Zilar), Maintenance Engr. (C. Warren), Work Control Lead (M. Batuan), Maint PIC (C. Johnson).	M&TE at WRAP is acceptably managed in accordance with facility and site procedures. A Notice of Discrepancy form is used for out of tolerance M&TE. No discrepancies noted.	X		
l. PM program elements, to include PM/CM ratio, are periodically reviewed.	Reviewed CM-5-34, Section 3.6. Interviewed Manager (T. Orgill), Work Control Lead (M. Batuan), Maintenance Engrs. (E. Allen, C. Warren).	Without a comprehensive Maintenance Management Plan, facility management cannot demonstrate that effective periodic program reviews occur or are planned. Work control process reports are available for some of this activity. There are no clear program element baseline criteria identified by the facility to use in these reviews, nor is there a policy for documenting periodic reviews. Policy and criteria for periodic program element reviews should be defined in a MIP.		X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
m. The maintenance organization utilizes an effective self-assessment program to continually evaluate performance to standards and areas for improvement. The self-assessment program is documented, and well supported by management.	Reviewed CM-5-34, Sect. 1.11, 2.11, and 3.6. Interviewed Manager (T. Orgill), Work Control Lead (M. Ibatuan), Manager (J. Riddell), Maint. Engr. (E. Allen).	The existing facility Self-Assessment Program (1.11) does not effectively address the maintenance program. Self-Assessment of Maintenance should be defined in the Maintenance Management Plan, or MIP, and then implemented via an expanded program in 1.11/CM-5-34. There are some activities presently performed by the plant that can be credited to this program.		X	
n. WRAP has established and implemented an effective Cold Weather Protection (CWP) program. A facility CWP plan is in place, and is reviewed periodically for improvement. CWP activities are comprehensive, well planned, conducted appropriately and on schedule.	Reviewed WHC-CM-8-7, Section 220, and CM-5-34, Sect. 3.6. Interviewed Manager (T. Orgill), and Work Control Lead (M. Ibatuan).	The WRAP facility had not developed or implemented a Cold Weather Protection (CWP) program, nor had they initiated CWP activities for the facilities; upon the arrival of the ORR team. This was previously documented by report from FDH ConOps to DOE on Nov. 1, 1996. The facility could not produce CWP plans, procedures, or checklists when requested. Upon inquiry, WRAP management began some CWP actions.			X
o. The facility CWP program provides for on-going/frequent surveillances during the CWP period to assure methods are stable.	See above item.	See above item description.			X
2. Technical Support					
a. The maintenance program is adequately supported by Engineering, Health Physics, and other plant functions.	Reviewed CM-5-34, Sections 2.11, 3.6. Interviewed Managers (T. Orgill, J. Riddell), Maint. Engrs. (E. Allen, C. Warren).	While sometimes not clearly defined in maintenance plans or process guidance documents, the WRAP maintenance program appears to be adequately supported by other technical support groups such as Safety (ES&H), Engineering, and Operations Support.	X (with comment)		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
b. Adequate resources are provided to perform system and equipment failure analysis.	Reviewed CM-5-34, Sections 2.11, 3.6. Interviewed Maintenance Engrs. (E. Allen and C. Warren), Cog. Engr. (R. Jordal), Craft (R. Dolanluk).	The WRAP 1 facility has well qualified and talented Maintenance Engineers that are technically knowledgeable of systems/components. Cognizant Engineers are capable of supporting troubleshooting or failure analysis activities. WRAP should consider providing and documenting Root Cause Analysis training for an appropriate number of Maint. Engrs.	X (with comment)		
c. Outside forces (Engineering/Craft) are adequately controlled when working on plant systems and equipment.	Reviewed CM-5-34, 2.11. Attended Plan-of-Day (3) and Plan-of-Week meetings to observe process. Interviewed numerous Work Control personnel and PIC (C. Johnson).	The WRAP 1 work control process applies appropriate control over work activities provided by outside forces (Construction, Maint. Support). These activities are formally released through Operations, and interfaces are reviewed during P-O-D & P-O-W meetings.	X		
3. Work Control/Work Management					
a. An accurate and complete master equipment list (MEL) is available.	Reviewed Master Equipment List (MEL)(Component Index) provided by WRAP Engineering.	The MEL appears to be a draft, and is not comprehensive. This MEL could be expanded to show other data related to each component (i.e.: pm procedures, cm/post-maint test requirements, assoc. spares/spare parts). It is only adequate for use by work control to properly identify component to work package. Continue to expand for comprehensive data base.	X		
b. The organization provides time and emphasis for long-range planning.	Reviewed WRAP Basis of Estimate, & FY Work Plan; looked at various schedules and planning reports provided by Work Control. Interviewed WC Team Lead (M. Ibatuan).	Weekly and monthly PM/CM reports are developed. The Team Lead for WC reported that the plant maintenance and planning reports are evolving, with intent to prepare, review, and issue annual forecast and resource loaded schedules. Use MIP to support these plans.	X (with comment)		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
c. The work control process provides for equipment deficiency identification, prioritization, corrective action tracking, and equipment history.	Reviewed CM-5-34, section 2.11. Interviewed WC Team Lead (M. Ibatuan).	The facility Work Control process is adequately developed and implemented for work identification, planning, performance, tracking, and close-out. Note: the process document (2.11) needs a table of contents (TOC). The 2.11 document is lacking with respect to work prioritization.		X	
d. There is a formal work authorization process assuring operations release.	Reviewed CM-5-34, 2.11. Interviewed WC Team Lead (M. Ibatuan).	The operations release of work is well defined in 2.11. There is evidence, validated by the WC Lead, that infrequent violations of release occur by maintenance personnel for multi-shift/day work activities, especially when using "general scope" work packages. On occasion, work packages have not been returned to the work control center prior to end of shift, and work is continued the following day. This must be rectified by policy clarification and enforcement.			X
e. The work control system provides management with a means for determining the status of outstanding work orders and maintenance planning.	Reviewed CM-5-34, 2.11. Interviewed WC Team Lead (M. Ibatuan), PIC (C. Johnson). Observed activities at POD/POW meetings.	The WRAP 1 work control process provides for development of reports that accurately status maintenance work. Work package status is discussed at all daily and weekly planning meetings.	X		
f. Maintenance backlog is monitored to help ensure that important jobs are not being unnecessarily delayed and control is being maintained over the amount of work in the backlog.	Reviewed CM-5-34, Sect. 2.11. Interviewed WC personnel.	The work control process supports development of reports that aid backlog management. At the POD/POW meetings, management was observed discussing backlog issues/concerns with plant representatives from other functions. The WC Team Lead is developing improved reports to facilitate this communication and emphasis.	X		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
g. The maintenance manager approves delays of maintenance activities exceeding grace period. Exceptions are reported to facility management.	Reviewed CM-5-34, 2.11. Interviewed the WC team Lead (M. Ibatuan).	Maintenance activities that are delayed for any reason are brought to the attention of the Manager, Operations and Maintenance, or his representative, during frequent planning meetings. Note: process needs to be enhanced to provide for documentation of actions/reasons.	X (with comment)		
h. The work control process describes the definition of priorities used to schedule work.	Reviewed CM-5-34, 2.11, 3.6. Interviewed WC Team Leader (M. Ibatuan).	The work control process does not adequately identify a prioritization system, based on risk, safety, or plant reliability, that can be used to schedule work. Priority was not discussed at the PODs' when lining up work order or preference. Work activity was rearranged with no reference to priority.		X	
i. An adequate screening process is established to define work activities requiring planning versus activities not requiring planning.	Reviewed CM-3-5, 2.11. Interviewed WC Team Leader (M. Ibatuan).	Section 2.11 discusses the screening process for the purpose of determining when work should be planned or unplanned. This process guidance refers to the "old 1-3" work as a category of work not requiring planning. Missing is clear and concise criteria for segregating this work activity. The people at WRAP involved in planning work, or involved in screening, admitted that this is a vague area. The management philosophy has vacillated on this issue a number of times, according to workers.			X
j. The planning process includes procurement of necessary repair parts, materials, tools, and equipment.	Reviewed CM-5-34, Section 3.1, Material Control, and Sections 2.11, 3.6. Interviewed Material Control Spec. (P. Gotterbarm), Maintenance Engr. (E. Allen).	The material coordination phase of planning work needs to be integrated into the process guidance document, 2.11. Material, tools, spare parts, etc., are being identified and obtained for planned work by the material coordinator.		X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
k. An adequate hazards identification process occurs prior to each work activity.	Reviewed CM-5-34, 2.11, 3.6. Observed Pre-job safety meetings (2). Interviewed Maintenance Engrs. (E. Allen), Maint. PIC (C. Johnson), Manager (T. Orgill).	The WRAP work control process discusses hazards identification in the screening process, to be performed by the WCC/Validator. There is not enough criteria presented for this decision process, which eventually determines the depth of planning required. Eventually, the facility will implement the automated Enhanced Work Planning (EWP) process, that will aid in up-front hazards risk assessment. Until then, create finite criteria for hazards I.D. within the work control process document.		X	
l. Effective pre-job briefing and planning is accomplished and involves affected craft.	Reviewed CM-5-34, 2.11, 3.6. Attended Pre-job briefings (2) for PM work.	At WRAP Pre-job safety meetings are required before any work is performed, and a checklist is used. Observed activities were adequate.	X		
m. Maintenance scheduling is integrated into and coordinated with the overall facility schedule, which considers prerequisites, job-site preparation, and other support groups. Communication among cognizant groups is established to set priorities properly.	Reviewed CM-5-34, 2.11, 3.6. Attended WRAP POW/POD meetings.	The WRAP 1 POD meetings are chaired by the Scheduler. Good use of integrated schedules was observed, with ensuing discussions on materials, system status. POD schedules need to clearly state priority of each piece of work defined, and checks need to be made that priority work is being attended to.	X (with comment)		
n. Work packages include detailed instructions, as required by the complexity of the work involved, to safety and property control each part of the job.	Reviewed CM-5-34, 2.11, 3.6; reviewed IP-1140/IP-0673, Procedure Development Guides. Reviewed several p.m. and cal procedures: WRP1-CI-0501 WRP1-PMI-1107 WRP1-PMI-1101 WRP1-PMI-0501, and more.	Packages and procedures appeared to be adequate in terms of the instruction detail provided. Work packages were appropriately assembled, contained necessary procedures and pre-job checklists.	X		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE		STATUS
			OBS	FIND	
o. Maintenance procedures supporting PM/CM activities are properly written, verified, validated, and released.	See above. Also, interviewed Procedure Writer/Maintenance Engineers (E. Allen, C. Warren), Procedure Coordinator (J. Kersten).	Facility specific procedures were written and approved as required by process, but problems exist. Some concerns: Craft field validated drafts, but did not receive final versions to see if comments were appropriately inserted. Procedure history files did not contain marked up copies of draft procedures or comment records. The "validation" signatures on pm procedures were those of the Manager, Ops & Maint., not those of people who perform the work. The Procedure Coordinator has issued procedures to the approved file, but states that she is not signing release and date due to having "inadequate time" to do editorial review. This entire process needs to be thoroughly reviewed.	X		
p. Maintenance personnel know, understand, and follow management expectations for procedure use and compliance.	Reviewed CM-5-34, 2-11, 3-6, and IP-1140/IP-0673. Interviewed Craft (M. Althaus, R. Dohaniuk, M. Zilar), Maintenance Engr. (E. Allen).	Could not find clear policy on management's expectations for procedure use. Site procedure (CM-3-5, Section 12.5) has specific requirements: continuous use or reference use. Craft indicated that clear guidance has not been given, or understanding is poor. The statement "procedure compliance is mandatory" is not adequate guidance. Procedures and work packages did not contain procedure use requirements for lack of other communication.			X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
q. The work request system provides a method for tracking work in progress.	Reviewed CM-5-34, 2.11. Interviewed Work Control Lead (M. Ibatuan), Work Control clerk (C. Stockard).	The work control process provides for documentation when work is complete, in-progress, suspended, or deferred. All work status documentation is controlled by the PIC, and reported to the work control center daily. Status is provided to management via POD/POW, and schedules are updated.	X		
r. Work clearance permits and other special safety-related permits, such as those for welding, burning, and for enclosed space entry, are required; copies are available at the job site for use by the workers.	Reviewed CM-5-34, 2.11. Interviewed Work Control staff, PIC (C. Johnson).	The work control process provides for the utilization and implementation of permits for special and hazardous work activities. There were no work packages available for review to validate the use of these permits. No discrepancies were discovered.	X		
s. Maintenance management provides for control of maintenance activities in the field by participation and/or monitoring of field work.	Reviewed CM-5-34, 2.11. Interviewed Manager (T. Orgill), PIC (C. Johnson).	There is evidence that the Manager, Ops & Maint., makes frequent field visits or worksite tours to observe work activities. These observations/trips should be documented. Maintenance PIC (Johnson) is referred to as "line management" by maintenance craft and manager personnel. PICs' are assigned to all planned work.	X (with comment)		
t. Post-maintenance testing requirements are clearly defined and include the required elements.	Reviewed CM-5-34, 2.11, 3.6, and Section 3.13, Control of Equipment and system Status. Interviewed Manager (T. Orgill), Work Control Lead (M. Ibatuan), Work Control Clerk (C. Stockard).	Post-Maintenance Test (PMT) policies/requirements are not well defined at WRAP i. There are only slight references in the 3.6 procedure, and the only other reference is ineffectively tucked away in 3.13, an Operations guidance procedure. Employees responsible for specifying or conducting PMT are uncertain of the principles for Retest/PMT. P-MT should be an element of the Maintenance Management Plan, with more specific requirements clarified in 2.11, Work Management.	X		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
u. Responsibilities are assigned for determining post-maintenance testing requirements, such as operations, maintenance, and technical support.	See above.	Same as above. No overall responsibilities are delineated. Cog Engineers and Operations education and involvement necessary.		X	
v. Temporary modifications receive appropriate review before implementation to ensure the adequacy of the repair and to assess its effect on personnel and equipment safety and reliability, and are tracked after their completion for consideration of permanent repairs. Permanent corrective action is taken when practical.	Reviewed CM-5-34, 2.11, 3.13, and 3.6. Interviewed Managers (T. Orgill, J. Bottenus), PIC (C. Johnson), WC Team Leader (M. Ibatuan).	All modification work at WRAP receives a high level of review and attention, as the facility is new and is not budgeted presently for modification work. The process guidance in 2.11 is adequate for addressing/controlling temporary modifications. Engineering and Operations staff aware and involved regarding control of temporary mods.	X		
w. Completed work control documents are reviewed to verify proper completion of administrative requirements and to identify preventive maintenance program adjustments that are needed.	Reviewed CM-5-34, 2.11. Interviewed Maint. Engr. (E. Allen), Cog. Engr. (R. Jorda).	2.11 adequately addresses requirements for post work reviews. Work control administration support staff review packages for completeness. Cog engineers and Maintenance Engineers review for technical adequacy, per 2.11 (9.2).	X		
x. The maintenance history program clearly defines the systems and equipment that require documentation and retention of historical data.	Reviewed CM-5-34, 2.11, 3.6. Interviewed Maintenance Engr. (E. Allen), Work Control Lead (M. Ibatuan).	2.11 does not adequately address policy for documenting and retaining history of completed maintenance. Indications are that the facility plans an informal history program, primarily as a responsibility for the Maint. Engr. as part of component field files.		X	
y. Equipment maintenance history is maintained and used in maintenance planning.	See above item.	Same observation as above item.		X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
z. A process is in place to collect information relevant to improved maintenance practices from vendor bulletins and other operating experience, and to integrate this feedback into the maintenance programs.	Reviewed CM-5-34, 2.11, 3.6. Interviewed Maint. Engr. (E. Allen).	Maintenance Engineers have taken this on as a responsibility to the Maintenance program at WRAP. This element will appropriately be managed informally, and integrated into the periodic review program. Site lessons-learned bulletins and other safety issues are discussed at safety/staff meetings, per Maintenance Engr.	X		
4.-5. NOTE: Eliminated (See #3 above)					
6. Systems Status					
a. Means are provided to ascertain the availability and operability of systems important to operations.	Attended POD/POW meetings. Interviewed WC Team Lead (M. Ibatman), Maint. PIC (C. Johnson).	This information is shared between Operations and Maintenance at POD/POW. System status is responsibility of the Operations organization and is controlled by formal work release as part of WC system.	X		
7. NOTE: Assessed under Core Requirement 13					
8. Material Control					
a. An effective procurement and material control process provides parts, spare parts, materials, equipment, supplies, tools, and services for work activities.	Reviewed CM-5-34, 2.11, 3.6, and 3.1 Material Control. Interviewed Mat. Coord. (P. Gotterbarm), Maint. PIC (C. Johnson).	The Maintenance program appears to be adequately supported by effective material, spare/spare parts procurement planning and practices. Maintenance craft and work control staff highly satisfied with this program element.	X		
b. Spare parts for essential equipment, especially long lead items, have been identified and procurement has been initiated.	Reviewed Master Equipment List (MEL) and the Spare Parts Inventory list. Interviewed Mat. Control and WC staff.	The spare parts inventories identified (in procurement or on inventory) appear to be satisfactory for essential equipment operations. Long lead items were order well in advance.	X		
9. Inventory Management					

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
a. Responsibilities have been assigned for identifying, sourcing, processing, testing and inventory management of parts, spare parts, materials, equipment, supplies, tools, and services.	Reviews and interviews same as above item.	Responsibilities are known and demonstrated. No discrepancies noted.	X		
b. Traceable characteristics for parts, spare parts, materials, equipment, supplies, and tools have been established and documented.	Reviews and interviews same as above item.	No noted discrepancies.	X		
c. Maintenance test equipment, tools, and supplies are compatible with the environmental conditions expected for operations.	Reviews and interviews same as above item.	No known discrepancies. The facility has two separate shop areas, with on "hot" shop in the facility. Appropriate tools and equipment are supplied for each based on application.	X		
10-12. NOTE: (See 9 above)					
13-19. NOTE: (See 1C above)					
20-21. NOTE: (See 3 above)					
22. NOTE : addressed in section 1C of this report.					
23. Maintenance Rework					
a. A process is in place that monitors maintenance rework, evaluates the cause of the rework, and determines what corrective measures are necessary to minimize the amount of rework.	Reviewed CM-5-34, 2.11, 3.6. Interviewed Manager (T. Orgill), Work Control Lead (M. Ibatuan), Work Control Clerk (C. Stockard).	The facility Work Control program/process does not address the issue of monitoring and controlling rework. This is an effective tool in determining if inadequate PM or PMT is being conducted.		X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
24. NOTE: Assessed under Core Requirement 2 and 3					
25. Maintenance Facilities					
a. Maintenance facilities, equipment, and tools are maintained in good condition.	Performed walk-thru of shop areas. Interviewed maintenance personnel.	Adequate, no discrepancies noted. This is a new shop area. NOTE: some major bench and floor mounted tools/equip were not bolted down (anchored). These items should be tagged to prevent use prior to final installation.	X (with comment)		
b. Maintenance work areas are maintained in a clean and orderly fashion.	Same as above item.	Shop areas are clean and orderly. Comment: Maintenance personnel should develop housekeeping surveillance checklist for weekly/monthly inspections.	X (with comment)		
c. Contaminated tools will be segregated from clean tools. Reuse is stressed and supported by storage and tool control system.	Same as above item.	Hot shop area provides segregation. Adequate program in place.	X		
d. Provisions are made for proper storage, segregation, and control of hazardous materials such as chemicals, reagents, explosives, and flammables.	Same as above item.	Adequate storage areas are available. Flammable storage cabinet should have visible log (MSDS), not hidden inside of cabinet.	X (with comment)		
e. Maintenance facility size, location, and arrangement promote safe and effective completion of work.	Same as above item.	Adequate shop facilities are provided.	X		
f. this item deleted—redundant					
g. Suitable facilities are available to decontaminate tools and equipment.	Same as item above.	Adequate. No discrepancies.	X		
h. Laydown areas are identified and controlled.	Same as item above.	Adequate. No discrepancies.	X		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	ACCEPT- ABLE	STATUS	
				OBS	FIND
26-32. NOTE: (See 25 above)					

Core Requirement 8

Management programs are established, sufficient numbers of qualified personnel are provided, and adequate facilities and equipment are available to ensure operational support services (e.g., training, maintenance, waste management, environmental protection, industrial safety and hygiene, radiological protection and health physics, emergency preparedness, fire protection, quality assurance, criticality safety, and engineering) are adequate for operations.

8.6 There is an adequate quality assurance organization and program.

Criteria:

1. The quality assurance program is clearly defined and documented, has well defined interfaces and responsibilities, and includes a well defined system for audits, surveillances, document review, corrective action, and follow up. There are procedures for systematic reviews and audits, including self-assessments.
2. Quality assurance reports are distributed to the appropriate level of management. The reports reflect adequate and timely QA reviews.
3. Administrative controls are implemented by management to maintain control of the quality assurance program elements.
4. Acceptance/operational tests and inspections are verified to be accurate and complete for systems important to safe operations.
5. Calibration of measurement, test, and monitoring systems are ensured and verified.
6. The Quality Assurance program is effectively implemented through QA review and approval of procedures and work activities on safety class equipment and personnel safety items.
7. QA personnel have the necessary knowledge, skills and abilities to actively participate in the QA program. (assessed under Core Requirement 2 and 3, provided here for information and completeness)
8. Software is adequately controlled.

Approach:

1. Identify and evaluate Quality Assurance Program documentation for adequacy and assess the facility for compliance to WHC-CM-5-34.
2. Review work packages to verify QA personnel approval when required.

3. Verify proper QA approval of procedures and oversight on specific work items.

4. Use WHC-CM-5-36, Chapter 4-2 and QR 19.0 to determine that the software is properly controlled and maintained.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Is there a written QA Program that defines responsibilities and interfaces?	CM-5-34 sec 1.9/Volkman & Vance	The Solid Waste Division has a QA Program Plan. There is no QA Planning document specific to WRAP. The SWD QA Program Plan refers to WHC-CM-1-1 to define responsibilities. WHC-CM-1-1 was not adopted by FDH. As a result responsibilities are no longer defined. The SWD S/RIDs implementing procedures, CM 5-34 and 5-36 are not included in the list of Manuals that have been adopted by FDH. Recommendation: Adopt CM 5-34 and 5-36, document responsibilities for SWD. Post operational finding.		X
2. Is the QA program adequate?	Volkman	Volkman conceded that the QA Program has a few holes. (roles & responsibilities not clearly defined). CM-1 has not been adopted by FDH. WRAP is not included in the scope statement of WHC-SP-1131(Implementation Plan for 10 CFR 830.120, The role of QA at WRAP is poorly defined. The primary driver for QA involvement is the approval designator on document reviews. Recommendation: Revise WHC-SP-1131 to incorporate WRAP as a nuclear Facility. Issue a WRAP specific QA plan. Restart finding. (Also addressed in CR 6 and 7)		X
3. Does the QA Program include systems for audit, surveillance, management assessment, document reviews, and corrective action?	WHC-CM-5-34 sec 1.9, SWD Quality Assurance Program Plan	The QA Program Plan addresses audits by the FEB, surveillance and management assessment, document reviews based upon approval designator, and corrective action is addressed under Quality Improvement.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
4. Are Quality Assurance reports generated and distributed appropriately and in a timely manner?	NCR No. SW/DQA-96N-008/053742/ Dave Vance & Don Volkman	The only operational Quality report generated on WRAP 1 is an NCR dealing with HEPA filters. The NCR was processed by SW/DQA. The lack of Quality Assurance reports thus far is attributable to the fact that WRAP is not handling waste yet and the scope of QA oversight in the plant lacks definition. The first scheduled QA surveillance is planned for Jan 97. Distribution will comply with the minimum distribution requirements of QAI 10.4.	X	
5. Has the line organization established administrative controls that assure implementation of the QA Program?	Volkman, Vance	WHC-CM-5-34 implements all elements of the QAPP. QA is invited to staff meetings and Plan of the Day meetings.	X	
6. Are acceptance tests and operational tests on systems important to safety approved and verified by QA personnel.	Vance, Volkman	Vance stated that there are no systems classified as important to safety. All ATPs and OTPs are reviewed by QA for completeness. QA participation is not required by plant procedures. Vance is on review/comment on all new procedures.	X	
7. Are controls in place to ensure the calibration for monitoring and data collection equipment?	WRP1-OP-0903, WRP1-OP-0906, Vance, Wills	Vance reviewed maintenance procedures for plant equipment and inserted some QA verification of calibration. The operating procedures for the NDA equipment includes steps for daily calibration verification with certified sources. Results of verification that fall outside an error band will trigger a full recalibration. The certificates for the sources will be in the ATR submittal for the NDA units. This has not arrived from Projects yet.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
8. Do calibration records provide traceability to recognized standards? What standards are used for NDA?	Index of WRAP 1 - Maintenance Procedures, WRP1-CI-0501/ Ed Allen, Maintenance Engineer for Mechanical Equipment, Steve Emerick, C Wills	Allen says that equipment calibrations will have to be traceable to national standard if the data generated is to be used to challenge inventories supplied by the waste source. The Calibration Instruction (Drum Infeed and Discharge Conveyors Weight Scale Test and Calibration) obtained from J drive requires the use of certified test weights and QC verification. The test weights will be certified by the site Standards Lab every 3 years. This certification will convey the traceability to a recognized standard. We witnessed part of operation to construct these test weights. The WHC Standards Lab was in the plant with a calibrated load cell to establish the true weights of the various test weights. OBSERVATION: We noted a problem with the work package for this operation. The text of the plan called for a QC Hold to verify weights. The hold point flags were not in the procedure. The explanation given was that QC verification of this step was unnecessary. The schedulers instructions to delete the hold point were only partially followed by the planner. QC will come later to perform the step. Pre-work reviews failed to detect this.	X	
9. Does QA review and approve procedures and work plans on safety related equipment and personnel safety items.	Vance	QA has reviewed every original procedure issued for WRAP. Reviews of subsequent revisions is at the discretion of the Cog Engineer.	X	
10. Do the QA personnel assigned to the plant possess documented qualifications allowing them to function effectively in the facility?	Vance, Volkman	Vance was qualified under WHC-CM-4-5 prior to re-engineering. Since reengineering and contract change the documentation of Vance's qualification is in need of updating. Volkman is currently updating Vance's training records.	X	
11. Is there objective evidence that the software has been tested against software requirements?	WHC-CM-5-36 Ch 4-2, section 4.6.1/Mike Palmer	Software has been tested through ATPs and OTPs against specifications and test procedures.	X	
12. Does the facility have a documented software configuration management process?	Vance	Vance reports that he reviewed the software configuration management plan.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
13. Is there a process to control Nonconforming Items?	NCR SWDQA-96N-008/053742/ Vance	Nonconforming items are controlled by QR 15, QI 15.1 and 15.2. SWD tracks NCRs as a whole, not facility specific. NCR 053742 was issued to address HEPA filters that the proper Certificate of Conformance.	X	
14. Is there a program for detection and handling of suspect or counterfeit parts?	WHC-CM-5-36 Ch 4-2/Volkman	WHC-CM-5-36 Ch 4-2 QI 15.6 is applicable to WRAP activity. Mike Brickley customarily compares bolting materials or breakers to the suspect parts literature during his routine inspection activity.	X	

Core Requirement 8.7 Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment.

Approach: Review operating procedures and health physics procedures to determine their adequacy in supporting normal, process upset, and documented emergencies. Assume they were prepared in accordance with the SWD Writer's Guide.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	PERSONNEL CONTACTED/ EVIDENCE EVALUATED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 1 Organization and administration of the HP program ensures effective implementation and control of HP activities.	Brannan, P. B. / Hackworth, M. F. WHC-SD-W026-SAR-002	The administration of the HP program and activities at WRAP is conducted by two RCT, one Nuclear Engineer, and one RC manager.	Y	
Criteria 2 Personnel performing health physics duties have successfully completed HSRM training and qualification program. (assessed under Core Requirements 2 and 3, provided here for information and completeness)	George, T. E. / Koep, P. J. WRAP RCT training files Emergency Preparedness (EP) Drill	Reviewed the training files of each RCT assigned to the WRAP facility. Each RCT has completed the identified WRAP O/Ts and is currently qualified. RCT response during the EP drill was not acceptable. The RCTs evacuated the building without portable instruments or EP kits. Because of this oversight RCT support was requested from CWC and took over 20 minutes to arrive. The RCTs did not enquire if any other personnel were in the NDA/NDE or Shipping/Receiving areas at the time of the spill. The RCTs required prompting to collect nasal smears from the contaminated worker. Nasal smears are required procedurally, by WRP1-OP-1204, when facial contamination is detected.	Y	N
Criteria 3 Programs to evaluate and control internal and external radiation exposure effectively monitor and measure worker exposure (e.g., dosimetry, exposure records, trend analysis, bioassay program, work area radiation records, etc.).	Brannan, P. B. / Hackworth, M. F. WHC-SD-W026-SAR-002 WHC-IP-1120	Programs to evaluate and control internal and external radiation exposure are present. WRAP will utilize the existing Hanford site external and internal dosimetry programs.	Y	

Core Requirement 8.8 Industrial Hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

- Approach 6** Employee interviews will be conducted to determine the extent of their knowledge regarding worker rights, such as Employee Concern program and access to information.
- Approach 7** Review procedures and observe equipment for sampling, monitoring, and analyzing hazardous substances to ensure that provisions are in place to collect data for notification and reporting as directed by Federal and State requirements.

Criteria 7 A system exists and is utilized whereby employees may identify safety and health hazards to their manager for corrective action without fear of reprisal. Employees are aware of their access rights to information including medical and monitoring records and Material Safety Data Sheets.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-36, Ch. 1-10 SAFETY 29 CFR 1910 (OSHA) 1. Do individuals know the three ways to express their safety concerns? (directly to safety rep., directly to management, safety concern hotline)	S. Norton T. Orgill T. George Y. Fillion D. Connolly	All of the individuals interviewed felt they could report safety concerns to their immediate supervisor and the employee concern if needed, but nobody mentioned the facility safety representative as a possible outlet for expressing their safety concerns.	XX	
2. Do individuals know their worker rights including the employee concern program? Is this information included in the safety program? CM-5-36, Ch. 1-10, WKS 1	S. Norton T. Orgill T. George Y. Fillion D. Connolly	All of the individuals interviewed were aware in general of their workers rights as practiced at WRAP and at Hanford in general. None of the operators were aware of where this information was located.	XX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3. Are official employee bulletin boards in place and do they contain the master safety rules (poster 29040452.1) and Occupational Safety and Health Protection for DOE Contractor-Employees at Government-Owned, Contractor-Operated Facilities (poster 79105063.1) CM-5-36, CH. 1-10, WKS 2, P. 3.2	The boards for re-aying this information are in place but they are not complete. The board in the WRAP facility is OK but the informatin board in the administration building is completely blank and there needs to be an information board in the maintenance shop.	The facility is aware of this deficiency and is tracking it to completion as a "WRTS" item		XX
4. Do employees receive information and training on hazardous chemicals in their work area? How does this program work? Is this information provided at the time of their initial assignment? Is it also done when a new hazard is introduced into their work area? (Interview some employees to determine if they know where their MSDS's are. See if employees know the hazards of the hazardous chemicals they are using. Did they know the hazards when they started working and also when a new hazard was introduced in their area?) Do employees know the location and availability of the written hazard communication program and the inventory lists of hazardous chemicals and the MSDS's?	Reviewed procedures Attended several prejob briefings T. George Y. Fillion D. Connolly	The facility is planning to include all MSDS's that pertain to a job when they issue a work package. However, at the present time they are not doing this. The PIC is responsible for gleaning the pertinent information from the applicable MSDS's and relaying the information to the workers. The operators all felt that they could probably get the information they needed from an MSDS by going from the facility to the adminisraion building and contacting the Environmental Compliance group. They weren't aware that there was an MSDS book in the facility, nor were they aware what chemicals were in the facility. None of the operators had looked at MSDS's for chemicals in the facility.		XX

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
5. Do employees know the methods used to detect the presence or release of the hazardous chemical? Do employees know what measures they can take and have been provided for them to avoid the hazards in the work place such as PPE, work practices, emergency procedures?	M. Graham V. Mitchell J. Fay T. George Y. Fillion D. Connolly	Other than smoke detectors and rad. detectors there are no permanent detectors for detection of hazards. Due to employee concerns, there have been two times where the Industrial Hygienists were called in to observe and detect if there were harmful substances due to a unique material that was being used. The results of the testing was communicated verbally to the employees but to date there has not been a written explanation of what was found as the results have not yet been published from the laboratory. A weakness that appears in this area is that the facility has not provided any facility specific training in the area of Hazard Communication unique to the WRAP facility	XX	XX

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 1.5 CM-5-36, Section 4.43 IP-1120, Chapter 5 IP-4263, WRP1 DOE 5500.3A				
1. Is the "Plant Drill Coordinator" assigned and aware of the responsibilities per CM-5-34?	Sieve Metzger Paul Gravelle	The facility "plant drill coordinator" gets a large amount of support from at least one contract individual. Without the outside support of the contract individual the facility would not be able to support this function.		XX obs #1
CM-5-34 (1.5)(4.2) 5500.3A, Section 11.C (13)(A)				
2. Is a yearly drill schedule for Emergency and Operation drills prepared and approved?	Sieve Metzger Paul Gravelle Operations Manager		XX	
CM-5-34 (1.5)(5.5)				
3. What is the plan to complete the required 10 drills per fiscal year? (emergency plus 3 operational).	Sieve Metzger Paul Gravelle Operations Manager	The Operations Manager has ensured this requirement has been exceeded. With the startup activities of a new facility, it is commendable that the Operations Manager has the foresight and makes the time to do more than the required minimum number of drills.	XX	
CM-5-34 (1.5) (5.5)				
4. Are critiques of drills performed?	Duty Operations Supervisor various operators	Drill critiques have been written for the drills that the facility has run.	XX	
CM-5-34 (1.5) (5.3)				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 1.5 CM-5-36, Section 4.43 IP-1120, Chapter 5 IP-0263.WRP1 DOE 5500.3A				
1. Are drills created with objectives which develop and maintain individual and team skills in response capability? DOE 5500.3A, Section 11.c.(12) (A)	Steve Metzger Paul Gravelle	More "operations" orientated type drills need to be written and run for operations to become experienced at response to operational problems at this new facility. Also more RadCon type drills need to be written and run to strengthen the working expectations between operations and the RadCon organizations.		XX Find #1
2. Are drills of sufficient scope and frequency to ensure adequate response capability in all applicable areas? DOE 5500.3A, Section 11.c.(12)(A)	Steve Metzger Paul Gravelle	The drill program needs to be expanded i.e., write more operations focused drills vice emergency preparedness drills. Recommended new drills include and are not limited to: Loss of facility plant instrument air Failure of plant instrument air dryer Loss of electrical power to SC-13-101 bus 1 Failure of an exhaust fan without a loss of corresponding supply fan for same area High area radiation monitor alarm High CAM alarm Contaminated individual Glycol leak in the chilled water cooling system that leaks into the floor drain in the mechanical equipment room		XX Find #1
3. Is the facility organization practiced on the actions and responsibilities of the BEO during facility causality events?	Observed one emergency preparedness facility drill and two unscheduled "false" fire alarm responses.	The facility BEO is still learning and becoming proficient at emergency response. Control of all three events observed was judged satisfactory. The facility critiques of the events were excellent and improvement will happen if the facility follows through with the items they identified in the critiques.	XX	

Core Requirement 9.0 A routine and emergency operations drill program, including program records, has been established and implemented.

Criteria 9.2 Records of routine and emergency drills are maintained.

Approach 4 Review records of routine and emergency drills for adequacy and completeness.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 1.5 CM-5-36, Section 4.43 IP-1120, Chapter 5 IP-0263, WRPI DOE 5500.3A				
1. Are drill records maintained?	Steve Metzger Paul Gravelle	Drill records are being maintained by a contract individual.	XX	
CM-5-34 (1.5) (5.6)				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

Core Requirement 9.0 A routine and emergency operations drill program, including program records, has been established and implemented.

Criteria 9.3 Critique results are used to improve the drill program, personnel response, and the facility emergency plan.

Approach 3 Review and assess the results of the drill(s) and assess the resolution of deficiencies.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 1.5 CM-5-36, Section 4.43 IP-1120, Chapter 5 IP-4063, WRP1 DOE 5500.3A				
1. Are emergency and Operational drills critique results used to improve the facility drill program, personnel response and emergency plans?	Duty Operations Supervisor various operators	The drill critique information is not being passed on to the operators.		XX Find #2
CM-5-34 (1.5) (5.3) 2. Are critique action items completed immediately or placed on the Waste Remediation Tracking System (WRTS)? CM-5-34 (1.5) 5.3)		Drill critique action items are being placed in WRTS. A suggestion: The number of items in WRTS is growing rapidly. A priority system with goals to completion (of something equivalent) needs to be established. With the continued startup work load for phase two, without some clear priority and goals the WRTS action items will build and it is possible some needed actions will be deferred/not acted on.	XX	
3. Are drills run and critiqued adequately?	observed emergency preparedness and operational drills.	Utilization of operators and RCT's as drill controllers should be incorporated into the drill program. The insight given by having the operators and RCT's help write, run, and critique the drills on their peers is very worthwhile and will improve the drill scenarios and the staff response to drills.	XX	obs #2

Core Requirement 8.10. There is a security organization and program that adequately supports the requirements.

Approach 1-Review procedures which control the security program for adequacy and implementation.

Criteria 1-The organization structure is clearly defined and staffing and resources are sufficient to accomplish tasks assigned to the organizational elements.

Responsibilities, authority, and interfaces for each organizational position are clearly defined and understood. Interfaces with other WRAP organizations is well defined and understood. (Assessed under core requirement 11 and 13)

2- Procedures and controls that assure safe and reliable operations are employed in the conduct of security activities.

3-(from core requirement 11 criteria 4) Support group interface bounds are clearly defined and understood.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-36, Section 4-33. RLID 5632.1B and RLID 473.1	Reviewed Section 4-33 for security and asset protection requirements. Review the ORR affidavit for core requirement 8.10, criterions 1 and 2.	Section 4-33 does present the requirements and responsibilities for authorized personnel, responsibilities for the various levels of security clearances, and protection requirements/access requirements for classified documents. It does not address the asset protection program required from RLID 5632.1B and follow on RLID 473.1.		X
1. The organizational interfaces between the security organization and the facility have been defined.(RLID 5632.1B,Section 6.c)	Review organization charts for WRAP-1, B&W Protec Safeguards and Security, WHC-CM-5-36 Section 4-33, and recently prepared Asset Protection Agreement for each WRAP-1 building.	The organizational interfaces for both the facility and security organization were not clearly defined. The Security organization has a group/organization entitled Northern Security Programs which supports the entire 200 and 100 areas, but their staff does not have a uniquely defined interface for WRAP-1, although Craig Babcock was interviewed by the facility and participated in the preparation of the Asset Protection Agreement.		X
2. The roles and responsibilities of a facility security POC have been defined(Section 6.c)	Section 4-33, organization chart, interviewed Craig Johnson and Mark Ibanuan.	Craig had been verbally assigned the Building Administrator position, although his position description did not account for the responsibility. His Building Administrator training did not include asset protection. No documentation was found that addressed nor defined the POC.		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3. A point of contact for security issues has been assigned for the facility(Section 6.c)	Same as above, plus interview documentation in affidavit.	It appears that Craig Babcock of Northern Security programs has assumed the POC role as he assisted in the Asset Protection Agreement preparation. There was not any written media available that described this responsibility.	X(partially)	
4. The WRAP facility security requirements have been defined and available to all assigned staff. (Section 6.c)	Same as above	The access security requirements were defined in the assets protection agreement, availability has been by verbal communication. Written communications were not found.	X (partially)	
5. The security requirements have been implemented and they meet the facility's current operational needs.(Section 6.c)	Asset Protection Agreement, interviewed Craig Johnson.	The commitments made in the Asset Protection Agreement have been implemented by Craig Johnson, but there is not a documented program in Section 4-33, nor the WRAP-1 Administration manual that presents the requirements or elements of the security program.Needs to be re-evaluated during phase 3 readiness review.		X
6. An asset protection review has been completed by the facility in conjunction with the security organization(Section 7.1.g).	Asset Protection Agreement for all WRAP-1 Buildings	The agreement appears to have been completed correctly per 5632.1B but has not as yet been approved by RL.		X(only due to lack of RL Approval)
7. The review identifies the threat(s), asset value, strategic business impacts, and any unacceptable risks to determine the appropriate protection level.(Section 7.1.g)	Interviewed Craig Johnson and Mark Ibatuan. Reviewed the agreement, FSAR, and Functional Design Criteria for WRAP-1.	It appears that all were addressed for the current facility configuration and mission. Nuclear Safeguards were not addressed for SNM Category IV. Attractiveness level 6 as defined in the FDC. Before WRAP-1 receives weapons programs waste this requirement must be reassessed.	X(partially)	
8. A process has been established for the review of asset protection review.(Section 7.1.g)	same as above	Nothing found.		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
9. The asset protection review documented by an asset protection agreement in accordance with RLID 5632.1B, attachment 8.2.	The Agreement and interviewed Craig Johnson	Agreement completed correctly	X	
10. The asset protection agreement has been properly reviewed and approved in accordance with RLID 5632.1B.	same as above	It was properly reviewed by the former WHC organizations and submitted to RL. RL has yet to approve. This is considered compliant to the process depicted in 5632.1B.	X	further review required
11. The asset protection agreement is updated annually. (Section 7.1.g)	Section 4-33, WRAP-1 Administration manual. Interviewed Craig Johnson and Mark Ibatuan.	This is the first year, but no documentation was found defining a program or process.		X
12. A process has been established to systematically characterize assets to appraise the facility's protection requirements (5630.1B, Section 9.d)	same as above	same as above		X
13. The systematic characterization is properly documented to support the graded asset protection strategy (Section 9.d)	same as above	same as above		X
14. A graded asset protection strategy, consistent with the cost and sensitivity of the facility's assets, has been implemented. (Section 9d)	same as above	same as above		X
15. A procedure has been established to check the facility access controls at the end of the day shift. (RLID 5632.1b Section 7.1.d)	same as above plus Dan Conley, an operator and the Surveillance procedure.	There was some verbal direction given to selected occupants of the buildings, but no documentation was found.		X
16. Facility check procedures ensure facilities are locked between 6 p.m and 6 a.m or when unoccupied. (Section 7.1d)	same as above	Nothing in place.		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
17. Administrative access controls during the work day provide adequate protection of facilities and property. (Section 7.1d)	Facility Orientation, interviewed Craig Johnson, Mark Ibatuan, Jeff Riddelle, Steve Norton.	The WRAP-1 process facility has a good control process and all assigned staff knows the requirements. The maintenance building is always locked with free access permitted to assigned personnel. The support building is free access but consistent with other buildings of this type on site.	X	
18. Entry/access requirements and instructions have been posted at each of the facility's entrance(s) as required. (Section 7.1d)	All Facilities entry access locations	No postings found at almost all access points except for the main entrance of the WRAP-1 process building.		X
19. Requirements/instructions on posted signs are accurate and current. (Section 7.1d)	same as above	same as above		X
20. The listed contact person and phone number is up-to-date. (Section 7.1d)	same as above	not listed at entry/access points.		X
21 Security badges are used for identification and access authorization. (Section 7.1d)	Interview of Craig Johnson, review of Section 4-33	Security badges used	X	
22 Provisions have been established to ensure the security of low-level assets. (Section 7.1d)	same as above	Verbal instructions have been given to personnel. Nothing documented nor do personnel understand the terminology of Low Level Assets.		X
23 Low-level assets have been identified and are secure in accordance with applicable directives. (Section 7.1d)	Interview Mark Ibatuan, Safety Equipment List, Section 4-33.	Equipment listings are available but a separate identification of assets was not documented.		X
24 The security interests and assets of the facility have been adequately defined (Section 7.4a)	same as above	Nothing defined		X
25 The level of protection for the identified assets has been determined according to the asset protection template and documentation. (Section 7.4a)	same as above	Nothing defined		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
26 A process has been established to evaluate the protection level required by the asset protection template for adequacy.	same as above	Nothing defined		X
27 The minimum physical security requirements have been implemented for each facility (Section 7.4a)	same as above	It appears that the minimum requirements for each facility is understood and implemented for the maintenance and support buildings. The process building frequently had doors left open that should have been secured, but with the construction project still in progress it was probably appropriate.	X(part ially)	
28 Access controls have been instituted and maintained based on the asset protection agreement. (Section 7.4a)	Interviewed Craig Johnson, Section 4-33	Controls have been instituted by verbal direction. Nothing documented for administrative guidance.	X(part ially)	
29 Physical access controls are used when administrative controls are not in effect. (Section 7.4a)	same as above	same as above	X(part ially)	
30 The number of frequently used entrances is limited commensurate to the level of protection required for the facility. (Section 7.3b)	same as above	same as above	X(part ially)	
31 Appropriate visitor controls have been identified and implemented for the facility. (Section 7.3b)	same as above	Controls implemented by verbal guidance. No written guidance nor procedure could be found.		X
32 A central area have been established to assist visitor's access to a facility. (Section 7.3b)	same as above	Implemented well by the facility. Personnel are also located near by and were always willing to assist the visitors.	X	
33 The appropriate signs have been posted in accordance with WHC-CM-4-33. (Section 7.4a)	same as above	Signs have been posted at the entrances to the 200 West area, but WRAP-1 lacked signs for facility specifics. The facility was compliant with Section 4-33 but not with RLJD 5632-1B.	X(part ially)	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
34 Posted signs are legible and contain the appropriate information required for the security of the facility. (Section 7.4a)	same as above	not compliant		X
35 Unoccupied facilities are locked. (Section 7.4a)	same as above	compliant	X	
36 A Process has been established to verify unoccupied facilities are locked. (Section 7.4a)	same as above	Checked by the building administrator or their designee. No administrative or operational procedure provides guidance.		X
37 A program has been established to positively manage and control keys and lock combinations, including OMNILOCK electronic combination door locks. (Section 7.4a)	SAME AS above	No program was documented nor found, although the need was being satisfied with verbal assignments to and by the Building Administrator		X
38 Combinations are changed when persons having access are terminated or permanently assigned outside the function involved. (Section 7.4a)	Craig Johnson and Mark Ibatuan interviewed, section 4-33 reviewed. Reviewed operating procedures.	Both understood the need, found no documented guidance for a mature key control program. The WRAP-1 process areas need a well defined key control program to maintain a high level of safety.		X
39 A custodian has been designated to control keys and combinations for the facility. (Section 7.4a)	same as above	personnel have been assigned control of keys and combinations.	X	
40 Access to combinations and keys is given only to personnel who have a need. (Section 7.4a)	same as above	This appears to be compliant although nothing is documented for guidance.	X	
41 Keys are returned from terminated or permanently reassigned personnel or combinations change as necessary to ensure proper access control. (Section 7.4a)	same as above	This requirement is well understood by those interviewed although nothing is documented for guidance. The state of the facility was new and this could not be assessed based on long term performance.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
42 Conduct computer sensitivity evaluation per WHC-CM-5-36, Chapter 4-7, Section 5.1.	Interview with John Weidert on 11/05/96 by Barbra Jackson.	A determination must be made for every computer as to whether it hosts / stores sensitive or essential information. The determination has not been conducted.		X
43 Perform modem accountability for computer systems that have / require access to local area network. (WHC-CM-5-36 chapter 4-7 section 5.1)	Interview with John Weidert on 11/05/96 by Barbra Jackson.	a modem accountability was performed on two of the computer systems used in the control room. The process control system still remains to be completed		

Core Requirement 8.11 There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criteria:

1. Configuration Management procedures/policy exists and are clearly communicated and understood by all levels of the organization. Appropriate graded approach is utilized consistent with the safety class of process and utility equipment/systems.
2. Responsibilities and interfaces for configuration management are clearly defined. (assessed under Core Requirement 11, provided here for information and completeness)
5. An administrative program is in place to ensure that modifications are analyzed, documented, approved by appropriate personnel and organizations, and reflected in design drawings, revised operations, training, and maintenance procedures.
9. Programs are defined, and procedures are in place to specify methods for identifying, addressing, and reconciling questions concerning alterations to the design, function, or method of performing the function of a structure, system, or component as described in the authorization basis.

Approach:

1. Review the configuration management program to determine the adequacy of facility interfaces required to maintain configuration management, proposed change review and approval, configuration control drawings, vendor manual control.
2. Interview the responsible manager for configuration management to assess the backlog of design changes, backlog of drawing changes, backlog of facility modifications, prioritization scheme for facility changes, and the interface with maintenance, training, and operations personnel concerning impacts of new and revised design requirements.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F O R O ?
Check location of configuration control program.	Solid Waste Disposal (SWD) documents/manuals.	WHC-CM-5-34, 2.4, contains Configuration Management requirements along with WHC-CM-5-34, 2.1 for Configuration Change Control. Per 2.4 section 5.2 the following are required. Parenthesis indicate actual conditions. POPs* Maint. Procedures* RWP* H-2 Drawings (62 available more coming) CVI Data* Specifications (none required for facility with no safety class or safety significant systems.) Project Files (Per section 5.3, the files have not been updated) Master Equipment List* Safety Equipment List (Not required for facility with no safety sig. or safety Class systems). CSER (CSER-96-018) CPS (WRP1-CPS-001, Rev 0) Calibr. Proc.* FSAR (Not approved by DOE yet) OSR/TSR (Part Of FSAR) Training Qualification Packages* Waste Acceptance Criteria (WHC-EP-0063) OTHER ADM & TECH PROCEDURES (As needed only) *Covered by other specific core requirements.	Observation.
Check Location Of Unreviewed Safety Question (USQ) process.	SWD documents/manuals.	WHC-CM-5-34, 1.24, contains the USQ procedure. In appendix B, the authorization basis for the USQ process is identified as a Department Of Energy approved Facility Safety Analysis Report. (The present WRAP 1 FSAR is contractor approved only).	No
Evaluate understanding of configuration control and communication.	Discussion with Jay Bottenus (Engineering manager).	Configuration Control for facility equipment will be through the use of approved drawings from the release stations, specifically those that have been field verified. Changes to the drawings will use the Engineering Change Notice (ECN) process. The changes to the software systems will follow the approved WRAP 1 software configuration procedure (WHC-IP-1237, 4.1).	No.

Evaluate understanding of configuration control and communication.	Discussions with Steve Metzger (plant operations PIC)	During the lock and tag review, the released drawings would be used to identify location of appropriate isolation. The use of uncontrolled copies or access to a drive with Computer Aided Design (CAD) files were also referenced as sources for these drawings. A released copy from the station, or a method for ensuring the drawing used is the correct rev was NOT mentioned.	Finding.
Evaluate understanding of configuration control and communication.	Discussions with cognizant engineers and program engineers	The cognizant engineers and program engineers were knowledgeable of their change control processes. The change process was reviewed by going through a possible change to the HVAC and programs. An ECN for the Electrical was reviewed.	No.
Evaluate understanding of configuration control and communication.	Discussions with Tom Orgille (Operations Manager)	The use of drawings found on floor of office was discussed. These drawings would be used only in emergency situations and not for changes or lock and tag.	No.
Evaluate change process (review against authorization basis)	Interview with Jay Bottrenus (Engineering Manager).	All changes will go through the USQ evaluation process. Changes required to fix systems to meet original design requirements may not be reviewed (especially software changes). Some blanket USQ's may be used which would cover a number of changes at the same time.	No.
Evaluate change process (review against authorization basis)	Check USQ files.	A system is in place which would assign numbers to USQ's and be used to store the USQ's. The records are kept in a locked fireproof cabinet. There were NO USQ's in the file.	Observation.
Are changes to the facility reviewed for impacts to other organizations or systems.	Reviewed requirements of SWD documents and manuals	Per the ECN procedure, WHC-CM-5-36, 6-1 EP 2.2, all other impacts for a design change are identified. An administrative procedure (WHC-CM-5-34, 2.1) for tracking in the WRTS system is available to track changes.	No.
Are systems available to provide config. control drawings.	Discussions with personnel responsible for config. control at WRAP 1.	The release station located outside of Plutonium Finishing Plant will provide released controlled drawings and can also provide ECNs. The Soft Reporting system can be used to check released drawings for current revision and ECN against drawings. A set of drawings is being set up on stick files in two locations for use by operations and engineering.	Observation.

Are requirements of SWD Config. Control Mgmt. in place.	Review available documents/discussions with cognizant engineering.	The requirements for software configuration control (WHC-CM-5-34, chapter 4-2, section 4) have not been completed/obtained (see attached table). Attempts to obtain the required information from the various suppliers has been attempted and is in process.	Finding.
Are the requirements of the software config. control in place.	Review available documents required per WHC-IP-1237, section 4.1/Discussions with program engineer.	The computer system administrator and Data Base Administrator were identified during the discussions. However a formal identifier was not available. Not all software programs have copies in the controlled cabinets (as required) nor were all the software labeled correctly. A backup and recovery plan has not been prepared. The change control procedure/process is being used and controls are in place.	Finding.
How are software changes communicated to outside organizations.	Review change process and interviews with operators.	The software configuration change process includes steps to involve/notify outside groups (maintenance, training, etc.) during the change process. Changes to programs are communicated to operators in meetings with supervisors or changes to procedures in required reading.	No.

Core Requirement 8.11 There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criteria:

3. Documents, drawings, and other references which define the facility configuration are readily available, authorized, properly controlled and are used in designing plant changes, preparing facility procedures, troubleshooting, etc.
4. Management ensure that changes to the facility are warranted and properly controlled.
6. The configuration of systems as contained on as-built drawings have been physically verified.
7. Procedures and management policies for changes to the facility are properly executed.
10. Temporary modification are controlled to ensure facility configuration is maintained.

Approach:

1. Review the configuration management program to determine the adequacy of facility interfaces required to maintain configuration management, proposed change review and approval, configuration control drawings, vendor manual control.
2. Interview the responsible manager for configuration management to assess the backlog of design changes, backlog of drawing changes, backlog of facility modifications, prioritization scheme for facility changes, and the interface with maintenance, training, and operations personnel concerning impacts of new and revised design requirements.
4. Confirm a program is in place and has been implemented requiring the physical walk down of systems to verify the accuracy of applicable design drawings/documentation. Confirm the validation/verification process by performing a walk down of the critical components of the HVAC system and compare to flow diagrams, valve lineups, schematics, as-built drawings, etc., to ensure systems are documented as built.
6. Verify that the change control process has been adequately implemented and that temporary and permanent changes are adequately controlled.
7. Review a major change to the WRAP facilities/systems to establish that the change was properly analyzed (for functionality, safety, authorization basis, and possible interactions with other systems), documented, and reviewed, where necessary, reviews by independent organizations.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F O R O ?
Determine existence of Program/System.	Solid Waste Disposal (SWD) Documentation.	WHC-CM-5-34, 2.2, "Solid Waste Disposal Drawing Control" provides field verification guidance. Changes to drawings are per WHC-CM-5-36, 6-1, EP 2.2 for temporary and permanent change ECNs.	No
Determine existence of Program/System.	Released H-2 drawings.	The initial 62 WRAP 1 drawings have been released and have been identified as field verified. Additional drawings will be released from the 'projects' soon.	Observation
Are Drawings Correct as shown.	Walk down or review of drawings.	A walk down of the electrical and spot examination of the rad control drawings showed errors in identification of equipment actually installed (electrical) and location (computer system printer). The drawings are not marked per the SWD procedure as AS BUILT which is required until a formal change to the drawing is conducted (this does not include field verification).	Finding/Observation
Control of changes.	SWD Manuals and discussions with Jay Bottemus (Engineering Manager).	Changes to facility are conducted using the configuration control systems. Management must approve changes either through the ECN process or the software change control process.	No
Implementation of Configuration. Control at Facility	Discussions with Jay Bottemus (Engineering Manager).	The changes to the facility will utilize field verified drawings. The construction program will release drawings as AS BUILT but the direction by management is to use only field verified drawings even if it will require that a field verification drawing change is conducted prior to doing work.	No
Are AS BUILT drawing files complete Per WHC-CM-5-24, Section 2.2.	Reviewed as built drawing files for drawings H-2-131741, -131820, 131873, 131894, and 132074/ Discussions with Judy Kersten	The drawing files contain the color coded drawings, current drawing, a list of drawings (in front) and any ECNs issued by Raytheon. These drawings were completed by Raytheon and given to the facility. Per procedure WHC-CM-5-24, section 2.2, there is supposed to be a Design Service Requirements and Component Identification Worksheet. However since these drawings were inherited and not generated the Design Service Requirement may not be needed. In the 2.2 the Component Identification Worksheet is stated as being required and shown in a flowsheet (labeled with numbers which are not used anywhere else), however, in the description of actions required there is no mention of this worksheet being filled out.	Observation

Core Requirement 8.11 There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criteria:

8. The design control program was properly implemented in the design of the facility.

Approach:

2. Interview the responsible manager for configuration management to assess the backlog of design changes, backlog of drawing changes, backlog of facility modifications, prioritization scheme for facility changes, and the interface with maintenance, training, and operations personnel concerning impacts of new and revised design requirements.

3. Verify that Certified Vendor Information files are in place and are correctly referenced with the H-2 drawings.

LINE OF INQUIRY	EVIDENCE EXAMINED	COMMENTS	F O R O ?
Was a configuration Control Program in place during construction.	Discussions with Jay Bottenus (Engineering Manager)	The reviewed by facility personnel of construction changes initiated by the project contractor was not required. However, there was an understanding of the purpose for the installed equipment (per the Functional Design Criteria) would be reviewed through the OTP and ATP process. Also, a test specification document was prepared to ensure certain engineering requirements would be met.	No.
CVI data available.	Discussions with Jay Bottenus and cognizant engineers.	In order to provide a cost savings, the CVI data will be issued as Information Releases and not Certified Vendor Information. This is a concern for the engineering group. Files if information have been generated at the engineering level and scans of IR data are being made to provide access.	No.*

* NOTE the CVI data is being evaluated under core requirement 6 and has its own findings.

- 8.12** An adequate records management/document control program exists to assure that all important documents, records, and related information are maintained current and readily retrievable.

Criteria:

1. The records management program defines responsibilities for determining what documents will be controlled in a system; methods used for acquisition, identification, storage, retention, and retrieval of documents; and controls to be exercised for changes, distribution, and removal.
2. The records management program scope includes receipt or preparation, review and approval, and distribution of documents generated externally and internally in a timely manner.
3. The records management program includes processes, interfaces and responsibilities for controlling design bases and technical documents, such as calculations, specifications, drawings, vendor manuals, records of maintenance, test results, etc.
4. Necessary documents are kept current and legible and are either available at appropriate plant locations or can be provided in a timely manner.
5. The document control program assures that uncontrolled drawings, manuals, and procedures are not used at the work location.
6. Documentation is stored correctly (e.g., fire proof cabinets for QA records).

Approach:

1. Review the program and procedures which define their records management system.
2. Review records management program and implementing procedures in engineering, maintenance, operations, and materials management to ensure responsibilities and processes are documented for controlling technical documentation. Sample the efficiency of the system by selecting one system important to safe operations and requesting documents associated with design, procurement, construction, maintenance, and operability of one or two significant pieces of equipment in that system. Interview selected facility management to assure they are knowledgeable of records management and retention policies and procedures.
3. Observe work in process involving structures, systems, and/or components, note any use of uncontrolled drawings, procedures, or manuals.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Are all documents used by personnel performing work controlled?	Judy Kirsten	The facility may use release stations in Mo-015 (near PFP) or in 200 east to obtain controlled drawings.	X	
2. How does the facility ensure that uncontrolled/superseded/ canceled documents are not used?	Mark Ibatuan, Rich Jordal	Ibatuan: The planner, Job Control Administrator, Cog Engineer and PIC should all make sure that the procedure or drawing in use is the latest revision. The Cog Engineer should be aware of what the current rev of the drawings are. Uncontrolled drawings are used in work packages, however, the Cog Engineer reviews to make sure that the drawings and procedures are correct.	X	
3. Does the records management program define responsibilities for controlling design bases and technical documents.	WHC-CM-5-34 section 2.4, WHC-CM-5-36 Ch 6-1 EP 1.3	WHC-CM-5-34 section 2.4 CONFIGURATION MANAGEMENT defines the responsibilities with regard to controlling design bases and technical baseline documents. This is further described in WHC-CM-5-36 Ch 6-1 EP 1.3. An issue related to control of design bases and technical baseline has been cited under checklist items 4 and 7 of this core requirement.	X	
3a. How do you check that the work package contains the most recent drawings and procedures?	Work Pkg # W1-96-0099-P for Air handling Unit 203-AH-11-501B Preventative Maintenance of Air Handling Unit, Lube, Adjustment and Cleaning. Procedure #WRP1-PM1-1107/ Emerick, Garrison, Rich Jordal	Garrison does the work package planning for modifications, repairs, trouble shooting and inspections. PMs are done by Steve Emerick and Carla Stockard. Garrison said that he relies on the Cog engineer to verify that the drawings and procedures are the latest rev. (Mark Ibatuan clarified that the planner as well as the cog engineer and the PIC all have the responsibility to make sure they are using the latest drawings and procedures) Each work package has the drawings and procedures necessary to accomplish the task. Drawings/ECNs are not obtained from a release station. He has an uncontrolled stack of construction dwgs that he draws from to assemble packages. Drawing revisions and listings of outstanding ECNs are available on soft reporting. Jordal confirmed that he verifies that the drawings and procedures included in his work packages are correct.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3b. How are discrepancies between field condition and design drawing resolved? (Sacco)	Carmen Sacco	Sacco says that he will be walking down drawings. The Cog engineer will issue ECNs to resolve.	X	
3c. What happens to work packages after the work is completed? (Garrison)	Work Package W1-96-00175-P, WRP1-PMI-0503/ Garrison, Stockard, Emerick	Garrison gives planned packages to WCC for approval routing. Upon approval, packages are held by WCC for scheduling. Packages are signed out to the Person In Charge to complete the activity. They are returned to WCC at the end of each work day. Once completed and post reviewed, the packages are kept by WCC until there is sufficient quantity to ship to RHA for archiving (Carla Stockard)	X	
3d. What design/Drawing Standard do you follow? (Sacco)	Carmen Sacco	AE Standards GG-DWVG-01/02/03/04, rev 0 Note: This is not the standard called out in WHC-CM-5-36, EP 1.3. This item has been addressed in the LOI for CR 7.		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
4. Is the vendor manual for the operation of MCC readily retrievable?	WRAP C1 Construction Specification, KEH master Submittal List, Submittal Files KEH-5366 514.B, 515, 515.1 Maria Yancey, Jack McGee	To retrieve vendor submittal data: Find C1 spec section #(MCCs-16480). Find submittal number on KEH master submittal list(MCCs-514.B, 515 & 515.1) The approved submittals were on file in MO-720. The file contains such items as Installation and maintenance Manual, Asbuilt, Parts lists, Startup testing Data, schematics. NOTE: Most of the vendor information has been down graded from CVI to IR(information Record) by Project ECN W-026-1012. The justification on the ECN failed to address the impact on Operation of the facility. This means that the information the submittals contained received a lesser amount of review and aren't available as CVI on soft reporting. SWD is scanning information obtained from the incomplete file maintained by Projects. The submittal file that has been accumulated by the Project will be turned over to Operations. However, the project file is not complete. Only ICF KH Construction Management has a complete submittal file. RECOMMENDATION: Revise ECN W-026-1012 to change the classification of submittals from "information record" to "Vendor information" for all submittal considered useful by operations. Post start finding.		X
5. Is the documentation associated with the design of MCC foundation readily available?		Design calculations have not been turned over by the AE (Raytheon) yet. We have been assured that the A-E does have the calculations. Raytheon will turn over the calculations by 11-31-96.	X	
6. Is the documentation associated with the procurement of MCC readily available?		These records are still in Project files and have not been turned over to the facility yet.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
7. Is the documentation associated with the construction of MCC readily available?	Judy Kirsten	Only those sections of the C1 spec dealing with the computer will have ECNs incorporated. The balance of plant will not. The project will turn over a marked up spec to operations to facilitate traceability of ECNs. Only these two sections of the project construction spec may be released into the Hanford system. Specification sections that cover items such as NDE/NDA, HEPA filters, glove boxes will not have outstanding ECNs incorporated and hence will not be released into the Hanford System. This is contrary to WHC-CM-5-36 CH 6-1 EP 1.2 para 2.8 which states "Upon turnover, the vendor design contractor, or A-E that provides engineering services shall be required to provide engineering specifications with all changes incorporated and released into the DCS document control database"		X
8. Is the documentation associated with the preventive maintenance of MCC readily available?	Vendor information file KEH-5366; 515. Installation and Maintenance Manual for Series 2100 MCC	RECOMMENDATION: Comply with the requirements of WHC-CM-5-36 CH 6-1 EP 1.2 para 2.8, incorporate changes and release the design documents. Post Start Finding	X	
9. Is management aware of record retention and storage requirements?	Judy Kirsten	The Vendor supplied manual is in the submittal file in MO-720. This information was changed (down graded) from "Vendor Information" to "Information Record" via Project ECN W026-1012. (this issue discussed in checklist item 4)	X	
10. Are records stored in accordance with approved facility procedures?	Judy Kirsten	Vendor Information is in permanent storage here. H series dwgs will be released into the Hanford system.	X	
		Quality Assurance records are stored in fire rated file cabinets in the WCC of MO-2740	X	

8.13 There exists an occurrence reporting/root cause program.

Criteria:

1. An occurrence reporting program is established which ensures that sufficient personnel are trained in root cause analysis techniques and are available.
2. The program shall ensure that those conducting investigations are independent of the cause of the unusual event.
3. The "lessons learned" which are developed as a result of the program implementation and root cause analysis shall be incorporated into the corrective action system to prevent recurrence.
4. The program should contain provisions to call in personnel with special expertise to assist in the occurrence investigation.

Approach:

1. The program will be reviewed in order to determine if the programmatic aspects ensure that knowledgeable and independent (if applicable) personnel conduct investigations.
2. Review completed assessments (if available) and verify that personnel performing the assessments were independent of the area assessed.
4. Review completed assessments (if available) to determine the specific findings and/or recommendations generated as a result of the assessment. Verify the incident and lessons learned have been incorporated into the training and re-training programs. Verify that the root causes have been determined, and corrective actions have been discussed with the appropriate plant staff.
5. Ensure assessment teams be supplemented with special expertise (if required) to assist in the occurrence investigation. Through discussion with cognizant personnel, identify and review an assessment (if available) where outside special expertise was required.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Has an occurrence reporting program been established at the facility?	Sieve Metzger	An occurrence reporting program has been established. Steve Metzger is the primary individual for Occurrence reporting. Susanne Koolker, Jeff Shorzman and Tom Orgill are also authorized to do Occurrence reporting. No Occurrence reports have been issued at the facility yet. There have been several event at WRAP. However, they did not reach the reporting threshold.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Are personnel trained in Root Cause Analysis available to support OR activity?	Individual TMX report for Stephen L Metzger, Training files for Orgill and Shortman.	All four individuals have completed Intro to Occurrence Reporting, Occurrence Report Writing, and Root Cause Analysis Basics. Susanne Kooker's training in this area was verified by Rod Pickett of the ORR Team.	X	
3. Does the facility enforce a requirement that occurrence investigators be independent of the cause of the event?	Steve Metzger	Metzger stated that he would not investigate an event that he was a participant in. One of the other occurrence report personnel would do it.	X	
4. Is there a lessons learned program in place? Are lessons Learned generated from occurrence report/root cause program? How do lessons learned fit into the corrective action system?	Metzger, Riddelle, Ibutuan	The affidavit lists "Implement CAEG and Lessons Learned per WHC-CM-5-34, Section 1.22" as a punchlist item. This was confirmed. Metzger stated that no formal Lessons Learned program has been developed yet. So far the only Lessons Learned activity is to designate selected lessons Learned bulletins received by the facility as required reading. The affidavit states that Carla Thibault is responsible for administering lessons learned program. This is no longer the case. Mark Ibutuan has recently been designated to administer CAEG and lessons learned. [Finding F.8.13.3.1]		X
5. How does the corrective action system work? What is in place to prevent reoccurrence?	Metzger	RECOMMENDATION: Develop and implement a Lessons Learned program for the Facility. Post Start Finding Also not implemented yet. At this time any corrective action that is identified in the facility as a result of a self assessment or independent assessment is submitted to Phyllis Roe for input into WRTS. [Finding F.8.13.3.2] RECOMMENDATION: Develop and implement a Corrective Action program for the Facility. Post Start Finding		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
6. Is there a provision in facility occurrence reporting procedures to call in outside investigators with special expertise when appropriate?	Metzger	Yes, If the PPG value of 25 or more it will require a full scale root cause analysis/formal review. Several people within the facility have root cause analysis training.	X	
7. Who is responsible for Occurrence reporting at WRAP.	Metzger	Steve Metzger has primary responsibility. He has three alternates as stated above.	X	
8. Were occurrence reports initiated for the Fire Alarms on 11/8 and 11/11? If not, why?	Metzger	Occurrence reports were not issued. The events did not reach the reporting threshold. All events were phoned in to the RL Site Rep (Larry Earley). The personnel involved also participated in a critique. The facility documented the results of the critique.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 1.5 CM-5-36, Section 4.43 IP-1120, Chapter 5 IP-0263, WRP1 DOE 5500.3A				
1. Is the "Plant Drill Coordinator" assigned and aware of the responsibilities per CM-5-34?	Steve Metzger Paul Gravelle	The facility "plant drill coordinator" gets a large amount of support from at least one contract individual. Without the outside support of the contract individual the facility would not be able to support this function.		XX obs #1
CM-5-34 (1.5)(4.2) 5500.3A, Section 11.C (13)(A)				
2. Is a yearly drill schedule for Emergency and Operation drills prepared and approved?	Steve Metzger Paul Gravelle Operations Manager		XX	
CM-5-34 (1.5)(5.5)				
3. What is the plan to complete the required 10 drills per fiscal year? (emergency plus 3 operational).	Steve Metzger Paul Gravelle Operations Manager	The Operations Manager has ensured this requirement has been exceeded. With the startup activities of a new facility, it is commendable that the Operations Manager has the foresight and makes the time to do more than the required minimum number of drills.	XX	
CM-5-34 (1.5) (5.5)				
4. Are critiques of drills performed?	Duty Operations Supervisor various operators	Drill critiques have been written for the drills that the facility has run.	XX	
CM-5-34 (1.5) (5.3)				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 1.5 CM-5-36, Section 4.43 IP-1120, Chapter 5 IP-4263.WRP1 DOE 5500.3A				
1. Are drills created with objectives which develop and maintain individual and team skills in response capability? DOE 5500.3A, Section 11.c (12) (A)	Steve Metzger Paul Gravelle	More "operations" orientated type drills need to be written and run for operations to become experienced at response to operational problems at this new facility. Also more RadCon type drills need to be written and run to strengthen the working expectations between operations and the RadCon organizations.		XX Find #1
2. Are drills of sufficient scope and frequency to ensure adequate response capability in all applicable areas? DOE 5500.3A, Section 11.c (12)(A)	Steve Metzger Paul Gravelle	The drill program needs to be expanded i.e., write more operations focused drills vice emergency preparedness drills. Recommended new drills include and are not limited to: Loss of facility plant instrument air Failure of plant instrument air dryer Loss of electrical power to SG-13-101 bus 1 Failure of an exhaust fan without a loss of corresponding supply fan for same area High area radiation monitor alarm High CAM alarm Contaminated individual Glycol leak in the chilled water cooling system that leaks into the floor drain in the mechanical equipment room		XX Find #1
3. Is the facility organization practiced on the actions and responsibilities of the BEO during facility causality events?	Observed one emergency preparedness facility drill and two unscheduled "false" fire alarm responses.	The facility BEO is still learning and becoming proficient at emergency response. Control of all three events observed was judged satisfactory. The facility critiques of the events were excellent and improvement will happen if the facility follows through with the items they identified in the critiques.	XX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 1.5 CM-5-36, Section 4.43 IP-1120, Chapter 5 IP-0263, WRP1 DOE 5500.3A				
1. Are drill records maintained?	Steve Metzger Paul Gravelle	Drill records are being maintained by a contract individual.	XX	
CM-5-34 (1.5) (5.6)				
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SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 1.5 CM-5-36, Section 4.43 IP-1120, Chapter 5 IP-0263, WRP1 DOE 5500.3A				
1. Are emergency and Operational drills critique results used to improve the facility drill program, personnel response and emergency plans? CM-5-34 (1.5) (5.3)	Duty Operations Supervisor various operators	The drill critique information is not being passed on to the operators.		XX Find #2
2. Are critique action items competed immediately or placed on the Waste Remediation Tracking System (WRTS)? CM-5-34 (1.5) 5.3)		Drill critique action items are being placed in WRTS. A suggestion: The number of items in WRTS is growing rapidly. A priority system with goals to completion (of something equivalent) needs to be established. With the continued startup work load for phase two, without some clear priority and goals the WRTS action items will build and it is possible some needed actions will be deferred/not acted on.	XX	
3. Are drills run and critiqued adequately?	observed emergency preparedness and operational drills.	Utilization of operators and RCT's as drill controllers should be incorporated into the drill program. The insight given by having the operators and RCT's help write, run, and critique the drills on their peers is very worthwhile and will improve the drill scenarios and the staff response to drills.	XX	obs #2

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 1.5 CM-5-36, Section 4.43 IP-1120, Chapter 5 IP-0263, WRP1 DOE 5500.3A				
1. Are Emergency and Operational drills conducted periodically ? CM-5-34 1.5 (5.5) DOE Order 5500.3A, Section 11.c.(12)(d)	Steve Metzger Paul Gravelle Operations Manager	refer to 9.1.1 #3 above	XX	
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SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-36 (4.2) IP-1026 Appendix L				
1. Has the startup test program confirmed operability of equipment?	Duty Operations Supervisor various operators observations of cold run, emergency and operational drills	The NDE/NTA area H&V did not shutdown as designed with an Alpha CAM high alarm was generated for a drill. The pushbutton controls for the jib crane are so hard to depress it causes physical pain/injury to the operator. When the power was lost to SG-13-101 bus 2 which removed power from most of the facility H&V units the computer system indication of the facility status did not detect this. The control room operator from all available indication could not tell that H&V was lost, in fact computer indication was that it was still running. This is unacceptable from an Conduct of Operations standpoint at a minimum.	XX	Find #1 Find #2 obs #1
2. Has the start-up test program validated procedures?	Procedures Team Lead Duty Operations Supervisor various operators		XX	
3. Has on-the-job training been conducted during the start up test program?	Duty Operations Supervisor various operators review of training records	documentation of OJT is not rigorous and contains numerous crossouts, and other administrative errors that are unacceptable for training records		XX obs #2
4. Where are specific controls governing quality-affecting software development identified in controlled and documented plans?	John Weidert		XX	
CM-5-36 (4.2, 4.2)				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
5. Are verification reviews of software documentation done by individuals who are independent and competent? CM-5-36 (4.2, 4.2.2.1)	John Weidert	DMS(Boeing-developed) BDM performed V&V PCL subs software - Independent review of Data Transmittal Form by: Cog Eng., Raytheon, QA, & Kaiser	XX	
6.				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-36 (4.2)				
1. Has the startup test program confirmed operability of equipment?	refer to Criteria 10.1	refer to Criteria 10.1		XX Find #1&2
2. Has the start-up test program validated procedures?	refer to Criteria 10.1		XX	
3. Has on-the-job training been conducted during the start up test program?	refer to Criteria 10.1		XX	
4.				
5.				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-36 (4.2) CM-5-34 (1.22)				
1. Have open ORs, ECNs & NCRs been reviewed for impact on WRAP phase 1 start-up?	Duty Operations Supervisor	Since there are no open OR's, ECN's or NCR's, This item could not be evaluated	--	--
2. Are open ORs, ECNs & NCRs tracked?	Duty Operations Supervisor	same as above	--	--
CM-5-34 (1.22)				
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SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM				
1. Has the project been officially accepted?	Plant Manager Engineering Manager Operations Manager		XX	
2. Are uncompleted items tracked?	Operations Manager Duty Operations Supervisor	items entered in WRTS	XX	
3. Have any uncompleted items been evaluated for impact on phase 1 start-up?	Engineering Manager Operations Manager	items entered in WRTS	XX	
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SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Has the Integrated Cold Run been completed?	Duty Operations Supervisor various operators observation of a cold run		XX	
2. Are open punch list items and new work items evaluated for impact in phase 1 start-up?	Duty Operations Supervisor Operations Manager		XX	
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SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Has Integrated Cold Run been completed?	Duty Operations Supervisor various operators observation of a cold run		XX	
2. Are open punch list items & new work items evaluated for impact on phase 1 start-up?	Plant Manager Engineering Manager Operations Manager		XX	
3. Is a Software Custodian assigned? CM-5-36 (4.2, 4.2.4)	John Weidert	a custodian is not assigned, contractors have taken this responsibility		XX obs #3
4. Does the maintenance documentation provide the information necessary for the programmer to maintain software and interpret, checkout, troubleshoot, or modify the software? CM-5-36 (4.2, 4.3.5.2)	John Weidert	O&M manuals (CVI)	XX	
5. Are record copies of software documentation stored, protected, and maintained? By what procedure? CM-5-36 (4.2, 4.9)	John Weidert	currently stored in M0720 Project files	XX	

Core Requirement Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.1 Policies/procedures exist defining the responsibility, authority, accountability, and reporting relationships of each management position, exempt position, non-exempt position, bargaining unit, and direct support personnel (e.g., Environmental Compliance, Fire Protection, Engineering Maintenance, QA, Health Physics, Training, Industrial Hygienist, Industrial Safety, Nuclear Safety, Laboratories, Security, Records management, Projects, Occurrence Reporting, Emergency Preparedness, etc.).

Approach 1. Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, and position descriptions.

2. Interview facility personnel for understanding of responsibilities, authorities, accountabilities, and reporting relationships.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Policies/procedures exist defining the responsibility, authority, accountability, and reporting relationships of each management position, exempt position, non-exempt position, bargaining unit, and direct support personnel (e.g., Environmental Compliance, Fire Protection, Engineering Maintenance, QA, Health Physics, Training, Industrial Hygienist, Industrial Safety, Nuclear Safety, Laboratories, Security, Records management, Projects, Occurrence Reporting, Emergency Preparedness, etc.).	WHC-CM-5-34 Solid Waste Disposal Operations Administration Manual IP-1237 WRAP Administration Manual WRAP Personnel Training Files WRAP Position Descriptions WRAP Organization Chart	WHC-CM-5-34 provides general operational guidance for all Solid Waste Facility Operations including WRAP. It was revised in April 1996 to include WRAP, and now provides for a good overall operational administrative guidance. Facility specific operational guidance is located in IP-1237; however, it is newly issued and relatively incomplete. Several sections are in process for issue and should be completed prior to planned start-up in March 1997. Completion of the unissued sections is necessary prior to start-up.		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Continued		Reporting relationships are clearly defined in the Organization Chart and it is maintained current as the facility staffing changes. Lines of authority are defined by both the Organization Chart and in the individual Position Descriptions. The Position Descriptions are general in content and in most cases not current. The position descriptions examined lacked facility specific requirements and position duties such as ORPS facility reporting requirement designations, BED designations, identification of Facility owner/work release authority for contractor activities, and administration of Lessons Learned.		
2. Policies/procedures exist defining the responsibility, authority, accountability, and reporting relationships of each management position, exempt position, non-exempt position, bargaining unit, and direct support personnel (e.g., Environmental Compliance, Fire Protection, Engineering Maintenance, QA, Health Physics, Training, Industrial Hygienist, Industrial Safety, Nuclear Safety, Laboratories, Security, Records management, Projects, Occurrence Reporting, Emergency Preparedness, etc.).	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead RCT Dan Connolly NPO Yvan Fillion NPO	During the interview process it was found that most of these activities were addressed and individuals knew that they had responsibility for specific activities. The responsibilities and authorities were directed by management to the individuals under their charge. Managers were aware that position descriptions required updating.		

Core Requirement

Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.2 All personnel associated with the facility understand and implement their responsibilities, authority, accountability and reporting relationships.**Approach 1.** Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, and position descriptions.

2. Interview facility personnel for understanding of responsibilities; authorities, accountabilities, and reporting relationships.

3. Observe facility "cold runs", emergency drills, and other operational activities.

SUBJECT/ACTIVITY REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. All personnel associated with the facility understand their responsibilities, authority, accountability and reporting relationships.	WHC-CM-5-34 IP-1237 WRAP Administration Manual WRAP Personnel Training Files WRAP Position Descriptions WRAP Organization Chart Tom Orgill Operations & Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead RCT Dan Connolly NPO Yvan Fillion NPO	During the interview process, it was found that most individuals knew what their responsibilities were even though they were unsure what requirement specified those responsibilities, and most of them had not reviewed their position description files for specific duties. The responsibilities were directed by management to the individuals under their charge, and those individuals accepted the duties and performed accordingly. All individuals interviewed knew their reporting relationships and those with whom they interacted in the course of performing their work. They took full accountability for their duties and knew the limits of their authority.	X	
2. All personnel associated with the facility implement their responsibilities and authority.	Observation of facility "cold runs", emergency drills, and other operational activities.	Observation of the facility activities such as the cold run and emergency drills confirmed that personnel understandings of responsibilities and authority brought out in interviews were implemented when they were required to perform their duties.	X	

Core Requirement

Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.3 Department interface and bounds are clearly defined and understood.

Approach 1. Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, and position descriptions.

2. Interview facility personnel for understanding of responsibilities, authorities, and interface requirements with other facility personnel.
3. Observe facility "cold runs", emergency drills, and other operational activities.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Department interface and bounds are clearly defined.	WHC-CM-5-34 IP-1237 WRAP Administration Manual WRAP Position Descriptions WRAP Organization Chart	The WRAP Organization Chart clearly shows direct department reporting requirements and most of the support groups such as those of Cog. Engineering, Rad Con, training, and overall safety support, but some support groups such as QA and specific ES&H (e.g. Industrial Hygiene and Health Physics) were not shown.		
2. Department interface and bounds are clearly understood.	Tom Orgill Operations & Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead RCT Dan Connolly NPO Yvan Fillion NPO	All individuals interviewed knew their reporting relationships and those with whom they interacted in the course of performing their work. They took full accountability for their duties and knew the limits of their authority. They were clear in their understanding of working relationships with each other and strongly supported a management led teamwork attitude and approach to completing work.	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3. Department interface and bounds are clearly understood.	Observation of facility "cold runs", emergency drills, and other operational activities.	Observation of the facility activities during the cold run confirmed the personnel understandings of interface requirements brought out during the interviews. As an example, Rad Con Technicians and NPO's readily completed their assigned tasks and had no miss-understandings of interface requirements.	X	

Core Requirement Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.4 Support group interface and bounds are clearly defined and understood.

Approach 1. Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, and position descriptions.

2. Interview facility personnel for understanding of responsibilities, authorities, and interface requirements with other facility personnel.

3. Observe facility "cold runs," emergency drills, and other operational activities.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Support group interface and bounds are clearly defined.	WHC-CM-5-34 IP-1237 WRAP Administration Manual WRAP Position Descriptions WRAP Organization Chart	The Organization Chart shows the reporting requirements of most support groups such as Cog. Engineers, Rad Con, training, and safety, but some support groups such as QA and specific ES&H (e.g. Industrial Hygiene and Health Physics) were not shown. The WRAP specific duties of the Health and Safety support person are not defined in his position description, nor is the position description for the Rad Con Lead specific to WRAP.		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Support group interface and bounds are clearly understood.	Richard Millward Rust Quality Assurance and Training Lead Gordon Meade Rust Health and Safety Manager Tom Orgill WRAP Operations and Maintenance Manager Jeff Riddelle WRAP Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shortzman WRAP Operations Team Lead Craig Johnson WRAP Maintenance PIC Dave Watson WRAP Training Instructor Tom George WRAP Lead Radiation Control Technician Dan Connolly NPO Yvan Fillion NPO	From interviews with facility personnel, it was felt that overall support was good. They were clear as to where to obtain support, and felt those supporting them knew their responsibilities and requirements. The support group (Rad Con) individual interviewed clearly knew his reporting relationships and those with whom he interacted in the course of performing his work. He took full accountability for performing his duties and knew the limits of his authority. Observation of the facility activities during the cold run confirmed the understandings of interface requirements.	X	

Core Requirement Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.5 Oversight interface and bounds are clearly defined and understood.

Approach 1. Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, and position descriptions.

2. Interview facility personnel for understanding of interface requirements with oversight support groups.
3. Discussions with oversight support group managers.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Oversight interface and bounds are clearly defined and understood.	WHC-CM-5-34 IP-1237 WRAP Administration Manual WRAP Position Descriptions WRAP Organization Chart Richard Millward Rust Quality Assurance and Training Lead Gordon Meade Rust Health and Safety Manager Tom Orgill WRAP Operations and Maintenance Manager Jeff Riddelle WRAP Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzman WRAP Operations Team Lead Craig Johnson WRAP Maintenance PIC Dave Watson WRAP Training Instructor Tom George WRAP Lead RCT	Facility personnel interviewed, were clear as to where to obtain outside oversight support. However, to date, only limited outside oversight has been performed at the facility. The oversight support group manager and Lead clearly knew their groups' requirements and the bounds of their authorities. Previous interviews with QA and Health and Safety support group personnel provided in the core requirement affidavits confirmed that the oversight support groups were available to support the facility as required. Internal oversight Self Assessment schedules were recently prepared by facility management, and implementation is in process.		

Core Requirement Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.6 Functions, assignments, responsibilities, and reporting relationships are clearly defined and understood, and effectively implemented with line management responsible for control of safety.

Approach 1. Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, and position descriptions.

2. Interview facility personnel for understanding of responsibilities, reporting relationships, and implementation of safety.

3. Discussions with Health and Safety support group manager.

4. Observe facility "cold runs", emergency drills, and other operational activities for evidence of safety responsibility and implementation.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Line management responsibilities for control of safety are clearly defined and understood.	WHC-CM-5-34 IP-1237 WRAP Administration Manual WRAP Position Descriptions WRAP Organization Chart	A review of the position description for the Operations and Maintenance Manager clearly states his responsibility for "providing leadership to ensure safe, efficient and compliant operations and maintenance" at the WRAP facility. However, a review of the position description for the operations team lead (front line supervisor) makes no reference to safety responsibility or implementation. WRAP administrative procedures do not specifically define responsibilities for safety activities such as ORPS reporting, or contractor safety oversight.		
2. Line management responsibilities for control of safety are clearly defined and understood.	WRAP Organization Chart	A safety person has been hard matrixed to the facility, reporting to the facility manager on safety issues, and supporting the facility safety requirements as requested. This provides for a single Point of Contact on safety matters and for obtaining additional safety support (e.g. IH, Nuclear Safety, etc) as necessary.		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3. Functions, assignments, responsibilities for control of safety are understood and effectively implemented.	Tom Orgill WRAP Operations and Maintenance Manager Jeff Shortzman WRAP Operations Team Lead Dan Counolly NPO Yvan Fillion NPO	Interviews with facility management showed a clear understanding of roles and responsibility for safety in the line organization. All felt comfortable with their roles and assignments, however, implementation of some reporting requirements such as ORPS is not complete. At least one assigned person has completed the required training, but has not obtained the pass word required to perform reporting or obtain ORPS lessons learned information.		
4. Functions, assignments, responsibilities for control of safety are understood and effectively implemented.	Observation of facility "cold runs", emergency drills, and other operational activities for evidence of safety responsibility and implementation.	Several safety infractions by operators (e.g. hard hats, unfastened seat belts, unfastened safety chains, and non-use of PPE) were observed during the cold run and only limited immediate corrective actions were observed by the operations team lead. The safety person and front line supervisors need to be more effective in implementing and enforcing safety requirements.		

Core Requirement

Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.7

Line Organizations are unencumbered by excessive duties or significant duties unrelated to the day-to-day operation of WRAP.

Approach

1. Interview facility personnel for additional assigned duties unrelated to the day-to-day operation of WRAP.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Line Organizations are unencumbered by excessive duties or significant duties unrelated to the day-to-day operation of WRAP.	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead Radiation Control Technician Dan Connolly NPO Yvan Filion NPO	During interviews with facility personnel, no one reported being assigned duties unrelated to the facility that encumbered their ability to complete their day-to-day activities. The Operations and Maintenance Manager did have several assignments (Plant Review Committee, Corrective Action Evaluation Group, Configuration Control Board for software, and Maintenance Management Board). He felt that these assignments did not interfere with his regular activities. Interviews with his direct reports supported his stated feelings. They reported that he was readily available when they needed him and he spent a good deal of time in the facility with them.		

Core Requirement
Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.8
Managers encourage and effectively foster teamwork and cooperation among interfacing organizations.

Approach
1. Interview facility personnel for evidence of a teamwork attitude in the facility.

2. Observe facility activities for evidence of teamwork among interfacing organizations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Interview facility personnel for evidence of a teamwork attitude in the facility.	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead Radiation Control Technician Dan Connolly NPO Yvan Fillion NPO	All facility personnel interviewed reported a good teamwork relationship among the different groups interfacing in the facility. Team Leads reported using Cog Engineers as back up's for their respective functions. The Rad Con Tech reported good working relationships with the NPO's. Several interviewees reported that the teamwork attitude was strongly supported and pushed by the Operations and Maintenance Manager Tom Orgill. Mr Orgill reported that it is "one of the requirements for work" in his department.		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Observe facility activities for evidence of teamwork among interfacing organizations.	Observation of facility meetings, the cold run and the emergency drills.	Facility personnel exhibited a good working relationship observed in meetings such as POD work assignments and drill debriefings. Input was accepted from all personnel during the meetings. Management was also observed discussing observations the ORR team reported on the cold run held the previous day with an NPO to obtain his input as to resolution of potentially relocating the battery charging units to safer and less congested place. The Rad Con Tech and the NPO s worked well together during the cold run.		

Core Requirement
Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.9
Directives and other management information flow quickly and accurately through the management chain and other formal channels of communication.

Approach
1. Interview facility personnel for information on the accuracy and timeliness of communication flow in the facility.

2. Observe facility emergency drills, and other operational activities for evidence of effective communications.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Interview facility personnel for information on the accuracy and timeliness of communication flow in the facility.	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead Radiation Control Technician Dan Connolly NPO Yvan Fillion NPO	All facility personnel interviewed reported a that directives and management information was readily available to them through several instruments. Management information was most often obtained from the numerous meetings (e.g. POD, staff meetings, quarters, weekly safety meetings, activity debriefs etc) conducted during normal operations. Other often cited sources of information were the Required Reading Books maintained by the managers for their direct reports and cc mail (although not all personnel had access to cc mail).		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Observe facility emergency drills, and other operational activities for evidence of effective communications.	Emergency drills, and other operational activities were observed for evidence of effective communications.	During the cold run, it was observed that team leads in the control room relied on radio communications to pass information to the NPO's working on the facility floor. On one occasion the team lead could not contact the person he wanted as their radio was apparently turned off. There were enough additional personnel in the area with radios to pick up the message and inform the person to turn on his radio and contact the team lead, which he quickly did. During the drills, the management and team leads did an effective job of communicating requirements to the personnel. Although the public address system was no operative in the office trailer module, communications were effected through the use of a hand held loud speaker.		

Core Requirement

Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.10

An adequate program exists for dissemination of general information to employees regarding the facility.

Approach

1. Interview facility personnel for evidence of a program for disseminating information on the facility.

2. Observe facility emergency drills, and other operational activities for evidence of dissemination of general information.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Interview facility personnel for evidence of a program for disseminating information on the facility.	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead Radiation Control Technician Dan Connolly NPO Yvan Fillion NPO	All facility personnel interviewed reported a that facility information was readily available to them. Facility information was most often obtained from the numerous meetings (e.g. POD, staff meetings, quarters, weekly safety meetings, status meetings, all hands meetings, activity debriefs etc) conducted during normal operations. Information in the Required Reading Books maintained by the managers for their direct reports, facility bulletin boards, the Hamford Reach and cc-mail also provide facility information. Personnel below management level reported they receive very little information on the recent change of contractors, and Rust Management. However several sited the all hands meetings about Rust and the transition completed by Mr. Ed Aromi as being informative and very good.		
2. Observe facility emergency drills, and other operational activities for evidence of dissemination of general information.	Emergency drills, and other operational activities were observed for evidence of an effective communications program for dissemination of information.	General information to all personnel was readily disseminated during the emergency drills through the use of alarms, public address system, and hand held loud speakers. It was noted that the public address system did operate in the office trailer module for the facility, but was compensated for through the use of the hand held loud speakers.		

Core Requirement

Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.11

Position Descriptions are available.

Approach

1. Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, and position descriptions.

2. Interview facility personnel for their understanding of responsibilities, and duties outlined in their position descriptions.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Review and assess the completeness and adequacy of the position descriptions with regard to the policies and procedures covering the WRAP Operations.	WHC-CM-5-34 Solid Waste Disposal Operations Administration Manual WRAP Personnel Training Files WRAP Position Descriptions WRAP Organization Chart	Individual Training Plans (ITP's) containing position descriptions are maintained for all personnel. A review of the position descriptions revealed that most are not current, are general (e.g. site-wide generic position descriptions) in content, and require facility specific input. They require updating by management.		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Review and assess the completeness and adequacy of the position descriptions with regard to the policies and procedures covering the WRAP Operations.	Tom Orgill Operations and Maintenance Manager	The ITP's are maintained by two secretaries for their respective manager's organizations. Each secretary maintains a different system, but the general information contained in the files is consistent. The files are currently being up-dated by the secretaries, but require facility specific input by the managers to up-date and complete the position descriptions so they will clearly define the responsibilities and site specific duties of the personnel.		
	Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager			
	Jeff Shorzman Operations Team Lead			
	Craig Johnson Maintenance PIC			
	Dave Watson Training Instructor			
	Tom George Lead Radiation Control Technician			
	Dan Connolly NPO			
	Yvan Fillion NPO			
	Phoebe Koep Secretary			
	Cynthia Davis Secretary			

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3. Interview facility personnel for their understanding of responsibilities, and duties outlined in their position descriptions.	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shortzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead Radiation Control Technician Dan Connolly NPO Yvan Fillhon NPO	With one exception, all personnel interviewed were aware of their position descriptions. Few had recently reviewed them for accuracy regarding their position requirements and duties. Those that had reviewed them were aware they were out dated or incomplete, but were performing their duties as directed by management. One NPO was not aware of a position description and referred to his union contract as all he needed for a position description.		

Core Requirement

Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.12

Subcontractors understand their reporting relationships and responsibilities. Subcontractor interface and bounds are defined and understood.

Approach

1. Review and assess the policies and procedures covering the WRAP Operations with regard to subcontractor activities, including the applicable sections of WHC-CM-5-34.
2. Interview facility personnel for their understanding of responsibilities, reporting relationships and interface requirements with subcontractors working at the facility.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Review and assess the completeness and adequacy of the of the policies and procedures with regard to subcontractor activities.	WHC-CM-5-34 Solid Waste Disposal Operations Administration Manual IP-1237 WRAP Administration Manual WRAP Personnel Training Files WRAP Position Descriptions WRAP Organization Chart Form BC-6001-394 Work Release for Construction/Service Organizations	The WRCISO form (BC-6001-394) provides for interface requirements and work controls for subcontractors working at the facility. If properly filled out and followed, it will adequately outline the work controls and the required interfaces necessary for a subcontractor to safely and effectively complete work at the WRAP. The designation of, or the duties for a facility owner/work release authority were not found in any of the position descriptions reviewed. It appears that the facility release authority is falling to the Operations and Maintenance Manager by default; however, the operations team leads sign the daily release authorizations.		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Interview facility personnel for their understanding of responsibilities, reporting relationships and interface requirements with subcontractors working at the facility.	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzuan Operations Team Lead Craig Johnson Maintenance PIC	According to interviews with WRAP managers, there is no single Point of Contact for subcontractor activities. The subcontractor liaison or Cog Engr attends the daily planning meetings and the POD meetings where all work activity is discussed and scheduled. It is during these meetings that the areas of control are designated, generally by the Operations and Maintenance Manager for the daily work activities. The subcontractor Cog Engr then interfaces with facility engineers and operations and maintenance team leads as necessary to complete the work. All facility personnel interviewed reported a good working relationship with the subcontractor.		

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.6, Operations Maintenance
(assessed under Core Requirement 8)

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. This area is assessed under Core Requirement #8	This area is assessed under core Requirement #8			

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.
3.7, Shift Routine and Operating Practices

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, SECTION 3.7 CM-5-36, SECTION 5.36 DOE ORDER 5480.19				
1. Are names of the duty WRAP Operations Manager/Team Lead & Surveillance Operator posted on a board at the entry to the facility?	The entry area to Facility was inspected.	Duty assignment board is posted in entry area and updated every morning	XX	
2. Are alarm light bulbs & annunciators checked at least once per shift?	A daily surveillance tour was observed and the tour data sheets for the last two weeks were reviewed.	Alarm bulbs and annunciators are being checked as required	XX	
CM-5-34 (3.7.4.5)				
3. Are tours by operations of sufficient detail to ensure that the status of equipment is known?	A daily surveillance tour was observed. The Duty Operations Supervisor and the Surveillance operators were interviewed.	A suggestion here. The electrical MCC amperage and voltage readings taken daily are from only one phase. The surveillance operator said it is an electrician's function to change the switch to read the other phases of amperage and voltage. I suggest that switching the meter selector to read the other phases of amperage and voltage be changed so both operations and electricians can do this. Operations should at least check all 3 phases of amperage and voltage readings once a week to ensure they are approximately equal to detect any phase imbalance problems.	XX	
CM-5-34 (3.7.4.5)				
4. Do data sheets include maximum/minimum values for equipment parameters?	The daily surveillance data sheets were reviewed.		XX	
CM-5-34 (3.7.4.6)				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
5. Are parameters outside specified maximum/minimum red circled, reported to operations team leader, and noted in the narrative section or reference made to the explanation in the facility log book? CM-5-34 (3.7, 4.6)	The daily surveillance data sheets were reviewed. The Duty Operations Supervisor and Surveillance operator were interviewed	Although out of specification parameters were noted in the comment section of the surveillance data sheets, since there is no "official" facility log book at this time there is no means for the facility to document any required information from the surveillance tour that is important to the operation of the facility.		XX Find #1
6. Are security keys controlled by the responsible facility manager/team leader? CM-5-34 (3.7, 4.9)	The Duty Operations Supervisor and Surveillance operator were interviewed		XX	
7. Does the facility operating base (room 121) contain OSRs, IOSRs, Operating Procedures. CM-5-36 chapters 1.10, 4.40, CM-34, and the Building Emergency Plan CM-5-4 (3.7, 4.14)	Room 121 was checked for the listed items	One suggestion here. The control room operators have requested a copy of IP-1237 Building Emergency Plan which is a good suggestion.	XX	
8. Are log errors corrected properly? CM-5-34 (3.7, 4.1)	Daily surveillance data sheets for the past 2 weeks were reviewed		XX	
9. Do drawings used for operational decisions contain the letters "FV"? CM-5-34 (3.7, 4.18)		An "official" drawing file for operations use has not been established.		XX obs #1
10. Have changes to CM-5-34, Section 3.7 included a USQ screening? CM-5-34 (3.7, 5.0)	The Procedures Team Lead was interviewed	No changes have been made to section 3.7 that would require a USQ. The USQ process has just been established and is so new that no USQ's have been done by the facility at this time. An evaluation of this area can not be made at this time.	--	--
11. Are items pointed out in the daily surveillance tours that require actions being followed up on?	The items that were pointed out in the daily inspection tour of 11/6/96 for action are being pursued.	As the operations organization matures they will need to write more work documents to ensure items noted are documented and not forgotten.	XX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
12. Are current surveillance data sheets being used on the daily tour?	I observed the Daily Surveillance tour of 11/6/96.	The Surveillance Operator that day (Dan Connolly) did an excellent job of checking the daily data sheets against the "golden rod" copy of the procedure. He noticed that not only his data sheets were the wrong revision, but that the "golden rod" copy had two different revision numbers. He took actions to see this discrepancy was corrected and he had the right revision of his data sheets prior to his tour.	XX	
13. Is housekeeping being checked on the daily surveillance tour?	I observed the Daily Surveillance tour of 11/6/96.	The Surveillance Operator that day (Dan Connolly) did an excellent job of checking the facility housekeeping on his tour. He noted items that needed action, ie the housekeeping in the clean and used SWP rooms and in the material staging room (by loading dock) was unsatisfactory.	XX	obs #10

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.8, Control Area Practices

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.8 DOE Order 5480.19				
1. Is control room access limited to persons on official facility business?	The Duty Operations Supervisor and the Control Room Operator were interviewed along with observation of the control room practices	Access chains and signs are available for use by the control room operators.	XX	
2. Do personnel request permission from the control room operator prior to entering? CM-5-34 (3.8, 5.1.2)	The Duty Operations Supervisor and the Control Room Operator were interviewed along with observation of the control room practices		XX	
3. Is a professional behavior maintained in the control room? CM-5-34 (3.8, 5.2)	The Duty Operations Supervisor and the Control Room Operator were interviewed along with observation of the control room practices	The lack of an "official" plant logbook and the use of a legal note pad as a "practice" logbook appears unprofessional. The responsibility of operation of the facility is clearly that of operations and an "official" logbook needs to be instated as required	XX	
4. Are control room operators alert and attentive to facility indications and alarms? CM-5-34 (3.8, 5.3)	The Duty Operations Supervisor and the Control Room Operator were interviewed along with observation of the control room practices		XX	
5. Are control room operators using approved procedures? CM-5-34 (3.22)	A "cold run" was observed from the control room	The X-ray technicians were using a white copy of the approved procedure 0904 (which is allowed) but the white copy had red pen and ink changes/additions made to it. The procedure change process should be used to correct the procedures if required.	XX	XX obs #2

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
6. Are adequate turnovers given when the control room operators are relieved?	I observed a turnover of the control room operator during the "cold run"	The turnover of the facility and the "cold run" status was excellent.	XX	
7. Are operational anomalies investigated?	A "cold run" was observed	The discrepancy between final drum weight of 36Kg as read at the discharge conveyor and the computer indicated weight in the control room of 62Kg should be documented and noted in the control room logs.		XX obs #3
8. Are control room indications adequate?	observation of operational and emergency drills	When power was lost to SG-13-101 bus 2, which shutdown most of the facility H&V units the computer indication in the control room continued to indicate they were running. The only indication of a loss of power to a major bus (half of the plant is supplied from SG-13-101 bus 2) was a fire system trouble alarm in the entry area of the building due to loss of AC power to VESDA system. Not until power was restored some 30 minutes later did the control room receive any alarms that there was a problem in the plant.		XX obs #13

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.
3.9, Communication

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.9 DOE Order 5480.19				
1. Are SWD communications conducted in a professional manner? CM-5-34 (3.9, 4.1.2)	The Duty Operations Supervisor, duty Surveillance Operator, and duty Control Room Operator were interviewed and observed	Communications were conducted in a professional manner	XX	
2. Are "repeat backs" given when remote communication instructions involving the operation of system equipment is transmitted? CM-5-34 (3.9, 5.1.13)	The Duty Operations Supervisor, duty Surveillance Operator, and duty Control Room Operator were interviewed and observed		XX	
3. Is the plant communications equipment sufficient for efficient communications?	Observations of operations on a daily bases and during the "cold runs"	At a minimum more radios are required. The plant phone system should be expanded for more efficient/easier usage, i.e., more locations where operations needs them.		XX obs #4
4. Is communication capability sufficient?	Observations of daily operations and emergency preparedness drills.	The PAX system needs to extend to the maintenance shops and the administrative building.		XX obs #9
5. Are communications clear?	Observations of daily operations and emergency preparedness drills.	The PAX speakers in the NDE/NDA area need to be adjusted/balanced to be understood.		XX obs #11

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

- 3.10, On the Job Training
(assessed under Core Requirement 2 and 3)

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.10 CM-5-36, Chapter 2.15 DOE Order 5480.19 DOE Order 5480.20				
1. Are target dates for trainees to reach milestones and complete training assigned? CM-5-34 (3.1.1, 4.2)	The Training Manager, Duty Operations Supervisor, and various operators were interviewed		XX	
2. Is OJT conducted by individuals qualified in the operation of the facility with the appropriate OJT instructor training requirements completed? CM-5-34 (3.10, 5.2)	The Duty Operations Supervisor and various operators were interviewed		XX	
3. Does OJT involve the following four elements?: Objective, Standards, Evaluation, Documentation. CM-5-34 (3.10, 5.8)	The Duty Operations Supervisor and various operators were interviewed		XX	

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.13, Control of Equipment and system Status

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.13 DOE Order 5480.19				
1. Are changes in the status of facility equipment and systems documented in the Facility Logbooks?	The Duty Operations Supervisor, Duty Surveillance Operator and the Control Room Operator were interviewed	No "official" facility logbook exists at this time		XX Find #1
CM-5-34 (3.13, 4.1)				
2. At the beginning of each day shift, do the Facility Logbooks reflect initial facility conditions?	The Duty Operations Supervisor, Duty Surveillance Operator and the Control Room Operator were interviewed	No "official" facility logbook exists at this time		XX Find #1
CM-5-34 (3.13, 4.3)				
3. Is equipment tested after maintenance to demonstrate it is capable of performing the intended function?	The Duty Operations Supervisor, Duty Surveillance Operator and the Control Room Operator were interviewed	retests are done as per directed in the work packages	XX	
CM-5-34 (3.13, 4.6)				
4. Is alarm status noted in Facility Logbooks?	The Duty Operations Supervisor, Duty Surveillance Operator and the Control Room Operator were interviewed	No "official" facility logbook exists at this time		XX Find #1
CM-5-34 (3.13, 4.7)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.14, Lockout and Tagout

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34 section 3.14 WHC-CM-5-36 ch 1-10, WKS 8.1 DOE Order 5480.19				
1. Are primary & alternate Administrators designated in writing by level 3 management?	Steve Metzger was interviewed	A suggestion here. It should be part of the job description to be a "Duty Operations Supervisor" that individual be a primary or alternate T/O administrator.	XX	
CM-5-34(3.14/4.0.1)				
2. Have SWD employees completed Lock/tag training?	The Duty Operations Supervisor and various operators were interviewed		XX	
CM-5-34(3.14/4.1)				
3. Are safe condition checks approved by a technical reviewer and the administrator?	A review was made of all 1996 tagout authorizations and Steve Metzger was interviewed		XX	
CM-5-34(3.14/5.2)				
4. Are safe condition checks witnessed by both the lock & tag Administrator and one of the following: Maintenance manager, first line maintenance manager, or PIC?	A tagout(96-0024) was observed on 11/4/96 for 96-0089 a pump on the roll-up doors. The Duty Operations Supervisor and the Maintenance PIC were interviewed		XX	
CM-5-34(3.14/5.2) CM-5-36(ch 1-10 WKS 8.1 sec 7.0)				
5. Are all technical reviews performed by cognizant engineers, using approved sketches or drawings showing the lockout points?	The Tagout Administrator was interviewed along with review of the tagout in the tagout log and of work packages that were being released during the ORR		XX	
CM-5-34(3.14/5.3)				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
6. Is "lifting" of tags prohibited? CM-5-34(3.14/5.7)	The Tagout Administrator and various operators were interviewed		XX	
7. Are active tagout authorizations surveyed monthly? CM-5-34(3.14/5.9)	A reviewed of all 1996 tagout was conducted and the tagout book was inspected for the required reviews		XX	
8. Are monthly Lock & Tag surveillances corrective items documented & tracked on the Waste Remediation Tracking System (WRTS)? CM-5-34(3.14/5.10)	Tagout Administrator	All corrected items to date have been corrected immediately thus have not needed to be entered into WRTS.	XX	
9. Are safe condition checks (SCC) being properly documented? CM-5-36 WKS 8.1	review of tagout authorization sheets was conducted	At times there is only one signature for the safe condition check for multiple tags, at other times there is a signature for each SCC on each tag. To be consistent and to document the SCC, I would recommend a signature for each tag's SCC.	XX	XX obs #5

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.15, Independent Verification

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.15 CM-5-36, Chapter 1-3 DOE Order 5480.19				
1. Is independent verification conducted separately and properly? CM-5-34 (3.15, 5.3)	The Duty Operations Supervisor, Tagout Administrator and various operators were interviewed. A tagout was also observed.		XX	

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.16, Alarm Management

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.16 CM-5-34, Section 2.11 CM-1-5, Section 1.1 DOE Order 5480.19				
1. Are non-active alarms labeled? CM-5-34 (3.16, 5.0.1)	The Duty Operations Supervisor and the Control Room Operator were interviewed	The alarms for the process section of the facility which is still under construction are clearly marked and are not a source of confusion to operations. The proposed computer filter to eliminate these alarms will improve this also.	XX	
2. Do all active alarms have a plant operating procedure? CM-5-34 (3.16, 5.0.2)	The Procedure Team Lead, Duty Operations Supervisor and various operators were interviewed		XX	
3. Are alarms documented in the Facility Logbooks? CM-5-34 (3.16, 5.0.3)		No "official" plant logbook exists at this time		XX Find #1
4. Are spurious alarms greater than one working day old reported on the daily operating report? CM-5-34 (3.16, 6.2.2)		There are no spurious alarms greater than one day old but since the daily report is not being written at this time this item is not as required.		XX obs #6
5. Do failed alarms have alternate methods established for monitoring required parameters? CM-5-34 (3.16, 6.4)	The Duty Operations Supervisor and various operators were interviewed		XX	

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.17, Logkeeping

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.17 CM-5-36, Chapter 3-5 DOE Order 5480.19				
1. Is a Narrative Logbook maintained?	The Duty Operations Supervisor and Control Room Operator were interviewed	No "official" plant logbook exists at this time		XX Find #1
2. Are entries in the Narrative Logbook clear, concise, complete and legible?		No "official" plant logbook exists at this time		XX Find #1
3. Is the author of any logbook entry identifiable?		No "official" plant logbook exists at this time		XX Find #1
CM-5-34 (3.17, 6.1.9)				
4. Are logbooks reviewed daily by Operations Manager/Team Leader		No "official" plant logbook exists at this time		XX Find #1
CM-5-34 (3.17, 6.1)				
5. Is there an operating station or desk/table for use by operations to handle ship/receive paperwork?	observed cold run	some sort of station/desk needs to be added for operations in the shipping/receiving area to use procedures from and keep paperwork together.		XX obs #7

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.18, Operations Turnover

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.18 DOE Order 5480.19				
1. Is a shift briefing given by the Operations Team Leader/Designee prior to beginning shift activities?	The shift briefings on 11/4, 11/5, 11/6, 11/7, and 11/8 were attended	The shift briefings were excellent	XX	
CM-5-34 (3.18, 5.1.3)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.19, Chemistry and Unique Processes

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.19				
1. Are MSDSs available and do operators know how to use them?	The Duty Operations Supervisor and the Surveillance Operator were interviewed	A cabinet in the Administrative area is set up for use	XX	
CM-5-34 (3.19, 4.3.5)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.20, Required Reading

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.20 DOE Order 5480.19				
1. Is valid material for Required Reading determined by Level 3 manager and function coordinator designated?	The Operations Manager, Duty Operations Supervisor were interviewed		XX	
CM-5-34 (3.20, 4.1)				
2. Is Required Reading material kept readily available?	The Operations Manager, Duty Operations Supervisor were interviewed	The Required reading book for operations is kept on the secretary's desk outside the Operations Manager's office.	XX	
CM-5-34 (3.20, 4.3)				
3. Is Required Reading completed in a timely manner?		The Required Reading program is only a little over a week old. This area can not be evaluated at this time.	--	--
CM-5-34 (3.20, 4.4)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.21, Timely Orders to Operators

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.21 DOE Order 5480.19				
1. Are daily orders communicated through shift briefs before personnel assume shift responsibility?	The Operations Manager, Duty Operations Supervisor and various operators were interviewed	All shift briefs for the week of 11/4 to 11/8 were observed. New standing orders 96-001 & 96-002 were explained to the operators.	XX	
CM-5-34 (3.21, 5.2)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.
3.22, Operation Procedures

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-3-4, Section 3.22 IP-0673 IP-1140 DOE Order 5480.19				
1. Are procedures that are not step sensitive designated by Standing Order? CM-5-34 (3.22, 3.4.1.1)	The Operations Manager and the Duty Operations Supervisor were interviewed	Standing Order 96-002 accomplishes this.	XX	
2. Are procedures that are not to be in hand during use designated by Standing Order? CM-5-34 (3.22, 3.4.1.4)	The Operations Manager and the Duty Operations Supervisor were interviewed	Standing Order 96-002 accomplishes this.	XX	

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.23, Operator Aid Posting

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.23 DOE Order 5480.19				
1. Are Operator Aids authorized? CM-5-34 (3.22, 4.2)	Reviewed the Operator Aid Logbook	The one operator aid in the logbook was posted. There appears to be "unauthorized" operator aids posted for the bar code reader/scanner to scan various commands at various locations in the plant. This bar code command sheets should be part of the operator aid program.		XX obs #8
2. Are Operator Aids reviewed and surveyed? CM-5-34 (4.2, 4.4, 4.5)	Reviewed the Operator Aid Logbook	as only one "official" aid is posted and it was posted on 11/6/96 this area can not be evaluated at this item	--	--

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.24, Equipment and Piping Labeling

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.24 DOE Order 5480.19				
1. Are temporary labels validated correctly installed by the Operations Team Leader?	The Procedure Team Lead and the Duty Operations Supervisor were interviewed		XX	
CM-5-34 (3.24, 3.4)				
2. Are labels on valves, dampers, instruments, gages, pipes, ducts, major equipment, busses, MCCs, power panels, breakers, switches, room doors, emergency equipment, and fire protection systems?	A facility walkdown was performed		XX	
CM-5-34 (3.24, 4.1)				
3. Are areas requiring PPE such as hard hats clearly understood and/or marked?	Observation of cold run	The area under the arc of the jib cranes should be marked to make personnel aware of special PPE requirements.		XX obs #12

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Observe facility emergency drills, and other operational activities for evidence of effective communications.	Emergency drills, and other operational activities were observed for evidence of effective communications.	During the cold run, it was observed that team leads in the control room relied on radio communications to pass information to the NPO's working on the facility floor. On one occasion the team lead could not contact the person he wanted as their radio was apparently turned off. There were enough additional personnel in the area with radios to pick up the message and inform the person to turn on his radio and contact the team lead, which he quickly did. During the drills, the management and team leads did an effective job of communicating requirements to the personnel. Although the public address system was no operative in the office trailer module, communications were effected through the use of a hand held loud speaker.		

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WRAP-1 Phase 1 Operational Readiness Review

DATE November 20, 1996

Core Requirement

There are sufficient numbers of qualified personnel to support safe operations.

Criteria 13.1

There is an adequate number of qualified personnel for the mission of the facility.

Approach

1. Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, Basis of Estimates (BOE's), WO26-SAR-002 Facility Safety Analysis Report (FSAR), and training plans.

2. Interview facility personnel for their understanding of WRAP Phase 1 operations and obtain their input as to the staffing levels and training necessary to complete the work.

3. Observe facility "cold runs", emergency drills, and other operational activities.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS		COMPLY	
				YES	NO

Core Requirement Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.11 Position Descriptions are available.

Approach 1. Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, and position descriptions.

2. Interview facility personnel for their understanding of responsibilities, and duties outlined in their position descriptions.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Review and assess the completeness and adequacy of the position descriptions with regard to the policies and procedures covering the WRAP Operations.	WHC-CM-5-34 Solid Waste Disposal Operations Administration Manual WRAP Personnel Training Files WRAP Position Descriptions WRAP Organization Chart	Individual Training Plans (ITP's) containing position descriptions are maintained for all personnel. A review of the position descriptions revealed that most are not current, are general (e.g. statewide generic position descriptions) in content, and require facility specific input. They require updating by management.		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Review and assess the completeness and adequacy of the position descriptions with regard to the policies and procedures covering the WRAP Operations.	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shorzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead Radiation Control Technician Dan Connolly NPO Yvan Fillion NPO Phoebe Koep Secretary Cynthia Davis Secretary	The ITP's are maintained by two secretaries for their respective manager's organizations. Each secretary maintains a different system, but the general information contained in the files is consistent. The files are currently being up-dated by the secretaries, but require facility specific input by the managers to up-date and complete the position descriptions so they will clearly define the responsibilities and site specific duties of the personnel.		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
3. Interview facility personnel for their understanding of responsibilities, and duties outlined in their position descriptions.	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shortzman Operations Team Lead Craig Johnson Maintenance PIC Dave Watson Training Instructor Tom George Lead Radiation Control Technician Dan Connolly NPO Yvan Fillion NPO	With one exception, all personnel interviewed were aware of their position descriptions. Few had recently reviewed them for accuracy regarding their position requirements and duties. Those that had reviewed them were aware they were out dated or incomplete, but were performing their duties as directed by management. One NPO was not aware of a position description and referred to his union contract as all he needed for a position description.		

Core Requirement

Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Criteria 11.12

Subcontractors understand their reporting relationships and responsibilities. Subcontractor interface and bounds are defined and understood.

Approach

1. Review and assess the policies and procedures covering the WRAP Operations with regard to subcontractor activities, including the applicable sections of WHC-CM-5-34.
2. Interview facility personnel for their understanding of responsibilities, reporting relationships and interface requirements with subcontractors working at the facility.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
1. Review and assess the completeness and adequacy of the of the policies and procedures with regard to subcontractor activities.	WHC-CM-5-34 Solid Waste Disposal Operations Administration Manual IP-1237 WRAP Administration Manual WRAP Personnel Training Files WRAP Position Descriptions WRAP Organization Chart Form BC-6001-394 Work Release for Construction/Service Organizations	The WRCO form (BC-6001-394) provides for interface requirements and work controls for subcontractors working at the facility. If properly filled out and followed, it will adequately outline the work controls and the required interfaces necessary for a subcontractor to safely and effectively complete work at the WRAP. The designation of, or the duties for a facility owner/work release authority were not found in any of the position descriptions reviewed. It appears that the facility release authority is falling to the Operations and Maintenance Manager by default; however, the operations team leads sign the daily release authorizations.		

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
2. Interview facility personnel for their understanding of responsibilities, reporting relationships and interface requirements with subcontractors working at the facility.	Tom Orgill Operations and Maintenance Manager Jeff Riddelle Facility Start-up Manager & Acting Environmental Production and Training Manager Jeff Shortzman Operations Team Lead Craig Johnson Maintenance PIC	According to interviews with WRAP managers, there is no single Point of Contact for subcontractor activities. The subcontractor liaison or Cog Engr attends the daily planning meetings and the POD meetings where all work activity is discussed and scheduled. It is during these meetings that the areas of control are designated, generally by the Operations and Maintenance Manager for the daily work activities. The subcontractor Cog Engr then interfaces with facility engineers and operations and maintenance team leads as necessary to complete the work. All facility personnel interviewed reported a good working relationship with the subcontractor.		

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.6. Operations Maintenance
(assessed under Core Requirement 8)

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-				
1. This area is assessed under Core Requirement #8	This area is assessed under core Requirement #8			

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.7. Shift Routine and Operating Practices

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5.34, SECTION 3.7 CM-5.36, SECTION 5.36 DOE ORDER 5480.19				
1. Are names of the duty WRAP Operations Manager/Team Lead & Surveillance Operator posted on a board at the entry to the facility? CM-5-34, (3.7.4.1)	The entry area to Facility was inspected.	Duty assignment board is posted in entry area and updated every morning	XX	
2. Are alarm light bulbs & annunciators checked at least once per shift? CM-5-34 (3.7.4.5)	A daily surveillance tour was observed and the tour data sheets for the last two weeks were reviewed.	Alarm bulbs and annunciators are being checked as required	XX	
3. Are tours by operations of sufficient detail to ensure that the status of equipment is known? CM-5-34 (3.7.4.5)	A daily surveillance tour was observed. The Duty Operations Supervisor and the Surveillance operators were interviewed.	A suggestion here. The electrical MCC amperage and voltage readings taken daily are from only one phase. The surveillance operator said it is an electrician's function to change the switch to read the other phases of amperage and voltage. I suggest that switching the meter selector to read the other phases of amperage and voltage be changed so both operations and electricians can do this. Operations should at least check all 3 phases of amperage and voltage readings once a week to ensure they are approximately equal to detect any phase imbalance problems.	XX	
4. Do data sheets include maximum/minimum values for equipment parameters? CM-5.34 (3.7.4.6)	The daily surveillance data sheets were reviewed.		XX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
5. Are parameters outside specified maximum/minimum red circled, reported to operations team leader, and noted in the narrative section or reference made to the explanation in the facility log book? CM-5-34 (3.7, 4.6)	The daily surveillance data sheets were reviewed. The Duty Operations Supervisor and Surveillance operator were interviewed	Although out of specification parameters were noted in the comment section of the surveillance data sheets, since there is no "official" facility log book at this time there is no means for the facility to document any required information from the surveillance tour that is important to the operation of the facility.	XX	XX Find #1
6. Are security keys controlled by the responsible facility manager/team leader? CM-5-34 (3.7, 4.9)	The Duty Operations Supervisor and Surveillance operator were interviewed		XX	
7. Does the facility operating base (room 121) contain OSRs, IOSRs, Operating Procedures. CM-5.36 chapters 1.10, 4.40, CM-34, and the Building Emergency Plan CM-5-4 (3.7, 4.14)	Room 121 was checked for the listed items	One suggestion here. The control room operators have requested a copy of IP-1237 Building Emergency Plan which is a good suggestion.	XX	
8. Are log errors corrected properly? CM-5-34 (3.7, 4.1)	Daily surveillance data sheets for the past 2 weeks were reviewed		XX	
9. Do drawings used for operational decisions contain the letters "FV"? CM-5-34 (3.7, 4.18)		An "official" drawing file for operations use has not been established.		XX obs #1
10. Have changes to CM-5-34, Section 3.7 included a USQ screening? CM-5-34 (3.7, 5.0)	The Procedures Team Lead was interviewed	No changes have been made to section 3.7 that would require a USQ. The USQ process has just been established and is so new that no USQ's have been done by the facility at this time. An evaluation of this area can not be made at this time.	--	--
11. Are items pointed out in the daily surveillance tours that require actions being followed up on?	The items that were pointed out in the daily inspection tour of 11/6/96 for action are being pursued.	As the operations organization matures they will need to write more work documents to ensure items noted are documented and not forgotten.	XX	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
12. Are current surveillance data sheets being used on the daily tour?	I observed the Daily Surveillance tour of 11/6/96.	The Surveillance Operator that day (Dan Connolly) did an excellent job of checking the daily data sheets against the "golden rod" copy of the procedure. He noticed that not only his data sheets were the wrong revision, but that the "golden rod" copy had two different revision numbers. He took actions to see this discrepancy was corrected and he had the right revision of his data sheets prior to his tour.	XX	
13. Is housekeeping being checked on the daily surveillance tour?	I observed the Daily Surveillance tour of 11/6/96.	The Surveillance Operator that day (Dan Connolly) did an excellent job of checking the facility housekeeping on his tour. He noted items that needed action, ie the housekeeping in the clean and used SWP rooms and in the material staging room (by loading dock) was unsatisfactory.	XX	obs #10

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.8, Control Area Practices

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.8 DOE Order 5480.19				
1. Is control room access limited to persons on official facility business?	The Duty Operations Supervisor and the Control Room Operator were interviewed along with observation of the control room practices	Access chains and signs are available for use by the control room operators.	XX	
2. Do personnel request permission from the control room operator prior to entering? CM-5-34 (3.8, 5.1.2)	The Duty Operations Supervisor and the Control Room Operator were interviewed along with observation of the control room practices		XX	
3. Is a professional behavior maintained in the control room? CM-5-34 (3.8, 5.2)	The Duty Operations Supervisor and the Control Room Operator were interviewed along with observation of the control room practices	The lack of an "official" plant logbook and the use of a legal note pad as a "practice" logbook appears unprofessional. The responsibility of operation of the facility is clearly that of operations and an "official" logbook needs to be instated as required	XX	
4. Are control room operators alert and attentive to facility indications and alarms? CM-5-34 (3.8, 5.3)	The Duty Operations Supervisor and the Control Room Operator were interviewed along with observation of the control room practices		XX	
5. Are control room operators using approved procedures? CM-5-34 (3.22)	A "cold run" was observed from the control room	The X-ray technicians were using a white copy of the approved procedure 0904 (which is allowed) but the white copy had red pen and ink changes/additions made to it. The procedure change process should be used to correct the procedures if required.		XX obs #2

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
6. Are adequate turnovers given when the control room operators are relieved?	I observed a turnover of the control room operator during the "cold run"	The turnover of the facility and the "cold run" status was excellent.	XX	
7. Are operational anomalies investigated?	A "cold run" was observed	The discrepancy between final drum weight of 36Kg as read at the discharge conveyor and the computer indicated weight in the control room of 62Kg should be documented and noted in the control room logs.		XX obs #3
8. Are control room indications adequate?	observation of operational and emergency drills	When power was lost to SG-13-101 bus 2, which shutdown most of the facility H&V units the computer indication in the control room continued to indicate they were running. The only indication of a loss of power to a major bus (half of the plant is supplied from SG-13-101 bus 2) was a fire system trouble alarm in the entry area of the building due to loss of AC power to VESDA system. Not until power was restored some 30 minutes later did the control room receive any alarms that there was a problem in the plant.		XX obs #13

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.9, Communication

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.9 DOE Order 5480.19				
1. Are SWD communications conducted in a professional manner? CM-5-34 (3.9, 4.1.2)	The Duty Operations Supervisor, duty Surveillance Operator, and duty Control Room Operator were interviewed and observed	Communications were conducted in a professional manner	XX	
2. Are "repeat backs" given when remote communication instructions involving the operation of system equipment is transmitted? CM-5-34 (3.9, 5.1.13)	The Duty Operations Supervisor, duty Surveillance Operator, and duty Control Room Operator were interviewed and observed		XX	
3. Is the plant communications equipment sufficient for efficient communications?	Observations of operations on a daily bases and during the "cold runs"	At a minimum more radios are required. The plant phone system should be expanded for more efficient/easier usage, i.e., more locations where operations needs them.		XX obs #4
4. Is communication capability sufficient?	Observations of daily operations and emergency preparedness drills.	The PAX system needs to extend to the maintenance shops and the administrative building.		XX obs #9
5. Are communications clear?	Observations of daily operations and emergency preparedness drills.	The PAX speakers in the NDE/ANDA area need to be adjusted/balanced to be understood.		XX obs #11

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

- 3.10, On the Job Training
(assessed under Core Requirement 2 and 3)

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34; Section 3.10 CM-5-36, Chapter 2.15 DOE Order 5480.19 DOE Order 5480.20				
1. Are target dates for trainees to reach milestones and complete training assigned?	The Training Manager, Duty Operations Supervisor, and various operators were interviewed		XX	
CM-5-34 (3.1, 4.2)				
2. Is OJT conducted by individuals qualified in the operation of the facility with the appropriate OJT instructor training requirements completed?	The Duty Operations Supervisor and various operators were interviewed		XX	
CM-5-34 (3.10, 5.2)				
3. Does OJT involve the following four elements?: Objective, Standards, Evaluation, Documentation.	The Duty Operations Supervisor and various operators were interviewed		XX	
CM-5-34 (3.10, 5.8)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.
3.13, Control of Equipment and system Status

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.13 DOE Order 5480.19				
1. Are changes in the status of facility equipment and systems documented in the Facility Logbooks?	The Duty Operations Supervisor, Duty Surveillance Operator and the Control Room Operator were interviewed	No "official" facility logbook exists at this time		XX Find #1
CM-5-34 (3.13, 4.1)				
2. At the beginning of each day shift, do the Facility Logbooks reflect initial facility conditions?	The Duty Operations Supervisor, Duty Surveillance Operator and the Control Room Operator were interviewed	No "official" facility logbook exists at this time		XX Find #1
CM-5-34 (3.13, 4.3)				
3. Is equipment tested after maintenance to demonstrate it is capable of performing the intended function?	The Duty Operations Supervisor, Duty Surveillance Operator and the Control Room Operator were interviewed	retests are done as per directed in the work packages	XX	
CM-5-34 (3.13, 4.6)				
4. Is alarm status noted in Facility Logbooks?	The Duty Operations Supervisor, Duty Surveillance Operator and the Control Room Operator were interviewed	No "official" facility logbook exists at this time		XX Find #1
CM-5-34 (3.13, 4.7)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.14, Lockout and Tagout

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
WHC-CM-5-34 section 3.14 WHC-CM-5-36 ch 1-10, WKS 8.1 DOE Order 5480.19				
1. Are primary & alternate Administrators designated in writing by level 3 management?	Steve Metzger was interviewed	A suggestion here. It should be part of the job description to be a "Duty Operations Supervisor" that individual be a primary or alternate T/O administrator.	XX	
CM-5-34(3.14/4.0.1)				
2. Have SWD employees completed Lock/tag training?	The Duty Operations Supervisor and various operators were interviewed		XX	
CM-5-34(3.14/4.1)				
3. Are safe condition checks approved by a technical reviewer and the administrator?	A review was made of all 1996 tagout authorizations and Steve Metzger was interviewed		XX	
CM-5-34(3.14/5.2)				
4. Are safe condition checks witnessed by both the lock & tag Administrator and one of the following: Maintenance manager, first line maintenance manager, or PIC?	A tagout(96-0024) was observed on 11/4/96 for 96-0089 a pump on the roll-up doors. The Duty Operations Supervisor and the Maintenance PIC were interviewed		XX	
CM-5-34(3.14/5.2) CM-5-36(ch 1-10 WKS 8.1 sec 7.0)				
5. Are all technical reviews performed by cognizant engineers, using approved sketches or drawings showing the lockout points?	The Tagout Administrator was interviewed along with review of the tagout in the tagout log and of work packages that were being released during the ORR		XX	
CM-5-34(3.14/5.3)				

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
6. Is "lifting" of tags prohibited? CM-5-34(3.14/5.7)	The Tagout Administrator and various operators were interviewed		XX	
7. Are active tagout authorizations surveyed monthly? CM-5-34(3.14/5.9)	A reviewed of all 1996 tagout was conducted and the tagout book was inspected for the required reviews		XX	
8. Are monthly Lock & Tag surveillances corrective items documented & tracked on the Waste Remediation Tracking System (WRTS)? CM-5-34(3.14/5.10)	Tagout Administrator	All corrected items to date have been corrected immediately thus have not needed to be entered into WRTS.	XX	
9. Are safe condition checks (SCC) being properly documented? CM-5-36 WKS 8.1	review of tagout authorization sheets was conducted	At times there is only one signature for the safe condition check for multiple tags, at other times there is a signature for each SCC on each tag. To be consistent and to document the SCC, I would recommend a signature for each tag's SCC.	XX	XX obs #5

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.15, Independent Verification

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.15 CM-5-36, Chapter 1-3 DOE Order 5480.19				
1. Is independent verification conducted separately and properly? CM-5-34 (3.15, 5.3)	The Duty Operations Supervisor, Tagout Administrator and various operators were interviewed. A tagout was also observed.		XX	

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.16, Alarm Management

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.16 CM-5-34, Section 2.11 CM-1-5, Section 1.1 DOE Order 5480.19				
1. Are non-active alarms labeled? CM-5-34 (3.16, 5.0.1)	The Duty Operations Supervisor and the Control Room Operator were interviewed	The alarms for the process section of the facility which is still under construction are clearly marked and are not a source of confusion to operations. The proposed computer filter to eliminate these alarms will improve this also.	XX	
2. Do all active alarms have a plant operating procedure? CM-5-34 (3.16, 5.0.2)	The Procedure Team Lead, Duty Operations Supervisor and various operators were interviewed		XX	
3. Are alarms documented in the Facility Logbooks? CM-5-34 (3.16, 5.0.3)		No "official" plant logbook exists at this time		XX Find #1
4. Are spurious alarms greater than one working day old reported on the daily operating report? CM-5-34 (3.16, 6.2.2)		There are no spurious alarms greater than one day old but since the daily report is not being written at this time this item is not as required.		XX obs #6
5. Do failed alarms have alternate methods established for monitoring required parameters? CM-5-34 (3.16, 6.4)	The Duty Operations Supervisor and various operators were interviewed		XX	

Core Requirement 12.0 The implementation status for DOE Order 5480.19 conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.17, Logkeeping

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.17 CM-5-36, Chapter 3-5 DOE Order 5480.19				
1. Is a Narrative Logbook maintained?	The Duty Operations Supervisor and Control Room Operator were interviewed	No "official" plant logbook exists at this time		XX Find #1
CM-5-34 (3.17, 5.0)		No "official" plant logbook exists at this time		XX Find #1
2. Are entries in the Narrative Logbook clear, concise, complete and legible?		No "official" plant logbook exists at this time		XX Find #1
CM-5-34 (3.17, 6.1.4)		No "official" plant logbook exists at this time		XX Find #1
3. Is the author of any logbook entry identifiable?		No "official" plant logbook exists at this time		XX Find #1
CM-5-34 (3.17, 6.1.9)		No "official" plant logbook exists at this time		XX Find #1
4. Are logbooks reviewed daily by Operations Manager/Team Leader		No "official" plant logbook exists at this time		XX Find #1
CM-5-34 (3.17, 6.1)		some sort of station/desk needs to be added for operations in the shipping/receiving area to use procedures from and keep paperwork together.		XX obs #7
5. Is there an operating station or desk/table for use by operations to handle ship/receive paperwork?	observed cold run			

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.18, Operations Turnover

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.18 DOE Order 5480.19				
1. Is a shift briefing given by the Operations Team Leader/Designee prior to beginning shift activities?	The shift briefings on 11/4, 11/5, 11/6, 11/7, and 11/8 were attended	The shift briefings were excellent	XX	
CM-5-34 (3.18, 5.1.3)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.19, Chemistry and Unique Processes

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.19				
1. Are MSDSS available and do operators know how to use them?	The Duty Operations Supervisor and the Surveillance Operator were interviewed	A cabinet in the Administrative area is set up for use	XX	
CM-5-34 (3.19, 4.3.5)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.20, Required Reading

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.20 DOE Order 5480.19				
1. Is valid material for Required Reading determined by Level 3 manager and function coordinator designated?	The Operations Manager, Duty Operations Supervisor were interviewed		XX	
CM-5-34 (3.20, 4.1)				
2. Is Required Reading material kept readily available?	The Operations Manager, Duty Operations Supervisor were interviewed	The Required reading book for operations is kept on the secretary's desk outside the Operations Manager's office.	XX	
CM-5-34 (3.20, 4.3)				
3. Is Required Reading completed in a timely manner?		The Required Reading program is only a little over a week old. This area can not be evaluated at this time.	--	--
CM-5-34 (3.20, 4.4)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:

3.21, Timely Orders to Operators

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.21 DOE Order 5480.19				
1. Are daily orders communicated through shift briefs before personnel assume shift responsibility?	The Operations Manager, Duty Operations Supervisor and various operators were interviewed	All shift briefs for the week of 11/4 to 11/8 were observed. New standing orders 96-001 & 96-002 were explained to the operators.	XX	
CM-5-34 (3.21, 5.2)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.22, Operation Procedures

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-3-4, Section 3.22 IP-0673 IP-1140 DOE Order 5480.19				
1. Are procedures that are not step sensitive designated by Standing Order?	The Operations Manager and the Duty Operations Supervisor were interviewed	Standing Order 96-002 accomplishes this.	XX	
CM-5-34 (3.22, 3.4.1.1)				
2. Are procedures that are not to be in hand during use designated by Standing Order?	The Operations Manager and the Duty Operations Supervisor were interviewed	Standing Order 96-002 accomplishes this.	XX	
CM-5-34 (3.22, 3.4.1.4)				

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following.

3.23, Operator Aid Posting

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.23 DOE Order 5480.19				
1. Are Operator Aids authorized? CM-5-34 (3.22, 4.2)	Reviewed the Operator Aid Logbook	The one operator aid in the logbook was posted. There appears to be "unauthorized" operator aids posted for the bar code reader/scanner to scan various commands at various locations in the plant. This bar code command sheets should be part of the operator aid program.		XX obs #8
2. Are Operator Aids reviewed and surveyed? CM-5-34 (4.2, 4.4, 4.5)	Reviewed the Operator Aid Logbook	as only one "official" aid is posted and it was posted on 11/6/96 this area can not be evaluated at this item	--	--

Core Requirement 12.0 The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Criteria 12.1 The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
3.24, Equipment and Piping Labeling

Approach 1 Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, Operations.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
CM-5-34, Section 3.24 DOE Order 5480.19				
1. Are temporary labels validated correctly installed by the Operations Team Leader?	The Procedure Team Lead and the Duty Operations Supervisor were interviewed		XX	
CM-5-34 (3.24, 3.4)				
2. Are labels on valves, dampers, instruments, gages, pipes, ducts, major equipment, busses, MCCs, power panels, breakers, switches, room doors, emergency equipment, and fire protection systems?	A facility walkdown was performed		XX	
CM-5-34 (3.24, 4.1)				
3. Are areas requiring PPE such as hard hats clearly understood and/or marked?	Observation of cold run	The area under the arc of the jib cranes should be marked to make personnel aware of special PPE requirements.		XX obs #12

Page 1 of 3

WRAP-1 Phase 1 Operational Readiness Review

DATE November 20, 1996

Core Requirement There are sufficient numbers of qualified personnel to support safe operations.

Criteria 13.1 There is an adequate number of qualified personnel for the mission of the facility.

Approach 1. Review and assess the policies and procedures covering the WRAP Operations, including the applicable sections of WHC-CM-5-34, the facility organization chart, Basis of Estimates (BOE's), WO26-SAR-002 Facility Safety Analysis Report (FSAR), and training plans.

2. Interview facility personnel for their understanding of WRAP Phase 1 operations and obtain their input as to the staffing levels and training necessary to complete the work.

3. Observe facility "cold runs", emergency drills, and other operational activities.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO

DATE 11-15-96

Core Requirement 14.0

A program is established to promote a site-wide culture in which personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements and, through their actions, demonstrate a high priority commitment to comply with these requirements.

Criterion Number and Statement: 1.

Procedures and training programs are in place to promote safety awareness, ownership of personal safety, and communications about safety in the workplace.

SUBJECT/ACTIVITY REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 1.	WHC-CM-5-34 Steve Norton Jeff Riddle Tom Orrell Jay Bortone Brad Brunsen Steve Metzger Jeff Schorzen Vince Chapman Ben Pierce Phyllis Koep Tom George Cliff Stephen Mark Graham	Section 1.8 of WHC-CM-5-34 implements the training requirements for SWD personnel, this also includes the training Matrix for all SWD personnel including WRAP. Safety training is included in the matrix. Those training items are tracked in the TMAX site system. All training for assigned personnel is administratively tracked by Mr. Koep with backup from Mr. Tibbault. They can pull up current records and requirements for individuals through the database. Those training requirements (classes) are posted daily and discussed in daily meetings. Observation #1, training on the authorization basis is very brief and content on facility safety commitments is just an overview. Suggest more content be added, as TSRs are not the only commitments to safety in the SAR. Observed a safety meeting for the operations organization conducted by the operations manager. There are many positive points associated with the meeting. There was a great deal of interaction with management from the worker level associated with opinions, questions, and solutions. Management took action items based upon discussion with the workforce on safety issues. Interviews with facility personnel showed management ownership in promoting a safety culture for the facility. Across the board there appeared to be ownership of safety, stop work authority, awareness of required reading for items associated with safety and operations. Management appeared to understand the benefits of passing lessons learned to the workforce through required reading. Additionally, management has initiated a safety log in the administrative area for personnel to log safety items for management action. Discussion with Mark Graham, the Industrial Safety oversight contact for WRAP, indicated the continuity for workplace safety is not consistent across the workforce. There are excellent indications that safety is utmost. These include management commitment, knowledge, and observation of craft personnel performing job assignments. Demonstration in the field indicates it is not embraced totally. Hazard awareness is communicated in meetings, and through WHC-1-1252 Section 4.6. Observation #2, while observing an evolution of relocating connex boxes, a facility employee was observed picking up "cribbing" with no gloves on. Beside the normal issue of protecting extremities, mice were observed by the employee after the connex box was moved. This should have indicated to the employee that Hanta virus may be present. The Hanta virus hazard has been disseminated site wide. The employee was instructed to go wash their hands, which they did, but not until they proceeded through the main entrance, providing an opportunity to spread any material they might have picked up.		

Criterion Number and Statement: 2.

Work spaces are clean and free of clutter and debris, and equipment and tools are properly stored. Good housekeeping, control of hazardous materials, ignition sources and transient combustibles are maintained as appropriate.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 2.	WHC-CM-5-34 Ron Koll Mike Hackworth Steve Norton Jeff Riddle Tom Orgill Jeff Schreman Steve Metzger	During all walk through the work areas were free of clutter and debris. It must be emphasized however that the facility is still not operational. There is a housekeeping program established under WHC-CM-5-34 Section 1.10. Personnel were asked during interviews about walk throughs and inspections, across the spectrum of the management workforce, this is accomplished.		

Criterion Number and Statement: 3.

Procedures exist, understood, and implemented to control secondary contractor work to site standards of good housekeeping.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 3.	Tom Orgill Steve Norton Jeff Riddle	Interview with plant management discussed contractor work and the expectations of facility management. Expectations are were consistent in that plant standards are expected to be adhered to by both facility and contractor personnel. As expressed from the second phase of Wrap which is still under construction, housekeeping is not very high priority item. Plant management did confirm that they have had to instruct the construction group to perform housekeeping activities in their periodic walk throughs. There is evidence of construction debris and clutter at the exterior of the facility on the phase 2 side entrance (north side).		

Criterion Number and Statement: 4.

WRAP management clearly and personally communicate expectations regarding safety and environmental protection to their employees, and encourages employees to bring problems to them for resolution.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 4.	Tom Orgill	On 11-11-96, at 0800 a safety meeting was observed for operations personnel. There was very good communications between management and the work force. The interactions were good and everyone in attendance was participating. Items brought to management attention by workforce included: difference in facility vs site alarms, walking across the gravel, snow removal, and management expectations for safety. I would suggest that besides vocalizing and listening expectations that management also follow up by observation to see if the expectations are being met and communication has been effective. Performance indicators may not be telling the whole story as far as facility culture is concerned.		

Criterion Number and Statement: 5.

A Management Observation Program has been implemented and includes scheduled and random tours to assess housekeeping and control of hazardous materials.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 5.	Steve Norton Jeff Rodalle Tom Orgill	Plant management during interviews confirmed their commitment to follow up with tours to assess housekeeping. All management were able to identify the last time they toured the plant.		

Criterion Number and Statement: 6.

WRAP personnel demonstrate a conservative approach to operational activities and their decisions reflect a sense of responsibility for safety and environmental protection. The Master Safety Rules are understood and followed.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 6.	Steve Norton Jeff Riddle Tom Orgill Steve Metzger Jeff Schorrsman	Interviews were the primary means of probing this criteria due to the limited amount of work in progress at WRAP. Discussions with other ORR team members indicate that there is a conservative approach to operational activities. However during the emergency drill, there are indications that the hazards associated with traumatic materials are not completely understood by all parties. Particularly interesting was the proposed evolution during the drill to check the air handling system for contamination after ventilation shutdown. The drill was truncated prior to this evolution, but conversation with the radiological engineering support after the drill revealed that the suggestion would not have been followed due to lock and tag issues and contamination spread. There is a good safety support structure within the plant to help with the decision making process.		

Criterion Number and Statement: 7.

Management has implemented site-wide programs to promote a culture of awareness of public and worker safety and health, and environmental protection requirements.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 7.	WHC-SD-W026-SAR-002 WHC-CM-5-34 WHC-CM-5-36 Steve Norton Jeff Riddle Tom Orgill	Management is required by SWD internal requirements and compliance with the authorization basis to implement site wide programs in the safety arena. Industrial safety, industrial hygiene, fire protection, radiological control, and worker safety are some of the major safety areas. The implementation of awareness at the facility is accomplished through lessons learned (posted in the lunch room), safety meetings where observation confirmed safety awareness is being practiced, self assessments and walk throughs are being performed, and interface through the discipline support from independent oversight (one instance for fall protection, and another for chemical issues during a gasket evolution. Additionally the facility has established a log book where any one in the plant may enter a concern for management action.		

Criterion Number and Statement: 8.

Policies, procedures, goals, and objectives consistently place the highest priority on safety, protection of the environment, and professional employee attitudes.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 8.	None	This criteria is covered in the explanation for criteria 7 where the implementation is explained. The plant management consistently vocalizes and iterates its expectations. The issue may be the follow up may not be consistent to assure expectations are being met.		

Criterion Number and Statement: 9.

The goals and objectives of WHC-SWD encourage excellence in activities and include specific objectives for the continued enhancement of the safety culture.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 9.	Steve Norton Jeff Riddelle Tom Orgill	To date there has been little effort expended to develop goals or performance measures to evaluate development of culture goals and enhancement of same. There are very positive indicators that management is aware of and concerned with safety and its value for operation of the facility.		

Criteria Number and Statement: 10.

Stop work authority is clearly understood by management and non-management personnel, and personnel recognize its positive value to health, safety, and protection of the environment.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 10.	Steve Norton Jeff Kiddle Tom Orpili Ron Koll Jay Bottanau Mike Hackworth Kay Humphrys Phyllis Koep Celia Tubault Ben Pierce Harlan Boynton Vince Chapman Tom George Susanne Kosiker Jeff Schorzman Steve Metzger	Without question, all personnel interviewed clearly understood the stop work authority value. All were positive on its value and understood its benefit.		

Criterion Number and Statement: 11.

Application of lessons learned from past occurrences is implemented at WRAP 1 to make the staff aware of potential hazards that we not previously identified.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 11.	Steve Norton Jeff Riddle Tom Orgill Ron Koll Jay Bottens Mike Hackworth Kay Humphreys Phyllis Koop Carla Thibault Ben Pierce Harlan Boyatzian Vince Chapman Tom George Susanne Koelker Jeff Schorzsman Steve Metzger	Throughout interviews with plant personnel, all interviewed confirmed the lessons learned material was cascaded down through the organization. Additionally there is a lessons learned section on the bulletin board in the lunch room. Management posts lessons learned in required reading for plant personnel when appropriate. After reading there is a sign off sheet kept at the secretary's desk.		

Criterion Number and Statement: 12.

Conditional potentially adverse to safety, commitments, and "open items" are formally tracked to completion, status reports periodically provided to management, and resolution escalated to higher levels of management when appropriate.

SUBJECT/ACTIVITY REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 12.	Steve Norton Jeff Ridelle Tom O'gill Ron Koll Jay Botticus Mike Hackworth Kay Humphreys Phyllis Koop Carla Tilbanilt Ben Pierce Harlan Boynton Vince Chapman Tom George Susanne Koelker Jeff Schorzeauan Steve Metzger	All personnel were aware of the WRTS system and the HATS system to track safety and compliance issues. Management retained the authority to enter items into those systems. Management assumed responsibility for completion, with support from engineering for status reports. It must be emphasized that continued objectiveness must be practiced for this system to work effectively.		

Criterion Number and Statement: 13.

Information programs release information regarding safety and environmental protection on a regular basis. The releases include information of both normal and off-normal events.

SUBJECT/ACTIVITY REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
Criteria 13.		The WRAP system for occurrences follows the occurrence reporting requirement in WHC-CM-5-34 Section 1.18. Other information is cascaded down through lessons learned, required reading, co mail, through safety meetings, section meetings, staff meetings, or all employee meetings.		

DATE November 4, 1996

WRAP-1 Phase 1 Operational Readiness Review

Core Requirement 19.0 The technical and management qualifications of contractor personnel responsible for facility operations are adequate.

Criteria 19.3 & 19.4 Examinations/oral boards given to management personnel are adequate in their depth and breadth of subject matter as it pertains to facility operations.

Approach 1

1. Review test materials, course materials, oral board questions and responses.
2. Receive WRAP facility Safety Basis Training course number.
3. Interview managers; spot check board questions previously answered correctly.
4. Review questions managers had difficulties with during their individual oral boards.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
EXAMS AND ORAL BOARDS	Oral board documents were reviewed for: Steven Metzger - Operations Team Lead Jeffrey Salszman - Operations Team Lead Tom Ongill - Operations and Maintenance Manager WHC-CM-5-34, Section 1.8, Revision 4, "Training Plan" WHC-CM-4-33, "Hosting and Escorting Unclassified Foreign National Visitors and Assignees"	The operations manager and both operations team leads were interviewed separately November 4 through November 14, 1996. Discussions in each session commenced with general review of oral board questions and adequacy of the board. This was followed by a review of specific questions that had given interviewees difficulty. All three individuals provided satisfactory responses to the questions. (See back-up documentation CR.19)	X	

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
EXAMS AND ORAL BOARDS CONTINUED	Waste Receiving and Packaging Facility (WRAP), Module 1, Final Safety Analysis Report (Draft) WRAP Module 1 Hazards Assessment, WHC-SD-PRP-HA-027 Written exams were reviewed (prerequisite for oral boards) <u>Personnel Contacted:</u> Steve Norton Plant Manager Jay Bottenus Engineering Manager Jeff Riddelle WRAP 1 Environmental Production and Training Manager Dave Watson Training Lead Tom Orgill WRAP 2 Operations and Maintenance Manager Steve Metzger Operations Team Lead Jeff Schorzman Operations Team Lead	The operations manager and both operations team leads were interviewed separately November 4 through November 14, 1996. Discussions in each session commenced with general review of oral board questions and adequacy of the board. This was followed by a review of specific questions that had given interviewees difficulty. All three individuals provided satisfactory responses to the questions. (See back-up documentation CR.19)	X	

DATE November 4 - 13, 1996

WRAP-1 Phase 1 Operational Readiness Review

Core Requirement 19.0 The technical and management qualifications of contractor personnel responsible for facility operations are adequate.

Criteria 19.1 Management has adequate on-the-job experience, training, and education which qualifies them for their position.

- Approach 1
1. Review and assess management qualification in accordance with requirements established in Sections 1.8, "Training Administration" and 3.1, "On the Job Training" contained in the Solid Waste Disposal Operations Administration manual, WHC-CM-5-34.
 2. Interview management to determine if they see the need for changes.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
OJT, TRAINING AND EDUCATION	WHC-CM-5-34, Section 1.8, Revision 4, "Training Plan"	Reviewing manager and lead position training records and personnel files, these persons have satisfied the requirements of WHC-CM-5-34, Sections 1.8 and 3.1. Management felt the existing training requirements were satisfactory.	X	
	WHC-CM-5-34, Section 3.1, "On the Job Training"			
	WRAP Operations Personnel Training Records			
	WRAP Operations Personnel Files			
	Personnel Contacted: Dave Watson WRAP 1 Training Lead Jeff Riddelle Training Manager Phoebe Koep Secretary Cynthia Davis Secretary			

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
EXAMS AND ORAL BOARDS CONTINUED	Waste Receiving and Packaging Facility (WRAP), Module 1, Final Safety Analysis Report (Draft) WRAP Module 1 Hazards Assessment, WHC-SD-PRP-HA-027 Written exams were reviewed (prerequisite for oral boards) Personnel Contacted: Steve Norton Plant Manager Jay Botenous Engineering Manager Jeff Riddelle WRAP 1 Environmental Production and Training Manager Dave Watson Training Lead Tom Orgill WRAP 2 Operations and Maintenance Manager Steve Metzger Operations Team Lead Jeff Schurzman Operations Team Lead	The operations manager and both operations team leads were interviewed separately November 4 through November 14, 1996. Discussions in each session commenced with general review of oral board questions and adequacy of the board. This was followed by a review of specific questions that had given interviewees difficulty. All three individuals provided satisfactory responses to the questions. (See back-up documentation CR.19)	X	

DATE November 4, 1996

WRAP-I Phase 1 Operational Readiness Review

Core Requirement 19.0 The technical and management qualifications of contractor personnel responsible for facility operations are adequate.

Criteria 19.3 & 19.4 Examinations/oral boards given to management personnel are adequate in their depth and breadth of subject matter as it pertains to facility operations.

- Approach 1
1. Review test materials, course materials, oral board questions and responses.
 2. Receive WRAP facility Safety Basis Training course number _____.
 3. Interview managers: spot check board questions previously answered correctly.
 4. Review questions managers had difficulties with during their individual oral boards.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
EXAMS AND ORAL BOARDS	Oral board documents were reviewed for: Steven Metzger - Operations Team Lead Jeffrey Schorzman - Operations Team Lead Tom Orgill - Operations and Maintenance Manager WHC-CM-5-34, Section 1.8, Revision 4, "Training Plan" WHC-CM-4-33, "Hosting and Escorting Unclassified Foreign National Visitors and Assignees"	The operations manager and both operations team leads were interviewed separately November 4 through November 14, 1996. Discussions in each session commenced with general review of oral board questions and adequacy of the board. This was followed by a review of specific questions that had given interviewees difficulty. All three individuals provided satisfactory responses to the questions. (See back-up documentation CR.19)	X	

DATE November 4 - 13, 1996

WRAP-1 Phase 1 Operational Readiness Review

'Core Requirement 19.9 The technical and management qualifications of contractor personnel responsible for facility operations are adequate.

Criteria 19.1 Management has adequate on-the-job experience, training, and education which qualify them for their position.

- Approach 1
1. Review and assess management qualification in accordance with requirements established in Sections 1.8, "Training Administration" and 3.1, "On the Job Training" contained in the Solid Waste Disposal Operations Administration manual, WHC-CM-534.
 2. Interview management to determine if they see the need for changes.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
OJT, TRAINING AND EDUCATION	WHC-CM-534, Section 1.8, Revision 4, "Training Plan"	Reviewing manager and lead position training records and personnel files, these persons have satisfied the requirements of WHC-CM-534, Sections 1.8 and 3.1. Management felt the existing training requirements were satisfactory.	X	
	WHC-CM-534, Section 3.1, "On the Job Training"			
	WRAP Operations Personnel Training Records			
	WRAP Operations Personnel Files			
	Personnel Contacted:			
	Dave Watson WRAP 1 Training Lead			
	Jeff Riddle Training Manager			
	Phoebe Koep Secretary			
	Cynthia Davis Secretary			

DATE November 4 - 7, 1995

WRAP-1 Phase 1 Operational Readiness Review

Core Requirement 19.0 The technical and management qualifications of contractor personnel responsible for facility operations are adequate.

Criteria 19.2 Adequate document of management qualifications is available.

Approach 1

1. Evaluate available documentation.
2. Question managers knowledge of more generic topics (i.e. lessons learned, occurrence reporting, company goals and objectives).
3. Interview training manager.
4. Interview personnel responsible for maintenance of training records.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
DOCUMENTATION OF MANAGEMENT QUALIFICATIONS	WHC-CM-5-34, Section 1.8, Revision 4, "Training Plan" WHC-CM-5-34, Section 3.1, "On the Job Training" WRAP Operations Personnel Training Records WRAP Operations Personnel Files	Training records for all WRAP facility managers and operations lead personnel were reviewed. This document revealed that some additional work was required to bring the training records into an up-to-date condition. Various individuals were scheduled for required training, but had not received it at the time of the review. All personnel met, or will meet, the training requirements prior to March 31, 1997. Health and Safety Plan Training for WRAP 1 managers and leads needs to be taken. All manager and supervisor training needs are being tracked on the Waste Remediation Commitment Tracking system. Following the employee training records review, an assessment of WRAP training modules was conducted. This assessment identified several areas of concern.		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
DOCUMENTATION OF MANAGEMENT QUALIFICATIONS CONTINUED	Personnel Contacted: Dave Watson WRAP 1 Training Lead Jeff Riddlelle Training Manager Phoebe Koep Secretary Cynthia Davis Secretary	Five or six facility specific training modules were randomly selected for review. All modules had been reviewed by operators and retrained. Additionally, each had a cover memo stating the files had undergone a review by Parsons prior to declaration of readiness by the facility and each needed to have the comments incorporated. Interview with the training lead individual suggested there were no immediate plans to resolve comments. WRAP 1 Person-In-Charge training requirements checklists were reviewed. The checklist (course number 306550) for S. L. Metzger was reviewed, which raised a question as to what do the dates signify that are on page 3 of 6? They appear to be due dates, could be retrain dates, or in the case of EO-4, is this an expiration date? <u>This (page 3-5) should be redesign so that the dates have some significance.</u> Mr. Metzger was interviewed related to this checklist and said that it was a mixture of qualification dates and retraining dates. Tom Orgill, who had approved this checklist, agreed that the dates are misleading and that it needs to be revised.		

DATE November 4 - 7, 1996

WRAP-1 Phase 1 Operational Readiness Review

Core Requirement 19.0 The technical and management qualifications of contractor personnel responsible for facility operations are adequate.

Criteria 19.2 Adequate document of management qualifications is available.

Approach 1

1. Evaluate available documentation.
2. Question managers knowledge of more generic topics (i.e. lessons learned, occurrence reporting, company goals and objectives).
3. Interview training manager.
4. Interview personnel responsible for maintenance of training records.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
DOCUMENTATION OF MANAGEMENT QUALIFICATIONS	WHC-CM-5-34, Section 1.8, Revision 4, "Training Plan" WHC-CM-5-34, Section 3.1, "On the Job Training" WRAP Operations Personnel Training Records WRAP Operations Personnel Files	Training records for all WRAP facility managers and operations lead personnel were reviewed. This document revealed that some additional work was required to bring the training records into an up-to-date condition. Various individuals were scheduled for required training, but had not received it at the time of the review. All personnel met, or will meet, the training requirements prior to March 31, 1997. Health and Safety Plan Training for WRAP 1 managers and leads needs to be taken. All manager and supervisor training needs are being tracked on the Waste Remediation Commitment Tracking system. Following the employee training records review, an assessment of WRAP training modules was conducted. This assessment identified several areas of concern.		X

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
DOCUMENTATION OF MANAGEMENT QUALIFICATIONS CONTINUED	WHC-CM-5-34, Section 1.8, Revision 4, "Training Plan"	All management interviewed were requested to discuss the lessons learned program, occurrence reporting, procedural compliance, facility goals and objectives, USQ Process, the selection process for hiring WRAP managers and leads, employees ability to stop work for safety concerns, organizational communications and required reading.		
	WHC-CM-5-34, Section 3.1, "On the Job Training"			
	WRAP Operations Personnel Training Records			
	WRAP Operations Personnel Files	The persons interviewed generally had a good understanding of the program or process being discussed. In some instances, the depth of knowledge was weak because some of these systems had been put into place within the last week or two (i.e. required reading with lessons learned in the process of being developed, etc.)		
	Management Interviews Personnel Contacted:			
	Steve Norton Plant Manager			
	Jay Bottenus Engineering Manager	One significant weakness is in the area of communication. When the questions like who is responsible for the administration of WRAP lessons learned, occurrence reporting and the initiation of the USQ process; consistent responses were not given. Job descriptions were not specific enough to determine who had the responsibility for the above items.		
	Jeff Riddelle WRAP 1 Environmental Production and Training Manager			
	Tom Orgill WRAP 2 Operations and Maintenance Manager			
	Dave Watson Training Lead			
	Steve Metzger Operations Team Lead			
	Jeff Schorzman Operations Team Lead			

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
DOCUMENTATION OF MANAGEMENT QUALIFICATIONS CONTINUED	WHC-CM-5-34, Section 1.8, Revision 4, "Training Plan"	All management interviewed were requested to discuss: the lessons learned program, occurrence reporting, procedural compliance, facility goals and objectives, USQ Process, the selection process for hiring WRAP managers and leads, employees ability to stop work for safety concerns, organizational communications and required reading. The persons interviewed generally had a good understanding of the program or process being discussed. In some instances, the depth of knowledge was weak because some of these systems had been put into place within the last week or two (i.e. required reading with lessons learned in the process of being developed, etc.) One significant weakness is in the area of communication communication. When the questions are are who is responsible for the administration of WRAP lessons learned, occurrence reporting and the initiation of the USQ process; consistent responses were not given. Job descriptions were not specific enough to determine who had the responsibility for the above items.		
	WHC-CM-5-34, Section 3.1, "On the Job Training"			
	WRAP Operations Personnel Training Records			
	WRAP Operations Personnel Files			
	Management Interviews Personnel Contacted:			
	Steve Norton Plant Manager			
	Jay Bottenus Engineering Manager			
	Jeff Riddelle WRAP 1 Environmental Production and Training Manager			
	Tom Orgill WRAP 2 Operations and Maintenance Manager			
	Dave Watson Training Lead			
	Steve Metzger Operations Team Lead			
	Jeff Schorzman Operations Team Lead			

DATE November 4 - 13, 1996

WRAP-1 Phase 1 Operational Readiness Review

Core Requirement 19.0 The technical and management qualifications of contractor personnel responsible for facility operations are adequate.

Criteria 19.1 Management has adequate on-the-job experience, training, and education which qualifies them for their position.

- Approach 1
1. Review and assess management qualification in accordance with requirements established in Sections 1.8, "Training Administration" and 3.1, "On the Job Training" contained in the Solid Waste Disposal Operations Administration manual, WHC-CM-5-34.
 2. Interview management to determine if they see the need for changes.

SUBJECT/ACTIVITY REQUIREMENT REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/COMMENTS	COMPLY	
			YES	NO
OUT, TRAINING AND EDUCATION	WHC-CM-5-34, Section 1.8, Revision 4, "Training Plan" WHC-CM-5-34, Section 3.1, "On the Job Training" WRAP Operations Personnel Training Records WRAP Operations Personnel Files Personnel Contacted: Dave Watson WRAP 1 Training Lead Jeff Ruddle Training Manager Phoebe Koep Secretary Cynthia Davis Secretary	Reviewing manager and lead position training records and personnel files, these persons have satisfied the requirements of WHC-CM-5-34, Sections 1.8 and 3.1. Management felt the existing training requirements were satisfactory.	X	

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APPENDIX D

REVIEW TEAM MEMBER PROFILES

WRAP 1 phase 1 ORR Review Team Member Profiles

NAME: Richard E. Allen

SPECIALTY: Emergency Preparedness

EXPERIENCE: 12 years of professional experience in environmental regulations and emergency preparedness. Presently the emergency preparedness coordinator for T Plant. Write and perform drills, review and revise emergency manual and guide, readiness review team member for other facilities.

NAME: Annette E. Aughey

SPECIALTY: Operations / Administrative

EXPERIENCE: 14 years experience as a Nuclear Process Operator. Currently a Solid Waste Requirements (SRIDS) expert as well as the administrator of the WHC-CM-5-36 manual. Participation on the ORR team will be to evaluate the usefulness of the procedures from a users point of view and coordination of the ORR team results.

NAME: William W. Bowen

SPECIALTY: Review Team Leader / Security

EXPERIENCE: 29 years experience in management, construction, start up, and operation of nuclear and chemical plants in both commercial and government environments. BS, MS Mechanical Engineering

NAME: Mark Brian Enghusen

SPECIALTY: Chemical Engineering

EXPERIENCE: 18 years experience as both a cognizant engineer or a lead engineer supporting several different plants on the Hanford site. BS Chemical Engineering

NAME: Keith G. Foote

SPECIALTY: HVAC Engineering

EXPERIENCE: 11 years experience in the design, start up, and evaluation of various HVAC systems in both nuclear power plants, as well as commercial and industrial applications. Licenced Professional Engineer, BS Mechanical Engineering

NAME: Steven K. Fong

SPECIALTY: Electrical Engineering

EXPERIENCE: 22 years experience as an electrical engineer in both commercial and Department of Energy facilities. Responsible for design, design reviews, analysis of various electrical systems from nuclear facilities to commercial applications. BS Electrical Engineering, MBA

NAME: M. Micheal Ghorbani

SPECIALTY: Mechanical Engineering

EXPERIENCE: 11 years experience in design, analysis, test, and development of mechanical systems, lab automation, and data acquisition. Specializing in this ORR on the computer systems and data acquisition, interpretation. BS Mechanical, Electrical Engineering

NAME: Leonard Harville

SPECIALTY: Conduct of Operations

EXPERIENCE: 29 years experience in the management, operation, training, maintenance of Navy and DOE reactor plants. Also qualified at the SRO level as a refueling engineer, and USQ evaluator. Presently the assistant operations manager at FFTF.

NAME: Clyde T. Inamine

SPECIALTY: I&C systems

EXPERIENCE: 16 years in process controls systems design and electrical power distribution. Responsible for design, procurement, and installation of I&C systems commercially and for the Department of Energy. BS Electrical Engineering

NAME: Barbara A. Jackson

SPECIALTY: Systems Engineering

EXPERIENCE: 17 years experience in software and systems engineering. Mostly experienced in performing systems engineering in the early stages of the project life cycle, including requirements analysis, functional analysis and synthesis. BS Metallurgical Engineering, MS Systems Management

NAME: John A. Locklair, Jr.

SPECIALTY: Nuclear Safety

EXPERIENCE: 12 years experience in Nuclear Safety and Health Physics in both commercial and Department of Energy. Also responsible for review and publication of Safety Basis documents. BS Geophysics

NAME: Thomas A. Quayle

SPECIALTY: Environmental Compliance

EXPERIENCE: 18 years experience as a start up engineer and environmental compliance scientist. Subject matter expert in TSCA and knowledgeable in CERCLA, SARA, CAA, CWA, RCRA. BS Math

NAME: W. James Schildknecht

SPECIALTY: Maintenance

EXPERIENCE: 18 years work experience in the nuclear field including team leader for maintenance engineering at various facilities on the Hanford site as well as commercial construction. Presently a technical lead in Operations and Maintenance Programs.

NAME: Clifford J. Stephan

SPECIALTY: Radiological Control

EXPERIENCE: 5 years professional experience providing radiological control support to various facilities across the the Hanford site. BS Physics, MS Environmental Science

NAME: William R. Thackaberry

SPECIALTY: Quality Assurance

EXPERIENCE: 20 experience in Quality Assurance with expertise in QA for geotechnical and environmental activities. Currently a member of the Center of Expertise for Quality Assurance for the Hanford site. BS Geology

NAME: Ronald H. Wight

SPECIALTY: Industrial Safety

EXPERIENCE: 15 years experience in commercial and nuclear environments as industrial safety specialist. Experience as safety engineer in Research and development, startup, and

established facilities. Certified lead auditor, and
Certified Associate Safety Professional.

NAME: Victor L. Magnus

SPECIALTY: Management

EXPERIENCE: 20 years of management experience in both the private and government arenas; including over twelve years of DOE contractor related experience. As a Construction Program Manager he spent two years at Hanford's N reactor. He has expertise in project management and environmental remedial action projects from the DOE Grand Junction Projects Office where he worked for Rust Geotech as the Director of Grand Junction Operations. While in this position, he had responsibility for the completion of several ORR's required during the successful completion of the environmental clean-up of over 4000 individual properties contaminated with low level radioactive waste.

NAME: Chuck Wolfe

SPECIALTY: Management, Conduct of Operations

EXPERIENCE: 19 years in the nuclear field encompassing training, qualification and operation of non-nuclear, nuclear, and nuclear reactor facilities, have experienced the challenges of restarting the Rocky Flats Weapons Plant. Established and monitored the implementation of the Rust Geotech Compliance Management System including Readiness Reviews and Conduct of Operations. The most recent responsibility was the development and implementation of a transition methodology that provided for the identification through resolution of all transition and contract close-out issues for Rust Geotech Inc., in Grand Junction, Co.

NAME: Rodney Pickett

SPECIALTY: Operations management and Engineering

EXPERIENCE: 6 years experience in design and operation of power distribution, plant parameter monitoring and control equipment, pneumatics, piping/plumbing. BS Electrical Engineering, Certified shift manager.

NAME: Ashok K. Sharma

SPECIALTY: Quality Assurance

EXPERIENCE: 28 years experience including assessments, design reviews, audits, in Quality Assurance in commercial and government areas. Electrical engineering and construction management.

Presently a Principal Quality Engineer on the Hanford site.
BS Electrical Engineering, MS Electrical Engineering

NAME: David Oar

SPECIALTY: Fire Protection

EXPERIENCE: 21 years in fire protection engineering in commercial nuclear power plants, fossil fuel power plants, and various DOE projects. Active in Fire Hazards Analysis and facility audits. Currently the Fire Protection Engineer for T Plant on the Hanford site. BS Electronic Engineering Technology, Registered Professional Fire Protection Engineer

Attachment 1

OPERATIONAL READINESS REVIEW IMPLEMENTATION PLAN

WHC-SD-W026-PLN-004, Rev. 1

IMPLEMENTATION PLAN (IP)
FOR THE WASTE RECEIVING AND PROCESSING FACILITY MODULE 1
(WRAP 1)
OPERATIONAL READINESS REVIEW

Prepared for the
United States Department of Energy
Under Contract DE-AC06-87RL10930

DISCLAIMER

This Operational Readiness Review Implementation Plan (ORRIP) was written in accordance with WHC-CM-5-34, "Solid Waste Disposal Operations Administration", Section 1.4, "Operational Readiness Activities". The ORRIP has been issued as a controlled document.

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ACRONYMS AND ABBREVIATIONS

AGV	Automated Guided Vehicle
ALARA	as low as reasonably achievable
ATP	acceptance test procedure
CAP	Corrective Action Plan
CFR	Code of Federal Regulations
CH	contact-handled
CPS	Criticality Prevention Specification
CRAs	Criteria and Review Approaches
CSER	Criticality Safety Evaluation Report
DNFSB	Defense Nuclear Facilities Safety Board
DMS	Data Management System
DOE	Department of Energy
ECN	engineering change notice
HEPA	High Efficient Particulate Air
HVAC	heating, ventilating, and air conditioning
HATS	Hanford Action Tracking System
LCO	Limiting Condition of Operation
LLMW	low-level mixed waste
LLW	low-level waste
MS/RID	Micro Standards/Requirements Identification Document
NDE/NDA	nondestructive examination/nondestructive assay
OR	Operational Readiness
ORR	Operational Readiness Review
ORRIP	ORR Implementation Plan
OSHA	Occupational Safety and Health Administration
OSR	Operational Safety Requirement
OTP	operational test procedure
PCS	Plant Control System
PM	preventive maintenance
PMS	Plant Management System
PMT	post maintenance teasing
POA	Plan-of-Action
PSAR	Preliminary Safety Analysis Report
RFS	Rust Federal Services
RIDS	Records Inventory Disposition Schedule
RT	Review Team
RTL	Review Team Leader
RWM	restricted waste management
SL	Safety Limit
S/RID	Standards/Requirements Identification Document
SWB	standard waste box
SWD	Solid Waste Disposal
TRU	transuranic
TSR	Technical Safety Requirement
WAC	Washington State Administrative Code
WHC	Westinghouse Hanford Company
WIPP	Waste Isolation Pilot Plant
WRAP 1	Waste Receiving and Processing Module 1
WRTS	Waste Remediation Tracking System

REFERENCES

- 1) WHC-IP-1233, Rev 0, *Solid Waste Disposal Micro S/RIDS*
- 2) WHC-IP-1120, Rev 4, *Standards / Requirements Identification Document (SRIDS)*
- 3) WHC-CM-5-36, *SWD Internal Requirements*
- 4) WHC-CM-5-34, *Solid Waste Disposal Operations Administration*
- 5) WHC-IP-1048, *Operational Readiness Activities*
- 6) WHC-SD-W026-SAR-001, *WRAP Module 1 Preliminary Safety Analysis Report*
- 7) WHC-SD-W026-PLN-002, *Plan-Of-Action For WRAP Module 1 Operational Readiness Review*
- 8) *DNFSB RECOMMENDATION 90-2 REQUIREMENTS INFORMATION DOCUMENT*

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1.0 INTRODUCTION

1.1 General

Due to Solid Waste programmatic commitments, the glovebox process lines and TRU PAC storage and handling equipment will not initially be operated, and therefore, will not be part of this review. Any reference to the glovebox process lines or TRU PAC storage and handling equipment is for information only, and has no bearing on this review. The WRAP-1 Operational Readiness Review (ORR) will be divided into three (3) phases. Phase 1 will be the subject of this Implementation Plan (IP). The detailed scope of the phase 1 ORR is identified beginning on page 6 of this document, but will generally include all facility utility systems, NDE/NDA process, shipping and receiving area and the facility structure. The phase 1 ORR is scheduled to issue the final report in late November, 1996, with the facility resolving all operational limiting corrective actions by late December, 1996. The facility will declare operational readiness by March 31, 1997. Phase 2 and 3 ORR activities will take place during 1997. This document will be revised and reissued for phase 2 and 3 ORRs.

WRAP 1 is located at the intersection of 23rd and Dayton in the Hanford Site 200W Area. WRAP 1 will be used over time to receive, characterize, sample, treat, certify, package, and ship to storage and disposal (on-site and off-site), contact-handled (CH) TRU, TRU-Mixed, Suspect TRU, Low-Level Waste (LLW), and Low-Level Mixed Waste (LLMW). WRAP will accept CH radioactive waste in 208 liter (55-gallon) and 322 liter (85-gallon) drums, standard waste boxes (SWB), and boxes of similar size.

Final safety analysis (Waste Receiving and Processing Module 1 Facility Final Safety Analysis Report, WHC-SD-W026-SAR-002) has concluded WRAP can be operated without adverse health and safety effects on the public or maximally exposed onsite receptor personnel. The analysis evaluated such events as glovebox fires, glovebox explosions, container releases, container fires, container explosions, seismic events, strong winds, and criticality.

WRAP 1 is equipped with a waste shipping and receiving area, NDE/NDA area, a process area having glovebox enclosures for opening, sorting, sampling, treating, and packaging the contents of drums, a process support area, a control room, a sample management area, and an administrative area (see Figures 1 and 2).

WRAP has multiple process paths depending on waste type (e.g., TRU, RMW, etc.) and package (e.g., drums, SWB, etc.). For example boxes enter the NDE/NDA area but do not enter the process area. Following is a basic sequence for processing drums at WRAP: truck arrives at WRAP shipping and receiving area, drum pallet is off loaded, drums are bar coded, weighed, and either stored in the automated stacker/retriever or moved into the NDE/NDA area by automated guided vehicle (AGV), AGV sequentially transfers drum to NDE cell, NDA pan cell, and gamma energy assay cell, AGV transfers drum to NDE/NDA airlock, drums pass through air lock into process area where a second AGV transfers drum to process roller conveyor, scissor-lift lifts drum to glovebox entry where door

opens removing overpack lid, drum is removed from overpack and transferred in the glovebox to drum opening station, lid band is cut and lid is removed, drum is rotated to empty contents onto sorting table, manipulators are used to sort items and perform visual inspection, waste is returned to drum(s) and lid sealed in place, drum is swaged and transferred to compaction station, drum is compacted and transferred to new overpack drum, the full drum is then transferred by AGV to the process area air lock, the drum passes through the air lock where it is moved by AGV to appropriate NDE or NDA station, drum is then moved by AGV to shipping and receiving area for transport or temporary storage.

The following sections provide more detail of the major areas within WRAP 1.

1.2 Shipping and Receiving (Phase 1 scope)

Waste containers are received at the WRAP 1 shipping and receiving area. This area contains battery-powered forklifts and AGV, powered conveyors, gravity conveyors used to assemble waste packages for the Waste Isolation Pilot Program (WIPP) in Carlsbad, New Mexico, an overhead crane, jib cranes and an automated stacker/retriever system used for interim storage. Once received in the facility, waste containers are tracked using bar code labels. Barcoding system interfaces with other DOE waste handling facilities.

After processing through WRAP 1, the low-level portion of the waste will be disposed of in the Hanford Site Low-Level Burial Grounds or, as in the case of some mixed waste, stored elsewhere in the Hanford Central Waste Complex awaiting further treatment. Transuranic waste will be held pending shipment to WIPP.

1.3 Nondestructive Examination and Nondestructive Assay (Phase 1 scope)

WRAP 1 provides NDE and NDA of incoming and outgoing waste containers to support waste characterization, verification, certification, and processing. Separate systems are provided for drums and boxes. NDA/NDE operations consist of the following:

- Penetrating radiation examination will be used to identify noncompliant materials (e.g., liquids, gas cylinders, and particulates) to determine appropriate handling and treatment.
- Neutron spectroscopy assay (passive-active neutron system) to measure the quantity of TRU isotopes.
- Gamma energy assay to obtain isotopic information.

1.4 Process Area

The Process Area consists of multiple glovebox lines for various waste streams (TRU, LLW, TRU RMW, RMW), supercompactor, air locks, drum

storage area, warm maintenance room, and AGV. WRAP 1 gloveboxes are used to open, sort, sample, repackage and perform limited treatment. Treatment consist of neutralization, depressurization, encapsulation, absorption, solidification, immobilization, and volume reduction of waste (i.e. supercompaction).

1.5 Control Room (Phase 1 scope)

The WRAP 1 central control room is located on the upper level of the building allowing direct observation of portions of shipping and receiving, NDE/NDA, and process areas. The area will facilitate seven operators. The control room contains two NDE operator consoles, two transport/NDA controller consoles, dispatcher's console, telephone, public address system, printer, CCTV, alarm annunciator, and computers for the Data Management System (DMS), AGV, Process Control System (PCS), and Plant Management System (PMS). The PMS satisfies five basic objectives; (1) data acquisition, (2) data analysis, (3) process system surveillance, (4) inventory control, and (5) control and surveillance of building utilities (e.g. HVAC).

1.6 Process Support Area (Phase 1 scope)

Process support areas provide space for heating, ventilating, and air conditioning equipment, mechanical equipment, and electrical equipment used to support operations of the facility.

An electrical equipment room, located adjacent to the process area, contains the facility motor control centers and other electrical switch gear. Incoming electric power is brought to this room via an overhead bus from transformers located outside the facility.

The first floor mechanical room contains the compressed air system for plant and instrument air and is the location where the fire main water enters the facility.

Heating, ventilating, and air conditioning equipment is located in a second floor mechanical equipment room. The heating, ventilating, and air conditioning exhaust fans and HEPA filtration equipment are located adjacent to the process area. Two chiller/tower units are located outside the building. The air is exhausted through a stack located outside the facility.

1.7 Sample Management

The sample management area is located on the first floor of WRAP adjacent to the waste processing area. Individual containerized samples are manually transferred from the process area to the sample management area where they are stored, prepared, and packaged for transport to Hanford Site analytical laboratories for analysis. All samples are received in sealed containers, each having an external bar-code label used to correlate a sample to a waste drum. The sample management area

is equipped with an operator terminal connected to the DMS, bar-code reader, sample storage, and refrigerated storage for volatile organic liquids.

1.8 Administrative/Personnel Support Area (Phase 1 scope)

This area contains rest rooms, change rooms including an anti-contamination clothing change area, offices, lunch room, conference room, additional storage, and space for visitor control.

Figure 1

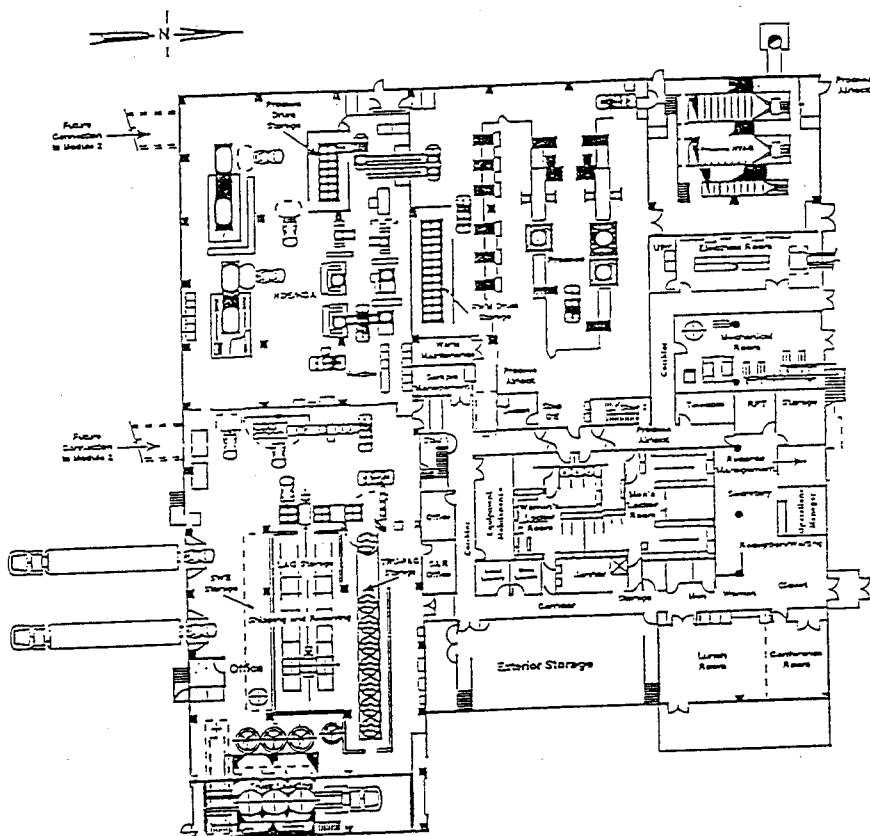
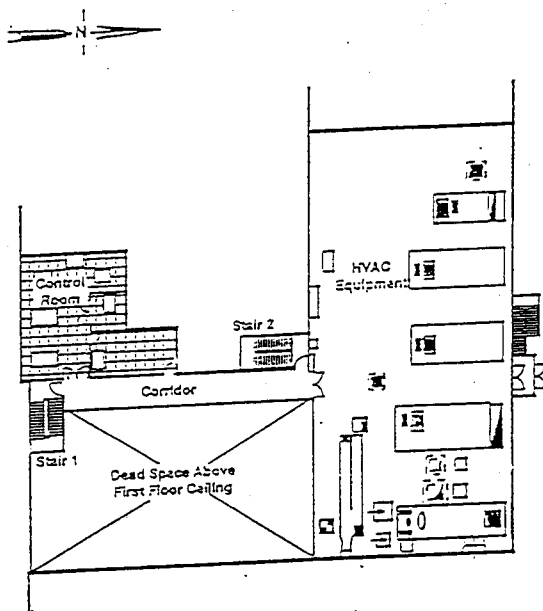
WRAP Module 1 Floor Plan
Ground Level

Figure 2



WRAP Module 1 Floor Plan
Upper Level

2.0 PURPOSE

The purpose of this review is to ensure facilities, equipment, personnel, procedures, and management control systems are in place to operate WRAP 1 safely, efficiently, and in compliance with all applicable requirements. For the startup of a new Hazard Category 3 Nuclear Facility (WRAP 1) WHC-CM-5-34, *Solid Waste Disposal Operations Administration*, Section 1.4, *Operational Readiness Activities* requires the performance of an ORR with Operations Office Manager as Approval Authority. By DOE RL decision, the Approval Authority has been delegated to Waste Programs Division. The Review Type and Approval Authority are commensurate with the facility's potential impact on safety and its planned operations.

3.0 SCOPE

Based on WRAP's designation as a "new facility", the review scope is inherently broad. The ORR scope will include all facilities, equipment, personnel, procedures, and management control systems needed to support or interface WRAP 1 operations and maintenance. WRAP 1 operations consist of receipt, characterization, sampling, treating, certification, packaging, and shipping of, CH TRU, TRU-Mixed, Suspect TRU, LLW, and LLMW. Interfacing operations, activities, and organizations will only be reviewed to the extent they affect WRAP 1 or WRAP 1 affects them. The ORR will review specific requirements to a breadth defined in WHC-SD-W026-PLN-002, *Plan-Of-Action For WRAP Module 1 Operational Readiness Review* and to a depth defined in this IP. The major objective of this review is to verify WRAP's facilities, equipment, personnel, procedures, and management control systems have been brought to a state of readiness by the facility. A secondary objective is to provide the facility with observations that would lead to excellence in operations. The facility will gain readiness through proper design, design control, construction, testing, training, documentation, etc. and will ensure readiness through the performance of a self assessments. Readiness is when the facility is in a condition to be operated safely, efficiently, and compliantly.

The major facility features and conditions that require ORR scrutiny include:

- Construction of the facility in accordance with plans and specifications
- Grading and facility access in accordance with plans and specifications
- Utilities, connections, and operational status of HVAC, air, water, and electrical power distribution
- NDE/NDA equipment installation, calibration, testing, operation, and maintenance
- Shipping/Receiving equipment installation, testing, operation and maintenance
- Integrated System Testing
- Material Handling/Transport system installation, testing, operation and maintenance

- . Interfaces with other facilities that either ship to or receive waste from WRAP 1
- . Interfaces with other facilities/organizations that support WRAP 1 operations and maintenance (e.g., Fire Department, Ambulance, Safety, etc.)
- . Control systems installation, testing, operations and maintenance
- . Data collection and management systems installation, testing, operations and maintenance
- . Computer controlled equipment and systems
- . Software control, applicability, useability
- . Data Management System
- . Approved operating, maintenance, and support procedures
- . Operator, maintenance, and support personnel training and qualifications
- . Management personnel training and qualifications
- . Safety monitoring and fire protection equipment and systems adequate for safe start-up and operation of the facility
- . Approved Criticality Safety Evaluation Report(s) (CSER)
- . Approved Criticality Prevention Specification(s) (CPS)
- . Radiological controls in place (e.g., Radiological Work Permits, ALARA reviews, etc.)
- . Compliance with environmental regulations and Part B Permit conditions
- . Compliance with SWD requirements
- . Safety documentation adequate to support facility operation
- . Administrative facilities adequate to support all operations
- . Personnel support area adequate to support all operations
- . Maintenance facilities adequate to support all operations
- . Manning and organization structure
- . Emergency preparedness

4.0 ORR PREREQUISITES

Prior to the commencement of the ORR, Solid Waste Disposal (SWD) Operational Readiness (OR) and/or select RT members will conduct a check of all prerequisites to ensure they are completed (see Appendix A). Determinations as to the adequacy (readiness) of prerequisite items for actual startup will be evaluated during review performance.

5.0 OVERALL APPROACH

5.1 Introduction to ORR Process and Generic Approach

The ORR will be performed per WHC-CM-5-34, *Solid Waste Disposal Operations Administration*, Section 1.4, *Operational Readiness Activities*. The overall ORR process consists of the following basic steps:

- . Review Team Leader (RTL) will be assigned by the Director SWD.
- . POA is written by the facility to formalize the decisions necessary to execute a new start. The POA will be provided to DOE-RL for review, comment, and approval.

- IP is drafted based on the DOE RL approved POA.
- RTL selects personnel to be members of the RT.
- As the facility performs actions to obtain readiness, the RT will review and provide comments to the IP; perform required reading, training, and facility familiarization.
- The facility will declare readiness in writing to the RTL.
- Upon verification of prerequisite completion, the RT will commence the ORR. The RT will conduct a performance based ORR consisting of documentation review, observation of facility operations and drills, personnel interviews, and facility/equipment hand-over-hand inspections. The RT will use the Criteria and Review Approaches (CRAs) of Appendix B when performing the review. The CRAs were developed to include the Core Requirement, Criteria, Review Approach, Basis, and References.
- The RT will prepare and distribute the final ORR Report (see section 5.2) with all Findings classified as either prestart or post-start (see Appendix D for Finding Classification Criteria)
- The facility will determine and perform corrective actions to resolve RT prestart Findings (see section 5.3).
- After satisfactorily completing Prestart Findings the facility will issue a Readiness to Proceed Memorandum to DOE RL.
- DOE RL will perform their review and present Findings to the facility.
- The facility will determine and perform corrective actions to resolve DOE prestart Findings.
- After satisfactorily resolving Prestart Findings DOE RL will authorize startup of the facility.
- Facility resolve Post-start Findings.

5.2 ORR Report Preparation

The report will document the portions of facility to be reviewed with process descriptions, findings, observations, lines of inquiries, evaluation processes, lessons learned, team member profiles, and other such information.

5.3 Finding Resolution and Closure Method

Facility management will prepare Corrective Action Plans (CAPs) which address the Findings. The RT and RTL will be available to support facility management in review and closeout of findings as necessary. The CAP for each Finding should contain the following elements:

- a. The Finding, as written in the ORR report submitted by the RT, and whether the Finding is a Prestart or Post-start Finding.
- b. The actions shall address the deficiencies identified in that Finding. The actions shall provide evaluation of any overall programmatic deficiencies or root causes related to a specific Finding which may lead to further similar occurrences and include actions addressing such deficiencies or root causes.
- c. The proposed dates by which the actions will be completed. If the actions for a Finding are phased, then the dates for each phase shall be detailed.
- d. For Post-start Findings, a description of the risks and mitigating actions, if any, to be taken during the interim which will reduce the risks associated with the Finding to an acceptable level before final correction. Include justification that the activity can proceed with acceptable risk.

Prestart and poststart findings will be entered into the Waste Remediation Tracking System (WRTS) per WHC-CM-5-34, Section 1.20, *Waste Remediation Tracking System*.

6.0 ORR PREPARATIONS

It is recommended that approximately four months prior to commencing the ORR, the RTL and RT members will be selected. RT members should have the following verified qualifications:

- Technically knowledgeable in the area assigned to evaluate. The knowledge should include experience working in the technical area.
- Knowledge of evaluation processes and methods. This knowledge may be gained through experience as an auditor or inspector or it may be gained through training evaluated as acceptable by the RTL.
- Facility specific information which may be gained through a combination of required reading and facility tours and presentations.
- Independence. RT members (including the RTL) will not be individuals who are assigned direct line management responsibilities for the work being reviewed and RT members shall not review his or her own work or work for which they are directly responsible.

RT members will be required to perform or have previously performed facility familiarization (through tours, presentations, and provided documentation), required reading, and specific training. RT members will be provided facility documentation (operating procedures, emergency response procedures, permits, FDCs, etc.) prior to commencement of ORR as training material to gain facility specific knowledge. Tours and presentations will be coordinated between the facility and RTL. The RT members will be required to take or have taken applicable site and facility training to gain access to the WRAP 1 facility. Dependent on

qualifications, certain RT members might be required to take assessment or auditing training. In the months prior to review performance, the RTL or designee will prepare and stage review forms, ORR Report shell, and any other report material which will allow an efficient review performance.

- WHC-CM-5-34, *Solid Waste Disposal Operations Administration*, Section 1.4, *Operational Readiness Activities*
- WHC-IP-1048, *Operational Readiness Activities*, Section 1, *Performance of Operational Readiness Reviews*.
- DOE-5480.31, *Startup and Restart of Nuclear Facilities*
- DOE-STD-3006-93, *Planning and Conduct of Operational Readiness Reviews*
- WHC-SD-W026-SAR-002, *WRAP Module 1 Facility Final Safety Analysis Report*
- WHC-SD-W026-PLN-002, *Plan of Action for WRAP Module 1 Operational Readiness Reviews*
- WHC-SD-W026-PLN-004, *Implementation Plan for WRAP Module 1 Operational Readiness Review*
- WRAP Functional Design Criteria WHC-SD-W026-FDC-001
- RIDS
 - WHC-CM-1120, *Solid Waste Disposal Standards and Requirements Identification Documents (SRIDS)*
 - WHC-SD-MP-SRID-002, *Site Standards and Requirements Identification Documents (SRIDS)* for information only

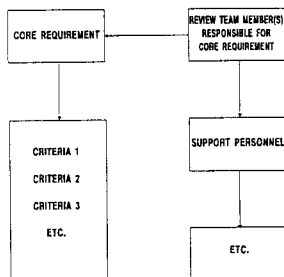
7.0 ADMINISTRATION

7.1 Review Team Composition/Structure

The RT is comprised of the RTL and a number of members who are divided amongst the Core Requirements. A RT member may be assigned to one or more Core Requirements depending on need and qualifications. A RT member assigned to a Core Requirement may solicit the input of other RT members or experts as seen fit to adequately evaluate a Core Requirement (see Figure 3). An expert is not part of the RT but an individual who has an in depth knowledge of a very specific item.

RT members will be knowledgeable and have experience in the various areas of review (e.g. safety, quality assurance, environmental protection, engineering, operations, etc.). RT members will be determined by the RTL.

Figure 3



7.2 Meetings

To facilitate RT coordination and the exchange of information, the RT will meet regularly. Prior to the review RT members will meet to participate in orientation, training, required reading, IP review, and facility tours and presentations. During the review, RT members will meet daily for debriefs. Facility personnel and management will be invited to these debriefs. These meetings will permit the RT members to discuss observations, potential Findings, actual Findings, problems encountered during review, additional information required, additional time required, schedules etc. Meetings will also permit the RTL to identify any trends or areas where more detailed information may be required. The RTL will use these meetings to review the efforts of the RT members to assure all Core Requirements are thoroughly assessed and that approaches used are in accordance with the CRAs. It will also allow potential schedule difficulties or possible information gaps to be noted in time to take corrective actions. During the review, designated RT members will also meet daily with the facility to discuss potential Findings, actual Findings, next day events, schedule problems, conflicts, additional information, etc.

7.3 Correspondence, Communication and Interface

Communication is a key aspect to proper ORR performance. Communication, both written and oral, is vital between facility, RT, and DOE as well as between RT members. To facilitate ORR performance, the facility will appoint a single point of contact to interface with the RT and DOE. Likewise the RT will have a single point of contact, to interface with the facility and DOE. The points of contact are responsible for coordinating meetings, evolutions/operations observations, interviews, needed documentation and for expressing concerns of both facility and RT. The RT is to be diligent in its thorough documentation of appraisals and Findings. RT Findings will be proof read for clarity,

accuracy, and preciseness by other RT members prior to facility management exposure or submittal to final report. Meeting Minutes will be taken and distributed if warranted (e.g., poor meeting attendance, closeout meeting, extreme meeting interest, etc.)

8.0 REPORTING

8.1 Reporting Review Results

The ORR Report must be clear as to what was evaluated and the methodology used during the evaluation (review logic). To ensure clarity and consistency standard forms will be used by all RT members. Standard Forms are contained in Appendix C and consist of the following: ORR Appraisal Form, ORR Finding Form, and ORR Observation Form. There is no specific form for Finding Resolutions as the WHC-CM-5-34, Corrective Action Management Procedure and Waste Remediation Tracking System procedures offer ample means (see section 5.3 for actual closure method).

An ORR Appraisal Form or line of inquiry will be used to document each Criteria evaluation. The form will be used to document personnel contacted, documentation reviewed, evolutions/operations witnessed, spaces visited and a summary/comment of the review.

An ORR Finding Form will be used for each Finding noted when performing an appraisal, a new form will be used for each new Finding. A Finding is considered an item that is not in agreement with SWD requirements or if not corrected could have an adverse impact on the environment, personnel, or the public. An Observation on the other hand is an item which does not fall within the bounds of a finding but if corrected would improve overall performance. ORR Finding Forms will document the Finding by providing the requirement(s) deviated, reference(s), and a discussion, conclusion, and resolution section. The ORR Observation Form will be used to document all Observation noted during the review.

All forms should be complete and in enough detail to allow an outside agency reviewing the form to follow the review logic and means utilized to verify performance with respect to the Criterion and to thereby validate the completeness and adequacy of the ORR. If for some reason the intent of a Criterion cannot be achieved, the reason should be documented.

All Findings will be evaluated for similarities, overlap, and duplication. Findings which are duplicate or overlap will be combined into a singular Finding and similar Findings will be grouped. These grouped Findings will make up the Master Findings List. The compilation of Master Findings will be evaluated by the RT to determine if they qualify as either a prestart or post-start Finding (per Appendix D).

Any RT member is free to issue a dissenting opinion, which will be carefully considered. Every attempt will be made to resolve the issue during the course of the review. However, should resolution not be achieved, provisions will be made to include the dissenting opinion in the ORR report.

The RTL will review the Findings List and develop an ORR report to document the results of the ORR and to provide justification for the RT's recommendations. All ORR Appraisal Forms or Lines of Inquiry, ORR Finding Forms, ORR Observation Forms, and the Findings List will be included in the ORR report to provide the review logic. Core Requirement leaders will be asked to sign findings and observations, signifying their agreement in report content and conclusion in the area they were assigned. Dissenting opinions that have not been resolved will be appropriately addressed in the ORR report.

The RTL will report any problems or successes and document them as Lessons Learned to aid future ORRs. These should include Lessons Learned with respect to the ORR process, as well as any Lessons Learned regarding the design, construction, and/or decommissioning of DOE nuclear facilities.

8.2 ORR Report Issuance

Copies of the ORR report will be transmitted by the RTL to the Director SWD and to the facility manager. The original ORR report will be entered into RIDS by SWD/OR.

8.3 Post-ORR Presentations

The RTL will coordinate any follow-up meetings, which include closeout meetings with the facility's management, debriefings of the RT, and presentation of the ORR report to upper management. Presentations may be required to internal or external interested groups as well.

9.0 SCHEDULE

The following is a proposed schedule that will be more firmly established prior to the ORR commencement date.

Date	Action
up to Nov. 1, 1996	Convene Team Prepare for ORR.
September 1, 1996	Facility commence internal readiness reviews, affidavits.
November 4, 1996	Commence ORR.
November 15, 1996	Conclude ORR and commence ORR report.
December 2, 1996	Initiate report release.
December 3, 1996	Facility develop Corrective Action Plan.
December 31, 1996	Facility complete Corrective Action Plan.

APPENDIX A: WRAP 1 ORR PREREQUISITE CHECKLIST

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 1

There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Are the following prerequisites approved, in place, and ready for review?

- ☐ 1) Technical Safety Requirements
- ☐ 2) Shipping/receiving operating procedures
- ☐ 3) Non-destructive Examination/Non-destructive Assay operating procedures
- ☐ 4) Internal waste transport operating procedures
- ☐ 5) Plant control system operating procedures
- ☐ 6) Plant data management system operating procedures
- ☐ 7) Process and utility systems, emergency operating, alarm response procedures
- ☐ 8) Criticality Safety Evaluation Report
- ☐ 9) Emergency Plan
- ☐ 10) As-Built Facility and Equipment Drawings
- ☐ 11) FSAR
- ☐ 12) Plant Operations Writers Guide (WHC-IP-0673 rev. 1)
- ☐ 13) Administrative Procedures (WHC-CM-5-34)
- ☐ 14) SWD Internal Requirements (WHC-CM-5-36)

The prerequisites for Core Requirement 1 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 2

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Are the following prerequisites approved, in place, and ready for review?

- ___ 1) WHC-CM-5-34 training matrix for WRAP
- ___ 2) Training and qualification program (e.g., training material, OJT Check Sheets, Job Performance Measures, test material, training aids etc.)
- ___ 3) Operating specifications document training
- ___ 4) Operating procedures training
- ___ 5) Nuclear operator certification packages in place
- ___ 6) Qualification standards and procedures
- ___ 7) Qualification records
- ___ 8) Tracking system for expiration of qualifications and notification for requalification
- ___ 9) Qualified/Certified records for instructors

The prerequisites for Core Requirement 2 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 3

Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Are the following prerequisites approved, in place, and ready for review?

- ___ 1) List of Facility Emergency Response, Engineering, List of Environmental Compliance, Fire Protection, Maintenance, Quality Assurance, Health Physics, Training, Industrial Hygiene, Industrial Safety, Nuclear Safety, Laboratory Support, Security, Records Management/Configuration Control, and Occurrence Reporting Personnel
- ___ 2) List of operations and operations support personnel
- ___ 3) Qualification test results
- ___ 4) Completed Examinations

The prerequisites for Core Requirement 3 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

**WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 4**

Facility safety documentation is in place that describes the "safety envelope" of the facility. The safety documentation should characterize the hazards/risks associated with the facility and should identify mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks. Safety systems and systems essential to worker and public safety are defined and a system to maintain control over the design and modification of facilities and safety-related utility systems is established.

Are the following prerequisites approved, in place, and ready for review?

- ☐ 1) WHC-approved Final safety analysis report, including technical specifications
- ☐ 2) Technical safety requirements
- ☐ 3) Criticality Safety Evaluation Report
- ☐ 4) Criticality Prevention Specifications
- ☐ 5) Worker safety documentation (Rad-Con)
- ☐ 6) Configuration control for changes

The prerequisites for Core Requirement 4 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Are the following prerequisites approved, in place, and ready for review?

- ☐ 1) Personnel Safety Equipment List
- ☐ 2) Records of safety and non-safety related system testing, includes:
 - Acceptance Test Procedures and results
 - Operational Testing Procedures and results
 - Plant cold testing results
 - Equipment operability reports
- ☐ 3) Program to assure operability of critical plant systems: UPS, Compressed Air, HVAC, Fire Suppression, Radiation detection and control devices, Maintenance testing (preventive maintenance, modification, and post-maintenance, Change Authority List

The prerequisites for Core Requirement 5 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 6

A process has been established to identify, evaluate, and resolve deficiencies and recommendations made by oversight groups, official review teams, audit organizations, and the operating contractor.

Are the following prerequisites approved, in place, and ready for review?

- ☐ 1) Oversight review comments and resolution documentation
- ☐ 2) Audit reports
- ☐ 3) HATS and WRTS reports
- ☐ 4) Plan in place for future evaluations and reviews of operations, e.g. self assessments, scheduled audits, etc.
- ☐ 5) A management process that is responsible for the administration of identifying, resolution and close out of corrective actions
- ☐ 6) Lessons Learned
- ☐ 7) Punchlist of corrective actions

The prerequisites for Core Requirement 6 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

**WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 7**

A systematic review of the facility's conformance to applicable DOE orders has been performed, any nonconformance have been identified, and schedules for gaining compliance have been justified in writing and formally approved.

NOTE: A systematic review will be performed to ensure the facility conforms to Solid Waste Disposal contract requirements.

Are the following prerequisites approved, in place, and ready for review?

- ☐ 1) Compliance Matrix or equivalent in place
- ☐ 2) List of applicable DOE Orders
- ☐ 3) Corrective action schedules
- ☐ 4) Efforts to meet corrective action schedules
- ☐ 5) S/RID compliance assessment provided

The prerequisites for Core Requirement 7 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

**WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 8**

Management programs are established, sufficient numbers of qualified personnel are provided, and adequate facilities and equipment are available to ensure operational support services (e.g., training, maintenance, waste management, environmental protection, industrial safety and hygiene, radiological protection and health physics, emergency preparedness, fire protection, quality assurance, criticality safety, and engineering) are adequate for operations.

Are the following prerequisites approved, in place, and ready for review?

8.1 There is an adequate emergency preparedness organization and program.

- ☐ 1) Emergency and off-normal procedures
- ☐ 2) Emergency plan
- ☐ 3) Facility Emergency Response personnel unique to WRAP training records
- ☐ 4) Procedures (operations, maintenance, surveillance, RADCON, administrative, etc.)
- ☐ 5) FSAR, Health and Safety Plan (HASP), Hazards Baseline Assessment, TSR, CSER
- ☐ 6) Procedures and training material for non-facility emergency response personnel (e.g., fire department, ambulance, hazmat team, security, etc.)
- ☐ 7) Up-to-date contact names and telephone numbers for emergency

The prerequisites for Core Requirement 8.1 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.2 There is an adequate engineering support organization and program including the cognizant/system engineer approach.

- ☐ 1) Programs, processes, and procedures which control engineering work
- ☐ 2) Design authority/design agent
- ☐ 3) Configuration control program (controlled design documents and vendor information relating to these system should be set up in files. Possibly establish also an essential drawing list which could be a criteria to check for operational readiness)

The prerequisites for Core Requirement 8.2 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.3 There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

- ___ 1) Environmental Compliance procedures
- ___ 2) Inventory control procedures for toxic and chemical materials
- ___ 3) Pre-operational baseline assessment of environmental radioactive levels
- ___ 4) Permit requirements

The prerequisites for Core Requirement 8.3 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.4 There is an adequate fire protection program.

- ___ 1) Procedures related to fire protection
- ___ 2) Fire Hazard Analysis
- ___ 3) Fire Protection requirements
- ___ 4) Fire emergency procedures
- ___ 5) Procedures for appropriate notification of fire protection system outages

The prerequisites for Core Requirement 8.4 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.5 There is an adequate maintenance organization, program and work control system.

- ___ 1) Maintenance Organization Chart
- ___ 2) Maintenance procedures
- ___ 3) WRAP-I mission objectives

- ___ 4) Project turnover remaining punchlist items & corrective maintenance items during OTPs and cold process test runs
- ___ 5) Management standards and goals for maintenance backlog
- ___ 6) Maintenance backlog
- ___ 7) Formal work control process
 - a. Print-outs of equipment deficiency, identification, prioritization, corrective action tracking, and equipment history
 - b. Print-outs of formal work authorization, job planning, scheduling, and backlog measures.
- ___ 8) Maintenance quality assurance staff list
- ___ 9) Procurement procedure/process
- ___ 10) Calibration/Repair procedures/standards
- ___ 11) Instrument/equipment calibration schedules/documentation
- ___ 12) Tagging mechanism for instruments/equipment
- ___ 13) Documentation of instrument "set-points" (Calibration data sheets)
- ___ 14) Equipment maintenance history
- ___ 15) Improvement process which allows feedback and corrective/improvement actions
- ___ 16) Maintenance performance indicators
- ___ 17) Storage map for hazardous materials
- ___ 18) Storage map for tools, supplies, jigs, and fixtures
- ___ 19) List of laydown areas and their contents
- ___ 20) Maintenance packages for post-maintenance testing documentation
- ___ 21) Maintenance Implementation Plan (MIP)
- ___ 22) Master Equipment List (MEL)

The prerequisites for Core Requirement 8.5 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.6 There is an adequate quality assurance organization and program.

- ___ 1) Quality assurance procedures for systematic reviews and audits, including self assessments
- ___ 2) Quality assurance reports
- ___ 3) Administrative controls pertaining to quality assurance program elements
- ___ 4) Acceptance/operational tests and inspection documentation
- ___ 5) Verification documentation concerning calibration of measurement, test, and monitoring systems
- ___ 6) Work package location

___ 8) WHC-CM-5-34 (facility compliance) QAPP

The prerequisites for Core Requirement 8.6 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.7 Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment.

- 1) Organization chart
- ___ 2) Procedures for packaging, labeling, accountability, and safe transportation of radioactive material control program documentation
- ___ 3) FSAR
- ___ 4) Copies of Facility Radiological Work Permits (RWP)
- ___ 5) Location of Facility Radiological Condition Status Boards
- ___ 6) Location of Facility Posting for Radiological Control for phase 1
- ___ 7) ALARA program documentation including goals, committee members & chair person
- ___ 8) Radioactive Source control program
- ___ 9) Radiological protection/measurement instruments test and calibration program documentation, including instrument tracking system documentation
- ___ 10) List of facility radiological control instruments to verify calibration stickers
- ___ 11) List of facility radiological control routine surveys.
- ___ 12) List of Stack Monitoring equipment
- ___ 13) Work Place Air Sampling program requirements
- ___ 14) Radiological Control Validation and Verification Plan.
- ___ 15) RCT OJT List
- ___ 16) Scheduled Radiological Control Routine Task Description
- ___ 17) Radiological Data Tracking and Trending Program Documentation
- ___ 18) Radiological Control Procedures WRAP1-OP-1201 - WRAP1-OP-1219
- ___ 19) ATP and OTP Test Reports for RGD Interlocks

The prerequisites for Core Requirement 8.7 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.8 Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

- ___ 1) OSHA standards
- ___ 2) Applicable DOE Orders
- ___ 3) Health & Safety Program (HASP)
- ___ 4) FSAR
- ___ 5) Record keeping procedures to document injuries, illnesses, and accident occurrences
- ___ 6) Injury, illness, and accident occurrence documentation
- ___ 7) Work place Hazard Identification program surveillance
- ___ 8) Regular and periodic audit records
- ___ 9) Observed hazard documentation - noncompliant conditions, corrective action dates, tracking programs
- ___ 10) Employee Concerns Program documentation - identify safety and health hazards for corrective action
- ___ 11) Industrial Hygiene Assessment Documentation includes
 - A. Safe work area
 - B. Electrical Equipment, Ground Fault Interrupters, Electrical Services
 - D. Heat generating appliances/equipment
 - E. Safety devices and posting signs
 - F. Adequate/safe equipment/machines
 - G. Personal protective equipment/clothing provided
 - H. Lock and Tag system in place
 - I. Noise control program
 - J. Personnel exposure to chemical hazards
- ___ 12) Maintenance records for ladders, guard rails, and fall protection equipment

The prerequisites for Core Requirement 8.8 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.9 There is a laboratory organization and program that adequately supports the requirements of WRAP operation. (NOT APPLICABLE FOR PHASE I)

- ___ 1) Sample schedule commitment
- ___ 2) Required analysis to be performed
- ___ 3) Facility procedures/controls for reliable sampling operations

___ 4) FSAR

8.10 There is a security organization and program that adequately supports the requirements WRAP operation.

- ___ 1) Security procedures and controls
___ 2) FSAR

The prerequisites for Core Requirement 8.10 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.11 There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

- ___ 1) Configuration Management procedures/policy
___ 2) Documents, as-built drawings, and other references which define the facility configuration
___ 3) Process for implementing modifications - design drawings, revised operations, training, and maintenance procedures

The prerequisites for Core Requirement 8.11 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.12 An adequate records management/document control program exists to assure that all important documents, records, and related information are maintained current and readily retrievable.

- ___ 1) Records management procedure
___ 2) Records management system
___ 3) Processes, interfaces and responsibilities for controlling design bases and technical documents
___ 4) Current documentation
___ 5) Storage location of documentation

___ 6) Software QA program including vendor validation program

The prerequisites for Core Requirement 8.12 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

8.13 There exists an Occurrence Reporting / Root Cause Program

- ___ 1) Administrative Procedures for Occurrence Reporting and Root Cause Analysis determination.
- ___ 2) Operating Procedures for identification & Notification
- ___ 3) Assessments related to Occurrence reporting if available

The prerequisites for Core Requirement 8.12 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 9

A routine and emergency operations drill program, including program records, has been established and implemented.

Are the following prerequisites approved, in place, and ready for review?

- ☐ 1) Records and audits of emergency operation drills
- ☐ 2) Records and audits of routine drills
- ☐ 3) Building Emergency Plan

The prerequisites for Core Requirement 9 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 10

An adequate start up or restart test program has been developed that includes adequate plans for graded operations testing to simultaneously confirm operability of equipment, the viability of procedures, and the training of operators.

Are the following prerequisites approved, in place, and ready for review?

- ___ 1) Equipment operability reports
- ___ 2) Open Item List
- ___ 3) Logic Flow for systems startup
- ___ 4) Start up Test Program's training requirements
- ___ 5) Start up Test Program's integration of on-the-job training

NOTE: Other items are verified under other Core Requirements

The prerequisites for Core Requirement 10 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 11

Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Are the following prerequisites approved, in place, and ready for review?

- _____ 1) Staffing Plan
- _____ 2) Position Description Forms
- _____ 3) Organization Chart with clear lines of command
- _____ 4) Procedure/policies define program/group functions, assignments, responsibilities, and reporting relationships of each management position, exempt position, non-exempt position, bargaining unit, and direct support personnel.
- _____ 5) Documentation regarding contractor/subcontractor reporting relationship

The prerequisites for Core Requirement 11 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Are the following prerequisites approved, in place, and ready for review?

____ 1) WHC-CM-5-34 revised to include WRAP (Section 3)

The prerequisites for Core Requirement 12 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 13

There are sufficient numbers of qualified personnel to support safe operations.

Are the following prerequisites approved, in place, and ready for review?

- _____ 1) Staffing Plan which addresses:
- A. Operating personnel staffing
 - B. Management personnel staffing
 - C. Maintenance personnel staffing
 - D. Facility engineering personnel staffing
 - E. Facility administrative personnel staffing
 - F. Support personnel staffing
 - G. Process Flow Diagram that includes where and what operator intervention consists.
 - H. Qualification and job assignment records

The prerequisites for Core Requirement 13 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 14

A program is established to promote a site-wide culture in which personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements and, through their actions, demonstrate a high priority commitment to comply with these requirements.

Are the following prerequisites approved, in place, and ready for review?

- ___ 1) Plant safety policy interviews completed
- ___ 2) Facility procedures/policy are in place to promote a site-wide culture in which personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements.
- ___ 3) Safety Attendance records
- ___ 4) Independent Oversight Organization meeting documentation
- ___ 5) WRAP goals and objectives for commitment to excellence
- ___ 6) WRAP safety performance indicators
- ___ 7) Safety Improvement Plan

The prerequisites for Core Requirement 14 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

There are no Prerequisite Checklists for Core Requirements 15, 16, 17, and 18 as they have been determined unnecessary per the DOE-RL approved Plan of Action.

WRAP I Operational Readiness Review
Prerequisite Checklist
Core Requirement 19

The technical and management qualifications of contractor personnel, responsible for facility operations, are adequate.

Are the following prerequisites approved, in place, and ready for review?

- ☐ 1) Training and qualification records
- ☐ 2) Operation drill records which show knowledge and competence
- ☐ 3) Oral/written examination records
- ☐ 4) Management qualification requirements

The prerequisites for Core Requirement 19 appear to have been met and are ready for ORR commencement.

Signatures:

Group Leader / Team Member(s):

APPENDIX B: CRITERIA AND REVIEW APPROACHES

All Criteria and Review Approaches are to be conducted within the defined Scope. All references to "the facility" apply to WRAP I. All references to the "authorization basis" apply to the WRAP I authorization basis.

Core Requirement 1

There are adequate and correct procedures and safety limits for operating the process systems and utility systems.

Interpretation:

Procedures include Plant Operating (process and utility), Alarm Response, and administrative procedures. This Core Requirement requires a review of the authorization basis documents only to ensure that any identified Technical Safety Requirements (TSRs) Administrative Controls (AC)) and Criticality Prevention Specifications (CPS) have been implemented in facility procedures. Authorization basis documents are to be assessed under Core Requirement 4. Acceptance Test Procedures (ATPs), Operational Test Procedures (OTPs), and Surveillance procedures are to be addressed under Core Requirement 5. Preventative Maintenance (PM) procedures are to be assessed under Core Requirement 8.5. Facility initial startup procedures are to be assessed under Core Requirement 10.

Criteria:

1. There is an adequate number of up-to-date procedures in place which support the operating status of the facility.
2. Operating procedures adequately and correctly incorporate the identified ACs, SRs, and CPSS for operating process and utility systems.
3. Procedures adequately address all possible operating modes for the facility (this includes packaging and transportation activities e.g., transport, storage, records, etc.).
4. Procedures provide operability and availability requirements for all systems and equipment operating modes.
5. Technical details are correct and consistent between procedures, drawings, system descriptions, training, etc.
6. Operating, Alarm response, and emergency operating procedures are adequately linked and consider the emergency plan.
7. Operating procedures reflect the current configuration of systems.
8. When appropriate, the sequence for conducting operations and plant equipment line-ups is specified and understood.
9. Procedures, as applicable, address normal and off-normal events.
10. All safety requirements set forth in the FSAR and CSER have been implemented into operating procedures as appropriate.
11. Procedures adequately describe all alarm response actions.
13. Procedures adequately describe all alarm conditions.

Core Requirement 1 cont.

14. Procedures are within the bounds of the authorization basis.
15. A program is in place that ensures the periodic review, revision, and approval of procedures.
16. A program is in place that provides a visible means to ensure evaluation and approval of temporary changes, by management and/or engineering, and timely removal when the purpose is superseded.
17. A program is in place to ensure that changes to technical safety requirements are reflected in procedures.
18. Controls are established and implemented that ensure only current and accurate procedures are available for distribution and use by plant personnel, including their use in training programs.
19. As part of the process for maintaining procedures current and accurate, time is provided for training before significant procedure changes are put into effect.
20. A process is in place which requires users of procedures to inform procedure writers of errors in procedures or difficulty in using procedures, and suggestions for improving procedure content or format.
21. A program is in place to ensure that the FSAR and regulatory-type commitments are reflected in procedures and remain in effect.
22. The Plant is properly labeled and labels/procedures match.
23. All procedures and procedure changes are written in accordance with an approved writers guide.
24. Procedures are verified and validated prior to use.
25. Administrative procedures (e.g., WHC-CM-5-34) have been updated to reflect WRAP 1.
26. Procedures are clear, concise, and contain adequate information for users to understand and perform their activities effectively.

Approach:

1. Review the Plant Operating Procedures that are critical to the operation of the Shipping and Receiving, NDE/NDA, and Control Room. Assure that the procedures were prepared in accordance with the SWD Writers Guide and incorporate the FSAR Technical Safety Requirement Administrative Controls and the Critical Safety Evaluation Report requirements. Include confirmation that the procedures depict current facility/equipment configuration including all labeling, and envelope operation of all required systems and anticipated plant processing configurations.

Core Requirement 1 cont.

2. Review critical procedures to assure all operating modes for processing are addressed, including emergency conditions and recovery from process upset. Assure alarm response guidance and equipment/component labeling provides for appropriate personnel response and system recovery.
3. Observe operation of Shipping and Receiving, NDE/NDA, and Control Room process systems for utilization of procedures for startup, operation, and shutdown. (This should be conducted with the process testing of core requirements 5 and 10, or the on-the-job training (OJT) and/or performance demonstrations of core requirements 2 and 3.)
4. Confirm that the requirements of Solid Waste Disposal Operations Administration (WHC-CM-5-34) and Plant Operating Procedures Writers Guide (WHC-IP-0673 rev.1) are implemented for procedure review, revision, approval, temporary changes, currency, validation and walk down prior to use.
5. Review current Solid Waste Disposal Operations Administration Manual procedures to assure they reflect WRAP-1 and implemented appropriately in facility specific administrative and operational procedures.
6. Verify facility has proper labels on equipment, in facility as required.

Basis:

It is essential that procedures are clear, concise, and valid to assure successful process operations and worker safety. If operations are based on incorrect system and equipment configuration, safety cannot be ensured. To ensure the safety envelope is maintained for this Hazard Category 3 facility, procedures must implement correct ACs and CPSs during normal and off-normal events. To assess the adequacy of operating procedures, the RT must determine if the WRAP-1 operating procedures properly control the plant configuration and meet the requirements of the FSAR, TSRs, and CSER.

References:

1. WHC-CM-5-34, Solid Waste Disposal Operations Administration:
Section 3.22, Operations Procedures
Section 3.16, Alarm Management
2. WRAP Final Safety Analysis Report
3. WHC-IP-0673, Solid Waste Disposal Plant Operating Procedure Writers Guide
4. 10CFR820.120
5. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
6. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)

Core Requirement 2

Training and qualification programs for operations and operations support personnel have been established, documented, and implemented (the training and qualification program encompasses the range of duties and activities required to be performed).

Interpretation:

The Core Requirement applies to facility-specific qualification programs established for operations and direct support personnel (Facility Emergency Response Personnel, Engineering Personnel, Environmental Compliance, Fire Protection, Maintenance, Quality Assurance, Health Physics, Training, Industrial Hygiene, Industrial Safety, Nuclear Safety, Laboratory Support, Security, Records Management/Configuration Control, and Occurrence Reporting).

Adequacy of exams, exam results, and personnel level of knowledge are to be assessed under Core Requirement 3. Adequacy of staffing levels is to be assessed under Core Requirement 13. Adequacy of management training and qualification is to be assessed under Core Requirement 15. Training requirements of non-facility emergency response personnel (e.g., fire department, ambulance, hazmat team, etc.) will be assessed under Core Requirement 8.1

Criteria:

1. Training emphasizes required responses to: procedural inadequacies, procedural conflicts, unexpected results, and inadequate guidance. Training also includes SWD policy on the authority to deviate from written procedures during an emergency, if necessary, to protect personnel and equipment or to maintain safe condition.
2. Training material address technical fundamentals.
3. Training programs for requalification are in place.
4. Training emphasizes procedural compliance, ACs, SRs, and CPSS.
5. Qualification programs are in place that provide qualification standards and procedures (e.g., signature control, exam control, classroom seminars, practical factors, pass/fail threshold) for personnel associated with the facility.
6. An effective system for tracking the expiration of qualifications and the notification for requalification has been implemented.
7. Performance-based training programs have been developed for personnel associated with the facility.
8. The scope and content of training programs are adequate to ensure that job assignments can be performed in a manner that supports facility and personal safety.

Core Requirement 2 Cont.

9. As-built drawings and the latest revision of approved procedures were used in the development of training.
10. Qualification programs are in place that provide qualification standards and procedures for training direct support personnel (Facility Emergency Response Personnel, Engineering Personnel, Environmental Compliance, Fire Protection, Maintenance, Quality Assurance, Health Physics, Training, Industrial Hygiene, Industrial Safety, Nuclear Safety, Laboratory Support, Security, Records Management/Configuration Control, and Occurrence Reporting).
11. Facility non-emergency response personnel are adequately trained in required actions during emergency situations.
12. Qualification records are accurate and complete.
13. Preexisting SWD training programs have been modified as necessary to account for new procedures, systems, and equipment associated with the facility.
14. Training requirements for temporary employees, contract personnel, and visitors are established and are appropriate for the tasks assigned.
15. The instructors are qualified/certified and knowledgeable of the subject matter taught.
16. Personnel are kept cognizant of site/facility policies and procedure changes that affect their activities.
17. Training aids are adequate to support hands-on and practical demonstration training.

Approach:

1. Review the training program for WRAP-1 to assure Operator facility specific certifications and qualifications have been prepared and implemented, including conforming to the HAMTC union contractual commitments.
2. Review the training program for WRAP-1 to verify that the qualification, continuing training, requalification, OJT, and training record requirements of WHC-CM-5-34 including a formal tracking system have been effectively implemented. Assure that temporary and contract personnel training needs have been addressed.
3. Review training material to assure it is based on current facility configuration and validated procedures. Include interviews of the various operations and support staff to ensure personnel are trained and knowledgeable in their areas of responsibility including procedure utilization and compliance. Include reviewing the one time Vendor information training and it's inclusion into the appropriate training

Core Requirement 2 Cont.

- package(s). Observe a demonstration of on-the-job training, performance demonstrations, and review exam bank questions.
4. Conduct a sample review of training records for the various direct operational and support staff to verify that the training have been identified for each individual and that these requirements have been satisfied.
 5. Review facility defining documentation to ensure a training organization and program are defined and include interviews of selected training personnel to assure they are knowledgeable in their areas of responsibilities.
 6. Observe classroom training that supports facility operation. Look at effectiveness of the trainer and applicability of the lesson plan and training aids in providing information that is readily usable in the field.

Basis:

State and Federal laws and regulations require specific training programs to be developed and implemented. This review will ensure that Federal and State requirements, as well as best management practices, are implemented.

References:

1. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.8, Training Administration
Section 3.10, On-the-Job Training
2. WHC-IP-0867, Operation Training Materials Development Guidelines
3. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
4. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)

Core Requirement 3

Level of knowledge of operations and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of operating and operations support personnel.

Interpretation:

This Core Requirement is to ensure operations and direct support personnel (Facility Emergency Response Personnel, Engineering Personnel, Environmental Compliance, Fire Protection, Maintenance, Quality Assurance, Health Physics, Training, Industrial Hygiene, Industrial Safety, Nuclear Safety, Laboratory Support, Security, Records Management/Configuration Control, and Occurrence Reporting) are technically competent in all aspects of their assigned duties.

The adequacy of management personnel is to be assessed under Core Requirement 19. Training requirements of emergency response personnel outside of the facility (e.g., fire department, ambulance, hazmat team, etc.) will be assessed under Core Requirement 8.1

Criteria:

1. The level of operations and direct support personnel's knowledge, skill, and abilities are adequate to operate in compliance with the WRAP-1 operating and administrative procedures, as evidenced by selective interviews of personnel, review of examinations and examination results by the RT.
2. Examinations given to personnel are adequate in their depth and breadth of subject matter as it pertains to the operation under review and the assigned duties of personnel.
3. On the job observations of selected operations and operations support personnel convey the impression that personnel are competent and able to operate the plant in accordance with all applicable procedures.
4. Current drawings and procedures were used in exam development.
5. Exams are based on current technically descriptive documents such as procedures, FSAR, CSER, vendor information, processing requirements, facility drawings, and hazard analysis.

Approach:

1. Review and assess test material to verify it adequately reflects training content. Verify pass/fail criteria for test material is clearly defined, with results utilized in determining personnel qualifications.
2. Review and assess test material to verify it adequately tests for an understanding of system capabilities, limitations, and procedures.
3. Conduct interviews with operations personnel to verify they have an adequate understanding of technical fundamentals, procedures, procedure compliance, allowed emergency actions, ACs, and CPSs.

Core Requirement 3 Cont.

4. Observe operations during Core Requirement 5 and 10 to evaluate the effectiveness of training.
5. Ensure facility personnel are trained on current fire and emergency information and are knowledgeable of their responsibilities during emergency conditions.
6. Interview personnel to determine their knowledge of information regarding the various types of facility hazards and stop work authority.

Basis:

The Defense Nuclear Facilities Safety Board (DNFSB) Recommendations 90-4, 91-3, 91-4, 92-3, and 92-6 delineated the important facets of a readiness review. These included assessment of the level of knowledge achieved during operator qualification programs as evidenced by review of exam questions and results and by selective observations of plant operations and by interviews of operators by the readiness review group

References:

1. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.8, Training Administration
Section 3.10, On-the-Job Training
2. WHC-IP-0867, Operation Training Materials Development Guidelines
3. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
4. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)

Core Requirement 4

Facility safety documentation is in place that describes the "safety envelope" of the facility. The safety documentation should characterize the hazards/risks associated with the facility and should identify mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks. Safety systems and systems essential to worker and public safety are defined and a system to maintain control over the design and modification of facilities and safety-related utility systems is established.

Interpretation:

This Core Requirement requires a review of all safety documentation. Configuration management is assessed under Core Requirement 8.13.

Criteria:

1. The authorization basis for operation has been established, reviewed, and approved by WHC.
2. Systems and support system to be operated within authorization basis.
3. Documentation provides for the protection of the worker and the public.
4. Documentation is in accordance with applicable administrative and regulatory requirements for this type of facility.
5. Program is in place to update the SAR/TSR and to evaluate impact of changes or errors to the authorization basis to the authorization basis.
6. A program is in place that identifies workplace hazards and the information is used in planning and conducting facility work.

Approach:

1. Ascertain that the authorization basis has been reviewed and approved by the proper organization based on the approval designator.
2. Review operating, maintenance, and administrative procedures to determine if the operation described is in within the limits of the authorization basis and proper controls are provided to maintain those limits.
3. Review selected procedures to ascertain that the requirements of the authorization basis are noted as appropriate.
4. Review documentation to ascertain that requirement for worker safety as it relates to industrial, hygiene, radiological, has been established.
5. Review the configuration control program to determine if changes include an evaluation for worker safety and authorization basis impact.

Core Requirement 4 cont.

6. Verify a program is in place that identifies workplace hazards and the information is used both in planning the work tasks and used by operating personnel in conducting work.

Basis:

Expert judgment, applicable DOE Orders and industrial standards are the primary basis for the above criteria and approach.

References:

1. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.3, Fire Protection Program
Section 1.14, ALARA Program
Section 1.15, Safety Analysis
Section 2.1,7 Criticality Safety
2. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
3. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)

Core Requirement 5

A program is in place to confirm and periodically reconfirm the condition and operability of safety systems, including safety related process systems and safety related utility systems. This includes examinations of records of tests and calibration of safety system and other instruments which monitor limiting conditions of operation or that satisfy technical safety requirements. All systems are currently operable and in a satisfactory condition.

Interpretation:

This Core Requirement applies to Acceptance Testing, Operational Testing, safety related system operability and condition tests, and Surveillance program. The Maintenance Program and Calibration Program will be assessed under Core Requirement 8.5.

Criteria:

1. An adequate surveillance program is in place. Adequate documentation to support the implementation of this program is maintained.
2. An adequate test program is in place. Adequate documentation to support the implementation of this program is maintained.
3. All safety systems and safety related process and utility systems are operable and available such as ventilation system flows are balanced so air flow is from clean to less clean.
4. Acceptance Test Procedures have been completed and documented for all facility systems.
5. Operational Test Procedures have been completed and documented for all facility systems.
6. Cold Plant Integrated Testing has been completed and documented for all facility systems.
7. The configuration management, maintenance, operation, environmental compliance, and radiological programs document program requirements and organizational responsibilities for testing, inspecting, surveilling, performing corrective and preventive maintenance, modifying and post-maintenance testing of systems.
8. Review of completed surveillances and/or tests are conducted to ensure that acceptance criteria are met and any trends are identified.
9. ATPS and OTPs contain acceptance requirements delineating the minimum standards acceptable for components and/or systems as appropriate.
10. Administrative controls are established to maintain test records.
11. Ventilation system flows are balanced so that air flow is from clean to less clean.

Core Requirement 5 cont.

Approach:

1. The authorization basis(FSAR) for WRAP-1 has classified the facility as Hazard Category 3 with no safety class or safety significant systems. Administrative technical specifications and Criticality driven inventory controls are defined in the FSAR. Review the implementing procedures for these specifications and controls to assure that the worker safety aspects are addressed and that the responsible technical support staff for the procedures are knowledgeable of the requirements.
2. WRAP-1 is not required to conduct surveillances of safety class systems or equipment. Review surveillance procedures process areas to assess if the appropriate amount of rigor is being applied considering complexity, man-machine interfaces, and lack of operating data for this type of facility.
3. Review ATPs and OTPs to verify the adequacy of the administrative control program for test record retention and retrieval process, documentation for completion of testing and operational turnover. Verify that all tests were reviewed and approved by appropriate organization and departments.
4. Interview configuration management, maintenance, operation, environmental compliance, and radiological controls personnel to verify adequate understanding of test, inspection, surveillance, corrective and preventive maintenance, modification and post-maintenance testing responsibilities, including a working knowledge of the various organizational interfaces and flow of information/data.
5. Verify ATPs and OTPs have acceptance criteria defined, and the testing verified that they were met. Review the OTPs to assure the various modes of operation (automated, semi-remote, manual remote and local) have been addressed and identify man-machine interface as it relates to worker safety.
6. Review and assess the methods used to track the status of the operability, availability, and mode of operation of systems including communication of worker safety information as it relates to the varying modes of operation.
7. Ensure authorities are identified that can approve changes in the mode of operation, changes in system operational performance, and changes to the various components(even component changes) that comprise the process. Confirm that the configuration management control processes include the development of operational history documentation that can be used to help provide guidance to assure mission success.
8. Review the operation of the HVAC system, including procedures and characteristic testing, to assure that the radiological boundary control requirements are met; this includes radiological contamination migration for all modes of operation.

Core Requirement 5 cont.

9. Review operability of: Critical systems; Compressed Air System; Fire Suppression System; Radiation Detection and Control Devices.

Basis:

All elements of the operating program, including procedures and training, should be adequate to assure continued systems operability and to keep design limits visible to plant personnel and assist in fostering an effective safety culture. It is important to verify that proper operability acceptance criteria were used in turnover tests and that these criteria are effectively documented. Standard industry practice requires proper documentation of acceptance criteria in procedures, and verification that operating limiting conditions meet all functional design requirements.

References:

1. WHC-CM-5-36, SWD Internal Requirements
Section SWD-4-2, Quality Assurance
Section SWD-6-1, Standard Engineering Practices
Section SWD-6-2, Project Management
2. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
3. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.9, Quality Assurance Program
Section 1.13, Processing and Transferring Records
Section 3.13, Control of Equipment
6. WHC-IP-1026, Engineering Practice Guidelines

Core Requirement 6

A process has been established to identify, evaluate, and resolve deficiencies and recommendations made by oversight groups, official review teams, audit organizations, and the operating contractor.

Interpretation:

This core requirement applies to how the WRAP-1 facility implements the SWD procedures for identification, evaluation, tracking and closure of corrective actions. The review does not apply to a determination of the adequacy of WHC or SWD tracking procedures.

Criteria:

1. Self assessment procedures and systems exist and are in use.
2. An adequate system exists and is implemented to identify, evaluate, and resolve deficiencies and recommendations made by oversight groups, official review teams, audit organizations, and WHC internal oversight.
3. Independent oversight organizations have clearly defined and understood responsibilities for WRAP oversight and have discharged their responsibilities for performing health, safety, and environmental protection audits of WRAP consistent with their organizational responsibilities.
4. Scope and frequency of audits/assessments are defined and followed.

Approach:

1. Verify that the facility has a documented process for resolving issues identified in reviews, audits, or reports. Assure Lessons Learned and trending are utilized as appropriate and closeout includes sufficient resolution to prevent recurrence.
2. Review and assess the implementation of WHC-CM-5-34, section 1.4, *Operational Readiness Activities*.
3. Review and assess the implementation of WHC-CM-5-34, section 1.11, *Self Assessment*.
4. Review and assess the implementation of WHC-CM-5-34, section 1.18, *Occurrence Reporting and Processing of Operations Information*.
5. Review and assess the implementation of WHC-CM-5-34, section 1.20, *Waste Remediation Tracking System (WRTS)*.
6. Review and assess the implementation of WHC-CM-5-34, section 1.22, *Corrective Action Management*.
7. Review and assess the implementation of WHC-CM-5-34, section 1.24, *Unreviewed Safety Questions*.

Core Requirement 6 cont.

8. Review and assess the corrective actions identified during project turnover(punchlist items), ATPs, OTPs, and pre-startup testing to assure proper utilization of tracking systems and individuals responsible for closeout.
9. Interview management personnel to assess their knowledge and application of the facility reporting systems as a management tool. Confirm their understanding of facility procedures for reporting and trending of facility performance including maintenance.

Basis:

Experience shows that the ability of management to effectively identify, prioritized, and track deficiencies and to develop and control proper corrective actions through closure is an accurate gauge readiness. Facility personnel are responsible for ensuring WRAP is operated with proper regard for health, safety, and protection of the environment. A portion of this responsibility is discharged through formal audits, either overall or focused in specific disciplines. It is imperative to establish that when these audits are conducted that management will be able to receive and act upon the findings in a satisfactory manner.

References:

1. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.4, Operational Readiness Activities.
Section 1.11, Self Assessment.
Section 1.18, Occurrence Reporting and Processing of Operations Information.
Section 1.20, Waste Remediation Tracking System (WRTS).
Section 1.22, Corrective Action Management.
Section 1.24, Unreviewed Safety Questions.
2. WHC-CM-5-36, SWD Internal Requirements
Section SWD-1-10, Safety Manual
Section SWD-4-2, Quality Assurance
Section SWD-4-27, Radiological Control Practices And Procedures
Section SWD-6-2, Project Management
Section SWD-7-5, Environmental Compliance
6. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
7. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)

Core Requirement 7

A systematic review of the facility's conformance to applicable DOE orders has been performed, any nonconformances have been identified, and schedules for gaining compliance have been justified in writing and formally approved.

Interpretation:

This Core Requirement is to review and assess the facility's performance of a compliance review against SWD contractual requirements.

Actual verification of compliance with SWD contractual requirement is performed under all other Core Requirements.

Criteria:

1. A compliance assessment has been completed, non compliances have been identified, and schedules for gaining compliance have been made.

Approach:

1. Review and assess documentation of the facility's compliance assessment.
2. Review and assess corrective action schedules.
3. Review and assess efforts to meet corrective action schedules.

Basis:

The Core Requirement stems from a DNFSB recommendation which requires DOE nuclear facilities to identify the specific standards and requirements considered applicable to the design, construction, operation, and decommissioning of the facility. The recommendation also requires conformance to identified standards and requirements.

References:

1. DNFSB Recommendation 90-2, Requirements Information Document

Core Requirement 8

Management programs are established, sufficient numbers of qualified personnel are provided, and adequate facilities and equipment are available to ensure operational support services (e.g., training, maintenance, waste management, environmental protection, industrial safety and hygiene, radiological protection and health physics, emergency preparedness, fire protection, quality assurance, criticality safety, and engineering) are adequate for operations.

Interpretation:

This Core Requirement requires review of support services management programs, personnel, facilities, and equipment, which were established and procured specifically for the facility being reviewed. As an example, a training office and managing staff setup within the facility is within the scope of the review, but the rest of SWD and WHC training department is not within the scope of the review. Staffing is assessed under Core Requirement 13.

8.1. There is an adequate emergency preparedness organization and program.

Criteria:

1. Emergency and off-normal procedures effectively guide personnel in responding to single and multiple events.
2. Procedures (operations, maintenance, alarm response, RADCON, administrative, etc.) are adequately linked and consider the Emergency Plan.
3. An approved emergency plan and supporting documents exist and have been tested to ensure effective emergency preparedness and response. Provisions are in place to upgrade the Emergency Plan based on lessons learned from drills, exercises and actual emergencies. The emergency plan incorporates required emergency preparedness program features.
4. Facility Emergency Response personnel are trained to effectively respond and mitigate the consequences of emergencies (assessed under Core Requirement 2 and 3, provided here for information and completeness). Facility non-emergency response personnel are adequately trained on emergencies situations (assessed under Core Requirement 2 and 3, provided here for information and completeness). Non-facility emergency response personnel are trained to respond to and support WRAP.
NOTE: only training that is unique to WRAP or describes WRAP's operations is to be assessed.
5. Facilities, equipment, and resources are in place and adequate to support emergency response operations and ensure the protection of all personnel (e.g., Emergency Operations Center, backup or alternative facilities, primary and backup communication, alarms adequate to notify personnel, transportation, medical treatment, respiratory equipment, exposure controls, instrumentation to measure exposure, etc.)

8.1 cont.

6. Provisions and procedures are in place to support correct classification of emergencies, assessment of consequences, notification of emergency response personnel, and to recommend appropriate protective actions.
7. Emergency drills and exercises are conducted prior to WRAP operation and are periodically conducted thereafter to test and verify the adequacy of the emergency plan. (assessed under Core Requirement 9, provided here for information and completeness)
8. Hazards assessment are prepared, documented, and maintained which considers emergency events that could affect WRAP.
9. Responsibility is assigned to an individual for coordination of facility and site emergency response planning, and for maintaining the emergency management program documentation current, including the emergency plan and emergency plan implementing procedure (assessed under Core Requirement 11, provided here for information and completeness)
10. Individuals and alternates are designated to perform all emergency roles using clear lines of succession.
11. Emergency response personnel are selected based on assignments similar to normal day-to-day responsibilities and the individual's ability to properly analyze data, assess situations, and make decisions under high stress conditions.

Approach:

1. Interview individuals responsible for implementation of the emergency preparedness program. Ensure that the emergency preparedness program includes the necessary elements of staffing, management support, resources, training, and planning, to cope with emergencies.
2. Review procedures (operations, maintenance, surveillance, RADCON, administrative, etc.) to verify that emergency and off-normal event are sufficiently linked to the emergency plan. Through discussions with operations personnel and facility managers, confirm knowledge of emergency/off-normal operating procedures. During conduct of the ORR evaluate how personnel utilize procedures during event drills.
3. Review the Emergency Plan and supporting documentation and compare to the requirements of the FSAR, Health and Safety Plan (HASP), Hazards Baseline Assessment, TSR, and CSER. Ensure that provisions are in place to incorporate drills and actual emergency lessons learned into the Emergency Plan.
4. Review procedures and training material for non-facility emergency response personnel (e.g., fire department, ambulance, hazmat team, security, etc.) to assure WRAP-1 has been included, noting its unique processes.

8.1 cont.

5. Review the Emergency Plan for commitment and definition of facility, equipment, and resources for emergency response. Conduct a site walk through to ensure medical, fire, hazmat, radiological response, and monitoring equipment are in place. Review surveillance procedures for emergency response equipment to ensure their continued maintenance and ensure up-to-date contact names and telephone numbers are provided at all times.
6. Interview personnel responsible for classification of emergencies to determine if the classification scheme is consistent with operating procedures and technical specifications.
7. Perform walk down of facilities and equipment, review procedures and interview appropriate onsite and, as necessary, offsite personnel to verify that provisions are adequate and in place for transportation and treatment of contaminated/injured personnel, fire/rescue support, and protection of security personnel during emergencies.
8. Review Hazard Analysis for WRAP to ensure a comprehensive hazard assessment has been conducted and that the emergency plan is responsive to the full spectrum of accidents.
9. Review procedures (operations, maintenance, surveillance, RADCON, administrative, etc.) to verify that emergency and off-normal event are sufficiently linked to the emergency plan. Through discussions with operators and operations managers, confirm operator knowledge of emergency/off-normal operating procedures. During conduct of the ORR evaluate how personnel utilize procedures during event drills.
10. Ensure up-to-date contact names and telephone numbers are provided at all times.

Basis:

An effective emergency preparedness, and response program is necessary to help ensure the safety and health of workers, public, property and environment in the event of an emergency. Emergency management programs should be in place to enable organizations to respond to an emergency in a timely, efficient, and effective manner, resulting in mitigation of consequences and recovery. WRAP hazard assessments are to be used as the basis of the emergency preparedness program.

References:

1. WHC-CM-5-36, SWD Internal Requirements
Section SWD-4-43 Emergency Management Resources
2. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.18, Occurrence Reporting and Processing
3. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
4. WHC-IP-1120, Rev 4 Standards / Requirements Identification Document (SRIDS)
5. FSAR
6. HASP
7. Baseline Hazard Assessment
8. TSR and CSER

- 8.2 There is an adequate engineering support organization and program including the cognizant/system engineer approach.

Criteria:

1. The organizational structure is clearly defined and staffing and resources are sufficient to accomplish tasks assigned to the organizational elements. (assessed under Core Requirement 11, provided here for information and completeness)
2. Adequate training, including WRAP specific training, is provided to the engineers. (assessed under Core Requirement 2 and 3, provided here for information and completeness)
3. Responsibilities, authority, and interfaces for each organizational position are clearly defined and understood. (assessed under Core Requirement 11, provided here for information and completeness)
4. Goals, objectives, and standards for performance of engineering support activities are adequately established, communicated, and reinforced. (assessed under Core Requirement 11, provided here for information and completeness)
5. The effectiveness and level of expertise of engineering support are periodically and adequately assessed. (assessed under Core Requirement 13, provided here for information and completeness)
6. Actions and controls within engineering support demonstrate that WRAP configuration control is maintained and a configuration management system is in place that ensures drawings, procedures, safety equipment lists, FSAR, training materials, etc. are kept current. (assessed under Core Requirement 8.13, provided here for information and completeness)
7. Procedures and controls that ensure safe and reliable WRAP operations are adequately employed in the conduct of engineering activities.
8. Engineering adequately support the WRAP mission.
9. Standard engineering practices, principals, convention, and approaches are employed.

Approach:

1. Obtain and review programs, processes, and procedures which control engineering work and confirm appropriate checks and balances exist which would preclude or correct errors (e.g., design, procedure, etc.), standard engineering practices and approaches are employed.
2. Interview engineering support personnel to confirm their understanding of governing and applicable programs/procedures. Include confirming their knowledge of applying these programs and procedures to the processing requirements of WRAP-1.

8.2 Cont.

3. Through discussions with maintenance, operations, and management develop an understanding of the adequacy of engineering. Determine backlog of work and the time to complete. Determine if responsibility for completing work is clearly defined.

Basis:

It is industry practice to establish an engineering support organization which clearly defines its management authority, responsibility, and accountability and which serves to provide the technical expertise necessary to support the needs of operations, maintenance, and WRAP management personnel.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
 - Section SWD-1-5, Standard Operating Practices
 - Section SWD-4-2, Quality Assurance
 - Section SWD-4-27, Radiological Control Practices and Procedures
 - Section SWD-4-29, Nuclear Criticality Safety
 - Section SWD-6-1, Standard Engineering Practices
 - Section SWD-8-7, Operations Support Services
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
 - Section 1.9, Quality Assurance Program Plan
 - Section 1.14, ALARA Program
 - Section 1.24, Unreviewed Safety Questions
 - Section 2.1, Configuration Change Control
 - Section 2.2, Solid Waste and T Plant As-Built Drawing Control
 - Section 2.3, Technical Notebooks
 - Section 2.4, Configuration Management
 - Section 2.11, Job Control System
 - Section 2.17, Criticality Safety
 - Section 3.1, Material Control
5. WHC-IP-1026, Engineering Practices Guidelines

- 8.3 There is an adequate environmental protection organization and program, to include Air Quality, Surface Water, Groundwater, Solid and Hazardous Waste, Hazardous Material Handling, Environmental Monitoring, Hazardous Substance Release Reporting, and Environmental Protection Quality Assurance.

Criteria:

1. Environmental Compliance programs are defined in formal policies, standards, and procedures.
2. A plan for monitoring air-effluent sources has been formalized in a document and has received appropriate review and approval.
3. There is a formal waste program that describes procedures, roles, and responsibilities for identifying, characterizing, and managing all waste streams.
4. There is a formal waste minimization program and plan.
5. There is a formal program that defines the use of chemicals and toxic materials. Inventory control procedures are in place for monitoring and limiting the type and quantity of chemicals and toxic materials purchased. Procedures are established and implemented to prevent the release of toxic chemical materials to the environment.
6. There are response action plans or equivalent documents that outline the nature and scope of the response action program and outline the specific responsibilities for, and procedures to assess, all releases potentially subject to reporting and notification requirements.
7. All required permits for construction and operations are possessed and associated requirements in effect (e.g., air, water, waste, TSD, etc.).
8. All environmental reviews and studies have been performed (e.g., NEPA, etc.)
9. A system is in place and implemented to provide estimates of quantities and assess the integrated impact of releases of hazardous material on WRAP personnel, the public, and the environment.
10. Hazardous substances are monitored, sampled, and analyzed in order to support making notifications and reporting reportable quantities to authorities.
11. Environmental sampling programs are conducted to establish a baseline for radioactivity in the environment in the vicinity of WRAP for use as a basis of comparison in the event of an excursion involving the plant.
12. Equipment and resources for sampling and analysis of environmental media are in place to provide assurance that significant releases from WRAP are not occurring and radioactive or hazardous materials are not accumulating in the environment. Verify the data can be analyzed in a timely manner.

8.3 cont.

13. Procedures are in place that describe how to operate the equipment used to sample and analyze.
14. Personnel in Environmental Compliance have the needed knowledge, skills, and abilities to conduct the program. (assessed under Core Requirement 2 and 3, provided here for information and completeness)
15. WRAP's impact has been assessed by independent monitoring groups (well monitoring, site air monitoring, etc.) and appropriate actions have been taken to accommodate.
16. Intra-building waste movements are made under a documented control system that provides for positive tracking of package movement, and movement approval.

Approach:

1. Ensure all procedure (normal and off-normal) that could impact the environment are reviewed by Environmental Compliance.
2. Review documentation, interview staff, and make field observations to ensure the Environmental Compliance program address all activities necessary to implement environmental policies.
3. Ensure Environmental Compliance procedures are technically correct, current, and have a level of detail appropriate for the activities to which they apply.
4. Review the air quality program to ensure that a plan for monitoring air-effluent sources has been formalized in a document and has received appropriate review and approval.
5. Ensure Spill Prevention, Control, and Countermeasures (SPCC) plans are reviewed on a regular basis. Plans must be reviewed and recertified at least every three years, but should be reviewed and amended at any time when substantive changes may occur. SPCC and BMP plans contain specific spill reporting instructions as required by the applicable regulation.
6. Review spill plans that involve emergency responses and notification, to make certain that up-to-date contact names and telephone numbers are provided at all times.
7. Review documentation, make field observations, and interview staff to ensure there is a formal, facility-wide waste program in place that describes procedures and roles and responsibilities for identifying, characterizing, and managing all waste streams.
8. Review documentation, make field observations, and interview staff to ensure there is a formal waste minimization program and plan.
9. Review documentation, interview staff, and make field observations to ensure that inventory control procedures are in place for monitoring and

8.3 Cont.

- limiting the type and quantity of toxic and chemical materials purchased and procedures are established and implemented to prevent the release of toxic and chemical materials to the environment.
10. Review procedures for operating monitoring, sampling and laboratory analyses equipment to assure they are appropriate for the constituent(s) being monitored and have been developed, reviewed, and approved
 11. Review procedures and observe operations of equipment used for sampling, monitoring, and analyzing hazardous substances to ensure WRAP has the ability to determine if releases are occurring, can collect data for notification and reporting as directed by Federal and state requirements and can characterize waste.
 12. Review the pre-operational baseline assessment of environmental radioactivity levels to verify that measurable changes in radioactive levels can be determined.
 13. Review all permits and studies, ensure no additional permits or studies are required. Ensure all permit requirements and actions have been completed or are captured within the compliance program.

Basis:

Various sections of 40CFR, 49CFR, WAC 173, WAC 197, and WAC 246 require the preparation of an environmental management program which should include all procedures necessary to establish and implement an effective environmental program.

Regulations promulgated under the Resource Conservation and Recovery Act require solid, hazardous, and mixed waste be characterized and managed in a manner to ensure safe accumulation, storage, treatment, and/or disposal of such wastes.

DOE Order 5500. 2B, Emergency Categories, Classes, and Notification and Reporting Requirements, requires immediate notification of DOE Headquarters Emergency Operations Center and the National Response Center as soon as, possible (within 24 hours) after discovery of a hazardous material spill or release to the environment (in excess of reportable quantities) as a result of DOE operations.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-2-14, Hazardous Material Packaging and Shipping
Section SWD-4-2, Quality Assurance

8.3 Cont.

- Section SWD-5-16, Solid Waste Management
- Section SWD-7-5, Environmental Compliance
- 4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
 - Section 1.9, Quality Assurance Program Plan
 - Section 1.12, Hazard Communication Program
 - Section 1.16, Hazardous Material Packaging and Transportation
 - Section 1.28, Waste Generation and Control
 - Section 3.3, EPCRA 312 Chemical Inventory Release Reporting
 - Section 3.4, Chemical Release Reporting

8.4 There is an adequate fire protection program.

Criteria:

1. The Hanford Fire Department is cognizant of WRAP's needs and have taken appropriate actions to meet.
2. Administrative procedures are established to control specific fire hazards.
3. All facility fire hazards are identified and evaluated on a continuing basis. A Fire Hazard Analysis is documented and complete.
4. Requirements of NFPA and Life Safety Code are specified, implemented, and maintained.
5. Fire protection systems and equipment are available as specified in fire protection program documents.
6. A pre-fire plan is in place and it reflects the current conditions in the facility.
7. A qualified cognizant individual is identified as the single point of contact for WRAP's fire systems and fire protection program.
8. Procedures/policies provide for appropriate notifications of fire protection system outages.
9. Provisions are made for the proper storage of radioactive, flammable, and combustible materials.
10. Fire emergency procedures are established and implemented.
11. Means of controlling liquid run-offs from a credible fire are provided so that contaminated (including non-radiological containments) liquids, including potentially contaminated water resulting from fire fighting operations, will not escape to the environment.

Approach:

1. Identify and review procedures related to fire protection. Verify that procedures are in place for combustible and flammable materials, hot work including cutting and welding, smoking, and fire protection system impairments. Inspect existing conditions to determine implementation of the identified procedures.
2. Review the Fire Hazards Analysis to determine that all facility areas and fire hazards are included. Determine that operating parameters were considered, including unusual operations, ventilation requirements, maintenance activities, and radiation control parameters.
3. Review the fire protection program and assure the requirements for periodic review are identified. Review work control procedures to confirm the requirement for Independent Safety review (fire protection)

8.4 cont.

in the modification approval cycle. Interview engineering and Safety personnel to determine the level of understanding of the review process.

4. Verify that construction has implemented the Fire Protection requirements identified in Construction specifications through design and installation.
5. Inspect the facility to observe existing conditions for compliance to fire protection requirements, such as; 1) Proper portable fire extinguishers are mounted, marked and operable, 2) Activities site access is clear and unobstructed for emergency vehicle response, 3) Fire hydrants are accessible, 4) Exits are arranged and maintained to provide free unobstructed egress from the facility, 5) Exit routes are clearly marked and illuminated where required, 6) Emergency lighting is provided and operable where required, 7) Proper storage of radioactive, flammable and combustible material.
6. Interview the Fire Department to ensure they are cognizant of WRAP's needs and have taken all appropriate actions.
7. Ensure a Pre-Fire Plan is in place which adequately encompasses the facility.

Basis:

The fire protection program must be initiated by management to function effectively across all lines of facility operations. The fire protection program must address the specific hazards of WRAP and incorporate the concept of "defense in depth." Fire protection systems must be designed to accomplish defined objectives. Fire emergencies are infrequent occurrences which require immediate action to protect personnel, the public, operations, and property.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/Rids
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-34, Solid Waste Disposal Operations Administration Section 1.3, Fire Protection Program

8.5 There is an adequate maintenance organization, program and work control system.

Criteria:

1. The Maintenance Program adequately defines organizational responsibilities for the maintenance process. The Maintenance Program adequately defines maintenance program elements including corrective maintenance, preventive maintenance, preventive maintenance schedules, instrument and calibration, temporary repairs, predictive maintenance, and maintenance of test equipment.
2. Technical support from engineering and other functional specialties is available and adequately specified to ensure: a) configuration management requirements are met, b) health and safety of the work force and protection of the environment are maintained during maintenance activities, and c) engineering performs failure analysis on significant equipment failures. The analysis should include a review of similar failures and design reviews as appropriate.
3. An adequate formal work control process provides:
 - a. Equipment deficiency identification, prioritization, corrective action tracking, and equipment history.
 - b. Formal work authorization, job planning, scheduling, and backlog measures.
 - c. Work controlled by written procedures using qualified personnel.
 - d. Post-Maintenance Testing (PMT) to assure equipment operability. Reworked, repaired, and replacement items are inspected and tested in accordance with the original inspection and test requirements or acceptable alternatives.
 - e. Clear definition of responsibilities for initiating work requests, approving completed work, and for ensuring that work is completed as scheduled, are in place.
4. Management has established standards for what is an acceptable amount of maintenance backlog and a system exists to control and review the open work backlog.
5. The maintenance backlog, for systems important to safe operation, is adequately managed and includes an effective review for safety implications and justification for continued operations.
6. Means are provided to ascertain the availability and operability of systems important to safe operations. Means are provided to ascertain any overdue preventive maintenance or calibration for these components.
7. Adequate staffing and resources are provided to assure quality work and work backlogs consistent with maintaining acceptable physical condition

8.5 cont.

- of WRAP (assessed under Core Requirement 13, provided here for information and completeness)
8. An effective procurement and material control process provides parts, spare parts, materials, equipment, supplies, tools, and services for work activities.
 9. Responsibilities have been assigned for identifying, sourcing, processing, testing and inventory management of parts, spare parts, materials, equipment, supplies, tools, and services.
 10. Traceable characteristics for parts, spare parts, materials, equipment, supplies, and tools (e.g., stock on hand, reorder mechanism, substitutability, detail specifications, shelf life, etc.) have been established and documented and are accessible to users in a timely fashion.
 11. The supply of parts, spare parts, materials, equipment, supplies, tools, and services are adequate to support the WRAP mission and compatible with staffing levels.
 12. Maintenance test equipment, tools, and supplies are compatible with the environmental conditions expected for normal and off-normal operations.
 13. An adequate calibration and repair program is in place. Adequate documentation (e.g., calibration procedures) to support the implementation of this program is maintained.
 14. Measurement and test equipment calibrations are traceable to national standards. The equipment control process has been validated, and adequate recall requirements have been specified to maintain calibration limits.
 15. Instrument/equipment calibrations are maintained on schedule and documented as required by applicable procedures. All required instruments/equipment are calibrated.
 16. Instruments/equipment are labeled or tagged or otherwise controlled to indicate due date of next calibration.
 17. Instrument/equipment is calibrated at specified intervals based on the required accuracy, purpose, degree of usage, stability characteristics, and other conditions affecting the measurement.
 18. Testing frequencies are based on approved TSRs.
 19. Instrument "set-points" are maintained, traceable, and documented in a controlled manner, and ongoing testing requires documentation of "as found"/"as left" conditions.
 20. Equipment maintenance history is maintained and used in maintenance planning.

8.5 cont.

21. A process is in place to collect information relevant to improved maintenance practices from vendor bulletins and other operating experience, and to integrate this feedback into the maintenance programs.
22. An adequate maintenance performance assessment program has been implemented.
23. A process is in place that monitors maintenance rework, evaluates the cause of the rework, and determines what corrective measures are necessary to minimize the amount of rework.
24. Maintenance, work control, and material control personnel have the necessary knowledge, skills and abilities to adequately manage the respective programs. (assessed under Core Requirement 2 and 3, provided here fore information and completeness).
25. Maintenance facilities, equipment, and tools are maintained in good condition.
26. Maintenance work areas are maintained in a clean and orderly fashion.
27. Contaminated tools will be segregated from clean tools. Reuse is stressed and supported by storage and tool control system.
28. Provisions are made for popper storage, segregation, and control of hazardous materials such as chemicals, reagents, explosives, and flammables.
29. Maintenance facility size, location, and arrangement promote safe and effective completion of work.
30. Suitable storage is provided for tools, supplies, jigs, and fixtures.
31. Suitable facilities are available to decontaminate tools and equipment.
32. Laydown areas are identified and controlled.

Approach:

1. Review technical manuals, maintenance procedures, operating procedures, etc. to identify parts, spare parts, materials, equipment, supplies, and tools.
2. Review the process/program used for determining/controlling parts, spare parts, materials, equipment, supplies, tools, material requirements, records control, procurement specifications, materials availability, storage locations, and special criteria for preventive maintenance or shelf-life.

8.5 cont.

3. Select a few critical parts, materials, supplies, and tools and review the procurement process to verify that appropriate specifications and use requirements were included.
4. Review the program for controlled storage and inventory management of critical equipment and consumables. Assure that required traceability is identified consistent with the use of the item. Interview personnel working in maintenance, engineering, and work control to verify their knowledge of component storage and inventory management. If a computerized data base is available, select random line items and assess data completeness and integrity.
5. Conduct interviews with maintenance, operational, work control and engineering personnel to verify their knowledge of the work control process from identification of needed maintenance/modification thru package preparation to field work completion. Review the prioritization process including utilization of schedules to assure that the WRAP-1 mission objectives are included and understood by personnel responsible for facility operation and performance.
6. Review maintenance procedures and management policies to assure they include the requirements of the FSAR, CSER, and WRAP-1 mission objectives for facility, processes/systems, and equipment operation. Assure they include guidance for identifying equipment deficiencies and controlling the prioritization, planning, scheduling, and authorization of work.
7. Review the project turnover remaining punchlist items and corrective maintenance items identified during OTPs and cold process test runs to determine appropriate inclusion into the work backlog list. Determine if the appropriate priority for corrective action was included and if responsible management are aware of the commitment.
8. Review management standards and goals related to maintenance backlog management to assure facility safety performance and process thruput commitments are included. Conduct an assessment of backlog reasonability in terms of aging, preventive/corrective maintenance mix, reasons for delay and potential implications for safe operations.
9. Verify that methods exist for prompt identification to operational personnel of inoperable equipment with appropriate incorporation into the maintenance program. Review process and procedures governing the "daily schedule" communication vehicle to ensure that appropriate management and support personnel are apprised of operations and maintenance problems affecting systems important to safe operations. Ensure that overdue preventive maintenance and calibrations are considered and included in equipment availability reporting.
10. Ensure a system is in place to inform operations of any unscheduled/emergency/accident situation "on or off facility" that may cause safety systems or safety related utilities to be completely or partially inoperative for any length of time.

8.5 Cont.

11. Review maintenance packages to determine the adequacy of post maintenance testing. Ensure that tests clearly specify test instructions and acceptance criteria sufficiently to verify operability of components and systems.
12. Verify that an improvement process exists which allows feedback and corrective/improvement actions for incorporating recommendations from vendors, regulators, operating experience, operating history, lessons learned, and self-assessment audits.
13. Review maintenance program documentation and applicable procedures in maintenance and engineering to ensure that maintenance history is adequately maintained. Interview planners and cognizant engineers to assess the use of maintenance history for improving maintenance planning and evaluating the effectiveness of predictive and preventive maintenance tasks.
14. Review how WRAP Maintenance uses performance indicators, trending, trend analysis, lessons learned and root cause analysis to monitor maintenance rework and identify the cause of rework. Review the actions taken to reduce the amount of rework.
15. Review calibration records to ensure calibration, reference standards, and non-conformance requirements are controlled.
16. Review preventative maintenance and recalibration schedules and procedures to assure they are included appropriately for safe operation of the facility.
17. Review Quality Assurance (QA) requirements to assure they include procedures for controlling measurement and test equipment at WRAP-1.
18. Review instrument test program/procedures in order to verify the instrument "set-points" are documented, controlled and maintained as necessary to support safe operation. Verify procedures require recording "as found" and "as left" conditions. Verify these procedures are subject to periodic scheduled reviews to establish they are still valid for plant conditions/configuration.
19. Determine if predictive maintenance is being considered to support mission objectives and thruput requirements and whether criteria are adequately specified for taking corrective actions.
20. Review Preventative Maintenance schedules to verify that the systems technical basis was utilized and facility safety and process thruput commitments were also included. Review performed PMs. Place special emphasis on reasons for any missed PMs, how the status of operable equipment is affected, how return to service is accomplished, and how procedures are changed to prevent problem recurrence.
21. Interview the maintenance manager to determine that an interface exists with appropriate communications methods from QA, engineering,

8.5 Cont.

operations, safety, and health physics. Assure communications include coordination between these technical support/functional groups and maintenance for integration of the quality assurance, configuration management, ALARA, and safety programs on site.

22. Walkdown maintenance areas and assess for adequacy (e.g., location, storage, material segregation, etc.)

Basis:

An effective program of preventive and corrective maintenance enhances availability and operability of equipment and provides data which can be used for continued improvements. An effective maintenance organization is necessary to retain the physical condition of WRAP in a manner that supports safe operation. Maintenance equipment must be maintained and calibrated to ensure that maintenance activities are safe, effective, and maintain configuration management controls. Specific controls are unique to maintenance activities which significantly impact safety and equipment reliability. Management's general approach to maintenance sets the organization's cultural bias toward safety and equipment availability. Prior to commencing operation, WRAP must have their work control, procurement and material control systems operating effectively to ensure adequate work progress, continued operations, and facility safety.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
 - Section SWD-1-5, Standard Operating Practices
 - Section SWD-2-1, Procurement Manual
 - Section SWD-2-3, Property Management
 - Section SWD-4-2, Quality Assurance
 - Section SWD-6-1, Standard Engineering Practices
 - Section SWD-8-7, Operations Support Services
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
 - Section 1.9, Quality Assurance Program
 - Section 1.31, Scheduling
 - Section 2.1, Configuration Change Control
 - Section 2.4, Configuration Management
 - Section 2.11 Job Control System
 - Section 3.1, Material Control

8.6 There is an adequate quality assurance organization and program.**Criteria:**

1. The quality assurance program is clearly defined and documented, has well defined interfaces and responsibilities, and includes a well defined system for audits, surveillances, document review, corrective action, and follow up. There are procedures for systematic reviews and audits, including self-assessments.
2. Quality assurance reports are distributed to the appropriate level of management. The reports reflect adequate and timely QA reviews.
3. Administrative controls are implemented by management to maintain control of the quality assurance program elements.
4. Acceptance/operational tests and inspections are verified to be accurate and complete for systems important to safe operations.
5. Calibration of measurement, test, and monitoring systems are ensured and verified.
6. The Quality Assurance program is effectively implemented through QA review and approval of procedures and work activities on safety class equipment and personnel safety items.
7. QA personnel have the necessary knowledge, skills and abilities to actively participate in the QA program. (assessed under Core Requirement 2 and 3, provided here for information and completeness)
8. Software is adequately controlled.

Approach:

1. Identify and evaluate Quality Assurance Program documentation for adequacy and assess the facility for compliance to WHC-CM-5-34.
2. Review work packages to verify QA personnel approval when required.
3. Verify proper QA approval of procedures and oversight on specific work items.
4. Use WHC-CM-5-36, Chapter 4-2 and QR 19.0 to determine that the software is properly controlled and maintained.

Basis:

Experience in the DOE and commercial nuclear industry has shown quality assurance requirements are sometimes not fully implemented into effective QA Programs.

8.6 Cont.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Reuirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-3-5, Document Control and Records Management
Section SWD-4-2, Quality Assurance
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.9, Quality Assurance Program Plan

- 8.7 Health physics (HP) programs and procedures provide appropriate direction, effectively support safe operation of the facility, and ensure adequate protection of workers, the public, and the environment.

Criteria:

1. Organization and administration of the HP program ensures effective implementation and control of HP activities.
2. Personnel performing health physics duties have successfully completed HSRCM training and qualification program. (assessed under Core Requirements 2 and 3, provided here for information and completeness)
3. Programs to evaluate and control internal and external radiation exposure effectively monitor and measure worker exposure (e.g., dosimetry, exposure records, trend analysis, bioassay program, work area radiation records, etc.).
4. Programs to control radioactive material are effective in:
(1) providing adequate packaging, labeling, accountability, and safe transportation of such material; and (2) minimizing the contamination of areas, equipment, and personnel.
5. Facility Radiological Work Permits (RWP) are adequate to protect the worker, public, and environment. RWPs contain adequate provisions for protective equipment, work limitations, job descriptions, and special instructions. RWPs are posted at entrances to work areas. Out-of-date RWPs are removed in a timely manner.
6. Facility radiological procedures/policies, or equivalent, are adequate to protect the worker, public, and the environment (e.g., surveying and monitoring, use of radiation sources, operating radiation-generating devices, using radiation monitoring equipment, etc.)
7. Facility status boards adequately represent radiological conditions of the facility and provide enough information to personnel to allow safe operations and minimize exposure.
8. Facility posting is adequate to provide personnel with enough information to allow safe operations and minimize exposure. Posting is in accordance with all requirements.
9. An ALARA program has been established and successfully implemented. ALARA program has taken into account all facets of exposure reduction (e.g., posting hot spots, shielding, special tools, monitoring, traffic routing, location of office areas and work stations, protection from transient radiation, adequate communications)
10. Source material is adequately controlled, labeled, handled, shipped, received, and surveyed.
11. Fail safe interlocks are used, tested, and documented on radiation generating devices, and barriers are adequately used to ensure the safety of operators and other personnel.

8.7 cont.

12. Set points to activate interlocks or other safety systems associated with radiation generating devices are defined.
13. The radiation field around radiation-generating devices and radioactive material has been well characterized (type, energy, and dose range).
14. Warning signs are posted at radiation-generating devices.
15. Area radiation monitoring equipment are used for radiation generating devices.
16. Specialized inspections and surveys of X-ray equipment are performed periodically and documented.
17. Radiological protection/measurement instruments (fixed and portable, air monitoring, radiation, filter, personnel, etc.) are properly tested and calibrated.
18. Instruments have current calibration stickers and are in a recall system.
19. Instrumentation is adequate to meet facilities needs (range, type, location, number, air flow rate, etc.).
20. A documented, acceptable air monitoring program is in place, and is supported by sufficient studies (e.g., air flow patterns, particle size, etc.).
21. Contamination controls are adequate to protect the worker (e.g., PPE removal procedures are posted, contaminated and non contaminated areas are routinely surveyed, laundry procedures minimize contamination spread, air borne generating devices, such as fans and vacuum cleaners, are adequately controlled, personnel monitoring is adequate, decontamination facilities are available, proper engineered barriers, etc.)

Approach:

1. Review the organizational structure of the health physics group and its relationship to the line management structure at WRAP. Determine if the organizational structure is clearly defined.
2. Interview the Health Physics Manager and staff members to determine if adequate resources are provided by consistent with the radiological risk of the facility as defined in the FSAR and CSER.
3. Review operating procedures and health physics procedures to determine their adequacy in supporting normal, process upset, and documented emergencies. Assure they were prepared in accordance with the SWD Writers Guide.

8.7 cont.

4. Determine if performance indicators will be used to assess the facility radiological control performance and how corrective actions will be identified and tracked.
5. Verify exposure records are maintained for appropriate operational WRAP personnel.
6. Review radiological surveillance procedures and techniques for the release of clean materials.
7. Review facility programs and procedures intended to reduce the volume of radioactive material generated from the facility.
8. Determine if personnel are aware of waste reduction policies and if waste collection containers are provided for clean waste and radioactive waste to minimize radwaste generated.
9. All areas which can reasonably be decontaminated are maintained in a decontaminated condition.
10. Tour facility and ensure all required posting, boundaries, radiation monitoring equipment are in place.
11. Review and selected RWPs used in critical process areas for applicability, correct controls, accuracy, and completeness.
12. Tour facility and ensure all required status boards are in place to properly define facility conditions.
13. Observe a demonstration of the facilities ability to assess radiological hazards to WRAP personnel, the public, and environment, based on quantities released, materials, and meteorology using analysis results in the FSAR and CSER.
14. Verify an ALARA program has been established and is being utilized.
15. Review documentation and tour the facility to ensure proper control of sources.
16. Ensure contamination control procedures are understood by interviewing field personnel, performing a facility tour and reviewing documentation.

Basis:

This review is based on functional requirements contained in State and Federal requirements.

8.7 Cont.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-4-27, Radiological Control Practices and Procedures
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.14, ALARA Program
Section 1.30, Conducting Self Survey at Solid Waste Disposal

- 8.8 Industrial hygiene and safety programs, policies, and procedures have been developed which are consistent with the hazards present or anticipated in the working environment as well as with DOE Orders and OSHA standards. The overall program is effectively managed to promptly address and remedy hazards, and systems are in place to communicate information to workers in order to prevent occupational injuries and illnesses.

Criteria:

1. A formal safety and health program has been developed which includes procedures and policies consistent with DOE Orders and OSHA.
2. Sufficient resources are available and dedicated to occupational safety and health to operate an effective program. Personnel, equipment, and reference materials are available to administer the program.
3. Appropriate record keeping procedures have been established to document injuries, illnesses, and accident occurrences and to permit the ready analysis of such records.
4. Training effectively performs required Industrial Hygiene and Safety training. The content of training programs adequately addresses all requirements and hazards at the facility, is effectively communicated, and records are maintained. (assessed under Core Requirement 2 and 3, provided here for information and completeness)
5. Sufficient work place surveillance exists to seek and track safety and health hazards. Regular and periodic audits are conducted to assess work place conditions.
6. Noncompliant conditions are documented, corrective action dates established, and tracking programs implemented to assure prompt abatement of observed hazards. Where engineering or administrative controls are not readily implemented, personal protective equipment is available and used to provide employee protection.
7. A system exists and is utilized whereby employees may identify safety and health hazards to their manager for corrective action without fear of reprisal. Employees are aware of their access rights to information including medical and monitoring records and Material Safety Data Sheets.
8. As a minimum Industrial Safety, Industrial Hygiene, and Nuclear Safety should have assessed the following respectively:

A - 1. Work area is safe, free of tripping hazards, clean, appropriate signs posted, barricaded as appropriate, floors dry and loading capacities posted, 2. Electrical equipment is properly grounded, Ground Fault Interrupters (GFI) provided where required, power control panels and breakers labeled, and electrical devices properly covered/protected, 3. Heat generating appliances/equipment are a safe distance from combustible material, 4. Machine guards in place, caution/warning signs posted, physical safety systems operational/functional and can not be

8.8 cont.

inadvertently by passed and safety devices (i.e. relief valves) provided, 5. Equipment/machines adequate/safe for job, special hand tools/handling devices for material handling provided, 6. Personal protective equipment/clothing provided, 7. A job hazard analysis (JHA) has been performed, 8. A Lock and Tag system is in place.

B - 1. Lavatories functional, potable water lines disinfected and tested, black flow prevention devices functional, and water pressure adequate, 2. Inside/outside facility lighting adequate, 3. HVAC adequate, humidity controls if needed functional, 4. Site enclosed, as appropriate, to prevent entrance/harborage of rodents/insects, special/unique facility cleaning requirements provided for, and proper waste containers provided, 5. Asbestos Hazard Areas cleaned up and verified free of loose asbestos, 6. Noise controlled, 7. Personnel exposure to chemical hazards.

C - 1. USQ process, 2. Implementation of SAR requirements, 3. Implementation of Criticality Safety Requirements.

9. A system is in place and implemented to estimate quantities and assess the integrated impact of hazardous material releases on WRAP personnel and the public.
10. Ladders, guard rails, and fall protection equipment are well maintained and meet applicable standards.

Approach:

1. A review of all relevant aspects of the formal safety and health program will be undertaken to evaluate the content for accuracy, adequacy, and consistency with DOE Orders and OSHA.
2. Safety and health resources, such as staffing, equipment, and the availability of reference resources will be evaluated to determine whether knowledge and tools exist to operate and manage an effective program.
3. Review the frequency of scheduled safety inspections to assure it meets the needs of the facility's mission objective.
4. Review records to determine if they are properly maintained. This review will include injury and illness records and inspection records.
5. A physical walk through of selected areas of the facility will be performed to observe actual work site conditions and practices to assess compliance with existing requirements, and the effectiveness of internal audits. As a minimum the following will be assessed: 1. Work area is safe, free of tripping hazards, clean, appropriate signs posted, barricaded as appropriate, floors dry and loading capacities posted, 2. Electrical equipment is properly grounded, Ground Fault Interrupters (GFI) provided where required, power control panels and breakers labeled, and electrical devices properly covered/protected, 3. Heat

8.8 cont.

- generating appliances/equipment are a safe distance from combustible material, 4. Machine guards in place, caution/warning signs posted, physical safety systems operational/functional and can not be inadvertently by passed and safety devices (i.e. relief valves) provided, 5. Equipment/machines adequate/safe for job, special hand tools/handling devices for material handling provided, 6. Personal protective equipment/clothing provided, 7. A job hazard analysis (JHA) has been performed, 8. A Lock and Tag system is in place, 9. Lavatories functional, potable water lines disinfected and tested, black flow prevention devices functional, and water pressure adequate, 10. Inside/outside facility lighting adequate, 11. HVAC adequate, humidity controls if needed functional, 12. Site enclosed, as appropriate, to prevent entrance/harborage of rodents/insects, special/unique facility cleaning requirements provided for, and proper waste containers provided, 13. Asbestos Hazard Areas cleaned up and verified free of loose asbestos, 14. Noise controlled, 15. personnel exposure to chemicals, 16. Nuclear Safety issues (USQ process, SAR requirements, criticality issues)
6. Employee interviews will be conducted to determine the extent of their knowledge regarding worker rights, such as Employee Concern program and access to information.
 7. Review procedures and observe equipment for sampling, monitoring, and analyzing hazardous substances to ensure that provisions are in place to collect data for notification and reporting as directed by Federal and state requirements.

Basis:

OSHA, and DOE Orders require that occupational safety and health programs ensure that employees are informed of potential hazards that may be encountered in the work place and that the associated controls are in place to maintain risks at an acceptable level. Effective procedures must be established and enforced to protect the employees' safety and health.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Reuirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
 - Section SWD-1-10, Safety Manual
 - Section SWD-1-11, Industrial Hygiene (NEW)
 - Section SWD-4-29, Nuclear Criticality Safety
 - Section SWD-4-40, Industrial Hygiene (OLD)
5. WHC-CM-5-34, Solid Waste Disposal Operations Administration
 - Section 1.15, Safety Analysis
 - Section 2.17, Criticality Safety

- 8.9 There is a laboratory organization and program that adequately supports the requirements of WRAP operation.

Criteria:

1. Interface with an appropriate laboratory is established with sample scheduled commitments and required analyses to be performed.
2. Facility procedures and controls ensure reliable sampling operations.

Approach:

1. Review procedures and work practices to ensure that reliable sampling operations are in place and samples can be delivered to support laboratory without sample contamination.

Basis:

Various rules, regulations and Washington state codes require that waste be sampled. The laboratories must be able to meet the needs of the WRAP and have a clear understanding of WRAP expectations.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Reuirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-2-14, Hazardous Material Packaging and Shipping
Section SWD-4-2, Quality Assurance
Section SWD-7-5, Environmental Compliance
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.9, Quality Assurance
Section 16, Hazardous Material Packaging and Transportation
Section 3.19, Operations Aspect of Facility Chemistry and Unique Processes

- 8.10 There is a security organization and program that adequately supports the requirements WRAP operation.

Criteria:

1. The organizational structure is clearly defined and staffing and resources are sufficient to accomplish tasks assigned to the organizational elements. Responsibilities, authority, and interfaces for each organizational position are clearly defined and understood. Interfaces with other WRAP organization is well defined and understood. (assessed under Core Requirement 11 and 13, provided here for information and completeness)
2. Procedures and controls that assure safe and reliable operations are employed in the conduct of security activities.

Approach:

1. Review procedures which control the security program for adequacy and implementation.

Basis:

WRAP has an important DOE mission as well as valuable physical and personnel resources. It is therefore important that these resources be protected by a competent and dedicated security organization. The ORR review is to establish that the general scope, personnel qualifications, and demonstrated competence of the Security organization is adequate to support WRAP operations.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-2-3, Property Management
Section SWD-4-7, Unclassified Computer Security
Section SWD-4-33, Security Manual
6. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 3.7, Shift Routines

- 8.11 There exists an adequate configuration management program to assure necessary change and drawing control of plant structures, systems, and components and to assure changes are reflected in training, procedure development, maintenance instructions, and technical baseline.

Criteria:

1. Configuration Management procedures/policy exists and are clearly communicated and understood by all levels of the organization. Appropriate graded approach is utilized consistent with the safety class of process and utility equipment/systems.
2. Responsibilities and interfaces for configuration management are clearly defined. (assessed under Core Requirement 11, provided here for information and completeness)
3. Documents, drawings, and other references which define the facility configuration are readily available, authorized, properly controlled and are used in designing plant changes, preparing facility procedures, troubleshooting, etc.
4. Management ensure that changes to the facility are warranted and properly controlled.
5. An administrative program is in place to ensure that modifications are analyzed, documented, approved by appropriate personnel and organizations, and reflected in design drawings, revised operations, training, and maintenance procedures.
6. The configuration of systems as contained on as-built drawings have been physically verified.
7. Procedures and management policies for changes to the facility are properly executed.
8. The design control program was properly implemented in the design of the facility.
9. Programs are defined, and procedures are in place to specify methods for identifying, addressing, and reconciling questions concerning alterations to the design, function, or method of performing the function of a structure, system, or component as described in the authorization basis.
10. Temporary modification are controlled to ensure facility configuration is maintained.

Approach:

1. Review the configuration management program to determine the adequacy of facility interfaces required to maintain configuration management, proposed change review and approval, configuration control drawings, vendor manual control.

8.11 cont.

2. Interview the responsible manager for configuration management to assess the backlog of design changes, backlog of drawing changes, backlog of facility modifications, prioritization scheme for facility changes, and the interface with maintenance, training, and operations personnel concerning impacts of new and revised design requirements.
3. Verify that Certified Vendor Information files are in place and are correctly referenced with the H-2 drawings.
4. Confirm a program is in place and has been implemented requiring the physical walk down of systems to verify the accuracy of applicable design drawings/documentation. Confirm the validation/verification process by performing a walk down of the critical components of the HVAC system and compare to flow diagrams, valve lineups, schematics, as-built drawings, etc., to ensure systems are documented as built.
6. Verify that the change control process has been adequately implemented and that temporary and permanent changes are adequately controlled.
7. Review a major change to the WRAP facilities/systems to establish that the change was properly analyzed (for functionality, safety, authorization basis, and possible interactions with other systems), documented, and reviewed, including, where necessary, reviews by independent organizations.

Basis:

These criteria ensure activities associated with plant configuration are appropriately controlled to maintain the facility configuration in conformance with design requirements. Conduct of operations require that drawings relied upon by operators and maintenance personnel must accurately reflect the plant configuration, and that the function, design basis, and current status of equipment and systems, required for safe operation, are known and documented, with up-to-date accurate records. These drawings must be prepared, approved, controlled, and used to ensure that the plant is operated safely and within all safety related limits.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-3-5, Documentation Control and Records Management
Section SWD-6-1, Standard Engineering Practices
Section SWD-6-2, Project Management
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.8, Training Administration
Section 1.24, Unreviewed Safety Questions
Section 2.1, Configuration Change Control

8.11 Cont.

Section 2.2, Solid Waste and T Plant As-Built Drawing Control
Section 2.4, Configuration Management
Section 2.11, Job Control System
Section 3.13, Control of Equipment and System Status
Section 3.22, Operating Procedures

- 8.12 An adequate records management/document control program exists to assure that all important documents, records, and related information are maintained current and readily retrievable.

Criteria:

1. The records management program defines responsibilities for determining what documents will be controlled in a system; methods used for acquisition, identification, storage, retention, and retrieval of documents; and controls to be exercised for changes, distribution, and removal.
2. The records management program scope includes receipt or preparation, review and approval, and distribution of documents generated externally and internally in a timely manner.
3. The records management program includes processes, interfaces and responsibilities for controlling design bases and technical documents, such as calculations, specifications, drawings, vendor manuals, records of maintenance, test results, etc.
4. Necessary documents are kept current and legible and are either available at appropriate plant locations or can be provided in a timely manner.
5. The document control program assures that uncontrolled drawings, manuals, and procedures are not used at the work location.
6. Documentation is stored correctly (e.g., fire proof cabinets for QA records).

Approach:

1. Review the program and procedures which define their records management system.
2. Review records management program and implementing procedures in engineering, maintenance, operations, and materials management to ensure responsibilities and processes are documented for controlling technical documentation. Sample the efficiency of the system by selecting one system important to safe operations and requesting documents associated with design, procurement, construction, maintenance, and operability of one or two significant pieces of equipment in that system. Interview selected facility management to assure they are knowledgeable of records management and retention policies and procedures.
11. Observe work in process involving structures, systems, and/or components, note any use of uncontrolled drawings, procedures, or manuals.

Basis:

An effective records management program is necessary to ensure that proper information is available for planning, decision-making, and performance

8.12 Cont.

audits. Timeliness and availability of records, especially technical documentation, is important for ensuring the safety and health of workers and protection of the environment.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
 - Section SWD-3-4, Information Release Administration
 - Section SWD-3-5, Document Control and Records Management
 - Section SWD-3-6, Uniform Publication System
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
 - Section 1.1, External Correspondence and Technical Work Document Approvals
 - Section 1.13, Processing and Transferring Records
 - Section 2.1, Configuration Change Control
 - Section 2.2, Solid Waste and T Plant As-Built Drawing Control
 - Section 2.4, Configuration Management
 - Section 2.11, Job Control System
 - Section 3.17, Logkeeping

8.13 There exists an occurrence reporting/root cause program.

Criteria:

1. An occurrence reporting program is established which ensures that sufficient personnel are trained in root cause analysis techniques and are available.
2. The program shall ensure that those conducting investigations are independent of the cause of the unusual event.
3. The "lessons learned" which are developed as a result of the program implementation and root cause analysis shall be incorporated into the corrective action system to prevent recurrence.
4. The program should contain provisions to call in personnel with special expertise to assist in the occurrence investigation.

Approach:

1. The program will be reviewed in order to determine if the programmatic aspects ensure that knowledgeable and independent (if applicable) personnel conduct investigations.
2. Review completed assessments (if available) and verify that personnel performing the assessments were independent of the area assessed.
4. Review completed assessments (if available) to determine the specific findings and/or recommendations generated as a result of the assessment. Verify the incident and lessons learned have been incorporated into the training and re-training programs. Verify that the root causes have been determined, and corrective actions have been discussed with the appropriate plant staff.
5. Ensure assessment teams be supplemented with special expertise (if required) to assist in the occurrence investigation. Through discussion with cognizant personnel, identify and review an assessment (if available) where outside special expertise was required.

Basis:

An assessment program which specifies the skills, knowledge, and abilities required to perform occurrence investigations and ensures that corrective actions are implemented to prevent recurrence is essential to verifying the adequacy of activities.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-1-5, Standard Operating Practices
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.18, Occurrence Reporting and Processing of Operations Information
Section 1.22, Corrective Action Management

Core Requirement 9

A routine and emergency operations drill program, including program records, has been established and implemented.

Interpretation:

The adequacy of the Emergency Plan and Emergency Preparedness Organization is to be assessed under Core Requirement 8. This Core Requirement does not require a review of the Emergency Plan except to ensure that an adequate cross section of emergency situations are addressed by the drill program.

Criteria:

1. The drill program adequately plans, schedules, prepares, conducts, critiques, and documents drills.
1. Emergency drills adequately simulate a range of accidents which impact on-site personnel, off-site personnel, property, and the environment.
2. Records of routine and emergency drills are maintained.
3. Critique results are used to improve the drill program, personnel response, and the facility emergency plan.
4. Emergency drills and exercises are conducted periodically to test and verify the adequacy of the emergency plan.

Approach:

1. Compare the Emergency Plan to the drill program to assess the adequacy and applicability of drills to the facility.
2. Observe and assess three or more drills.
3. Review and assess the results of the drill(s) and assess the resolution of deficiencies.
4. Review records of routine and emergency drills for adequacy and completeness.

Basis:

An effective emergency preparedness, and response program is necessary to help ensure the safety and health of workers, the public, property and environment in the event of an emergency. Emergency management programs should be in place to enable organizations to respond to an emergency in a timely, efficient, and effective manner, resulting in mitigation of consequences and recovery. A drill program is required to periodically test the program to ensure proper functionality.

Core Requirement 9 cont.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Reuirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-4-43, Emergency Management Resources
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.18, Occurrence Reporting and Processing

Core Requirement 10

An adequate startup or restart test program has been developed that includes adequate plans for graded operations testing to simultaneously confirm operability of equipment, the viability of procedures, and the training of operators.

Interpretation:

The Core Requirement applies to having a startup/restart program in place to assure that both equipment and operational staff are prepared for processing. It includes all aspects of testing that require systems and equipment to be running in order to confirm equipment operability, procedure viability, staff capability, and completeness of training. The test program also provides the opportunity to performance of on-the-job training. All aspects of the startup test program are to be reviewed under this Core Requirement, such as confirming that the facility initial startup procedures, special training given to initial startup operations personnel, and training/qualification that can only occur after the facility is operating are in place. A restart program will be developed when the long term processing campaign schedule is developed. The adequacy of ATPs and OTPs are to be assessed under Core Requirement 5.

Criteria:

1. An adequate startup or restart test program is in place.
2. The test program adequately addresses operations testing to simultaneously confirm operability of equipment, the viability of procedures, and the training of operators.
3. No open OR's, ECN's or NCR's will prevent startup of WRAP.
4. Construction complete and documented, with the turnover package identifying open items as appropriate.
5. Process systems and equipment are operable.
6. Utility and support systems are operable and fully functional.

Approach:

1. Review and assess the startup test program's satisfactory test criteria and results.
2. Review open OR's, ECN's, and NCR's and verify that all have been reviewed and appropriately dispositioned and that the disposition has been satisfactorily implemented for those items identified by engineering and/or operations as pre-start.
3. Review and assess the startup test program's proper integration of on-the-job training.

Core Requirement 10 Cont.

4. Ensure the project has officially been accepted and closed out (e.g., Official Acceptance of Construction).

Basis:

To determine if procedures, systems, equipment, and personnel can be integrated to allow safe, efficient, and compliant operation.

Requirements

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
 - Section SWD-4-2, Quality Assurance
 - Section SWD-6-1, Standard Engineering Practices
 - Section SWD-6-2, Project Management
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
 - Section 1.8 Training Administration
 - Section 3.10, On-the-Job Training

Core Requirement 11

Functions, assignments, responsibilities, and reporting relationships are clearly defined, understood, and effectively implemented with line management responsible for control of safety.

Interpretation:

This applies to all facility and direct support personnel/groups (Environmental Compliance, Fire Protection, Maintenance, QA, Health Physics, Training, Industrial Hygienist, Industrial Safety, Nuclear Safety, Laboratories, Security, Records Management, and Occurrence Reporting, Emergency Preparedness, etc). The review is to ensure that management has developed adequate position descriptions, job definitions, and reporting relationships and has adequately informed and trained all facility personnel on them.

Criteria:

1. Policies/procedures exist defining the responsibility, authority, accountability, and reporting relationships of each management position, exempt position, non-exempt position, bargaining unit, and direct support personnel (e.g., Environmental Compliance, Fire Protection, Engineering, Maintenance, QA, Health Physics, Training, Industrial Hygienist, Industrial Safety, Nuclear Safety, Laboratories, Security, Records Management, Projects, Occurrence Reporting, Emergency Preparedness, etc.).
2. All personnel associated with the facility understand and implement their responsibilities, authority, accountability and reporting relationships.
3. Department interface and bounds are clearly defined and understood.
4. Support group interface and bounds are clearly defined and understood.
5. Oversight interface and bounds are clearly defined and understood.
6. Managers have appropriate access to DOE, regulators, and emergency organizations on matters of safety and environmental protection.
7. Line organizations are unencumbered by excessive duties or significant duties unrelated to the day-to-day operation of WRAP.
8. Managers encourage and effectively foster teamwork and cooperation among interfacing organizations.
9. Directives and other management information flow quickly and accurately through the management chain and other formal channels of communication.
10. An adequate program exists for dissemination of general information to employees regarding the facility.
11. Position descriptions are available.

Core Requirement 11 cont.

12. Subcontractors understand their reporting relationships and responsibilities. Subcontractor interface and bounds are defined and understood.

Approach:

1. Obtain organization charts, position descriptions, and procedures to establish that there exists, for individuals and departments, clear definitions and bounds of authority, accountability, responsibilities, and reporting relationships.
2. Interview facility personnel to determine the adequacy of collateral duties, contractor/subcontractor interfaces and accountability, delegation practices, management attitude and practices which foster or hinder cooperation and teamwork, effectiveness of information flow (timeliness, adequacy, emphasis on safety and environmental protection).
3. Interview managers to ensure there exists adequate access to DOE, regulators, and emergency organizations on matters of safety and environmental protection.

Basis:

Management is responsible for the organization and coordination of work in order that responsibilities, authorities, and accountability are clearly understood and that responsibility for safety is prevalent throughout the organization. Documentation of the organization and coordination of the work combined with implementation of the documented policies and procedures are equally important. A basic responsibility of management is to ensure that effective coordination and communication exists between and within various levels of the organization. The DNFSB Recommendations 91-3, 91-4, 92-3, and 92-6 delineated the important facets of a readiness review. These included assessment of the interrelationships and the delineation of roles and responsibilities among the various contractor organizations involved.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-CM-1, Policies and Charters

Core Requirement 12

The implementation status for DOE Order 5480.19, conduct of operations requirements for DOE facilities, is adequate for operations.

Interpretation:

This Core Requirement is to ensure the facility is complying with all Conduct of Operation requirements as written in WHC-CM-5-34 .

Criteria:

1. The facility has implemented the WHC-CM-5-34 Conduct of Operations chapters specifically the following:
 - 3.6, Operations Maintenance
(assessed under Core Requirement 8)
 - 3.7, Shift Routine and Operating Practices
 - 3.9, Communication,
 - 3.10, On The Job Training
(assessed under Core Requirement 2 and 3)
 - 3.13, Control of Equipment and System Status
 - 3.14, Lockout and Tagout
 - 3.15, Independent Verification
 - 3.16, Alarm Management
 - 3.17, Logkeeping
 - 3.18, Operations Turnover
 - 3.19, Chemistry and Unique Processes
 - 3.20, Required Reading
 - 3.31, Timely Orders to Operators
 - 3.22, Operation Procedures
 - 3.23, Operator Aid Posting
 - 3.24, Equipment and Piping Labeling

Approach:

1. Review and assess the facility's implementation of each applicable chapter in WHC-CM-5-34, Section 3.0, *Operations*.

Basis:

The organization and administration of facility Operations should ensure a high level of performance in Operations is achieved through effective implementation and control of Operations activities. Clear lines of responsibility for normal, alarm, and emergency conditions should be established. Effective implementation and control of operating activities may be achieved by establishing written standards for Operations, periodically monitoring and assessing performance, and holding personnel accountable for their performance. Good operating discipline ensures facility and process configuration is maintained in accordance with design requirements, and that the operating staff knows the status of facility and process equipment and systems at all times.

Core Requirement 12 Cont.

References:

1. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Conduct of Operations

Core Requirement 13

There are sufficient numbers of qualified personnel to support safe operations.

Interpretation:

This Core Requirement is only to ensure adequate numbers of qualified personnel. Assessment of qualification is addressed under Core Requirement 2 and 3.

Criteria:

1. There is an adequate number of qualified personnel for the mission of the facility.
2. The staffing requirements are adequate to ensure safe operations.

Approach:

1. Using qualification records and job assignment records, compare the numbers of qualified personnel to the staffing levels identified by facility management to ensure Criterion 13.1 is met.
2. Verify the staffing levels are greater than or equal to any minimum staffing requirements identified in the authorization basis.
3. Review and assess staffing requirements identified by the authorization basis and line management by witnessing the performance or walking down plant operating procedure and work plans to verify that adequate numbers of personnel are available to operate the systems.

Basis:

Adequate numbers of qualified personnel are required to ensure the facility can be operated safely, efficiently, and compliantly. Inadequate staffing puts undue stress on plant personnel, creates unsafe work practices, corner cutting, inattention to detail, poor work atmosphere, excessive backlog, and endangers the environment.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RRIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
Section SWD-1-3, Management Requirements and Procedures
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.8, Training Administration

Core Requirement 14

A program is established to promote a site-wide culture in which personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements and, through their actions, demonstrate a high priority commitment to comply with these requirements.

Interpretation:

This Core Requirement requires assessment of the adequacy of facility specific programs and the adequacy of implementation of programs established and required by WHC and SWD. The Core Requirement does not require assessing the adequacy of WHC or SWD programs.

Criteria:

1. Procedures and training programs are in place to promote safety awareness, ownership of personnel safety, and communications about safety is commonplace.
2. Work spaces are clean and free of clutter and debris, and equipment and tools are properly stored. Good housekeeping, control of hazardous materials, ignition sources and transient combustibles are maintained as appropriate.
3. Procedures exist, understood, and implemented to control secondary contractor work to site standards of good housekeeping.
4. WRAP management clearly and personally communicate expectations regarding safety and environmental protection to their employees, and encourages employees to bring problems to them for resolution.
5. A Management Observation Program has been implemented and includes scheduled and random tours to assess housekeeping and control of hazardous materials.
6. WRAP personnel demonstrate a conservative approach to operational activities and their decisions reflect a sense of responsibility for safety and environmental protection. The Master Safety Rules are understood and followed.
7. Management has implemented site-wide programs to promote a culture of awareness of public and worker safety and health, and environmental protection requirements.
8. Policies, procedures, goals, and objectives consistently place the highest priority on safety, protection of the environment, and professional employee attitudes.
9. The goals and objectives of WHC-SWD encourage excellence in activities and include specific objectives for the continued enhancement of the safety culture.

Core Requirement 14 Cont.

10. Stop work authority is clearly understood by management and non-management personnel, and personnel recognize its positive value to health, safety, and protection of the environment.
11. Application of lessons learned from past occurrences is implemented at WRAP to make the staff aware of potential hazards that we not previously identified.
12. Conditions potentially adverse to safety, commitments, and "open items" are formally tracked to completion, status reports periodically provided to management, and resolution escalated to higher levels of management when appropriate.
13. Information programs release information regarding safety and environmental protection on a regular basis. The releases include information of both normal and off-normal events.

Approach:

1. Interview WRAP management and non-management personnel to verify management frequently tour the facility to observe plant activities and appraise plant conditions. Have a working knowledge of the safety programs, including the various communication methods.
2. Review the Management Observation Program and pertinent records of observations for effectiveness, and sensitivity to safety/hazard/environmental issues.
3. Interview a cross section of personnel to determine their practices in observing thier employees at work; participation in the Management Observation Program; Attendance at safety meetings; Interface with the independent oversight organizations; Establishing standards for health, safety, and environmental protection; Reinforcing of standards for health, safety, and environmental protection; Promulgating thier expectations regarding a conservative approach toward operations.
4. Review any formal programs or policies for positive reinforcement of safety or environmental protection performance.
5. Interview personnel from the Independent Oversight Organization to determine the Oversight Group's assessment of the WRAP staffs' attitude toward independent oversight and their participation to support a safe workplace.
6. Review WRAP Goals and Objectives for commitment to Excellence; Enhancement of the "safety culture"; Priority of safety goals over all other goals and objectives; Consistency of the safety culture across the organization; Assignment of responsibility and authority; Assessing and improving the process and safety goals.
7. Review and assess the facility's safety performance indicators and safety improvement plan.

Core Requirement 14 Cont.

8. Conduct tours of the accessible work spaces will be made to determine whether the safety programs have been implemented appropriately. Particular attention during these tours will be paid to housekeeping, the use of temporary equipment, out-of-service equipment, excessive use of extension cords, temporary drain lines, etc.
9. Workers engaged in performance of operations and maintenance tasks will be observed in order to evaluate the following practices:
 - a. Proper care while the job is in progress to minimize clutter and debris, and to contain spills and drainage.
 - b. Proper storage of tools during work breaks to minimize hazards to other personnel.
 - c. Proper clean-up at the completion of the job.

Basis:

Management must create an atmosphere of concern for health, safety, and environmental protection within WRAP and encourage employees to provide input on current and potential problems. A direct correlation between good housekeeping practices, pride of ownership, and the level of industrial and radiological safety at industrial facilities has been observed.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-36, SWD Internal Requirements
 - Section SWD-1-3, Management Requirements and Procedures
 - Section SWD-1-10, Safety Manual
 - Section SWD-4-40, Industrial Hygiene Manual
4. WHC-CM-5-34, Solid Waste Disposal Operations Administration
 - Section 1.10, Inspections
 - Section 1.11, Self Assessments
 - Section 1.12, Hazard Communication Program
 - Section 1.14, ALARA Program
 - Section 1.22 Corrective Action Management

Core Requirement 19

The technical and management qualifications of contractor personnel, responsible for facility operations, are adequate.

Interpretation:

This Core Requirement applies to all management associated with the facility. All other personnel are assessed under Core Requirement 2 and 3.

Criteria:

1. Management has adequate on-the-job experience and/or training/education that qualifies them for their positions.
2. Adequate documentation of management qualifications is available.
3. Examinations, given to management personnel, are adequate in their depth and breadth of subject matter as it pertains to facility operations.
4. Management written and oral exams are technically correct.

Approach:

1. Review test material to verify that they adequately reflect training content and test for an understanding of technical fundamentals, procedures, ACs, SRs, plant activities, and responsibilities associated with emergency response.
2. Review and assess management qualification requirements for adequacy.
3. Review and assess completion of qualifications and test results for management personnel.
4. Conduct interviews to determine the extent of knowledge of technical fundamentals, procedures, ACs, plant activities, and responsibilities associated with emergency response.

Basis:

The DNFSB Recommendation 92-6 delineated some of the important facets of a readiness review. These included assessment of the technical and managerial qualifications of contractor personnel responsible for direction, guidance, and operation of the facility.

References:

1. WHC-IP-1233, Rev 0, Solid Waste Disposal Micro S/RIDS
2. WHC-IP-1120, Rev 4, Standards / Requirements Identification Document (SRIDS)
3. WHC-CM-5-34, Solid Waste Disposal Operations Administration
Section 1.8, Training Administration
Section 3.10, On-the-Job Training

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APPENDIX C: FORMS

ORR APPRAISAL FORM

Core Requirement Number and Statement:

Criterion Number and Statement:

Date:

Documentation Reviewed:

WRITING INSTRUCTIONS

List all documentation that you used in your review process. Hard and electronic copies of forms will be provided to RT members. Format provided here for information.

Document NameDocument Number (if it has one)

Areas Visited:

WRITING INSTRUCTIONS

List all areas that you visited or toured during your review. Hard and electronic copies of forms will be provided to RT members. Format provided here for information.

Area

Personnel Contacted:

WRITING INSTRUCTIONS

List all people you had contact with (i.e. talked to, listened to, watched, etc.), not counting other board members. Hard and electronic copies of forms will be provided to RT members. Format provided here for information.

NameTitle/Job DescriptionDate Contacted

Evolutions/Operations Witnessed:

List all evolutions and operations witnessed (e.g., waste receipt, packaging, compaction, drills, etc.). Hard and electronic copies of forms will be provided to RT members. Format provided here for information.

Evolution/Operation Title

Summary of Review:

WRITING INSTRUCTIONS

In one page or less, explain the process you went through in your review and your findings. This section should be in paragraph format; it should not be in list format. Hard and electronic copies of forms will be provided to RT members. Format provided here for information.

Signatures:

Team Member:

Group Leader:

DATE _____ WRAP-1 Phase 1 Operational Readiness Review

Core Requirement

Approach _

Criteria _

SUBJECT/ACTIVITY REQUIREMENT/ REFERENCE	EVIDENCE EXAMINED/ PERSONNEL CONTACTED	OBSERVATIONS/ COMMENTS	COMPLY	
			YES	NO
1.				
2.				
3.				

WRITING INSTRUCTIONS

The subject and the reference are included in the same block. The next block is to record who was contacted and exactly what was examined as far as paper work and documents, as well as hardware observed. The observations block is for recording exactly what is nonconforming and where it is in the facility. The comply block is for a quick reference as to what area was lacking.

ORR FINDING FORM**Core Requirement Number and Statement:****Criterion Number and Statement:****Date:****Finding Number:** (example F.1.1.1, refers to Core Requirement 1, Criteria 1, Finding 1, F.1.1.2 would refer to Core Requirement 1, Criteria 1, Finding 2, etc.)**Finding:****WRITING INSTRUCTIONS**

Provide a concise statements of the finding. It is not to list actions that must be done to correct findings. It is not to be a general statement of whether or not readiness has been achieved (this will be a general board statement in the report). Hard and electronic copies of forms will be provided to RT members. Format provided here for information.

Discussion/Conclusion:**WRITING INSTRUCTIONS**

Provide enough information in this section to allow formulation of an adequate corrective action. Provide details of the finding (e.g., references, requirements, specific deviations etc.

Resolution:**WRITING INSTRUCTIONS**

If more information surfaces prior to the completion of the ORR that satisfies the Criterion as applies to the finding, that evidence is to be explained, followed by the statement, "Finding resolved prior to completion of the ORR." If no further information surfaces prior to the completion of the ORR, the statement should be written, "No resolution prior to completion of the ORR."

Signatures:**Team Member:****Group Leader:**

ORR OBSERVATION FORM

Core Requirement Number and Statement:

Criterion Number and Statement:

Date:

Observation Number: (example 0.1.1.1, refers to Core Requirement 1, Criteria 1, Observation 1, 0.1.1.2, refers to Core Requirement 1, Criteria 1, Observation 2)

Observation:

Provide a concise statement as to the Observation. Since an Observation is not a Finding less time, energy and resources should be spent developing. Hard and electronic copies of forms will be provided to RT members. Format provided here for information.

Signatures:

Team Member:

Group Leader:

**WRAP I OPERATIONAL READINESS REVIEW
FINDINGS/OBSERVATIONS CATEGORIES****Findings Categories:****WRITING INSTRUCTIONS**

This will be a chart that groups all like findings into six categories. The categories will be: Operational Capability; Training; Management Systems; Quality; Compliance; and Ergonomics/Design Features.

All of the findings will be designated as pre start of post start findings as well as designated as safety significant. In addition, each of the Core Requirements will be listed with the total number of findings associated with that core requirement listed

Observation Categories:**WRITING INSTRUCTIONS**

This will be chart very similar to the findings categories chart. The observations are not separated into pre start and post start but otherwise there is no difference in the style of the findings and observation charts.

APPENDIX D: FINDING CLASSIFICATION CRITERIA

These criteria will be used by the Team to determine if a Finding must be resolved before startup.

A. Initial Screening

1. Does this Finding involve a system that provides personnel safety and/or protects the environment?
2. Does this Finding involve processes, functions or components identified in the technical safety requirements/operational safety requirements (TSR/OSR) or nuclear safety control procedures?
3. Does this Finding involve potential adverse environmental impact exceeding regulatory or site-specific release limits?
4. Does this Finding impact non-safety processes, functions or components which could adversely impact safety related processes, functions or components?
5. Is this Finding noncompliant with a WHC or DOE/RL approved requirements document?
6. Does this Finding indicate a lack of adequate procedures or administrative systems?
7. Does this Finding indicate operational or administrative noncompliance with procedures or policy?
8. Has this Finding occurred with a frequency that indicates past corrective actions have been lacking or ineffective?
9. Does this Finding require operator training not specified in existing facility training requirements?
10. Does this Finding impact worker health and safety?
11. Does this Finding impact the performance of the facility mission?

If the response to any of the above is yes, further evaluation, in accordance with the Finding Impact Criteria is required. If the response to all of the above is no, the Finding is considered to be Poststart.

B. Finding Impact Criteria

1. Does the loss of operability of the item prevent safe shutdown, or cause the loss of essential monitoring?
2. Does the loss of operability of the item require operator action in less than 10 minutes to prevent or mitigate the consequences of events described in the safety analysis?
3. Does the loss of operability of the item cause operation outside the TSR/OSRs or safety analysis?
4. Does the loss of operability of the item result in a reduction of the margin of safety?
5. Does the Finding indicate a lack of control which can have a near-term impact on the operability or functionality of safety related systems?
6. Does the Finding result in an unacceptable impact on worker health or safety?
7. Does the Finding prevent the facility from performing its mission?

If the response to any of the above questions is yes, the Finding is considered to be Prestart. If the response to all of the above questions is no, the Finding is considered to be Poststart. However, some Poststart Findings may be changed to Prestart by the Team Leader due to potential health, safety, and/or environmental significance.

APPENDIX D: FINDING CLASSIFICATION CRITERIA