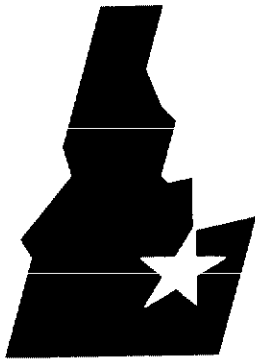


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**Idaho  
National  
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by the U.S.  
Department  
of Energy*

RCRA INTERIM STATUS TRAINING PLAN FOR THE  
TAN PORTABLE WATER TREATMENT UNIT

C. G. Dietz



*Work performed under  
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RCRA INTERIM STATUS  
TRAINING PLAN FOR THE  
TAN PORTABLE WATER TREATMENT UNIT

C. G. Dietz

April 1992

Idaho National Engineering Laboratory  
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Idaho Falls, Idaho 83415

Prepared for the  
U.S. Department of Energy  
Office of Environmental Restoration and Waste Management  
Under DOE Idaho Field Office  
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# INFORMATION ONLY

EGG-WM-9864

## RCRA INTERIM STATUS TRAINING PLAN FOR THE TAN PORTABLE WATER TREATMENT UNIT

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ABSTRACT

The purpose of this document is to ensure that employees working at the Test Area North Portable Water Treatment Unit perform their duties in compliance with the requirements of the Idaho Department of Health and Welfare Rules and Regulations, the Resource Conservation Recovery Act, and the Occupational Safety and Health Administration requirements. According to DOE-ID/EG&G Idaho, Inc., policy, all personnel involved with hazardous, low-level radioactive or mixed waste handling, management, and unit operations must be trained in the proper and safe management of such waste.

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## ACRONYMS

CFA	Central Facilities Area
CPR	Cardiopulmonary Resuscitation
DOE-ID	Department of Energy Field Office, Idaho
DOT	Department of Transportation
EOC	emergency operating center
ERD	Environmental Restoration Department
HRST	Human Resources Safety Training
IDAPA	Idaho Administrative Procedures Act
IDHW	Idaho Department of Health and Welfare
INEL	Idaho National Engineering Laboratory
NEPA	National Environmental Policy Act
OJT	on-the-job training
OSHA	Occupational Safety and Health Administration
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SRG	Site Remediation Group
TAN EP/RCRA CP	TAN Emergency Plan/RCRA Contingency Plan
TAN	Test Area North
TSD	treatment, storage, and disposal
WAC	Woodruff Annex Complex
WCB	Willow Creek Building

# **RCRA INTERIM STATUS TRAINING PLAN FOR THE TAN PORTABLE WATER TREATMENT UNIT**

## **1. INTRODUCTION**

This Training Plan has been prepared for the Test Area North (TAN) Portable Water Treatment Unit (hereinafter referred to as TAN PWTU) located in the TAN at the Idaho National Engineering Laboratory (INEL). (Note: This unit has previously been referred to as the TAN-786 Portable Water Filter Unit.) The purpose of this document is to ensure that employees working at TAN PWTU perform their duties in compliance with the requirements of the Idaho Department of Health and Welfare (IDHW) Rules and Regulations contained in the IDAPA 16.01.5009,<sup>1</sup> the Resource Conservation and Recovery Act (RCRA) contained in 40 CFR 265,<sup>2</sup> and the Occupational Safety and Health Administration (OSHA) requirements contained in 29 CFR 1910.<sup>3</sup>

The U.S. Department of Energy Field Office, Idaho (DOE-ID) is the owner and co-operator of TAN PWTU. EG&G Idaho, Inc., co-operates the unit for DOE-ID. EG&G Idaho's Site Remediation Group (SRG) is responsible for managing and operating the unit [See TAN PWTU organization chart (Figure 1-2).].

TAN PWTU is used to treat contaminated water that has been classified as a RCRA mixed waste from remediation activities. TAN PWTU consists of two carbon absorption canisters used to treat organics and three ion exchange columns used to treat heavy metal and low-level radioactive contaminants. According to DOE-ID/EG&G policy, all personnel involved with mixed waste handling, management, and unit operations must be trained in the proper and safe management of mixed waste. Training of personnel associated with the operation of TAN PWTU is conducted by the Training and Emergency Action Unit of the Waste Management Department, under the direction of the Waste Management Training Director and the designated training coordinator for ERD personnel (i.e., ERD training coordinator).



## TAN PWTU ORGANIZATION CHART

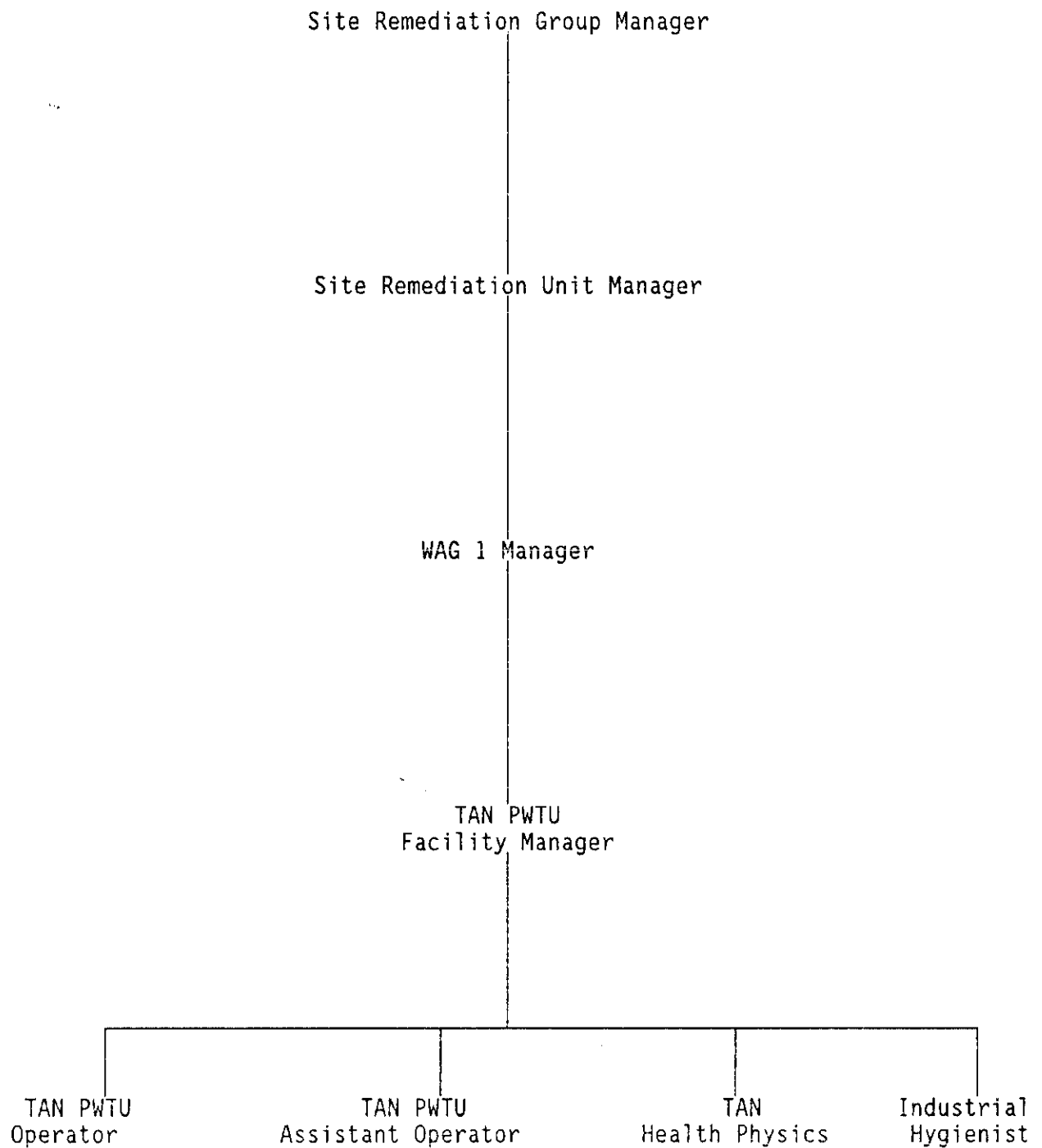


Figure 1-1. TAN PWTU Organization Chart.

A comprehensive training program has been implemented at TAN PWTU to ensure that personnel in positions related to mixed waste management at the unit receive training consistent with the requirements of RCRA, OSHA, and the IDHW rules and regulations. The TAN PWTU training program also is designed to ensure that personnel are trained in emergency response procedures and hazard communication.

Program specifics are presented in the sections that follow. Section 2 outlines the TAN PWTU training program. Section 3 describes how the training program is implemented. Section 4 describes how training records are maintained.

## 2. OUTLINE OF TRAINING PROGRAM

[IDAPA 16.01.5009,02;<sup>4</sup> 40 CFR 265.16(a)(1)<sup>5</sup>]

The training program for TAN PWTU personnel in positions related to mixed waste activities consists of a combination of classroom instruction and on-the-job training (OJT) in conjunction with qualification/certification programs. All TAN PWTU personnel receive new employee orientation, which is recorded on a TAN New Employee Orientation Checklist (see Attachment A9). New employee orientation includes general RCRA training, a medical examination, training in hazard communication, and training in emergency response procedures consistent with the TAN Emergency Plan/RCRA Contingency Plan (TAN EP/RCRA CP).<sup>6</sup>

In addition, all TAN PWTU personnel involved in unit management and/or mixed waste activities shall attend a variety of training courses appropriate to their jobs. These courses may include:

- Radiation Worker
- OSHA 1910.120<sup>7</sup> Hazardous Waste Operations and Emergency Response
- OSHA Supervisor Training
- First Aid/Cardiopulmonary Resuscitation (CPR)
- Department of Transportation (DOT) Hazardous Materials Shipper
- Hazard Communication
- Respirator Training.

Outlines of the above training programs, the Hazard Communication Program, and the New Employee Orientation Checklist are included in Attachment A.

The TAN PWTU training program is designed to ensure that personnel are trained to perform their job assignments safely and effectively. Section 2.4 discusses the training required to fulfill the following TAN PWTU job positions related to mixed waste management or handling:

- Project Manager
- Unit Operator
- Assistant Unit Operator
- Health Physics Technician
- Environmental Engineer
- Safety/Industrial Hygienist
- DOE-ID Firefighters.

Training support facilities and materials specific to training conducted at TAN PWTU by the Waste Management Training and Emergency Action Unit generally are located in EG&G Idaho's Woodruff Annex Complex (WAC) in Idaho Falls.

OJT is conducted under the supervision of the TAN PWTU Project Manager. OJT is ongoing and is specific to the nature of work performed by the employee. Training specific to the handling and management of mixed waste at TAN PWTU is incorporated into the employee's OJT as necessary. The TAN PWTU facility manager, in conjunction with Waste Management Training and Emergency Action Unit, uses a system of checklists associated with each job position to identify the minimum requirements an employee must complete during the OJT portion of his/her training program. The checklists become part of the employee's training record.

The training methods and media used for the training program include lectures, video tapes, films, and "hands-on" training. Written examinations and quizzes presented by the Waste Management Training and Emergency Action Unit for training are administered by the ERD training coordinator. All examinations and quizzes are graded and results are filed in each employee's record by the Waste Management Training and Emergency Action Unit.

The TAN PWTU training program is reviewed at least annually by the Environmental Restoration Department (ERD) training coordinator and is upgraded through:

- Evaluation of employee written exams and observation of employee performance of job-related tasks
- Management observation and appraisal of OJT performance
- Feedback and retraining/evaluation in weak areas.

The TAN PWTU training program is upgraded as needed in response to changes in job assignments or descriptions, unit modifications, technological changes, or implementation of new regulatory requirements.

Training for TAN PWTU personnel relative to hazardous/mixed waste operations and RCRA requirements is also conducted by the TAN PWTU facility manager. EG&G Human Resources Safety Training (HRST) conducts classes in Hazard Communications, EG&G 40-hour OSHA training, respirator training, and radiation worker training. The EG&G Traffic Unit conducts DOT Hazardous Materials Shipper classes. Training conducted by these units is held at Central Facilities Area (CFA), Willow Creek Building (WCB), the TAN PWTU, etc. The TAN PWTU facility manager identifies TAN PWTU personnel who require this training. The organization presenting the training (a) maintains the class roster and the graded examinations administered to test the knowledge of class participants and (b) enters a record of class completion into the HRST database. ERD routinely accesses the database to obtain transcripts of training received by personnel and places the transcript in individual employee training records.

Section 2.1 briefly describes the job positions related to mixed waste handling or management at TAN PWTU. Section 2.2 describes training content, frequency, and techniques. Section 2.3 describes the responsibilities and qualifications of the TAN PWTU facility manager in conjunction with the Waste Management Training Director and ERD training coordinator. Section 2.4 describes the relevance of training to job positions. Section 2.5 describes training for emergency response.

## 2.1 JOB TITLES/DESCRIPTIONS

[IDAPA 16.01.5009,02;<sup>4</sup> 40 CFR 265.16(d)(1) and (d)(2)<sup>5</sup>]

Following is a brief description for each job title related to mixed waste handling or management at TAN PWTU. Section 2.4 presents the minimum training requirements for each position. Attachment B contains the names of TAN PWTU personnel filling each of these positions.

Facility Manager - Provides technical expertise and overall management of personnel at TAN PWTU. Originates, reviews, and updates operational procedures as necessary to reflect safe and efficient operational practices. Provides work control of all operational, maintenance, and modification activities at TAN PWTU. An applicable bachelor's degree, five years of relevant or equivalent experience, and knowledge of company safety requirements, nuclear operations, handling and processing requirements for radioactive and hazardous materials, and applicable documents for equipment maintenance are the minimum qualifications for this position.

PWTU Operator - Serves as the primary operator of TAN PWTU. Responsibilities include supervising all other personnel at TAN PWTU, performing required inspections, maintaining unit logs and checklists, and securing necessary work permits and materials. Assists in the compilation and completion of facility procedures, plans, and records. Must be present (or a trained alternate) at all times when TAN PWTU is in a startup, operational, or shutdown mode. A high school diploma, experience in operating a treatment or similar unit, and a clear understanding of the liabilities connected with the operation of a RCRA treatment, storage, and disposal facility are the minimum qualifications for this position. Must be thoroughly trained in the operation of the TAN PWTU in addition to the training requirements specified in this plan prior to startup of the TAN PWTU.

Assistant PWTU Operator - Assists the Unit Operator in all operational activities at TAN PWTU. Provides suggestions to the Operator on ways of improving the operational safety of the plant. Reports to the Operator any

condition which he considers unsafe with respect to human health, the environment, or unit operations. Must be present (or a trained alternate) at all times when TAN PWTU is in a startup, operational, or shutdown mode. A high school diploma, experience with the operation of pumps, piping, hose connections, and basic unit processes, and a basic understanding of the liabilities associated with the operation of a RCRA treatment, storage, and disposal (TSD) facility are the minimum qualifications for this position. Must be thoroughly trained in the operation of the TAN PWTU in addition to the training requirements specified in this plan prior to startup of the TAN PWTU.

Health Physics Technician - Performs routine and special radiological control surveys of areas, materials, and personnel to ensure application of proper HP controls in support of TAN PWTU work activities. Monitors waste shipments, packaging, and storage of radioactive materials. Maintains records of work completed. An Associate of Applied Science certificate in Health Physics from a technical/vocational school (e.g., Eastern Idaho Technical College) or equivalent; knowledge of the principles and control of radiation/contamination, applicable standards, and appropriate instrumentation; and the ability to read, interpret, and enforce appropriate regulations are the minimum qualifications for this position. This individual must receive the same training that the operators of the TAN PWTU receive prior to operating the facility.

Environmental Engineer - Provides technical guidance to personnel in ERD programs and facilities, including TAN PWTU, on environmental regulations and requirements. Provides assistance in developing required environmental work plans, sampling plans, reports, and approvals. A Bachelor of Science degree in an applicable engineering or scientific discipline, a knowledge of all Federal, State, DOE-ID, and EG&G Idaho environmental regulations; and work experience in RCRA, CERCLA, Superfund Amendments and Reauthorization Act (SARA), National Environmental Policy Act (NEPA), and DOT regulations, permit applications, and audits are the minimum qualifications for this position. This individual must receive the same training that the operators of the TAN PWTU receive prior to operating the facility.

Safety/Industrial Hygienist - Advises all TAN PWTU personnel on issues concerning job safety and health. Develops and maintains a Safety and Industrial Hygiene program and develops internal audit programs to determine the effectiveness of the safety program. Assists in identifying safety and health related problems and develops appropriate corrective measures. A Bachelor of Science degree in safety and health, and a working knowledge of Federal regulations for both safety and health are the minimum qualifications for this position. This individual must receive the same training as the operator.

DOE-ID Firefighter - Serves the INEL, including TAN PWTU, in fighting fires and containing major spills, including spills of mixed waste from INEL waste management units. The DOE-ID Fire Department conducts a self-contained training program for its firefighters, which includes procedures for handling fires and spill emergencies that involve hazardous materials and hazardous/mixed wastes at the INEL. The TAN PWTU facility manager is responsible for site specific DOE-ID firefighters training that will be accomplished by distribution of the RCRA contingency plan and a current inventory of wastes at the TAN PWTU. An on-site inspection of the TAN PWTU will be recommended to DOE-ID firefighters.

In addition to the personnel described above, craft personnel such as electricians, mechanics, and laborers may need to enter TAN PWTU to perform routine maintenance. These workers do not handle or manage mixed waste. They receive a prejob briefing prior to commencing work and then work under a Safe Work Permit, which documents site hazards, special procedures and precautions, health and safety procedures, equipment, and clothing. If handling of hazardous materials or the disconnecting of any plumbing or unit processes is required, additional training may be required. Craft personnel work under the direction of the TAN PWTU operator. Crafts personnel are not addressed further in this Training Plan.

The names of personnel filling job positions at TAN PWTU related to mixed waste handling and management are listed in Attachment B. Personnel turnover will result in continual changes to these listings. TAN PWTU operational documents will be updated to reflect personnel changes as they occur. Current



records of personnel in each position are maintained by the ERD training coordinator.

## **2.2 TRAINING CONTENT, FREQUENCY, AND TECHNIQUES**

[IDAPA 16.01.5009,02<sup>1</sup>; 40 CFR 265.16(c) and (d)(3)<sup>2</sup>]

The initial training program for individuals involved in mixed waste management at TAN PWTU consists of a combination of formal and informal training sessions in conjunction with qualification/certification programs. The qualification/certification requirements for each position are identified on OJT checklists, which serve as training guides and provide documentation of steps completed during the training process.

Training sessions use a variety of methods and media including lectures, video tapes, films, and "hands-on" or OJT training. Personnel receive a significant portion of detailed job knowledge through OJT. Job-specific checklists prepared by the TAN PWTU facility manager provide requirements for OJT and are approved by the ERD training. The qualification requirements identified on the checklists include knowledge and performance areas as well as examination requirements for requalification in each position. The Waste Management Training Manual describes the qualification/certification programs for each job position in detail. The following major knowledge areas are included in OJT checklists and are evaluated for each formal qualification program:

- TAN PWTU systems and components
- Normal operating procedures
- Emergency and off-normal operating procedures as discussed in the TAN EP/RCRA CP<sup>6</sup>
- OSHA and other related health and safety requirements
- TAN PWTU administrative procedures
- RCRA requirements as they relate to TAN PWTU
- Theory of radiation and hazardous materials.

The TAN PWTU facility manager or the ERD training coordinator administers written examinations to individuals who are required to complete a formal training program. The TAN PWTU facility manager or the ERD training coordinator prepares the examinations, which are used to test the knowledge of TAN PWTU personnel participating in training programs. Written examinations are given for both OJT and classroom training. Individuals must answer at least 80% of all questions correctly on any examination to receive a passing grade. All examinations are graded and become part of the individual's training record. In addition to written examinations, employees are given oral examinations, operational evaluations, and reviews by the TAN PWTU facility manager or the ERD training coordinator to ensure that they are adequately trained for their job positions.

All employees involved in the management and/or operations of TAN PWTU listed in Chapter 2 of this plan (with the exception of the environmental engineer) shall receive formal classroom training conducted by other EG&G organizations or the TAN PWTU facility manager in the following areas:

- Radiation Worker
- OSHA 1910.120<sup>7</sup> Hazardous Waste Operations and Emergency Response
- OSHA Supervisor Training
- First Aid/CPR
- DOT Hazardous Materials Shipper
- TAN PWTU Health and Safety Plan (EG&G-WM-9143)<sup>8</sup>
- Hazard Communication
- Respirator Training.

Outlines of these courses are included in Attachment A.

In addition to the courses listed above, the Unit Operator and Assistant Unit Director receive training from vendors on important aspects of treatment systems and equipment.

Individuals who have completed initial ERD training programs will periodically receive refresher training and be reevaluated to ensure

proficiency is maintained. At a minimum, all employees associated with the operations at TAN PWTU receive annual training in TAN PWTU emergency procedures, annual radiation worker and respirator refresher training, and biennial refresher training for their specific job assignments. Employees who handle or manage mixed waste receive annual refresher training in RCRA and OSHA requirements and refresher training within six months of the effective date of any new RCRA regulation.

Occasionally, ERD employees attend training classes conducted by outside vendors. In order to adequately verify an employee's attendance at an outside vendor training course, information is obtained from the vendor on the course attended, course content, and number of hours. A verification form is then completed and submitted to HRST.

### **2.3 TRAINING DIRECTOR**

[IDAPA 16.01.5009,02;<sup>4</sup> 40 CFR 265.16(a)(2)<sup>5</sup>]

The TAN PWTU facility manager or ERD training coordinator is responsible for ensuring that TAN PWTU personnel who fill positions related to mixed waste handling or management receive training appropriate to their positions. He/She provides overall leadership and management direction to the Waste Management Training and Emergency Action Unit to assure that the highest standards of training, emergency preparedness, scheduling, record keeping, reporting, and support services are maintained for ERD. More specifically, his/her duties include the following:

- Provide direction to the training coordinators, including the ERD training coordinator, and the Waste Management Training and Emergency Action Unit
- Ensure that presentations by the ERD training coordinator and other instructors are evaluated in accordance with the Waste Management Department Training Program Manual<sup>9</sup>

- Provide direction for and approve the Waste Management Department Training Program Manual<sup>9</sup>
- Approve all lesson plans developed to support ERD training
- Ensure that all program objectives and requirements are satisfied and that the training program meets the requirements of IDAPA 16.01.5009,02<sup>4</sup> (40 CFR 265.16)<sup>5</sup> and 29 CFR 1910.120<sup>7</sup>
- Review documentation including feedback from audits and appraisals, ERD operating logs, emergency exercise critiques, and employee recommendations for possible inclusion into the ERD training program.

An applicable bachelor's degree and five years relevant experience or equivalent, including nuclear facility experience, waste management experience, working knowledge of EG&G, and experience in managing people, developing budgets, and developing long range plans, are the minimum qualifications for this position. The name of the person filling this position is provided in Attachment B.

The ERD training organization supports the TAN PWTU facility manager or the ERD training coordinator in facilitating and implementing the Waste Management training program and documenting the training received by ERD employees. In particular, the ERD training coordinator of the Training and Emergency Action Unit assists the Training Director and works as a member of a team that provides training and emergency action support to the Waste Management Department and the ERD.

The TAN PWTU facility manager or the ERD training coordinator supports the Training Director by facilitating training activities for TAN PWTU personnel. They are responsible for ensuring that TAN PWTU personnel are trained in mixed waste management and contingency plan implementation, including emergency procedures. More specifically, their principal duties include:

- Developing and maintaining training classes as necessary to support activities at TAN PWTU and other ERD operations
- Performing job/task analyses, preparing lesson plans, delivering training, maintaining question/answer banks, preparing tests, and analyzing test results
- Ensuring that the training program complies with the requirements identified in 29 CFR 1910<sup>3</sup> (OSHA) and IDAPA 16.01.5009<sup>1</sup> (40 CFR 265)<sup>2</sup>
- Ensuring that training requirements for all personnel are identified, training is scheduled, and training certifications and qualifications are properly documented
- Monitoring changes in organizational and individual requirements and regulations that must be met, and providing input to the ERD training plan to ensure compliance at the facility level.

A bachelor's degree in industrial or corporate training and five years of experience in industrial training or the equivalent, an advanced degree in a training discipline, experience as a military emergency planner or trainer, or training in a volunteer capacity operating under the principles of performance-based training development, and familiarity with the TAN PWTU health and safety plan are the minimum qualifications for this position. The name of the person filling this position is provided in Attachment B.

#### **2.4 RELEVANCE OF TRAINING TO JOB POSITION**

[IDAPA 16.01.5009,02<sup>4</sup>; 40 CFR 265.16(a)(2)<sup>5</sup>]

Individual training program profiles are prepared for each TAN PWTU position that requires formal training. Each profile may be used as a reference for identifying the minimum requirements associated with achieving and maintaining the indicated qualification/certification to fulfill the

position and as a checklist to ensure training record completeness. At a minimum, the training program profile includes:

- Eligibility requirements
- Qualification/certification prerequisites
- Requirements to achieve initial qualification/certification
- Requirements to maintain qualification/certification.

Profiles typically identify "normal" qualification and certification requirements. Occasionally, a position may require specialized training. Special-case training is documented in individual training records. Profiles include requirements for mixed waste management or handling and emergency response training. Table 2-1 identifies the minimum training required for each job position at TAN PWTU involving mixed waste management or handling.

Individuals who demonstrate an equivalency for specific requirements or prerequisites identified in the training profile may be exempted from the requirement. Exemptions/equivalencies must be approved by the ERD training coordinator. Each exemption/equivalency is documented in the individual's training record.

## **2.5 TRAINING FOR EMERGENCY RESPONSE**

[IDAPA 16.01.5009,02<sup>4</sup>; 40 CFR 265.16(a)(3)<sup>5</sup>]

Emergency response training is provided at least annually to all TAN PWTU personnel, including specialized training for employees with specific emergency action responsibilities, such as emergency operating center (EOC) staff and emergency brigade members. This training is a requirement stipulated in the EG&G Emergency Preparedness Manual<sup>10</sup> and implemented through TAN EP/RCRA CP<sup>6</sup>. Chapter 16 of TAN EP/RCRA CP discusses emergency response training, drills, and exercises at TAN. The following presents an overview of the emergency response training as it relates to TAN PWTU.

Table 2-1. TAN PWTU personnel training requirements

<u>Position</u>	<u>Radia- tion worker</u>	<u>Non- radia- tion worker</u>	<u>OSHA 1910.120</u>	<u>OSHA super- visor</u>	<u>Emergency procedure</u>	<u>Respirator</u>	<u>First aid/CPR</u>	<u>DOT hazardous material shipper</u>	<u>Hazard communi- cation</u>	<u>Vendor system training</u>	<u>Indepen- dent training</u>
Project Manager	X		X	X	X	X	X		X		
PWTU Operator	X		X	X	X	X	X		X	X	
Assistant PWTU Operator	X		X		X	X	X		X	X	
Training Director		X			X		X		X		
Training Coordinator		X			X		X		X		
Health Physics Technician	X		X		X	X	X	X	X		X
Environmental Engineer	X		X		X	X	X	X	X		
Emergency Action Coordinator/Planner		X	X		X	X	X		X		
Safety/Industrial Hygiene	X		X		X	X	X		X		
DOE-ID Firefighters											X

General emergency response training of TAN PWTU personnel includes the following:

- Location and content of the TAN PWTU Contingency Plan<sup>11</sup>
- Location and content of the Waste Management Emergency Preparedness Plan and the TAN EP/RCRA CP<sup>6</sup> and emergency procedures
- Reasons for emergency plans
- Special precautions during an emergency
- Identification, locations, and functions of the emergency response team equipment and supplies and EOC facilities
- Use of emergency communications systems and equipment including facility alarms and their meanings
- Personnel accountability and the role of the individual worker during the emergency
- Situations that require evacuation, evacuation routes, and emergency assembly areas.

The TAN emergency brigade will keep aware of all specific hazards at TAN PWTU by correspondence from the TAN PWTU facility manager. TAN emergency brigade and EOC members provide emergency response capabilities. All emergency brigade and EOC members are trained in their responsibilities at least annually. The training received by emergency brigade and EOC members includes any or all of the subjects summarized below.

#### TAN EOC/Emergency Brigade Training Topics

- Emergency Plan Familiarization



- Emergency Organization
- Accident Classification and Notification
- Radiological Emergencies/Response
- Industrial Safety/Fire (includes spills and countermeasures, fire protection systems, fire department response, emergency brigade response)
- Emergency Response Team Responsibilities
- Emergency Assessment (includes personnel assessment, brigade assessment, radiological survey team assessment, remote assessment, assessment procedures)
- EG&G/DOE-ID Emergency Plan
- TAN Facility Hazards (acids/caustics, petroleum products, hazardous chemicals)
- Emergency Communications
- Evacuation Accountability
- Emergency Facility Equipment
- Security/Safeguards
- Records
- Emergency Plan Implementing Procedures
- Normal Operating Procedures
- Abnormal Operating Procedures

- Special Precautions and Limitations
- DOE and Industry Emergency Operating Experience
- Changes in Emergency Operating Plans and Procedures
- First Aid
- Hazardous Materials Spill Control Decontamination (includes assessing the need for additional resources and making appropriate notification; performing advanced control, containment, and/or confinement operations; hazardous/mixed waste operations; contamination control and decontamination procedures and techniques)
- Safe Work Practices for Re-entry and Survey Teams
- Selection and Use of Personal Protective Equipment
- Hazardous Material Identification and Surveying (includes recognizing presence of hazardous materials in an emergency; identification of hazardous materials; classification, identification, and verification of known and unknown materials by using field survey instruments; hazard and risk assessment techniques; hazardous materials accident assessment procedures and techniques; and personnel monitoring).

All TAN PWTU personnel receive initial training and annual refresher training briefings on TAN PWTU emergency procedures. An emergency action exercise, which requires the participation of all TAN PWTU personnel, is conducted at least annually. This exercise is intended to test the practical application of emergency response procedures. Annual training includes applicable actions from the previous training exercise. These training exercises are supplemented by table-top emergency action training and a critique for appropriate TAN PWTU managers. Emergency drills are conducted monthly in addition to the annual exercises to further test the effectiveness of the training program. Together the drills and annual exercise are used as

a tool to evaluate the emergency personnel abilities and to evaluate the adequacy of TAN PWTU Contingency Plan<sup>11</sup>, Waste Management Emergency Preparedness Plan, and TAN EP/RCRA CP<sup>6</sup> as effective tools for protecting human health, the environment, and TAN PWTU unit and equipment.

### 3. IMPLEMENTATION OF TRAINING PROGRAM

[IDAPA 16.01.5009,02;<sup>4</sup> 40 CFR 265.16(b),(d)(4),(e)]<sup>5</sup>

All TAN PWTU personnel are required to complete new employee orientation within two months of their assignment to TAN PWTU. Completion of new employee orientation is documented on a checklist placed in the employee's training record. A copy of TAN New Employee Orientation Checklist is included in Attachment A9.

After completing new employee orientation, each employee enters into a qualification or certification program specific to his/her job assignment. Job assignments that require the completion of a qualification or certification program have time requirements associated with the program. An OJT checklist is used as a training guide to identify the minimum requirements for each program. OJT checklists must be completed within 6 to 12 months from the time the employee enters the program. The completed OJT checklist is reviewed and approved for inclusion into the employee's training record.

RCRA training is completed within the first six months of the individual's employment or assignment to TAN PWTU or to a position involving mixed waste management or handling. Throughout the training program and until its completion, employees do not perform their job duties unsupervised.

Prior to commencing treatment of waste water, all individuals working at the TAN PWTU shall complete the following training:

- Radiation Worker
- OSHA 1910.120<sup>7</sup> "Hazardous Waste Operations and Emergency Response"
- First Aid/Cardiopulmonary Resuscitation (CPR)
- Hazard Communication

- Respirator Training
- TAN PWTU Standard Operating Procedure and Health and Safety Plan<sup>8</sup>
- Review of RCRA general and pertinent RCRA documents.

#### 4. TRAINING RECORDS

[IDAPA 16.01.5009,02<sup>4</sup>; 40 CFR 265.16(d)(4) and (e)<sup>5</sup>]

The TAN PWTU facility manager or ERD training coordinator maintains individual training files for all ERD personnel, including those associated with TAN PWTU. These files include documentation of completed training such as class rosters, signed checklists, completed exams, data base printouts from training classes other than ERD training (e.g., Human Resources training), and other documents verifying training (e.g., certificates). Original training records are maintained by ERD, except for records of training administered by EG&G Human Resources or Safety Training (DOT Hazardous Materials Shipper, First Aid, CPR, etc.). These training records are maintained by the presenting organizations with verification of attendance provided to the ERD training coordinator.

At a minimum, individual training files include the following:

- Education, work experience, and employment history
- Most recent medical examination
- Results of oral exams, walkthroughs, and job performance assessments related to certification
- Correspondence relating to exceptions to training requirements and extensions of qualification or recertification.

The ERD Training Records Coordinator maintains training files, which include records of the names of employees filling all positions. Each training file includes a form that identifies the employee's minimum required training. The form is signed by the employee and the employee's manager and is updated annually. Additionally, the ERD Training Records Coordinator maintains a logbook that indicates required training and refresher training,

certification and recertification due dates for all ERD personnel, including those associated with TAN PWTU.

Training records for current employees are maintained by the ERD Training Records Coordinator until unit closure or employee termination or transfer. The training records of terminating employees are sent to records storage where they are maintained for a minimum of three years. The training records for TAN PWTU employees who transfer to other areas within the INEL are forwarded to the employees' new organization.

TAN PWTU Training Plan is revised whenever there are:

- Job assignment or job description changes
- TAN PWTU unit modification
- Technological changes
- New regulatory requirements
- Process changes implemented
- Different hazardous materials received.

At a minimum, this Training Plan is reviewed annually and revised as needed. Copies of this Training Plan are kept in the offices of the ERD training coordinator and the TAN PWTU Project Manager.

## 5. REFERENCES

1. State of Idaho, Idaho Administrative Procedures Act, IDAPA, 16.01.5009.
2. National Archives and Records Administration, Code of Federal Regulations, 40 CFR 265, "Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities."
3. National Archives and Records Administration, Code of Federal Regulations, 29 CFR 1910, "Occupational Safety and Health Standards."
4. State of Idaho, Idaho Administrative Procedures Act, IDAPA, 16.01.5009.
5. National Archives and Records Administration, Code of Federal Regulations, 40 CFR 265.16, "Personnel Training."
6. Environmental Restoration Program, TAN Emergency Plan/RCRA Contingency Plan, June 29, 1991.
7. National Archives and Records Administration, Code of Federal Regulations, 29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response."
8. C. G. Dietz, TAN PWTU Health and Safety Plan, EG&G-WM-9143.
9. EG&G Idaho, Inc., Waste Management Department Training Program Manual.
10. EG&G Idaho, Inc., Emergency Preparedness Manual.
11. EG&G Idaho, Inc., TAN PWTU Contingency Plan, EGG-WM-9861.



**ATTACHMENT A**

**TRAINING PROGRAM OUTLINES AND  
NEW EMPLOYEE ORIENTATION CHECKLIST**



ATTACHMENT A

TRAINING PROGRAM OUTLINES AND  
NEW EMPLOYEE ORIENTATION CHECKLIST

- A1. Training Program Outline for Radiation Worker Training (Initial and Refresher)
- A2. Program Outline and Training Checklist for OSHA 1910.120 Hazardous Waste Operations and Emergency Response Training (40-hour, 24-hour, and Refresher Training)
- A3. Training Program Outline for OSHA Supervisor Training
- A4. Training Program Outline for First Aid/CPR (Initial and Refresher)
- A5. Training Program Outline for DOT Hazardous Materials Shippers Course
- A6. Training Program Outline for Respirator Training
- A7. Training Program Outline for Hazard Communication Training (Initial and Refresher)
- A8. Training Program Outline for Non-Rad Worker
- A9. TAN New Employee Orientation Checklist

ATTACHMENT A1  
TRAINING PROGRAM OUTLINE FOR RADIATION WORKER  
TRAINING (INITIAL AND REFRESHER)

HUMAN RESOURCE SAFETY TRAINING  
INITIAL RADIATION WORKER TRAINING LESSON PLAN

COURSE TITLE:

Radiation Worker Training

LESSON TITLE:

Initial Radiation Worker Training TS-501

TIME PERIOD:

12 Hours

OVERVIEW:

The Initial Radiation Worker class will cover the twenty items listed in the DOE Order 5480.11 which is designed to teach participants how to safely work in general radiological conditions while keeping dose and contamination levels as low as reasonably achievable.

REFERENCES:

DOE Order 5480.11  
DOE-ID Order 5480.11  
EG&G Idaho, Inc., *Radiological Controls Manual*  
EG&G Idaho, Inc., *Safety Manual*

OBJECTIVES:

TERMINAL:

With the aid of classroom lecture, videos, visual aids, and practical exercises, participants will be able to perform tasks in radiological environments while keeping radiation/contamination exposures As Low As Reasonably Achievable (ALARA). A passing score of at least 80% accuracy on a written examination is required.

ENABLING:

1. Define the terms Radiation, Ionization, Radioactive Material and Contamination.
2. List the four types of ionizing radiation.
3. Describe the following characteristics for each of the four types of ionizing radiation:
  - Penetrating ability
  - Type of shielding required
  - Biological hazard
4. List the three sources of natural background radiation.

HUMAN RESOURCE SAFETY TRAINING  
INITIAL RADIATION WORKER TRAINING LESSON PLAN

5. Define the terms curie, radiological half-life, rem, dose, and dose rate.
6. Discuss the biological effects of an acute whole body dose of ionizing radiation.
7. Discuss the biological effects of chronic low doses of ionizing radiation to the whole body.
8. Describe the difference between a somatic effect and a genetic effect.
9. Describe the As Low As Reasonably Achievable (ALARA) philosophy, including workers rights and responsibilities.
10. State the Administrative Dose Guidelines for:
  - Whole Body (penetrating radiation)
  - Skin (penetrating and non penetrating radiation).
11. State the DOE limits for individuals involved in life-saving efforts and equipment shutdowns in an emergency.
12. State the purpose of the following dosimeters and explain where each is worn on the body:
  - Thermoluminescent Dosimeter (TLD)
  - Direct Reading Dosimeter (DRD)
  - Digital Dosimeter
13. State the actions an employee must take if the TLD is lost.
14. State the four ways in which radioactive contamination can enter the body.
15. Discuss the importance of the Health Physics Technician (HP) and the role he/she plays.
16. Describe the methods for monitoring internal contamination (Whole Body Count and bioassay).
17. Discuss the following contamination terms:
  - Loose
  - Fixed
  - Airborne

HUMAN RESOURCE SAFETY TRAINING  
INITIAL RADIATION WORKER TRAINING LESSON PLAN

18. Identify sources of contamination including spills, leaks, and maintenance activities that require the opening of contaminated systems.
19. Explain how barriers, such as floor coverings and ropes, are used to minimize the spread of contamination.
20. Describe how ventilation and containment are used in contamination control.
21. State the significance of the colors magenta and yellow.
22. Discuss the following radiological signs and the definition of:
  - Radiation Area
  - High Radiation Area
  - Very High Radiation Area
23. State the contamination limits for Zones I, II, and III and the protective clothing and equipment required.
24. Discuss the importance of a Safe Work Permit and the proper procedure for completing it.
25. State the purpose of a green tag.
26. Describe employee response to the following alarms:
  - Constant Air Monitor (CAM)
  - Remote Area Monitor (RAM)
  - Criticality Alarm
  - LAD, and Portal Monitor
  - Personnel Survey Monitor
27. Describe how a self-survey is performed and which instruments are most commonly used.
28. State the level at which a person is considered to be contaminated.
29. State the methods used for skin decontamination.
30. State the response to a radioactive spill.
31. Demonstrate proper waste segregation and the methods used.

HUMAN RESOURCE SAFETY TRAINING  
INITIAL RADIATION WORKER TRAINING LESSON PLAN

INSTRUCTIONAL MATERIALS:

Overhead slides TS501-1 through TS501-101

Handouts TS-501 *Radiation Worker Training Study Guide/Workbook*

Marker or black board

Dosimetry:

- TLD
- DRD
- Digital dosimeter
- Albedo dosimeter
- Chirpie
- Extremity dosimetry

Videos:

- Radiation Naturally
- Atomic Structure and Ionization
- Biological Effects
- Dosimetry
- Waste Generation Reduction
- WERF
- Zone I
- Zone II
- Zone III
- EG&G Idaho, Inc. Emergency Actions

Exercise Equipment:

- Survey Instrumentation
  - Ludlum 177 (or equivalent)
  - Ludlum 14C
- Zone III Equipment per Student:
  - Dosimetry (TLD and DRD)
  - Duct tape
  - Two pairs plastic booties
  - One pair cotton glove liners
  - One pair yellow cloth Anti-C coveralls
  - One pair shoe covers
  - Two pairs latex gloves
  - One full-face respirator (with lens removed or currently respirator trained)
  - One yellow cloth hood
  - One pair disposable white coveralls with hood
- Contaminated Tool Removal
  - Three yellow bags
  - Tool
  - Duct tape



HUMAN RESOURCE SAFETY TRAINING  
INITIAL RADIATION WORKER TRAINING LESSON PLAN

PRESENTATION METHODS:

Lecture, open discussion, and workbook exercises after each section which will be followed by a practical Zone III dress-up exercise and written examination.

STUDENT ASSIGNMENTS:

None outside of class.

EVALUATION:

Each participant will satisfactorily complete a Zone III dress-up exercise and a 50-question multiple choice examination with a final grade of at least 80%.

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## RADIATION WORKER LESSON PLAN

### COURSE TITLE:

Radiation Worker Training

### LESSON TITLE:

Radiation Worker Refresher Training TS-501R

### TIME PERIOD:

4 Hours

### OVERVIEW:

\*This class is required annually by DOE-ID for those Radiation Workers whose ALARA exposure goal exceeds 500 mrem and/or those Radiation Workers authorized to work in all radiation and contamination areas. The participants are required to complete the Initial Radiation Worker Training Class (TS-501) or equivalent prior to taking this class.

### REFERENCES:

- DOE Orders 5480.11, Radiation Protection for Occupational Workers
- DOE-ID Orders ID 5480.11, Radiation Protection for Occupational Workers
- EG&G Idaho, Inc. Radiological Controls Manual
- EG&G Idaho, Inc. Safety Manual, Section 8

### OBJECTIVES:

#### TERMINAL:

At the conclusion of this training session, each class participant will have sufficient knowledge to anticipate and protect themselves and others against unacceptable levels of exposure of radiation and have a better understanding of the effects of ionizing radiation on the body.

#### ENABLING:

- Define and list the components of the atom.
- List three elements and define isotopes.
- Know the difference between ionizing and non-ionizing radiation.
- Identify the different types of ionizing radiation, their penetrating abilities, and capabilities of biological damage.

## HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

### RADIATION WORKER LESSON PLAN

- Know the curie is a measurement of radioisotope activity.
- Describe the radiological decaying process (half-life).
- List three ways man uses ionizing radiation for the benefit of mankind.
- Describe the three units of measurement (Roentgen, rad, and rem).
- Know the difference between dose and exposure.
- Work stay time problems.
- Explain the ALARA policy and give two examples of how EG&G has implemented it within the company.
- Know the DOE and EG&G annual effective dose equivalents for the whole body.
- Know the radiation dose allowed to a pregnant radiation worker and the supervisor notification procedure to be followed.
- Define cell structure, cell division, cell division rates and the effects of ionizing radiation on cells.
- Know the effects ionizing radiation has on the body when receiving a chronic or acute dose.
- Give an example of a delayed effect and a prompt effect.
- List the three acute syndromes and at what radiation levels radiation sickness and death may occur.
- Explain and give an example of genetic and somatic effects.
- Explain non-stochastic and stochastic effects and give examples.
- Define critical organ and be able to give an example of two radioisotopes and the organs effected by an intake.
- Know who is responsible and two reasons for the implementation of the radiological program at the facilities.
- List three examples when the radiation levels may change on a job.
- Define the types of instrumentation used to perform higher levels of radiation surveys and its limitations.
- Explain the use of a RAM, type of alarm, and proper response to its alarm.
- List the different radiation areas and the radiation levels of each.
- Know the different types of dosimetry and their uses.

## HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

### RADIATION WORKER LESSON PLAN

- Know the exposure-reducing techniques and give two examples of how each would work in a radiation area (time, distance, and shielding).
- Give an example of permanent and temporary shielding and when a temporary loss of shielding may occur.
- List three Radiation Worker responsibilities.
- Give five examples of ways to minimize radiation work exposure.
- Give three examples of a site emergency.
- Know the responsibilities of each employee and the area warden in an emergency situation.
- Explain what to do if a large personnel contamination monitor alarms.
- Explain how to use a frisker, at what reading you are considered contaminated and the proper response if you are contaminated.
- Know the alarms and proper response to CAM, RAM, and two-tone warbler alarms.
- Know the take cover and evacuation signals and proper responses.
- Explain what fire alarms are used at the site and the Idaho Falls facilities and the numbers to call in an emergency.
- Know the projected whole body exposure that is limited to volunteers.

#### INSTRUCTIONAL MATERIALS:

Overhead slides TS501R-1 through TS501R-

Radiation Worker Refresher Study Guide

#### Videos:

- "The Atom - A Closer Look", Walt Disney Studios
- "Ionizing Radiation and Its Biological Effects", TRADE
- "EG&G Idaho, Inc. 1989 Employee Orientation", EG&G Idaho, Inc.

#### PRESENTATION METHODS:

Lecture with reference to study guide and open discussion followed by a written examination.

#### STUDENT ASSIGNMENTS:

None outside of class.

#### EVALUATION:

80% or above required on the written examination.

ATTACHMENT A2

TRAINING PROGRAM OUTLINE AND CHECKLIST FOR  
OSHA 1910.120 HAZARDOUS WASTE OPERATIONS AND  
EMERGENCY RESPONSE  
(40-HOUR, 24-HOUR, AND REFRESHER TRAINING)

**DOCUMENT TITLE:**

Hazardous Waste Operators Facility Checklist which includes:

- Section I - RCRA/CERCLA Corrective Action Work Sites
- Section II - RCRA TSD Work Sites

**COURSE TITLE:**

The Hazardous Waste Operators Facility Training Checklist will be used in conjunction with the 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response course.

**LESSON TITLE:**

The Hazardous Waste Operators Facility Training Checklist is intended for those personnel that have satisfactorily completed training in the 40-Hour 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response for General Site Workers (TS-205E).

**OVERVIEW:**

The Hazardous Waste Operators Facility Training Checklist is to be used to document federally regulated (29 CFR 1910.120 and 40 CFR 261, 262, 264, and 265) on-the-job training for those employees working at RCRA/CERCLA corrective action and RCRA TSD work sites. The Checklist was developed by HRD/Safety Training and the ES&O groups: Requirements and Systems and Environmental Programs.

Upon satisfactory completion of the 40-hour lesson (TS-205E) mentioned above, HRD/Safety Training will send the Checklist, EG&G Idaho, Inc. Form #3080, and pertinent information to the trainee's unit manager. The completed Checklist and Form #3080 are to be returned to HRD/ST within 30 days from the 'Date Classroom Training Completed' indicated on Part I of Form #3080. The Checklist will be filed with the trainee's TS-205E written classroom test.

**OBJECTIVE:**

The Hazardous Waste Operators Facility Training Checklist will assist line management in identifying the required on-the-job training to help ensure the safety of the employees and compliance with the various regulations.

## HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

### 40-HOUR 29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE FOR GENERAL SITE WORKERS - INTRODUCTORY CPR/FIRST AID TS-205F

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COURSE TITLE: 29 CFR 1910.120 - Hazardous Waste Operations and  
Emergency Response

LESSON TITLE: 40-Hour 29 CFR 1910.120 Hazardous Waste Operations  
and Emergency Response for General Site Workers -  
Introductory CPR/First Aid TS-205F

TIME PERIOD: 4 Hours

OVERVIEW: The Introductory CPR/First Aid class is a module of the  
40-hour 29 CFR 1910.120 Hazardous Waste Operations and  
Emergency Response for General Site Workers course. This  
class contains recommended first-aid procedures concerning  
illnesses, injuries, and other problems that could occur to  
employees working in operations.

REFERENCES: 29 CFR 1910.120 Hazardous Waste Operations and Emergency  
Response

Tel-A-Train, Inc. First Aid Programs

#### OBJECTIVE(S):

##### TERMINAL OBJECTIVE:

With the aid of classroom lecture, videos, and practical  
exercises participants will be able to perform recognized  
first-aid procedures.

##### ENABLING OBJECTIVES:

1. State the phone numbers to call if involved in an emergency while at work  
at the site.
2. Describe the steps necessary for performing correct cardiopulmonary  
resuscitation.
3. Discuss the reasons why cardiopulmonary resuscitation should be initiated  
immediately in a patient with cardiac arrest.
4. State the differences in depth of chest compressions and rate of rescue  
breathing in an adult as compared to a child or an infant.

## HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

### 40-HOUR 29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE FOR GENERAL SITE WORKERS - INTRODUCTORY CPR/FIRST AID TS-205F

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5. Demonstrate the correct procedure for performing abdominal thrusts on a conscious adult who is choking.
6. Describe the correct procedure for performing abdominal thrusts on an unconscious adult who is choking.
7. State the purpose of flushing the skin immediately with water after having received a chemical burn.
8. State the symptoms of shock.
9. Describe the proper procedure for caring for someone who has a diabetic emergency.
10. Discuss what to do when encountering someone who is in contact with an electrical current.
11. Describe the most common symptoms of a heart attack.
12. State the symptoms of heat stroke and heat exhaustion.
13. Discuss the general guidelines for caring for a victim of accidental poisoning.
14. Describe the steps in caring for a person who is having a convulsion.
15. Discuss the points of proper care of a person suffering from cold exposure.
16. Describe the three routes of entry of chemical poisons.
17. Discuss the proper response to a chemical burn to the eyes.

INSTRUCTIONAL MATERIAL:

1. A Reference Guide to First Aid Procedures
2. CPR mannequin
3. Tel-A-Train Videos
  - Emergency Priorities
  - The ABC's of Life
  - Treating Common Injuries
  - Recognizing Sudden Illness

PRESENTATION METHODS: Discussion, lecture, video, and classroom exercises



24-Hour 29 CFR 1910.120 Hazardous Waste Operations  
and Emergency Response TS207

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DOCUMENT TITLE:

The EG&G Idaho, Inc. Form #3080 includes:

- Part I - 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response Training
- Part II - Hazardous Waste Operators Facility Training

COURSE TITLE:

EG&G Idaho, Inc. Form #3080 will be used in conjunction with the 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response course.

LESSON TITLE:

EG&G Idaho, Inc. Form #3080 is intended for those personnel that have satisfactorily completed training in the 24-Hour 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response (TS-207).

OVERVIEW:

The EG&G Form #3080 is a HRD/ST document. Upon satisfactory completion of one of the above mentioned lesson plans, the trainee and instructor will complete Part I. The Form and a required on-the-job training checklist (Hazardous Waste Operators Facility Training Checklist) will be sent out to the trainee's manager for completion of Part II by the manager and trainee. The completed Form and Checklist are to be returned to HRD/ST within 30 days from the 'Date Classroom Training Completed' indicated on Part I of the Form. The Form will be filed with the trainee's TS-207 classroom training roll sheets.

OBJECTIVE:

The EG&G Form #3080 is a document for the HRD/ST training file which verifies:

- The trainee has satisfactorily completed the classroom training in class number TS-207
- The facility management has provided adequate on-the-job training to that trainee
- The trainee has received and understood the training provided

## 1.0 INTRODUCTION

### 1.1 WELCOME TO 29CFR1910.120 GENERAL SITE WORKER COURSE

### 1.2 INEL MISSION

### 1.3 STUDENT INTRODUCTIONS, BACKGROUNDS, JOB DESCRIPTIONS, AND SKILL LEVEL ASSESSMENT

### 1.4 LEGAL AND REGULATORY ASPECTS OF THE COURSE

- 1.4.1 Title 40 Code of Federal Regulations (40CFR)  
(U.S. Environmental Protection Agency)
- 1.4.2 Clean Air Act
- 1.4.3 Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), 1947
- 1.4.4 National Environmental Policy Act (NEPA), 1969
- 1.4.5 Resource Conservation and Recovery Act (RCRA), 1976
- 1.4.6 National Priority List
- 1.4.7 Toxic Substances Control Act (TSCA), 1976
- 1.4.8 Hazardous Materials Transportation Act
- 1.4.9 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or "Superfund") 1980
- 1.4.10 Superfund Amendments and Reauthorization Act (SARA) 1986
- 1.4.11 Clean Water Act (CWA)
- 1.4.12 Safe Drinking Water Act (SDWA), 1974
- 1.4.13 Noise Control Act
- 1.4.14 Title 29 Code of Federal Regulations (29CFR)  
(U.S. Department of Labor)
- 1.4.15 Occupational Health and Safety Act (OSHA)
- 1.4.16 Hazardous Communication 29 CFR 1910.1200 (OSHA)
- 1.4.17 State and local regulations

### 1.5 RIGHTS AND RESPONSIBILITIES OF EMPLOYEES UNDER OSHA AND CERCLA

### 1.6 GOALS AND OBJECTIVES

### 1.7 COURSE OVERVIEW

## 2.0 HAZARDS AND THEIR MANAGEMENT

### 2.1 SAFETY AND HEALTH PROGRAM

- 2.1.1 General
- 2.1.2 Organizational structure
- 2.1.3 Comprehensive site work plan
- 2.1.4 Site-specific safety and health plan

### 2.2 INFORMATIONAL PROGRAMS

### 2.3 NEW TECHNOLOGY PROGRAMS

- 2.3.1 Procedures for new technologies and equipment for employee protection
- 2.3.2 Evaluation of new methods, materials or equipment for employee protection

### 2.4 PRINCIPLES OF SAFETY

### 2.5 HAZARD RECOGNITION AND RISK EVALUATION

### 2.6 TYPES OF HAZARDS

- 2.6.1 Chemical exposures
- 2.6.2 Explosion and fire
- 2.6.3 Oxygen deficiency (confined space entry)
- 2.6.4 Ionizing radiation
- 2.6.5 Biologic hazards
- 2.6.6 Physical hazards
- 2.6.7 Electrical hazards
- 2.6.8 Heat Stress
- 2.6.9 Cold Exposure
- 2.6.10 Noise

### 2.7 CLASSIFICATIONS OF HAZARDOUS MATERIALS AND WASTE

### 2.8 PHYSICAL AND CHEMICAL PROPERTIES OF HAZARDOUS MATERIALS AND WASTE

## 2.9 TOXICOLOGY

- 2.9.1 Definition
- 2.9.2 Routes of entry
- 2.9.3 Rate of entry
- 2.9.4 Target organs
- 2.9.5 Threshold Limit Value (TLV)
- 2.9.6 Immediately Dangerous to Life and Health (IDLH)
- 2.9.7 Recognition of signs and symptoms of overexposure
- 2.9.8 Responses to toxic exposures

## 2.10 INDUSTRIAL HYGIENE

- 2.10.1 Definition
- 2.10.2 Recognition
- 2.10.3 Evaluation
- 2.10.4 Control
- 2.10.5 Methods of control
- 2.10.6 Environmental stresses
- 2.10.7 Chemical stresses
- 2.10.8 Airborne contaminants

## 2.11 SOURCES OF HAZARD INFORMATION

LESSON PLAN: Module 1

TITLE: Introduction

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. Understand the INEL mission.
2. Understand the requirements of 29CFR1910.120, and how they relate to the workplace.
3. Explain the purpose of the legal and regulatory aspects mentioned in this module.
4. Explain the purpose of the state and local OSHA-type agencies.
5. List the general duties and obligations of employers and employees under 29CFR1910.120.

LESSON PLAN: Module 2

TITLE: Hazards and Their Management

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. Understand the overall organization safety programs within EG&G.
2. List several safe work practices to use when dealing with hazardous waste.
3. Identify and evaluate health hazards and emergency actions when working in hazardous waste operations.
4. Explain the concepts of risk hazard.
5. Briefly describe types of hazards likely to be encountered when working with and around hazardous materials.
6. Gain an understanding of the classifications of hazardous materials and waste and their physical and chemical properties.
7. Learn the definition of toxicology, its routes and rates of entry, threshold limit values and responses to toxic exposure.
3. Explain the major functions of the science of Industrial Hygiene and the four main categories of environmental stress that are likely to be encountered in hazardous waste and emergency response operations.

### 3.0 PLANNING AND ORGANIZATION

#### 3.1 PLANNING - THE CRITICAL ELEMENT OF HAZARDOUS WASTE SITE ACTIVITIES

3.1.1 Anticipation and steps for prevention of potential hazards

3.1.2 On-going process

#### 3.2 DEVELOPMENT OF AN ORGANIZATIONAL STRUCTURE FOR SITE OPERATIONS

#### 3.3 ESTABLISHMENT OF A COMPREHENSIVE WORK PLAN

#### 3.4 DEVELOPMENT AND IMPLEMENTATION OF A SITE SAFETY PLAN

#### 3.5 SAFETY MEETINGS AND INSPECTIONS

LESSON PLAN:

Module 3

TITLE:

Planning and Organization

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. List the major elements of the organizational structure of a comprehensive Hazardous Waste Operations and Emergency Response Site Program.



## 4.0 TRAINING

4.1 GENERAL OBJECTIVES OF A TRAINING PROGRAM

4.2 TRAINING ELEMENTS TO BE COVERED

4.3 GENERAL SITE WORKER INITIAL TRAINING

4.4 MANAGEMENT AND SUPERVISOR TRAINING

4.5 QUALIFICATIONS FOR TRAINERS

4.6 TRAINING CERTIFICATION

4.7 EMERGENCY RESPONSE

4.8 REFRESHER TRAINING

4.9 EQUIVALENT TRAINING

LESSON PLAN: Module 4

TITLE: Training

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. State the purpose and importance of a training program for workers involved in hazardous waste site activities.
2. Recognize the amount of training required for a specific position involved in hazardous waste site activities.

## 5.0 MEDICAL PROGRAM

5.1 MEDICAL SURVEILLANCE

5.2 EMPLOYEES COVERED

5.3 FREQUENCY OF MEDICAL EXAMINATIONS

5.4 CONTENT OF MEDICAL EXAMINATIONS

5.5 EXAMINATION BY A PHYSICIAN AND COSTS

5.6 INFORMATION PROVIDED TO THE PHYSICIAN

5.7 PHYSICIANS WRITTEN OPINION

5.8 RECORDKEEPING

LESSON PLAN: Module 5

TITLE: Medical Program

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. Understand the purpose and components of a medical surveillance program.
2. Describe the reasons for monitoring the health of hazardous waste site workers.
3. Recognize the different types of medical examinations and the reason each is necessary.

## 6.0 SITE CHARACTERIZATION

6.1 GENERAL PURPOSE OF SITE CHARACTERIZATION

6.2 PRELIMINARY OFF-SITE CHARACTERIZATION

6.3 ON-SITE SURVEY

6.4 RISK IDENTIFICATION

6.5 EMPLOYEE NOTIFICATION OF HAZARDS AND RISKS

LESSON PLAN:

Module 6

TITLE:

Site Characterization

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. Conduct off-site characterizations from the site perimeter prior to making a site entry.
2. Conduct an on-site survey using proper personnel, personal protective equipment, and monitoring techniques.
3. Recognize the importance of employee notification concerning the hazardous materials located in the site area.

LESSON PLAN: Module 7

TITLE: Monitoring

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. State four reasons for monitoring the work environment.
2. Recognize the different types of site and personal monitoring principles and the instruments used at a hazardous waste site.
3. Recognize the capabilities and limitations of direct-reading instruments and laboratory analysis.
4. Understand the importance of initial and periodic monitoring.
5. Determine which employees would be considered in the high risk category and the use of proper monitoring procedures.

## 8.0 ENGINEERING CONTROLS, WORK PRACTICES, AND PERSONAL PROTECTIVE EQUIPMENT

### 8.1 REGULATORY REQUIREMENTS

- 8.1.1 Substances regulated in Subparts G and Z
- 8.1.2 Substances not regulated in Subparts G and Z

### 8.2 SELECTION OF RESPIRATORY EQUIPMENT

- 8.2.1 Protection Factor
- 8.2.2 Self-Contained Breathing Apparatus (SCBA)
- 8.2.3 Supplied-Air Respirators (SAR)
- 8.2.4 Combination SCBA/SAR
- 8.2.5 Air-purifying respirators

### 8.3 SELECTION OF PROTECTIVE CLOTHING AND ACCESSORIES

- 8.3.1 Selection of chemical-protective clothing
- 8.3.2 Permeation and degradation
- 8.3.3 Heat transfer characteristics
- 8.3.4 Other considerations
- 8.3.5 Special conditions

### 8.4 PERSONAL PROTECTIVE EQUIPMENT PROGRAM

### 8.5 PERSONAL PROTECTIVE EQUIPMENT USE

- 8.5.1 Training
- 8.5.2 Work mission duration
- 8.5.3 Personal use factors
- 8.5.4 Donning an ensemble
- 8.5.5 Respirator fit testing
- 8.5.6 In-use monitoring
- 8.5.7 Doffing an ensemble
- 8.5.8 Clothing reuse
- 8.5.9 Inspection
- 8.5.10 Storage
- 8.5.11 Maintenance

### 8.6 HEAT STRESS AND OTHER PHYSIOLOGICAL FACTORS

- 8.6.1 Monitoring
- 8.6.2 Prevention
- 8.6.3 Other factors



LESSON PLAN: Module 3

TITLE: Engineering Controls, Work Practices,  
and Personal Protective Clothing

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. Understand the use of engineering controls, work practices, and Personal Protective Equipment in reducing and maintaining low employee exposures.
2. Identify the effects and conditions associated with exposure to respiratory hazards.
3. Define the term "protection factor" and explain its importance.
4. List the categories of respiratory protective equipment and give the main features of each type.
5. Understand the purpose of a Personal Protective Equipment program.
6. Briefly describe the importance of using proper Personal Protective Equipment and list two problems associated with their use.

## 9.0 SITE CONTROL

### 9.1 PURPOSE OF A SITE CONTROL PROGRAM

- 9.1.1 Minimizing potential contamination of workers
- 9.1.2 Public protection from site hazards
- 9.1.3 Prevention of vandalism

### 9.2 ELEMENTS OF A SITE CONTROL PROGRAM

- 9.2.1 Site map
- 9.2.2 Site preparation
- 9.2.3 Site work zones
- 9.2.4 The buddy system
- 9.2.5 Site security
- 9.2.6 Communication systems
- 9.2.7 Safe work practices

### 9.3 ILLUMINATION

### 9.4 SANITATION AT TEMPORARY WORKPLACES

- 9.4.1 Potable water
- 9.4.2 Nonpotable water
- 9.4.3 Toilet facilities
- 9.4.4 Food handling
- 9.4.5 Temporary sleeping quarters
- 9.4.6 Washing facilities
- 9.4.7 Showers and change rooms

LESSON PLAN: Module 9

TITLE: Site Control

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. Explain the purpose of site control.
2. List three items to be assessed when preparing a site map.
3. Gain an understanding of the elements of site control, including site preparation techniques and work zones, use of the buddy system, site security, communication systems, and safe work practices.

## 10.0 DECONTAMINATION

### 10.1 REGULATORY REQUIREMENTS

### 10.2 DECONTAMINATION PLAN

- 10.2.1 Purpose
- 10.2.2 Number and layout of decontamination stations
- 10.2.3 Decontamination equipment
- 10.2.4 Appropriate decontamination methods
- 10.2.5 Establish procedures
- 10.2.6 Methods and procedures for removal of personal protective clothing and equipment
- 10.2.7 Establish methods for disposing of clothing and equipment

### 10.3 PREVENTION OF CONTAMINATION

- 10.3.1 Purpose
- 10.3.2 Establish Standard Operating Procedures
- 10.3.3 Good work practices
- 10.3.4 Remote handling techniques
- 10.3.5 Protection of instruments
- 10.3.6 Disposable garments and equipment
- 10.3.7 Strippable coatings
- 10.3.8 Encasing the source of contaminants

### 10.4 TYPES OF CONTAMINATION

- 10.4.1 Surface contaminants
- 10.4.2 Permeating contaminants
- 10.4.3 Factors affecting the extent of permeation

### 10.5 DECONTAMINATION METHODS

- 10.5.1 Physical removal of contaminants
- 10.5.2 Inactivation of contaminants
- 10.5.3 Removal of contaminants by physical and chemical means

### 10.6 TESTING FOR EFFECTIVENESS OF DECONTAMINATION

- 10.6.1 Initial and periodic assessment of decontamination methods
- 10.6.2 Visual observation
- 10.6.3 Wide sampling
- 10.6.4 Cleaning solution analysis
- 10.6.5 Testing for permeation

## 10.7 HEALTH HAZARDS

- 10.7.1 Incompatibility with the hazardous substances
- 10.7.2 Incompatibility with the clothing or equipment being contaminated
- 10.7.3 Direct health hazard to workers

## 10.8 DECONTAMINATION FACILITY DESIGN

- 10.8.1 Location in the Contamination Reduction Zone (CRZ)
- 10.8.2 Dependency of decontamination procedures on site-specific factors

## 10.9 DECONTAMINATION EQUIPMENT SELECTION

## 10.10 DISPOSAL METHODS

- 10.10.1 Decontamination equipment disposal
- 10.10.2 Clothing disposal
- 10.10.3 Disposal of spent solutions and wash water

## 10.11 PERSONNEL PROTECTION

- 10.11.1 Selection and unauthorized removal of Personal Protective Equipment
- 10.11.2 Variation in level of protection dependent upon decontamination equipment selected
- 10.11.3 Showers and change rooms provided

## 10.12 EMERGENCY DECONTAMINATION

- 10.12.1 Procedures must be established
- 10.12.2 Prevention of loss of life or severe injury
- 10.12.3 Protection of medical personnel
- 10.12.4 Disposal of contaminated clothing and equipment

LESSON PLAN:                      Module 10

TITLE:                              Decontamination

LESSON DURATION:

INSTRUCTIONAL SETTING:    Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. Gain an understanding of contamination prevention measures.
2. Recognize types and sources of potential contamination.
3. Under the chemical and physical decontamination classifications, list three decontamination removal methods.
4. List some considerations to be taken prior to selecting a decontamination process.
5. Gain an understanding of the elements of decontamination facility design, equipment selection, disposal methods, personal protection, and emergency decontamination.

## 11.0 HANDLING DRUMS AND OTHER CONTAINERS

### 11.1 REGULATORY REQUIREMENTS

### 11.2 INSPECTION

### 11.3 PLANNING

### 11.4 HANDLING

- 11.4.1 Drums containing radioactive waste
- 11.4.2 Drums that may contain explosive or shock-sensitive wastes
- 11.4.3 Bulging drums
- 11.4.4 Drums containing packaged laboratory wastes (Lab Packs)
- 11.4.5 Leaking, open, and deteriorated drums
- 11.4.6 Buried drums

### 11.5 OPENING

### 11.6 SAMPLING

### 11.7 CHARACTERIZATION

### 11.8 STAGING

### 11.9 BULKING

### 11.10 SHIPMENT

### 11.11 SPECIAL CASE PROBLEMS

- 11.11.1 Tanks and vaults
- 11.11.2 Vacuum trucks
- 11.11.3 Elevated trucks
- 11.11.4 Compressed gas cylinders
- 11.11.5 Ponds and lagoons

LESSON PLAN:                      Module 11

TITLE:                              Handling Drums and Other Containers

LESSON DURATION:

INSTRUCTIONAL SETTING:    Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. Understand the hazards associated with the handling of drums and other containers which contain hazardous waste material.
2. List observations to be made when visually inspecting drums and other containers for hazard assessment.
3. Understand the planning, handling, opening, sampling, characterization, staging, bulking, and shipment processes associated with drums and other containers which contain hazardous waste material.
4. List three special case problems associated with handling hazardous waste.



## 12.0 SITE EMERGENCIES

### 12.1 REGULATORY REQUIREMENTS FOR AN EMERGENCY RESPONSE PLAN

### 12.2 ELEMENTS OF AN EMERGENCY RESPONSE PLAN

- 12.2.1 Planning
- 12.2.2 Personnel
- 12.2.3 Training
- 12.2.4 Emergency recognition and prevention
- 12.2.5 Communications
- 12.2.6 Site mapping
- 12.2.7 Safe distances and refuges
- 12.2.8 Site security and control
- 12.2.9 Evacuation routes and procedures
- 12.2.10 Decontamination
- 12.2.11 Equipment
- 12.2.12 Medical treatment/first aid
- 12.2.13 Emergency response procedures
- 12.2.14 Documentation

### 12.3 PROCEDURES FOR HANDLING EMERGENCY INCIDENTS

- 12.3.1 Notification
- 12.3.2 Size-up
- 12.3.3 Rescue/response procedures (spill response)
- 12.3.4 Follow-up

### 12.4 EMERGENCY PREVENTION

LESSON PLAN: Module 12

TITLE: Site Emergencies

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the conclusion of this module, the student will be able to:

1. List ten causes of emergencies at a hazardous waste site which are worker-related and/or waste-related.
2. List and describe the importance of the fourteen elements in a thorough emergency response plan.
3. Describe the communications problems that are common to hazardous waste emergencies and tell how they can be resolved.
4. List four emergency response procedures and explain the essential information used in handling emergency incidents.
5. List emergency prevention methods which can be used in the work place.

## 13.0 OPERATIONS CONDUCTED UNDER THE RCRA

- 13.1 REGULATORY REQUIREMENTS FOR TREATMENT,  
STORAGE, AND DISPOSAL (TSD) FACILITIES
- 13.2 SAFETY AND HEALTH PROGRAM
- 13.3 HAZARD COMMUNICATION PROGRAM
- 13.4 MEDICAL SURVEILLANCE PROGRAM
- 13.5 DECONTAMINATION PROGRAM
- 13.6 NEW TECHNOLOGY PROGRAM
- 13.7 MATERIAL HANDLING PROGRAM
- 13.8 TRAINING PROGRAM
- 13.9 EMERGENCY RESPONSE PROGRAM

LESSON PLAN:

Module 13

TITLE:

Operations Conducted Under the RCRA

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the completion of this module, the student will be able to:

1. Understand the application of the resource Conservation and Recovery Act and the required programs.

## 14.0 EMERGENCY RESPONSE TO HAZARDOUS SUBSTANCE RELEASES BY EMPLOYEES NOT PREVIOUSLY COVERED

- 14.1 REGULATORY REQUIREMENTS FOR AN EMERGENCY  
RESPONSE PLAN
- 14.2 ELEMENTS OF AN EMERGENCY RESPONSE PLAN
- 14.3 PROCEDURES FOR HANDLING EMERGENCY RESPONSE
- 14.4 SKILLED SUPPORT PERSONNEL
- 14.5 SPECIALIST EMPLOYEES
- 14.6 TRAINING
  - 14.6.1 First responder awareness level
  - 14.6.2 First responder operations level
  - 14.6.3 Hazardous materials technician
  - 14.6.4 Hazardous materials specialist
  - 14.6.5 On-scene commander
- 14.7 TRAINERS
- 14.8 REFRESHER TRAINING
- 14.9 MEDICAL SURVEILLANCE AND CONSULTATION
- 14.10 CHEMICAL PROTECTIVE CLOTHING
- 14.11 POST-EMERGENCY RESPONSE OPERATIONS

LESSON PLAN:

Module 14

TITLE:

Emergency Response to Hazardous  
Substance Releases by Employees Not  
Previously Covered

LESSON DURATION:

INSTRUCTIONAL SETTING: Classroom

STUDENT OBJECTIVES:

At the completion of this module, the student will be able to:

1. Understand the regulatory requirements for an emergency response plan.
2. Understand elements of an emergency response plan.
3. Understand the need for procedures for handling emergency response.
4. Understand the training requirements for the various levels of response.

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## 29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE - REFRESHER TS-205R

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### COURSE TITLE:

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response

### LESSON TITLE:

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response -  
Refresher TS-205R

### TIME PERIOD:

8 Hours

### OVERVIEW:

This class is required annually for all employees on site, including supervisors and on-site managers that are still engaged in hazardous waste operations. To complete the annual refresher classroom training the employee must have completed certification in the 40-hour 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response for General Site Workers or the 24-hour 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response.

### REFERENCES:

- Hazardous Waste Operations and Emergency Response, Title 29 Code of Federal Regulations, Part 1910.120 (29 CFR 1910.120), 1988.
- Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH 85-115, 1985.
- Trade Instructional Materials for SARA/OSHA Training Volume I, General Site Worker Training, ORAU 88/C-125, April 1988.
- General Physics Corporation Hazardous Waste Operations and Emergency Response for General Site Workers, (HAZWOPER).

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## 29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE - REFRESHER TS-205R

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### OBJECTIVES:

#### TERMINAL:

With the aid of the classroom lecture, visual aids, and demonstrations, participants will be able to identify, evaluate, and control problems pertaining to waste operations, hazardous substances, and associated health hazards. This will be demonstrated by passing a written examination with at least 80% accuracy.

#### ENABLING:

- Identify the hazardous materials used at employee's workplace; their usage; safety precautions and the Personal Protective Equipment used with each.
- List problems and solutions encountered at employee's workplace.
- List accidents, near misses, UOR's that have occurred within the past year and the proper response to each.
- Analyze a national and international "Hazardous Material" accident.
- Describe weaknesses in our Hazardous Material Control System.
- Understands the Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities.

### INSTRUCTIONAL MATERIALS:

Overhead slides

#### Videos:

- Heat Stress, West Valley
- Explosives, China Lake
- Chemical Safety Fire and Explosion, Part 3, Tel-A-Train
- Chemical Safety Health Hazards, Part 2, Tel-A-Train
- Illegal Fireworks

### PRESENTATION METHODS:

Pretest, lecture, and open discussion followed by quiz.

### STUDENT ASSIGNMENTS:

None outside of class.



# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## MEDIC FIRST AID LESSON PLAN

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### COURSE TITLE:

Medic First Aid

### LESSON TITLE:

Medic First Aid - Basic  
(Fourth Edition) TS-701

### TIME PERIOD:

8 Hours

### OVERVIEW:

The Medic First Aid - Basic class is required one time only for those employees who are required to be certified in CPR and First Aid. These employees include those designated as first aid attendants, emergency brigade members, electricians, line workers, and health physics technicians. All field safety personnel should have this training.

### REFERENCES:

- Standard Operational Safety Requirements - ID Appendix 0550, Subpart IIII
- Radiological Control Manual - Section 10, Radiological Control Training and Certification Requirements
- 29 CFR 1910.120 Hazardous Waste Operation and Emergency Response

### OBJECTIVES:

#### TERMINAL:

With the aid of practical exercises, videos, and instructor emphasis the class participants will be able to perform the Seven Basic Skills of Care listed under the enabling objectives and receive valuable information on other types of first aid emergencies.

#### ENABLING:

To place emphasis on the development of the Seven Basic Skills of Care which include:

- Primary Assessment
- One Rescuer CPR
- Unconscious and Conscious Choking
- Control of Bleeding
- Shock Management
- Illness Assessment
- Injury Assessment

Participants will learn measures to take to protect themselves from communicable diseases and the skills of patient care in the same sequence in which they would actually use them in caring for an ill or injured person.

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## MEDIC FIRST AID LESSON PLAN

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### INSTRUCTIONAL MATERIALS:

Videotapes, "Medic First Aid Mark II" modules 1 through 7, copyright 1990.

Handouts "CPR and the Law" sheet, emergency number cards, \*MFA Vis-A-Quiz Workbook, \*MFA Medical Emergency Reference Manual #1, \*Pocket Reference Manual, and first aid kits.

\*Update '89 version.

### PRESENTATION METHODS:

Videos, lecture, practical exercises, and open discussion.

### STUDENT ASSIGNMENTS:

None outside of class.

### EVALUATION:

Optional quiz exercise in the back of Vis-A-Quiz Workbook and mandatory practical exercises.

# HAZARDOUS WASTE OPERATOR FACILITY TRAINING CHECKLIST

## TS-205C

SITE OPERATION/FACILITY \_\_\_\_\_ DATE \_\_\_\_\_  
print

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**INSTRUCTIONS:** The employee's on-the-job training shall be done under the direct supervision of a trained experienced supervisor(s). The supervisor(s) shall initial and date each of the checklist items. If the item is not applicable to the employee's work site area indicate with initials, date, and N/A. The distribution instructions are given at the end of Section I and Section II.

**EMPLOYEE INSTRUCTIONS:** Fill in the following information prior to starting your on-the-job training.

Employee's Name \_\_\_\_\_ S# | / / / / |  
print

Employee's Job Description/Title \_\_\_\_\_

Employee's Signature \_\_\_\_\_

**MANAGER INSTRUCTIONS:** Fill in the following information after the employee has completed the checklist.

Manager's Name \_\_\_\_\_ S# | / / / / |  
print

Manager's Signature \_\_\_\_\_

**NOTE:** At the completion of a satisfactory review with the employee, the manager of the facility and employee shall sign Part II of Form #3080. The completed Checklist and Form must be returned to HRD/Safety Training within 30 days from 'Date Classroom Training Completed' as indicated in Part I on Form #3080. The 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response certification will not be documented in the employee's training records until HRD/Safety Training has received the completed Checklist and Form.

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

## RCRA/CERCLA - SECTION I

In this section the minimal elements for the training program of hazardous waste workers are identified. It covers the site specific topics as they relate specifically to the operation. On-the-job training is a requirement and shall thoroughly cover the following:

TRAINED BY (initial/date)	N/A (not applicable)	DESCRIPTION OF CHECKLIST ITEM
		29 CFR 1910.120
_____	_____	1.0 Names of the personnel and alternates responsible for site safety and health
_____	_____	2.0 List the health, safety, and other hazards present at the work site and review the site safety and health plan
		3.0 Use of Personal Protective Equipment (PPE):
_____	_____	1. The proper PPE used in a site hazards evaluation
_____	_____	2. List the PPE selection criteria for each job performed
_____	_____	3. The PPE use and limitations
_____	_____	4. The PPE effective lifetime
_____	_____	5. Explain the PPE maintenance, proper storage requirements, and locations
_____	_____	6. Explain the PPE decontamination procedures monitored by a site health and safety supervisor
_____	_____	7. The PPE training and proper fitting requirements
_____	_____	8. PPE donning and doffing procedures
_____	_____	9. PPE inspection prior to, during, and after use
_____	_____	10. The effectiveness of the PPE evaluation program

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY (initial/date)	N/A (not applicable)	DESCRIPTION OF CHECKLIST ITEM
_____	_____	11. List temperature extreme limits and other medical concerns when wearing PPE
_____	_____	12. Explain the written respiratory protection SOPs
_____	_____	4.0 Explain work practices by which the employee can minimize risks from hazards (to include engineering controls and PPE)
_____	_____	5.0 Explain the need to inform the supervisor of signs and symptoms of overexposure
_____	_____	6.0 The implementation of required information program for employees, contractors, and subcontractors, engaged in operations
_____	_____	1. Explain the nature of the hazard(s)
_____	_____	2. The level and the extent of exposure likely to result from participation
_____	_____	7.A The implementation of a medical surveillance program for:
_____	_____	1. those exposed above the permissible exposure limits (PEL's) or the published exposure levels without regard to the use of respirators for 30+ days/year
_____	_____	2. those wearing respiratory protection 30+ days/year
_____	_____	3. those injured and/or overexposed from an emergency incident

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY (initial/date)	N/A (not applicable)	DESCRIPTION OF CHECKLIST ITEM
_____	_____	4. the hazardous material (HAZMAT) team members
_____	_____	5. employees who are or may be exposed at higher than PEL for hazardous substances or published exposure levels
_____	_____	6. employees who wear respirators for 30 days or more
_____	_____	7. employees injured as a result of overexposure
_____	_____	7.8 Explain the purpose for the scheduling of medical exams to occur prior to assignment, yearly, termination of employment, and cases of overexposure
_____	_____	8.A The monitoring programs at the facility
_____	_____	1. The types of monitoring used (i.e., air, personnel, environmental)
_____	_____	2. The monitoring frequency (i.e., periodic, constant, initial)
_____	_____	8.8 The techniques and instrumentation used
_____	_____	1. The maintenance and calibration of the instrumentation
_____	_____	2. The monitoring of high risk employees (>PELs or published exposure levels)
_____	_____	9.0 The facility control measures used in a site control program
_____	_____	1. The use and location of the facility map
_____	_____	2. Explain the use and location of any facility work zones
_____	_____	3. The use of the buddy system

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY \_\_\_\_\_ N/A  
 (initial/date) (not applicable)

DESCRIPTION OF CHECKLIST ITEM

- |       |       |   |
|-------|-------|---|
| _____ | _____ | 4. List the facility communications<br>(including emergencies)                                    |
| _____ | _____ | 5. Explain the use of safe work<br>practices and/or <u>standard</u> operating<br>practices (SOPs) |
| _____ | _____ | 6. Identify the nearest available<br>medical assistance   |

## 10.0 Confined space entry procedures

Employees are to be instructed  
 in accordance with 29 CFR 1926.21 and  
 ANSI Z117.1

- |       |       |  |
|-------|-------|--|
| _____ | _____ | 1. Explain the nature of the hazards   |
| _____ | _____ | 2. List precautions to be taken  |
| _____ | _____ | 3. The use of PPE (what kind)  |
| _____ | _____ | 4. List the inspections to be conducted<br>by the facility safety and health<br>supervisor |
| _____ | _____ | 5. The standby personnel to be present   |
| _____ | _____ | 6. The harnesses/lines to be used  |
| _____ | _____ | 7. The type of communication used  |

11.0 Pre-entry briefings to assess employees  
 of the facility safety and health plan  
 29 CFR 1910.120

12.0 List the inspections that are made by  
 a facility safety and health officer to  
 determine the effectiveness of the  
 facility safety and health plan  
 29 CFR 1910.120

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY N/A  
(initial/date) (not applicable)

DESCRIPTION OF CHECKLIST ITEM

## 13.0 Hazardous waste containment (drums not included)

40 CFR Subpart I Part 265

- |       |       |   |
|-------|-------|---|
| _____ | _____ | 1. The condition of the containers used                         |
| _____ | _____ | 2. The compatibility of the hazardous waste with the containers |
| _____ | _____ | 3. Explain the management of the containers                     |
| _____ | _____ | 4. Explain the inspection procedures of the containers          |
| _____ | _____ | 5. List the requirements for ignitable or reactive wastes       |
| _____ | _____ | 6. List any special requirements for incompatible wastes        |

29 CFR 1910.120

## 14.0 Practices and procedures are required for the safe handling of drums and containers. Explain the:

- |       |       |  |
|-------|-------|--|
| _____ | _____ | 1. appropriate procedures for the inspection and classification of the drums or containers |
| _____ | _____ | 2. plan to be used when handling the drums or containers                                   |
| _____ | _____ | 3. drum or container staging area(s) and the process in each area                          |
| _____ | _____ | 4. procedures used in the opening of the drums or containers                               |
| _____ | _____ | 5. drum or container sampling plan and techniques that are used                            |
| _____ | _____ | 6. method of characterizing the drums or containers  |
| _____ | _____ | 7. procedures for handling radioactive wastes  |



## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY (initial/date)	N/A (not applicable)	DESCRIPTION OF CHECKLIST ITEM
_____	_____	8. procedures for handling shock sensitive wastes
_____	_____	9. procedures for handling radioactive wastes
_____	_____	10. procedures for handling drums containing packaged laboratory wastes (lab packs)
_____	_____	11. procedures to follow when placing hazardous wastes in bulk containers such as tanks (bulking)
_____	_____	12. shipping and transport requirements
_____	_____	13. use of material handling equipment around hazardous wastes

## 15.0 Decontamination procedures

_____	_____	1. The standard operating procedures (SOPs) which address the minimization of employee contact with hazardous substances or with equipment that has contacted hazardous substances
_____	_____	2. Discuss the location of decontamination of the contaminated employees or equipment which shall be performed to minimize the exposure of uncontaminated employees or equipment
_____	_____	3. The equipment and solvents used for decontamination and its proper disposal
_____	_____	4. The decontamination, maintenance, cleaning, and laundering of the personal protective clothing and equipment (PPE)

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY \_\_\_\_\_ N/A  
 (initial/date) (not applicable)

## DESCRIPTION OF CHECKLIST ITEM

- |       |       |   |
|-------|-------|---|
| _____ | _____ | 5. Restrictions for unauthorized employees  |
| _____ | _____ | 6. The requirements for sending contaminated PPE to commercial laundries or cleaning establishments |
| _____ | _____ | 7. The use of the shower and change room locations for decontamination purposes                     |

## 16.0 Elements of the Emergency Response Plan

The employer shall develop an emergency response plan for emergencies which shall address as a minimum, the following subjects:

- |       |       |  |
|-------|-------|--|
| _____ | _____ | 1. Pre-emergency planning  |
| _____ | _____ | 2. Personnel roles, lines of authority, and communication                              |
| _____ | _____ | 3. Emergency recognition and prevention  |
| _____ | _____ | 4. Safe distances and places of refuge   |
| _____ | _____ | 5. Site security and control   |
| _____ | _____ | 6. Evacuation routes and procedures  |
| _____ | _____ | 7. Decontamination procedures which are not covered by the site safety and health plan |
| _____ | _____ | 8. Emergency medical treatment and first aid   |
| _____ | _____ | 9. Emergency alerting and response procedures  |
| _____ | _____ | 10. Critiques of response and follow-up  |
| _____ | _____ | 11. PPE and emergency equipment location and uses                                      |
| _____ | _____ | 12. Procedures for handling emergency incidents  |

## SECTION I

PAGE 8 OF 8

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY (initial/date)	N/A (not applicable)	DESCRIPTION OF CHECKLIST ITEM
_____	_____	13. Site topography, layout, and prevailing weather conditions
_____	_____	14. Procedures for reporting incidents to local, state, and federal government agencies
_____	_____	15. Spill containment program
_____	_____	16. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment 40 CFR 265.16
_____	_____	17. Communications or alarm systems 40 CFR 265.16
_____	_____	18. Responses to fires or explosions 40 CFR 265.16
_____	_____	19. Response to groundwater contamination incidents 40 CFR 265.16

END OF SECTION I

## DISTRIBUTION INSTRUCTIONS:

(1) Manager and employee complete and sign Part II of the Hazardous Waste Operator - Facility/Site Specific Training, (Form #3080). (2) Retain a copy of the completed Form #3080 and Checklist for your office file. (3) Forward the Hazardous Waste Operator Facility Training Checklist and Form #3080 within 30 days from the completion date of classroom training to HRD/Safety Training, CFA 612, Mail Stop 4129, Ext. 6-1643.

This will verify satisfactory completion and certify the employee in the 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response Training.

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

## RCRA TSD - SECTION II

## Waste Handling Facility Specific Training Topics

Employer's with RCRA-regulated hazardous waste management operations must implement a written safety and health program designed to identify, evaluate, and control safety and health hazards at their facilities for the purpose of employee protection. No site specific minimum training time is specified in the requirements. However, the following must be included in the training program addressing all topics as they relate specifically to the operation.

TRAINED BY (initial/date)	N/A (not applicable)	DESCRIPTION OF CHECKLIST ITEM
_____	_____	1.0 Discuss the elements of the health and safety program and who is responsible for the program 29 CFR 1910.120
_____	_____	2.0 Explain the EG&G Hazard Communication program for those chemicals that may be used but are not classified as hazardous waste 29 CFR 1910.120
_____	_____	3.0 The employee has reviewed his/her facilities' Standard Operating Procedures, Program Directives, Standard Practices and all other pertinent documents relating to hazardous waste management 40 CFR 265
_____	_____	4.0 The employee is knowledgeable of the identification of the characteristics and listed hazardous wastes 40 CFR 261
_____	_____	5.0 List any of the potential hazards present at the work site 29 CFR 1910.120
_____	_____	6.0 The general principles of chemicals and their hazards 40 CFR 265
_____	_____	1. List incompatibilities of wastes
_____	_____	2. Identify reactives in the work site

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

## 7.0 Hazardous waste containment

40 CFR Subpart I Part 265

1. The condition of the containers used
2. The compatibility of the hazardous waste with the containers
3. Explain the management of the containers
4. Explain the inspection procedures of the containers
5. List the requirements for ignitable or reactive wastes
6. List any special requirements for incompatible wastes

## 8.0 The hazardous waste pre-transportation requirements pertaining to:

40 CFR Subpart C Part 262

1. packaging
2. labeling of hazardous waste for accumulation and transportation
3. allowable hazardous waste accumulation time periods
4. placarding of shipments

## 9.0 The general hazardous waste manifest requirements

40 CFR Subpart 8 Part 262

1. Explain the general manifest requirements
2. Explain the use of the hazardous waste manifest

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_

S NUMBER | / / / / |

TRAINED BY N/A  
(initial/date) (not applicable)

DESCRIPTION OF CHECKLIST ITEM

## 10.0 Record keeping and reporting

40 CFR Subpart D Part 262

- \_\_\_\_\_
1. Discuss the record keeping and biennial (2 year) report

29 CFR 1910.120

## 11.0 Use of Personal Protective Equipment (PPE):

- \_\_\_\_\_
1. The proper PPE used in a site hazards evaluation
- \_\_\_\_\_
2. List the PPE selection criteria for each job performed
- \_\_\_\_\_
3. The PPE use and limitations
- \_\_\_\_\_
4. The PPE effective lifetime
- \_\_\_\_\_
5. Explain the PPE maintenance, proper storage requirements, and locations
- \_\_\_\_\_
6. Explain the PPE decontamination procedures monitored by a site health and safety supervisor
- \_\_\_\_\_
7. The PPE training and proper fitting requirements
- \_\_\_\_\_
8. PPE donning and doffing procedures
- \_\_\_\_\_
9. PPE inspection prior to, during, and after use
- \_\_\_\_\_
10. The effectiveness of the PPE evaluation program
- \_\_\_\_\_
11. List temperature extreme limits and other medical concerns when wearing PPE
- \_\_\_\_\_
12. Explain the written respiratory protection SOPs

29 CFR 1910.134

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY N/A  
 (initial/date) (not applicable)

## DESCRIPTION OF CHECKLIST ITEM

## 12.0 New Technology Programs

- \_\_\_\_\_
1. List work practices, technologies, and equipment by which the employee can minimize risks from hazards

\_\_\_\_\_

 13.0 List uses of engineering controls and of PPE for the purpose of employee protection

\_\_\_\_\_

 14.0 Explain the need to inform the supervisor of signs and symptoms of overexposure

\_\_\_\_\_

 15.0 The implementation of required information program for employees, contractors, and subcontractors, engaged in operations

- \_\_\_\_\_
1. Explain the nature of the hazard(s)
  2. The level and the extent of exposure likely to result from participation
- \_\_\_\_\_

\_\_\_\_\_

 15.A The implementation of a medical surveillance program for:

- \_\_\_\_\_
1. those exposed above the permissible exposure limits (PEL's) or the published exposure levels without regard to the use of respirators for 30+ days/year
  2. those wearing respiratory protection 30+ days/year
  3. those injured and/or overexposed from an emergency incident
  4. the hazardous material (HAZMAT) team members
- \_\_\_\_\_

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY \_\_\_\_\_ N/A  
(initial/date) (not applicable)

DESCRIPTION OF CHECKLIST ITEM

- |       |       |   |
|-------|-------|---|
| _____ | _____ | 5. employees who are or may be exposed at higher than PEL for hazardous substances or published exposure levels   |
| _____ | _____ | 6. employees who wear respirators for 30 days or more<br>29 CFR 1910.134  |
| _____ | _____ | 7. employees injured as a result of overexposure  |
| _____ | _____ | 16.B Explain the purpose for the scheduling of medical exams to occur prior to assignment, yearly, termination of employment, and cases of overexposure |



## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY \_\_\_\_\_ N/A  
(initial/date) (not applicable)

DESCRIPTION OF CHECKLIST ITEM

## 17.0 Decontamination procedures

- |       |       |  |
|-------|-------|--|
| _____ | _____ | 1. The standard operating procedures (SOPs) which address the minimization of employee contact with hazardous substances or with equipment that has contacted hazardous substances |
| _____ | _____ | 2. Discuss the location of decontamination of the contaminated employees or equipment which shall be performed to minimize the exposure of uncontaminated employees or equipment   |
| _____ | _____ | 3. The equipment and solvents used for decontamination and its proper disposal   |
| _____ | _____ | 4. The decontamination, maintenance, cleaning, and laundering of the personal protective clothing and equipment (PPE)  |
| _____ | _____ | 5. Restrictions for unauthorized employees   |
| _____ | _____ | 6. The requirements for sending contaminated PPE to commercial laundries or cleaning establishments  |
| _____ | _____ | 7. The use of the shower and change room locations for decontamination purposes  |

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY N/A  
(initial/date) (not applicable)

DESCRIPTION OF CHECKLIST ITEM

## 18.0 Confined space entry procedures

Employees are to be instructed  
in accordance with 29 CFR 1926.21 and  
ANSI Z117.1

1. Explain the nature of the hazards
2. List precautions to be taken
3. The use of PPE (what kind)
4. List the inspections to be conducted  
by the facility safety and health  
supervisor
5. The standby personnel to be present
6. The harnesses/lines to be used
7. The type of communication used

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY N/A  
(initial/date) (not applicable)

## DESCRIPTION OF CHECKLIST ITEM

29 CFR 1910.120

19.0 The employer shall develop an emergency response program for emergencies which shall address, as a minimum the following areas:

- |       |       |   |
|-------|-------|---|
| _____ | _____ | 1. Pre-emergency planning                                 |
| _____ | _____ | 2. Personnel roles, lines of authority, and communication |
| _____ | _____ | 3. Emergency recognition and prevention                   |
| _____ | _____ | 4. Safe distances and places of refuge                    |
| _____ | _____ | 5. Site security and control                              |
| _____ | _____ | 6. Evacuation routes and procedures                       |
| _____ | _____ | 7. Decontamination procedures                             |
| _____ | _____ | 8. Emergency medical treatment and first aid              |
| _____ | _____ | 9. Emergency alerting and response procedures             |
| _____ | _____ | 10. Critiques of response and follow-up                   |
| _____ | _____ | 11. PPE and emergency equipment                           |

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

Exception #1: An employer need not train all employees to the degree specified if the employer divides the work force in a manner such that a sufficient number of employees who have responsibility to control emergencies have the training specified, and all other employees, who may first respond to an emergency incident, have sufficient awareness training to recognize that an emergency situation exists and that they are instructed in that case to summon the fully trained employees and not attempt control activities for which they are not trained.

TRAINED BY N/A  
(initial/date) (not applicable)

## DESCRIPTION OF CHECKLIST ITEM

20.0 The training for emergency response employees shall be completed before they are called upon to perform in real emergencies. The areas of additional emergency training must include:

1. Standard operating procedures the employer has established for the job
2. Personal protective equipment to be worn
3. Procedures for handling emergency incidents
4. Site topography, layout, and prevailing weather conditions
5. Procedures for reporting incidents to local, state, and federal government agencies
6. Spill containment program
7. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment  
40 CFR 265.16
8. Communications or alarm systems  
40 CFR 265.16
9. Responses to fires or explosions  
40 CFR 265.16
10. Response to groundwater contamination incidents  
40 CFR 265.16

## SECTION II

PAGE 10 OF 10

## HAZARDOUS WASTE OPERATOR TRAINING FACILITY CHECKLIST

EMPLOYEE NAME \_\_\_\_\_ S NUMBER | / / / / |

TRAINED BY N/A  
 (initial/date) (not applicable)

DESCRIPTION OF CHECKLIST ITEM

29 CFR 1910.120

21.0 Employee members of TSD facility emergency response organizations shall be trained to a level of competence in the recognition of health and safety hazards to protect themselves and other employees. This training is to be commensurate to the response role and will include training in the:

- |       |       |  |
|-------|-------|--|
| _____ | _____ | 1. Methods used to minimize risk from safety and health hazards  |
| _____ | _____ | 2. Safe use of control equipment   |
| _____ | _____ | 3. Selection and use of appropriate personal protective equipment  |
| _____ | _____ | 4. The proper response to an incident scene  |
| _____ | _____ | 5. Safe operating procedures to be used at the incident scene  |
| _____ | _____ | 6. Techniques of coordination with other employees to minimize risk  |
| _____ | _____ | 7. The appropriate response to over exposure from health hazards or injury to themselves and other employees |
| _____ | _____ | 8. Appropriate response to over exposure from health hazards or injury to themselves and other employees     |
| _____ | _____ | 9. Recognition of subsequent symptoms which may result from over exposures.                                  |

END OF SECTION II

## DISTRIBUTION INSTRUCTIONS:

(1) Manager and employee complete and sign Part II of the Hazardous Waste Operator - Facility/Site Specific Training, (Form #3080). (2) Retain a copy of the completed Form #3080 and Checklist for your office file. (3) Forward the Hazardous Waste Operator Facility Training Checklist and Form #3080 within 30 days from the completion date of classroom training to HRD/Safety Training, CFA 612, Mail Stop 4129, Ext. 6-1643.

This will verify satisfactory completion and certify the employee in the 29 CFR 1910.120 Hazardous Waste Operations and Emergency Response Training.

ATTACHMENT A3

TRAINING PROGRAM OUTLINE  
FOR OSHA SUPERVISOR TRAINING

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## 29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE FOR SUPERVISORS TS-206

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### COURSE TITLE:

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response

### LESSON TITLE:

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response for  
Supervisors TS-206

### TIME PERIOD:

8 Hours

### OVERVIEW:

This class is required for on-site managers and supervisors directly responsible for or who supervise employees engaged in hazardous waste operations. This training is in addition to the 40-hour course (TS-205), the 24-hour course (TS-207) or the 8-hour refresher course (TS-205R).

### REFERENCES:

- Hazardous Waste Operations and Emergency Response, Title 29 Code of Federal Regulations, Part 1910.120 (29 CFR 1910.120), 1988.
- Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities, NIOSH 85-115, 1985.
- Trade Instructional Materials for SARA/OSHA Training Volume I, General Site Worker Training, ORAU 88/C-125, April 1988.
- General Physics Corporation Hazardous Waste Operations and Emergency Response for General Site Workers, (HAZWOPER).

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## 29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE FOR SUPERVISORS TS-206

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### OBJECTIVES:

#### TERMINAL:

With the aid of the classroom lecture, visual aids, and demonstrations, participants will be able to identify, evaluate, and control problems pertaining to waste operations, hazardous substances, and associated health hazards. This will be demonstrated by passing a written examination with at least 80% accuracy.

#### ENABLING:

- Identify EG&G's safety and health programs.
- Describe employee safety training programs.
  - Identify a spill containment program within EG&G.
- List accidents, near misses, UOR's that have occurred within the past year and the proper response to each.
- Identify the training programs which describe the use of personal protective equipment within EG&G.
- Describe health hazard monitoring procedures and techniques used at EG&G.
- Define management in terms of structure and function for your workplace.
- Define command and control.
- Describe specific hazardous material problems at EG&G facilities.
- Identify recommendations to improve handling of hazardous materials more safely and efficiently.
- Identify controlling facility operations documents.
- List various ways, techniques or devices management uses to control resources.
- Define the mission of ES&Q.



## HUMAN RESOURCES DEVELOPMENT/SAFETY TRAINING

### 29 CFR 1910.120 HAZARDOUS WASTE OPERATIONS AND EMERGENCY RESPONSE FOR SUPERVISORS TS-206

---

- Analyze a case history pertaining to hazardous materials in the workplace.
- List specific problems at the workplace which relate to people, materials, equipment, facilities and environment.
- List solutions pertaining to hazardous material problems such as: command and control, communications, visibility, heat stress, donning and doffing, and chemical source term.

#### INSTRUCTIONAL MATERIALS:

Overhead slides

Videos: (1) Illegal Fireworks (2) Chemical Safety

#### PRESENTATION METHODS:

Pretest, lecture, and open discussion followed by quiz.

#### STUDENT ASSIGNMENTS:

None outside of class.

ATTACHMENT A4

TRAINING PROGRAM OUTLINE FOR  
FIRST AID/CPR (INITIAL AND REFRESHER)

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## MEDIC FIRST AID LESSON PLAN

---

### COURSE TITLE:

Medic First Aid

### LESSON TITLE:

Medic First Aid - Basic  
(Fourth Edition) TS-701

### TIME PERIOD:

8 Hours

### OVERVIEW:

The Medic First Aid - Basic class is required one time only for those employees who are required to be certified in CPR and First Aid. These employees include those designated as first aid attendants, emergency brigade members, electricians, line workers, and health physics technicians. All field safety personnel should have this training.

### REFERENCES:

- Standard Operational Safety Requirements - ID Appendix 0550, Subpart IIIL
- Radiological Control Manual - Section 10, Radiological Control Training and Certification Requirements
- 29 CFR 1910.120 Hazardous Waste Operation and Emergency Response

### OBJECTIVES:

#### TERMINAL:

With the aid of practical exercises, videos, and instructor emphasis the class participants will be able to perform the Seven Basic Skills of Care listed under the enabling objectives and receive valuable information on other types of first aid emergencies.

#### ENABLING:

To place emphasis on the development of the Seven Basic Skills of Care which include:

- Primary Assessment
- One Rescuer CPR
- Unconscious and Conscious Choking
- Control of Bleeding
- Shock Management
- Illness Assessment
- Injury Assessment

Participants will learn measures to take to protect themselves from communicable diseases and the skills of patient care in the same sequence in which they would actually use them in caring for an ill or injured person.

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## MEDIC FIRST AID LESSON PLAN

---

### INSTRUCTIONAL MATERIALS:

Videotapes, "Medic First Aid Mark II" modules 1 through 7, copyright 1990.

Handouts "CPR and the Law" sheet, emergency number cards, \*MFA Vis-A-Quiz Workbook, \*MFA Medical Emergency Reference Manual #1, \*Pocket Reference Manual, and first aid kits.

\*Update '89 version.

### PRESENTATION METHODS:

Videos, lecture, practical exercises, and open discussion.

### STUDENT ASSIGNMENTS:

None outside of class.

### EVALUATION:

Optional quiz exercise in the back of Vis-A-Quiz Workbook and mandatory practical exercises.

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## MEDIC FIRST AID LESSON PLAN

---

### COURSE TITLE:

Medic First Aid

### LESSON TITLE:

Medic First Aid - Basic - Recertification I  
(Third Edition) TS-701R

### TIME PERIOD:

4 Hours

### OVERVIEW:

The Medic First Aid - Basic Recertification I class is required as a refresher for those employees who are certified in the Medic First Aid course. These employees include those designated as first aid attendants, emergency brigade members, electricians, line workers, and health physics technicians. All field safety personnel should have this training.

### REFERENCES:

- Standard Operational Safety Requirements - ID Appendix 0550, Subpart IIIL
- Radiological Control Manual - Section 10, Radiological Control Training and Certification Requirements
- 29 CFR 1910.120 Hazardous Waste Operation and Emergency Response

### OBJECTIVES:

#### TERMINAL:

With the aid of practical exercises, videos, and instructor emphasis the class participants will be able to perform the Seven Basic Skills of Care listed under the enabling objectives.

#### ENABLING:

To place emphasis on the development of the Seven Basic Skills of Care which include:

- Primary Assessment
- One Rescuer CPR
- Unconscious and Conscious Choking
- Control of Bleeding
- Shock Management
- Illness Assessment
- Injury Assessment

Participants will learn measures to take to protect themselves from communicable diseases and the skills of patient care in the same sequence in which they would actually use them in caring for an ill or injured person.

# HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING

## MEDIC FIRST AID LESSON PLAN

---

### INSTRUCTIONAL MATERIALS:

Video, Medic First Aid "Recertification 1 (R-1) Continuing Education Seven Basic Skills" or "Medic First Aid Mark II" all of module 1, all of module 2, and Injury Assessment only on module 5.

Handouts "CPR and the Law" sheet, emergency phone number cards, \*MFA Vis-A-Quiz Workbook, \*MFA Medical Emergency Reference Manual #1, and \*Pocket Reference Manual.

\*Update '89 version.

### PRESENTATION METHODS:

Video, lecture, practical exercises, and open discussion.

### STUDENT ASSIGNMENTS:

None outside of class.

### EVALUATION:

Quiz exercise in the back of Vis-A-Quiz Workbook and practical exercises.

ATTACHMENT A5

TRAINING PROGRAM OUTLINE FOR  
DOT HAZARDOUS MATERIALS SHIPPERS COURSE

TRAFFIC MANAGEMENT  
HAZARDOUS MATERIALS TRANSPORTATION SAFETY TRAINING

COURSE TITLE: Hazardous Materials Transportation Safety Training

TRAINING COURSES:

- HZ-100, Hazardous Material Carrier Qualification - required annually by DOE-ID Orders for personnel who transport radioactive or other hazardous materials.
- HZ-110, Hazardous Material Shipper - required one time only by DOE-ID Orders for personnel who ship radioactive and other hazardous materials.
- HZ-111, Hazardous Material Shipper Requalification - required annually by DOE-ID Orders for personnel who ship radioactive and other hazardous materials.
- HZ-200, Hazardous Material Shipper-SAIC (Science Applications International Corp.) - basic training for personnel who ship radioactive and other hazardous materials (may be substituted for HZ-110 and -111).
- HZ-210, Hazardous Material Shipper Requalification-SAIC - advanced training for personnel who ship radioactive and other hazardous materials (may be substituted for HZ-111).

OVERVIEW:

This training program provides instruction to persons who have responsibility for preparing hazardous materials for shipment or for transporting hazardous materials on or off the INEL in order that such persons meet the requirements of the Department of Transportation (DOT) regulations.



## REFERENCES:

- 49 CFR 171-179 [training requirement 173.1(b)], DOT
- 49 CFR 100-199, Research and Special Programs Administration, DOT
- 40 CFR Parts 260-263 (EPA)
- DOE-ID Order 5480.1, Chapter III, Safety Requirements for the Packaging of Fissile and Other Radioactive Materials
- DOE-ID Order 5480.3 (Draft), Hazardous Material Packaging and Transportation Safety
- DOE Order 5480.3 (Draft), Safety Requirements for the Packaging and Transportation of Hazardous Materials, Hazardous Substances, and Hazardous Wastes.
- DOE Order 5480.11, Radiation Protection for Occupational Workers.
- DOE Order 5610.1, Packaging and Transporting of Nuclear Explosives, Nuclear Components, and Special Assemblies.

## OBJECTIVES:

All INEL personnel responsible for packaging and transporting hazardous materials must be trained and qualified. EG&G Traffic Management has designed this training program to certify that employees performing these responsibilities are trained in the following areas:

- DOE, DOT, and EPA regulatory requirements which may include hazardous waste topics discussed in EG&G Traffic Hazardous Materials/Waste Shippers course:
  1. Training Requirements
  2. Waste Hazards Determination and Waste Characterization
  3. Sampling Requirements
  4. Packing, Marking, Labeling Requirements (on-site and off-site shipping according to DOT regulations)
  5. Forms Completion (examples)
  6. Manifesting (on-site and off-site shipments)
  7. INEL Waste Acceptance Criteria

3. Waste Load Acceptance/Rejections Criteria and Inspection

9. Safety and Health Considerations (Safe Work Permit)

10. RCRA Compliance.

- Storage, cargo compatibility, loading, and unloading procedures
- Package approval, testing requirements and procedures
- Shippers' responsibilities, transfer documentation, and hazard communication requirements and procedures
- Identification of materials and hazard classes, including determination and use of transport indexes for nuclear materials
- Notification requirement of accidents or incidents
- Recognition of improper or compromised packaging
- On-site transfer procedures and regulations
- Emergency response actions, including familiarity with the hazards involved and the procedures necessary to mitigate the consequences of an accident
- Quality assurance for design, procurement, fabrication, maintenance, and use of packaging
- For vehicle operators, the operation of and legal responsibility for their vehicles, including the operation of emergency equipment accompanying the shipment
- Other requirements as applicable
- Radiation safety training.

#### PRESENTATION METHODS:

Lecture, open discussion, and workbook exercises as applicable to the specific courses followed by a written examination.

#### STUDENT ASSIGNMENTS:

None outside of class.

## EVALUATION:

Each participant will satisfactorily complete a written examination with a final grade of at least        and demonstrate an ability and proficiency for shipping hazardous materials by successfully completing at least one radioactive shipment and one hazardous waste shipment to become certified. Certification is maintained by making no less than five shipments in a three-month period with not less than one shipment per month. Certification is recorded as shown on Record of Hazardous Material Shipping Qualification/Certification form which follows.

# RECORD OF HAZARDOUS MATERIAL SHIPPING QUALIFICATION/CERTIFICATION

EMPLOYEE NAME:

EMPLOYER:

## QUALIFICATION POINT REQUIREMENTS

Education -	University/Degree Date	Graduated	No. Yrs Completed
-------------	------------------------	-----------	-------------------

1. Undergraduate
2. Graduate

Experience - Company/Dates (Specify Related Work to Hazardous Material Shipping)

Technical Chemical/Mechanical  
Nuclear Industry  
Quality Assurance  
Radiation Controls  
Hazardous Materials Packaging

Training Courses Hazardous Material Packaging and Shipping

Title	Location	Sponsor	Date	Pass/Fail Verified
-------	----------	---------	------	--------------------

1  
2  
3  
4  
5  
6  
7  
8

Hazardous Materials Shipment participation are approved practical exercises

Name	Location	Type	Date	Verified by Hazardous Mat'l Shipping Coord.
------	----------	------	------	---

1  
2  
3  
4  
5  
6  
7  
8

POSITION:

ANNUAL EVALUATION (Sign and Date)

TRAFFIC MANAGEMENT

RESPONSIBLE UNIT  
MANAGER

ATTACHMENT A6  
TRAINING PROGRAM OUTLINE FOR  
RESPIRATOR TRAINING

# HUMAN RESOURCE DEVELOPMENT

## RESPIRATOR TRAINING

---

COURSE TITLE: EG&G Idaho, Inc. HRD Training

LESSON TITLE: Respirator Training

TIME PERIOD: 4 hours

OVERVIEW: Respirator training is to provide employees with information and guidance to properly and safely use respiratory equipment. Familiarization of specific respirators, their uses and limitations, requirements for proper fit, physical requirements, facial conditions, and fit testing are some of the topics covered.

REFERENCES: ANSI Standard Z88-2, OSHA 1910.134, and EG&G Safety Manual.

### OBJECTIVE(S):

#### Terminal Objective:

Upon completion of this training, the participant will have the information and guidance needed for the proper use, selection, and care of respirators, as outlined in ANSI Z88-2 and OSHA 1910.134. This training will help safeguard the health and life of the user. The employee will demonstrate the ability to properly put on and remove the respirator to pass a quantitative fit test, and correctly answer questions in the workbook.

#### Enabling Objectives:

With the aid of the video tape, discussion, and workbook the employee will be able to:

- a) identify respirator hazards and what happens if a respirator is not used;
- b) identify the engineering and administrative controls used and the needs for respirators to provide protection;
- c) identify the reason for selecting a particular type of respirator;
- d) describe the function, capabilities, and limitations of the selected respirator;
- e) demonstrate the method of donning the respirator and checking its fit and operation;

- f) demonstrate the proper wearing of the respirator;
- g) explain how maintenance and storage of respirators are performed; and
- h) explain how to recognize and cope with emergency situations.

**INSTRUCTIONAL MATERIALS:**

1. Handouts titled:
  - Respirator Training Workbook/Study Guide
  - Instructor/Course Evaluation Summary
2. Video titled:
  - Respirator Training (Edited Summit Training Source, 20 minutes)
3. Assortment of Respirators
  - MSA Full-face and half-face (all sizes)
  - SVA Full-face and half-face (all sizes)
  - Scotts Self-Contained Breathing Apparatus
4. U-matic VCR
5. T.V.
6. Attendance Sheet

**PRESENTATION METHODS:**

Discussion, Lecture, Participation, Workbook, and Video.

**STUDENT PREREQUISITES:**

Obtain form EG&G 780A, Medical Assessment for Respirator Training, from Medical and male employees must be clean shaven.

**EVALUATION:**

Quantitative fit test.

Test participants learning (workbook review).

ATTACHMENT A7

TRAINING PROGRAM OUTLINE FOR  
HAZARD COMMUNICATION TRAINING (INITIAL AND REFRESHER)



HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING  
LESSON PLAN

INTRODUCTION TO HAZARD COMMUNICATION

COURSE TITLE: HRD/Safety Training, EG&G Idaho, Inc.

LESSON TITLE: Hazard Communication Training Program

TIME PERIOD: 3 Hours

OVERVIEW: This program presents a general introduction to chemical safety in the workplace. It is designed to encourage an awareness and understanding of the kinds of hazards that can result from working with chemical substances. An introduction to the information resources required by the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard is given. Topics covered include:

1. The Federal Hazard Communication Standard
2. Chemical Forms and Exposure Hazards
3. Physical and Health Hazards
4. Controlling Chemical Hazards
5. MSDS and MSDS Physical Hazard Information
6. MSDS Health Hazard Information
7. Using Labels and The Hazardous Chemical Inventory
8. EG&G's Written Program

- REFERENCES:
1. OSHA Standard 29 CFR 1910.1200
  2. Handbook of Hazard Communication and OSHA Requirements, by G. & R. Lowry, 1985, Lewis Publishers, Inc.
  3. OSHA and State Employee Hazard Communication Program, 1985 Edition, Vols I & II, by INTEREG Group, Inc.
  4. Understanding "Right to Know", Department of Labor and Industries, Washington Industrial Safety and Health, 1989.
  5. EG&G-Idaho Hazard Communication Program, Company Safety Procedures Manual 11.2, dated 11/30/89.

OBJECTIVE:

TERMINAL OBJECTIVE

Upon completion of the class, the employee will be able to demonstrate their awareness of the OSHA Hazard Communication Standard and the requirements it places upon EG&G by achieving at least an 80% score on a ten-question quiz.

INSTRUCTIONAL METHOD:

1. Workbook

- \* "Hazard Communication Training Program - Student's Workbook"

2. Overheads

- \* (Fourteen)

3. Handouts

- \* "Your Right To Know"
- \* "For Your Information"

4. Video:

- \* "Federal OSHA Hazard Communication Training Program"

PRESENTATION METHODS: Lecture, Discussion, and Videos

EVALUATION:

To satisfactorily pass the course, each participant will complete a written examination and correct all mistakes so as to ensure a mastery of subject matter.

- \* On file in the H/R S-T  
Hazard Communication  
Lead Instructor's office.

HUMAN RESOURCE DEVELOPMENT/SAFETY TRAINING  
LESSON PLAN

HAZARD COMMUNICATION ANNUAL REFRESHER

COURSE TITLE: HRD/Safety Training, EG&G Idaho, Inc.

LESSON TITLE: Hazard Communication Annual Refresher Training

TIME PERIOD: 1 Hour

OVERVIEW: This program presents a general, annual review of chemical safety in the workplace. It is designed to review details on the new company-wide program, and to provide a general annual refresher on Hazard Communication in accordance with the new company procedure. Topics covered include:

1. A brief overview of the requirements of the OSHA Hazard Communications Standard and employees' rights under the law
2. Review of chemical and physical hazards
3. Use and information on MSDS's
4. Labeling system for containers
5. Contents and availability of the EG&G Idaho written Hazard Communication Program

REFERENCES:

1. OSHA Standard 29 CFR 1910.1200
2. EG&G Idaho Hazard Communication Program, Company Procedures Manual 11.2, dated 11/30/89
3. OSHA Hazard Communications Training Program (Video)

OBJECTIVE:

TERMINAL OBJECTIVE

Upon completion of the class, the employee will be able to discuss their individual responsibilities and EG&G's responsibilities under the Hazard Communication Standard.

ENABLING OBJECTIVES:

1. Be able to recognize the Physical and Health hazards of chemicals;
2. Understand that the employee has a right to review MSDS's; understand what is contained in an MSDS, and to know the location of the MSDS's in their respective work area;
3. Be able to identify and understand the health hazard warnings on the warning label used by EG&G.
4. Enlist each employee to locate where MSDS's are kept in their work area.

INSTRUCTIONAL METHOD:

1. Video:

- \* "Federal OSHA Hazard Communication Training Program

2. Overheads

- \* (Nine)

3. Handouts

- \* "Your Right To Know"
- \* "For Your Information"

PRESENTATION METHODS: Lecture, Discussion, and Video

\* On file in the H/R S-T  
Hazard Communication  
Lead Instructor's Office.

ATTACHMENT A8

TRAINING PROGRAM OUTLINE FOR  
NON-RADIATION WORKER TRAINING

HUMAN RESOURCES SAFETY TRAINING  
NON-RADIATION WORKER HEALTH AND SAFETY ORIENTATION

COURSE TITLE: Non-Radiation Worker Training

LESSON TITLE: Non-Radiation Worker Health and Safety Orientation, TS-509

TIME PERIOD: 30 minutes

OVERVIEW:

This orientation program is intended for new employees and persons who do not directly work with radioactive materials or in radiation zones. It provides a basic introduction to EG&G Idaho safety procedures and practices to protect human health and the environment.

REFERENCES:

EG&G Idaho, Inc., Radiological Controls Manual  
EG&G Idaho, Inc., Safety Manual

OBJECTIVES:

To inform EG&G Idaho non-radiation workers as to their individual responsibilities for promoting safety and to indoctrinate them to EG&G emergency signals and evacuation procedures. Non-radiation worker Health and Safety Orientation covers the following four areas:

- Radiation
- Access to EG&G facilities
- Emergency Alarms
- Safety.

INSTRUCTIONAL MATERIALS:

Video - Non-Radiation Worker Health and Safety Orientation

STUDENT ASSIGNMENTS: None

EVALUATION:

By virtue of watching the video, each participant will receive a health and safety card which allows unescorted access into EG&G Idaho facilities for one year from the date the card is issued. Non-radiation workers must attend non-radiation worker training on an annual basis. No examination is administered after watching the video.

ATTACHMENT A9  
TAN NEW EMPLOYEE ORIENTATION CHECKLIST



NEW EMPLOYEE ORIENTATION  
CHECKLIST

CANDIDATE \_\_\_\_\_  
S# \_\_\_\_\_

DATE STARTED \_\_\_\_\_  
DATE COMPLETED \_\_\_\_\_

GENERAL INSTRUCTIONS

This Checklist shall be completed by the responsible manager and the new employee. The completed checklist is to be retained in the employee's personnel training file. The employee may receive a copy of the completed checklist for future reference. References are provided for manager and employee usage.

The manager may "N/A" and initial all items not applicable to the individual. The manager or shift manager will discuss each item with the employee as it relates to the employee's position. This discussion is documented when the manager or shift manager signs and dates the manager review item at the end of each applicable section.

This checklist shall be completed within two (2) months of the employee's start date. The Safety Training Items listed Job Specific area are not included in the 2 month requirement. These items should be completed as soon as training is made available from Safety.

RM--Resource Manual	PMM-Property Management Manual
SD--THS Standing Directives	SM--Safety Manual
DOE--HR Department of Energy Hoisting and Rigging Manual	SS--Safeguards and Security Manual
EAM--Emergency Action Manual	TTTM--TAN/TSF Tenants Manual
ERCM--EG&G Radiological Control Manual	

I. <u>SECURITY</u>	<u>Reference</u>	<u>Employee</u>	
		<u>Signature</u>	<u>Date</u>
A. Verify current ID "L" or "Q" access authorization or arrange escort	SS Sec. 7, 2.1.2	_____	_____
B. Employee responsibility for security area control	SS Sec. 6, 2.9.8	_____	_____
C. Personal property on site	PMM page 43	_____	_____
D. Human Reliability Program	SS Chp. 8,	_____	_____
E. Visitors and Tours	SS Sec. 4, 2.2.3 & 2.2.4 TTTM page 7	_____	_____

	<u>Manager</u>	
	<u>Signature</u>	<u>Date</u>
Manager Review	_____	_____

II. <u>AREA INDOCTRINATION</u>	<u>Reference</u>	<u>Employee</u>	
		<u>Signature</u>	<u>Date</u>
A. Gatehouse Orientation--Video at guardhouse (EG&G stamped on Radiation Worker permit card)		_____	_____
B. Tour by manager of applicable area		_____	_____
C. Deficiency Log use and availability	SD 4.8	_____	_____

	<u>Manager</u>	
	<u>Signature</u>	<u>Date</u>
Manager Review	_____	_____

III. WORK RULES AND POLICIES

	<u>Reference</u>	<u>Employee Signature</u>	<u>Date</u>
A. Starting, quitting, lunch times	RM 1-22	_____	_____
B. Eating areas	ERCM 3.1.5	_____	_____
C. Housekeeping and appearance control		_____	_____
D. Overtime policy	RM 1-23	_____	_____
E. Meal tickets	RM 1-25	_____	_____
F. Time cards, daily entries	RM 2-1	_____	_____
G. Sick leave policy, calling in sick, UAB report (sick slip), returning to work requirements	RM 1-30	_____	_____
H. Rules of conduct	RM 1-15	_____	_____
I. Site Work Release policy, Work Control	SD 3.12	_____	_____
J. Reporting of unusual occurrences	SD 3.18	_____	_____
K. Hoisting and Rigging Requirements	DOE-HR SD 5.1	_____	_____
L. Radiological Control Requirements	ERCM 3.1.1,.2. .5	_____	_____
M. Quality Assurance	RM 5.0	_____	_____
		<u>Manager Signature</u>	<u>Date</u>
Manager Review		_____	_____

	<u>Reference</u>	<u>Employee Signature</u>	<u>Date</u>
IV. <u>HEALTH AND SAFETY</u>			
A. Health and Safety Orientation	SM-Sect. 8, 2.1.f	_____	_____
B. Emergency actions-- evacuations, take cover signals QSEPs, safety systems and locations	EAM RM Sec. 8	_____	_____
C. Necessity for following regulations--signs and sounds	SM-Sect. 12	_____	_____
D. Safe work permits (SWP)	SM-Sect. 2, 2.4.2	_____	_____
E. Safe equipment and clothing	SM-Sect. 16	_____	_____
F. Safety items available for purchase	SM-Sect. 16	_____	_____
G. Safety glasses--how to obtain prescription type	SM-Sect. 16, Supp. 16.2	_____	_____
H. Reporting injuries, nurse and dispensary, lost-time accidents	SM-Sect. 3	_____	_____
I. Danger tags and lockouts	SM-Sect. 12 SD 5.2	_____	_____
		<u>Manager Signature</u>	<u>Date</u>
Manager Review		_____	_____

	<u>Reference</u>	<u>Employee Signature</u>	<u>Date</u>
V. <u>RADIATION</u>			
A. Radiation Worker requirements	ERCM, Ch 10 SM-Sect. 8	_____	_____

	<u>Reference</u>	<u>Employee Signature</u>	<u>Date</u>
B. Exposure Control	ERCM-Ch 2,	_____	_____
C. Branch exposure limits (ALARA)	SD 5.5 ERCM-Ch 3, Sect. 3.2.2	_____	_____
D. Personnel dosimeter use	ERCM-Ch 3, Sect. 3.1.2	_____	_____
E. Contamination control Include Reporting Requirements	ERCM-Ch 4	_____	_____
F. Green tags	ERCM-Ch 4, Sect. 3.1.1	_____	_____
G. Criticality Safety Training requirements	SM-Sect. 25	_____	_____
H. Respirator Training requirements	SM-Sect. 8, 2.1 Z. and aa ERCM-Ch 3	_____	_____

	<u>Manager Signature</u>	<u>Date</u>
Manager Review	_____	_____

VI. DOCUMENTATION

A. Log-keeping practices	SD 4.9	_____	_____
B. Internal Surveillance	SD 1.3	_____	_____
C. SWR use	SD 3.12	_____	_____
D. Preparation and approval of THS documents--DRRs, SDs, and DOPs FCFs, O&MMs, Work Task Packages	SD 3.1 SD 1.6 SD 3.2 SD 3.6 SD 3.8 SD 3.13	_____	_____
E. Use of DOPs and O&MMs Work Task Packages and Job Control	SD 3.5 SD 3.13 SD 3.20	_____	_____
F. Drawing control (ADCNs purpose and use)	SD 3.3	_____	_____

G. Document Control System	SD 3.14	_____	_____
H. Management Plan		_____	_____
		<u>Manager</u>	
		<u>Signature</u>	<u>Date</u>
Manager Review		_____	_____

	<u>Reference</u>	<u>Employee</u>	
		<u>Signature</u>	<u>Date</u>
VII. <u>GOVERNMENT PROPERTY</u>			
A. Use of government vehicles and trip tickets	RM 9-3 thru 9-10	_____	_____
B. Reporting vehicle accidents	RM 9-10	_____	_____
C. Reporting fires and property damage	SM-Sect. 3, 2-8 & 2-9	_____	_____
D. Property passes	RM 4-28	_____	_____
E. Property disposal techniques	RM 4-29	_____	_____
F. Control of sensitive items	SD 1.5	_____	_____
		<u>Manager</u>	
		<u>Signature</u>	<u>Date</u>
Manager Review		_____	_____

VIII. JOB SPECIFIC

The employee's responsible manager shall designate the following required training as applicable to the employee's job position and physical condition. The THS Training Coordinator(s) will schedule the training as identified below. If, for any reason, the initial scheduled sessions are not met, it is the responsibility of the employee's manager to reschedule training and submit the new date to the THS Training Coordinator(s).

<u>Training Course</u>	<u>Course Number</u>	<u>Check as Applicable</u>	
		<u>Not Required</u>	<u>Required</u>
A. Radiation Worker Qualification "A"	TS-501 (7.5 hours)	_____	_____
B. Radiation Worker Qualification "B"	TS-510 (7.5 hours)	_____	_____
C. Non-Radiation Worker	TS-509 (15 min.)	_____	_____
D. Hazardous Material Shipper	TS-602 (6 hours)	_____	_____
E. First Aid (required for Fire Brigade members)	TS-801 (8 hours)	_____	_____
F. Cardiopulmonary Resuscitation-CPR (required for Fire Brigade members)	TS-803 (4 hours)	_____	_____
G. Respiratory Protection and Fit Test (required for Fire Brigade members including Scott Air Pack)	TS-804 (7.5 hours)	_____	_____
H. Medical Evaluation (forward a copy of all medical evaluation forms to the THS TC)	N/A	_____	_____
1. Specific Criteria		_____	_____
a. Professional Crane Operator		_____	_____
b. Other (specify)		_____	_____
2. Routine Periodic		_____	_____
a. Incidental Crane Operator		_____	_____
b. Fissile Material Handler		_____	_____
c. Other (specify)		_____	_____

IX. PRESENTATIONS BY J. N. DAVIS

	<u>Employee</u> <u>Signature</u>	<u>Date</u>
A. High Performance Teams - 2 hours	_____	_____
B. Intro. to Waste Management - 2 hours	_____	_____
	<u>Manager</u> <u>Signature</u>	<u>Date</u>
Manager Review	_____	_____

X. EDUCATION

A. List previous education and training, including EG&G Manager Training, if applicable. (Operations personnel should fill out an Individual Background Summary.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

XI. EMPLOYEE COMMENTS

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\_\_\_\_\_  
Employee's Signature

\_\_\_\_\_  
Date



XII. MANAGER COMMENTS

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Manager's Signature

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Date

**ATTACHMENT B**  
**TAN PWTU PERSONNEL**