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Final Draft *Copy No.* 13

RCRA Interim Status Assessment
Part A Facilities
4843 Alkali Metal Storage Facility

J-1866-330.9

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J-1866-33.09

January 10, 1989

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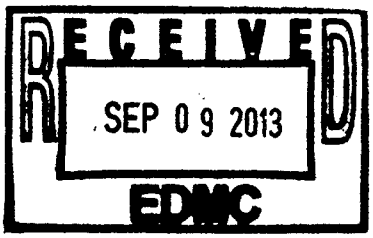

Attn: Mr. David Hutchison Mail Stop H4-50

Re: 4843 Alkali Metal Storage Building
Part A Interim Status Assessment

Dear Mr. Hutchison:

This letter lists the documents that were reviewed as part of the Interim Status assessment of the RCRA Part A facility referenced above. The results and conclusions are based, in part, on the documents listed herein. The documents are referenced to the section of the report for which they were reviewed.

All Sections

- Unnumbered, November 16, 1987, "4843 Alkali Metal Storage Facility Dangerous Waste Permit Application" Revision 1

General Inspection (WAC 173-303-320)

- Unnumbered, November 27, 1987, "Building 4843 General Safety Analysis Document, Revision 1"
- Unnumbered, January 19, 1988 "TSD Information for Annual Dangerous Waste Report - 4843 Building"

Personnel Training (WAC 173-303-330)

- Procedure 4843-1, June 18, 1987 "4843 Building Operations Procedures"

Emergencies (WAC 173-303-360)

- WHC-IP-0263-4843, Emergency Preparedness Plan - Building 4843

Manifest System (WAC 173-303-370)

- WHC Internal Memo, from Office of Senior Counsel to R. L. Martin, Dated January 11, 1988, Regarding "Public Access to Highway"

Facility Recording (WAC 173-303-390)

- Unnumbered, Hanford Site Waste Management Units Reports (1987)

We trust this letter is sufficient for your needs. Please call if you have any questions.

Sincerely,

HART CROWSER, INC.

Brian Opitz by EBE

BRIAN E. OPITZ
Senior Project Professional

Eric B. Egbers

ERIC B. EGBERS
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January 10, 1989

Westinghouse Hanford Company
Post Office Box 1970
Richland, Washington 99352

Attn: Mr. David Hutchison

Re: RCRA Interim Status Assessment
Part A TSD Facilities
4843 Storage Facility

Dear Mr. Hutchison:

Our report on the RCRA Part A TSD Facility Assessment for the 4843 Facility is enclosed. The report presents our understanding of the current compliance status of the facility, as well as recommendations for improving compliance with the applicable federal and state dangerous waste treatment, storage, and disposal (TSD) regulations. The report also presents regulatory guidance for each of the specific sections of dangerous waste regulations that the facility was assessed against.

The assessment was limited to the facility and practices directly associated with the TSD units identified in the 4843 Facility RCRA Part A permit application. The facilities and practices were assessed relative to the interim status TSD requirements noted specifically in the report. The facilities and practices were not assessed relative to dangerous waste generator or generator accumulation requirements. Regulatory analysis of the facility was not performed.

The conclusions and recommendations in this report are based on information provided to the authors from several sources. Since it was beyond the scope of this project to independently confirm all information provided, there exists the possibility that portions of the information are incorrect, incomplete, or out of date. For example, although a facility operating manual may state that a certain practice is accomplished, we did not actually observe the

facility operations to confirm that the specific practice is performed.

Our conclusions and recommendations are based on our understanding and experience with the federal and state dangerous waste regulations. The conclusions and recommendations should not be construed as legal opinions. Consult legal counsel for more definitive compliance conclusions.

Sincerely,

HART CROWSER, Inc.

Brian Opitz by EBE

BRIAN E. OPITZ
Senior Project Professional

Eric B. Egbers

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Program Technical Director

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Enclosure

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RCRA Interim Status Assessment
Part A Facilities
4843 Alkali Metal Storage Facility

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CONTENTS

GENERAL REQUIREMENTS FOR DANGEROUS WASTE MANAGEMENT FACILITIES
WAC 173-303-280

REGULATIONS AND REQUIREMENTS

General Requirements

The general requirements for dangerous waste TSD facilities note two specific requirements.

- The facility must be operated in a manner which does not present an imminent or substantial hazard to the public health or the environment.

- The facility is required to apply for an EPA/state identification number from the regulatory agency.

The requirement to operate the facility in a manner which does not threaten human health or the environment is purposely general so that the agencies can use the requirement as a broad, enforcement tool. If other, more specific regulations can not be applied to a situation where the agency feels a threat exists, this general facility requirement can be used. This requirement is satisfied primarily by preventing or minimizing activities on the site which have a potential to expose the public or the environment to dangerous wastes.

Identification Number

The TSD facility EPA/state identification number is obtained by completing a Washington State notification of dangerous waste activities form, Form No. 2, and submitting the form to the Washington State Department of Ecology. The information requested on the form includes:

- Name and address of the party handling the dangerous waste;

- The type of dangerous waste activities;
- Facility contact persons at the facility;
- Identification of the dangerous wastes handled at the facility; and
- The estimated quantity of dangerous wastes handled.

The identification number is used on the annual report that a TSD facility must submit each year and on manifests which a facility may use to transfer wastes off-site.

APPLICABILITY

The 4843 building is identified as a container storage facility on the Part A permit application. Thus, the 4843 facility must satisfy the general requirements for a dangerous waste management facility.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the 4843 facility relative to the general requirements was determined through interviews of the facility operators, review of the facility documentation, and a walk through the facility.

The 4843 facility serves as a storage warehouse for alkali metal wastes which exhibit the dangerous waste characteristic of reactivity. The wastes are generated from the Fast Flux Test Facility and from various operations on the Hanford Site which utilize alkali metals. The building currently houses waste radioactive sodium metal and non-radioactive lithium metal product. The building does not presently contain the estimated annual quantity of waste, however, there is a potential for additional compatible waste to be stored there in the future.

CONCLUSIONS AND RECOMMENDATIONS

- The 4843 facility satisfies the general requirements for dangerous waste management facilities.

REQUIRED NOTICES
WAC 173-303-290

REGULATIONS AND REQUIREMENTS

There are three specific types of notices required of TSD dangerous waste facilities.

- The Washington State Department of Ecology must be notified at least four weeks prior to the TSD facility receiving dangerous waste from a source outside of the United States.

- The owner/operator of the TSD facility is required to notify any new owner/operator of the dangerous waste regulations, chapter 173-303 WAC.

- The TSD facility owner/operator must inform any generator of dangerous waste who ships its waste to the TSD facility that the facility has the appropriate permits to receive the wastes.

Since most of the Hanford Site does not receive wastes from off-site, the required notices requirements generally do not apply to the Hanford facilities. The facility would be required to notify any new Hanford Site operator of the applicable dangerous waste regulations if, in the future, the site operations are assumed by someone other than WHC.

APPLICABILITY

The 4843 facility does not currently receive dangerous waste from off-site. No changes in owners/operators of the 4843 facility are expected. The 4843 facility does receive shipments from other areas on-site but WHC is the generator and operator, and the federal government is common owner of both the generation and waste management operations. Thus, the notification requirements do not apply to the 4843 facility.

GENERAL WASTE ANALYSIS
WAC 173-303-300

REGULATIONS AND REQUIREMENTS

Waste Analysis Requirements

The waste analysis requirements assures that the TSD facility has sufficient understanding of the dangerous wastes to properly treat, store, or dispose of them. The waste analysis requirements include the following:

- The owner/operator must obtain a detailed chemical, physical, and/or biological analysis of the wastes prior to its management. The analysis must provide the parameters necessary to assure that the material is properly handled. An understanding of the facility processes may be used as an alternative to testing if such knowledge is sufficient to meet the intent of the waste analysis requirements.

- The wastes must be reexamined if the wastes or the processes generating the wastes change.

- A written waste analysis plan is required which presents the specific parameters that the waste will be analyzed for, the rationale for selecting the parameters, sampling and test methods, and the frequency with which the initial waste analysis will reviewed or repeated. The plan must be maintained in the facility operating record.

- If wastes are received from off-site, procedures are required to ensure that the wastes received are as anticipated. (Since most of the Hanford Site does not receive wastes from off-site, this requirement is not applicable for most Hanford facilities.)

The waste analysis requirement is an important step toward effective and safe waste handling procedures. The waste analysis requirement is not

simply a record keeping system for analytical data. The facility operator must carefully examine the precise function and nature of the TSD operations to formulate a suitable wastes analysis program.

Waste analysis is necessary for a proper closure plan. An understanding of the wastes is necessary to determine effective methods to remove and/or treat the dangerous wastes and to decontaminate the facility. Similar requirements exist for post-closure and groundwater monitoring activities.

Content of the Waste Analyses Plan

Process Control and Monitoring The waste analysis plan must consider the wastes at all stages of the TSD processes where the wastes may differ from one stage to another. For example, a dangerous waste being treated in a tank should be analyzed before and after the treatment process. It should be analyzed prior to the process to ensure that the treatment is appropriate for the waste and does not result in a reactive or otherwise dangerous situation. The waste analysis should be accomplished after the treatment to ensure that the process is successful in effectively treating the waste.

The waste analysis plan must also identify tolerances that the wastes must meet in terms of specific parameters (i.e., measurable chemical or physical properties). The plan must show how the wastes are monitored to ensure that the specific tolerances are met. For example, consider a container that is received from the generator listing the contents as 25 pounds of radioactive sodium. The plan must describe in detail how this information is checked for accuracy. In order to observe ALARA considerations and not reopen sealed containers, it may be necessary for facility operating personnel to observe the packaging of the material at the generators location prior to shipment to the 4843 facility.

Material Compatibility The waste analysis must show the compatibility between the wastes and all materials that come in contact with the wastes. For example, the compatibility between the wastes and any packaging

materials, container materials, synthetic liner materials, secondary containment materials, etc. must be documented as a result of the waste analysis program.

Representative Sampling The waste analysis plan must note specifically how representative samples of the wastes will be obtained. Information that must be provided includes:

- Methods to ensure that the samples properly represent the range of the characteristics of the wastes;
- Sampling techniques; and
- Sampling equipment.

Quality Assurance and Quality Control The waste analysis plan must detail the quality assurance/quality control program that ensures that all of the waste analysis information is technically defensible and properly documented. The QA/QC program should address:

- The number of samples and sample blanks required for statistical completeness;
- Preparation, maintenance, and cleaning of containers and equipment;
- Certification of any laboratories used;
- Chain-of-custody procedures and proper sample handling;
- Laboratory testing methods approved by the EPA or state regulatory agency and justifications if non-approved methods are used;
- Health and safety protocols; and
- Proper methods of data compilation, review, and presentation.

APPLICABILITY

The 4843 facility has been identified as a TSD container storage facility in the Part A permit application. Thus, the facility must satisfy the waste analyses requirements.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the waste analysis plan and program at the 4843 facility was determined from facility personnel interviews and review of facility documentation.

The waste analysis program for the 4843 facility is not performed at the storage facility. Rather, the program relies on generator supplied information to ensure proper handling and management of wastes received at the facility. The waste analysis activities are performed by the generator and a review of those procedures is beyond the scope of this assessment. Protocol at the 4843 facility is to accept wastes for which adequate sampling, analysis, MSDS, or other relevant data have been supplied by the generator followed by a request to the generator to provide necessary and/or additional verification information in the event of missing data or a discrepancy in contents or packaging.

When the waste is received at the container storage facility, 4843 facility personnel review the waste information sheets provided by the generator to verify that the proper DOT shipping container is being used and to assess the hazard class and compatibility group to verify the waste is placed in the proper area pending shipment for treatment or disposal. Paper work accompanying each drum is compared to information on container labels to identify any discrepancies. In addition, internal manifest tracking begins with the attachment of an internal WHC drum label. Furthermore, radiation protection technologists (RPT) assess the radiation hazard associated with the container so that necessary dose precautions can be undertaken. Dose reduction measures may include additional shielding by surrounding the drum

with other containers, increased distance or spacing from facility personnel, or wrapping the drum until waste treatment or disposal activities are performed.

Verification analysis is not performed at the 4843 facility nor are the containers sampled or opened for visual inspection of the contents, unless a known discrepancy exists or if the container is leaking or otherwise damaged (in which case the material is repackaged). All incidents would be reviewed on a case by case basis by facility personnel, industrial safety and fire protection personnel, and generating facility personnel.

The 4843 facility operating procedure does not contain a waste analysis plan nor does it include specific detailed instructions for determining the existence or handling of incompatible wastes. Provisions are not included for periodic analysis or other forms of verification to ensure that waste parameters are being adequately identified on the basis of generator supplied data.

CONCLUSIONS AND RECOMMENDATIONS

- (Waste Analysis Plan) Develop a document that can be clearly identified as the 4843 facility waste analysis plan. Include in this a thorough description of the procedures and methods for obtaining information used to ensure safe management of wastes at the facility. Describe the generator supplied data, how these data are used to determine waste storage practices, and other relevant data not supplied by the generator but which are important to safe container storage (e.g., manufacturer's information on container materials).

- (Waste Analysis) Develop a formal program for periodically verifying generator supplied data and pertinent data obtained from other sources are accurate and provide sufficient information to safely manage the wastes received at the 4843 facility.

- (Waste Analysis Plan) Incorporate in the waste analysis plan a detailed description of the verification program recommended above.

SECURITY
WAC 173-303-310

REGULATIONS AND REQUIREMENTS

The Active Portion Must Be Secured

All TSD facilities must have sufficient security to prevent unknowing entry and to minimize unauthorized entry of people and/or animals to the active portions of the facility. The active portion of a facility is considered the dangerous waste management unit such as a specific tank, container area, or landfill unit within the facility. Transfer areas such as loading and unloading docks are also considered an active portion of the facility. The specific features required of the security system include:

- Signs around the active portions of the facility; and either
- A 24-hour surveillance system; or
- Artificial or natural barriers with controlled access.

Signs

The signs around the active portions of the facility are required to satisfy the following:

- The sign must clearly note the danger associated with the TSD unit and that unauthorized people are not allowed. At a minimum, the sign must read "Danger-Unauthorized Personnel Keep Out".
- The sign must be legible from a distance of at least 25 feet.
- A sufficient number of signs must be placed around the active portion of the facility so that a sign is visible from any approach.

- The sign must be in English as well as any other language predominant in the area around the TSD facility.

24-Hour Surveillance

A 24-hour surveillance system should immediately identify any attempted or inadvertent entry into the active portion of the facility. Continuously monitored closed circuit TV systems and 24-hour guard service are typical types of 24-hour surveillance systems.

Artificial or Natural Barriers

Artificial or natural barriers with controlled access points can also be provide security. Artificial barriers are considered to be items such as 6-foot or higher lockable fences with gates and building enclosures. Natural barriers are such items as rivers, lakes, and steep hillsides. Controlled access points are points where entry and exit to the facility is closely controlled such as lockable or continuously patrolled gates or doors.

APPLICABILITY

The 4843 facility has been identified as a container storage facility in the Part A permit application. Thus, the 4843 facility must satisfy the security requirements.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the security of the 4843 facility was determined through interviews of facility personnel and observation of the facility.

Access to the 4843 facility is controlled by the overall Hanford Site security. Doors to the 4843 facility are locked at all times except when

facility personnel are performing their work duties. The facility manager possesses the only key to the facility.

Signs noting the dangerous nature of the facility and warning unauthorized personnel to keep away are posted on each side of the building.

CONCLUSIONS AND RECOMMENDATIONS

- The security at the 4843 facility is adequate.

GENERAL INSPECTION
WAC 173-303-320

REGULATIONS AND REQUIREMENTS

Inspection Program

Facilities which treat, store, or dispose dangerous wastes must develop and implement a detailed inspection program. A written inspection plan must be developed and maintained in the facility operating records and must address both general and unit-specific inspection requirements. The general inspection requirements refer to inspection of the portions of the TSD facility other than the actual TSD container, tank, landfill, etc., units. Unit-specific inspection requirements are presented as part of the individual container, tank, landfill, etc., requirements.

The general facility inspection program must consider these items:

- Safety equipment such as emergency eye wash stations, protective shields, first aid equipment, and respirators;
- Emergency equipment such as spill control supplies, fire extinguishers, emergency lights, generators, and fire alarms;
- Monitoring equipment such as thermostats, fire detection equipment, level, pressure, and flow transducers;
- Security equipment such as fences, signs, lights, and locks;
- Communication equipment such as radios, intercoms, closed circuit TV systems, and public address systems;
- Other general facility items such as building floors, walls, roofs, elevators, ramps, and vehicles.

Detailed Inspection Plan

The inspection plan should note in great detail what specific items are to be inspected, when they are to be inspected, and what is to be checked for on each item. The level of detail required in an inspection plan is typically underestimated. It is not sufficient to simply "check the closed circuit TV system," as an example. Rather, each of the cameras should be checked for clarity, mobility, and focusing. Each receiving unit should be checked for cleanliness, picture quality, and picture adjustments. The inspection should reflect all elements which are necessary for the proper functioning of the item.

Inspection Records: Records of the inspections must be maintained. At a minimum, the logs must note:

- The date and time of the inspection;
- The printed name and signature of the inspector;
- Notations of the observations made; and
- The date and nature of any action required as a result of the inspection.

The inspection logs must be maintained in the facility operating records for at least three years.

Checklists Typically, checklists guide the inspection of particular items. The checklists should reflect the level of detail required of the inspections. The checklists should give specific guidance on what to check on each item, how to inspect it, and how to note any deficiencies. Commonly, the inspection checklists serve as the inspection log and include space to note any responses to problems observed during the inspection.

Frequency of Inspections The frequency of the inspections depends on the specific nature and function of the item being inspected. Equipment which continuously prevents dangerous wastes from spilling or leaking should be inspected daily. Equipment which is used only in the case of an emergency, likely needs to be inspected monthly. In general, the more a failure of a piece of equipment poses a threat to the environment or human health, and the more frequently the item is required to perform its function, the more often it should be inspected. Equipment which is inspected less often should be subjected to a more rigorous inspection.

Unit-Specific Inspections Unit-specific inspection requirements are presented in the container requirements section. Additional inspection requirements for ignitible or reactive dangerous wastes are discussed in the Other General Requirements section.

APPLICABILITY

The 4843 facility has been identified as a container storage facility in the Part A permit application. Thus, the 4843 facility must satisfy the general inspection requirements.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the general inspection practices of the 4843 facility was determined through interviews of facility personnel, review of facility documentation, and observation of the radiological hazard assessment by a RPT.

Inspection of the 4843 facility includes a weekly container inspection and monthly radiological survey. The weekly inspection focuses on safety and storage practices, condition and status of containers, and proper operation of facility equipment such as ventilation equipment. Further details will be evaluated in the **USE AND MANAGEMENT OF CONTAINERS** section of this report.

The monthly inspection assesses the radiological hazard associated with the storage of radioactive alkali metals in containers. The survey includes an internal facility assessment along with evaluating the dose along the external walls outside of the 4843 building. The radiological survey is performed by a RPT from the Operational Health Physics organization within Westinghouse Hanford. The survey results are documented each month in the Inventory, Safety, and Operations Log as the activity is performed.

CONCLUSIONS AND RECOMMENDATIONS

- (Inspection Plan) Amend the 4843 building procedures to include a comprehensive written inspection plan that specifies all items, areas of the facility, and equipment to be inspected. Detail problems that are to be looked for; and specify the frequency with which each item, area, and piece of equipment will be inspected.

- (Inspection Plan) Discuss in the inspection plan the role and responsibility of the Hanford Fire Department in appraising the fire protection devices at the 4843 facility.

- (Inspection Records) Develop a formalized system for recording and documenting the correction of deficiencies found during inspections, and keep this documentation in the facility operating record.

PERSONNEL TRAINING
WAC 173-303-330

REGULATIONS AND REQUIREMENTS

Training Program

All employees at a TSD facility who are directly associated with the management of dangerous waste must successfully complete a training program which ensures the facility's compliance with the dangerous waste regulations. The regulations define "facility personnel" as

> "All persons who work at, or oversee the operations of a hazardous waste facility, and whose actions or failure to act may result in noncompliance with the requirements (of the regulations)."

The training elements include:

- The proper methods of handling dangerous wastes in the facility;
- The proper response to emergencies and implementation of the contingency plan; and
- Instructors knowledgeable in proper dangerous waste management procedures relative to the specific facility.

New employees should undergo training within 6 months of employment and must be supervised by a trained person until training has been successfully completed. Annually, each employee must review the training program. The facility operating file must include a written training plan and records of each employees completion of the training.

Training Alternatives The regulations offer alternatives for specifically how the training requirements can be met. The training can be accomplished

through a formal course presented either in the facility or by instructors from outside the facility. Alternatively, the training can be accomplished by on-the-job training (OJT) instruction from facility supervisors. It is common for the facility supervisors to attend a course taught by instructors from outside the facility and then to return to the facility to instruct the remaining facility personnel.

The specific elements in the training course should be directed toward the specific wastes, units, and activities at the TSD facility. The training program should address how the types of wastes, units, and management activities relate to the following:

- The chemical characteristics and associated hazards of the dangerous wastes handled at the facility;

- Maintenance, inspection, and use of the facility emergency response and monitoring equipment;

- Proper implementation of the contingency plan including response to a leak, spill, fire, explosion, or groundwater contamination incident;

- Proper operation, inspection, and maintenance of waste feed cutoff systems;

- Proper operation, inspection, and maintenance of the facility communication equipment; and

- Shut down of operations.

For example, the training program should include instruction in how to verify if the building ventilation system is working properly and the procedure(s) for correcting the situation if it is not (e.g., notify the Operational Health Physics organization that a radioactive storage facility ventilation system is not working properly and then request personnel from facility maintenance to repair the unit).

Instructors The training instructor must have thorough knowledge of the dangerous waste regulations and how they relate to the specific nature of the facility and dangerous wastes handled at the facility. Given the ultimate responsibility of the training instructor, it is desirable if the instructor is specifically trained in the field of dangerous waste management. On-the-job training is best taught by the facility supervisor since that person is generally in the best position to judge whether an individual has displayed sufficient skills and knowledge to perform required tasks.

New Employees Each employee required to receive the training must do so within the first 6 months of employment at the facility. Until the training is received, the employee must work under the direct supervision of an individual that has received the training. Thereafter, each employee must complete an annual review of the training, at a minimum. If the facility or facility operations change or if the nature of the wastes handled at the facility change, the employees must be retrained.

Training Plan

A training plan documenting the training program must be prepared and included in the facility operating record. The plan should show in detail the specific training procedures and how the training requirements are met at the particular TSD facility. Specifically, the plan must include the following for each position related to the management of dangerous wastes at the TSD facility:

- Job title and description;
- Name of employee filling the position;
- Requisite skills, education, and experience;

- Detailed, written description of the type and amount of training required for the position including course outlines, handouts, exams, etc.; and

- Documentation showing that the required training, both initial training and annual reviews, has been received within the required time period.

Training Records

Records showing that the training requirements are being satisfied must be maintained in the facility operating records. The training plan should be maintained permanently in the files. Documentation regarding individual employee's completion of the required training must be maintained for at least three years after the employee's last day at the facility. The records should be detailed and complete and include the dates of each employee's training and the courses attended. They should allow an inspector to quickly determine that the facility is meeting the training requirements.

APPLICABILITY

The 4843 facility has been identified as a container storage facility in the Part A permit application. Thus, the 4843 facility must satisfy the personnel training requirements.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the training program of the 4843 facility was determined through interviews of facility personnel and review of facility documentation.

Each operator at the 4843 facility is required to complete courses in dangerous waste management practices, radiation safety, emergency response,

and basic operating procedures. In addition, the employee completes On-The-Job Training (OJT) which consists of learning each of the facilities operating procedures. The training program is completed within the first six months of employment at the facility with either semi annual or annual reviews thereafter.

CONCLUSIONS AND RECOMMENDATIONS

- (Training Plan) Consolidate a comprehensive written training plan into a single binder labeled "Dangerous Waste Training Plan." It should include all training information, course outlines, training schedules, job descriptions, and job requirements or qualifications. It should also include a written synopsis of the overall training program.

- (Training Plan) All 4843 facility operations or activities should have a written procedure on the proper method of performing the required duties. These procedures should be incorporated in the training plan and used during the course instruction and be available for reference during OJT.

- (Training Plan) Include in the training plan other 4843 facility personnel who, in the future, could be responsible for initiating emergency procedures at the facility (e.g., maintenance personnel or a RPT during a survey).

- (Training Plan) Describe in the training plan the procedures that will be followed for training new employees, including OJT and supervision of new employees until training has been completed.

PREPAREDNESS AND PREVENTION
WAC 173-303-340

REGULATIONS AND REQUIREMENTS

Preparedness and Prevention Requirements

Dangerous waste TSD facilities must be designed, constructed, maintained, and operated to minimize the possibility of a release of dangerous waste to the environment. Regulations directed toward satisfying this general requirement are presented in terms of four general requirements:

- Required equipment;
- Access to communication equipment and alarms;
- Aisle space; and
- Arrangements with local authorities.

Required Equipment

- An internal communication system;
- An external communication system, such as a telephone, capable of summoning emergency aid;
- Portable fire control equipment, fire extinguishers, spill control equipment, and decontamination equipment; and
- Water at sufficient pressure and volume to supply the water hoses, sprinkler systems, foaming equipment, etc..

Internal Communication The internal communication system must allow immediate notification to all employees of any emergency and to inform them of the proper evacuation. The system should also immediately notify emergency response personnel within the facility as to the location and nature of the emergency. Typical internal communication systems include alarms with varying tones, intercom systems, and public address systems. This equipment must be located so that personnel have immediate access, either directly or by visual contact with someone with immediate access, wherever dangerous wastes are being handled.

External Communication External communication systems are required to be able to immediately notify emergency response personnel from outside the facility. In particular, the system should notify the local police and fire departments or local or state response teams as to the location, nature, and extent of the emergency situation. Typically, external communication systems consist of a telephone which is able to call the emergency response personnel. The telephone should be available at the control room or a main office. If only one person is in the facility when it is operating, that person must have immediate access to the external communication system (i.e., a hand held radio phone if the individual is not stationed near a phone).

Fire and Spill Control Equipment The facility's fire control equipment should be based on the specific nature of the TSD activities occurring at the site and the associated potential fire hazards. If the wastes handled require a particular method of fire control (special foams, inert gas, dry chemicals, etc.), that type of equipment should be maintained at the facility. Similarly, the type of spill control equipment (e.g., pumps, vacuums, absorbants, etc.) at the facility should reflect the particular nature of the materials that could potentially spill. The equipment should be stored at the facility near the location where its use would be anticipated.

Water System The water system at the facility must provide adequate water pressure and volume to meet any emergency. The facility sprinkler system,

if present, should be designed for the anticipated water pressure and volumes.

Aisle Space

The TSD facility must maintain adequate aisle space within the facility to allow the movement of emergency equipment and personnel within the facility. Adequate space should be provided to inspect the units within the facility, move maintenance and emergency equipment to areas where it could be necessary, and allow evacuation of the facility.

Consultation with Emergency Aid Agencies

Local agencies that may respond to an emergency at the TSD facility should be consulted to exchange information and make arrangements between the TSD facility and the agencies. Such relationships should particularly be developed with the local police and fire departments, local hospitals, and state emergency response teams. Specific information that should be provided to the local police and fire departments and emergency response personnel include:

- Layout of the facility;
- The types, nature, amount, location, and hazards associated with the dangerous wastes handled at the facility;
- Areas in the facility where personnel are typically working;
- Entrances into the facility; and
- Evacuation routes.

Information for local hospitals include the types of dangerous wastes handled at the facility and the associated health dangers associated with

the wastes. The health dangers should include burns and the effects of inhalation, skin contact, ingestion, etc.

Where outside agencies decline to enter into such agreements with the TSD facility, their refusal should be documented and noted in the facility operating record.

APPLICABILITY

The 4843 facility has been identified as a container storage facility in the Part A permit application. Thus, the 4843 facility must satisfy the preparedness and prevention requirements.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the preparedness and prevention program of the 4843 facility was determined through interviews of facility personnel, review of facility documentation, and observation of the facility.

The 4843 building Emergency Preparedness Plan describes the site emergency contact organizations and telephone numbers, emergency signals and responses, evacuation routes, locations of hazardous materials, a building emergency organization list, emergency equipment, employee responsibilities, personnel accountability, and emergency checklists.

Based upon the size of the facility, internal communication is by word of mouth.

The facility has an external telephone system approximately 100 feet from the south entrance to 4843. Fire extinguishers are located throughout the building near the entrance/exit doors. There are no overhead fire sprinkler systems in the building since water and alkali metals react violently when combined. The Hanford Fire Department has a station house

within the 400 Area and is well trained in emergency response to alkali metal situations.

The waste containers are stored on pallets in designated areas depending on the waste being stored. There is a separate area for waste and product within the 4843 building. Currently, there is approximately 600 pounds (27 drums) of alkali waste stored in containers in the 4843 building, well below the estimated annual quantity of 185,000 pounds. The location and quantities are such that there is sufficient aisle space provided for the containers.

The Hanford Site has general agreements with local hospitals and police departments. These agreements are not specific to the individual facilities on the Hanford Site.

CONCLUSIONS AND RECOMMENDATIONS

- Based upon existing equipment available for inspection, and the contents of the available documentation, the preparedness and prevention at the 4843 facility is adequate.

CONTINGENCY PLAN
WAC 173-303-350

REGULATIONS AND REQUIREMENTS

Contingency Plan Requirements

Dangerous waste TSD facilities must develop procedures to effectively address emergencies. The procedures should lessen the impact on human health and the environment if fires, explosions, or releases of dangerous wastes to the environment occur. The emergency procedures to be followed in the TSD facility must be presented in a contingency plan. The contingency plan must include the following:

- A detailed description of the specific actions to be taken if specific emergencies occur;
- A description of the arrangements made with local agencies which might be required to respond in the event of an emergency;
- A current list of the emergency coordinator(s) including work and home phone numbers and address;
- A list of all emergency equipment and its location at the facility; and
- An evacuation plan for the facility personnel.

Content of the Contingency Plan

Detailed Responses to Emergencies The contingency plan must present detailed instructions to facility personnel on what specific actions to take in the event of specific emergencies. The nature of the TSD facility, its dangerous wastes management units, and the specific activities which

occur in each of the units as well as other portions of the facility need to be considered in postulating what potential emergencies could occur.

Once the potential emergencies are identified, detailed and specific responses to those emergencies must be developed and presented. The contingency plan should be written as instructions to the facility personnel for their use during an emergency. The plan should not be a generic, standard discussion of what to do in the case of an emergency. Simply stating that "If you observe a spill, clean it up" does not satisfy the requirements of a contingency plan. Examples of the level of unit/event specific instructions are required are as follows:

If you observe a fire in the 4843 building, take the following steps:

- Exit the 4843 building through the nearest exit away from the fire;
- Initiate the fire alarm next to the exit door as you leave the building and dial 811 on the external telephone to report the fire.
- Immediately relay the information on the location of the fire, the size of the fire, the probable source, and any other information or observations obtained prior to evacuating the building;
- Proceed to the appropriate staging area as instructed in the facility evacuation plan. All fire fighting activities in the building will be conducted and directed by the Hanford Fire Department;
- Remain at the staging area until otherwise directed by responsible emergency personnel.

Authority during Emergencies The plan must also include detailed discussions of who has what authority at what time. For example, the facility emergency coordinator could have the authority over a fire until the fire fighting crews arrive. Then the fire chief assumes prime responsibility.

Agreements with Local Authorities The contingency plan should document all of the arrangements and agreements that have been made with local agencies. These agreements would be those required by the preparedness and prevention requirements (WAC 173-303-340) and include local fire

departments, police departments, and local emergency response teams. The nature of the agreements should be provided so that roles and responsibilities in the event of specific types of emergencies can be determined. Copies of the contingency plans are required to be provided to the local agencies with which the facility has agreements.

List of Emergency Coordinators The list of emergency coordinators in the contingency plan must be complete and current. Since the plan will be used as an instruction manual in the event of an emergency, it must be clear from the plan who the emergency coordinator is and how to contact that person.

List of Emergency Equipment The contingency plan must include a list of all of the emergency equipment at the facility. This equipment is noted in the preparedness and prevention requirements (i.e., fire extinguishers, spill control equipment, communication systems, etc.). The plan should list all of the equipment available, its location within the facility, and a physical description of each item. The use(s) and capabilities of the equipment should also be provided. A plot plan is an excellent way to show the location of the emergency equipment. Again, the information should be presented in a manner which helps the facility and emergency personnel effectively respond to specific emergencies in the facility.

Evacuation Routes Emergency evacuation routes and procedures must be presented in detail in the contingency plan. Methods to communicate the proper routes under specific emergency situations should also be documented. For example, different types of alarms could signify which specific evacuation route is appropriate in particular emergencies.

Filing and Modifying the Contingency Plan

A copy of the contingency plan must be maintained in the facility operating record. It should be easily available to inspectors so that they can quickly determine if the facility plan satisfies the contingency plan requirements.

The contingency plan must be amended if it fails during an emergency, if applicable regulations change, if the facility or facility operations change, if the emergency coordinators change, or if the list of emergency equipment changes.

APPLICABILITY

The 4843 facility has been identified as a TSD storage facility in the Part A permit application. Thus, the 4843 facility must develop and maintain a written contingency plan on-site.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the 4843 facility contingency plan was determined through interviews with the facility personnel and review of facility documentation.

The 4843 facility does not have a contingency plan that contains all of the necessary emergency procedures for the container storage facility. There are several components of a contingency plan contained within the Emergency Preparedness Plan (EMP) discussed in the previous section however the EMP does not address all of the requirements of WAC-173-303-350.

The EMP discusses an evacuation plan for facility personnel in the event of a building evacuation type emergency. It also presents a list of emergency personnel with addresses and telephone numbers and alternates in the event the primary contact is unavailable. It is our understanding that it is against WHC policy (with concurrence from DOE-RL) that home phone numbers and addresses of facility personnel be openly published. WHC maintains facility specific emergency response personnel information at the Hanford Site emergency center. In the event of an emergency requiring the attention of an emergency coordinator, facility personnel are instructed to contact the center if immediate access to the coordinator is not

available. The EMP also describes the emergency response equipment available at the facility, however it does not itemize it in a list form with its location within the facility.

CONCLUSIONS AND RECOMMENDATIONS

- (Contingency Plan) WHC has, in the past, preferred to combine the emergency and contingency plans into a single document. If that option is exercised for the 4843 facility documentation, ensure that the content of the emergency contingency plan meets the requirements set forth in WAC 173-303-350 and 360.

- (Contingency Plan Content) Include detailed emergency responses specific to each emergency that could reasonably occur at the facility. This includes specific and detailed response activities that will be conducted by the Hanford Fire Department and/or other emergency responders that may be involved.

- (Contingency Plan Content) Include in the contingency plan documentation of arrangements with local authorities made in response to the preparedness and prevention requirements in WAC 173-303-340. Since these arrangements are currently described in the Hanford Site emergency plan (WHC-CM-4-1), make reference to the arrangements in the facility contingency plan and ensure a current copy of the site emergency plan is available at the facility.

- (Contingency Plan Content) Include in the contingency plan the emergency coordinator, a list of alternates, and the Hanford Site emergency center, with respective telephone numbers.

- (Contingency Plan Content) Include a list of all emergency equipment, the quantity available on-site, the capacity and capabilities of all emergency equipment, the location of emergency equipment at the facility, and a physical description of each item.

- (Contingency Plan Content) Although it is not specifically required in the regulations, include a list of emergency equipment available at the Hanford Fire Department. The list could be included as an appendix item in the facility contingency plan, or referenced as supplemental information and included in the site emergency plan.

- (Contingency Plan Content) Include a detailed evacuation plan that describes the requirements for its use, evacuation signals, routes, and alternative routes.

EMERGENCIES
WAC 173-303-360

REGULATIONS AND REQUIREMENTS

Emergency Requirements

Dangerous waste TSD facilities must satisfy specific requirements in the an emergency at the facility. These requirements are directed toward minimizing any hazards to human health or the environment resulting from the emergency. Although the contingency plan is to provide facility-specific instructions in the event of specific types of emergencies, the general emergency requirements present particular responses that are required of all facilities during all emergencies.

The Emergency Coordinator

The emergency coordinator identified in the contingency plan must have the authority to commit the necessary resources to respond to an emergency. Thus, the coordinator is typically one of the senior individuals within the facility. The emergency coordinator should be familiar with the dangerous waste management activities at the facility including the following:

- The facility contingency plan;
- The location and properties of all dangerous wastes handled at the facility;
- The location of all records within the facility; and
- The layout of the facility.

Either the emergency coordinator, or an alternate coordinator who meets the above requirements and who reports to the emergency coordinator, must be

on-site or else available on call at all times. Specific procedures should be documented regarding how an alternate coordinator remains in contact with the primary coordinator when the primary coordinator is off-site.

The regulations note specific requirements that the emergency coordinator and owner/operator must satisfy in the event of an emergency. The emergency coordinator, in addition to any other activity required by the facility contingency plan, must immediately:

- Activate alarms and communication systems and notify state and local response teams if their help is necessary;
- Identify the nature and extent of any release, fire, or explosion;
- Assess any potential hazards to human health or the environment resulting from the emergency;
- Report any potential threat to the area outside the facility to the appropriate local authorities and help determine if the area needs to be evacuated;
- Take all reasonable measures to stop any releases, fires, or explosions, and ensure that they do not re-occur or spread;
- Properly treat, store, or dispose of any wastes recovered from spills or releases generated during the emergency; and
- Clean, repair, or replace any emergency equipment used or damaged by the emergency and ensure that it is in good working order before resuming operations.

Notification and Reports

The owner/operator must notify the regulatory agencies that the facility equipment has been properly cleaned, repaired, or replaced before resuming

operations. The owner/operator must also prepare a written report which includes the following:

- Name, address, and phone number of the facility and the owner/operator;
- Date, time, and type of emergency;
- The types and quantities of materials involved in the emergency;
- The extent of any injuries;
- An assessment of any hazards to human health or the environment due to the emergency;
- The amount and disposition of any material recovered from releases during the emergency; and
- Cause of the emergency and corrective actions taken to prevent reoccurrence of a similar incident.

The report must be submitted within 15 days of the emergency.

APPLICABILITY

The 4843 facility has been identified as a TSD storage facility in the Part A permit application. Thus, the 4843 is required to comply with the emergency requirements set forth in WAC 173-303-360.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the emergency procedures and responsibilities at the 4843 facility was determined through interviews with the facility personnel and review of facility documentation.

The Hanford Fire Department (400 Area) is the primary emergency responder at the 4843 facility. These individuals have a high level of training toward responding to emergencies. Documentation of response actions is lacking in some area as discussed in the **CONTINGENCY PLAN** and **EMERGENCY** sections of this assessment.

CONCLUSIONS AND RECOMMENDATIONS

- (Emergency Coordinator) Ensure that the emergency coordinator and all alternate emergency coordinators are intimately familiar with the contents of the facility contingency plan, location and properties of all wastes managed, and the location of all records pertinent to the management of wastes at the 4843 facility.

MANIFEST SYSTEM
WAC 173-303-370

REGULATIONS AND REQUIREMENTS

Dangerous waste facilities that receive waste from off-site are required to adhere to specific manifest practices. These manifest practices include signing procedures, recordkeeping, methods to handle discrepancies, and reasons and methods to refuse a shipment.

The Hanford Site rarely receives shipments of dangerous wastes from off-site. Thus, the manifest requirements are not typically applicable to the assessment of Hanford Site facilities. If, however, shipments of dangerous wastes are received from off-site for treatment or disposal, manifest requirements would apply and the facility personnel must:

- Sign and date each copy of the manifest;
- Note any discrepancy within the manifest information or between the manifest information and the shipment;
- Provide the transporter a signed copy of the manifest;
- Return a signed copy of the manifest to the generator; and
- Retain a signed copy of the manifest in the facility operating file.

If a discrepancy is noted in the manifest, it must be immediately reconciled and clarified with the generator and/or transporter. A written report to regulatory agency explaining the discrepancy is required if the conflict is not resolved within 15 days.

APPLICABILITY

Based upon an opinion by WHC, Office of Senior Counsel, the Federal government owns and controls Stevens Drive from and past the 300 Area. As such, it is not a public highway and is considered on-site transportation. Therefore, transportation to the 4843 facility, from Hanford facilities, is considered on-site and not subject to federal and state shipping regulations.

The 4843 facility does not receive dangerous waste from off-site. Thus, the manifest requirements in WAC 173-303-370 do not apply to 4843 facility.

FACILITY RECORDKEEPING
WAC 173-303-380

REGULATIONS AND REQUIREMENTS

Facility Recordkeeping Requirements

Dangerous waste TSD facilities must maintain complete and accurate records of all dangerous waste management activities that have occurred at the site. The record system should document all dangerous waste activities and allow easy reconstruction of past dangerous waste management practices. Particularly, the records should be such that an inspector from a regulatory agency can quickly determine whether the facility is operating in compliance with the dangerous waste regulations.

Required Records

Specific items that should be included in the facility records as a minimum are:

- Records of the amount and nature of dangerous wastes treated, stored, or disposed at the facility including dates, source, final disposition, methods, etc.;

- Records of where (what units within the facility) specific wastes have been, or are, treated, stored, or disposed;

- Waste analysis results including laboratory test results, waste designation narratives, and any petitions regarding waste designation that have been submitted;

- Contingency plan, emergency reports, and records associated with past emergency situations at the facility;

- Inspection logs and records of follow up actions as well as results from inspections by outside inspectors;

- Groundwater monitoring data and testing results; and

- Closure and post-closure plans and cost estimates.

Waste Identification

Records which document the nature of the wastes and their management must describe the waste by its common name and by its dangerous waste number. The TSD management method codes must also be provided. For example, a waste reactive solid stored in a container would be referred to as S01 (management code for storage in a container) of a D003 (reactive) waste.

Records Location and Access

The facility dangerous waste records should be maintained in a single location separate from the general facility records so that they can be easily found and reviewed. Although it is not required by the regulations, it is recommended that a duplicate of the dangerous waste records be maintained in a separate location in case the originals are destroyed. The records must be retained at least until closure of the facility.

The records should be maintained under the control of a select few individuals within the facility. Unauthorized personnel should not be allowed access to the dangerous waste records. The records must be available for inspection upon request by the regulatory agencies.

APPLICABILITY

The 4843 facility has been identified as a TSD container storage unit in the Part A permit application. Thus, the 4843 facility must satisfy the facility recordkeeping requirements.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the recordkeeping practices at the 4843 facility was determined through interviews with the facility personnel and review of facility documentation.

Facility operating records are maintained at both the 4843 facility and at the 340 building. The records include an inventory of the waste currently stored at the facility, inspection logs, and elements of the contingency plan. The files include training records for the facility personnel.

CONCLUSIONS AND RECOMMENDATIONS

- (Record Location and Access) Maintain a copy of all operating records at the 340 building. Although it is not required by the regulations, maintain a duplicate set at the 4843 facility.

FACILITY REPORTING
WAC 173-303-390

REGULATIONS AND REQUIREMENTS

Reporting Requirements

The owner/operator of a dangerous waste management facility must submit reports on various activities at the facility. In particular the following reports are required:

- Reports documenting unmanifested dangerous waste shipments;
- Annual reports; and
- Other additional reports.

Unmanifested Shipments

Facilities must report dangerous waste shipments received from off-site without an accompanying manifest. Since the Hanford Site rarely receives dangerous waste from off-site, the Hanford Site facilities do not typically have cause to submit this type of report.

Annual Reports

By March 1 of each year, dangerous waste TSD facilities must submit annual reports which document the dangerous waste activities at the facility for the previous calendar year. A particular form, Form 5, available from the regulatory agency, is to be used to develop the annual report. Specific information relevant to the Hanford Site facilities that is required on the form includes:

- The EPA/state identification number, name, and address of the facility;

- The amount and nature of all dangerous wastes treated, stored, or disposed at the facility using the dangerous waste numbers;

- The methods of treatment, storage, or disposal used at the facility using the dangerous waste handling codes; and

- The most recent closure and post-closure cost estimates.

The Hanford Site submits a single annual report for the entire site. The report includes the TSD activities at each of the individual facilities. The individual facilities submit their annual information to the preparers of the overall Hanford Site annual report.

Other Reports

Other reports which may be required of the TSD facilities include reports documenting emergency situations as required in the emergency regulations and any other report that the regulatory agencies require on a case-by-case basis.

APPLICABILITY

The 4843 facility has been identified as a TSD container storage unit in the Part A permit application. Thus, the 4843 facility must satisfy the facility reporting requirements. The facility does not receive waste from off-site and, thus, reports of non-manifested shipments are not applicable to the 4843 facility.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the facility reporting practices at the 4843 facility was determined through interviews with the facility personnel and review of page 60 of the 1987 Hanford Site Annual Mixed Waste TSD Report.

CONCLUSIONS AND RECOMMENDATIONS

- The 4843 facility reporting practices are adequate.

OTHER GENERAL REQUIREMENTS
WAC 173-303-395

REGULATIONS AND REQUIREMENTS

General requirements that apply to dangerous waste TSD facilities include:

- Precautions for ignitable, reactive, or incompatible wastes;
- Labeling for tanks and containers;
- Relationships with other environmental laws and regulations;
- Loading and unloading areas; and
- Storage time limits for impoundments and piles.

Ignitible and Reactive Wastes

The special requirements that pertain to ignitible or reactive wastes apply to wastes which are designated as such by the dangerous waste designation procedures. Specifically, any wastes meeting the characteristics described in WAC 173-303-090(5) or -090(7) are subject to these requirements. The special requirements applicable to ignitible or reactive wastes are:

- Ignitible or reactive wastes must be separated from sources of ignition such as open flames, sparks, heat, etc.;
- "No Smoking" signs must be placed wherever ignitible or reactive wastes are being handled; and
- The facility must be inspected annually by a person knowledgeable in the Uniform Fire Code.

In general ignitible, reactive, or incompatible wastes and materials must be handled in a manner that does not:

- Generate extreme heat, pressure, fire, explosion, or violent reactions;
- Produce uncontrolled gases or dusts that are toxic, flammable, explosive, or otherwise threaten human health or the environment; or
- Damage the structural integrity of the facility or unit containing dangerous waste.

Satisfying the ignitible, reactive, or incompatible waste general requirements typically includes the facility accomplishing the following:

- Identification of any ignitible, reactive, or incompatible wastes handled within the facility;
- Identification of potential scenarios and methods that may result in incompatible wastes being combined;
- Identification of sources of ignition or reaction within the facility;
- An analyses of handling methods and units storing ignitible, reactive, or incompatible wastes relative to the above items; and
- An analyses of treatment methods and units used to render the waste nonignitible, unreactive, or compatible.

Identification of Ignitible, Reactive, or Incompatible Wastes The identification of any ignitible, reactive, or incompatible wastes should be made an integral part of the waste analysis plan. The plan should consider the nature of the wastes at intermediary steps in any treatment processes to determine the ignitibility, reactivity, or incompatibility. All materials which come into contact with the wastes should be considered to

determine any potential for incompatibility between the wastes and the materials.

The dangerous waste activities and processes should be reviewed to identify ways that incompatible wastes may inadvertently be allowed to mix. These include containers that are supposedly empty but contain incompatible residue and improperly decontaminating tools and equipment.

Sources of Ignition Sources of ignition may consist of other than open flames and heat. Equipment and tools used around ignitible or reactive wastes should be constructed of non-sparking materials. Ignitible wastes should be segregated from wastes which generate significant amounts of heat when exposed to common materials such as water or air. Sources of static electricity should be avoided, and tanks and containers should be grounded.

Annual Fire Inspection The purpose of the annual fire inspection is to confirm that the facility is designed and operated in conformance with the Uniform Fire Code. The regulations require that facilities that handle ignitible wastes be designed, constructed, and operated in general accordance with the Uniform Fire Code. The annual inspection must be performed by a professional person who is knowledgeable of the code. The local fire marshall or a facility engineer with a background in fire codes typically satisfy this criteria. The inspection should also include checking for practices which present potential for causing fires or explosions.

Container Labels

Containers must be marked with a label which notes the contents and the major risks associated with the wastes. Specific requirements are provided in the technological standards for each of the specific types of units.

Other Requirements

Other general requirements note how the dangerous waste regulations relate to other environmental laws. Other laws include those pertaining to the Clean Water Act, Toxic Substances Control Act, and Clean Air Act. Particular requirements for loading and unloading areas and storage time limits for impoundments and piles are also presented.

APPLICABILITY

The 4843 facility has been identified as a TSD container storage unit in the Part A permit application. Thus, the 4843 facility must satisfy the other general requirements for dangerous waste management facilities.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the facility relative to the other general requirements was determined through interviews with the facility personnel, review of facility documentation, and observation of the 4843 facility.

The 4843 facility is inspected at least annually in the presence of a fire department representative.

The containers are marked with a label which notes the contents for the container and the major risks associated with the wastes.

The loading/unloading area within the facility will adequately contain any spills or leaks which may occur.

CONCLUSIONS AND RECOMMENDATIONS

- (Annual Fire Inspection) Place a copy of the most recent fire inspection log with the other records in the facility operating file.

- Based on a review of the facility documentation and facility tour, the 4843 facility complies with these general requirements.

SITING STANDARDS
WAC 173-303-420

REGULATIONS AND REQUIREMENTS

Dangerous waste TSD facilities must meet specific standards regarding the physical location of the facility. The siting standards generally address minimum distances that TSD facilities must be from surface waters, public facilities, drinking water supplies, and other sensitive features. Facilities may not be located in earthquake sensitive areas or a floodplain.

The specific siting standards are currently being significantly revised and rewritten. The final form of the siting standards can not, at this time, be anticipated. Thus, it is not possible to assess facilities relative to the dangerous waste facility siting criteria.

APPLICABILITY

The 4843 facility has been identified as a TSD container storage unit in the Part A permit application. Thus, the 4843 facility may be subject to future siting requirements.

PERFORMANCE STANDARDS
WAC 173-303-430

REGULATIONS AND REQUIREMENTS

The general performance standards allow for the regulatory agencies to apply, on a case-by-case basis, standards that are more stringent than those specifically presented in the regulations. The general performance standards require that dangerous waste TSD facilities must be designed, constructed, and maintained in a manner that prevents degradation of human health or the environment. Specific areas of environmental damage noted in the regulations include:

- Groundwater and surface water quality;
- Air quality;
- Slope and soil instability;
- Flora and fauna;
- Aesthetics of public or adjoining lands; and
- Excessive noise.

The general performance standards also require that the facility treat or recycle waste material as much as economically feasible.

In essence, the general performance standards allow the regulatory agency to control the operations at a TSD facility even if no specific regulation (other than the general performance standards) is being violated. By citing the general performance standards and identifying a "threat to human health or the environment," the agency can undertake enforcement action to correct the source of the threat. Thus, the general performance standards

require that, above all else, the owner/operator identify facility-specific practices that, although may not fail any specific TSD requirement, could present a threat to human health or the environment.

APPLICABILITY

The 4843 facility has been identified as a TSD container storage unit in the Part A permit application. Thus, the 4843 facility must satisfy the general performance standards for dangerous waste management facilities.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the facility relative to the other general requirements was determined through interviews with the facility personnel, review of facility documentation, and observation of the 4843 facility.

No evidence of improper current practices that pose a threat to the environment or human health were observed. No recent releases of dangerous waste to the environment were noted by the facility personnel.

CONCLUSIONS AND RECOMMENDATIONS

- The 4843 facility is designed and is currently being operated in accordance with the general performance standards.

BUFFER MONITORING ZONES
WAC 173-303-440

REGULATIONS AND REQUIREMENTS

Ignitible or Reactive Wastes

Dangerous waste TSD facilities that handle ignitible or reactive wastes are required to maintain specific minimum distances between the TSD units and public ways, streets, and property lines. In particular, facilities treating or storing ignitible wastes in tanks must meet buffer zones specified by the National Fire Protection Association Code. The specific reference for the NFPA requirements is discussed in the guidance for tanks.

Explosive Wastes

The regulations also present buffer zone requirements for dangerous wastes that are explosive. Treatment or storage of these wastes must be provided buffer zones equivalent to the Uniform Fire Code's American Table of Distances for Storage of Explosives, Table 77-201, 1979 edition.

New Land-Based Units

The buffer zone requirements also present minimum distances that new land-based TSD units are required to meet. The minimum distance is based on the travel time of the wastes from the active portion of the facility to the nearest downgradient well or surface water used for drinking water. The travel times must be longer than 3 years for DW wastes and 10 years for EHW wastes. These buffer zone requirements will likely be changed be the new siting standards currently being developed.

APPLICABILITY

The 4843 facility has been identified as a TSD container storage unit in the Part A permit application. Thus, the 4843 facility must satisfy the buffer monitoring zone requirements.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the facility buffer zones was determined through interviews with the facility personnel and observation of the 4843 facility.

The 4843 facility is located in the 400 Area on the Hanford Site. The facility is located within 1/2 mile of a street which is a public right of way. The nearest property lines are several miles away and the facility is several miles from the Columbia River.

The 4843 facility does not store ignitible material in tanks, nor is it a new facility. The facility may store dangerous wastes that exhibit applicable characteristics of reactivity (unstable) for which the UFC's explosives table could impose setback requirements. However, the nearest property of concern from the UFC's Table No. 77-201 would be the public highway, at a distance of approximately 1/2 mile from the 4843 facility.

CONCLUSIONS AND RECOMMENDATIONS

- The 4843 facility buffer zones are adequate.

CLOSURE
40 CFR 265 SUBPART G

REGULATIONS AND REQUIREMENTS

Closure Requirements

When dangerous waste TSD facilities are shutdown or taken out of service, they must be properly "closed". Closures of TSD facilities are usually aimed at cleaning up all hazardous wastes at the facility and restoring facility to an uncontaminated condition. When it is not possible to remove all dangerous wastes (referred to as "clean closure"), the owner/operator must undertake post-closure care of the facility site.

Performance Standard The regulations set forth a closure performance standard that applies to all facilities. This performance standard requires the owner/operator to close the facility in a manner that:

- Minimizes the need for further maintenance;
- Controls, minimizes, or eliminates releases of dangerous wastes after closure to protect public health and the environment; and
- Complies with the specific closure requirements for individual waste management units (e.g., containers, tanks) set forth elsewhere in the regulations.

For listed and characteristic dangerous waste, clean closure must be to background environmental levels. For other types of dangerous wastes, the contamination must be removed to a certain level depending on the contamination and other factors.

The general intent behind the performance standard is to ensure, to the maximum extent possible when a facility is closed, that it will pose no or

minimal risk to people and the environment after closure. Clean closure is considered by the regulatory agencies to be the best way to achieve this standard. Even when clean closure is not possible, the same general principle of no or minimal risk will usually guide the agencies' reviews and comments on a facility's closure activities. The focus in these cases will be on minimizing risk to people and the environment, and on setting up the post-closure care program such that the facility will continue to pose no or minimal risk during and after the post-closure care period.

Notifications The owner/operator must notify Ecology and EPA in writing at least 60 days before the date closure of a land disposal unit (surface impoundment, waste pile, land treatment, or landfill unit) is expected to begin. Forty-five days notice is required for all other closures.

Once a unit or facility has managed the last volume of hazardous waste, the owner/operator will have 90 days to treat, remove, or dispose on-site all hazardous wastes in accordance with the closure plan, and 180 days to complete the remaining closure activities specified in the closure plan. Longer time periods for disposition of hazardous wastes and completion of all other closure activities can be allowed if Ecology and EPA approve them. Within 60 days after closure is completed for a land disposal unit or for an entire facility, the owner/operator must submit a written Certification of Closure to Ecology and EPA.

Closure Plan Requirements

The device for accomplishing the closure requirements and performance standard is the closure plan. The owner/operator must prepare a written closure plan and submit it to Ecology and EPA as part of the facility Part B permit application.

Closure plans are typically very detailed. A plan must address partial closure of units at the facility during its active life (e.g., completion and closure of one cell at a landfill) as well as final closure efforts for the entire facility. The closure plan must take into account all of the

different types of waste management units and activities associated with those units when discussing the efforts that will be conducted to close. In addition, certain units (e.g., surface impoundments and tanks without secondary containment) must have contingency plans in the event that intended clean closure cannot be performed.

The closure plan must describe, in detail, the steps necessary to achieve full closure at any point during the facility's active life. This will usually result in the closure plan assuming a worst case scenario, where full closure might have to be conducted with the maximum amount of hazardous waste present on-site, and when the greatest level of waste management activities is occurring.

The closure plan must include at least the following information:

- A description of how each management unit at the facility will be closed to achieve the closure performance standard;

- A description of how final closure of the facility will be conducted to achieve the closure performance standard;

- An identification of the maximum extent of operations that will be ongoing at any given time during the facility's active life (worst case closure scenario);

- An estimate of the maximum inventory (both types and volumes) of hazardous waste that will ever be on-site during the facility's active life (worst case closure scenario);

- Descriptions of the methods for remediating the facility during partial and final closure, including at least:

    - Removal, transport, storage (temporary and/or permanent), treatment, and disposal (off-site and on-site, where applicable) of hazardous wastes;

- Identification of the type(s) of off-site waste receiving facilities, where applicable;

- Steps needed to remove or decontaminate hazardous materials (wastes, constituents and residues) such as containment systems, equipment, structures and soil that may be contaminated;

- Sampling and analysis that will be used to determine the extent of decontamination needed to meet the closure performance standard; and

- Other activities that may be needed to satisfy the closure performance standard, such as groundwater monitoring, leachate collection and run-on/run-off control; and

o A schedule for closure of each management unit (partial closure) and for final closure, including at least the total time needed to close each unit and for intervening activities so that closure progress can be tracked.

When preparing the closure plan contents described above, the owner/operator must account for, in detail, the activities that will actually need to be conducted to close the facility. Closure can be broken down into the following general activities:

Material Removal
- Sampling
- Analysis
- Remediation
- Facility Reclamation

Materials Staging and Disposition
- Containment
- Preparation for Disposal
- Transport
- Ensuring TSD Receipt

Closure Certification
- Records
- Reports

Specific discussions and guidance for each of these areas are provided in the following paragraphs.

Material Removal are all efforts oriented specifically to removing all hazardous wastes, waste constituents, and residues from the facility which are not intended to be left behind after closure. This must include decontamination measures, efforts to demonstrate clean closure, (except for landfill portions of the facility) and final condition of the facility upon closure.

Sampling activities must be directed to proving to Ecology and EPA that no hazardous materials (wastes, constituents, and residues) will remain after closure except those that are intended to be left in place.

Analysis represents all of the different tests that will be performed to demonstrate that hazardous materials are not left after closure, or to show that only those materials intended to remain in place are actually present after closure. It must also include chain of custody and QA/QC procedures.

Remediation provides a description of the efforts that will be undertaken to actually remove hazardous materials from the facility and remediate those areas where hazardous materials are not intended to remain. It will specify where and when analysis to check for clean closure will be performed. It will also specify worker, equipment, and other decontamination procedures that will be followed.

Facility Reclamation should address all of the efforts that will be undertaken to return the facility to the appearance and uses of surrounding areas. For landfills, this will particularly address areas such as final covers and revegetation.

Materials Staging and Disposition should address all activities associated with containing and preparing, for final disposition, the wastes generated during closure. The methods of transport, likely disposal practices, estimated volumes of hazardous materials to be disposed of, and disposal verification should be addressed.

Containment should describe how the various forms of containment (e.g., container, tank) will be provided for different types of hazardous materials (including contaminated equipment) while closure is conducted. Hazardous waste containment procedures will likely need to be followed unless the wastes are shown to not be hazardous.

Preparation for Disposal will likely involve arranging for a disposal facility to receive the hazardous materials generated during closure. On-site disposal may be an option for landfills. If this is to be done, then the disposal methods should be accounted for.

Transport should provide a discussion of how off-site transport and disposal will actually be accomplished for materials that will be shipped off-site.

Ensuring TSD Receipt is primarily a matter of checking the hazardous waste manifests (or other documents if only on-site transport is involved) to confirm that the receiving TSD facility has accepted the hazardous materials.

Closure Certification will address those final activities necessary to document and demonstrate that the closure plan was followed and that the closure performance standard has been satisfied.

Records should be sufficient to technically support the certification of closure that must be submitted to the regulatory agencies.

Reports will essentially be all written communication with Ecology and EPA necessary to certify that closure has been performed in accordance with the

approved closure plan and that the closure performance standard has been met.

The owner/operator must maintain the closure plan to ensure that it is current and accounts for the anticipated closure activities. The owner/operator must submit a request for modification of the permit to amend the closure plan when the facility operations change and change the closure procedures or the closure schedule changes.

Post-Closure Requirements

A dangerous waste TSD facility generally must comply with the post-closure requirements if hazardous waste remain at that facility after closure at levels in excess of the clean closure criteria. Post-closure is essentially a period of time (typically 30 years) after closure during which certain caretaking activities must occur. The regulations are directed primarily toward land disposal units such as landfills where the dangerous wastes are anticipated to remain after the facility is shutdown. However, certain surface impoundments, tanks, and waste piles also need to have contingent post-closure care even though it may be the intent to remove all wastes at closure.

Intent of Post-Closure The general intent of the post-closure care period is to allow for the detection of failures in the waste containment system after the facility has been closed. Such failures could be indicated by, for example, excessive cap settling, groundwater contamination, or increasing leachate in the collection system. During the post-closure care period, the owner/operator must ensure that the facility's post-closure monitoring and maintenance activities are performed in a manner that will allow for detection of failures (and incipient failures) in the land disposal unit(s). Post-closure use of the property must not disturb the integrity of the waste containment system (e.g., liners, caps) or the monitoring systems.

Notification Requirements When a land disposal unit or facility is closed, two notices must be given. The first required notice is a notice, including a survey plat, to the local land authority, and to Ecology and EPA. The second required notice is a notice in the deed to the property. The basic purpose of these notices is to ensure that the presence of hazardous wastes at the site is identified to future users and purchasers of the property, and to prevent potential disturbance of the disposal units by future activities at the site.

Post-Closure Plan Requirements

The primary device for ensuring that the closed land disposal units are not disturbed, that monitoring is continued, and that maintenance of the closed unit(s) is timely and appropriate is the post-closure plan. The post-closure plan must be submitted to Ecology and EPA as part of the facility's permit application and, upon approval, becomes a condition of the permit. The plan must describe in detail the activities that will be conducted during the post-closure care period, and must address the specific post-closure requirements for each type of unit (e.g., waste pile, landfill).

For each disposal unit at a facility, the post-closure plan must identify the activities (and frequency of those activities) that will be conducted after closure of the unit. The plan's contents must include at least:

- Descriptions of the planned groundwater monitoring activities and frequencies;

- Descriptions of the planned maintenance activities and frequencies to ensure:

  - Integrity of the containment structures (e.g., cap);

  - Function of the facility monitoring equipment; and

- The name, address, and phone number of the person or office to contact regarding the unit or facility during the post-closure care period.

The post-closure plan must be followed until the end of the post-closure care period. At the end of post-closure care for each disposal unit, the owner/operator must submit to Ecology and EPA a certification that post-closure care was performed in accordance with the post-closure plan.

When preparing the post-closure plan for a unit or facility, the owner/operator should consider all of the activities that are likely to be necessary to actually provide post-closure care for the unit or facility. The following activities should be considered and, as appropriate, addressed in the plan.

Monitoring and Inspection
- Leachate
- Groundwater
- Containment System Integrity

Maintenance and Corrective Measures
- Containment Systems
- Monitoring Systems

The following paragraphs provide brief discussions of the types of considerations to include when addressing these activities in the post-closure plan.

Monitoring and Inspection should identify all activities necessary to detect escape of hazardous wastes, constituents, or residues into the environment, and to detect any breakdown in the integrity of the containment systems or the monitoring systems. Containment systems include liners, caps, covers, and in the case of land treatment units, the treatment zone itself.

Leachate may be generated during the post-closure care period. The leachate collection system should be inspected for excessive leachate generation, failure of the leachate removal system, or other related problems that could indicate loss of hazardous materials (wastes, constituents, or residues) to the environment.

Groundwater monitoring must be conducted during post-closure. The post-closure plan should be in compliance with the state and federal groundwater monitoring regulations. Inspection of the monitoring wells and locations should be conducted to ensure that they are maintained in good condition.

Containment System Integrity should be monitored and inspected to detect failures when they occur, and to identify signs of incipient failure so that preventive efforts can be undertaken prior to failure. Signs of potential failure to look for include: excessive settling of the cap; excessive erosion or loss of vegetation; damage to the cap from burrowing animals or plants; and, for land treatment, unexpected changes in the treatment zone.

Maintenance and Corrective Measures should specify the actions that will be taken in the event that the containment systems fail or may be failing, that the monitoring systems are not operating correctly, or that monitoring indicates potential escape of hazardous materials to the environment.

Containment Systems should be corrected if signs of failure or incipient failure occur, and should be maintained to prevent failure from becoming a potential problem. For example, maintenance and corrective measure for the containment systems might include: maintaining the vegetative cover; maintaining any security systems in place; replacing soils lost through erosion; and even digging up an entire cell to replace the liner system.

Monitoring Systems should be corrected if problems occur that compromise their operation, and maintenance and corrective measures should be planned for in the event that the monitoring systems indicate release of hazardous

materials to the environment. For example, consideration should be given to what actions will be taken if: the leachate detection system fails; or, the ground water monitoring system detects hazardous constituents.

APPLICABILITY

The 4843 facility has been identified as a TSD container storage unit in the Part A permit application. Thus, the 4843 facility must develop and maintain a detailed closure plan to ensure proper closure when the unit is taken out of service.

INFORMATION REVIEWED AND CURRENT STATUS

At this time there is no closure plan for the 4843 facility.

CONCLUSIONS AND RECOMMENDATIONS

- (Closure Plan) Prepare a detailed closure plan for the 4843 facility taking into account all applicable closure requirements. The level of detail required must be such that closure could commence in accordance with the closure plan at any time without the need for further planning or modifications to the plan.

- (Post-Closure) Post-closure care of the 4843 facility is not required at this time because "clean closure" is anticipated and the unit is not a land facility. The closure plan must address, in detail, how "clean closure" will be achieved. If this can not be done to the satisfactions of the regulatory agencies a contingent post-closure plan will likely be required.

FINANCIAL REQUIREMENTS
40 CFR 265 SUBPART H

REGULATIONS AND REQUIREMENTS

Dangerous waste TSD facility owners/operators must demonstrate that they have sufficient financial assets to ensure that the facility can be properly closed and, if necessary, and properly maintained during post-closure. The documentation required can include certificates of insurance, proof of self insurance, or sufficient liquid financial assets. In addition, owners/operators must have insurance for their facilities to cover accidents, releases, and other incidents.

The regulations specifically exclude federally owned facilities from the financial requirements. It has been assumed that governmental agencies have sufficient financial ability to properly close their TSD facilities, pay for post-closure care where necessary, and cover costs arising from unexpected incidents. Since the Hanford Site is a federally owned facility, it is exempt from the TSD financial requirements.

CONCLUSIONS AND RECOMMENDATIONS

- Although not a requirement of the regulations, development of a closure cost estimate is recommended to facilitate federal budget acquisition prior to closure. In addition, current state regulations require operators at federal facilities to comply with the financial requirements under final status.

USE AND MANAGEMENT OF CONTAINERS
40 CFR 265 SUBPART I

REGULATIONS AND REQUIREMENTS

Containers and container areas that are used to store or treat dangerous wastes must satisfy certain minimum standards. Containers are defined as portable devices in which dangerous wastes are treated or stored. Thus, items such as tank trucks and tank trailers, as well as typical drums, are considered containers. The regulations apply to both containers and container areas.

The requirements for containers and container areas include standards for:

- Container integrity;
- Compatibility between the container and the waste(s);
- Handling or management of the containers;
- Inspection of the containers and container area;
- Management of ignitible, reactive, or incompatible wastes in containers;
- Labeling of the containers; and
- Secondary containment.

Container Integrity

Containers used to handle dangerous wastes must be in good condition. The container should not be damaged structurally and should be relatively free of corrosion. Other types of distress that must be prevented include dents, pitting, punctures, and separation of seams. Containers that

experience these kinds of distress, leak, or are otherwise unable to contain the wastes safely, must be emptied of dangerous wastes and not used until sufficiently repaired.

Waste/Container Material Compatibility

Wastes handled in the containers must be compatible with the container. Contact between the container and the wastes can not result in excessive heat, fire, explosion, or any other reaction that will damage the container. Similarly, the wastes must be compatible with the materials of construction of the container area itself. For example, if a particular waste generates toxic gases when it comes into contact with concrete, the floor of the container area should not be constructed of concrete.

The waste analyses plan demonstrates that the container/waste compatibility requirements are satisfied. It should show that the wastes, the container materials, and the container area materials are compatible. The facility operating procedures should include what particular type of containers should be used for each type of dangerous waste generated at the facility.

Management of Containers

Containers handling dangerous wastes must be managed to prevent damage to the container and prohibit release of the waste from the container. Specifically, the regulations require that containers be kept closed at all times except when waste is being added or removed. The lids of the containers should be secured so that if the container were to tip, wastes would not spill. Other practices which are consistent with these requirements include:

- Place drums vertically rather than horizontally so that the drum is more stable and not able to roll;

- Elevate containers off of the floor so that liquids will not accumulate around the base of the container;

- Stack drums no greater than 2 high to reduce the potential for the drums to become unstable and fall; and

- Protect container storage areas from damage by objects such as fork-lift trucks by using barriers or fences.

Inspections

Containers and container areas must be inspected at least weekly for leaks, spills, corrosion, or container distress. The inspection program should include inspection checklists which give detailed, complete guidance to the inspector regarding what specific items are to be inspected and what they are to be inspected for. The checklists should also consider the specific area to be inspected. For example, an inspection checklist for a container area where drums are stacked on pallets should include checking for rot in the wood pallets which may result in failure of the pallet and falling of the container.

The inspection checklists must be maintained in the operating file. The inspection logs, checklists, and other records should be of sufficient detail to allow an inspector to quickly determine that the facility is satisfying the container and container area inspection requirements.

Ignitible, Reactive, or Incompatible Wastes

Containers that handle ignitible or reactive wastes must be managed in accordance with special requirements for such types of wastes. The regulations specifically require that containers holding ignitible or reactive wastes be placed at least 50 feet from the facility property line. The wastes must also be handled in a manner that prevents the ignitible or reactive wastes from igniting or reacting. This includes keeping the containers away from open flames or other sources of heat.

Incompatible wastes are not to be mixed together in a container. Dangerous wastes are not to be placed in a container that once held an incompatible

waste unless the container is washed or unless the wastes placed in the container will not generate uncontrolled reactions, fumes, heat, etc. In addition, containers which contain incompatible wastes must be stored in areas that are separated by a dike, berm, or other device that prevents the mixing of the incompatible wastes.

In general, the storage or treatment of ignitible, reactive, or incompatible wastes in containers must adhere to the requirements of WAC 173-303-395, Other General Requirements.

Labeling

The Washington State addenda to interim status container requirements include specific requirements for labeling of containers handling dangerous waste. The containers must be marked with a label which notes the contents of the container and the risks associated with the wastes.

Secondary Containment

The Washington State dangerous waste regulations present secondary containment requirements for interim status container areas. These requirements are considered addenda to the federal Subpart I requirements.

Container areas that were constructed or installed prior to September 30, 1986 are required to have secondary containment. Furthermore, existing container areas that the regulatory agency believes present a potential threat to public health or to the environment can be required to have secondary containment by the agency. A history of releases from the containers or repeated nonconformance with the container regulations are typical justifications for the agency to require secondary containment for existing container areas.

Secondary containment for container areas typically consists of an impervious floor with impervious curbs. The materials used to construct the containment area must be compatible with the wastes handled in the

containers. Secondary containment areas must be protected from run-off. In other words, rainfall, snow melt, or other water must be prevented from flowing in to the containment area. Similarly, the containment must have sufficient volume to contain the rainfall from a 25-year, 24-hour storm without allowing the precipitation to flow out of the containment area.

Liquids accumulated in the containment area must be removed in a timely manner. If accumulated precipitation is drained out of the containment area, the draining should occur only after the accumulated liquid is determined to be non-dangerous. The drainage valve should be maintained in a locked position and only opened to drain non-dangerous liquid.

APPLICABILITY

The 4843 facility has been identified as a TSD container storage unit in the Part A permit application. Thus, the 4843 facility must satisfy the container and container storage area standards. Furthermore, the dangerous wastes stored at the facility are reactive and thus, the facility must satisfy the container requirements for reactive wastes.

INFORMATION REVIEWED AND CURRENT STATUS

The current status of the 4843 facility container storage area was determined through interviews with the facility personnel and observation of the containers and container areas.

Containerized dangerous waste is stored inside the 4843 building within a radiation zone along one side of the building. The containers stored in the facility include 5-, 30-, and 55-gallon metal drums. The containers are anticipated to be compatible with the waste.

The floor is sealed concrete designed and constructed to minimize cracking. The walls are fiberglass insulated metal siding. The containers

are stored on pallets within the radiation zone and can be moved or positioned dependent on the radiation dose emanating from the waste material. If stacking is necessary, the containers are stacked no more than two high.

The 4843 facility is inspected weekly for proper ventilation, signs of leaks or spills, and locked doors. The containment structure and emergency equipment are inspected at least monthly for evidence of distress and proper working condition. Inspection checklists are used and the completed logs are maintained in the facility operating records and in the operators office building. The facility is inspected at least annually by the fire department.

The containers are marked with a label which notes the contents of the containers and the associated major risks.

Since the facility was in operation prior to September 30, 1986, secondary containment in not required under interim status. Secondary containment is provided by the concrete floor and curbs.

CONCLUSIONS AND RECOMMENDATIONS

- The management of containers at the 4843 facility satisfy the container requirements.