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Document Number: WHC-SD-WM-TR-024, REV 1

Document Title: B Plant Complex Waste Management Training Plan

Release Date: 10/21/94

* * * * *

This document was reviewed following the
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WHC Information Release Administration Specialist:

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October 21, 1994

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7. Abstract

This training program is designed to comply with all applicable federal, state and U. S. Department of Energy-Richland Operations Office training requirements. The training program complies with requirements contained within WAC 173-303-330 for the development of a written dangerous waste training program. The training program is designed to prepare personnel to manage and maintain waste treatment, storage and disposal (TSD) units, as well as generator units, in a safe, effective, efficient and environmentally sound manner. In addition to preparing employees to manage and maintain TSD and generator units under normal conditions, the training program ensures that employees are prepared to respond in a prompt and effective manner should an emergency occur. The training plan also identifies specific individuals holding key waste management positions at B Plant Complex.

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18

WHC-SD-WM-TR-024, Revision 1

B PLANT COMPLEX WASTE MANAGEMENT
TRAINING PLAN

B Plant Complex Technical Training
&
B Plant Environmental Engineering

October 1994

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EXECUTIVE SUMMARY

This summary outlines the training program developed and implemented for B Plant Complex. The training program is designed to comply with all applicable federal, state and U.S. Department of Energy-Richland Operations Office training requirements. The training program complies with requirements contained within WAC-173-303-330 for the development of a written dangerous waste training program. The training program is designed to prepare personnel to manage and maintain waste treatment, storage and disposal (TSD) units, as well as generator units, in a safe, effective, efficient and environmentally sound manner. In addition to preparing employees to manage and maintain TSD and generator units under normal conditions, the training program ensures that employees are prepared to respond in a prompt and effective manner should an emergency occur.

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1.0 RCRA TRAINING PROGRAM DESCRIPTION

This chapter describes the Resource Conservation and Recovery Act of 1976 (RCRA) training program implemented at B Plant Complex. Terms used in this chapter include Hanford Facility personnel, visitors, and subcontractors. Hanford Facility personnel include employees of the U.S. Department of Energy, Richland Operations Office (DOE-RL), and employees of the Hanford Facility major contractors (i.e. Westinghouse Hanford Company, ICF Kaiser Hanford, Pacific Northwest Laboratories, Bechtel Hanford Company).

1.1 TRAINING PROGRAM DIRECTOR

The B Plant Complex Director has overall responsibility for all training. However, no one individual is designated as training director. The position is shared among B Plant Complex training and support organizations. B Plant Complex can utilize training resources and experts from many different areas on hazardous material, dangerous waste management, and safety rather than rely on the knowledge of a few individuals. This shared responsibility ensures the identification of appropriate training requirements and that the training program meets all applicable dangerous waste management requirements. General responsibilities for training are discussed in the following sections.

1.1.1 B Plant Complex Responsibilities

B Plant Complex has the following responsibilities related to training:

- Determine training requirements and training compliance for all Hanford Facility personnel, subcontractors, and visitors who obtain access to or work within B Plant Complex.
- Request and/or conduct training at B Plant Complex.
- Submit training completion records to the Training Records Information (TRI) system.
- Identify training requirements to contractors working in or around B Plant Complex.

1.1.2 B Plant Complex Training Group Responsibilities

The B Plant Complex Training Group has the following responsibilities:

- Conduct informal job analysis and identify training commensurate with personnel duties and responsibilities.
- Design and develop training programs.
- Develop and instruct training courses.

- Operate and maintain on-the-job training requirements.
- Track refresher requirements and maintain current training status for B Plant Complex personnel.
- Maintain the TRI system.
- Process training completion records received into the TRI system.

1.1.3 RCRA Field Services Group Responsibilities

The RCRA Field Services group has the following responsibilities:

- Consult with training group and B Plant Complex in the development and re-evaluation of current training programs.
- Assist B Plant Complex management in determining training requirements and RCRA compliance for personnel.
- Maintain current knowledge of RCRA training requirements pertaining to Hanford Facility personnel.

1.1.4 ICF Kaiser Hanford (ICF KH) Company Responsibilities

ICF KH, whose personnel are classified as Hanford Facility personnel, has the following responsibilities:

- Ensure ICF KH employees are trained to meet B Plant Complex training requirements.
- Maintain ICF KH employee training records and provide them if requested by B Plant Complex.

1.2 TRAINING FREQUENCY

New employee training is completed within the first 6 months of assignment to B Plant Complex or to a new position within B Plant Complex, whichever is later. After completing introductory training, employees are required to receive annual refresher training for RCRA-related courses to meet continuing training requirements, unless otherwise justified. When annual refresher training is not warranted, the justification will be provided in the corresponding course description. Refresher training for non-RCRA courses can occur either annually or bi-annually. Untrained employees are not allowed to work at B Plant Complex without supervision by a trained employee. B Plant Complex management is responsible for ensuring that all B Plant Complex employees are trained and that certifications are maintained. To help inform B Plant Complex operations when training will expire, a tickler file is available to indicate when training is within 90 days of expiration.

1.3 TRAINING RECORDS

1.3.1 Location of Training Records

Training records, as described in WAC 173-303-330, consist of documentation showing training has been completed. Hanford Facility training records include both electronic data storage and hard copies. The electronic data storage information is the training record initially presented to demonstrate that B Plant Complex personnel have been trained. After a course is completed, the electronic data storage record is created on the TRI system. The electronic data storage record will contain the course number, course title, date of attendance, and any refresher dates.

Hard copies of training records are sent to the training records organization for entry onto the TRI system. Original hard copy records are transferred quarterly to the Records Holding Facility in Richland, Washington. After approximately one year, the original hard copy training records are archived at the Federal Records Center in Kent, Washington. Electronic data storage and hard copy training records on former employees are kept for at least 3 years from the date the employee last worked at B Plant Complex.

1.3.2 Access of Training Records

When a training record is requested during an inspection, an electronic data storage record will initially be provided. If the electronic data record does not satisfy the inspection concern, a hard copy training record will be provided. Training records on former employees may not be available for normal users and may require a representative from the training records group to access the TRI system for this information.

1.3.3 Determining Current Training Status

After an electronic data storage training record is obtained, it will be compared to information in this plan. This plan can be used to determine the RCRA training status of all Hanford Facility personnel, visitors and subcontractors. The electronic data storage training record, coupled with this training plan, will allow any inspector to quickly determine the training status of personnel in the field. To accomplish this, the correct training must be assigned after properly categorizing personnel into a variety of program areas.

2.0 ASSIGNING CORRECT RCRA TRAINING

2.1 EMPLOYEE CATEGORIES, JOB POSITIONS AND DESCRIPTIONS

Five basic worker categories are defined for compliance with the Hanford Facility dangerous waste training requirements. Personnel duties and responsibilities may overlap between categories. When overlaps occur, personnel will complete appropriate training pertaining to each category. The determining factor for placing specific personnel within any of the worker categories is the corresponding job duty. The five worker categories are as follows:

- All Employees
- General Worker
- Advanced General Worker
- General Manager
- General Shipper

The duties corresponding to these categories can be divided between B Plant Complex generator and TSD operations. The level of training is determined by the duties associated with each worker category. The descriptions of job duties for each category are general in nature; however, they do provide adequate specifics that can be matched to individual job titles or job positions commonly employed at the Hanford Facility. A general description of the duties associated with each worker category is contained in Table 2.1.

B Plant Complex personnel are assigned a job title (from the salaried nonexempt or bargaining unit classifications) or position (from the exempt classifications). The job or position descriptions include applicable requisite skills, work experience, education, other qualifications, and a brief list of duties and/or responsibilities for each job title or position. Information regarding work experience, education, and other qualifications required for each position is maintained on the Hanford Facility. In general, all personnel require a high school diploma or General Educational Development (GED) certificate. Personnel filling exempt management or engineering positions may require a college degree with 2 or more years of industry experience. Many prerequisites exist for these positions. In some cases, a college degree may be waived as a prerequisite requirement. An equivalent combination of education and experience also may be acceptable. Additional information on specific prerequisites can be provided upon request or can be found in Appendix A of this plan.

The following sections provide, within the appropriate worker category, job titles and brief position descriptions of Hanford Facility personnel, visitors, and subcontractors associated with dangerous waste management at B Plant Complex. Subcontractors and visitors requiring access to work or tour B Plant Complex must complete the appropriate level of training determined by B Plant Complex management according to their job duties. Most visitors and

subcontractors will be trained as if they were in the All Employee or General Worker categories, respectively.

Table 2.1 RCRA Training Worker Categories

Worker Categories	Generator Job Duties	B Plant Complex TSD Unit Job Duties
All Employees	Is not categorized as a General Worker, Advanced General Worker, General Manager, or General Shipper.	Duties are the same as for generator.
General Worker	Generates dangerous waste and places waste into appropriate containers. Waste management activities are overseen by person-in-charge or other B Plant Complex personnel. Contingency plan duties are to immediately evacuate incident area and report incident to appropriate personnel. Duties and responsibilities would not exceed those stated above.	B Plant Complex unit-specific duties might include repair, replacement, calibration, modification, or any other similar activity on B Plant Complex systems. Work performed is either supervised by individuals with in-depth knowledge of systems and components or is adequately addressed through organized pre-job briefing before commencing work. Contingency plan duties are to evacuate B Plant Complex during emergencies and notify appropriate personnel.
Advanced General Worker	Duties include the generation and management of dangerous waste. Selects, packages, and prepares containers of dangerous waste for movement including proper marking and labeling of containers. Performs inspections of waste accumulation areas. Samples containers of dangerous waste and prepares samples for delivery to a laboratory. Contingency plan duties include responding to small spills in accordance with procedures within plans.	B Plant Complex unit-specific duties include the control, operation, manipulation, sampling, transfer, or monitoring of dangerous waste within tank or waste process systems. Other duties include annunciator response and other off normal operational responses to maintain B Plant Complex within operational parameters. Escorts or directs General Workers in activities within B Plant Complex. Contingency plan duties include implementation of emergency procedures and small spill responses.
General Manager	Someone who can act as the Building Emergency Director or Environmental Compliance Officer, or directs Advanced General Workers in accumulation of dangerous waste. Responsible for the accountability and directing of employees during dangerous waste emergency events. Must be trained to the same level as managed employees.	Duties are the same as for generator.
General Shipper	Duties include the preparation and shipment of dangerous waste containers in compliance with applicable requirements. Directs General and Advanced General workers in dangerous waste management and/or transportation activities. Authorized individual for signing offsite waste manifests.	Duties are the same as for generator.

Personnel who have completed training offsite are required to provide a certificate or other suitable training course evidence that meets the requirements of WAC 173-303 and this section. B Plant Complex management, or a delegated representative, must verify the acceptability of offsite training as commensurate with the employee's anticipated job assignment and the minimum training requirements referenced in this section.

2.1.1 All Employees

Hanford Facility personnel included in this category are not categorized into one of the other four worker categories. Personnel in the All Employees category will have no duties or responsibilities associated with the management of dangerous waste in accumulation containers, or with the critical systems at B Plant Complex. Most of the personnel categorized as All Employees will be administrative personnel and visitors, subcontractors, or support organizations who tour or provide oversight at B Plant Complex. Although visitors and subcontractors are not defined as Hanford Facility personnel, they are still trained to a level equivalent to the All Employees category.

2.1.2 General Worker

Hanford Facility personnel or subcontractors with waste management duties limited to the generation of waste and placing that waste into a pre-approved container are classified as General Workers. In addition, these personnel could be working on the critical system(s) at B Plant Complex conducting maintenance or modification. Employees classified as General Workers will not assume responsibilities that involve the inspection, advanced marking, or movement of accumulation containers. Personnel who function as General Workers may include, but are not limited to, the following:

- Maintenance personnel
- Health physics technicians
- Supervisors of ICF KH general workers
- Contractor crafts
- Truck drivers
- Operators

2.1.3 Advanced General Worker

Hanford Facility personnel are categorized as Advanced General Workers if their job duties exceed that of General Workers. These personnel manage dangerous waste, including the inspection, advance marking, and/or movement of containers. These personnel can also be involved in the operation of B Plant Complex's critical system(s). These personnel typically have responsibility to act and/or notify B Plant Complex management when an incident occurs which requires immediate response, such as a spilled container or process upset. B Plant Complex Operators who qualify as Advanced General Workers may have the following responsibilities:

- Perform B Plant Complex waste handling activities in accordance with current operating procedures.
- Perform waste sampling as required by procedure.
- Conduct routine inspections of the less than 90 day storage pad and satellite accumulation areas (SAA).

- Assist truck drivers in loading and unloading waste at B Plant Complex.
- Ensure that trucks transporting dangerous waste are properly placarded.
- Respond to dangerous waste leaks or spills.
- Ensure that the waste has been properly secured in the transportation vehicle.

2.1.4 General Manager

Various types of management are included in this category. In addition, engineers assigned to B Plant Complex can be classified as General Managers if their involvement in waste management warrants such a classification. Other than the difference in titles, managers and engineers at B Plant Complex have many similar responsibilities and are required to take the same courses. The following managers are included within this category: (1) personnel who act as the Emergency Director and/or alternate(s), (2) the Environmental Compliance Officer for B Plant Complex, and (3) managers of Advanced General Workers (i.e., operations managers). Engineers can be classified as General Managers if their responsibilities affect the critical system(s) of B Plant Complex.

2.1.4.1 B Plant Complex Emergency Director/Alternate(s)

Responsibilities of the B Plant Complex Emergency Director/Alternate(s) include the following:

- Function as the Emergency Director as defined in WAC 173-303-360.
- Determine if a RCRA contingency plan has been implemented during the course of an incident or process upset.
- Ensure all reports to the Washington State Department of Ecology have been made after an incident or process upset has occurred.
- Become thoroughly familiar with B Plant Complex contingency plans, operations, activities, location and properties of all wastes handled, location of all records for B Plant Complex, and the B Plant Complex layout.

2.1.4.2 B Plant Complex Environmental Compliance Officer

Responsibilities of the B Plant Complex Environmental Compliance Officer include the following:

- Provide support to B Plant Complex management to ensure compliance with the applicable environmental compliance

requirements as identified in this plan, environmental permits, the *Hanford Federal Facility Agreement and Consent Order* (Ecology et al. 1994), and other applicable documents.

- Ensure that B Plant Complex management is aware of the facility's environmental compliance status and the facility's environmental compliance activities.
- Understand and be able to explain B Plant Complex's environmental compliance status with all applicable environmental requirements.
- Advise B Plant Complex management of new environmental requirements and policies, the associated impacts, and recommended implementation mechanisms to ensure compliance.

2.1.4.3 B Plant Complex Operations Management

Responsibilities of B Plant Complex Operations Management include the following:

- Maintain control over B Plant Complex operations in accordance with established operating procedures and policies, DOE Orders, and federal and state regulations.
- Direct, control, and coordinate the receipt, storage, transfer, and reprocessing of dangerous waste.
- Ensure compliance with B Plant Complex operating limits and specifications.
- Ensure that pre-job safety and planning meetings are conducted, as applicable, with Hanford Facility personnel, visitors, and subcontractors involved with B Plant Complex operations.
- Ensure that regulatory records are maintained.
- Understand B Plant Complex operating procedures.
- Respond to and provide remedial guidance and decisions for operational anomalies, off-normal conditions, and equipment malfunctions.
- Respond to off-normal and/or emergency conditions according to established procedures.
- Coordinate the recovery from, measurement of, and re-establishment of control of unplanned releases to the environment and other emergency conditions.

- Notify the Emergency Director of any unplanned releases to the environment.

2.1.4.4 B Plant Complex Engineers

Responsibilities of B Plant Complex Engineers (may include cognizant, systems, test, and/or maintenance engineers) include the following:

- Ensure that emergency and monitoring equipment, process equipment, procedures, designs, etc., comply with DOE orders, federal and state regulations, national standards, and applicable engineering procedures and management standards.
- Issue and maintain, or provide oversight and review of, operating documentation, operating procedures, flowsheets, sample schedules, specifications, process test plans and procedures, operational safety requirements, and other documents necessary to operate B Plant Complex.
- Perform routine and comprehensive evaluations of B Plant processes to ensure compliance with process control requirements, procedure compliance, equipment performance, assessing problem areas and implementing timely corrective actions.
- Prepare, issue, and review operating procedures.
- Maintain instrument and equipment flow diagrams.
- Prepare design criteria and perform and approve design analysis.
- Prepare and approve equipment and material specifications for new design.
- Prepare and approve engineering design documents and drawings that are in compliance with applicable policies, procedures, and instructions in accordance with recognized national standards and codes.
- Provide input to environmental permit applications.
- Develop procedures for inspecting and replacing emergency and monitoring equipment.
- Ensure compliance with requirements, applicable policies, programs, regulations, and DOE Orders for personnel safety, environmental compliance, and public safety reasons.

- Review and revise maintenance procedures and work plans, and ensure that procedures are current and accurate.
- Provide technical direction for hazardous material and dangerous waste spill responses.
- Respond to off-normal and/or emergency conditions according to established procedures.

2.1.5 General Shipper

General Shippers prepare and sign documentation for the shipment of dangerous waste. B Plant Complex involves both on-site shipments and off-site shipments as defined by WAC 173-303-040. General Shippers who sign Uniform Hazardous Waste Manifests for off-site shipments are included within this chapter.

Waste is sent off-site from B Plant Complex by B Plant Complex operators who are categorized as Advanced General Workers. The B Plant Complex operators will not be categorized as General Shippers.

2.2 TRAINING PROGRAM AND STRUCTURE

The Hanford Facility training program was developed using a graded approach to training after reviewing DOE orders and federal and state regulations. Tasks performed by personnel in selected job positions were identified and evaluated to determine training requirements. In addition, training needs are evaluated continually in relation to current DOE orders and federal and state regulations. This training plan will be updated at least annually and the list of employees in Appendix C will be updated quarterly.

2.2.1 Relevance of Training to Job Positions

After assigning Hanford Facility personnel, visitors, and subcontractors into a worker category, the training program must ensure that those individuals receive training commensurate with their duties and responsibilities. Some of these duties are general in nature and can be taught in a course for all personnel within a worker category on the Hanford Facility. Other considerations are specific to B Plant Complex and do not apply to other treatment, storage, and disposal (TSD) units managed on the Hanford Facility. The training program is therefore designed to address concerns on a general perspective and a unit/building perspective.

2.2.2 Training Program Descriptions and Courses

The Hanford Facility training program is divided into five program areas. These program areas are described in Table 2.2 as orientation, awareness, advanced, administration, and unit/job specifics. The orientation, awareness, and advanced program areas are further divided into general training and unit/building specific training categories.

Table 2.2 Hanford Facility Training Program Area Descriptions

Program	Descriptions
Waste Management Orientation	Training at this level involves a basic introduction to dangerous waste management and contacts involving dangerous waste. Correct response to emergencies involving releases of materials to the environment is addressed. Training also includes a discussion of the Hanford Facility Contingency Plan (DOE-RL-93-75) and other applicable conditions.
Unit/Bldg Orientation	This level of training provides unit/building specific information on the hazards in the immediate and surrounding work environments. This training will ensure personnel are informed about potential emergency at a unit/building to which access is desired.
Waste Management Awareness	The training at this level is commensurate with the duties of generating dangerous waste and placing the waste into pre-approved containers. The training provides an overview of requirements pertaining to satellite accumulation areas. Additionally, the training covers contingency plan requirements and worker response to small spills, materials release reporting, and notifications. General safe practices for handling and storing dangerous waste/materials are addressed.
Unit/Bldg Awareness	This level of training encompasses the job-specific or building-specific requirements that supplement the information provided in waste management awareness. The training provides personnel with proper waste handling and emergency procedures relevant to their responsibilities during normal operations and emergencies.
Waste Management Advanced	The training at this level is for personnel required to properly select, package, and prepare for the movement of dangerous waste containers. General advanced training is provided only for container management. Training for other RCRA units such as tank systems, surface impoundments, landfills, etc., must be covered through the unit/building specific portion of the advanced program. This is the most comprehensive container waste management training provided to personnel and covers the necessary information regarding documentation, reporting, record keeping, and other information pertaining to the generation of dangerous waste and movement of the waste to a TSD unit.
Unit/Bldg Advanced	This level of training provides specific information required to operate, control, and manage processes and dangerous waste management operations. Considerations for this program involve container management as well as all other RCRA units. This program can be deferred to the unit/job specific program area if operator/supervisor certification programs must be administered at the TSD unit. Personnel who monitor and inspect tank systems receive training in this program area for operations, maintenance, and response to non-routine conditions.
Waste Management Administration	Training at this level is for general shippers and those who must resolve problems and issues related to dangerous waste management. This training covers aspects of waste minimization, waste management, and record keeping for the Hanford Facility.
Unit/Job Specific	The training at this level is designed to provide additional generator B Plant Complex unit/building specific information for personnel to ensure the safe and efficient operation and maintenance of B Plant Complex processes and operations. Not all training within this program will be RCRA related. Some operator/supervisor certification programs are not based on dangerous waste management. In these cases, the training plan will identify which portions of this program will be included within the RCRA training program.

2.2.2.1 Waste Management Orientation

All Hanford Facility personnel are required to complete Waste Management Orientation training. In general, the Waste Management Orientation program includes training to emergency responses, identifying contacts for personnel to obtain dangerous waste management information, and pollution prevention concepts. Visitors and subcontractors also will receive appropriate training in the Waste Management Orientation program area for the locations such personnel will be at and the activities that will be undertaken. The concepts must be covered generally as they

pertain to the Hanford Facility as well as on a unit/building basis to inform personnel of the hazards in their immediate and surrounding environments. When unit/building specific training requirements are waived, personnel must be escorted by qualified B Plant Complex personnel. In these cases, it is the escort's responsibility to explain and announce the hazards in their immediate and surrounding environments. The following courses address training concerns within Waste Management Orientation:

Hanford Facility personnel

- New Hire Orientation (NHO)
Retraining: Hanford General Employee Training (HGET)
- B Plant Complex unit/building specific orientation (this requirement is waived when non-B Plant Complex personnel are escorted by qualified B Plant Complex personnel)
Retraining: HGET

Visitors

- Visitor/Vendor Training
Retraining: none
- Escorted by qualified B Plant Complex personnel (see sections 3.1 and 3.2 for cases when B Plant Complex unit/building specific orientation may be required)
Retraining: none

Subcontractors

- NHO or Visitor/Vendor Training
Retraining: HGET or none
- B Plant Complex unit/building specific orientation or escorted by qualified B Plant Complex personnel
Retraining: HGET or none:

2.2.2.2 Waste Management Awareness

In addition to Waste Management Orientation, General Workers, Advanced General Workers, General Managers and General Shippers must complete Waste Management Awareness training. Subcontractors could also fall within this program description because many subcontractors are categorized as General Workers. Training at this level is commensurate with the duties of performing maintenance or construction activities where a dangerous or mixed waste is generated. Unit/building specific training also is provided in the awareness program area. The training courses that are provided for this program include the following:

Hanford Facility personnel

- Generator Hazards Safety Training
Retraining: Provided through the non-RCRA Occupational Safety and Health Administration (OSHA) training in section 4.0.
- B Plant Complex unit/building specific Building Emergency Plan training (training may be provided through B Plant Complex unit/building specific orientation)
Retraining: same

Visitors

- B Plant Complex unit/building specific emergency response training (see sections 3.1 and 3.2 for cases when B Plant Complex unit/building specific orientation may be required)
Retraining: none

Subcontractors

- Generator Hazards Safety Training
Retraining: Provided through the non-RCRA OSHA training in section 4.0
- B Plant Complex unit/building specific Building Emergency Plan training if not escorted by qualified B Plant Complex personnel (training may be provided through B Plant Complex unit/building specific orientation)
Retraining: same

2.2.2.3 Waste Management Advanced

Waste Management Advanced training must be completed by Advanced General Workers, General Managers and General Shippers. General Managers complete training in the environmental regulations and/or environmental compliance course. Advanced General Workers and General Shippers complete training associated with containerized waste management. B Plant Complex personnel subject to this training program perform activities associated with container management, treatment, and disposal of dangerous or mixed waste. Courses intended for this program area include the following:

- Core Waste Management Training
Retraining: Core Waste Management Refresher
- Building Emergency Director Training
Retraining: Building Emergency Director Refresher

- Environmental Regulations at Hanford
Retraining: Environmental Regulations and Compliance
Refresher
- Environmental Compliance at Hanford
Retraining: Environmental Regulations and Compliance
Refresher
- Unit/building specific training (see Section 2.2.2.5).

Visitors and subcontractors will not require training under the Waste Management Advanced program as their duties and responsibilities will not involve this program area.

2.2.2.4 Waste Management Administration

Waste Management Administration training is targeted for General Shippers and personnel who must resolve problems and issues related to waste management. This program area covers administrative aspects of pollution prevention, waste management and record keeping. Courses in this program area include the following:

- Hazardous Waste Shipment Certification
Refresher: same
- Waste Management Administrative
Retraining: Waste Management Refresher
- Waste Designation Support
Retraining: same
- Facility Waste Sampling and Analysis
Retraining: N/A, one-time course

2.2.2.5 Unit/Job Specific Training

To ensure that Hanford Facility personnel receive appropriate training in B Plant Complex operations, B Plant Complex operators and operations managers/supervisors complete specific courses in preparation for work assignments. Certifications for job-specific work assignments have been developed in accordance with DOE Order 5480.20. The training at this level is designed to provide additional information to ensure the safe and efficient operation and maintenance of B Plant Complex processes and operations. Additionally, the training provides more detailed information for the response to emergencies and off normal events that could occur within B Plant Complex.

Certification is required for personnel working in selected job positions (operations managers/supervisors and nuclear operators). To become certified, personnel must successfully complete classroom training, self-study, and on-the-job training as applicable. Classroom

instruction and/or self-study is designed to provide personnel with the knowledge required to work safely at B Plant Complex.

The on-the-job training requires affected B Plant Complex employees to gain experience with the operating procedures. All work involving hazardous materials and dangerous waste management is performed according to approved operating procedures; therefore, an understanding of procedures is crucial to ensure the proper and safe operation of B Plant Complex's critical system(s). Personnel learn the procedures by performing, simulating, and/or describing a particular task as specified by the appropriate operating procedure. Personnel demonstrating the required knowledge and skills are observed by certified personnel. An operational examination administered by an independent evaluator is required following satisfactory completion of the written examination and observation by certified personnel. Certification follows satisfactory completion of the operational examination.

2.2.3 Emergency Response Training

Federal and state regulations require that personnel be able to respond effectively to emergencies. In accordance with WAC 173-303-330(1)(d), personnel are trained on emergency equipment, systems, and procedures. B Plant Complex engages in the management of waste within containers in storage units and waste in disposal units. Table 2.3 indicates those items within WAC 173-303-330(1)(d) that are applicable to B Plant Complex operations.

Table 2.3 Applicability of WAC 173-303-330(1)(d) to B Plant Complex

WAC 173-303-330(1)(d) Criteria	Applicable to B Plant Complex
Procedures for using, inspecting, repairing, and replacing B Plant Complex emergency and monitoring equipment	Y
Key parameters for automatic waste feed cut-off systems	Y
Communications or alarm systems	Y
Response to fires or explosions	Y
Response to groundwater contamination incidents	Y
Shutdown of operations	Y

Specific topics required by federal and state dangerous waste regulations are included in many courses taught at the Hanford Facility. The courses cover many different program areas. For example, some courses address the orientation program area required of all Hanford Facility personnel. At the other end of the spectrum, some of these courses address the responsibilities of the Emergency Director as defined in WAC 173-303-360. Some of the courses in this area are:

- NHO
- HGET

- Building Emergency Plan
- B Plant Complex operator certification training
- Solid waste manager/supervisor certification training
- Building Emergency Director training.

2.3 TRAINING TABLES AND ATTACHMENTS

After categorizing Hanford Facility personnel, visitors, and subcontractors into worker categories, duties and responsibilities are evaluated. The duties and responsibilities will determine appropriate required courses from the five training program areas. Table 2.5 shows the interaction between worker categories and program areas.

Appendix B contains a brief description of the training courses for the B Plant Complex RCRA training program, including course title and number, brief course description, mandating document(s) (as applicable), target audience, instructional delivery, evaluation method, length of course, and frequency of retraining.

Appendix C provides a list of B Plant Complex personnel who are categorized as General Workers, Advanced General Workers, General Managers, and General Shippers.

2.4 LIST OF COURSES AND COURSE NAMES

Table 2.4 contains a listing of RCRA Training courses by number and title.

Table 2.4 RCRA Training Courses Listing

Course Numbers	Course Titles
000001	Hanford General Employee Training
000090	Visitor/Vendor Orientation
02006A	New Hire Orientation
02006G	Generator Hazards Safety Training
020159	Hazardous Waste Shipment Certification
020288	Building Emergency Director Training
035010	Waste Designation Support
035020	Facility Waste Sampling and Analysis
035040	Environmental Regulations at Hanford
035050	Environmental Compliance at Hanford
035055	Environmental Regulations and Compliance Refresher
035100	Core Waste Management Training - Initial
035110	Core Waste Management Training - Requalification
035120	Waste Management Administrative - Initial
035130	Waste Management Administrative - Requalification
037500	Building Warden Training
037510	Building Emergency Director/Warden Requalification

Table 2.5 B Plant Complex Dangerous Waste Training Matrix

Program Area	Course Title	Freq.	Worker Category				
			All Employees	General Worker	Advanced General Worker	General Manager	General Shipper
Waste Management Orientation	NHO 02006A: Refresher 000001	(1)	x ¹	x ¹	x	x	x
Unit/Bldg Orientation	B Plant Unit Orientation: Refresher 000001	(1)	x ^{1,2}	x ^{1,2}	x	x	x
Waste Management Awareness	Generator Hazards Safety Training 02006G (refer to course description)	(1)		x ¹	x	x	x
Unit/Bldg Awareness	B Plant Complex Unit Specific Building Emergency Plan (refer to course description)	(1)		x ^{1,2}	x	x	x
Waste Management Advanced	Core Waste Management Training 035100: Refresher 035110	(1)			x ³	x ⁴	
	Building Emergency Director Training 020288: Refresher 037510	(1)				x ⁵	
	Environmental Compliance at Hanford - 035050 or Environmental Regulations at Hanford - 035040: Refresher 035055	(1)				x ⁶	
Waste Management Administration	Hazardous Waste Shipment Certification 020159	(2)					x
	Waste Management Administration 035120: Refresher 035130	(1)					x
	Waste Designation Support 035010	(1)					x
	Facility Waste Sampling and Analysis 035020	One time					x
Unit/Job Specific	Certifications or Other Training	(1) or (2)			x	x	

(1) Annually

(2) Repeated every 2 years

1 Equivalent training exists for visitors and subcontractors.

2 Training requirement waived when escorted by qualified B Plant Complex personnel.

3 Required only for Advanced General Workers managing waste in containers.

4 Required only for Advanced General Worker Managers.

5 Required only for Emergency Coordinator and Alternates.

6 ECO, Engineer and Level 4, 5 and 6 Managers take 035050.

3.0 TRAINING FOR ACCESS TO B PLANT COMPLEX

This chapter describes the non-RCRA training programs that are closely related to the RCRA programs implemented at B Plant Complex. Terms used in this chapter include Hanford Facility personnel, visitors, and subcontractors. Hanford Facility personnel include employees of DOE-RL and employees of the Hanford Facility major contractors (i.e., Westinghouse Hanford Company, ICF Kaiser Hanford, Pacific Northwest Laboratories, Bechtel Hanford Company). Visitors include personnel who do not have a contract in place with DOE-RL or the Hanford Facility major contractors, and regulatory agency personnel who conduct regulatory compliance inspections. Subcontractors refer to any contractor working for DOE-RL or the major Hanford Facility contractors. These definitions could differ from other definitions used on the Hanford Facility to describe training requirements.

3.1 HANFORD FACILITY ACCESS

Access to the Hanford Facility is controlled through the issuance of badges. The type of badge that is issued will depend on the access frequency of the visitor or subcontractor. In most cases, visitors such as regulatory agency inspectors are issued permanent badges. There are instances where the regulatory agency inspector visit frequency is low and a temporary badge is issued instead of a permanent badge. In either case, to have a badge issued, the visitor or subcontractor must prove U.S. citizenship, provide identification, and view the visitor/vendor video (course number 000090). Subcontractors may require escorting until security background checks have been completed. When the subcontractor vendor status is removed, the subcontractor will complete New Hire Orientation (NHO) (course number 02006A) and has the potential to work unescorted.

In cases where the visitor is a foreign national, the individual must be processed through the Foreign Visitor and Assignment Program before they are allowed access to the Hanford Facility. When a foreign national requests access to the Hanford Facility, the extent of documentation will depend on the duration of the stay and whether either the visitor or the facility being visited are classified as "sensitive." Approvals typically take anywhere from 3 to 8 weeks from start to finish. The name of the guest, country of origin, date(s) of visit, and facility(ies) to be visited must be supplied. All personnel escorting the foreign national must be trained according to Foreign National Visitor Awareness (course number 000094).

3.2 B PLANT COMPLEX ACCESS

Building access is evaluated on whether the visitor or subcontractor must be escorted (this does not include foreign national considerations). If the visitor or subcontractor is escorted by qualified Hanford Facility personnel assigned to B Plant Complex, unit/building orientation is not required unless the visitor or subcontractor will be working and not touring under a Radiation

Work Permit (RWP). For example, when a regulatory inspector wants to sample a container during part of an inspection, the inspector must complete the appropriate B Plant Complex orientation training if the sampling will be conducted under an RWP. This orientation fulfills radiological safety training considerations specific to the hazards present at B Plant Complex. Hanford Facility personnel being escorted by qualified B Plant Complex personnel also fall under the same orientation considerations as do the visitors and subcontractors.

3.3 RADIOLOGICAL AREA ACCESS

In addition to the requirements for building access, there are also specific requirements pertaining to Radiological Area access. For entry into Radiological Areas, visitors (e.g., regulatory agency inspectors) are allowed access when accompanied by a qualified escort (Hanford Facility personnel assigned to the unit/building). There are limitations, however, on the amount of exposure that visitors may receive, which may impact access over time. Health physics organizations can help ascertain these types of limits.

To enter a radiological area, dosimeters must be acquired. Appropriate dosimeters will be issued to visitors and subcontractors either on a temporary or permanent basis. Regulatory agency inspectors assigned permanent dosimetry are not required to complete a Radiological Area Visitor Form for each visit if a Personnel Radiation Exposure History Form has been completed. Those regulatory agency personnel with permanent dosimetry should possess a valid Qualification Card and should present it at the time of entry to eliminate the need to complete the Radiation Area Visitor Form. Temporary dosimetry is also issued (depending on visit frequency) to visitors and subcontractors and is returned with the temporary badge after the visit. Visitors and subcontractors that are issued temporary dosimetry need to complete the Radiological Area Visitor Form upon each visit to a Radiological Area. The form may be completed at the unit/building which will be accessed, but should be completed at the time the visitor or subcontractor is badged. Visitors and subcontractors who anticipate wearing a respirator or handling radioactive materials, contaminated or potentially contaminated materials, or contaminated equipment shall comply with access qualifications met by Hanford Facility personnel as stipulated by an RWP. In addition, some unit/buildings may require an exit contamination survey.

Whole body counts are only required by individual RWPs which are written for a specific Radiological Area or for specific radiological work. Radiological Areas and the respective RWPs for those areas must be identified before the visitors or subcontractors visit the site so whole body counts can be completed. Whole body counts can be required for both entry and exit considerations to establish a baseline and to determine any intake of radioactive materials.

There are three types of Radiological Areas which require additional training for visitors and subcontractors: Very High Radiation Areas, High

Contamination Areas, and Airborne Areas. For these areas, additional qualifications include those of Hanford Facility radiological workers. These courses/items include the following:

- B Plant Complex unit/building orientation (see Section 3.2)
- Radiological Worker II Training - Initial (course number 020001)
- Bioassay testing (if applicable)
- Criticality training (if applicable)
- Mask fit user test (pulmonary capacity).

Finally, all Hanford Facility personnel, visitors, and subcontractors are required to read the applicable RWP upon initial entry. Personnel must sign that they have read and understood the RWP and agree to comply with the requirements.

4.0 OCCUPATIONAL SAFETY AND HEALTH TRAINING

Occupational Safety and Health Administration (OSHA) training on the Hanford Facility is consists of three parts: Hazard Communication (HAZCOM), Hazardous Waste Operations Training (24/40 hour training), and other health and safety training. HAZCOM training and Hazardous Waste Operations training are discussed in Sections 4.1 and 4.2. Other health and safety training can include, but is not limited to, confined space entry, noise conservation, fork lift training, and lock and tag. Hanford Facility health and safety organizations can provide additional clarity on all of these training areas. Regulatory agency inspectors will not be held to any requirements discussed in this section. It is the responsibility of each regulatory agency to provide the necessary training to their personnel in these areas before the inspectors visit the Hanford Facility.

4.1 HAZARD COMMUNICATION

HAZCOM training consists of general training and unit/building specific training as required by 29 CFR 1910.1200. All Hanford Facility personnel receive general HAZCOM training through NHO. Only Hanford Facility personnel who handle or manage hazardous materials or dangerous wastes (except consumer commodities) must receive unit/building specific HAZCOM training. To administer unit/building specific HAZCOM programs, the Hazard Evaluation Workshop (course number 035030) is provided to managers and personnel who are responsible for developing the unit/building specific program.

4.2 HAZARDOUS WASTE OPERATIONS TRAINING

Hazardous Waste Operations training, among other things, is required for personnel entering a hazardous waste site or a treatment, storage, and disposal (TSD) unit in accordance with 29 CFR 1910.120. Training requirements for hazardous waste sites involve 40 hours of training (classroom and field experience) whereas training requirements for TSD units involve 24 hours of training (classroom only). Entry requirements for B Plant Complex require that Hanford Facility personnel receive 24-hour training under this standard. The 24-hour training is applicable to personnel who have a "reasonable possibility of employee exposure to health or safety hazards" at the TSD unit. Some areas of a TSD unit do not have this possibility.

The only RCRA training consideration applied to 24 hour OSHA training involves the 8-hour refresher course (course number 032020 or 032030). The 8-hour refresher course is taken by personnel who maintain either a 24- or 40-hour qualification. When Hanford Facility personnel attend the 8-hour refresher, credit is given for refresher training in the Waste Management Awareness program area.

5.0 U.S. DEPARTMENT OF TRANSPORTATION TRAINING

U.S. Department of Transportation (DOT) training is conducted on-site for Hanford Facility personnel who are involved with transportation, or who offer materials and wastes for transportation. At this time, there are four courses being offered through the transportation organizations on the Hanford Facility:

- 020064 Basic DOT Hazardous Materials Regulation
- 020159 DOT Hazardous Waste Shipment Certification
- 020059 Basic Radioactive Materials Shipment Awareness
- 020069 Radioactive Materials Shipment Certification.

Basic DOT Hazardous Materials Regulation is designed to meet the training needs of "HAZMAT Employees." The Hazardous Waste Shipment Certification course is only included in the RCRA portion of this training plan when the General Shipper will be shipping an off-site shipment as defined in WAC 173-303. Otherwise, this course will not be enforceable under the Hanford Facility RCRA Permit when issued. The transportation organizations on the Hanford Facility can provide additional information concerning these courses.

6.0 OTHER ENVIRONMENTAL TRAINING

In addition to RCRA training, other environmental training requirements exist. For example, *Toxic Substances Control Act* (TSCA) training exists on the Hanford Facility for polychlorinated biphenyl (PCB) spill response. Training also exists for compliance with reporting under the *Emergency Planning and Community Right-to-Know Act*. There also are asbestos training requirements for workers and supervisors involved in asbestos abatement. In all of these cases, this is non-RCRA training. The environmental training and regulatory support organizations can assist Hanford Facility personnel in determining training needs in these areas.

7.0 REFERENCES

DOE Order 5480.20, *Personnel Selection, Qualification, Training and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities*, U.S. Department of Energy, Washington, D.C.

DOE-RL, 1993, *Hanford Facility Contingency Plan*, DOE/RL-93-75, U.S. Department of Energy, Richland Operations Office, Richland, Washington.

Ecology, EPA, and DOE, 1994, *Hanford Federal Facility Agreement and Consent Order*, Fourth Amendment, Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Olympia, Washington.

Emergency Planning and Community Right-to-Know Act of 1986, 42 USC 11001, et seq.

Resource Conservation and Recovery Act of 1976, 42 USC 6901, et seq.

Toxic Substances Control Act, 1976, 15 USC 2601 et seq.

WAC 173-303, 1990, "Dangerous Waste Regulations," *Washington Administrative Code*, as amended.

29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response, *Code of Federal Regulations*, as amended.

29 CFR 1910.1200, "Hazard Communication," *Code of Federal Regulations*, as amended.

APPENDIX A
PREREQUISITES FOR B PLANT COMPLEX JOBS AND POSITIONS

PREREQUISITES FOR B PLANT COMPLEX JOBS AND POSITIONS

GENERAL WORKER

Waste Operations Clerk:

This position assists the Hazardous Waste Coordinator and Rad Waste Coordinator in all clerical functions.

A high school diploma or equivalent is required.

Nuclear Process Operator:

This position is responsible for carrying out assignments in many different areas covering a wide variety of products and processes, operating diversified equipment, and performing a sequence of complex operations. Individuals holding this position work with a minimum of supervision and take the lead in performing work including troubleshooting, indoctrination of new employees, emergency procedures, and similar items.

A high school diploma or equivalent is required.

Journeyman Power Operator:

This position is responsible for critical and complex power functions, such as operation of a high pressure power house boiler, control of final water flow, and chemical content and control of multiple pressurized air condition systems.

A high school diploma or equivalent is required.

Nuclear Operator:

This position is responsible for critical and complex process functions.

A high school diploma or equivalent is required.

ADVANCED GENERAL WORKER

Hazardous Waste Lead, Radiological Waste Lead, Hazardous Material Lead, Special Project Lead, and Radiological Control Lead:

These positions provide the lead operating support to projects associated with or involving hazardous materials or dangerous waste at B Plant Complex. Individuals in these positions must have a general understanding of federal and state laws and regulations, the United States Department of Energy (DOE) orders, and WHC procedures and

guidance pertaining to hazardous materials and dangerous waste so that compliance as well as protection of personnel and the environment are assured.

A high school diploma or equivalent plus 2 year related experience is required, or equivalent education and experience is required.

GENERAL SHIPPER

Hazardous Waste Coordinator and Rad Waste Coordinator:

These positions implement the Hazardous Materials/Dangerous Waste program for B Plant Complex. They must be cognizant of all federal and state laws and regulations, DOE Orders, and WHC procedures and guidance pertaining to hazardous materials and dangerous waste so that compliance as well as protection of personnel and the environment are assured. These individuals are responsible for oversight of the waste packaging and shipping operations, preparation of shipping documentation, and they must certify the contents of waste shipments. These individuals assist with presentations and help conduct tours for DOE and other state and federal agencies.

A Bachelor of Science degree plus 2 years related experience is required, or equivalent education and experience.

Hazardous Materials Coordinator:

This position provides direction and support to operations and maintenance personnel in areas pertaining to the purchase, storage, and handling of hazardous materials. Specific duties for this position include identification of alternate less hazardous products, EPCRA 312 and 313 reporting, work package review, hazard communication lead management, carcinogen control, and pollution prevention committee.

A Bachelor of Science Degree in chemistry or chemical engineering is required, or equivalent education and experience.

GENERAL MANAGER

Cognizant Engineer for Solid Waste and Lead Engineer for RCRA activities including hazardous waste permitting:

These positions provide engineering expertise to the Environmental Engineering organization ensuring that all activities are in compliance with federal and state laws and regulations, DOE Orders, and WHC procedures and guidance pertaining to hazardous materials and dangerous waste. These individuals make routine decisions within established procedures and well-defined standard practices and exercise some

authority in selecting which methods are applicable in a given situation. Periodic supervision and technical direction is provided by engineering management. Supervision and guidance for these individuals relates largely to overall objective, critical issues, and specific technical requirements. These individuals may provide technical direction to entry level engineers, clerical employees, drafters, technicians, and crafts. These individuals may also make presentations and conduct tours for DOE and other state and federal agencies.

This position requires a Bachelor of Science in Engineering plus three years of related experience, or equivalent education and experience.

B Plant Complex Operation A, B, C, and D Shift Managers:

These positions direct all processing and related support activities of a rotating shift crew for the safe, efficient and environmentally sound operation of B Plant Complex. He/She operates the facility to achieve the goals of the Operations Manager. He/She acts as Facility Representative for the Complex Director in his/her absence. The Shift Manager must know and understand WHC and DOE-RL policies, and effectively use proper organizational and administrative structures. Specialized knowledge relating to chemical processing systems, utilities, HVAC systems and related equipment is required. Excellent written and oral communication skills are essential in this position.

Normally, a Bachelor of Science degree plus 10 years directly related experience is required in this position. An equivalent amount of education and experience may be substituted. Special emphasis is placed on experience in the Nuclear and/or Chemical Processing fields. Experience with handling, controlling and processing nuclear materials is desired.

B Plant Complex Disposal Operations Manager:

This position provides management direction consistent with WHC policies and procedures to meet programmatic goals and objectives. He/She assures that projects, maintenance and plant operations are manned consistent with established priorities. He/She is responsible to provide direction for establishing and maintaining a work place that is safe for employees and the environment as well as management direction for the handling and disposal of hazardous, radioactive, and mixed waste for B Plant Complex and related facilities. He/She ensures that hazardous materials are properly stored and managed within the facilities and that employees are informed of associated hazards. He/She assures that all required waste, hazardous materials, and occurrence reporting is accomplished on time.

Normally, a Bachelor of Science degree plus 8-10 years of related experience is required in this position. An equivalent amount of

education and experience may be substituted. Special emphasis is placed on experience in the nuclear and/or chemical processing field. Experience with handling, controlling and processing high-level radioactive material is desired.

B Plant Complex Transition Operations Manager:

This position is responsible for coordinating and directing day shift activities associated with the safe efficient, and environmentally sound operation of B Plant Complex. The Transition Operations Manager is responsible for all non-process systems such as the HVAC, steam, water, compressed air, power and emergency back-up systems. He/She is responsible for maintenance activities in the facility on day shift, and may be required to take charge in case of an emergency until he/she is relieved by proper authority.

Normally, a Bachelor of Science degree plus 8-10 years of related experience is required in this position. An equivalent amount of education and experience may be substituted. Special emphasis is placed on experience in the nuclear and/or chemical processing field. Experience with handling, controlling and processing high-level radioactive material is desired.

B Plant Complex Plant Surveillance Manager:

This position is responsible for managing the B Plant Complex in a safe, efficient and environmentally sound manner to meet program objectives. He/She ensures compliance with federal and state laws and regulations, DOE order, and WHC procedures and guidance. Particular emphasis shall be placed on personnel safety and radiation protection, environmental protection, and the health and safety of the general public. He/She should know and effectively use proper organizational and administrative structures, relevant theory, principles and techniques to meet programmatic goals and objectives. Specialized knowledge relating to the processing, storage and shipment of high-level radioactive materials and hazardous materials is required.

Normally, a Bachelor of Arts/Science degree plus 8-10 years of related experience is required in this position. Extensive experience in the nuclear field and/or proven abilities may be substituted. Experience with handling, controlling and shipping high-level radioactive materials is needed. Special emphasis should be placed on experience in the nuclear field with management experience highly desirable. Experience in chemical processing or a nuclear field is required. Current knowledge of radioactive and hazardous material shipping regulations and environmental laws is necessary.

Environmental Engineering Manager:

This position plans, directs and effects technical leadership for Effluent, Solid Waste and Environmental Engineering activities at B Plant Complex. He/She provides technical guidance and plant environmental engineering support for related facility and process activities to meet program goals. He/She serves as technical coordination focal point between Operations and all other technical and environmental support organizations. The scope of responsibility covers the following major areas: providing cognizant engineers for Liquid, Solid and Gaseous Effluent; support to B Plant Hazardous Material Coordinator, Hazardous Waste Coordinator, and Radioactive Waste Coordinator; and providing plant engineering technical lead on permitting and environmental reviews for existing facilities. The manager develops and trains all new engineers coming into the section to maintain an expert staff. He/She represents B Plant Complex in negotiations with Ecology pertaining to permitting and TPA Milestone establishments/status. He/She must be able to logically evaluate processing updates and effectively troubleshoot daily operating problems. When coordinating work with other WHC organization, a long range outlook must be maintained to ensure compliance with programmatic goals. The ability to identify alternate solutions or courses-of-action is an important aspect of the job. He/She must be able to pass on skills and to effectively direct and control the technical environmental operations of B Plant Complex by continuously striving to improve plant environmental soundness. The manager should have significant impacts in the long range planning for the facility and should work to position the facility to meet B Plant Complex's part of the environmental mission at Hanford.

A Bachelor of Science in Engineering plus 6-10 years experience in Process Engineering, Plant Operations or similar environment is required, or equivalent education and experience.

B Plant Complex Director/Deputy:

This position exercises overall management control of B Plant Complex. This position ensures that operations, maintenance and modifications are conducted in a safe, environmentally sound and cost effective manner. He/She ensures that maintenance and modification of plant systems and hardware is conducted in a disciplined, technically correct manner. He/She manages activities required to safely transition B Plant Complex from operational status to shutdown and is responsible for training and professional development of the facility staff. He/She represents the facility at WHC, DOE and commercial interfaces. He/She must possess detailed knowledge of a broad range of engineering, operational, and regulatory fields. He/She must possess knowledge of DOE and WHC documents pertaining to plant operation, modification and construction. Knowledge of environmentally related issues and their associated regulations is essential, as is knowledge of plant specific operating

and process documentation. Current knowledge of WHC, DOE, and state regulations pertaining to plant operation, design and construction is required. Administrative requirements pertaining to safety and environmental regulations are also necessary. He/She oversees certification and development of subordinate members, professional and bargaining unit personnel.

Position requires a Bachelor of Science in Engineering or Science. A minimum of 12 years experience in construction, operations or maintenance of a nuclear facility is required, of which 6 must have been served in a management capacity.

APPENDIX B

HANFORD FACILITY DANGEROUS WASTE TRAINING COURSES

HANFORD FACILITY DANGEROUS WASTE TRAINING COURSES

Title	000001 Hanford General Employee Training (HGET)
Description	Course covers U.S. Department of Energy (DOE) orders and applicable policies pertaining to employer and employee rights and responsibilities, general radiation training, hazard communications, dangerous waste, fire prevention, personal protective equipment, safety requirements, certain unit/building orientation refresher training, emergency preparedness, accident reporting, and avenues for addressing safety concerns.
Mandating Document(s)	Hanford Facility RCRA Permit (when issued), General Conditions
Target Audience	All Hanford Facility personnel
Delivery	Computer-based training with interactive video
Evaluation	Computer-generated questions
Length	Average = 2 to 6 hours
Frequency	Annual

Title	000090 Visitor/Vendor Orientation
Description	Course is designed to acquaint and familiarize visitors and subcontractors with safety, security, and emergency preparedness requirements and their responsibilities to notify Hanford Facility personnel when situations arise. In addition, this orientation identifies the need to obey signs and labels that may be encountered regarding radiological areas, hazardous materials, and dangerous wastes.
Mandating Document(s)	Hanford Facility RCRA Permit (when issued), General Conditions
Target Audience	Visitors/vendors/subcontractors
Delivery	Video tape
Evaluation	Not applicable
Length	15 minutes
Frequency	Annual

Title	02006A New Hire Orientation
Description	Course covers DOE orders and applicable policies pertaining to employer and employee rights and responsibilities, general radiation training, hazardous waste, fire prevention, personal protective equipment, safety requirements, accident reporting, and avenues for addressing safety concerns.
Mandating Document(s)	Hanford Facility RCRA Permit (when issued), General Conditions
Target Audience	All Hanford Facility personnel
Delivery	Classroom
Evaluation	Not applicable
Length	3 hours
Frequency	Initial (Retrained annually by 000001 HGET)

Title	02006G Generator Hazards Safety Training
Description	Course introduces workers to federal laws governing chemical safety in the work place. The course provides the hazardous material/waste worker with the basic fundamentals for safe use and disposal of hazardous material. Course defines hazard communication and hazardous material, reviews labeling requirements, and introduces material safety data sheets and key terms used in chemical safety. The course also introduces methods for waste minimization.
Mandating Document(s)	WAC 173-303-200(2)
Target Audience	Hanford Facility personnel categorized as a General Worker, Advanced General Worker, General Manager, and General Shipper
Delivery	Classroom
Evaluation	Written examination - 80% passing grade
Length	4 hours
Frequency	Annual: B Plant Complex personnel receive refresher training through 24-hour Occupational Safety and Health Administration (OSHA) 8-hour refresher.

Title	020159 DOT Hazardous Waste Shipment Certification
Description	Course introduces General Shippers to identify shippers' responsibilities and liabilities with regard to compliance to WAC 173-303 and U.S. Department of Transportation (DOT) regulations, including storage, inspection, and loading requirements.
Mandating Document(s)	WAC 173-303-180, -190, and -370
Target audience	General Shippers
Delivery	Classroom
Evaluation	Written examination - 80% passing grade
Length	4 hours
Frequency	Every other year

Title	02028B Building Emergency Director Training
Description	Course provides an overview of the responsibilities of the building emergency director, identifies the building emergency organizations, actions required during an event, implementing the contingency plan, and discusses drill and exercise requirements.
Mandating Document(s)	WAC 173-303-340, -350, and -360
Target audience	Building Emergency Directors and their alternates who can function as the Emergency Coordinator
Delivery	Classroom
Evaluation	Not applicable
Length	2 hours
Frequency	Initial (Retrained annually by 037510 Building Emergency Director/Warden Requalification)

Title	035010 Waste Designation Support
Description	Course teaches dangerous waste designation according to WAC 173-303. Class content includes section-by-section lecture on the regulations, with examples following each section. Students complete examples using a waste designation flow chart. Examples addressed include federally listed waste, discarded chemical products, dangerous waste source, Washington State criteria (e.g., toxicity, persistence, carcinogenic), and federal characteristics (e.g., ignitability, corrosivity, reactivity, and toxicity).
Mandating Document(s)	WAC 173-303-070, and -080 through -100
Target Audience	General Shippers
Delivery	Classroom
Evaluation	Written examination - 80% passing grade
Length	12 hours
Frequency	Annual

Title	035020 Facility Waste Sampling and Analysis
Description	<p>Course presents waste sampling methodologies according to EPA Protocols SW-846, Test Methods for Evaluating Solid Waste Physical/Chemical Methods. This course also covers documentation requirements in a sampling plan, field and laboratory quality control/assurance, and use of actual sampling equipment.</p> <p>One-time training is required because the General Shipper, in most cases, will utilize resources on the Hanford Facility to acquire samples. This training provides an overview of information to ensure that sampling efforts are properly set up.</p>
Mandating Document(s)	WAC 173-303-110 and -070
Target audience	General Shippers
Delivery	Classroom presentation, exercises, demonstration and discussion
Evaluation	Written Examination
Length	12 hours
Frequency	One time

Title	035040 Environmental Regulations at Hanford
Description	This course provides an overview of environmental regulations as they apply to the Hanford Facility. This course helps enable participants to make informed decisions relating to environmental compliance issues. It includes information on potential legal liabilities, applicable federal and state regulations, various reporting requirements, inspections/audits and record keeping. Information is presented using Hanford Facility examples.
Mandating Document(s)	WAC 173-303-145 and general overview of certain WAC 173-303 sections Training covers disciplines from <i>Resource Conservation and Recovery Act of 1976 (RCRA)</i> , <i>National Environmental Policy Act of 1969 (NEPA)</i> , air regulations, <i>Emergency Planning and Community Right-to-Know Act (EPCRA)</i> , <i>Toxic Substances Control Act (TSCA)</i> , spill reporting, and inspection considerations.
Target Audience	Level I, II, and III Managers
Delivery	Classroom
Evaluation	Written examination - 80% passing grade
Length	8 hours
Frequency	Initial (Retraining 035055)

Title	035050 Environmental Compliance at Hanford
Description	Provides an overview of environmental regulations and focuses on the use of environmental compliance manuals to address compliance issues. Information is presented through Hanford Facility examples.
Mandating Document(s)	WAC 173-303-145 and general overview of certain WAC 173-303 sections Training covers disciplines from RCRA, NEPA, air regulations, EPCRA, TSCA, spill reporting, and inspection considerations.
Target Audience	Environmental Compliance Officers, engineers categorized as General Managers, and level 4, 5, and 6 managers
Delivery	Classroom
Evaluation	Workbook
Length	8 Hours
Frequency	Initial (Retraining 035055)

Title	035055 Environmental Regulations and Compliance Refresher
Description	This course provides participants with an update of environmental regulation and compliance issues related to work at the Hanford Facility. Emphasis of instruction and information will be based on current Hanford issues. Information reviewed may include potential legal liabilities, applicable federal and state regulations, various reporting requirements, inspections/audits, and record keeping. Information is presented using Hanford Facility examples.
Mandating Document(s)	WAC 173-303-145 and general overview of certain WAC 173-303 sections Training covers disciplines from RCRA, NEPA, air and water regulations, EPCRA, TSCA, spill reporting, and inspection considerations related to current Hanford issues.
Target Audience	Managers, Environmental Compliance Officers, engineers categorized as General Managers who have attended either Environmental Regulations at Hanford or Environmental Compliance at Hanford.
Delivery	Classroom or self-study
Evaluation	Workbook
Length	About 4 hours
Frequency	Retrained annually

Title	035100 Core Waste Management - Initial
Description	Course covers basic requirements of waste management, incorporating 40 CFR 260 through 265, WAC 173-303, DOE orders, and company policy. Includes three practical exercises for hands-on experience with satellite and 90-day accumulation area requirements, labpacks for dangerous waste and mixed waste, and preparation of packages for final destination.
Mandating Document(s)	WAC 173-303-630, -200 and Waste Minimization
Target Audience	Advanced General Workers and General Managers of Advanced General Workers
Delivery	Classroom
Evaluation	Written Examination - 80% passing grade
Length	16 hours
Frequency	Initial (retrained annually by 035110 Core Waste Management Training - Refresher)

Title	035110 Core Waste Management - Refresher
Description	Refreshes Course 035100
Target Audience	Advanced General Workers and General Managers of Advanced General Workers
Delivery	Classroom
Evaluation	Written Examination - 80% passing grade
Length	4 Hours
Frequency	Annual

Title	035120 Waste Management Administration - Initial
Description	Course is designed for personnel preparing to become authorized shippers of dangerous and/or mixed waste. This course covers regulatory and company policies, forms, reports, forecasts, and plans. Topics also covered include: waste characterization, waste storage disposal request, low-level waste storage/disposal record, transuranic waste storage/disposal record, and radioactive mixed waste attachment sheet. In addition, students will learn how these forms are used to complete shipping papers.
Mandating Document(s)	Hanford Facility RCRA Permit (when issued), Part II, condition II.Q
Target Audience	General Shippers
Delivery	Classroom
Evaluation	Written examination - 80% passing grade
Length	8 hours
Frequency	Initial (Retrained annually by 035130 Waste Management Administration - Refresher)

Title	035130 Waste Management Administration - Refresher
Description	Refreshes course 035120
Target Audience	General Shippers
Delivery	Classroom
Evaluation	Written examination - 80% passing grade
Length	4 hours
Frequency	Annual

Title	037500 Building Warden Training
Description	Course provides an overview of the responsibilities of the building emergency warden, identifies the building emergency organizations, actions required during an event, implementing the contingency plan, and discusses drill and exercise requirements.
Mandating Document(s)	WAC 173-303-340, -350, and -360
Target audience	Building Wardens and their alternates who can function as the Emergency Coordinator
Delivery	Classroom
Evaluation	Not applicable
Length	2 hours
Frequency	Initial (Retrained annually by 037510 Building Emergency Director/Warden Requalification)

Title	037510 Building Emergency Director/Warden Requalification
Description	Refresher for Building Emergency Director Training
Target audience	Building Emergency Directors and alternates
Delivery	Classroom
Evaluation	Not applicable
Length	2 hours
Frequency	Annual

APPENDIX C

INDIVIDUALS FILLING FIVE WASTE TRAINING CATEGORIES AT B PLANT COMPLEX

INDIVIDUALS FILLING FIVE WASTE TRAINING CATEGORIES AT B PLANT COMPLEX

All Employees All B Plant Complex personnel who will have no duties or responsibilities associated with the management of dangerous waste in accumulation containers, or with the critical systems of the TSD units.

General Worker

Waste Operations Clerk:

TM Doty

Nuclear Operator Trainee:

DR Barichello, DR Barnhard, KE Berry, DO Clifford, TR Edmundson, SF Ghiglione, JL Graves, MP Hammer, EW Houchin, RM Jamison, AL Judkins, BE Kasey, JT Kion, NH Taylor, TL Trevis

Nuclear Process Operator:

KL Ashley, DH Barnett, SL Beightol, WB Cook, C DeBoise, GL Garman, TD Gosney, RE Gouge, MJ Guinn, MB Hexum, GW Johnson, CC Jones, LR Lampman, LL Lanman, DS Older, JR Pinkal, PG Purdy, KO Schmidt, KM Smith, JR Sumison, JE Wabaunsee, SF Wallace, DF Warder

Journeyman Power Operator:

RL Bacon, RM Cooper, FM DeSoto, KL Hicks-CPO, DL Hipke, CC Jones, LL Lanman-CPO, JA Rosane

Nuclear Operator:

LO Arnold, DS Balero, JA Bottineau, BL Jackson, MR Messinger, RA Shepard, IJ Villareal, NL Wilkerson, Jr.

Advanced General Worker

Hazardous Waste Lead:

Position not currently filled

Radiological Waste Lead:

Position not currently filled

Hazardous Material Lead:

Position not currently filled

Special Project Lead:

FJ Miksch

Radiological Control Lead:

RA Schultz

General Shipper

Hazardous Waste Coordinator:

JW Hasson

Rad Waste Coordinator:

JW Hasson

Hazardous Materials Coordinator:

JC Dupaquier II

General Manager

Cognizant Engineer for Solid Waste:

TG Beam

Lead Engineer for RCRA activities including hazardous waste permitting:

TG Beam

B Plant Complex Operation A, B, C and D Shift Managers:

RD Pickett
WW Wingfield
BL Wallace
FD Hoverson

B Plant Disposal Operations Manager:

KD Strong, Acting

B Plant Complex Transition Operations Manager:

TA Brown

B Plant Complex Plant Surveillance Manager:

GSF Voyles

Environmental Engineering Manager:

SE Killoy, Acting

B Plant Complex Deputy:

WW Bowen

B Plant Complex Director:

RE Heineman, Jr.