Chapter 447  Hazardous Materials (HazMat) and Solid Waste

447.01  Considering HazMat During the Project Lifecycle

Hazardous materials (HazMat) will impact a WSDOT project when encountered or improperly managed. WSDOT has a responsibility to consider HazMat issues early on and throughout the lifecycle of a project in order to:

• Protect public health and safety by ensuring that construction activities do not cause an inadvertent spill or release, or spread or contribute to existing contamination.

• Manage HazMat issues in a cost-effective manner to avoid or minimize construction impacts.

• Avoid or manage agency cleanup liability.

WSDOT must abide by numerous federal, state, and local regulations that govern HazMat. The regulations are stringent and may take different time frames to comply with. Many of the regulations are listed at the end of this chapter. WSDOT projects may also encounter or generate solid waste, which is not hazardous or dangerous. Laws and regulations also govern the handling and disposal of solid waste.

The rest of this chapter describes HazMat specific topics to assist WSDOT region staff for projects. Construction related topics such as identifying, managing, and disposing of HazMat are included in this chapter. Visit the WSDOT HazMat webpage for additional information and procedural guidance on addressing HazMat issues.
447.02 Determining Suitable HazMat Documentation from the ERS

Region staff often determines how to proceed with hazardous materials documentation based on the likelihood that a project will encounter contamination. This is a professional judgment made during project scoping when staff completes the Environmental Review Summary (ERS) in the Project Summary Database (Section 300.02). The ERS asks the following:

1. Discuss any known or potentially contaminated sites within or near the project area.
2. Describe any contamination the project is likely to encounter. If known, how will the project specifically impact these sites?
3. Identify any additional investigations or documentation that would be needed.

Region staff uses the answers to these questions to determine if further investigations will help identify potential HazMat issues at a site or within a corridor. They also use the information to assess potential project impacts (including to the project budget and schedule), mitigations, and required permits or approvals. Types of further investigations will be discussed later in this chapter and include Hazardous Materials Analysis reports and Phase I and II Environmental Site Assessments.

If during the National Environmental Policy Act (NEPA)/State Environmental Policy Act (SEPA) process a region classifies a project as a Categorical Exclusion (CE), then the ERS is exported into the Environmental Classification Summary (ECS) and becomes the hazardous materials documentation for the project (Section 300.04). The ECS is signed by the WSDOT Region Environmental Manager. Although both forms ask the same questions, the information and level of detail required in an ECS may be greater because the ECS is a final decision document. If staff determines that no additional documentation is required based on project specifics, they justify their decision in the ERS or ECS. Additional information regarding the ERS/ECS documentation is located at the WSDOT HazMat Investigations and Documentation webpage.

447.03 Writing and Right-Sizing HazMat Analysis

A Hazardous Materials Analysis is prepared to satisfy project NEPA/SEPA requirements for environmental documentation. Region staff determines the appropriate level of analysis required when they complete the ERS. The purpose of the analysis is to identify potentially contaminated sites along a project corridor that may:

- Affect the environment during construction.
- Create significant construction impacts.
- Incur cleanup liability for WSDOT.

The HazMat Analysis must document significant unavoidable adverse impacts that WSDOT cannot reasonably mitigate. Whenever possible, include the Analysis directly in the NEPA document. In unusual cases, when warranted by the nature of the project, the Analysis can be documented in a separate report which supplements the environmental document. Factors such as project size and type of construction activities, past and current land use
in an area, excavation depths and acquisition plans help WSDOT staff determine the best approach. WSDOT provides Right Size Guidance that describes three levels of reports, as well as situations where no documentation may be required. Right-size is a common term used to describe the level of detail necessary to analyze a specific project given the setting and anticipated impacts. The level of detail must be sufficient to allow region staff to make informed decisions regarding the selection of alternatives and mitigation measures. Region staff should be able to use the Analysis to assess budget and schedule impacts and decide when to engage in early coordination with regulatory agencies. The documentation must provide site-specific recommendations for additional investigations needed prior to acquisition and construction. Right sizing keeps documentation short and concise.

447.04 Identifying Potentially Contaminated Property

The Department of Ecology (Ecology) has regulatory authority over contaminated properties pursuant to the Model Toxics Control Act (MTCA) Cleanup Regulations found in Chapter 173-340 WAC. MTCA holds that any past or present relationship with a contaminated site may result in liability for cleanup. Thus, Ecology can find WSDOT responsible for cleanup of hazardous materials whether the original source is from WSDOT activities, from a tenant, or inherited when WSDOT purchases property.

Cleanup costs for contaminated properties can be extraordinary and cleanup actions can take many years. For this reason, WSDOT seeks to reduce liability by identifying the nature and extent of contamination at properties prior to acquisition and construction. This process is commonly known as completing “due diligence.”

As discussed, WSDOT identifies potentially contaminated sites is through research and environmental documentation (see Sections 447.02 and 447.03, respectively) completed during the NEPA/SEPA process. Additionally, WSDOT conducts investigations called Environmental Site Assessments (ESAs) to meet the standard of the industry for identifying potentially contaminated properties, and may be performed either independent of, or in conjunction with, the NEPA/SEPA process; however, ESAs are not necessary to satisfy NEPA/SEPA environmental documentation requirements. The Environmental Protection Agency (EPA) recognizes two American Society for Testing and Materials (ASTM) International Standards as compliant with the All Appropriate Inquiry (AAI) requirements: ASTM E 1527-13 “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” and ASTM E 1527-08 “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property.” The final rule requires that the results of an AAI investigation be documented in a written report pursuant to 40 CFR 312.21. The two ESA listed below can be purchased at www.astm.org/standard/standards-and-publications.html.

- Phase I ESA (ASTM E 1527-05 / 1527-13)
- Phase II ESA (ASTM E 1903-11)
447.04(1) Phase I Environmental Site Assessment (Phase I ESA)

Although similar to a HazMat Analysis Report, a Phase I ESA as a standalone document does not fully satisfy NEPA requirements. The purpose of a Phase I ESA is to evaluate the environmental conditions of an individual's property as part of a real estate transaction and assess the likelihood of assuming liability from any contamination which may determine the property to be considered as a Recognized Environmental Condition REC\(^1\); whereas, NEPA documents a comprehensive study that details all potential significant impacts from various disciplines relating to the entire project footprint. WSDOT routinely uses the HazMat Analysis in the environmental document to identify potentially contaminated properties; WSDOT does not automatically complete Phase I ESAs for all individual sites. A Phase I ESA in full compliance with the ASTM standard should be conducted for properties that may be substantially contaminated and require WSDOT acquisition. If the proposed acquisition is considered substantially contaminated and may pose a significant financial risk, WSDOT must complete a Phase I ESA prior to acquisition to fulfill the requirements of 40 Code of Federal Regulations (CFR) Part 312, Standards and Practices in order to meet “All Appropriate Inquiry” (AAI) as defined by the USEPA and qualify for one of the defenses under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)—aka the Superfund law—to limit cleanup liability and potentially recover future cleanup costs. WSDOT also uses the information to assess potential impacts on project design and construction. In accordance with 40 CFR 312.21, an Environmental Professional must complete the Phase I ESA. Additional information regarding a Phase I ESA is available on the WSDOT HazMat Investigations and Documentation webpage.

447.04(2) Phase II Environmental Site Assessment (Phase II ESA)

The purpose of a Phase II ESA is to further investigate sites that may have contamination based on the findings of the HazMat Analysis or Phase I ESA. The Phase II ESA is conducted to characterize the nature and extent of potentially contaminated media prior to acquisition and construction. WSDOT uses information obtained in previous reports, planned areas of construction, and acquisition plans when conducting the assessment. A Phase II ESA is limited in scope and will not always identify all the contamination on a site.

When site specific documentation exists in the Ecology files for the planned acquisition or construction areas a Phase II ESA may not be necessary. Additional information regarding a Phase II ESA is available on the WSDOT HazMat Investigations and Documentation webpage.

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\(^1\) A recognized environmental condition (REC) refers to the presence or likely presence of any hazardous substance or petroleum product on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term is not intended to include “de minimis” conditions that do not present a threat to human health and/or the environment and that would not be subject to an enforcement action if brought to the attention of appropriate governmental agencies.
Finally, WSDOT may identify or encounter contamination during geotechnical exploration drilling. As described in the Geotechnical Design Manual M 46-03, prior to any drilling activities crews complete a geotechnical field exploration and an environmental assessment. The manual also provides procedures for planning, storing, and disposing of potentially contaminated material generated during drilling activities. Additional information regarding Geotechnical Soil Boring Procedures is available on the WSDOT HazMat Investigations and Documentation webpage.

Identifying the extent of contamination through a Phase II ESA helps WSDOT:

- Select project alternatives and/or mitigation options.
- Prepare real estate transactions and determine fair market property value.
- Determine appropriate property management options.
- Identify construction impacts and associated costs for mitigation and/or disposal of material.
- Consider worker health and safety needs.

Per the ASTM standard, field sampling and report writing should be performed only by or under the direct guidance of an Environmental Professional.

**447.05 Managing Liability During Real Estate Acquisition**

Under current federal and state hazardous waste cleanup statutes, all former, current, and future property owners can be held individually liable for 100 percent of the cleanup cost for a contaminated property. This is referred to as “joint and several liability” and means that when WSDOT acquires contaminated property, it may be held liable for any or all cleanup and restoration costs regardless of the “degree of guilt.” WSDOT can also be held liable as a prior owner, thus, selling land does not protect the department from liability.

To claim protection from liability as an innocent landowner, contiguous property owner, or bona fide prospective purchaser; property owners, including state and local governments, must conduct an AAI within one year prior to purchasing or acquiring the property as referenced in 40 CFR 312.20(a) and pursuant to CERCLA section 101(35)(B), and must purchase without knowing, or having reason to know, of contamination on the property.

Notwithstanding paragraph (a) of the above section, in accordance with 40 CFR 312.20(b) the following components of the AAI must be conducted or updated within 180 days of and prior to the date of purchase or acquisition of the subject property:

- Interviews with past and present owners, operators, and occupants (see 40 CFR 312.23)
- Searches for recorded environmental cleanup liens (see 40 CFR 312.25)
- Reviews of federal, tribal, state, and local government records (see 40 CFR 312.26)
- Visual inspections of the facility and of adjoining properties (see 40 CFR 312.27)
- The declaration by an Environmental Professional (see 40 CFR 312.21(d))

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2 The Environmental Assessment, at a minimum, should address environmentally sensitive areas, potential cultural resources, and documented or suspect contamination.
If the inquiry and subsequent site investigation identifies actual soil and/or groundwater contamination, the purchaser may pursue a “private right of action” with past or current owners of the property. A private right of action is a legal claim authorized by MTCA (RCW 70.105D.080) under which a person may recover costs of remedial action from other persons liable under the Act provided that a cleanup is “substantially equivalent” to a cleanup performed or supervised by Ecology. If the source of contamination is on an adjacent property, the persons liable for the adjacent contamination could be responsible for costs associated with cleanup of a site and costs to repair damages to natural resources.

WSDOT also uses property appraisals performed by the WSDOT Real Estate Services Office (RESO) as described in the Right of Way Manual M 26-01. Chapter 4 instructs appraisers to document potential HazMat issues on parcels such as odd soil odors or colors, the presence of tanks or drums, and suspected asbestos containing materials. If observed, the manual provides directions on how to proceed with the appraisal.

If acquiring contaminated properties, WSDOT RESO staff follows the steps outlined in Right of Way Manual Chapter 6 to identify and mitigate risk as much as possible. Actions may include, but are not limited to, valuing the property as clean and holding funds in escrow for cleanup, including an indemnification clause, or a creating a Prospective Purchaser Agreement. Once the purchase of a contaminated property is complete, the RESO is required to report the information to the Environmental Services Office (ESO).

ESO tracks contaminated properties that WSDOT owns, and their associated cleanup liability, and uses the information to report to the Washington State Office of Financial Management. This reporting is required by the Governmental Accounting Standards Board (GASB) Statement 49, Accounting and Financial Reporting for Pollution Remediation Obligations. When appropriate, WSDOT tracks remaining residual contamination in WSDOT right of way (regardless of liability) after a MTCA cleanup.3

447.06 Planning for Sediment Management

Projects that occur in marine or freshwater environments, including ferry terminals and bridge crossings, may need to evaluate and characterize sediment for chemical contamination. WSDOT uses the Sediment Management Standards (Chapter 173-204 WAC), promulgated by Ecology, to sample and evaluate sediments that may be disturbed. The sediment regulations impose a number of specific requirements, including special sampling and laboratory analysis procedures that make early coordination critical to WSDOT project schedules.

If a project will involve dredging, WSDOT also follows the requirements of the Dredged Material Management Program (DMMP) administered by the US Army Corps of Engineers. The DMMP provides criteria for in-water disposal of dredged sediment. If the sediments are not suitable for open-water disposal, they will need to be disposed of at an appropriate upland disposal facility.

3 An Implementation Agreement (IA) was signed in 2015 between Ecology and WSDOT. WSDOT has agreed to update the Right of Way Manual, utility manuals and right of way plan sheets to identify residual contamination for select sites after a MTCA cleanup has taken place. Ecology submits the proposed IA sites to WSDOT for approval. The HazMat Program and regional environmental managers will review the proposed IA site documentation to affirm, modify, or reject the proposal.

When WSDOT staff follows the policies in this chapter and the procedures on the HazMat webpages, WSDOT can reasonably anticipate and address HazMat issues prior to the advertisement of a project. During construction, WSDOT may need to have a contractor handle and manage issues such as contaminated soil or water, underground storage tanks (USTs), asbestos containing materials (ACM), cementitious material or wastes, lead based paint, potentially hazardous chemicals such as detergents, polymers, dust palliatives, concrete curing compounds, form release oils, or spills. WSDOT relays this information to contractors bidding on the work in four main ways:

- **Standard Specifications M 41-10**, which are standard protocols that are required for all WSDOT projects.
- **General Special Provisions**, which are provisions written to describe specific construction requirements and are available for use on multiple projects.
- **HazMat Special Provisions and Plans Sheets**, which are project-specific amendments that describe the location of, and how to handle, HazMat issues requiring special attention.
- **Hazardous Materials Management Plans**, which supplement a HazMat Special Provision and provide detailed instructions for managing materials.

For complex issues, WSDOT HazMat Specialists are available to assist with writing or reviewing HazMat Project-Specific Special Provisions. Often these provisions define areas with differing types or depths of contaminated soil or water. The Project-Specific Special Provision describes how the Contractor will handle and manage the material. Information about how WSDOT will characterize the material for disposal is also often included.

Further information about how specifications and provisions address HazMat topics is available on the WSDOT [Investigations and Documentation] webpage.

447.07(1) Identifying and Reporting HazMat During Construction

WSDOT identifies areas with known or suspected HazMat issues or USTs in the Special Provisions and on Contract Plan Sheets. In these situations, the contractor follows the steps outlined in the Special Provisions for managing and disposing of materials.

Even with advanced planning, it is not possible for WSDOT to know the entire history of every site, and unanticipated encounters of HazMat can occur. WSDOT remains prepared for unexpected situations during construction by having policies and procedures in place for the following:

- Encountering unknown USTs
- Finding releases of unknown HazMat
- Responding to spills from construction activities
- Reporting spills caused by the traveling public
These unexpected situations require rapid response actions to minimize impacts to the environment and the project work. WSDOT staff follows the Environmental Compliance Assurance Procedure (ECAP) as described in Construction Manual Section SS 1-07.5. The ECAP includes steps for notifying WSDOT management and regulatory agencies. The subsections below describe each situation and related reporting requirements in more detail.

Once WSDOT identifies HazMat, WSDOT must appropriately manage the material prior to reuse or disposal at a permitted disposal facility willing to accept the material. Sections 447.09 and 447.10 address these topics. For more information about HazMat during construction, visit the Hazardous Materials Investigations and Documentation webpage.

447.07(2) Encountering Unknown Underground Storage Tanks (USTs)

Due to potential explosion hazards and the specific statues and regulations associated with UST decommissioning, USTs require special consideration when encountered at a WSDOT site. Usually unknown USTs that a contractor encounters are home heating oil or farm fuel USTs that are not regulated or registered with Ecology. When a contractor encounters a UST, WSDOT policy is for the contractor to stop work in the immediate area and notify the WSDOT Project Engineer (PE). The PE will initiate ECAP.

Ecology has the authority over all “regulated” USTs in Washington State pursuant to Chapter 173-360 WAC. If there is a confirmed release from a regulated UST, Chapter 173-340 WAC will also apply. In the case of a confirmed release, WSDOT must ensure that Ecology receives notification within 24 hours. A status report is then due to Ecology within 20 days.

A Washington State certified UST Decommissioner is required to remove a regulated UST and a Washington State certified UST Site Assessor must be present during removal to sample and document UST closure activities. Thirty days prior to removing a regulated UST, a 30-Day Notice is due to Ecology. WSDOT can ask Ecology to waive this requirement if it will cause schedule delays. The HazMat program has certified UST Site Assessors to assist in UST removal.

If there is no contamination discovered during a regulated UST removal, Ecology must receive a Closure and Site Assessment Notice, a Site Check/Site Assessment Checklist, and a Site Assessment Report within 30 days. If there is contamination from a regulated UST or an exempted UST greater than 1,100 gallons as referenced in WAC 173-360-110, Ecology must receive a Site Characterization Report within 90 days. The reports should contain required information detailed in the 2003 Ecology document Guidance for Site Checks and Site Assessments for Underground Storage Tanks. For more information, see the Ecology UST webpage.

Some USTs are exempt in accordance with WAC 173-360-110, but may be regulated by local agencies. WSDOT requires a site assessment be performed by a current certified Washington State Site Assessor with the International Fire Code Institute (IFCI), and the decommissioning of the UST to be conducted by a certified Washington State UST Decommissioner with IFCI even when removing a non-regulated UST (1,100 gallons or less in capacity).
Local health and fire departments may also require notification of UST site closures.

- **Pierce County Health Department Permit**
- **Pierce County Health Department Process**
- **King County Health Department**

Different counties may have various requirements. A registered UST Decommissioner will know local regulations regarding tank removal.

### 447.07(3) Finding Releases of Unknown HazMat

When a contractor finds a release of an unanticipated HazMat, usually identified by sight or smell, WSDOT policy is for the contractor to stop work in the immediate area and notify the WSDOT PE. The PE initiates the ECAP, and should coordinate with ESO to determine whether WSDOT workers can safely continue working in the immediate area.

The PE follows notification procedures established in ECAP to determine internal and external reporting requirements. WSDOT HazMat Specialists will help to coordinate any required regulatory reporting. Per [WAC 173-340-300](#), WSDOT is required to report to Ecology hazardous substances that may be a threat to human health or the environment based on best professional judgment. [WAC 173-340-300(2)(b)](#) does provide a non-exhaustive list of reportable events and some examples are presented below.

- Contamination in a water supply well.
- Free product such as petroleum product or other organic liquids on the surface of the ground or in the groundwater.
- Any contaminated soil or unpermitted disposal of waste materials that would be classified as a hazardous waste under federal or state law.
- Any abandoned containers such as drums or tanks, above ground or buried, still containing more than trace residuals of hazardous substances.
- Sites where hazardous substances have leaked or been dumped on the ground.
- Leaking underground petroleum storage tanks not already reported under [WAC 173-340-450](#).

Pursuant to [WAC 173-340-200](#) and by definition, most releases or spills on WSDOT construction projects would meet the requirements of a reportable event. "Release" means any intentional or unintentional entry of any hazardous substance into the environment, including but not limited to the abandonment or disposal of containers of hazardous substances. "Hazardous substance" means any dangerous or extremely hazardous waste as defined in [RCW 70.105.010](#) (5) and (6), or any dangerous or extremely dangerous waste as designated by rule under Chapter 70.105 RCW; any hazardous substance as defined in [RCW 70.105.010(14)](#) or any hazardous substance as defined by rule under Chapter 70.105 RCW; any substance that, on the effective date of this section, is a hazardous substance under Section 101(14) of the federal cleanup law, 42 U.S.C., Sec. 9601(14); petroleum or petroleum products; and any substance or category of substances, including solid waste decomposition products, determined by the director by rule to present a threat to human health or the environment if released into the environment.
WSDOT Regional Project Offices should provide copies of all Ecology letters related to contamination on WSDOT properties to ESO HazMat Program within 30 days of receipt. The ESO HazMat Program tracks the information and uses it for GASB reporting as discussed in Section 447.05.

447.07(4) Responding to Spills From Construction Activities

Spills caused by WSDOT contractors during project construction are the responsibility of the contractor to clean up, report, and dispose of properly. The Department of Ecology and Local Jurisdiction Health Departments require confirmation sampling to verify that the spill was adequately cleaned up and to avoid having the site location listed on Ecology's facility database. The Contractor should hire an Environmental Consultant at their expense to conduct the remedial cleanup activities, and the Regional Project Offices may contact the ESO HazMat Program when a spill has occurred to oversee that the cleanup process was appropriately completed.

As a way to prevent and respond to spills on project sites, WSDOT requires contractors to prepare and implement a Spill Prevention Control and Countermeasures (SPCC) Plan for all projects. The SPCC Plan must address the required elements in their respective order as identified in Standard Specifications Section 1-07.15(1), including reporting requirements. The contractor may not begin any onsite construction activities until the contractor submits and WSDOT accepts the SPCC Plan. The SPCC Plan must remain on site at all times until the completion of the project. The SPCC Plan shall be considered a living document that is required to be updated to reflect current site conditions. For example, if the Contractor adds additional spill kits or moves the existing spill kits to another location of the project, this must be reflected in an updated SPCC Plan.

If a spill occurs on a project, WSDOT staff follows ECAP. Visit the WSDOT Spill Prevention Control and Countermeasures webpage for additional guidance, resources, and training information. WSDOT has a Spill Reporting Flow Chart (pdf 42 kb) that contractors and staff can use as a quick reference for how to report spills.

447.07(5) Reporting Spills Caused by the Traveling Public (Third-Party)

In rare cases, WSDOT Personnel or Contract Personnel may be a witness to or have to respond to an inadvertent spill from a Third-Party accident. If a spill from the traveling public occurs within a WSDOT construction project or ROW, WSDOT personnel shall immediately notify Washington State Patrol (WSP) and Ecology to report the spill, and if possible, identify the responsible party. WSDOT must report a spill if WSDOT personnel or Contract personnel have knowledge of a spill that may threaten human health or the environment, or where sites have been leaked or been dumped on the ground pursuant to WAC 173-340-300(3)(b)(iv)(viii). If the spill is an immediate threat to human health or the environment (e.g., tank truck leaking into a water body), WSDOT personnel within their limits of expertise should take action to contain the spill until Ecology or the WSP arrive on the scene. Cleanup costs may be recovered at a later date if and when the responsible party is identified.
In accordance with the Revised Code of Washington (RCW) 70.136.030, the WSP is the “hazardous materials incident command agency” along state and interstate highway corridors and coordinates all activities at the scene of a spill. Should WSDOT enter into an emergency assistance agreement with the WSP, the agreement does not obligate WSDOT to assist as WSDOT would be considered exercising the “Good Samaritan” law in pursuant to RCW 70.136.050, and WSDOT would not be liable for any civil damages resulting from the manner in which it conducted the cleanup except for gross negligence or willful or wanton misconduct.

Ecology is not obligated to respond to every spill on WSDOT ROW. Upon receiving notification from the WSP Incident Commander, Ecology’s Spill Response Team will determine if the release warrants a response. In accordance with RCW 90.56.020 and 90.56.350, Ecology is obligated to respond and cleanup spills of oil or other hazardous substances that have discharged or have the potential to discharge into the Waters of the State. In addition, other factors may influence the lack of a response such as limited resources (i.e. manpower).

The cleanup of spills by the traveling public is regulated under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Section 9607(b), which states, “There shall be no liability under subsection (a) of this section for a person otherwise liable who can establish by a preponderance of the evidence that the release or threat of release of a hazardous substance and the damages resulting therefrom were caused solely by—

(1) an act of God;

(2) an act of war;

(3) an act or omission of a third party other than an employee or agent of the defendant, or than one whose act or omission occurs in connection with a contractual relationship, existing directly or indirectly, with the defendant (except where the sole contractual arrangement arises from a published tariff and acceptance for carriage by a common carrier by rail), if the defendant establishes by a preponderance of the evidence that (a) he exercised due care with respect to the hazardous substance concerned, taking into consideration the characteristics of such hazardous substance, in light of all relevant facts and circumstances, and (b) he took precautions against foreseeable acts or omissions of any such third party and the consequences that could foreseeably result from such acts or omissions; or

(4) any combination of the foregoing paragraphs” (see also RCW 70.105.040).

In most cases spills are reported to Ecology through the Environmental Report Tracking System (ERTS). This information is sometime then relayed to either the WSDOT Incident Response Team (ICR) or Regional Maintenance Offices. The WSDOT Hazardous Materials Program occasionally receives notification letters of Third-Party Spills; or through a tracking system called GASB which identifies sites that have been listed on Ecology's databases as discussed in Section 447.05.
Can WSDOT “become” a liable party for a Third-Party Spill?

WSDOT can assume financial liability for a Third-Party spill if the spill is not reported, or a liable party (individual who caused the spill) was not identified, then under RCW 70.105.040, WSDOT as the owner of the property or facility will assume liability of any future cleanup of contamination left in place. Under CERCLA, persons may be held strictly liable for releases or threatened release of hazardous substances at properties they owned or operated at the time of release. This rule means that a potentially responsible party may be liable for contamination based solely on property ownership without regard to fault. Petroleum products are specifically excluded from the CERCLA “hazardous substances” in accordance with 42 U.S.C. 9601(14); however are still considered hazardous substances under MTCA.

Managing HazMat During Construction

WSDOT contractors are responsible for the safe management of known or suspected HazMat when encountered at a site, as described by the Special Provisions and should manage HazMat in a cost-effective manner in accordance with all federal, state, and local laws, regulations, and standards. If the contract does not address HazMat that is inadvertently discovered, the PE works with a WSDOT HazMat Specialist and the contractor to coordinate the management of these materials. The WSDOT contractors are also responsible for managing all HazMat that is brought or generated on site during all construction activities. Typical HazMat encountered or generated on construction sites includes but not limited to: contaminated soil, sediment, and water; USTs; ACM; lead-based paint, crystalline silica (dust), and cementitious material (saw-cuttings, concrete slurry and concrete grindings) In addition, potentially hazardous chemicals such as detergents, polymers, dust palliatives, concrete curing compounds, or form release oils are also considered HazMat.

WSDOT policy is that only trained and experienced WSDOT HazMat Specialists, Safety Officers and/or consulting environmental professionals are qualified to handle HazMat and collect samples.

The management of HazMat may include any or all of the activities listed below.

Visit the WSDOT HazMat webpage for information on each topic.

- Identifying the type, concentration, and extent of the contamination.
- Stockpiling and covering HazMat or otherwise containing liquids.
- Sampling and submitting samples for laboratory analysis.
- Labeling containers and drums.
- Characterizing the material for reuse, or disposal at a permitted disposal facility able to accept the material.
- Submitting information to regulatory agencies.

If project waste materials designate as dangerous waste, WSDOT assumes responsibility as the generator of the waste for reporting purposes. Per Chapter 173-303 WAC, WSDOT must obtain a Resource Conservation and Recovery Act (RCRA) Environmental Protection Agency (EPA) Site Identification (ID) number from Ecology. WSDOT is required to track and count quantities of all Dangerous Waste generated and disposed. While the EPA Site ID number
remains open in Ecology’s system, the PE is required to submit an Annual Report⁴ to Ecology due no later than March 1st of each year.

Besides managing and disposing of HazMat generated from an active construction project, the immediate cleanup of all contaminated soil or water may not typically be required assuming there is no immediate threat to human health and/or the environment. The PE decides the level of cleanup that is feasible based on the construction schedule and budget, as well as other factors, such as apparent extent of contamination and the intended future use of the site. Where possible, the PE should consider the opportunity to minimize WSDOT’s future cleanup liability, cleanup areas where final construction might prevent or obstruct future cleanup, and perform cleanup to protect environmentally sensitive areas. Visit the WSDOT HazMat Program webpage for more information about cleanup options.

447.09 Reusing or Disposing of Project Waste Materials

WSDOT is ultimately responsible for the reuse and disposal of project waste materials. Disposal of materials can be costly and may impact project schedules. It is for these reasons that WSDOT coordinates the sampling and characterization of HazMat as described above. The decision to reuse or dispose of project waste materials is influenced by the following factors:

- Type and level of contamination (e.g., petroleum product vs. solvents).
- Future site use (e.g., residential vs. industrial, a parking lot or roadway).
- Site access and presence of critical areas.
- Permit requirements and environmental commitments.

WSDOT addresses the reuse and disposal of solid wastes during construction in Standard Specifications Sections 2-01.2, 2-02.3, and 2-03.3(7). If a contractor provides a disposal site, they are required by Section 2-03.3(7)C to provide the PE with the location of the disposal site and copies of required permits and approvals before they transport any waste off the project site. The Contractor shall provide the Engineer with a copy of the shipping manifest or bill of lading for each load indicating the quantity of material hauled to disposal, and bearing the disposal site operator’s confirmation for receipt of each load of material. The PE keeps a copy of the disposal documentation in the project file.

When HazMat is addressed in a project Special Provision, WSDOT includes a description of the materials and identifies the type of disposal facility that will accept the materials. As a common practice, WSDOT does not direct contractors where to take materials for disposal. It is required that contractors dispose of waste in accordance with all applicable federal, state, and local laws and regulations.

⁴ Ecology implemented an electronic submittal process for annual reports. For user guide information see www.ecy.wa.gov/programs/hwtr/waste-report/index.html
The WSDOT HazMat webpage provides information about and disposal options for the types of waste listed below. Consult a WSDOT HazMat Specialist with project-specific questions.

- Solid Waste
- Problem Waste
- Dangerous Waste
- Asbestos Containing Materials
- Lead-Based Paint
- Creosote Treated Wood

447.10 Laws and Regulations

Numerous federal, state, and local regulations govern HazMat issues and related topics. Below is a list of the most common federal and state regulations that apply to WSDOT projects.

447.10(1) Federal Laws and Regulations

- 40 CFR Parts 61 to 71 National Emission Standards for Hazardous Air Pollutants
- 40 CFR Part 112 Oil Pollution Prevention
- 40 CFR Part 312 All Appropriate Inquiries
- 15 USC 2601 Toxic Substances Control Act
- 29 USC 651 et seq. Occupational Safety and Health Act
- 33 USC 1251 et seq. Clean Water Act
- 42 USC 300f et seq. Comprehensive Environmental Response, Compensation, and Liability Act
- 42 USC 6901 et seq. Resource Conservation and Recovery Act
- 42 USC 9601 et seq. Comprehensive Environmental Response, Compensation, and Liability Act

447.10(2) State Regulations

- Chapter 173-160 WAC Minimum Standards for Construction and Maintenance of Wells
- Chapter 173-200 WAC Water Quality Standards for Groundwaters of the State of Washington
- Chapter 173-201A WAC Water Quality Standards for Surface Waters of the State of Washington
- Chapter 173-204 WAC Sediment Management Standards
- Chapter 173-303 WAC Dangerous Waste Regulations
- Chapter 173-340 WAC Model Toxics Control Act
- Chapter 173-350 WAC Solid Waste Handling Standards
- Chapter 173-360 WAC Underground Storage Tank Regulations
- Chapter 197-11 WAC State Environmental Policy Act
• Chapter 296-62 WAC General Occupational Health Standards
• Chapter 296-155 WAC Safety Standards for Construction Work
• Chapter 296-843 WAC Hazardous Waste Operations

447.11 Abbreviations and Acronyms

- ACM Asbestos Containing Materials
- ASTM American Society for Testing and Materials
- CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
- CFR Code of Federal Regulations
- Ecology Washington State Department of Ecology
- ECAP Environmental Compliance Assurance Procedure
- ECS Environmental Classification Summary
- ERS Environmental Review Summary
- ESA Environmental Site Assessment
- ESO Environmental Services Office
- GASB Governmental Accounting Standards Board
- HazMat Hazardous Materials
- MTCA Model Toxics Control Act
- NEPA National Environmental Policy Act
- PE Project Engineer
- RCRA Resource Conservation and Recovery Act
- SEPA State Environmental Policy Act
- SPCC Spill Prevention Control and Countermeasures
- USEPA United States Environmental Protection Agency
- USC United States Code
- UST Underground Storage Tank
- WAC Washington Administrative Code
- WSDOT Washington State Department of Transportation
447.12 Glossary

WSDOT uses the common term “Hazardous materials” to describe waste materials that require special handling and disposal. The term covers all types of contaminated or hazardous media including dangerous waste, hazardous waste, problem waste, hazardous substances, and petroleum products. The definitions below describe the different terms found in state and federal regulations.

**Dangerous Waste** – Solid wastes designated in WAC 173-303-070 through 173-303-100 as dangerous or extremely hazardous or mixed waste. Dangerous waste includes all federal hazardous waste, plus certain wastes exhibiting specific characteristics based on toxicity and persistence. The regulatory requirements for disposal of dangerous waste are more complex than the requirements for disposal of problem waste and place additional responsibility both on WSDOT as the generator and on the contractor for safe handling and disposal.

**Hazardous Substance** – Hazardous substance designated under CERCLA in 42 USC 9601(14) and 40 CFR 116 that pose a threat to public health or the environment. Federal regulation of hazardous substances excludes petroleum, crude oil, natural gas, natural gas liquids or synthetic gas usable for fuel. State regulation of hazardous substances is more stringent and includes petroleum products, as addressed in WAC 173-340-200.

**Hazardous Waste** – Solid wastes designated in 40 CFR 261 and regulated as hazardous and/or mixed waste by the USEPA. Mixed waste includes both hazardous and radioactive components; waste that is solely radioactive is not regulated as hazardous waste. Hazardous waste includes specific listed waste that is generated from particular processes or activities or exhibits certain reactive, corrosive, toxic, or ignitable characteristics. Hazardous waste is also regulated by Ecology as dangerous waste and State-only dangerous waste.

**Problem Waste** – Pursuant to Chapter 173-304 WAC, problem wastes are defined as soil, sediment, sludge, and liquids (groundwater, surface water, decontamination water, etc.) that are removed during the cleanup of a remedial action site, or other cleanup efforts and actions, that contain hazardous substances but are not designated as dangerous waste pursuant to Chapter 173-303 WAC. Examples of the type of waste streams that may be disposed of under this definition include:

- Contaminated soil, sludge, groundwater, surface water, and construction demolition debris containing any combination of the following compounds: petroleum hydrocarbons, volatile and semi-volatile organic compounds, polycyclic aromatic hydrocarbons, polychlorinated biphenyls, heavy metals, herbicides, and pesticides.
- Contaminated dredge spoils (sediments) resulting from the dredging of surface waters of the state where contaminants are present in the dredge spoils at concentrations not suitable for open water disposal and the dredge spoils are not dangerous wastes and are not regulated by Section 404 of the Clean Water Act.
- Asbestos containing material.
**Solid Waste** – State regulation Chapter 173-350 WAC define solid waste as all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, problem wastes as defined below, and recyclable materials. Federal regulations define solid waste as any garbage, refuse, or sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility, and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations and from community activities. Solid waste includes hazardous and problem wastes.
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