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Approval Designator (F)	Reason for Transmittal (G)	Disposition (H) & (I)
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(See Approval Designator for required signatures)

(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN	(G) Reason	(H) Disp.	(J) Name	(K) Signature	(L) Date	(M) MSIN
1		Design Authority	JR Kriskovich	5-12-97	R1-56	1	1	Prog Eng	JA Andersen	B4-57	5-1-97
1		Cog. Eng.	JL Thompson	5-7-97	S2-24	1	1	DJ Minter	DJ Minter	B1-43	5-1-97
1		Cog. Mgr.	DW Crase	5-14-97	B3-68	1	1	GD Johnson	GD Johnson	S7-145	5/17/97
1	/	QA RR True	R.R. True	5-7-97	T4-07	1		EG Staples	EG Staples	R2-88	5/12/97
1	/	Safety	LS Krogsrud	5/14/97	T4-07	1	1	JD Barton	JD Barton	T4-07	5-1-97
1	/	Facility Cog Eng	TD Kaiser	5-14-97	T4-07			J.D. Briggs	J.D. Briggs	5/16/97	PHMC.C.O. (ADC)
1	/	Tank Farm Mgr	GL Dunford	5-14-97	T4-07						

18. Signature of EDT Originator JA Andersen Date: 5-1-97	19. Authorized Representative for Receiving Organization JL Thompson Date: 5-7-97	20. Design Authority/ Cognizant Manager DW Crase Date: 5-14-97	21. DOE APPROVAL (if required) Ctrl. No. <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/comments <input type="checkbox"/> Disapproved w/comments
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Engineering Workplan and Design Basis for 241-SY-Ventilation Improvements

JA Andersen

SGN Eurisys Services Corporation, Richland, WA 99352
U.S. Department of Energy Contract DE-AC06-96RL13200

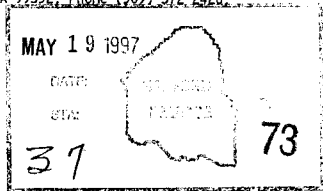
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Key Words: 241-SY airflow controllers, ventilation

Abstract: Installation of three (3) airflow controllers on the SY tanks to improve control of air flow into the tanks.

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V.L. Burkland *5/19/97*
Release Approval Date
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Approved for Public Release

Engineering Work Plan and Design Basis
for 241-SY Ventilation Improvements

March 21, 1997

Author

J.A. Andersen

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ENGINEERING TASK PLAN AND DESIGN BASIS FOR 241-SY VENTILATION IMPROVEMENTS

1.0 INTRODUCTION

There are three tanks in the 241-SY tank farm. Tank 241-SY-101 and 241-SY-103 are flammable gas watchlist tanks. Tank 241-SY-102 is included in the ventilation improvement process in an effort to further control air flow in the tank farm. This tank farm has only one outlet ventilation port for all three tanks. Flammable gas is released (may be steady and/or periodic) from the waste in the primary tank vapor space. The gas is removed from the tank by an active ventilation system. However, maintaining consistent measurable flow through the tank can be problematic due to the poor control capabilities of existing equipment. Low flow through the tank could allow flammable gas to build up in the tank and possibly exceed the lower flammability limit (LFL), prevent the most rapid removal of flammable gas from the tank after a sudden gas release, and/or cause high vacuum alarms to sound.

Using the inlet and outlet down stream butterfly valves performs the current method of controlling flow in tank farm 241-SY. A filter station is installed on the inlet of each tank, but controlling air flow with its 12 inch butterfly valve is difficult. There is also in-leakage through pump and valve pits. Butterfly valves on the downstream side of each tank could also be used to control air flow. However, their large size and the relatively low air velocity make this control method also ineffective.

The proposed method of optimizing tank air flow and pressure control capability is to install an air flow controller on the inlet of each existing filter station in SY farm, and seal as best as practical all other air leakage paths. Such air flow controllers have been installed on 241-AN and 241-AW tanks (see drawing H-2-85647).

2.0 SCOPE

2.1 OBJECTIVE

The scope of work is two fold. First this document establishes the functional and design requirements for air flow controllers which are planned to be installed on the existing filter stations of each of the three 241-SY tanks. Second, this document identifies the tasks involved in procuring and installing the equipment.

2.2 DELIVERABLES

The engineering deliverables and associated scheduled completion dates for this effort include the following (at the time of this print not all deliverables have scheduled completion dates):

- Engineering Task Plan, including revisions.
- Engineering Change Notice (ECN) to Safety Equipment List, with justification (as separate Supporting Document, if needed).
- Engineering Change Notices to Safety Basis Documents, as needed.
- Design bases for the flow controllers as a Supporting Document (SD).
- Design analyses as a SD.
- Design Verification documentation, as required (to be released with applicable documents).
- Design media (drawings, ECNs) for the flow controllers. May 1997
- Documented USQ screenings and/or evaluations. June 1997
- ATP and OTP for air flow controllers. August 1997.
- Acceptance Test Report (ATR) and Operability Test Report (OTR). October 1997
- Complete fabrication of air flow controller assemblies for tanks 241-SY-101, 102, and 103. July 1997
- Complete fabrication of transition ducting assembly for tank 241-SY-101 between inlet air stack and air inlet of HEPA filter. July 1997
- Field installation of air flow controllers and transition ducting. TBD 1998.

- Updates to operations manuals, preventative maintenance, training, and round sheets. TBD 1998.

These and additional deliverables are identified on the Acceptance for Beneficial Use (ABU) form in Appendix A. Upon completion of the items identified on the ABU form, system turnover can be accomplished.

3.0 DESCRIPTION

3.1 PHYSICAL DESCRIPTION

For the tank 241-SY-101, primary tank exhaust ventilation system air flow rate is allowed to <188.8 liters per second (L/s) [400 cubic feet per minutes (cfm)] or >333.4 L/s (700 cfm) occasionally for short periods of time not to exceed 8 hours once per 31 days. The air flow rate for tank 241-SY-101 is greater than or equal to 188.8 L/s (400 cfm) and less than or equal to 333.4 L/s (700 cfm) for the primary tanks exhaust ventilation system and is to be verified every seven days. The combined minimum air flow rate from tanks 241-SY-102 and 103 are at least 2/3 the flow from tank 241-SY-101 before beginning activity. See section 3.6.2 Air Flow Control Device for performance criteria of the air flow controller.

Air flow controllers shall be installed on the inlet side of the HEPA filters for air flowing into the 241-SY tanks. For tank 241-SY-101 there is an air inlet stack with transition ducting from the stack to the air inlet side of the HEPA filter. This configuration does not exist on tanks 241-SY-102 and 103. Air flow controller assemblies shall be installed on the air inlet side of the HEPA filters for tanks 241-SY-102 and 103. No transition ducting is required for tanks 241-SY-102 and 103.

The existing transition ducting shall be removed between the stack and HEPA filter on tank 241-SY-101 and replaced with new ducting. The new ducting shall connect the existing air inlet stack to the air flow controller installed on the air inlet side of the HEPA filter.

3.2 FUNCTIONAL REQUIREMENTS

The primary functions of the air flow controller shall be as stated below.

- The air flow controller shall be capable of maintaining sufficient air flow into each tank to help prevent flammable gas build-up in the waste tank vapor spaces and to ensure the most expedient removal (given capabilities of ventilation system) of flammable gas from a tank after a sudden gas release.
- The air flow controller, or integrated component, shall be capable of limiting tank vacuum levels.

- The air flow controllers shall be capable of controlling minimum air flow to meet the requirements of the 241-SY-101 mixing pump operations.

3.3 ENGINEERING TASKS

The following is a list of tasks to be performed by the engineering team (see Appendix A for identification of upgrade team):

- Prepare Engineering Task Plan
- Document Safety Classification of air flow controllers
- Update safety documents (SA, OSR, ISEL, LANL SA for 241-SY-101 mixing pump, etc.) as required
- Develop design basis for the 241-SY air flow controllers
- Design/Analyze flow controllers
- Complete design verification (Independent Review, testing as applicable)
- Produce design media of flow controllers
- Perform USQ screenings and/or evaluations
- Prepare Acceptance Test Procedure (ATP) and report (ATR) and Operability Test Procedure (OTP) and report (OTR) for the air flow controllers
- Support procurement activities as required
- Support procedure development or revisions
- Support fabrication and installation
- Support testing (ATP/OTP)
- Complete Acceptance for Beneficial Use (ABU)

The air flow controllers and transition ducting will be fabricated on site, using the development control procedures in WHC-CM-6-1, section EP-2.4. Material, fabrication, and inspection criteria will be described or specified as required on development control drawings submitted to the shop. All components intended for onsite fabrication under

development control are non-safety class, general service equipment. Refer to section 7.0 Safety of this document for details concerning the safety classification. No special conditions or restrictions apply, for testing requirements see sections 3.6.2 Air Flow Control Device and 3.8 Pre-Operational and Operational Tests.

3.4 VERIFICATION

Verification points for this task shall be assigned as required or deemed necessary. Typical verification for this task could include the completion of fabrication, completion of the Acceptance Test Procedure (ATP)/Operation Test Procedure (OTP), and completion of installation. Typical verification points should include functions such as procurement (as required), fabrication, and testing.

3.5 PROCUREMENT

All material that is required for this task should be available as a part of shop material. This material shall be purchased under existing contracts that allow for general service purchases of material. See drawing H-2-828962 for material.

3.6 DESIGN REQUIREMENTS

The design of the air flow controllers for 241-SY tank farm shall, to the maximum extent practical (primarily for part interchangeability and to minimize re-design/re-analysis efforts), be a duplicate of the 241-AN design (see drawing H-2-85647) and meet the design requirements stated herein. The exception to duplicating the AN design shall be the air controller for tank 241-SY-101. Because of the higher air flows required for this tank the air controller shall be designed for greater air flow capacity. The air flow controller shall be capable of controlling minimum air flow to meet requirements of 241-SY-101 mixing pump operations.

3.6.1 STANDARDS AND PROCEDURES

The following documents constitute the code/standard and procedural requirements, as portions thereof apply to specific components or features of the air flow controller.

- ASME AG-1, Code On Nuclear Air and Gas Treatment
- ASME N509, Nuclear Power Plant Air Cleaning Units and Components
- ASME N510, Testing of Nuclear Air Treatment Systems
- DOE Order 6430.1A, General Design Criteria

- SDC-4.1, Standard Arch-Civil Design Criteria/Design Loads for Facilities
- WHC-CM-4-46, Section 9, Safety Classification of Structures, Systems, and Components
- WHC-CM-6-1, Standard Engineering Practices

3.6.2 AIR FLOW CONTROL DEVICE

- The flow control device shall maintain air flow within $\pm 10\%$ of the set value over the ranges of flow and pressure stated below.
- The flow control device for 241-SY-101, 102, and 103 shall be able to operate over a flow range of approximately 23.6 to 472 L/s (50 to 1000 cfm).
- The flow control device shall be able to operate, at a minimum, over differential pressures ranging from 187 to 996 Pa (0.75 to 4 in WG).

3.7 INSTALLATION TASKS

Installation of the three air flow controllers for 241-SY shall require the removal of existing equipment and then install new equipment. The installation process shall follow the guidelines as outlined below:

- Remove the ducting transition pieces from the air inlet side of the HEPA filter from tanks 241-SY-102 and 103.
- Install one each air flow controller assembly onto the air inlet side of the HEPA filter for 241-SY-102 and 103.
- Remove the existing transition ducting between the air inlet stack and air inlet side of the HEPA filter.
- Cover the opening in the stack that went to the existing ducting.
- Open the appropriate ducting port on the air inlet stack.
- Install one air flow controller to the air inlet side of the HEPA filter.
- Install the transition ducting from the air inlet stack to the air flow controller.

3.8 PRE-OPERATIONAL AND OPERATION TESTS

No system operation tests shall be conducted.

Pre-operational tests shall consist of testing one flow controller device to verify that operating parameter will be met. Each air flow control assembly shall be tested to verify operating parameters can be met.

For this task the ATP is a functional test of the air flow controllers. The goal is to verify that the air flow controller are accurate over the specified ranges of flow and pressures drops. The air flow controller will be tested in a laboratory, therefore the ATP is not performed in the field. The OTP shall be conducted in the field and is performed as a functional check of the flow controller. When the OTP is accepted and the vent system brought on-line the air flow control system will be setup for the proper vent and balance.

4.0 ORGANIZATION RESPONSIBILITIES

The SY ventilation upgrade team, identified in Appendix A, is responsible for ensuring completion of the ABU tasks. Quality Assurance, Safety, and Environmental will be asked to review documents in accordance with WHC-CM-3-5, Document Control and Records Management Manual, Section 12.7, "Approval of Environmental, Safety, and Quality Affecting Documents" and upon request.

The names listed on the ABU form are for information only and are subject to change.

The completion of this task is dependent on the active participation of several companies and organizations. Following is a listing of each participating company and organization with their responsibilities.

SGN Eurysis Services Corporation (SESC) Remote Sensing and Sampling Equipment Engineering is responsible for preparing the engineering documentation and initiating work packages associated with the completion of this task.

Fluor Daniel Northwest (FDNW) Mechanical/HVAC Engineering shall perform the pre-operational testing required on the air flow controller. Design Services and Support shall perform the drafting required.

Once the proper Plant Forces Work Review has been performed then a determination shall be made about which organization will be used for installation of the air flow controllers and transition ducting. This could be Plant Forces or put out for contract.

Flour Daniel Hanford (FDH) Fabrication Services shall be used to fabricate the air flow

controllers and transition ducting.

Dyncorp Site Fabrication Services shall be used to prepare the work packages and provide fabrication shop support. This includes quality control, package development, planning, material coordination, etc.

Lockheed Martin Hanford Company (LMHC) TWRS Facility Operations Design Authority shall perform the design authority functions required for this tank.

Duke Engineering Services Hanford (DESH) TWRS USQ Process shall perform the USQ screening for this task.

LMHC West Tank Farms Engineering Support will take ownership of the air flow controller and transition ducting when the task has been completed.

LMHC West Tank Farms Engineering Support Services will provide quality assurance and safety support as required for this tank.

5.0 SCHEDULE & COST

Appendix B contains the schedule for upgrading the ventilation system.

The following is a cost estimate for completing the SY ventilation improvements:

<input type="checkbox"/>	Engineering	\$56K
<input type="checkbox"/>	Fabrication	\$49K
<input type="checkbox"/>	Maint./Operating/Test procedures	\$10K
<input type="checkbox"/>	Installation and field support	\$61K

Work Orders for engineering tasks are being distributed as required and needed.

Work Order #C05214 has been established in the amount of \$69,000 to cover the cost of fabrication of the air flow controller and transition ducting piece.

Work Order shall be established as required for procedural tasks and field installations/support.

6.0 QUALITY ASSURANCE

Quality Assurance will be asked to review documents in accordance with WHC-CM-3-5, Document Control and Records Management Manual, Section 12.7. Approval designators will be evaluated and assigned for each set of documentation that is

developed. Table 1, Document Approval Matrix, in Section 12.7 of WHC-CM-3-5 will be used to assign the approval designators for all documentation associated with this task.

The quality approval designator shall be applied to this document as outlined in WHC-CM-3-5, Table 1. Sections T3.12, T4.3, and T4.4 describe the criteria that require the quality approval designator. Section T3.12 states “Documentation establishing or modifying quality assurance verification requirements, or associated with activities subject to such verification”. Section T4.3 states “Procurement documents for services which define or impact the ability to achieve, maintain, or comply with quality assurance program or verification requirements”. Section T4.4 Procurement/fabrication documents associated with items/activities requiring documented quality assurance verification that the acceptance criteria are met”. Based on the content of these three sections the quality approval designator shall be used.

7.0 SAFETY

Safety classification of the air flow controllers which will be used in SY tank farm is based on a review of hazard and equipment failure analyses, and criteria from WHC-CM-4-46 Section 9, Table 1.

Existing Authorization Basis hazards and analyses were reviewed in Unreviewed Safety Question (USQ) Determination TF-97-0239. The hazards and accident analyses associated with tank ventilation system operation involve low tank vacuum (possible loss of confinement), high tank vacuum (potential damage to tank), inadequate tank ventilation (flammable gas accumulation), and spark sources (potential explosion and damage to tank). It was determined that the operation of the air flow controllers on the inlet of each SY primary tank will not adversely affect tank farm operation and is within the Authorization Basis. The Authorization Basis does not take credit for these air flow controllers in any hazard/accident scenarios as a means of reducing risk.

An equipment failure analysis was also performed when the air flow controllers were first installed in a Hanford tank farm (AW). The analysis considered the design features of the ventilation system and air flow controllers, administrative controls, and operator actions in determining the probability of occurrence of selected scenarios (involving, for example, excessive flammable gas accumulation). The primary conclusion was that a high flammable gas inventory in a waste tank due to the failure of its associated air flow controller is incredible. The analysis is contained in Engineering Change Notice (ECN) 604846, pages 9-31. Due to similarities in the design features/functions of the SY ventilation system and proposed air flow controllers, this conclusion is considered applicable to the SY installations as well.

Since the USQ Determination and previous analyses confirm that failure of the air flow controllers has no significant consequences, and because the air flow controllers are not

considered defense in depth for the prevention of a significant release of radioactive or hazardous material, the air flow controllers do not meet the criteria of WHC-CM-4-46 Section 9, Table 1. Thus, they are designated as "General Service SSCS." This is consistent with the AW and AN air flow controller safety class designations of "Undesignated" (or previously, SC 4) documented in ECNs 604846 and 165704.

The safety approval designation is applicable to this document. Table 1 of WHC-CM-3-5 Section 12.7 specifies that documents which provide modifications to existing facility structures, systems, or equipment are required to have the safety approval designator.

The safety approval designator shall be applied to this document as outlined in WHC-CM-3-5, Table 1. Sections T3.13 and T4.4 describe the criteria that require the safety approval designator. Section T3.13 states "Designs, specifications, and test procedures for modifications to existing facility structures, systems or equipment which may impact features". Section T4.3 states "Procurement documents for services which define or impact the ability to achieve, maintain, or comply with safety requirements". Based on the content of these two sections the safety approval designator shall be used.

8.0 SHIPPING & HANDLING

The air flow controller and transition ducting shall be fabricated in the sheet metal shop located on the Hanford Site. These pieces shall be shipped and installed in the 241-SY tank farm. There are no special handling requirements for the air flow controllers or transition ducting.

9.0 REFERENCE

ASME, 1994, *Code On Nuclear Air and Gas Treatment*, asme-ag-1-1994, 1994 Revision, American Society of Mechanical Engineers, New York, New York

ASME, 1989, *Nuclear Power Plant Air Cleaning Units and Components*, ASME N509-1989, 1989 Revision, American Society of Mechanical Engineers, New York, New York

ASME, 1989, *Testing of Nuclear Air Treatment Systems*, ASME N510-1989, 1989 Revision, American Society of Mechanical Engineers, New York, New York

DOE, 1989, *General Design Criteria*, DOE 6430.1A, 1989 Revision, Department of Energy, Washington D.C.

ICFKH, 1996, *Standard Arch-Civil Design Criteria/Design Loads for Facilities*, GC-LOAD-01, Revision 1, ICF Kaiser Hanford Company, Richland, Washington

WHC, 1996, *Safety Classification of Structures, Systems, and Components*, WHC-CM-4-46, Section 9, Revision 2, Westinghouse Hanford Company, Richland, Washington

WHC, 1996, *Standard Engineering Practices*, WHC-CM-6-1, Revision 70, Westinghouse Hanford Company, Richland, Washington

WHC, 1996, *Quality Assurance Manual*, WHC-CM-4-2, Revision 89, Westinghouse Hanford Company, Richland, Washington

WHC, 1995, *Engineering Practice Guidelines*, Revision 0, WHC-IP-1026, Westinghouse Hanford Company, Richland, Washington

WHC, 1996, *TWRS Administration, Integrated Guide to TWRS Safety, Engineering and Project Procedures Applicable to TWRS Activities*, WHC-IP-0842, Section 2.1, Revision 0-A, Westinghouse Hanford Company, Richland, Washington

WHC, 1996, *Document Control and Records Management Manual*, WHC-CM-3-5, Section 12.7, Revision 0, Westinghouse Hanford Company, Richland, Washington

WHC, 1996, *Double Shell Tank Interim Operation Safety Requirements*, WHC-SD-WM-OSR-016, Section 3, Revision 0-E, Westinghouse Hanford Company, Richland, Washington

WHC, 1995, *Safety Assessment for Proposed Pump Operation to Mitigate Episodic Gas Releases in Tank 241-SY-101*, WHC-SD-WM-SAD-033, Revision 2, Westinghouse Hanford Company, Richland, Washington

APPENDIX A - ABU FORM AND UPGRADE TEAM

DESCRIPTION	RESPONSIBILITY	DESCRIPTION	RESPONSIBILITY
ENGINEERING		ADP	
<input checked="" type="checkbox"/> Engineering Work Plan	CE Hanson	<input type="checkbox"/> Software Configuration Mgmt. Plan	
<input type="checkbox"/> Activity Schedule		<input type="checkbox"/> System Requirements Spec	
<input type="checkbox"/> Final Safety Analysis Report		<input type="checkbox"/> Software Design Description	
<input type="checkbox"/> Interim Safety Basis - update		<input type="checkbox"/> Software Validation/Verification	
<input type="checkbox"/> Safety Assessment		<input type="checkbox"/> _____	
<input checked="" type="checkbox"/> Safety Equipment List ECN	CE Hanson		
<input checked="" type="checkbox"/> Safety Basis/Authorization Basis documents/ECN's as required	CE Hanson	TRAINING	
<input type="checkbox"/> Operational Safety Requirements-or update existing		<input type="checkbox"/> Training Plan	
<input type="checkbox"/> Operational Safety Document(s)-or update existing		<input type="checkbox"/> Training Manuals	
<input checked="" type="checkbox"/> Design Criteria/Design Basis Document	CE Hanson	<input checked="" type="checkbox"/> Training to Operating Crews	W.J. Hopkinson
<input type="checkbox"/> System Design Description		<input checked="" type="checkbox"/> Training to Maintenance Crews	R.L. Brooks
<input type="checkbox"/> Test Plan/Specifications		<input type="checkbox"/> Training Mock-Up	
<input checked="" type="checkbox"/> Acceptance Test Procedures and Final Test Report	CE Hanson	<input type="checkbox"/> _____	
<input checked="" type="checkbox"/> Operational Test Procedures and Final Test Report	CE Hanson		
<input type="checkbox"/> Environmental Impact Statement		OPERATIONS/MAINTENANCE	
<input type="checkbox"/> Environmental Report		<input type="checkbox"/> Operating and Maintenance Manuals	
<input type="checkbox"/> Environmental Permit		<input checked="" type="checkbox"/> Operating Procedures/Round Sheets	T. Horner
<input type="checkbox"/> Hazardous Waste Disposal Plan Procedures		<input type="checkbox"/> Surveillance Procedures	
<input type="checkbox"/> Solid Waste Disposal Plan/Procedure		<input type="checkbox"/> Calibration Procedures	
<input checked="" type="checkbox"/> Stress Seismic Analysis	CE Hanson	<input type="checkbox"/> Preventative Maintenance Proc./or	
<input type="checkbox"/> Stress Design Report		<input type="checkbox"/> Repair/Maintenance Procedures	
<input type="checkbox"/> Design Specifications/Report		<input type="checkbox"/> Functional Check Procedures	
<input type="checkbox"/> Equipment Specifications		<input checked="" type="checkbox"/> PM/S Datasheets	E.G. Staples
<input type="checkbox"/> Procurement Specifications		<input type="checkbox"/> _____	
<input type="checkbox"/> Construction Specification		<input type="checkbox"/> _____	
<input type="checkbox"/> Essential Material Specifications		<input type="checkbox"/> _____	
<input checked="" type="checkbox"/> Final Design Drawings	CE Hanson		
<input checked="" type="checkbox"/> Installation Drawings/ECN's	CE Hanson	QUALITY ASSURANCE	
<input type="checkbox"/> Installation Work Plan		<input type="checkbox"/> Inspection Plan	
<input type="checkbox"/> As-built Essential Drawings		<input type="checkbox"/> QAPP	
<input type="checkbox"/> Interface Control Drawings		<input type="checkbox"/> QAP,P	
<input type="checkbox"/> IEFD Drawings		<input type="checkbox"/> _____	
<input type="checkbox"/> Systems Drawings			
<input type="checkbox"/> Drawing Tree		PROCUREMENT	
<input type="checkbox"/> Incorporate Outstanding Project Generated ECN's		<input type="checkbox"/> Vendor Information Files	
<input checked="" type="checkbox"/> USQ Screening/Evaluation	CE Hanson	<input type="checkbox"/> Comprehensive Equip. List	
<input checked="" type="checkbox"/> Validation and Verification Records	CE Hanson	<input type="checkbox"/> Spare Parts List	
		<input type="checkbox"/> Spare Parts in Stock	
		<input type="checkbox"/> _____	

UPGRADE TEAM - SY VENTILATION UPGRADES (AIR FLOW CONTROLLERS)	
ORGANIZATION	MANAGER/COGNIZANT ENGINEER
SESC Remote Sensing and Sampling Equipment Engineering Design Authority until turnover)	Carl Hanson/Jack Thompson
TWRS Facility Equipment Engineering (Design Authority)	RL Schlosser/JR Kriskovich
West Tank Farms Plant Engineering	DL Dunford/TD Kaiser
Maintenance Engineering	E Staples
West Tank Farms Quality Assurance	MJ Baily/RR True
West Tank Farms Independent Safety	JJ Badden/LS Krogsrud
West Tank Farms Operations	J.J. Badden/R. Tucker

APPENDIX B – SCHEDULE

ID	Task Name	January		February			March						
		1/5	1/12	1/19	1/26	2/2	2/9	2/16	2/23	3/2	3/9	3/16	3/23
1	EWP/Design Basis												
2	Plant Forces Work Review												
3	Design Drawings ECN												
4	USQ												
5	Prepare and Release ATP												
6	Prepare and Release OTP												
7	Prepare Main. and Operating Proc.												
8	Fab Equipment												
9	Prepare Install & Test Work Pack.												
10	Site Prep and Field Install												
11	Perform ATP												
12	Perform OTP												
13	Prepare/Release ATR & OTR												
14	Release ABU												
15	Complete Work												

DEFERRED TO
FY 1998
DATES TBD

Project: sy air flow controller
Date: Wed 4/30/97

Task	Summary	Rolled Up Progress
Progress	Rolled Up Task	
Milestone	Rolled Up Milestone	

ID	Task Name	April			May			June					
		3/30	4/6	4/13	4/20	4/27	5/4	5/11	5/18	5/25	6/1	6/8	6/15
1	EWP/Design Basis												
2	Plant Forces Work Review												
3	Design Drawings ECN												
4	USQ												
5	Prepare and Release ATP												
6	Prepare and Release OTP												
7	Prepare Main. and Operating Proc.												
8	Fab Equipment												
9	Prepare Install & Test Work Pack.												
10	Site Prep and Field Install												
11	Perform ATP												
12	Perform OTP												
13	Prepare/Release ATR & OTR												
14	Release ABU												
15	Complete Work												

Project: sy air flow controller
Date: Wed 4/30/97

Task Summary

Progress Rolled Up Task

Milestone Rolled Up Milestone

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