
Chapter 296-843 WAC

Safety Standards for Hazardous Waste

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This book contains rules for Safety Standards for hazardous waste, as adopted under the Washington Industrial Safety and Health Act of 1973 (Chapter 49.17 RCW).

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Chapter 296-843 WAC HAZARDOUS WASTE OPERATIONS

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WAC 296-843-099 Definitions.

Buddy system. A system of organizing employees into work groups so that each employee is assigned to observe another employee in the same work group. The purpose of this system is to provide rapid assistance to employees in the event of an emergency.

Clean-up operation. An operation where hazardous substances are removed, contained, incinerated, neutralized, stabilized, cleared up, or in any other manner processed or handled with the goal of making the site safer for people or the environment.

Contamination reduction zone. The buffer zone between the exclusion and the clean zone.

Decontamination. The removal of hazardous substances from employees and equipment, to the extent necessary, to avoid foreseeable adverse health effects.

Emergency response or responding to emergencies. An organized response to an anticipated release of a hazardous substance that is, or could become, an uncontrolled release.

Exclusion zone. A controlled area at a site, where contamination occurs, that is a risk to human health or the environment.

Exposure or exposed. Employee contact with a toxic substance, harmful physical agent, or oxygen deficient condition. Exposure can occur through various routes of entry, such as inhalation, ingestion, skin contact, or skin absorption.

Facility. Any building structure, installation, equipment, pipe, or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, storage container, motor vehicle, rolling stock, or aircraft; or

Any site or area where a hazardous substance has been deposited, stored, disposed of, placed, or otherwise located (not including any boat, ship or barge).

Hazardous materials team (HAZMAT team). A group of employees who are expected to perform responses to releases, or possible releases, of hazardous substances for the purpose of control and stabilization. As a result of their duties, HAZMAT team members may have close contact with hazardous substances.

Hazardous substance. Any of the following substances that could adversely affect an exposed employee's health or safety:

- (a) Substances defined under section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) or "Superfund" Act (found at <http://www.epa.gov>).
- (b) Biological or other disease-causing agents released that could reasonably be expected to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions, including malfunctions in reproduction, or physical deformations in a person or their offspring when the person:
 - (i) Is directly exposed to the agent in the environment.
 - (ii) Directly ingests, inhales, or assimilates the agent from the environment.
 - (iii) Indirectly ingests the agent through a food chain.

- (c) Substances listed by the United States Department of Transportation as hazardous materials under Title 49 (Transportation) in the Code of Federal Regulations (C.F.R.), Part 172, Section 101 and appendices (found at <http://www.nara.gov>, search for “List of C.F.R. subjects”).
- (d) Hazardous wastes as defined in this chapter.

Hazardous waste. Any substance designated by the department of ecology as a dangerous or extremely hazardous waste by chapter 173-303 WAC, Dangerous waste regulations.

Hazardous waste site. A hazardous waste site is any facility or location within the scope of this chapter.

Health hazard. Means a chemical or a pathogen where acute or chronic health effects may occur in exposed employees. It also includes stress due to temperature extremes. The term health hazard includes chemicals that are classified in accordance with the hazard communication standard, WAC [296-901-140](#), as posing one of the following hazardous effects: Acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); aspiration toxicity or simple asphyxiant. (See WAC [296-901-14022](#) Appendix A—Health hazard criteria, mandatory, for the criteria for determining whether a chemical is classified as a health hazard.)

IDLH or immediately dangerous to life or health. Any atmospheric condition that would:

- (a) Cause an immediate threat to life; or
- (b) Cause permanent or delayed adverse health effects; or
- (c) Interfere with an employee's ability to escape.

Incidental release. A release that can be safely controlled at the time of the release and does not have the potential to become an uncontrolled release.

An example of a situation that results in an incidental release:

A tanker truck is receiving a load of hazardous liquid when a leak occurs. The driver knows the only hazard from the liquid is minor skin irritation. The employer has trained the driver on procedures and provided equipment to use for a release of this quantity. The driver puts on skin protection and stops the leak. A spill kit is used to contain, absorb, and pick up the spilled material for disposal.

Oxygen deficiency. An atmosphere where the percentage of oxygen by volume is less than 19.5%.

Permissible exposure limit (PEL). Permissible exposure limits (PELs) are employee exposures to toxic substances or harmful physical agents that must not be exceeded. PELs are specified in applicable DOSH rules.

Postemergency response. The stage of the emergency response where the immediate threat from the release has been stabilized or eliminated, and cleanup of the site has started. For more information, see the definition for “emergency response.”

Published exposure level. Exposure limits published in “*National Institute for Occupational Safety and Health (NIOSH) Recommendations for Occupational Safety and Health*” (DHHS publication #92-100, 1992).

If an exposure limit is not published by NIOSH, then “published exposure level” means the exposure limits published by the American Conference of Governmental Industrial Hygienists (ACGIH) in *"TLVs and BEIs-Threshold Limit Values for Chemical Substances and Physical Agents"* (1999 edition).

Safety data sheet (SDS). Written, printed, or electronic information (on paper, microfiche, or on-screen) that informs manufacturers, distributors, employers or employees about a hazardous chemical, its hazards and protective measures as required by WAC [296-901-14014](#) Safety data sheets.

Site safety and health supervisor (or official). The individual present at a hazardous waste site who is responsible to the employer and has the authority and knowledge necessary to establish the site-specific health and safety plan and verify compliance with applicable safety and health requirements.

Site work zones. Zones established at a hazardous waste site before clean-up work begins to control work on the site and access to the site. The work zones are: Exclusion zone, contamination reduction zone, and clean zone.

Uncontrolled hazardous waste site. An area where an accumulation of hazardous substances creates a threat to the health and safety of individuals or the environment or both. Examples include: Former municipal, county, or state landfills, locations where illegal or poorly managed waste disposal has taken place, or property of generators or former generators of hazardous substance waste (surface impoundments, landfills, dumps, and tank or drum farms).

Uncontrolled release. A release where significant safety and health risks could be created. Releases of hazardous substances that are either incidental or could not create a safety or health hazard (i.e., fire, explosion, or chemical exposure) are not considered to be uncontrolled releases.

Examples of conditions that could create a significant safety and health risk:

- (a) Large-quantity releases.
- (b) Small releases that could be highly toxic.
- (c) Potentially contaminated individuals arriving at hospitals.
- (d) Airborne exposures that could exceed a DOSH permissible exposure limit or a published exposure limit and employees are not adequately trained or equipped to control the release.

Example of an uncontrolled release:

A forklift driver knocks over a container of a solvent-based liquid, releasing the contents onto the warehouse floor. The driver has been trained to recognize the vapor is flammable and moderately toxic when inhaled. The driver has not been trained or provided appropriate equipment to address this type of spill. In this situation, it is not safe for the driver to attempt a response. The driver needs to notify someone of the release so an emergency response can be initiated.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-099, filed 11/06/2018, effective 12/07/2018.]

WAC 296-843-100 Scope. This chapter applies if you have any of the following:

- (1) Employees working in operations involving hazardous waste at a treatment, storage, and disposal (TSD) facility required to have a permit or interim status AND regulated by any of the following:
 - (a) 40 CFR Parts 264 and 265 under the Resource Conservation and Recovery Act of 1976 (RCRA), 42 U.S.C. 6901 et seq.;
 - (b) Agencies implementing RCRA through agreements with the United States Environmental Protection Agency (U.S.E.P.A.);
 - (c) Chapter 173-303 WAC, Dangerous waste regulations; or
- (2) Employees conducting initial investigations of government-identified sites before determining whether hazardous substances are present; or
- (3) Corrective actions, involving clean-up operations, at sites covered by the Resource Conservation and Recovery Act of 1976 (RCRA) as amended (42 U.S.C. 6901 et seq.) or chapter 70.105 RCW, Hazardous waste management; or
- (4) Employees performing clean-up operations at an uncontrolled hazardous waste site. Sites include, but are not limited to:
 - (a) The Environmental Protection Agency's (EPA) National Priority Site List (NPL); see <http://www.epa.gov/superfund/sites/npl/wa.htm> ;
 - (b) Sites recommended for inclusion on the EPA NPL;
 - (c) State priority site lists, for example those listed under chapter 173-340 WAC, Model Toxics Control Act (MTCA); see <http://www.ecy.wa.gov/programs/tcp/cscs/CSCSpagEpage.HTM> ;
 - (d) Unlisted sites recognized by a federal, state or local government as an uncontrolled hazardous waste site. Examples of such sites include:
 - (i) Sites that do not meet cleanup goals established by the MTCA and that pose a threat or potential threat to human health or the environment;
 - (ii) Clandestine drug lab sites designated for clean-up;
 - (e) Post emergency response cleanup at the site of a hazardous substance release regulated by chapter [296-824](#) WAC, Emergency response.

Important:

This chapter applies to hazardous waste sites until cleanup at the site is determined to be complete by the governing regulatory agency.

Illustration 1

**Other rules that may apply to hazardous waste operations:**

You will find safety and health requirements (for example, personal protective equipment) are addressed in other rules and also in this chapter. If you find a conflict in requirements, you need to meet the more protective requirement. Contact your local L&I office if you need assistance in making this determination.

Examples of other rules that may apply:

1. Chapter [296-800](#) WAC, Safety and health core rules:
 - a. WAC [296-800-140](#), Accident prevention program;
 - b. WAC [296-800-210](#), Lighting;
 - c. WAC [296-800-230](#), Drinking water, bathrooms, washing facilities and waste disposal.
2. Chapter [296-24](#) WAC, Safety standards for general safety.
3. Chapter [296-833](#) WAC, Temporary housing for workers.

4. Chapter [296-62](#) WAC, General occupational health.
5. Chapter [296-155](#) WAC, Safety standards for construction work.
6. Chapter [296-824](#) WAC, Emergency response.
7. Chapter [296-841](#) WAC, Respiratory hazards.
8. Chapter [296-842](#) WAC, Respirators.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-100, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-100, filed 01/05/04, effective 05/01/04.]

WAC 296-843-110 Evaluations and inspections.

Your responsibility: To conduct evaluations before entering the site and periodically throughout the hazardous waste operations.

<i>You must meet the requirements</i>	<i>in this section</i>
Complete a preliminary site evaluation before allowing employees to enter the site	WAC 296-843-11005
Conduct ongoing evaluations of safety and health hazards	WAC 296-843-11010

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-110, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-110, filed 01/05/04, effective 05/01/04.]

WAC 296-843-11005 Complete a preliminary site evaluation before allowing employees to enter the site.

You must complete a preliminary site evaluation by doing all the following:

Collect or develop the following information to the extent available:	<ul style="list-style-type: none"> • The site location and approximate size • A description of the response activity and the job tasks to be performed • The time needed to cover all planned activities • The site's topography and all ways to access the site • The current status and capabilities of any emergency response team assisting during an emergency • The safety and health hazards expected at the site • The hazardous substances and health hazards at the site, including their chemical and physical properties • All hazardous substance dispersion pathways • An emergency response plan
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<p>Have a qualified person evaluate the preliminary site information to identify:</p>	<ul style="list-style-type: none"> • Potential site hazards and risks • The most appropriate methods to protect employees • Conditions that have the potential to cause death or serious harm, including potential inhalation or skin absorption hazards that are immediately dangerous to life or health (IDLH) <ul style="list-style-type: none"> - Examples include: <ul style="list-style-type: none"> ▪ Confined space entry ▪ Potentially explosive or flammable environments ▪ Visible vapor clouds ▪ Areas where plants or animals have died • Risks related to specific on-site hazardous substances and health hazards <ul style="list-style-type: none"> - Examples include: <ul style="list-style-type: none"> ▪ Exposures exceeding the permissible exposure limits (PELs) or published exposure levels ▪ IDLH concentrations ▪ Potential skin absorption and irritation sources ▪ Potential eye irritation sources ▪ Explosion sensitivity and flammability ranges ▪ Oxygen deficient atmospheres
<p>Have a qualified person prepare an initial site characterization and analysis for the site to:</p>	<ul style="list-style-type: none"> • Identify known and suspected health and safety hazards for the site • Aid in selecting control methods to protect employees from site hazards • Brief employees on site conditions before any work starts • Initiate the site-specific health and safety plan (HASP)

Note: Characterization and analysis of site hazards in an ongoing process for work on the hazardous work site.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-11005, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-11005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-11010 Conduct ongoing evaluations of safety and health hazards.

- (1) You must have a qualified person complete further evaluation of health and safety hazards at the site immediately after initial entry to:
 - (a) Identify site hazards in more detail.
 - (b) Help select appropriate:
 - (i) Control methods to protect employees from site hazards.
 - (ii) Personal protective equipment (PPE) for site operations.

Note: For more information, see WAC 296-843-170 Hazard controls, and WAC 296-843-190 Personal protective equipment.

- (2) You must make sure your site safety and health supervisor or another qualified person performs periodic inspections to:
- (a) Determine if the site-specific HASP is effective.
 - (b) Correct any deficiencies.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-11010, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-11010, filed 01/05/04, effective 05/01/04.]

WAC 296-843-120 Health and safety plan (HASP).

Your responsibility: To establish a written safety and health safety plan (HASP)

You must meet the requirements	in this section
Develop and maintain a written site-specific health and safety plan (HASP)	WAC 296-843-12005

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-120, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-120, filed 01/05/04, effective 05/01/04.]

WAC 296-843-12005 Develop and maintain a written site-specific health and safety plan (HASP).

Reference: If your overall program required under WAC [296-800-140](#) Accident prevention program (APP), meets requirements of this chapter, you do not need to duplicate those portions of your APP in the site-specific health and safety plan (HASP).

- (1) You must develop a written HASP for each hazardous waste site, before beginning hazardous waste operations, that includes at least the following:
 - (a) **Hazard analysis:**
 - (i) Identification and evaluation of on-site safety and health hazards.
 - (ii) A safety and health risk (hazard) analysis for each site task and operation that is identified in the comprehensive work plan.
 - (b) **Organization chart:**

An organizational structure that reflects current site operations, including the following:

 - (i) Establish and identify the chain of command.
 - (ii) Identify the site safety and health supervisor and other personnel responsible for employee safety and health.
 - (iii) Specify the overall responsibilities of supervisors and employees.
 - (iv) Include the name and title of the person with responsibility and authority to direct all hazardous waste operations.
 - (v) Include a site safety and health supervisor responsible for developing and implementing the HASP and verifying compliance.
 - (vi) Identify the functions and responsibilities of all personnel needed for hazardous waste operations and emergency response.
 - (vii) Identify site specific lines of authority, responsibility, and communication.

(c) **Comprehensive work plan:**

A written comprehensive work plan of tasks, objectives, logistics, and resources for site operations, including the following:

- (i) Addresses anticipated clean-up activities and normal operating procedures unless that information is already available in another document.
- (ii) Defines work tasks and objectives.
- (iii) Describes how the work tasks and objectives will be accomplished.
- (iv) Establishes the personnel requirements to implement the work plan.
- (v) Provides for implementation of training, briefings, and information as required by WAC 296-843-200.

(d) **Site control plan:**

An up-to-date site control plan before clean-up operations begin to minimize employee exposure to hazardous substances and including the following (unless it is available in another document):

- (i) A site map.
- (ii) Establish site work zones.
- (iii) How the “buddy system” is used.
- (iv) The site communications plan, including how employees are alerted during emergencies.
- (v) The site's standard operating procedures (SOPs) or safe work practices.
- (vi) Identification of the nearest medical assistance.

(e) **Personal protective equipment:**

A PPE plan that addresses all of the following:

- (i) Site hazards and activities.
- (ii) Methods to evaluate the effectiveness of the PPE plan.
- (iii) Criteria for selecting and fitting PPE, including work duration, use limitations of particular PPE, and medical considerations such as temperature extremes and heat stress.
- (iv) Training on PPE use.
- (v) Procedures for putting on and taking off PPE.
- (vi) PPE inspection procedures prior to, during, and after use.
- (vii) Decontamination and disposal of PPE.
- (viii) Maintenance and storage of PPE.

(f) **Additional elements:**

- (i) A sampling and monitoring plan (see WAC 296-843-130) that includes sampling of drums and containers.
- (ii) Site control measures (see WAC 296-843-140).

- (iii) Decontamination procedures (see WAC 296-843-150).
- (iv) Spill containment plans (see WAC 296-843-180, Drum and container handling).
- (v) Standard operating procedures for sampling, managing, and handling drums and containers (see WAC 296-843-180).
- (vi) Entry procedures for tanks or vaults (see chapter [296-809](#) WAC, Confined spaces).
- (vii) A training, briefings, and information plan (see WAC 296-843-200).
- (viii) A medical surveillance plan (see WAC 296-843-210), that includes site-specific medical surveillance requirements.
- (ix) Sanitation (see WAC [296-155](#)-140).
- (x) Lighting (see WAC [296-800](#)-210).
- (xi) Excavations (see chapter [296-155](#) WAC, Part N, Excavation, trenching and shoring).
- (xii) Any relationship or interaction between other programs and the site-specific program.

Note: The emergency response plan required by WAC 296-843-160, Emergency response for hazardous waste sites, is also included as a separate section in the HASP.

- (2) You must keep a copy of your HASP on site.

Reference: For more information, see WAC 296-843-220 Recordkeeping and information access.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-12005, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .020, .040, .050, and .060. 07-03-163 (Order 06-30), § 296-843-12005, filed 01/24/07, effective 04/01/07. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-12005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-130 Sampling and monitoring.

Your responsibility: To conduct monitoring for health and safety hazards to protect employees.

<i>You must meet the requirements</i>	<i>in this section</i>
Conduct monitoring for health and safety hazards during initial site entry	WAC 296-843-13005
Evaluate employee exposure to hazardous substances during clean-up operations	WAC 296-843-13010

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-130, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-130, filed 01/05/04, effective 05/01/04.]

WAC 296-843-13005 Conduct monitoring for health and safety hazards during initial site entry.

- (1) You must make visual observations of the site to detect signs of actual or potential immediately dangerous to life or health (IDLH) or other dangerous conditions.
- (2) You must conduct representative air monitoring with direct reading test equipment, when the preliminary site evaluation does not eliminate the potential for ionizing radiation or IDLH conditions.
- (3) You must assess the following:
 - (a) Potential IDLH conditions.
 - (b) Exposure over radioactive material dose limits.
 - (c) Potential exposure over permissible exposure limits (PELs) or other published exposure levels.
 - (d) Other dangerous conditions, such as the presence of flammable or oxygen-deficient atmospheres.

<p><i>Reference:</i> See WAC 296-62-09004 <i>Ionizing radiation, for additional information about radioactive material dose limits.</i></p>

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-13005, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-13005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-13010 Evaluate employee exposure to hazardous substances during clean-up operations.***Important:***

The clean-up operations begin when soil, surface water, or containers are moved or disturbed.

- (1) You must identify the type of personnel monitoring and environmental sampling you plan to use, including instrumentation.
- (2) You must include requirements for maintaining and calibrating the monitoring and sampling instruments used.
- (3) You must monitor whenever employees may be exposed to concentrations exceeding PELs or other published exposure levels.
- (4) You must evaluate employees who are likely to have the highest exposure:
 - (a) Monitor all employees who are likely to have the highest exposure to hazardous substances or health hazards above the PEL or published exposure limit.
 - (b) Use personal sampling frequently enough to characterize the exposures of these employees.
 - (c) When results indicate exposure is over the PEL or other published exposure level, identify all employees likely to be above the PEL or published exposure limit.

Note: You may use a representative sampling approach by documenting that the employees and chemicals chosen for monitoring are representative of both:

1. *Employee exposure to hazardous substances, and*
2. *Employees not sampled.*

- (5) You must conduct monitoring when the possibility of one of the following exists:
 - (a) An atmosphere that is immediately dangerous to life or health (IDLH); or
 - (b) A flammable atmosphere; or
 - (c) Employee exposures exceeding PELs or other published exposure levels.Examples of situations where these possibilities may exist:
 - (i) Work begins on a different portion of the site.
 - (ii) Contaminants other than those previously monitored are being handled.
 - (iii) A different type of site operation starts, such as moving from drum opening to exploratory well drilling.
 - (iv) Handling leaking drums or containers.

- (v) Working in areas with obvious liquid contamination such as a spill or lagoon.
- (vi) Time has passed and employee exposure levels may have significantly increased.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-13010, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-13010, filed 01/05/04, effective 05/01/04.]

WAC 296-843-140 Site control.

Your responsibility: To establish a plan to control access to the site.

You must meet the requirements	in this section
Establish a site control plan	WAC 296-843-14005

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-140, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-140, filed 01/05/04, effective 05/01/04.]

WAC 296-843-14005 Establish site control.

- (1) You must maintain site work zones and site control as required by Table 1, Site Work Zone Requirements.
- (2) You must control access to the exclusion and contamination reduction zones.
- (3) You must make sure people wear personal protective equipment (PPE) appropriate to their work zone.

Table 1 Site Work Zone Requirements	
For this type of work zone:	You must:
Exclusion zone	<ul style="list-style-type: none"> • Establish entry and exit checkpoints on the zone's boundary • Regulate the flow of people and equipment into and out of the zone • Make sure exits go through a contamination reduction corridor
Contamination reduction zone with a contamination reduction corridor	<ul style="list-style-type: none"> • Enter through a control point from the clean zone • Provide a transition or buffer between the exclusion zone and the clean zone • Perform all decontamination procedures • Establish separate decontamination routes for people and equipment, if practical • Remove all PPE worn in the contamination reduction or exclusion
Clean zone or support zone	<ul style="list-style-type: none"> • Have no employee exposure to hazardous substances or health hazards

Note: See Illustration 2 for an example of site work zones.

Illustration 2
SITE WORK ZONES

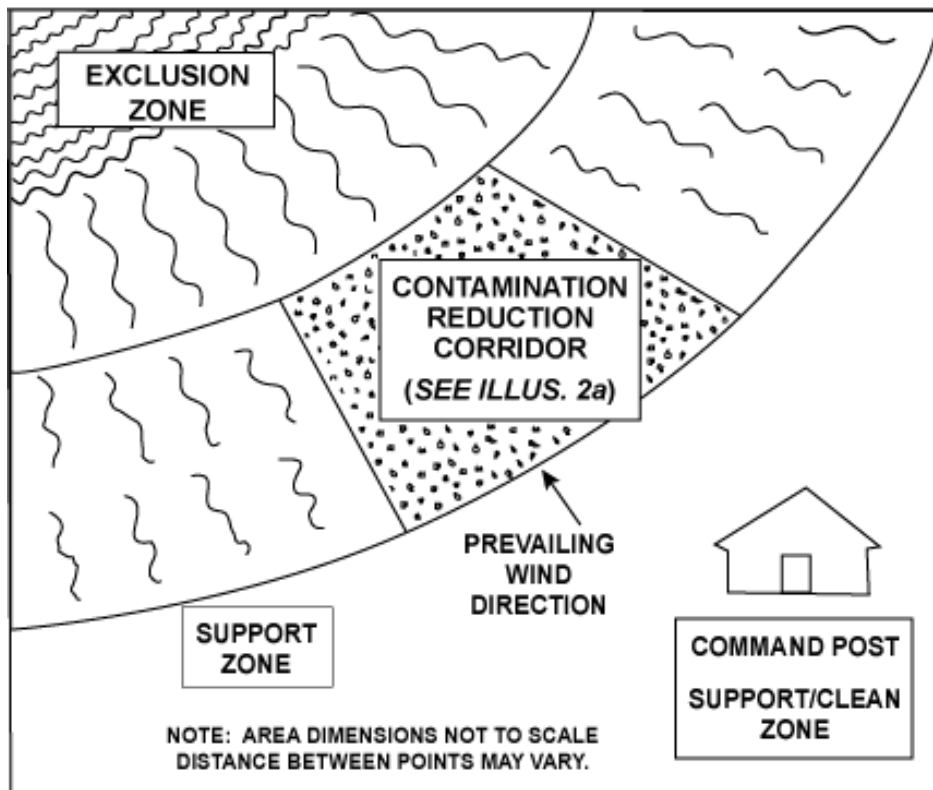
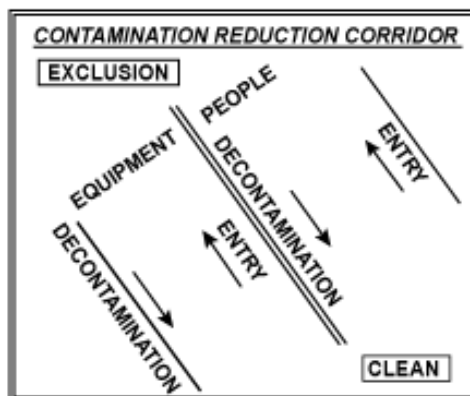


Illustration 2a
CONTAMINATION
REDUCTION CORRIDOR



[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-14005, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-14005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-150 Worker and equipment decontamination.

Your responsibility: To make sure the necessary facilities and equipment for effective decontamination are available and used.

<i>You must meet the requirements</i>	<i>in this section</i>
Establish and implement decontamination procedures before any worker or equipment enters a contaminated area	WAC 296-843-15005
Provide showers and changing rooms	WAC 296-843-15010
Provide washing facilities	WAC 296-843-15015

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-150, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-150, filed 01/05/04, effective 05/01/04.]

WAC 296-843-15005 Establish and implement decontamination procedures before any worker or equipment enters a contaminated area.

You must establish, implement, and communicate decontamination procedures to all workers, to include the following:

- (1) Standard operating procedures to minimize worker contact with:
 - (a) Hazardous substances.
 - (b) Contaminated equipment.
- (2) Decontaminating all:
 - (a) Workers leaving a contaminated area.
 - (b) Equipment leaving a contaminated area.
- (3) Decontaminating, cleaning, laundering, repairing, or replacing protective clothing or equipment (PPE) as needed to maintain effectiveness.
- (4) Immediate removal of clothing, such as cotton coveralls, wet with hazardous substances and use of the nearest shower. Decontaminate or dispose of clothing before removal from the work zone.
- (5) Periodically monitoring procedures for effectiveness by the site safety and health supervisor.
- (6) Correct your procedures when found ineffective.
- (7) Establish decontamination areas to minimize contact of contaminated employees and equipment with uncontaminated employees or equipment.
- (8) Make sure only authorized employees remove protective clothing or equipment from changing rooms.

- (9) Inform commercial laundries or cleaning establishments about the potentially harmful effects from exposure to hazardous substances.
- (10) Properly decontaminate or dispose of decontamination equipment and solvents.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-15005, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-15005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-15010 Provide showers and changing rooms.

- (1) You must provide changing areas and showers outside a contaminated area, when needed for worker decontamination, that include at least the following:
 - (a) Separate changing areas:
 - (i) One to provide a clean area where employees can remove, store, and put on street clothing with an exit leading off the work site.
 - (ii) Another where employees can put on, remove, store, and dispose of work clothing and PPE with an exit leading to the work site.
 - (b) A shower area separating the changing areas.
- (2) You must prevent clean areas from being contaminated by hazardous substances.
- (3) You must provide and use other effective means for worker cleansing, if temperature conditions prevent the effective use of water.
- (4) You must locate showers and change rooms where worker exposures are below permissible exposure limits (PELs) or other published exposure levels.

If this cannot be accomplished, use a ventilation system to supply air that is below the PELs or published exposure level.
- (5) You must make sure all workers shower at the end of their work shift or before they leave the site, when needed for worker decontamination.

Illustration 3 is a sample diagram of a change room layout.



[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-15010, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-15010, filed 01/05/04, effective 05/01/04.]

WAC 296-843-15015 Provide washing facilities.

You must provide adequate washing facilities to employees working in hazardous waste operations that are:

- (1) Close and convenient to the work area.
- (2) Located in areas where employee exposure is below PELs or other published exposure levels.
- (3) Equipped so an employee can remove hazardous substances from themselves without assistance.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-15015, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-15015, filed 01/05/04, effective 05/01/04.]

WAC 296-843-160 Emergency response for hazardous waste sites.

Your responsibility: To establish an emergency response plan for emergencies at the hazardous waste site.

<i>You must meet the requirements</i>	<i>in this section</i>
Establish an emergency response plan for anticipated emergencies before beginning hazardous waste operations.	WAC 296-843-16005

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-160, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-160, filed 01/05/04, effective 05/01/04.]

WAC 296-843-16005 Establish an emergency response plan for anticipated emergencies before beginning hazardous waste operations.

<i>EXEMPTION:</i>
<p><i>Employers are exempt from preparing and emergency response plan if they do ALL of the following:</i></p> <ol style="list-style-type: none"> <i>1. Evacuate all employees from the danger area during an emergency.</i> <i>2. Prohibit employees from assisting in the emergency response.</i> <i>3. Prepare an emergency action plan that complies with WAC 296-24-567(1), Evacuation plan.</i>

<i>Important:</i>
<p><i>Treatment, storage, and disposal (TSD) employers are not required to duplicate subjects fully addressed in the contingency plan required by permits when the contingency plan is part of their emergency response plan. Examples of permits would be those issued by the Department of ecology.</i></p>

- (1) You must establish and maintain the plan to reflect current site conditions, information, and personnel:
 - (a) Include policies or procedures for at least the following:
 - (i) Preemergency planning.
 - (ii) Coordination with outside organizations.
 - (iii) Current site topography, layout, and weather conditions.
 - (iv) Personnel roles.
 - (v) Lines of authority.
 - (vi) Communication.

- (vii) Reporting incidents to local, state, and federal government agencies.
 - (viii) Emergency recognition and prevention.
 - (ix) Safe distances and places of refuge.
 - (x) Site security and control.
 - (xi) Evacuation routes.
 - (xii) Decontamination not covered by the site-specific HASP.
 - (xiii) Emergency medical treatment and first aid.
 - (xiv) Emergency alert and response.
 - (xv) Personal protective equipment and emergency equipment.
 - (xvi) Employee training.
 - (xvii) Critique of the response effort and appropriate follow-up.
- (b) Use available information at the time of the emergency to:
 - (i) Evaluate the incident and site response capabilities.
 - (ii) Proceed with appropriate steps to implement your emergency response plan.
 - (c) Make sure the emergency response plan is:
 - (i) Kept as a separate section of your site-specific health and safety plan (HASP);
and
 - (ii) Integrated and compatible with, local, state, and federal plans for disasters, fires, and emergency responses.
- (2) You must establish an alarm system to alert employees to an on-site emergency incident:
 - (a) To stop work activities, if necessary.
 - (b) To lower background noise to assist communication.
 - (c) To begin emergency procedures.
 - (3) You must rehearse the plan as part of site operations training.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-16005, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-16005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-170 Employee exposure controls.

Your responsibility: Implement feasible controls to protect employees from exposure to site hazards.

<i>You must meet the requirements</i>	<i>in this section</i>
Control employee exposure to site health and safety hazards	WAC 296-843-17005

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-170, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-170, filed 01/05/04, effective 05/01/04.]

WAC 296-843-17005 Control employee exposure to site health and safety hazards.

- (1) You must use feasible controls, selected based on monitoring and other available information, to protect employee exposure above permissible exposure limits (PELs) or other published exposure levels.
Examples of controls include:
 - (a) Installing pressurized cabs or control booths on equipment.
 - (b) Using remotely operated material handling equipment.
 - (c) Removing all nonessential employees when opening drums.
 - (d) Wetting down dusty operations.
 - (e) Positioning employees upwind of possible hazards.
- (2) You must evaluate new technologies and other control measures before using them on a large scale.
- (3) You must use any reasonable combination of controls and personal protective equipment (PPE) to reduce and maintain employee exposure at or below the PELs, published exposure levels, or dose levels when controls are not:
 - (a) Feasible; or
 - (b) Effective.
- (4) You must make sure PPE is **not** used as a replacement controls.
PPE should be used only as a supplement to controls.

Note For those hazardous substances without PELs or published exposure levels, use other published literature and safety data sheets (SDSs) to help decide what level of protection is appropriate. For more information about SDSs, see WAC [296-901-14014](#) Safety data sheets.

- (5) You must use employee rotation to reduce exposure below ionizing radiation PELs or dose limits, when that is the **only** feasible means of protecting employees.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-17005, filed 11/06/2018, effective 12/07/2018. RCW 49.17.010, .040, .050, and .060. 14-07-086 (Order 13-08), § 296-843-17005, filed 03/18/14, effective 05/01/14. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-17005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-180 Drum and container handling.

Your responsibility: To handle drums and containers in ways that minimize the hazard to employees.

You must meet the requirements	in this section
Handle drums and containers safely	WAC 296-843-18005
Handle drums and containers suspected of containing shock-sensitive (explosive) wastes safely	WAC 296-843-18010
Maintain worker safety in drum and container opening areas	WAC 296-843-18015
Ship and transport drums and containers safely	WAC 296-843-18020

Important:

1. *Containers or drums containing shock-sensitive (explosive) or potentially shock-sensitive wastes require special handling precautions.*
2. *Handle, transport, label, and dispose of drums and containers according to this chapter and the United States Department of Transportation (DOT), Washington department of labor and industries' DOSH , EPA, and Washington department of ecology requirements for:*
 - a. *Drums.*
 - b. *Containers.*
 - c. *Hazardous substances.*
 - d. *Contaminated soils.*
 - e. *Liquids, and other residues.*

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-180, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-180, filed 01/05/04, effective 05/01/04.]

WAC 296-843-18005 Handle drums and containers safely.

Preparation for moving drums and containers:

- (1) You must assess hazards to employees, such as radioactive waste, before handling drums and containers.
- (2) You must consider unlabeled drums and containers to contain hazardous substances and handle them accordingly, until the contents are positively identified, labeled, and assessed for hazards.
- (3) You must inspect and make sure drums and containers are sound before moving them. If it is not practical to inspect drums without moving them, move drums and containers to an accessible location and inspect prior to further handling.

- (4) You must remove soil or other materials covering drums or containers with caution to prevent rupture.
- (5) You must use ground-penetrating systems or other types of detection systems or devices to estimate the location and depth of buried drums or containers.
- (6) You must use the sampling plan and procedures included in the site-specific HASP to sample the contents of containers and drums.

Moving drums and containers:

- (7) You must warn all employees exposed to drum movement operations about the potential hazards associated with the contents of the drums or containers prior to moving them.
- (8) You must minimize movement of drums or containers.
- (9) You must select, position, and operate tools and material handling equipment to prevent the ignition of flammable vapors.
- (10) You must handle tanks and vaults containing hazardous substances with the same precautions as for drums and containers, taking into account the size of tank or vault.

Handling spills and leaks:

- (11) You must contain and isolate the entire volume of a hazardous substance in a drum or container when a spill occurs.
- (12) You must have available and use both of the following in areas where spills, leaks, or ruptures may occur:
 - (a) United States Department of Transportation (DOT) specified salvage drums or containers.
 - (b) Suitable quantities of proper absorbent materials.
- (13) You must empty drums and containers, that cannot be moved without rupturing, leaking, or spilling, into a sound container.

Use a pump or other device classified for the material being transferred.
- (14) You must have fire-extinguishing equipment on-hand to control fires in their initial stage.

Reference: For further information, see the Safety and health core rules, WAC [296-800-300](#), Portable fire extinguishers.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-18005, filed 11/06/2018, effective 12/07/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-18005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-18010 Handle drums and containers suspected of containing shock-sensitive (explosive) wastes safely.

- (1) You must allow only essential employees in the transfer area.
- (2) You must communicate as follows:
 - (a) Signal the beginning and end of shock-sensitive (explosive) waste handling activities with an alarm system that is capable of being perceived above background light and noise.
 - (b) Maintain continuous communications throughout the handling operation:
 - (i) Between the employee-in-charge of the immediate handling area AND the site safety and health supervisor AND the command post.
 - (ii) Using portable radios, hand signals, or telephones, as appropriate.
 - (c) Prevent the use of communication equipment or methods that could cause shock-sensitive (explosive) materials to explode.
- (3) You must provide material handling equipment with explosive containment devices or shields to protect equipment operators from exploding containers.
- (4) You must not move bulging or swollen drums or containers until the cause for excess pressure is determined and you can move the drum or container safely.
- (5) You must consider packaged laboratory wastes or laboratory waste packs shock-sensitive or explosive until the contents have been characterized. Make sure laboratory waste packs are opened only when necessary and by a person knowledgeable in the inspection, classification, and segregation of the containers within the pack.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-18010, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-18010, filed 01/05/04, effective 05/01/04.]

WAC 296-843-18015 Maintain worker safety in drum and container opening areas.

- (1) You must keep employees who are not involved in opening drums or containers a safe distance from the opening area.
- (2) You must use appropriate shielding between the employee and the drums or containers, when excess interior pressure cannot be relieved from a remote location.
- (3) You must provide an explosion-resistant barrier that does not interfere with the work to protect employees working near or adjacent to drum or container opening operations from accidental explosions.
- (4) You must position controls for drum or container opening equipment, monitoring equipment, and fire suppression equipment behind the explosion-resistant barrier. Prohibit employees from standing on or working from drums or containers.

Reference: The shipment of shock-sensitive (explosive) waste may be prohibited under United States Department of Transportation (DOT) regulations. You and your shipper should refer to title 49 CFR.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-18015, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-18015, filed 01/05/04, effective 05/01/04.]

WAC 296-843-18020 Ship and transport drums and containers safely.

- (1) You must identify and classify drum and container contents prior to packaging for shipment.
- (2) You must provide staging areas:
 - (a) Each staging area must have adequate entry and exit routes.
 - (b) The number of drum or container staging areas must be kept to the minimum needed to identify and classify materials safely and prepare them for transport.
- (3) You must permit bulking of hazardous wastes only after a thorough characterization of the wastes has been completed.

Note: Handle, transport, label, and dispose of drums and containers according to this chapter and other United States Department of Transportation (DOT), DOSH, EPA, and Washington Department of Ecology regulations for:

1. *Drums.*
2. *Containers.*
3. *Hazardous substances.*
4. *Contaminated soils.*

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-118020, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-18020, filed 01/05/04, effective 05/01/04.]

WAC 296-843-190 Personal protective equipment (PPE).

Your responsibility: To use PPE to protect employees when feasible controls do not remove the hazardous exposure.

You must meet the requirements	in this section
Provide and use appropriate PPE	WAC 296-843-19005

Reference: For additional information about developing a PPE plan, see the PPE user guide found at <http://www.lni.wa.gov/wisha/publications/PPEGuide/PPEload>.

Note: The manufacturer's information on PPE may be used to meet your PPE plan requirements. For example, the manufacturer's procedures for putting on and taking off PPE may be attached to the site-specific health and safety plan (HASP).

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-190, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-190, filed 01/05/04, effective 05/01/04.]

WAC 296-843-19005 Provide and use appropriate PPE.

Reference: See WAC 296-843-110, Evaluations and inspections, found in this chapter, for more information about how to identify hazards and complete your preliminary site evaluation.

- (1) You must make sure the PPE you provide and use for initial entry protects employees from known or suspected safety and health hazards identified during the preliminary site evaluation as follows:

If	Then
The need for atmosphere supplying respirators and chemical protective clothing has NOT been eliminated	Provide atmosphere supplying respirators and protective clothing
Employees use respiratory protection other than a positive-pressure SCBA for initial entry	Include an escape self-contained breathing apparatus (SCBA) with enough air to reach a safe location and always at least 5 minutes of air

Use Table 2, Selecting PPE in Various Exposure Situations, to determine the level of PPE to provide during initial entry:

- (2) You must make sure the PPE you select provides employee protection based on:
- Actual and potential hazards identified during the site characterization and analysis (see WAC 296-843-110 Evaluations and inspections).

- (b) Hazards likely to be encountered.
- (c) Required tasks and their duration.
- (d) Site requirements and limitations.
- (e) Use Table 2 to identify the type of PPE that is required for various exposure situations.

Table 2 Selecting PPE in Various Exposure Situations	
If	Then
Changing site conditions indicate a change in employee exposure	Review and adjust the level of protection as appropriate
	<i>Note:</i> <i>You may decrease the level of protection when information indicates this will not increase employee exposure to safety or health hazards</i>
<p>There is a substantial possibility that skin absorption or contact with a hazardous substance may:</p> <ul style="list-style-type: none"> • Impair an employee's ability to escape • Cause immediate serious illness or injury • Is an IDLH or • Immediate death hazard 	<p>Use totally encapsulating chemical protective (TECP) suits and make sure they will protect employees from the hazards</p> <ul style="list-style-type: none"> • Use, decontaminate, inspect, and remove TECP suits from service according to the manufacturer's recommendations • Perform any TECP integrity tests recommended by the manufacturer and make sure all TECP suits are capable of: <ul style="list-style-type: none"> - Maintaining positive air pressure - Preventing inward test gas leakage of more than 0.5% <p><i>Note:</i> <i>Follow the manufacturer's recommended procedures for testing a TECP suit is ability to maintain positive air pressure and prevent inward gas leakage. Other established test protocols for these suits, for example, NFPA 1991 and ASTM F1052-97, may also be used</i></p>
<p>There is a substantial possibility that employee exposure to hazardous substances will either:</p> <ul style="list-style-type: none"> • Immediately cause death, serious illness, or serious injury or • Impair an employee's ability to escape 	<p>Use a positive-pressure SCBA or an airline respirator with an escape SCBA</p> <p>Protect air supply from contamination and the entire respirator system from physical damage</p>

Note: If there is not a permissible exposure limit (PEL) or other published exposure level for a hazardous substance, you may use published studies and information as a guide for selecting appropriate PPE.

- (3) PPE required by this standard must be provided at no cost to the employees.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-19005, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 09-05-071 (Order 08-35), § 296-843-19005, filed 02/17/09, effective 04/01/09. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-19005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-200 Training, briefings, and information.

Your responsibility: To make sure employees and subcontractors have the training and information needed to work safely.

<i>You must meet the requirements</i>	<i>in this section</i>
Inform workers, contractors and subcontractors about the hazardous waste site	WAC 296-843-20005
Train workers, supervisors and managers before work begins on the site	WAC 296-843-20010
Provide additional training to your managers and supervisors	WAC 296-843-20015
Training for postemergency response	WAC 296-843-20020
Make sure your employees receive written documentation of training	WAC 296-843-20025
Provide refresher training to employees	WAC 296-843-20030
Use qualified trainers	WAC 296-843-20035

Important:

If law enforcement personnel participate in clean-up activities, they must receive appropriate hazardous waste clean-up training as described in this chapter.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-200, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-200, filed 01/05/04, effective 05/01/04.]

WAC 296-843-20005 Inform workers, contractors and subcontractors about the hazardous waste site.

- (1) You must inform employees, contractors, and subcontractors or their representatives, about:
 - (a) The nature, level, and degree of exposure to hazardous substances they are likely to encounter.
 - (b) All site-related emergency response procedures.
 - (c) Any identified potential fire, explosion, health, safety, or other hazards.
- (2) You must conduct briefings for employees, contractors, and subcontractors, or their representatives as follows:
 - (a) A preentry briefing before any site activity is started.
 - (b) Additional briefings, as needed, to make sure that the site-specific HASP is followed.

- (c) Make sure all employees working on the site are:
 - (i) Informed of any risks identified.
 - (ii) Trained on how to protect themselves and other workers against the site hazards and risks.
- (3) You must update all information to reflect current site activities and hazards.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-100, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-20005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-20010 Train workers, supervisors and managers before work begins on the site.

Important:

1. *The 80-hour training requirement does NOT apply to law enforcement personnel entering illicit drug labs, securing the premises, and obtaining evidence. Attendance at a 40-hour training course, such as presented by the criminal justice training commission, is acceptable.*
2. *These training requirements do not apply to workers engaged in limited post emergency response activities provided they meet the conditions described in WAC 296-843-20020.*

- (1) You must make sure workers have received 24-, 40- or 80-hour training as required by Table 3 before participating in hazardous waste operations.
- (2) You must make sure workers also receive site-specific training that thoroughly covers at least the following:
 - (a) The personnel responsible for employee safety and health.
 - (b) Safety, health, and other hazards known or suspected at the site.
 - (c) Use of personal protective equipment.
 - (d) Work practices to minimize worker's risk from the hazards.
 - (e) Use of engineering and other controls and equipment on the site.
 - (f) Medical surveillance provided.
 - (g) Recognition of signs and symptoms that might indicate overexposure to site hazards.
 - (h) The contents of the site-specific health and safety plan (HASP) required by this chapter.

Note: The site-specific training can be provided as part of the 24-, 40- or 80-hour training or as part of the employee briefings provided all training and information requirements of WAC 296-843-200 are met.

Table 3 Training Requirements		
If	Then	Notes
Work and exposures require use of atmosphere supplying respirators	Provide 80 hours of training and 3 days of supervised on-site field experience	<p>80-hour training may be fulfilled as follows:</p> <ul style="list-style-type: none"> • One 80-hour training session with emphasis on hazards requiring the use of atmosphere-supplying respirators and of chemical protective clothing or • One 40-hour training class as described below and an additional 40 hours of training that emphasizes hazards requiring the use of atmosphere-supplying respirators and of chemical protective clothing <p>Refresher training, previous courses, supervised field experience, and previous work experience may count towards the additional 40 hours, if it improves the worker's competency to use respirators and chemical protective clothing ensembles and procedures</p>
Work and exposures may exceed the PEL or require protective clothing but do not require atmosphere supplying respirators	Provide 40 hours of training and 3 days of supervised on-site field experience	Workers with 24 hours of training may become 40 hour trained with 16 hours of off-site training and 2 additional days of supervised on-site field experience

Table 3 Training Requirements (Cont.)		
If	Then	Notes
Workers are occasionally on-site to perform specific limited tasks and unlikely to be exposed above PELs or other published exposure limits <ul style="list-style-type: none"> • No need for respirators • No health hazards • No possibility of an emergency 	Provide 24 hours of training and one day of supervised on-site field experience	
Workers are at TSD facilities under normal operations (this does not include corrective actions clean-up at these facilities)	Provide 24 hours of training and one day of supervised on-site field experience	
Employees perform emergency response activities	Train workers to a level of competence in site emergencies, consistent with their assigned duties, to protect themselves and other employees	
Workers qualify for limited post emergency response clean-up training	Provide at least 8 hours of training	See WAC 296-843-20020, Training for post emergency response, for detailed training information
Workers have been previously trained (includes equivalent training)	Provide site-specific training, briefings and information required by this chapter and supervised field experience on the site of one day for 24 hours and 3 days for 40-or 80-hours trained workers	Document equivalent training and work experience as required by WAC 296-843-20025

Note: When calculating "training hours," DOSH assumes a "normal" workday of 8 hours with sufficient time for lunch and other breaks.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-20010, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-20010, filed 01/05/04, effective 05/01/04.]

WAC 296-843-20015 Provide additional training to your managers and supervisors.

- (1) You must make sure the following receive appropriate training:
 - (a) On-site managers.
 - (b) Supervisors responsible for hazardous waste operations.
 - (c) Supervisors who directly supervise employees in hazardous waste operations.
- (2) You must make sure such supervisors and on-site managers receive the same training as that required by the workers they supervise (see WAC 296-843-20010).
- (3) You must make sure such supervisors and managers receive a minimum of 8 additional hours of specialized training including the following information:
 - (a) Written site-specific health and safety plan (HASP):
 - (i) Training plan.
 - (ii) Personal protective equipment (PPE) plan.
 - (iii) Spill containment plan.
 - (iv) Emergency management procedures to use when a release of hazardous substances occurs.
 - (v) Federal, state, and local agencies to be contacted if there is a release of hazardous substances.
 - (vi) Sampling and monitoring plan (including procedures and techniques for monitoring health hazards).
 - (b) Managing hazardous wastes and their disposal.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-20015, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-20015, filed 01/05/04, effective 05/01/04.]

WAC 296-843-20020 Training for post emergency response.

- (1) You must provide workers who participate only in limited post emergency response clean-up operations with a minimum of 8 hours of training, when these conditions are met:
 - (a) Clean-up is at a site that is a hazardous waste operation only because of an emergency response.
 - (b) Clean-up work is directly supervised by someone who has completed at least 40 hours of training in hazardous waste operations as required in this chapter.
 - (c) Written documentation is maintained at the work site supporting less than 24 hours of training.
 - (d) The work:
 - (i) Is performed in an area that has been monitored and fully characterized by a qualified person as an area where employee exposure cannot exceed PELs or other published exposure levels.

- (ii) Does not require using respiratory protection.
 - (iii) Does not require entry into permit-required confined spaces.
 - (iv) Involves minimal health risks from skin exposure and absorption that are effectively controlled by PPE.
- (e) Workers have received training in your emergency response plan and hazard communication program.

Reference: For additional information, see WAC 296-843-160 Emergency response, and WAC [296-901-140](#) Hazard communication.

- (2) You must make sure workers complete any other safety and health training needed to perform assigned clean-up tasks in a safe and healthful manner. Training may include topics such as the following:
- (a) Safety hazards and controls.
 - (b) The content and availability of the site-specific health and safety plan.
 - (c) Decontamination procedures.
 - (d) Operating procedures related to assigned clean-up tasks.
 - (e) PPE use and limitations.
 - (f) Hands-on exercises for PPE and decontamination.
 - (g) Information about heat stress and hypothermia.
- (3) You must make sure workers have been trained within the last twelve months.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-20020, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 14-07-086 (Order 13-08), § 296-843-20020, filed 03/18/14, effective 05/01/14. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-20020, filed 01/05/04, effective 05/01/04.]

WAC 296-843-20025 Make sure your employees receive written documentation of training.

- (1) You must certify and document annually that each manager, supervisor, and worker has either:
- (a) Attended and successfully completed the training required by this section; or
 - (b) Demonstrated their competency.
- (2) You must record and maintain the method used to demonstrate competency.
- (3) You must make sure your employees and supervisors who complete required training and field experience receive written training documentation authenticated by the responsible trainer.
- (4) You must provide a copy of the certification or documentation to your employee upon request.

Note: Equivalent training may include academic or work-related training that covers subjects required by this chapter.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-20025, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-20025, filed 01/05/04, effective 05/01/04.]

WAC 296-843-20030 Provide refresher training to employees.

You must make sure all certified employees, supervisors, and managers receive 8 hours of refresher training at least every 12 months that covers:

- (1) The topics specified in WAC 296-843-200.
- (2) Assessments or evaluations of work-related incidents.
- (3) Any other relevant topics.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-20030, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-20030, filed 01/05/04, effective 05/01/04.]

WAC 296-843-20035 Use qualified trainers.

- (1) You must use trainers that have demonstrated competent instructional skills; and
- (2) Demonstrate knowledge of the subject matter and have either:
 - (a) Satisfactorily completed a training program in the subject; or
 - (b) Have the academic credentials and instructional experience needed for teaching the subject.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-20035, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-20035, filed 01/05/04, effective 05/01/04.]

WAC 296-843-210 Medical surveillance.

Your responsibility: To provide medical surveillance for employees that work in hazardous waste operations.

<i>You must meet the requirements</i>	<i>in this section</i>
Provide medical surveillance for your employees	WAC 296-843-21005

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-210, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-210, filed 01/05/04, effective 05/01/04.]

WAC 296-843-21005 Provide medical surveillance for your employees.

- (1) You must establish a medical surveillance plan for all employees who meet any of the following:
 - (a) Are or may be exposed to hazardous substances or health hazards for at least 30 days a year, at or above the permissible exposure limits (PELs) or other published exposure levels.
 - (b) Wear a respirator for at least 30 days a year.
 - (c) Are injured, become ill, or develop signs or symptoms of possible overexposure to hazardous substances or health hazards.
 - (d) Are hazardous materials team (HAZMAT) members.

Reference: Employees who use respirators less than 30 days a year are required to have a respirator medical evaluation as outlined by chapter [296-842](#) WAC, Respirators. Completion of a medical examination required by this section will meet the requirement for a respirator medical evaluation.

- (2) You must make sure medical examinations, consultations, and procedures are:
 - (a) Scheduled according to Table 4, Medical Examination Schedule.
 - (b) Performed or supervised by a licensed physician.
 - (c) Available:
 - (i) At a reasonable time and place.
 - (ii) Without loss of pay.
 - (iii) Without cost to employees.

Note: Examples of costs include: Mileage, gas, bus fare, and time spent outside normal work hours.

Table 4 Medical Examination Schedule	
If a Worker	Then provide an examination
Is assigned to work that is covered by this chapter	Before work assignment begins
Continues to work in hazardous waste operations	At least every twelve months, unless the attending physician decides a different interval, up to twenty-four months or less than twelve months, is appropriate
Needs to be examined more frequently based on the examining physician's medical judgment	At an interval less than twelve months
Is assigned to an area where their work is not covered; or employment is terminated	As soon as possible, unless he or she was examined within the past six months
Has an incident that results in injury or illness; or Develops signs or symptoms of possible overexposure to hazardous substances and health hazards; or Has been exposed above the permissible exposure limits or published exposure levels	As soon as possible
Requires follow-up examinations or consultations because of medical necessity for an exposure incident or injury	When determined by the examining physician

- (3) You must make sure the medical examination includes the following information for each affected employee:
- A medical and work history, with special emphasis on symptoms related to handling hazardous substances and health hazards.
 - Information about fitness for duty including the ability to wear any personal protective equipment (PPE) under conditions that may be expected at the workplace.
 - Any additional information that is determined by the examining physician.

*Note: The physician should consult the NIOSH Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities
<http://www.cdc.gov/niosh/85-115.html>.*

- (4) You must provide complete information to the examining physician, including:
- A copy of WAC 296-843-210.
 - Medical evaluation information required by chapter [296-842](#) WAC, Respirators.
 - A description of the employee's duties that relate to hazardous substance exposure.

- (d) The actual or anticipated hazardous substance exposure levels for the employee.
- (e) A description of the PPE the employee uses or could use.
- (f) Information available from previous medical examinations.
- (g) Instruction to the physician that the physician's written opinion NOT include specific findings or diagnoses that are not related to occupational exposures.

Note: You are NOT required to send duplicate information to the physician for each employee.

- (5) You must obtain the physician's written medical opinion that includes the following information:
 - (a) Whether medical conditions were found that would increase the employee's risk for impairment during emergency response work or respirator use.
 - (b) Limitations of the employee's assigned work, if any.
 - (c) Examination and test results, if the employee requests this information.
 - (d) A statement that the employee has been confidentially informed of medical examination results (including medical conditions requiring followup required by WAC 296-843-210).
- (6) You must provide the employee with a copy of the physician evaluation.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-21005, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-21005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-220 Recordkeeping and information access.

Your responsibility: To keep records and make them accessible to employees.

<i>You must meet the requirements</i>	<i>in this section</i>
Make your records accessible	WAC 296-843-22005
Keep medical surveillance records for your employees	WAC 296-843-22010

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-220, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-220, filed 01/05/04, effective 05/01/04.]

WAC 296-843-22005 Make your records accessible.

You must allow your written health and safety plan (HASP) and all other written plans required by this chapter to be inspected and copied by:

- (1) Employees or their designated representative.
- (2) Site contractors or their designated representatives.
- (3) Subcontractors or their designated representatives.
- (4) Personnel of any federal, state, or local agency with regulatory authority over the site.

[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-22005, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-22005, filed 01/05/04, effective 05/01/04.]

WAC 296-843-22010 Keep medical surveillance records for your employees.

- (1) You must keep medical surveillance records for each affected employee that include:
 - (a) The employee's name and Social Security number.
 - (b) Physicians' written opinions including recommended limitations and results of examinations and tests.
 - (c) Any employee medical complaints regarding hazardous substance exposures.
 - (d) A copy of all information given to the examining physician (except a copy of this chapter).
- (2) You must keep each employee's records for at least the duration of his or her employment plus 30 years.

<p><i>Reference: For additional requirements on medical and exposure records, see chapter 296-62 WAC, Part B, Access to records.</i></p>
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[Statutory Authority: RCW 49.17.010, .040, .050, .060. 18-22-116 (Order 1628), § 296-843-22010, filed 11/06/2018, effective 12/07/2018. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 04-02-054 (Order 99-52), § 296-843-22010, filed 01/05/04, effective 05/01/04.]