INCINERATION OF DOE OFFSITE MIXED WASTE AT THE IDAHO NATIONAL ENGINEERING AND ENVIRONMENTAL LABORATORY

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DISCLAIMER

ABSTRACT

The Waste Experimental Reduction Facility (WERF) incinerator at the Idaho National Engineering and Environmental Laboratory (INEEL) is one of three incinerators in the United States Department of Energy (DOE) Complex capable of incinerating mixed low-level waste (MLLW). WERF has received MLLW from offsite generators and is scheduled to receive more. The State of Idaho supports receipt of offsite MLLW waste at the WERF incinerator within the requirements established in the (INEEL) Site Treatment Plan (STP). The incinerator is operating as a Resource Conservation and Recovery Act (RCRA) Interim Status Facility, with a RCRA Part B permit application currently being reviewed by the State of Idaho. Offsite MLLW received from other DOE facilities are currently being incinerated at WERF at no charge to the generator. Residues associated with the incineration of offsite MLLW waste that meet the Envirocare of Utah waste acceptance criteria are sent to that facility for treatment and/or disposal. WERF is contributing to the treatment and reduction of MLLW in the DOE Complex.

INTRODUCTION

The WERF incinerator is located at the INEEL. The incinerator is currently supporting the accelerated cleanup of the Department of Energy Complex by incineration treatment of both legacy and newly-generated inventories of MLLW. The WERF incinerator has completed treatment of the INEEL legacy backlog of incinerable MLLW as planned for this facility in the INEEL STP. Currently the WERF incinerator is scheduled for 10 incineration campaigns per year. Two of these campaigns are planned for INEEL waste, with the other eight dedicated to offsite mixed waste. The volume of waste incinerated in one campaign is dependent on the matrix of the waste being incinerated.

Currently, a no-charge policy has been approved by the United States Department of Energy Idaho Operations Office (DOE-ID) for WERF incineration of offsite MLLW from other DOE facilities. Costs associated with the characterization of the waste to meet the INEEL Waste Acceptance Criteria (WAC), transport of the waste to the INEEL, transport of any residues back to the generator or to an approved treatment and disposal facility outside of the State of Idaho, and post-incineration treatment and disposal costs will be the responsibility of the offsite MLLW generator.

There are numerous offsite MLLW streams currently listed in the INEEL STP for incineration at WERF. Upon receipt, review, and approval of detailed waste characterization information for these waste streams, INEEL will establish shipment schedules and obtain State of Idaho approval for receipt of the waste for treatment. The INEEL STP also contains a mechanism for adding new MLLW streams requiring incineration from offsite generators. The INEEL notifies the State of Idaho of the proposed INEEL STP revisions that add the new waste streams, and the state is required to obtain public comment on the revisions. After the public comment period, the State resolves comments and approves the new waste streams. In 1997, (91) new offsite mixed waste

streams were included in the INEEL STP adding 750 m^3 currently in storage and another 1,571 m^3 projected over the next five years for treatment at the WERF incinerator. The treatment plans for these 91 waste streams were approved by the State of Idaho after receiving no comment during the public review period.

One of the State of Idaho-imposed conditions for receiving offsite MLLW waste for incineration is that the waste must be treated within six months of receipt, and the treatment residues shipped out of the State of Idaho within six months after completion of treatment. Offsite generators of MLLW shipped to WERF for treatment are required to sign an agreement stating that the treatment residues can be returned to their facility in the event an approved disposal facility outside of the State of Idaho cannot be located and used within the time periods imposed by the State.

The WERF incinerator has successfully received and treated offsite waste from several DOE and Navy facilities. Some of these waste streams were included in the initial version of the INEEL STP; others have been added using the mechanism contained in the STP. The process in place at WERF for the review of the waste characterization data, the approval for waste shipment, and the actual shipment is working well and WERF has been successful in reducing not only the INEEL backlog of incinerable MLLW, but is contributing significantly to the reduction of the Complex's incinerable MLLW.

The INEEL has a contract with Envirocare of Utah for treatment and disposal of the residues from incineration of offsite waste. If the residues from an offsite generator meet the acceptance criteria at the Envirocare facility, the residues will be shipped to Envirocare for additional treatment (e.g. stabilization), if necessary, and/or disposal. If the treatment residues do not meet the Envirocare acceptance criteria, or cannot be shipped to another disposal facility outside the State of Idaho, the residues will be returned to the generator's facility by prior agreement. The INEEL is also actively pursuing other incinerator residue disposal options.

The WERF incinerator is currently operating as a RCRA Interim Status facility. The RCRA Part B Permit application is being reviewed by the State of Idaho. WERF plans to complete the high-temperature portion of a trial burn in summer 1998, which is required by the regulations to demonstrate the required Destruction Removal Efficiency. The low-temperature portion of the trial burn was completed fall 1997.

An evaluation of the proposed Hazardous Waste Combustor (HWC) Maximum Achievable Concentration Technology (MACT) standards is underway to determine the potential impacts to the WERF incinerator long-term operation.

WERF ACCEPTANCE CRITERIA AND PROCESS

Before any offsite mixed waste can be received and treated at the WERF incinerator, DOE-ID must be notified in writing of the generator's intention to use the incinerator, and the offsite

mixed waste stream must be included in the INEEL STP. The process for adding new offsite waste streams to the INEEL STP is to receive sufficient characterization information to develop a treatment plan for the waste stream, submit the treatment plan to the State of Idaho for conditional approval, and prepare and publish a Notice of Availability (NOA) for 30-day public comment on the plans. After the completion of the 30-day public comment and resolution of any comments, the State of Idaho will grant final approval of the treatment plans and the waste streams are added to the INEEL STP. The State of Idaho has stipulated that requests to add new waste streams to the INEEL STP be consolidated to minimize the number of NOAs published. In 1997, (91) offsite waste streams were added to the INEEL STP using the Annual Site Treatment Plan Report NOA as the mechanism to obtain public comment.

The WERF Waste Acceptance Criteria (WAC) incorporates RCRA Part B permit and safety-related requirements directly applicable to waste characterization, packaging, waste receipt, and waste profiling. An electronic copy of the WERF WAC is available at the following web address: http://wastenot.inel.gov/rrwac/regrrwac.html. Complete the registration information. Download the Acrobat and/or the PDF file(s). As prompted, enter the password, "tru6pet." Generators filling out waste profile forms will consult the WERF WAC for guidance.

DOE Order 5820.2A *Radioactive Waste Management* requires that generators have an auditable Waste Certification Program (WCP). The generator's WCP ensures that the receiving facility Waste Analysis Plan (WAP) and acceptance criteria will be met. The WERF WAC requires the receiving facility at the INEEL to concur in writing with the generator's WCP prior to waste shipment from the generator.

Form series L0435.9 through L0435.13, "Material and Waste Characterization," is the waste stream profile package completed by the generator and submitted to the assigned Waste Account Manager. The Waste Account Manager, the Waste Generator Interface from the receiving facility, and the incinerator burn engineer review the submitted waste profile, ensuring that all acceptance criteria are met. This review includes a detailed evaluation of data submitted to support declarations made on the waste profile. Review comments generated will be documented and transmitted back to the generator. Generators will respond in writing to those comments that require clarification of the profile documentation and/or submittal of additional profile information.

Due to the unique nature of each waste stream and the detailed level of documentation required, generators must attach an executive summary to the waste profile forms L0435.9 through L0435.13 documenting detailed waste stream information such as: waste generation explanations, hazardous waste determinations (RCRA code application and justification), radiological profile determination/methodology, waste packaging description, and explanations regarding submitted data.

The shipment profile is submitted on form series L0435.14 through L0435.17, "Shipment Request and Certification," which documents specific container-level information such as waste

net weight in a container, package gross weight, DOT information (shipping description, marking, labeling), each radionuclide's curie value, and container radiation readings. The shipment profile submittal includes a draft copy of the proposed shipping manifest, and applicable LDR notification/certification documentation. The shipment profile is reviewed by facility personnel and the onsite INEEL traffic department. Comments generated from the review are handled in the same manner as described earlier for the waste stream profile. Both the waste profile and the shipment profile are available via electronic media upon request. Once review of the waste stream and shipment profile is complete, they are approved by receiving facility personnel signing the cover page. The signed/approved page is then sent to the generator and a shipment date is negotiated.

The WERF WAC requires that 5% of waste received from offsite undergo receipt verification prior to acceptance at the facility. Prior to waste shipment, 5% of the containers to be shipped are randomly selected by WERF for verification. Upon arrival at the INEEL, the selected containers are removed from the transport vehicle and verification is performed. Verification provides assurance that the waste profile adequately documents the waste stream, as communicated by the generator. Specific items checked include pH, specific gravity, organic vapors, reducer and/or oxidizer testing for liquid streams, and composition accuracy for solids. Discrepancies encountered during verification are immediately reconciled with the generator. If it is not possible to resolve a discrepancy, the waste shipment will be rejected and immediately returned to the generator. Upon successful completion of waste verification, the waste is accepted into the facility.

Waste is repackaged into a 20 x 20 x 20-in. box in preparation for incineration. Boxes are used because the incinerator feed system accepts a conveyance of this type. Waste is loaded into the boxes to a predetermined volume and weight dependent upon waste stream parameters and incinerator limits. Once sorted, solid waste is placed directly into a lined box, and liquid waste is pumped onto an absorbent, usually ground corncobs, within a lined box. Once the boxes are closed and tape-sealed, the waste is ready for incineration.

WERF AVAILABILITY AND SCHEDULE

Currently the WERF incinerator is scheduled for 10 incineration campaigns per year. Two campaigns are planned for onsite waste, with the other eight dedicated to offsite MLLW. WERF is evaluating ways to increase the number of annual campaigns. One idea being considered is combining smaller offsite mixed waste streams with larger streams. This may require mixing of offsite mixed waste from different generators. This would not pose a problem if the ash went directly to a disposal facility such as Envirocare. But if for some reason the ash were not accepted for disposal, this would require the sites to agree to accept it back at their site knowing that it had been mixed with another site's waste.

The volume of waste processed per campaign is dependent on the matrix of the waste being treated. The incinerator has been designed for a burn rate of 400 pounds per hour. In order to

achieve this rate, all conditions, including the composition of the waste, would have to be ideal. Actual operations have demonstrated that WERF can incinerate up to approximately 250 pounds per hour, or 65 m^3 of noncompacted incinerable trash per campaign, or 143 pounds per hour or 13 m^3 of high-BTU liquid per campaign, or 84 pounds per hour or 7.6 m^3 of low-BTU liquid per campaign, or 3 pounds per hour or 0.3 m^3 of highly-halogenated waste per campaign. Different waste types can be combined to increase efficiency, such as high-BTU liquids with low-BTU liquids and high-halogen and low-halogen. Key assumptions when using these values are that a campaign consists of approximately 200 hours of effective burn time, each m^3 of liquid weighs approximately 2,200 lbs, and each m^3 of solids weighs approximately 750 lbs. (i.e., noncompacted trash).

The burn plan schedule for FY 1998 and FY1999 is currently filled with offsite mixed waste campaigns from Naval Reactors, Rocky Flats, the Paducah Gaseous Diffusion Plant, Sandia, Hanford, Weldon Springs, Los Alamos, Argonne East, Mound, the Portsmouth Gaseous Diffusion Plant, facilities within DOE-Oakland's purview, and West Valley. The WERF incinerator is scheduled to operate through the year 2003.

COSTS AND FUNDING FOR TREATMENT AT THE WERF INCINERATOR

The DOE-ID has currently approved a no-cost charging policy for the incineration of offsite mixed waste at the WERF incinerator. Offsite mixed waste generators are responsible for costs associated: with waste characterization to meet the waste acceptance criteria for WERF; shipping the waste to WERF; post-incineration treatment of the treatment residues (if necessary), at a treatment, storage, and disposal (TSD) facility outside of the State of Idaho; disposal of the residues at that facility; and shipping the waste to the TSD or back to the offsite generator, if necessary.

WERF is currently developing stabilization recipes and technology in order to accommodate the onsite stabilization of WERF incineration treatment residues. WERF is also scheduled to construct and operate macroencapsulation treatment. It is not clear at this time how offsite generators will be charged for these services. With these treatment units on line and fully operational, it may be possible to treat the incineration residues at the WERF rather than having a commercial TSD do the work.

MANAGEMENT OF TREATMENT RESIDUES AT THE WERF INCINERATOR

The INEEL STP requires that upon completion of an offsite mixed waste incineration campaign, the associated residues must be removed from the State of Idaho within six months. The residues include the hearth ash left in the primary chamber after incineration of the waste, the fly ash collected in the bag house of the incinerator off-gas system, and any nonincinerable items that were sent to the WERF to be segregated out of the waste during the repackaging of the waste

prior to incineration. This segregation is performed at WERF on a limited basis and will only be performed when special circumstances are present.

In order to meet the six-month requirement, the residues will either be shipped to the Envirocare of Utah facility under a contract currently in place at the INEEL, or the DOE-Oak Ridge office, or returned to the offsite generator. This decision will be based on several factors such as the ability for the ash to meet the acceptance criteria at Envirocare, the generator's preference, and the status of the residues in regards to RCRA Land Disposal Restrictions (LDRs). The offsite generator will be required to sign a concurrence on the INEEL residual management plan and also on funding requirements discussed above. The concurrence will verify that all permits and approvals are in place at the generator's facility in the event the residues are shipped back to the generator.

The INEEL contract with the Envirocare of Utah facility only covers treatment and disposal of non-LDR-compliant, nondebris solids and small volumes of non-LDR-compliant debris. Residues that already meet LDR will be costed the same as if the residues were non-LDR-compliant requiring treatment. In cases where the residues are LDR-compliant, an evaluation will be performed to determine if the ORNL contract with Envirocare will result in any cost savings for management of the residues at Envirocare.

REGULATORY STATUS AT THE WERF INCINERATOR

Permitting status

The Idaho State Division of Environmental Quality has issued a WERF air Permit to Construct, and an INEEL Title V air operating permit application has been submitted that includes WERF. The WERF incinerator currently operates under RCRA Interim Status. A RCRA Part B Permit application is being reviewed by the State of Idaho. As part of the RCRA permitting process, WERF conducted a trial burn test divided between a low-temperature test, performed in May 1997 and a high-temperature test performed in July 1997. The low temperature testing conducted in May was successful in demonstrating the objectives of the trial burn and in meeting requirements. The high temperature burn conducted in July was only partially successful. As part of the testing plan, the incinerator must pass three valid tests to demonstrate a destruction and removal efficiency of more than 99.99 percent. In the high temperature portion of the test, this destruction removal efficiency was achieved on two out of the three burns. The third burn had a destruction and removal efficiency of 99.985 percent for the principle organic hazardous constituent (POHC) chlorobenzene.

In reviewing the WERF Trial Burn results, the State of Idaho used the Environmental Protection Agency's (EPA) Office of Solid Waste and Emergency Response July 5, 1994 Memorandum, "Guidance on Trial Burn Failures". The State of Idaho subsequently requested that DOE provide certain information to demonstrate their progress in permitting to support continued operation under interim status. DOE has submitted the requested information

including: 1) A detailed schedule of the events leading to, and including, a repetition of the high temperature trial burn; 2) An Interim Operations Plan describing measures necessary to ensure the incinerator operating conditions result in improved DRE and reduced dioxin/furan emission levels that are protective of human health and the environment; and 3) a Table of Trial Burn Results, Interim Operating Limits, and Permit Targets. The WERF incinerator will continue to operate under Interim Status and any limiting conditions of the Interim Operations Plan until the RCRA Part B permit is issued by the State.

Potential Future Regulatory Requirements for DOE Mixed Waste Incinerators

May 1993, the Administrator of the Environmental Protection Agency (EPA) presented the Agency's draft combustion strategy that reevaluates the regulation and control of facilities that burn hazardous wastes and the performance of a comprehensive risk assessment as part of the permit process for hazardous waste combustion air emissions sources. On April 19, 1996, the EPA proposed revised standards for hazardous waste incinerators, hazardous waste burning cement kilns, and lightweight aggregate kilns. The standards were proposed under a joint authority of the Clean Air Act (CAA) and RCRA. The proposed emission standards were developed under the CAA provisions concerning the maximum level of achievable control over hazardous air pollutants (HAPs). These Maximum Achievable Control Technology (MACT) standard are also referred to as National Emission Standards for Hazardous Air Pollutants (NESHAPS). The proposed standards are for the following HAPs: dioxins/furans, mercury, two semi-volatile metals (i.e., lead and cadmium), four low-volatility metals (LVM) (i.e., antimony, arsenic, beryllium, and chromium), particulate matter, and hydrochloric acid/chlorine gas. Other toxic organic emissions were addressed by proposed standards for carbon monoxide and hydrocarbons. The levels of most of the proposed revised MACT standards were decreased by a subsequent notice of data availability (NODA) on May 2, 1997. The NODA also eliminated antimony from the proposed standard for LVM. These proposed standards have impacts on waste analysis, off gas emissions control, and emissions analysis for compliance, particularly due to the requirement for advanced continuous emissions monitoring systems (CEMS).

The bases for the revised proposed MACT standards are discussed in the Notices of Data Availability (NODA) and in the "Draft Technical Support Document for Hazardous Waste Combustor (HWC) MACT Standards, Volume I: MACT Evaluations Based on Revised Database," April 1997.

With its existing air pollution control system, WERF is not expected to meet the proposed maximum achievable control technology (MACT) dioxin/furan emissions standard (the probable standard is expected to be in the range of 0.2-0.4 nanograms TEQ (Toxic Equivalent)/dry standard cubic meter (dscm) for existing incinerators). Results from WERF's operations show dioxin/furan emissions one or more orders of magnitude above the proposed standards. It is also very likely that WERF will not meet the MACT mercury emissions standard (the probable standard is in the range of 40-100 micrograms (μg)/dscm for existing incinerators) when burning typical DOO9 MLLW.

WERF is vulnerable to potential mandatory early closure requirement for facilities not planning to meet the proposed MACT standards. Current DOE planning includes a shutdown of WERF operations in September 2003. MACT Rule promulgation has the potential to effect early shutdown six months to two years (i.e., approximately mid 1999-2001) after the effective date of final MACT rule for facilities not planing to meet the final MACT standards. The early shutdown would impact the ability of WERF to assist the DOE Complex in treating its mixed waste. Several sites would need to enter negotiations with their states to establish alternative treatment for their incinerable mixed waste streams targeted for WERF. There are currently no plans to add additional controls to bring the WERF incinerator into compliance with the new MACT standards.

CONCLUSION

During the past two years, the WERF incinerator has faced many challenges with the receipt of offsite mixed waste for treatment. Many of these challenges have been overcome and the incinerator is now well on it's way to becoming a dependable contributor to the treatment of that mixed waste in the DOE Complex requiring incineration. Some of the challenges that have been overcome include:

- Establishing a treatment and disposal contract with Envirocare of Utah for treatment and disposal of the residues associated with treatment.
- Familiarizing the offsite mixed waste generator with the acceptance criteria of the incinerator and the process for profiling the waste to the WERF incinerator and gaining final acceptance for shipment.
- Refining the process to add new offsite mixed waste streams to the INEEL STP, and developing a protocol for obtaining the State of Idaho's approval to actually bring the offsite mixed waste into the state for treatment.

With these challenges overcome, the volume of offsite mixed waste processed through the incinerator should increase significantly. The table below shows the volume of offsite waste that has been received at the WERF incinerator since it was restarted in 1995. Table II details the waste that is planned for incineration in calendar year 1998. The majority of the waste that is scheduled for 1998 has already been profiled and approved for receipt at the facility. The other mixed waste streams are currently in the waste profile review process.

TABLE I
OFFSITE MIXED WASTE INCINERATED
AT WERF AS OF
SEPTEMBER 22, 1997

FACILITY	NUMBER OF WASTE STREAMS RECEIVED	GROSS CONTAINER VOLUME OF WASTE RECEIVED CUBIC METERS
Naval Nuclear Propulsion Program		
• Mare Island Naval Shipyard	8	8.0
• Charleston Naval Shipyard	3	0.3
• Pearl Harbor Naval Shipyard	2	0.7
• Puget Sound Naval Shipyard	2	16.8
• Norfolk Naval Shipyard	1	0.8
• Bettis Atomic Power Laboratory	6	3.9
• Knolls Atomic Power Laboratory	4	1.2
Kesserling	2	0.5
Windsor	1	0.02
Los Alamos National Laboratory	3	26

TABLE II
OFFSITE MIXED WASTE
PLANNED FOR INCINERATION AT WERF
FY 1998

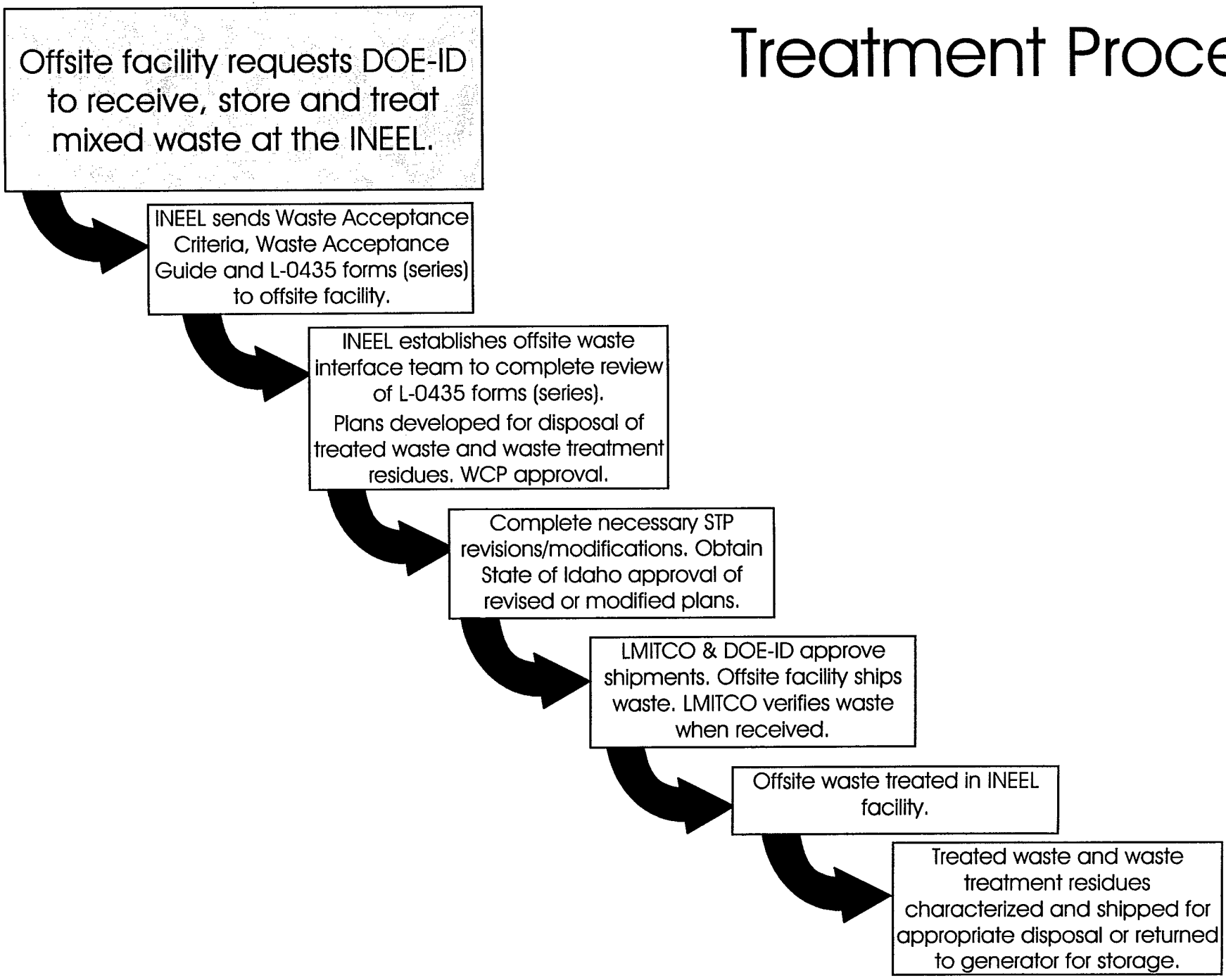
FACILITY	NUMBER OF WASTE STREAMS	ESTIMATED GROSS CONTAINER VOLUME OF WASTE CUBIC METERS
Naval Nuclear Propulsion Program		
• Knolls Atomic Power Laboratory	4	0.5
Kesserling	2	1.2
Windsor	1	0.2
• Norfolk Naval Shipyard	1	7.4
• Pearl Harbor Naval Shipyard	1	0.2
• Puget Sound Naval Shipyard	1	2.7
Pantex	1	20
Sandia	3	30
Paducah	4	22
Paducah – USEC	1	2
Rocky Flats	1	28
Hanford	1	25
Weldon Springs	3	4

Incineration of DOE Offsite Mixed Waste at the

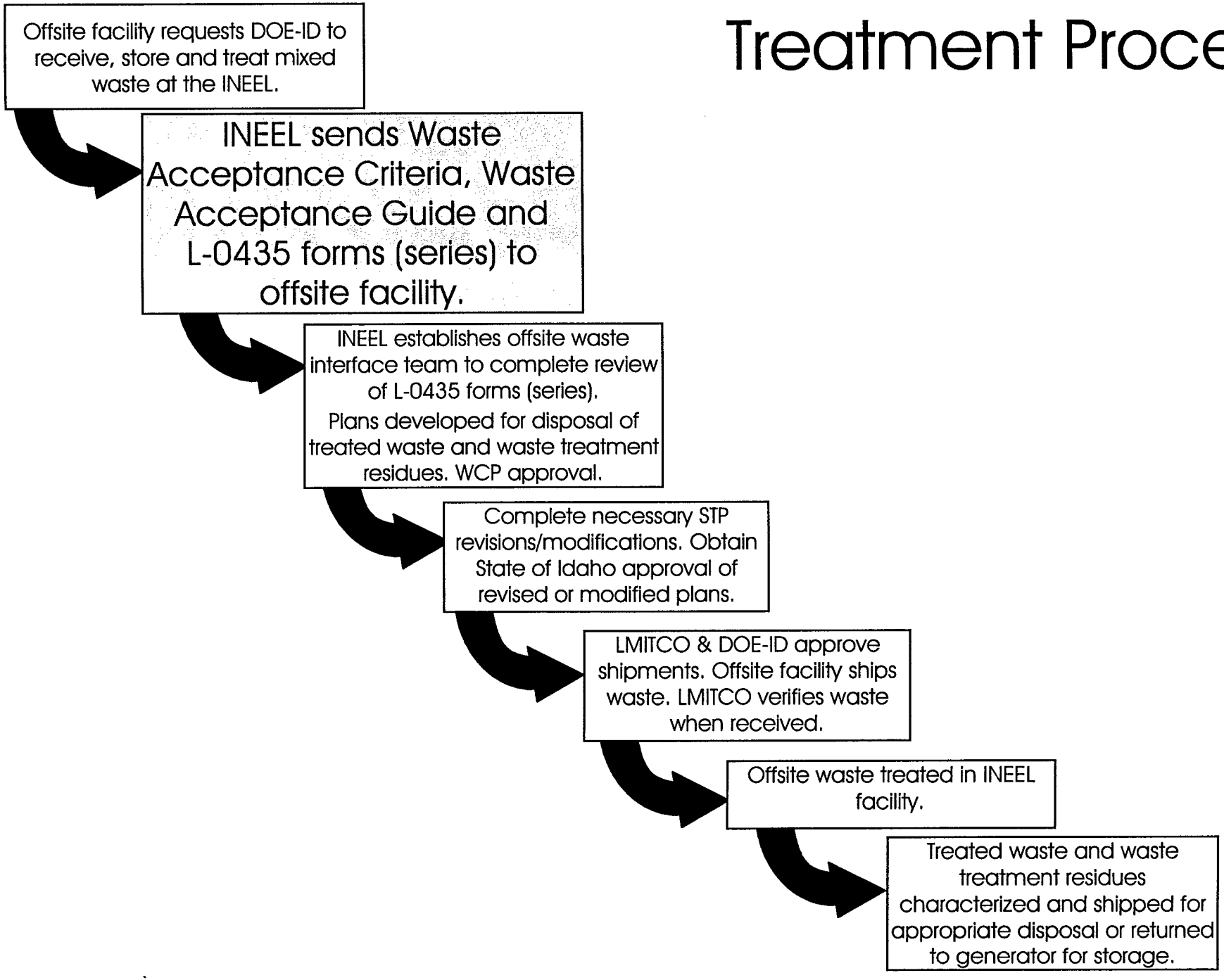
Idaho National Engineering and Environmental Laboratory

About the Waste Experimental Reduction Facility Incineration

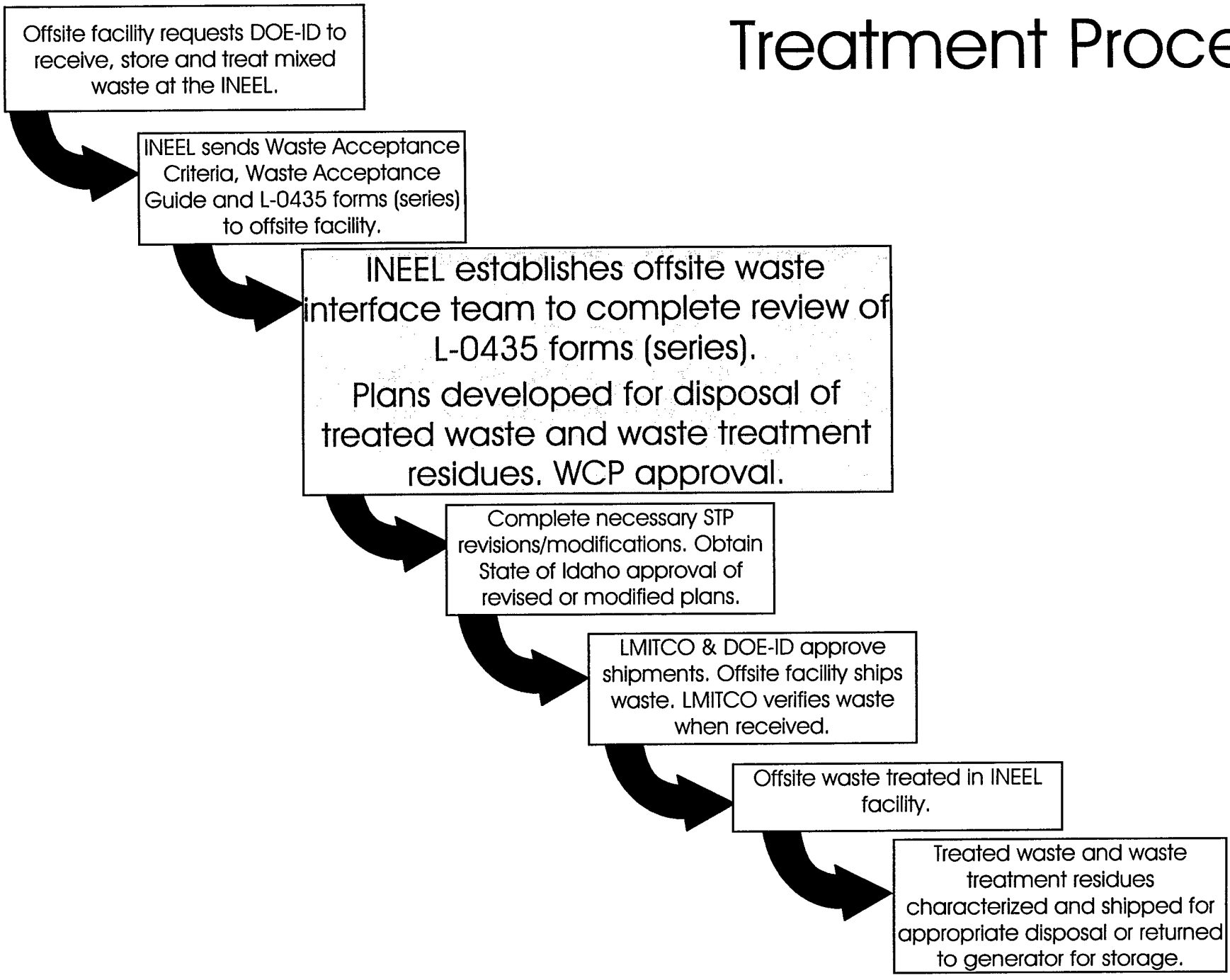
INEEL Offsite Mixed Waste Treatment Process



INEEL Offsite Mixed Waste Treatment Process



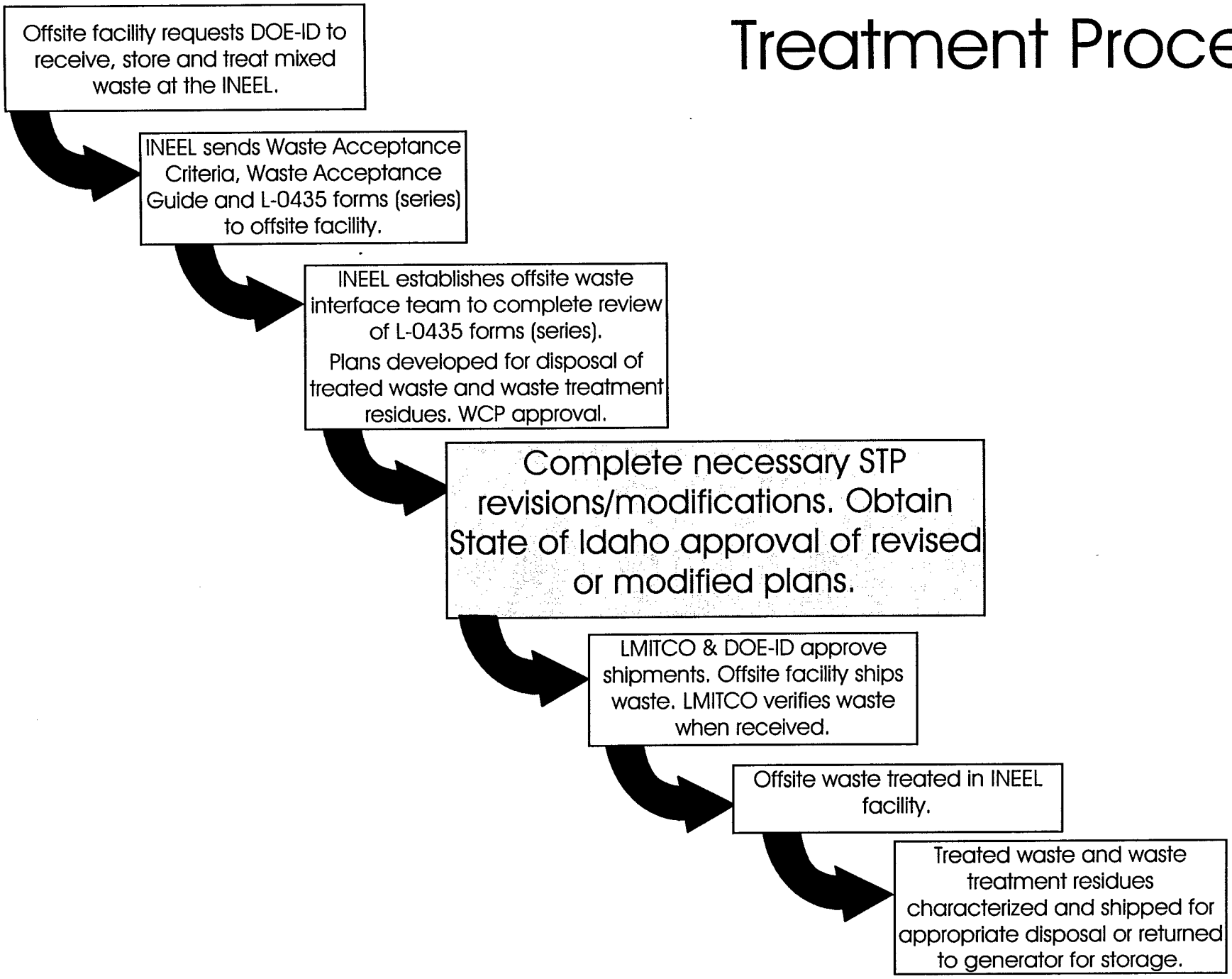
INEEL Offsite Mixed Waste Treatment Process



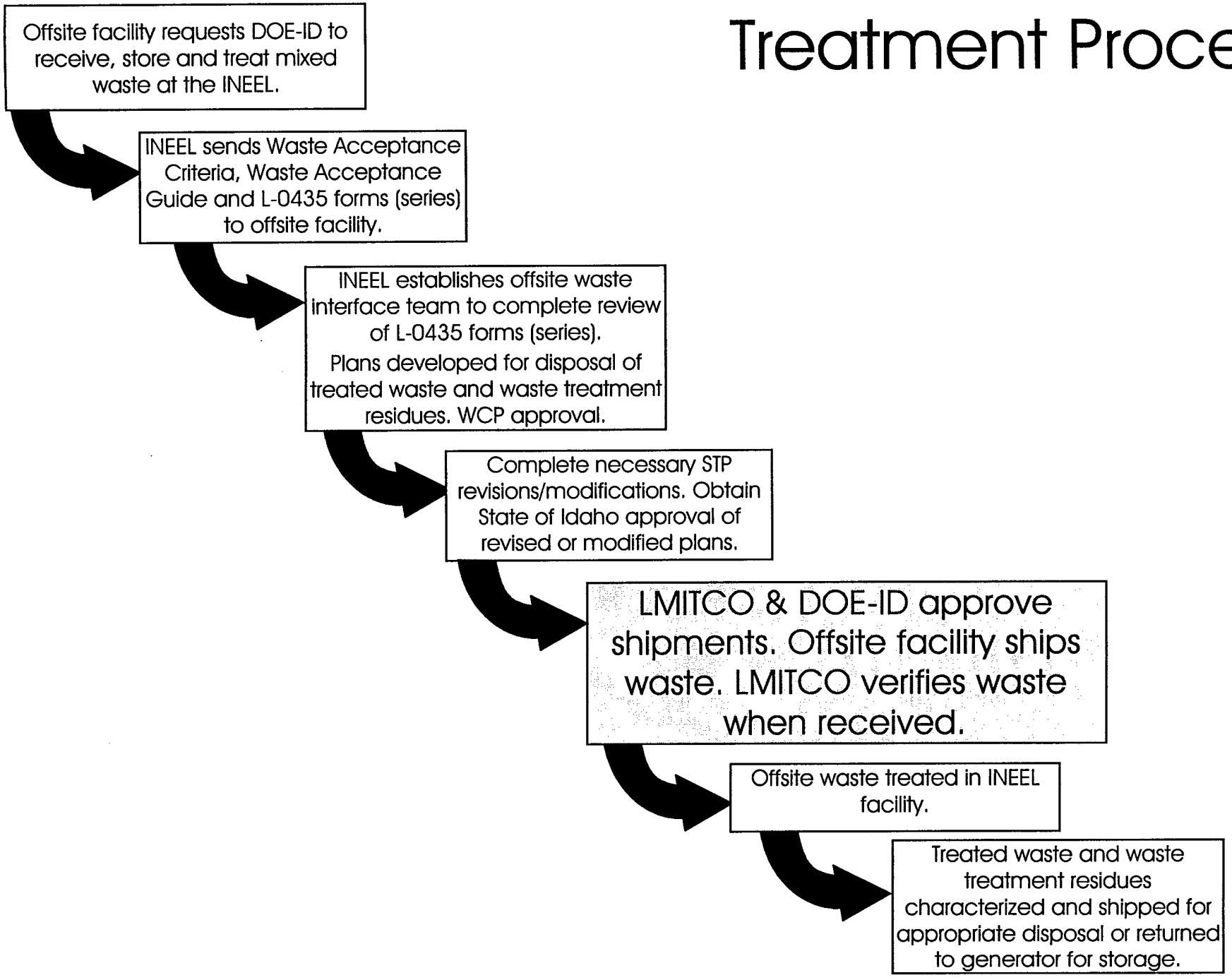
WERF Incinerator Limitations

- Chlorine 4 lbs/hr
- 0.1 nCi/g Alpha (BMP)
- Lead 7-8 lbs/hr
- Mercury 6.9 lbs/hr
- No etiological agents
- No explosives or wetted explosives
- No pyrophoric or shock-sensitive materials
- No large metal objects
- No asbestos (BMP)
- No PCBs $\geq$ 5 ppm (Can receive up to 50 and blend down to <5 ppm)
- No TSCA waste
- No items that cannot be contact-handled due to radiation (i.e., > 100 mR/hr on contact requires case-by-case review and acceptance)

INEEL Offsite Mixed Waste Treatment Process



INEEL Offsite Mixed Waste Treatment Process



Receipt Verification

5% of waste from offsite is required to be verified.

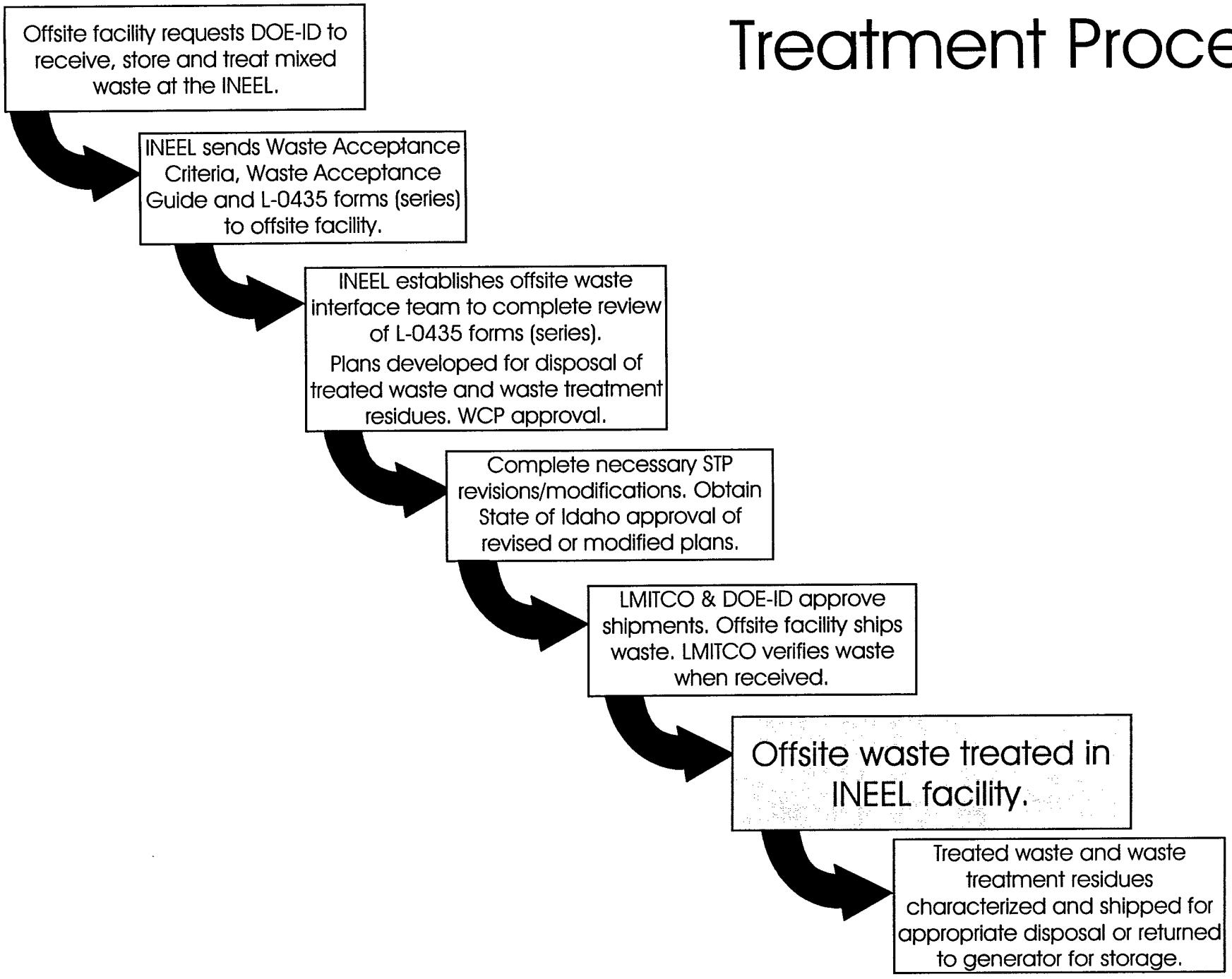
- Provides assurance that the waste profile adequately and accurately documents characterization information.
  - What you said you were going to send is actually what you sent.

SPECIFIC ITEMS CHECKED:

- Specific Gravity
- Organic Vapors
- Reducer/Oxidizer
- pH
- Composition Accuracy

*Discrepancies are resolved immediately with generator.

INEEL Offsite Mixed Waste Treatment Process



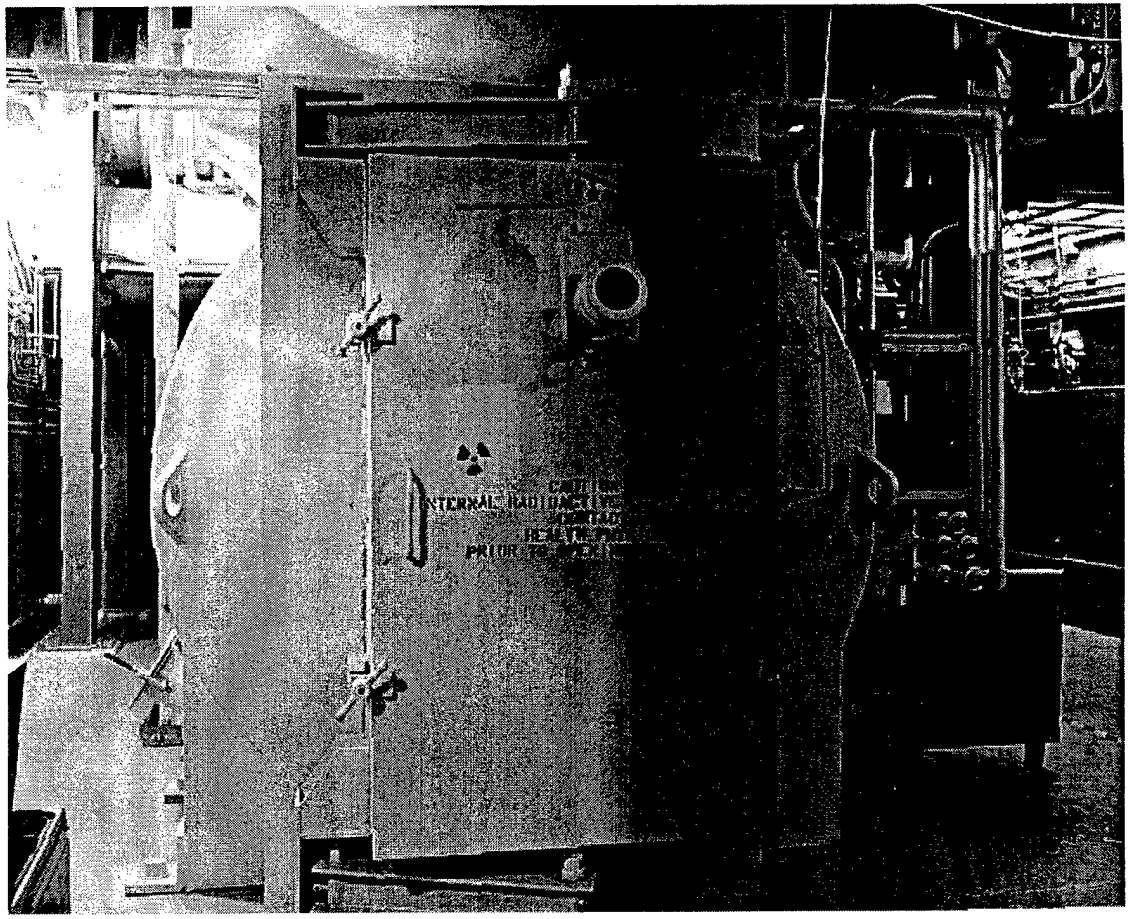
WERF Incineration/ Repackaging

- Waste is repackaged into 20-inch-square cardboard boxes prior to being fed into the primary combustion chamber of the incinerator

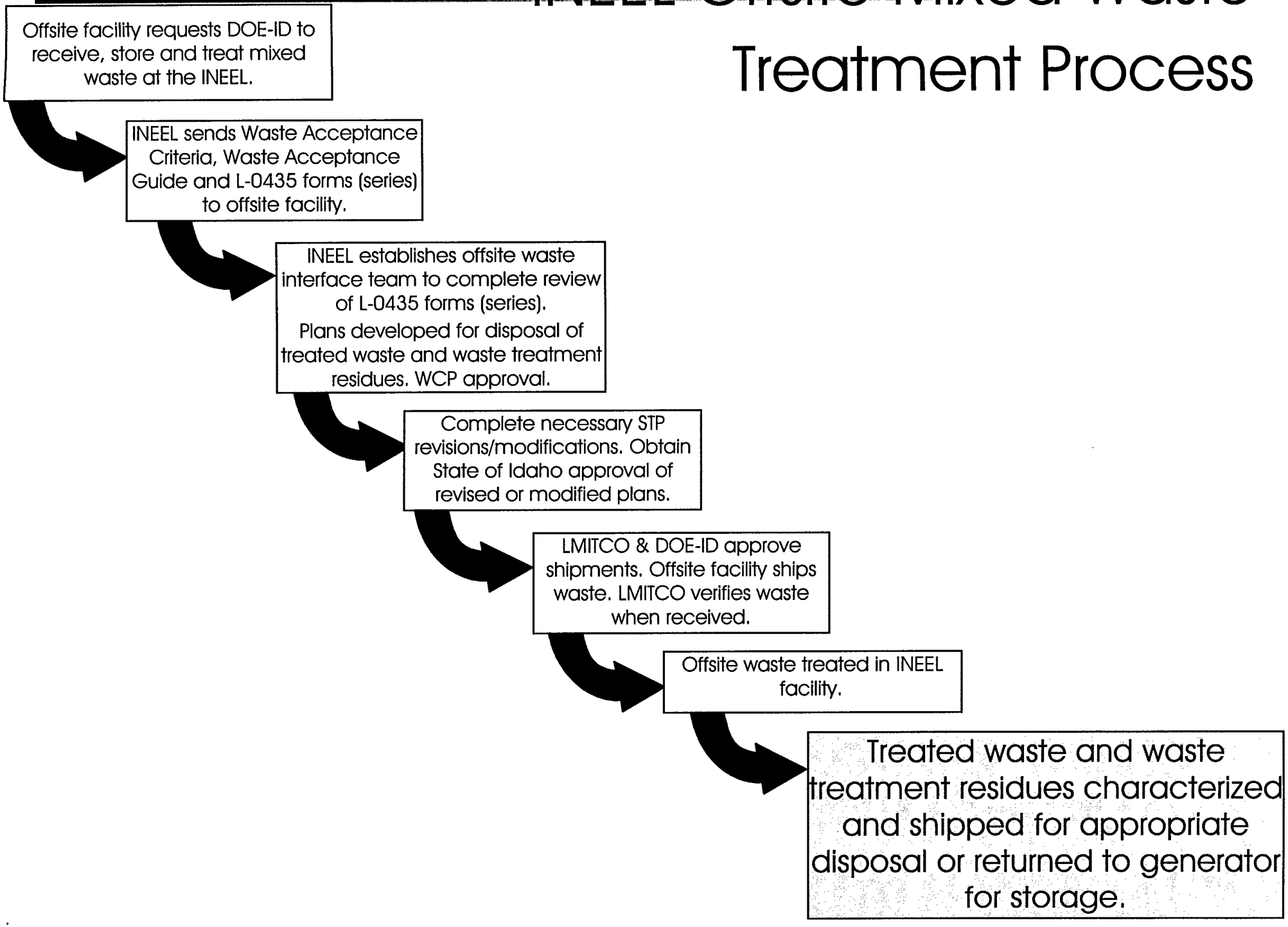
- WERF incinerates approximately 1000 boxes/campaign. The volume of waste/box is dependent on the weight, hazardous constituents, and BTU value of the waste

WERF Incinerator

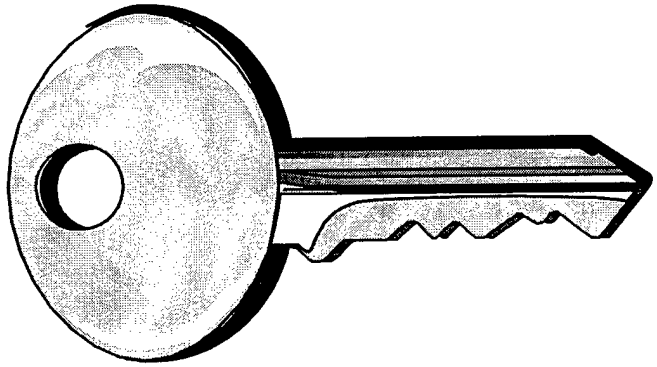
- Incineration of listed and characteristic MLLW (currently operating under RCRA interim status; Part B application submitted)
- Completed incineration of INEEL MLLW incinerable backlog in early FY 1997
- Received DOE MLLW from offsite facilities. Waste received to date from Mare Island, Charleston, Puget Sound, Pearl Harbor, Norfolk Naval Shipyards, Naval Reactor Laboratories, and Los Alamos National Laboratory



INEEL Offsite Mixed Waste Treatment Process



Summary



- Key to getting waste treated at WERF
  = Waste profiled and approved.
- Streams are in the STP.
- Waste is shipped, verified, repackaged, incinerated.
- Disposal of residuals.
- Effective and Successful process for MLLW treatment.

Tentative WERF Burn Schedules through FY 1998 and FY 1999

	FY 1998									FY 1999												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
LLW	X																				
Miniburn/Navy		X																			
Pantex			X																		
Sandia				X																	
Planned Maintenance					X																
Paducah						X															
Trial Burn							X	X													
Rocky Flats									X												
Hanford										X											
Weldon Springs											X										
ANL-E and ANL-W												X									
Navy													X								
INEEL														X							
LANL*															X						
DOE Oakland*																X					
Planned Maintenance																	X				
West Valley*																		X			
Hanford II*																			X		
Paducah II*																				X	
Sandia II*																					X

* Receipt dates not established.

INEEL Offsite Waste Points of Contact

DOE Mixed Waste Project Management

Mary V. Willcox (208) 526-2173

Section Leader for Offiste Waste Activities

Kevin E. Kooda (208) 526-8505

John D. Harris - Project Account Manager (208) 526-3461

- Naval Reactors
- DOE Albuquerque Field Office
- DOE Rocky Flats
- DOE-Chicago
- DOE - Ohio
- DOE Oak Ridge
- Weldon Springs Remedial Action Site

Lisa Harvego - Project Account Manager (208) 526-0473

- DOE Richland
- DOE - Nevada
- DOE Albuquerque Field Office
- DOE Oakland Field Office
- DOE Savannah River
- West Valley Demonstration Project

Regulatory Status at WERF Incinerator

- RCRA Part B Permit being reviewed by the State of Idaho
- Conducted low-temperature trial burn - May 1997
- Conducted high-temperature trial burn - July 1997

Trial Burn Results and Plans

- Passed all objectives of low-temperature trial burn
- Failed Destruction and Removal Efficiency (DRE) for chlorobenzene during high-temperature burn
- Will conduct a mini-burn in February of 1998
- Will conduct second high-temperature trial burn in August of 1998

MACT Rule Impacts

- Dioxin/Furan emissions are one or more orders of magnitude greater than the proposed standard
- WERF will not meet mercury emissions standards
- Currently, there are no plans to bring WERF into compliance with the proposed rule

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