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OSWER DIR. # ~~9010.15-01~~

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 16 1988

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MEMORANDUM

SUBJECT: OSWER Integrated Health and Safety Policy

FROM: Jack W. McGraw
Deputy Assistant Administrator
Office of Solid Waste and Emergency Response

TO: OSWER Office Directors
OSWER Staff Directors

PURPOSE:

To implement the OSWER Integrated Health and Safety Policy.

BACKGROUND:

As you know, all EPA employees are required to comply with Occupational Safety and Health Act (OSHA) Standards (e.g., 29 CFR 1910.1926), as well as EPA's Occupational Health and Safety directives. EPA Order 1440 (Occupational Health and Safety Manual) establishes the overall Agency health and safety policy. EPA Order 1440.2 (Health and Safety Requirements for Employees Engaged in Field Activities) requires all EPA field activity personnel to receive the appropriate training certification prior to any field activity.

The OSWER Interim Integrated Health and Safety Policy, which became effective August 12, 1988, after concurrence by all Office Directors, fulfills the requirements of EPA Order 1440. Therefore, OSWER personnel whose job functions require them to be involved with hazardous waste sites, emergency spill activities, chemical processing/storage plants, and/or potentially hazardous substances, are required to have the appropriate training certification prior to engaging in field activities. Compliance with EPA Order 1440 and 29 CFR 1910.120 are mandatory, not voluntary.

OBJECTIVES:

In order to assure that we meet all OSHA and EPA requirements in a timely fashion, the attached subject policy is based on information received from the various offices, workgroup members and in-house occupational health and safety expertise existing within the Environmental Response Team (ERT) in Edison, NJ.

IMPLEMENTATION:

To assist Branch Chiefs in their Employee Health and Safety record-keeping responsibility, the ERT has established an OSWER Integrated Health and Safety Data System to track compliance with training and medical surveillance requirements. Please have your first line supervisors furnish the following employee information for employees in OSWER categories No. 1 through No. 4 by September 15, 1988 to:

Rodney D. Turpin
U.S. Environmental Protection Agency
Environmental Response Branch
Woodbridge Ave., Bldg. 10, (MS-101)
Edison, NJ 08837

FTS-340-6741

The employee information will be furnished to you on a regularly scheduled basis as per your request. Thank you in advance for your assistance in making the OSWER Integrated Health and Safety Program an effective and safe one.

LAST NAME	FIRST NAME	OFFICE	MAIL CODE	CATEGORY

Attachment

cc: OSWER Division Directors
D. Weitzman (PM-273)

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

INTEGRATED HEALTH AND SAFETY POLICY

FOR

FIELD ACTIVITIES

ASSISTANT ADMINISTRATOR

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

401 M Street, NW
Washington DC 20460

May 15, 1988

ABSTRACT

PURPOSE: The purpose of this document is to establish an Integrated Health and Safety Policy for all Office of Solid Waste and Emergency Response (OSWER) Superfund Amendment Reauthorization Act field activity employees who are engaged in hazardous substances or related activities.

BACKGROUND: The Environmental Protection Agency (EPA) is mandated by a number of laws and regulations to safeguard the health and safety of its employees. While the Occupational Health and Safety Staff (OHSS), within the Office of Administration and Resources Management's (OARM) Office of Administration (OA), has overall responsibility for the development, organization, and administration of EPA's Health and Safety Programs, the responsibilities for establishing, implementing, and enforcing an Occupational Health and Safety Program have been delegated to Assistant Administrators (AA) and Regional Administrators (RA) by the EPA Occupational Health and Safety Manual (EPA Order 1440). Since OSWER has the responsibility for developing and implementing specific health, safety, and training programs for its employees, this document is intended to inform the field activity employee of his/her duties and responsibilities in regard to specific health and safety policies, and to demonstrate OSWER's overall commitment to the protection of its employees.

APPLICABILITY: This policy is effective for all OSWER field activity employees who are either actively or potentially involved in various hazardous substances field activities (i.e., RCRA major corrective actions and RCRA storage, treatment, and disposal facilities regulated under 40 CFR parts 264 and 265; Hazardous Waste & Emergency Response; Chemical Preparedness; Underground Storage Tanks; Solid Wastes; etc., and other field activities involving hazardous or potentially hazardous substances). Applicability of this policy also extends to persons who are not employed by OSWER, but are either under a specific contract or otherwise under the jurisdiction of OSWER.

CONTENTS

1.0 PURPOSE

The purpose of this document is to establish an Integrated Health and Safety Policy for all OSWER employees who are presently, or who may be engaged in the future field activities (e.g. hazardous substance field activities and related activities involving hazardous chemicals/ substances).

1.1 Each OSWER employee involved in field activities shall receive appropriate training, equipment, and medical monitoring in accordance with the U.S. EPA Occupational Health and Safety Manual (Order 1440), U.S. EPA Orders 1440.2 and 1440.3, the Office of Emergency and Remedial Response (OERR), Hazardous Response Support Division Standard Operating Safety Guides, as well as other appropriate Federal/State requirements and guidelines such as 29 CFR 1910/1926.

1.2 Any extension of duty associated with hazardous substances or other similar OSWER field activities beyond the specific field category to which a particular employee is assigned or for which he/she is specifically qualified by training and practical experience is prohibited. No supervisor is authorized to order, direct, or otherwise instruct an employee to enter a situation that is more hazardous than that employee's field training certification (e.g., Occupational Health and Safety Manual [Chapter 7], EPA Order 1440.2 and 29 CFR 1910.120). Such an assumption of duty by an employee involves the concomitant assumption of all risks on the part of that individual should the employee be specifically informed that the assumption or duty is beyond the scope of his/her training.

2.0 OSWER POLICY

2.1 All employees who participate in field activities must be classified into field activity categories.

2.2 An employee must receive the required training and health monitoring prior to performing field activities.

2.3 All organizations that have their own health and safety programs, including private contractors and other Federal, state and local agencies, shall utilize and be responsible for the administration of their individual programs as long as these programs are at least as stringent as the OSWER requirements and OSHA standards.

2.4 EPA has delegated to the AA, OSWER, the Health and Safety responsibility for OSWER employees. It is OSWER policy that contractors shall be responsible for implementing the Office of Emergency and Remedial Response (OERR) Standard Operating Safety Guides (SOSG) for its employees and operations, including employee rights to know. In this regard, EPA at a minimum

requires that each contractor know and adhere to HRSD'S SOSG, 29 CFR 1910.120, and 29 CFR 1910/1926. EPA has chosen to implement this policy by allowing the contractor to design an internal health and safety program and to certify to EPA that the company's program complies with the SOSG and 29 CFR 1910/1926. Where a contractor's health and safety program differs from the SOSG, the contractor must certify to EPA that his program is at least as stringent as EPA requirements.

3.0 AUTHORITY

The authority for this program is derived from: U.S. EPA, OHSS, Occupational Health and Safety Manual, U.S. EPA Order 1440, 1440.2, and 1440.3, and all applicable Federal requirements.

4.0 RESPONSIBILITY

4.1 ADMINISTRATIVE

4.1.1 CATEGORIZATION - This order identifies four distinct field activity categories into which employees are assigned based upon their field training certification classification (EPA Order 1440.2 and 29 CFR 1910.120) and exposure potential. The categories are defined and outlined in Section 5.0. (Procedures and Duty Categories) of this document.

4.1.2 Office Directors are delegated the authority and responsibility to implement and enforce this policy. To ensure a truly integrated/coordinated program, each Office Director is required to assign at least one occupational and safety health person to serve as liaison on the OSWER Integrated Health and Safety Workgroup chaired by the Environmental Response Team (ERT), Edison, N.J.

4.1.3 Division Directors are delegated the authority to identify each field activity position in their Divisions.

Budgeting of funds for safety training and for the purchase, maintenance and storage of employee safety equipment is the responsibility of the Division Director,

4.1.4 Branch Chiefs are responsible for assigning field activity categories to Section Chiefs/first line supervisors.

The Branch Chiefs are also responsible for maintaining Employee Safety and Training Records, which contain all safety-related matters.

4.1.5 Section Chiefs/first line supervisors are responsible for assigning field activity categories to an individual employee. Each employee shall be provided with a complete description of the field activity categories. The Section Chief or designee is responsible for purchasing, issuing, and training his/her personnel concerning any phase of respiratory protection.

4.1.6 Employee must read and fully understand the OSWER policy and sign a statement attesting to that fact.

4.1.7 OSWER Integrated Health and Safety Workgroup will coordinate the implementation and maintenance of this policy. The Workgroup representative is the focal point for coordinating the office's activities with regard to OSWER employee occupational health and safety activities.

4.2 TRAINING

4.2.1 The development, implementation, and maintenance of safety training programs shall be the highest OSWER training priority. The AA, OSWER, or designee, is ultimately responsible for ensuring that all OSWER employees and contractors receive the appropriate safety equipment and training or equivalent in accordance with U.S. EPA Orders (e.g., 1440, 1440.2, 1440.3) and 29 CFR 1910/1926.

4.2.2 The responsibility for ensuring that all employees receive the appropriate mandatory safety training is shared jointly by the OSWER Office Directors, Division Directors, Branch Chiefs, Section Chiefs/first line supervisors, and employee.

4.2.3 All supervisors equivalent to or lower than Section Chiefs in charge of field activity employees should receive commensurate safety training in all applicable field safety categories.

4.3 MEDICAL SERVICES

4.3.1 The AA, OSWER, (or designee) is ultimately responsible for ensuring that all field activity employees actively participate in a Medical Monitoring Program (See Appendix B).

4.3.2 It is the employee's responsibility to seek medical assistance and advise his/her supervisor in the event of exposure or potential exposure to a contaminant. In addition, the employee must report all accidents/

exposure to his supervisor so the required workers' compensation form can be carried to the medical provider.

4.3.3 If an emergency exists, the employee must contact the supervisor and complete the necessary forms as soon as possible (see EPA Occupational Health and Safety Manual, Order 1440, Chapter 3).

4.4 OSWER INTEGRATED HEALTH AND SAFETY PROGRAM

The Agency's Occupational Health and Safety Manual (EPA ORDER 1440), particularly Chapter 9, establishes occupational health and safety policy and requirements, and assigns responsibilities for EPA employees engaged in hazardous substance field activities. In order to meet these requirements, the Environmental Response Team (ERT), Edison, NJ has been delegated the responsibility to manage the OSWER Integrated Health and Safety Program. The primary objective of the program is to ensure that all aspects of the safety and occupational health requirements are met in a timely fashion to afford each employee proper protection.

5.0 FIELD ACTIVITY CATEGORIES AND PROCEDURES

5.1 DEFINITION OF CATEGORIES

In order to meet the specific needs of the individual OSWER employees, this policy requires additional administrative controls over those of EPA Orders 1440.2 and 1440.3. The administrative control is a further restriction to EPA Order 1440.2 "Basic, Intermediate and Advanced" training certification, and is accomplished by assigning Categories No. 1-4 to the appropriate field activity personnel. Because of these additional administrative controls, Categories 2 and 3 employees are exempt from the EPA Order 1440.2 requirement of three days of on-the-job training <u>within three months</u> of classroom training unless requested by the employee. However, when applicable, they are still required to meet the three days of on-the-job training.

The employee's category assignment may be changed by the first line supervisor via written notification to the Manager, OSWER Integrated Health and Safety Program, U.S. EPA-ERT, (Mail Code MS101) Raritan Depot, Bldg. 10, Woodbridge Ave., Edison, NJ 08837 (FTS 340-6740). This notification consists of identifying the employee's necessary change(s) and verifying that the appropriate training, equipment, and medical examination have been provided to the employee for the reclassification.

5.1.1 Category 1 is established as the OSWER highest risk category. This category includes all employees whose job description/critical job elements require handling of, or potential exposure to, identified or unidentified hazardous chemicals. For example, employees responding to spill emergencies, uncontrolled hazardous waste sites, etc. (i.e., ERT personnel) are in this category. These employees are authorized to wear OERR Levels of Personnel Protective Equipment A, B, C, and D. Medical examinations are given every six months. See Appendix G for details.

5.1.2 Category 2 includes those OSWER personnel who are required to enter the "Exclusion Zone" or a facility's "Treatment/Storage Activity Area" where there is the potential of exposure to identified or unidentified hazardous chemicals, for more than approximately 20 days per calendar year[1]. Sampling and corrective action activities are some examples of the job function. These employees are authorized to wear OERR Levels of Personnel Protective Equipment C and D, and receive Medical Examinations annually. (Those employees that will only engage in RCRA activities will receive a Category 2A Listing.) See Appendix G for details.

5.1.3 Category 3 includes those OSWER personnel who are required to enter the "Exclusion Zone" or a facility's "Treatment/Storage Activity Area" where there is the potential of exposure to identified or unidentified hazardous chemicals situations, etc., for less than approximately 20 days per calendar year[1]. Sampling and corrective action activities are some examples of the job function. (Those employees that will only engage in RCRA activities will receive a Category 3A Listing.) See Appendix G for details.

Medical examinations are scheduled based on the employee's number/frequency of hours of potential exposure. This period may range from 1-4 years. These employees are authorized to wear OERR Levels of Personnel Protective Equipment C and D. See Appendix G for details.

5.1.4 Category 4 includes all other OSWER field activity personnel not specifically addressed in Categories 1-3, but who are required to perform his/her job function in a "Secure/Clean Area" of those activities identified in Categories 1 through 3. These employees are not authorized to wear OERR Levels of Personnel Protective Equipment.

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[1] The period of potential exposure of greater than or less than 20 days is derived from the 30-day standard in 29 CFR 1910.120 and may be modified as appropriate per supervisor and employee agreement.

Examples of this type of employee are: Certain operations conducted under RCRA as described in 29 CFR 1910.120(0); employees and supervisors who perform activities in the "Support Zone" at hazardous waste site emergency spills.

5.2 CATEGORY REQUIREMENTS

This section of the OSWER policy provides a basic framework for the safe conduct of Category 1-4 personnel while being directly or indirectly involved in a hazardous substance activity.

5.2.1 OSWER field activity personnel must be aware, in advance, of the objectives of each site visit and must be prepared to employ safe operations to avoid potential hazards. Each employee is required to enforce and comply with this policy and exercise good personal judgement and technical expertise on a case-by-case basis.

5.2.2 Whenever applicable, OSWER field activity personnel are required to implement the OERR, HRSD, Standard Operating Safety Guides for guidance and selection criteria. OSWER personnel must exercise extreme caution to prevent loss of life, injury, or health hazards to themselves and to the general public. OSWER field activity personnel are required to adhere to this policy whether or not the Regional requirements are as specific as this policy.

5.2.3 In the event of conflicting safety regulations, the employee must implement those safety practices affording the highest level of protection for everyone involved.

5.2.3.1 Qualifications

To be eligible to perform Category 1-3 duties, the employee must:

a) be assigned to the on-site work by his/her supervisor;
b) complete a Baseline Medical Examination and participate in a medical monitoring program;
c) complete the appropriate health and safety training program as per U.S. EPA Order 1440.2, 1440.3, and 29 CFR 1910.120 prior to involvement in field activities, and/or other types of similar field activities;
d) be assigned the appropriate Field Activity Category.

5.3 STANDARD OPERATING GUIDELINES

5.3.1 Pre-arrival Planning

In planning a field activity, it is the employee's responsibility to be aware of the purpose of the field activity and comply with the OSWER Integrated Health and Safety Policy, OHSS Occupational Health & Safety Orders, 29 CFR 1910.120, and all applicable requirements.

5.3.1.1 PRIOR to arrival at a field activity location, the employee shall complete Part One of the OSWER Incident Safety Check Sheet (refer to Appendix A) and furnish it to the first line supervisor or designee for review. It is recognized that lead time and availability of information are usually limited; however, the employee must attempt to complete this form (preferably prior to office departure). If any emergency arises, it is recommended that, the employee and his/her supervisor contact the Environmental Response Branch's Edison, NJ Hotline (201-321-6660) for technical assistance.

5.3.1.2 When Applicable, Site Safety Plans shall be completed and submitted in accordance with 29 CFR 1910.120, OHSS, Occupational Health and Safety Manual, and OERR, HRSD, Standard Operating Safety Guides.

5.3.2 Safety Onsite (When Applicable)

OSWER personnel shall implement on-site evaluation and inspection in accordance with the OERR, HRSD, Standard Operating Safety Guides.

5.3.2.1 The buddy system shall be utilized in the field; OSWER field personnel shall not enter an "Exclusion Area" or a RCRA hazardous waste TSD, etc., alone. Employees shall make use of their practical experience and technical expertise to keep alert to potentially dangerous situations. Guidance for these types of precautionary measures and procedures is provided in the OERR, HRSD, Standard Operating Safety Guides and other state-of-the-art technology documents.

5.3.2.2 If any condition suggestive of a situation more hazardous than anticipated is discovered, all field activity shall temporarily stop for a reevaluation of the hazard and the level of protection required.

5.3.2.3 In the event that an OSWER field activity employee experiences any adverse effects or symptoms of exposure while engaged in field activities, he/she must immediately leave the site/area, and contact the site/facility supervisor (OSC, etc.), and seek appropriate medical attention. Such incidents must be reported in accordance with Chapter 3 of the EPA Occupational Health and Safety Manual (EPA Order 1440).

5.4 Personnel Protection

If OSWER personnel are required to enter any area in which there is a risk of potential exposure or in which respiratory protection is needed, e.g., a hazardous site/spill exclusion zone, RCRA storage facility, manufacturers production area, etc., they are required to adhere to this Integrated Health and Safety Policy whether or not the Regions have a policy or a specific site safety plan. Employees are required to refer to the OERR, HRSD, Standard Operating Safety Guides for a detailed description of the levels of protection and selection criteria.

5.5 Site Departure and Decontamination Procedures

Disposable safety clothing and sampling equipment shall be properly disposed. If appropriate disposal facilities are not available, safety clothing, and sampling equipment shall be placed in a suitable container pending proper disposal. Nondisposable safety clothing and sampling equipment shall be decontaminated (preferably on-site) in accordance with the OERR, HRSD, Standard Operating Safety Guides. In the event that the adequacy of these procedures is questionable, nondisposable equipment shall be placed in appropriate containers until the exact nature of the sampled material is known. Suitable decontamination procedures shall then be employed to clean the equipment, or the equipment shall be properly disposed of at an approved RCRA hazardous waste facility that meets the requirements of the EPA offsite policy (OSWER Directive 9834.11) and EPA Land Disposal Restrictions (RCRA sections 268.30 and 268.32).

6.0 MEDICAL BASELINE AND MONITORING PROGRAMS

Based on their field exposure classification, OSWER field activity employees shall undergo routinely scheduled examinations to determine the possible health effects of such activity. A medical baseline health profile shall be established for this purpose. As a minimum, the OSWER medical monitoring program shall consist of OHSS guidelines and requirements. In general, the medical monitoring program shall be apportioned into three classes on the basis of employee field activities and potential exposure. In addition, OSWER field activity personnel shall immediately receive post-exposure medical/treatment examinations upon notifying their Section Chief(s) of an exposure. A tabular summary of the OSWER Medical Monitoring Requirements according to Field Activity Category is included in Appendix B of this document.

7.0 TRAINING

An adequate training program is essential for proper implementation of this Integrated Health and Safety Policy. The complexities of the topics of interest, the variety of courses offered, and the need for specific training within each category necessitates formulation of certain ground rules.

7.1 Each OSWER field activity employee shall receive safety training commensurate with the job requirements and field exposure classification. First line supervisors shall recommend additional safety training courses for an employee's future needs.

7.2 A series of core topics are designated for each category as tabulated in the Summary of the OSWER Health and Safety Training Requirements (Appendix C). These core topics are mandatory of all OSWER Field Activities Category Employees. The other topics identified as "desirable" should be taken by employees based upon the recommendations of their supervisors. The level of training provided shall be consistent with the employee's job function and responsibilities. Supervisors are responsible for insuring that their employees are properly trained.

7.3 The training plans and programs must remain flexible enough to include/delete any additional/obsolete topics as the need arises or new ideas are introduced. As per EPA Order 1440.2 and 29 CFR 1910.120, 8 hours of refresher training are required annually of most OSWER field activity personnel.

7.4 Training hour requirements vary on the specific field activity. The following summarizes the 29 CFR 1910.120 training requirements as it relates to the OSWER Field Activity Categories:

Category 1: Forty hours of training, plus 3 days of actual field experience under the direct supervision of a trained, experienced supervisor. (Field supervisor in this category will be required to have an additional 8 hours of "Supervisor Training.") All employees shall receive 8 hours of refresher training annually.

Category 2: Hazardous waste site and corrective action site workers are required to have the same as Category 1 (above). All other Category 2 personnel that do not enter an Exclusion Zone or equivalent area, may qualify for 29 CFR 1910.120(0) training requirements of 24 hours initial training and 8 hours refresher training annually.

Category 3: Hazardous waste site and corrective action site workers are required to have the same as Category 1 (above). All other Category 3 personnel that do not enter an Exclusion Zone or equivalent area, may qualify for 29 CFR 1910.120(0) training requirements of 24 hours initial training and 8 hours refresher training annually.

Category 4: Although not required by 29 CFR 1910.120, all Category 4 employees are required to have a minimum of 4 hours of training in those areas identified in Appendix C.

8.0 HAZARD COMMUNICATION/RIGHT-TO-KNOW

8.1 The EPA is required to communicate the hazards associated with the workplace to all EPA employees. EPA Order 1440.7, Hazard Communication, requires that employees be given information and training on hazardous substances in their work areas.

8.2 It is EPA policy that it will extend the hazardous communication/right-to-know requirement to its contractors or contractor representatives. At a minimum, OSWER employees and contractors and their representatives must be informed of the physical and health hazards of known substances in the work area, methods to detect hazardous substances, and measures employees can take to protect themselves from the hazards. In the case of OSWER employees, the hazardous substances are often unknown.

8.3 All parties working together at hazardous waste sites or spill emergencies/accidents must share all available information on the possible hazards involved.

8.4 As part of the hazard communication, employees are to be informed of the threat to human reproduction by chemicals in the workplace. OSWER employees (both male and female) who are potentially exposed to chemicals that affect reproduction, such as teratogens, mutagens, and chemicals that alter fertility,

have the right to request a temporary change in job assignment as needed to allow conception or to protect an unborn child. Each request will be handled on an individual basis. For each request the supervisor has the responsibility to assess the reproductive hazards associated with the job and to make reasonable accommodations of equal professional status.

Appendix A
OSWER INCIDENT SAFETY CHECK-OFF LIST

I. BEFORE FIELD ACTIVITY Employee _____

1. Incident: Site_____ City_____ State_____
   a. Response Dates_____
2. Activity Description: Environmental Sampling___ Product Sampling___ Residential___ Site Evaluation___ Containment___ Well Drilling___ Facility Inspection___
3. Type of Response: Spill___ Site ___ Facility___ Other___
4. Site Topography: Mountains_____ Rivers_____ Valley_____ Rural_____ Suburban_____ Urban_____ Level_____ Slopes_____ Facility_____
5. Incident Safety Plan: (when applicable) Not Developed _____ Reviewed _____ Region _____ Briefed _____ ERT _____
6. Site Accessibility: (when applicable) Road: Good_____ Fair_____ Poor_____ Air: Good_____ Fair_____ Poor_____
7. Suspected chemical(s) and pathway with source(s) involved: (A)_____ (B)_____ (C) _____ (D)_____
8. Emergency Response Teams present for First Aid, etc. Yes_____ No____
9. Protective Level(s) Selected: (A)_____ (B)____ (C)____ (D)_____
   (a) If Level "C," Identify Canister_____
   If Level "D," JUSTIFY: write in comments section at bottom of page
10. If SCBA, Identify Buddy System: Office/Name_____
11. Last Response: (a) Level Used: (A)____ (B)____ (C)____ (D)____
    (b) Medical Attention/Exam Performed: Yes____ No___

II. AFTER RESPONSE

1. Protective Level Used: (A)_____ (B)_____ (C)_____ (D)_____
   a. Level "C," identify canister: _____ b. Level "D" (comment below)
   c. Level B/C skin protection: Tyvek___ Tyvek/Saran__ Acid/Rain__ Other___
2. List possible chemical exposure: Same as above: (A)_____ (B)_____ (C)_____ (D)_____
3. Equipment Decontamination:

	(a) clothing	(b) respirator	(c) monitoring
Disposed:	_____	_____	_____
Cleaned:	_____	_____	_____
No Action:	_____	_____	_____

4. Approximate time in exclusion area:_____hr/day for _____ days

PART I: Date Prepared _____ Reviewed by _____ Date _____

PART II: Date Prepared _____ Reviewed by _____ Date _____

APPENDIX B
SUMMARY OF OSWER MEDICAL MONITORING REQUIREMENTS
PER EMPLOYEE CATEGORY

EMPLOYEE CATEGORY	1	2	3	4
Examination Class*	Base line plus Medical Monitoring Exam every 6 months	Base line plus Annual Medical Monitoring Exam	Base line plus periodic medical monitoring exam based on potential exposure freq. (avg 1-4 yr)	N/A

* Examination rate may increase with increasing incidence of exposure.

NOTE: A "calendar year" is a somewhat arbitrary term when discussing a measurement of exposure. For example, 8 one-day visits to a site where the exposure is great or the toxicity is high may be more critical to the health of the individual than 19 visits at another site. Therefore, all factors must be considered when selecting the Medical Monitoring Exam schedule.

APPENDIX C

SUMMARY OF THE OSWER HEALTH AND SAFETY TRAINING COURSE REQUIREMENTS

Category	OERR Levels of Protection	EPA Order 1440.2 Classification	OSWER Policy Document	OERR Standard Operating Safety Guides	Properties of Hazardous Mtls.	Toxicology
1	A,B,C	Advance	X	X	X	X
2	C	Intermediate/Basic	X	X	X	X
3	C	Intermediate/Basic	X	X	X	X
4	NONE	N/A	X	X	N/A	N/A

Category	Basic Office First Aid	Basic Field First Aid	CPR	Protective Clothing	Respiratory Protection	Decontamination Procedures	Entry Procedures	Employee Rights and Responsibilities	Defensive Driving
1	O	X	O	X	X	X	X	X	X
2	O	X	O	X	X	X	X	X	X
3	O	X	O	X	X	X	X	X	X
4	O	O	O	N/A	N/A	N/A	N/A	X	X

Key: X = Mandatory, Core Topics
O = Desirable, But Not Mandatory
N/A = Not Applicable
* = Cardiopulmonary Resuscitation

APPENDIX D

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE
RESPIRATORY PROTECTION PROGRAM
(Revised March 1988)

I. Purpose

The Office of Solid Waste and Emergency Response (OSWER) respiratory protection program is intended to control exposures to those agents that may cause occupational diseases when air is contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors.

II. Objective

Respiratory protection may be properly worn when effective engineering control methods are not feasible, while they are being implemented, or in emergencies. Generally, most corrective actions do not lend themselves to effective engineering controls. Therefore, respiratory protection is judged to be the best approach to ensure employee health protection. It is important to note, however, that effective work practices can minimize reliance on such devices. The primary objective of this program is to protect the employee against "potential" exposure as well as measured exposure.

III. Scope

This respiratory protection program is intended to address all OSWER field activity employees.

IV. Responsibility

It is the responsibility of Section Chiefs/first line supervisors to administer this program in close liaison with medical monitoring personnel. Supervisors are required to provide both the appropriate training and respiratory protection employees need, at no cost to the employee.

Employees shall use the respiratory protection provided in accordance with instructions and training received. Each employee shall guard against damage to the respirator, and report any respirator malfunctions to the supervisor.

V. Program Elements

A. The OSWER respiratory protection program meets all provisions of 29 CFR 1910.134 and 29 CFR 1910.120. In addition, it meets all EPA, OHSS's Occupational Health and Safety requirements and the OERR's, HRSD Standard Operating Safety Guides.

B. Program Elements

1. Standard Operating Procedures. This respiratory protection program shall function as the written standard operating procedures governing the selection and use of respiratory protection for OSWER personnel.

2. Respirator Fitting and Selection

   a. The selection of the proper type of respiratory protection shall be based primarily on, but not limited to the:

      1) Nature of the field activity;
      2) Type of respiratory hazard;
      3) Location of the hazardous area;
      4) Period of time for which respiratory protection must be provided;
      5) Employee's potential exposure;
      6) Employee's activities;
      7) Employee's physical characteristics and functional activities;
      8) Limitations of the various types of respirators; and
      9) Respirator protection factors/respirator fit.

   b. Factors concerning both the potential and the measured hazard shall be considered when requiring the use of respiratory protection. These factors shall include, but not be limited to:

      1) Types of hazard;
      2) Physical and chemical properties;
      3) Physiological effects on the body;
      4) Expected concentration/level;
      5) Established ACGIH TLV's, OSHA PEL's, AIHA WEEL's.
      6) IDLH considerations; and
      7) Agent warning properties.

   c. U.S. EPA Environmental Response Team's (ERT) Air Monitoring Guidelines (FSOP #8) shall be followed, when applicable, to identify the type of respiratory hazards, define their nature and potential (i.e., vapor, particulate, etc.), and determine the concentration in the work area.

   d. Factors concerning potential and actual site activities shall be taken into account in selecting proper respiratory protection. These factors include a description of work activities; description of the potential hazards; agents of health concern, employee exposure potential and work activities. The selected respirator protection must be continuously evaluated to reflect changes in conditions or factors.

e. The work activity location, with respect to a safe/clean area, shall be considered in selecting respirator protection. Not only does this permit for a well identified contamination reduction zone, but also requires the presence of emergency access and exit areas.

f. The period of time a respirator is to be worn shall be considered when selecting respiratory protection.

g. Worker activities and locations during site activities shall be considered when selecting proper respiratory protection.

h. The physical characteristics, functional capabilities, and performance limitations of various types of respiratory protection shall be considered when selecting a respirator.

i. The hazards for which a particular respirator is designed shall be considered when selecting a respirator.

j. A qualitative respirator fit test shall be performed on each user to determine a satisfactory fit with negative pressure respirators. Test results shall be used to select specific types, makes, and models for individual workers. All OSWER Category 1 and 2 employees will be fit tested at least annually. Category 3 personnel will be fit tested before each respirator use after the initial testing. Fit testing is not required for positive pressure respirators (e.g., SCBA units). Individual workers shall be trained to qualitatively check respirator fit via the positive-negative pressure method each time a unit is donned. Whenever possible, a quantitative fit test shall be incorporated.

k. Respirators shall not be worn when conditions prevent a good seal. Employees shall not wear respirator temple bars, straps, head coverings, etc. between the sealing surface of the respirator. Neither shall respirators be worn if facial hair, features, etc., prevent a good fit.

l. Respirator fit testing records shall be kept. Records shall include type of fit-test method used, specific make and model of respirator tested, name of worker tested, name of test operator, date of test, and results of fit testing.

m. A variety of sizes of respirator facepieces shall be available to OSWER personnel to accommodate the wide range of facial shapes and dimensions among personnel.

n. Employee preference for a particular respirator model shall be considered when selecting suitable respiratory protection. This includes such factors such as comfort, breathing resistance, weight, field of vision, etc. However, the preferred model must have a satisfactory fit test.

o. Where feasible, respirators shall be individually assigned to workers for their exclusive use. If a respirator is marked for identification purposes, the marking shall not affect the respirator performance.

3. Training and Education

a. Each respirator wearer shall be given training that shall include explanations and discussions of respiratory hazards and misuse; the need for respiratory protection; the reason for selecting a particular respirator; the function, capabilities, and limitations of the selected respirator; the method for donning the respirator and checking its fit and operation; proper wearing instructions; respirator maintenance; recognizing and handling emergencies; special instructions as required; regulations concerning respirator use; and identification of respirator cartridges and canisters by color code.

b. The training shall include a hands-on portion that covers donning, wearing, and removing the respirator; adjusting the respirator for proper fit; wearing the respirator in a safe atmosphere and in a test atmosphere.

c. The Section Chief or designee is responsible for purchasing, issuing, and training his/her personnel concerning any phase of respiratory protection.

d. Trainers, employees, and others associated with the respiratory protection program shall be trained to ensure the proper use of respirators. Training shall include basic respiratory protection practices, the nature and extent of expected respiratory hazard exposure, principles and criteria for selecting respirators, using respirators and monitoring their use, maintenance and storage, and regulations governing respirator use.

e. Each respirator wearer shall be retrained and fit tested at least annually or as appropriate (e.g.,after large changes in body weight, dental surgery, etc.) when facial size or shape significantly changes (see Paragraph V.B.2.j).

4. Cleaning and Disinfecting

   a. Respirators shall be regularly cleaned and disinfected. Those issued for the exclusive use of one worker should be cleaned after each day's use, or more often if necessary. Those used by more than one worker shall be thoroughly cleaned and disinfected after each use (e.g., routine, non-routine, emergency, or rescue units).

5. Equipment Storage

   a. Respirators shall be stored in a convenient, clean, and sanitary location so that they are protected against dust, sunlight, extreme temperature, excessive moisture, or damaging chemicals.

   b. Respirators shall be stored to prevent distortion of rubber or other elastomeric parts. Respirators shall not be stored in such places as lockers and tool boxes unless they are adequately protected from contamination, distortion, and damage. Consult the "use and care" instructions, usually mounted inside the carrying case lid, for proper storage of emergency respirators.

6. Inspection and Repair

   a. Each respirator shall be inspected routinely before and after each use. A respirator shall be inspected by the user immediately before each use to ensure that it is in proper working condition.

   b. After cleaning and sanitizing, each respirator shall be inspected to determine if it is in proper working condition, if it needs replacement parts or repairs, or if it should be discarded. Each respirator stored for emergency or rescue use shall be inspected at least monthly and after each use by an experienced person. Respirator inspection shall include a check for tightness of connections; for the conditions of the respiratory inlet covering, head harness, valves, connecting tubes, harness assembly, filter(s), cartridges, canister, end-of-service-life indicator, and shelf life date(s); and for the proper function of regulators, alarms, and other warning systems.

   c. Each rubber or elastomeric part shall be inspected for pliability and signs of deterioration. Each air and oxygen cylinder shall be inspected to ensure that it is fully charged according to the manufacturer's instructions.

d. Only parts designed for a specific respirator shall be used in its repair. Do not replace components or make adjustments or repairs beyond the manufacturer's recommendations. Reducing and admission valves or regulators shall be returned to the manufacturer or to a trained technician for adjustment or repair.

e. A record of inspection dates, findings, and remedial actions shall be kept for each SCBA respirator maintained for emergency or rescue use.

7. Surveillance

Appropriate surveillance or work area conditions and degree of employee exposure or stress shall be maintained.

8. Evaluation of Respiratory Protection Program

a. There shall be periodic (at least annual) inspection and evaluation to determine the continued effectiveness of the respiratory protection program. It is essential to ensure that all employees are provided with adequate protection. The program should be improved and deficiencies should be eliminated based on evaluation results.

b. Respirator wearers shall be consulted periodically about their acceptance of respirators. Frequent inspection of the program shall be conducted to ensure that proper types of respirators are selected, that users are properly trained, that appropriate equipment is issued and used, that respirators are worn properly, that respirators are in good operating condition, that respirators are inspected and maintained properly, that respiratory storage is acceptable, that respiratory hazards are monitored, and medical examinations are given as necessary, to evaluate user health.

c. The results of the inspection and evaluation shall be utilized to improve or maintain elements of the program as appropriate. Follow up investigations shall be conducted to ensure that sources of concerns are identified and corrected. Evaluation findings shall be documented. Plans to correct program concerns shall be documented (i.e., problem, target dates, responsibility, etc.).

9. Medical Approval

a. Each employee shall have a medical evaluation to determine fitness to wear respiratory protection and potential exposure. Adequate medical data shall be provided as part of the preplacement examination and all

subsequent examinations to allow a physician to make a judgement on each worker's fitness (Refer to Appendix B of the Integrated Health and Safety Policy for Field Activities for examination schedule).

b. Employees shall show the examining physician their exposure records (e.g., Incident Safety Check-off Sheet [See Appendix A of the Integrated Health and Safety Policy for Field Activities]) since the last examination.

10. Approved Respiratory Protection

Only approved respiratory protection shall be selected when available. Any modification of an approved respirator that is not authorized by the approval agencies (e.g., MSHA and NIOSH) voids the respirator approval.

VI. Air Quality

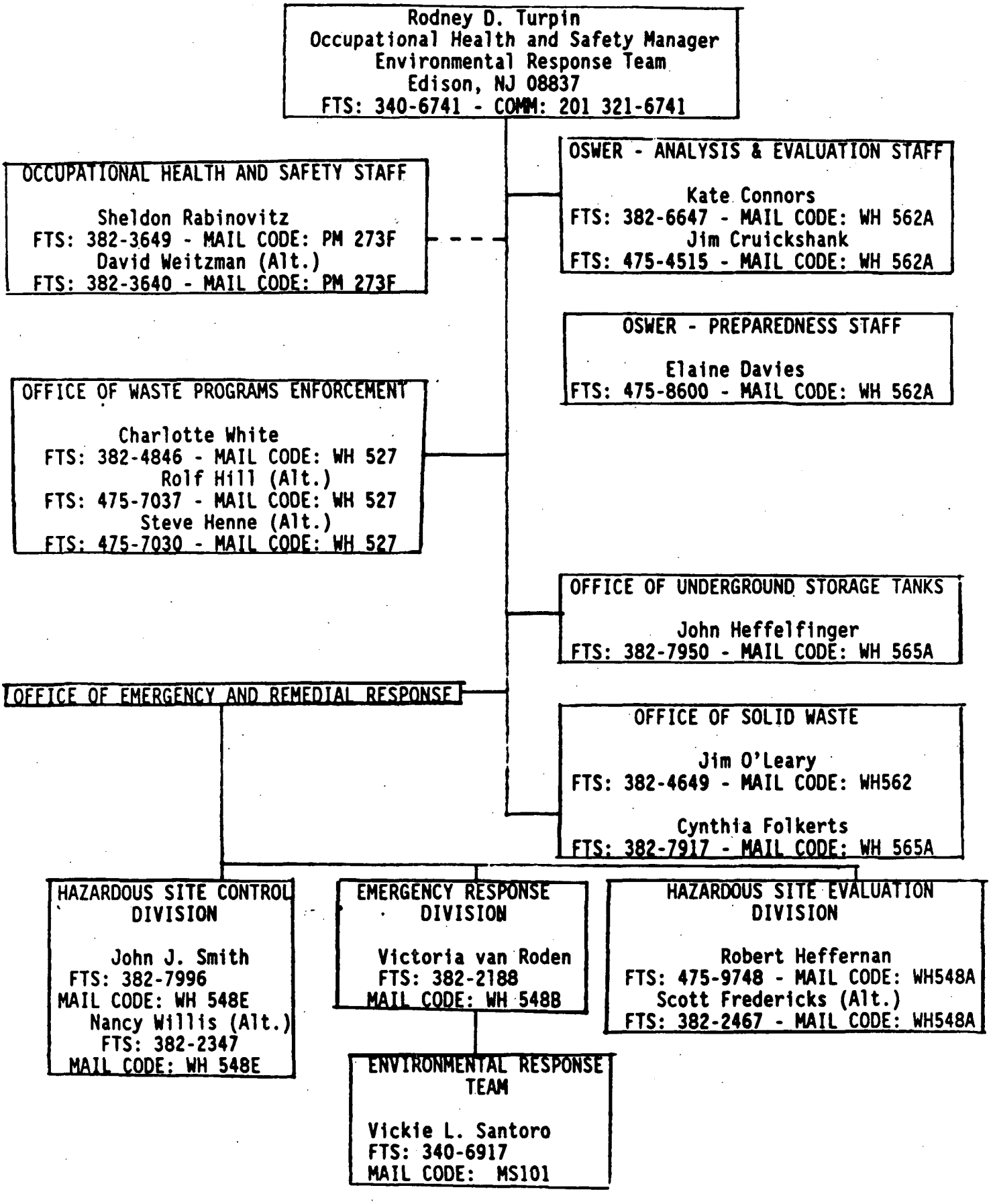
A. Compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiratory protection shall be of high purity. Compressed air should be the principle source of breathing air. Compressed gaseous air shall meet at least the requirements for Type 1 - Grade D breathing air of Compress Gas Association Commodity Specification G-7.1-1966.

B. Breathing air should be supplied to respirators from cylinders. 11 cylinders shall be tested for quality and maintained in accordance with applicable DOT specifications for shipping containers (Title 4-9, Code of Federal Regulations, Parts 173 and 178).

C. Breathing air containers shall be marked in accordance with ANSI Z48.1-1954 (R1971) or Interim Federal Specification GG-B-675b, September 23, 1976.

Appendix E

OSWER INTEGRATED HEALTH AND SAFETY WORKGROUP



May 15, 1988

APPENDIX F

EPA HEALTH AND SAFETY REQUIREMENTS AND GUIDELINE

1. EPA Occupational Health and Safety Manual (1440)

   Chapter 1. Policy and Responsibilities
   Chapter 2. Occupational Health and Safety Program Administration
   Chapter 3. Accident and Illness Investigation, Reporting, and Recordkeeping Requirements
   Chapter 4. Inspections and Correction of Unhealthful or Unsafe Working Conditions
   Chapter 5. Occupational Health and Safety Committees
   Chapter 6. Occupational Health and Safety Standards
   Chapter 7. Occupational Health and Safety Training
   Chapter 8. Laboratory Use of Toxic Substances
   Chapter 9. Hazardous Substances Responses
   Chapter 10. EPA Diving Safety Policy

2. EPA Health and Safety Orders

   1440.2 - Field Activities
   1440.3 - Respiratory Protection
   1440.4 - Health and Safety Training Requirements for Mine Safety
   1440.5 - Qualifications and Training Requirements for Occupational Health and Safety Program Personnel
   1440.6 - Motor Vehicle Occupant Restraining Systems
   1440.7 - Hazard Communication

3. Health and Safety Guidelines

   Respiratory Protection Program Guideline
   Eye Protection Program Guidelines
   Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities
   Medical Monitoring Program Guidelines
   Health and Safety Guidelines for EPA Asbestos Inspections
   Guidelines for the Selection of Chemical Protective Clothing, Second Edition

APPENDIX G

GENERAL DESCRIPTION OF THE OERR LEVELS OF PROTECTION AND PROTECTIVE GEAR

Personal protective equipment has been divided into four categories based on the degree of protection afforded and are as follows:

Level A - To be selected when the greatest level of skin, respiratory, and eye protection is required.

Level A equipment; used as appropriate:

1. Pressure-demand, self-contained breathing apparatus, approved by the Mine Safety and Health Administration (MSHA) and National Institute of Occupational Safety and Health (NIOSH).
2. Fully encapsulating chemical-resistant suit.
3. Coveralls*
4. Long Underwear*
5. Gloves (outer) chemical-resistant
6. Gloves (inner) chemical-resistant
7. Boots, chemical-resistant, steel toe and shank. (Depending on suit construction, worn over/or under suit boot.)
8. Hard hat (under suit)*
9. Disposable protective suit, gloves, and boots (Depending on suit construction, may be worn over fully encapsulating suit boot.)
10. Two-way radios (worn inside encapsulating suit).

* Optional, as appropriate

Level B - The highest level of respiratory protection is necessary but a lesser level of skin protection is needed.

Level B equipment; used as appropriate:

1. Pressure-demand, self-contained breathing apparatus (MSHA/NIOSH approved), or airline respirator.

2. Hooded chemical-resistant clothing (overalls and long-sleeved jacket; coveralls; one or two-piece chemical-splash suit; disposable chemical-resistant overalls).

3. Coveralls*

4. Gloves (outer) chemical-resistant

5. Gloves (inner) chemical-resistant

6. Boots (outer), chemical-resistant, steel toe and shank.

7. Boot covers (outer), chemical-resistant (disposable)*.

8. Hard hat (face shield)*

9. Two-way radios (worn inside encapsulating suit).

* Optional, as appropriate

Level C - The concentration(s) and type(s) of airborne substance(s) is known and the criteria for using air purifying respirators are met.

Level C equipment; used as appropriate:

1. Full-face, air purifying, canister-equipped respirators (MSHA/NIOSH approved).

2. Hooded chemical-resistant clothing (overalls; two-piece chemical-splash suit; disposable chemical-resistant overalls).

3. Coveralls*

4. Gloves (outer) chemical-resistant

5. Gloves (inner) chemical-resistant*

6. Boots (outer), chemical-resistant, steel toe and shank*.

7. Boot covers (outer), chemical-resistant (disposable)*.

8. Hard hat (face shield)*

9. Escape Mask *

10. Two-way radios (worn under outside protective clothing).

* Optional, as appropriate

Level D - A work uniform.

Level D equipment; used as appropriate:

1. Coveralls
2. Gloves*
3. Boots/shoes, leather or chemical-resistant, steel toe and shank.
4. Boots (outer), chemical-resistant (disposable)*.
5. Safety glasses or chemical splash goggles*
6. Hard hat (face shield)*
7. Escape Mask*

* Optional, as appropriate