

Chapter 620

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620.01 Introduction

This chapter summarizes specific requirements applying to different elements of the environment during construction (i.e., earth, air quality, water quality). It is organized to parallel the presentation of requirements for each element of the environment during the design and environmental review phase in [Chapter 420](#) through [Chapter 470](#).

These requirements are spelled out in more detail in WSDOT's *Standard Specifications for Road, Bridge, and Municipal Construction* M 41-10 (*Standard Specifications*) and *Construction Manual* M 41-01 as cited throughout this chapter.

620.02 Earth

(1) Clearing and Grubbing

Prior to beginning work, the site boundaries and all sensitive areas must be marked with fencing as described in Project Delivery Memo #09-02, High Visibility Fence Clarifications (see [Exhibit 690-1](#)).

It is advantageous to preserve natural growth where possible for roadside aesthetics and control of erosion. If it is not clearly shown in the contract plans, the Project Engineer should discuss preservation of natural growth with the landscape architect as long as the growth will not interfere with roadway and drainage construction before starting clearing operations. Areas to be omitted from clearing or extra areas to be cleared should be determined before starting work and an accurate record made during staking operations. For details, see WSDOT *Construction Manual* Section 2-1. See the WSDOT [Federal, State, and Local Permits](#) web page for land clearing burns and local clearing and grading ordinances.

(2) Excavation

- (a) **Mining Notification** – The U.S. Department of Labor, Mine Safety and Health Administration must be notified at the beginning and end of all mining operations. This includes surface mining, such as normal pit site operations, all crusher operations, and all pits and quarries, including borrow pits. The project engineer is responsible for this notification for WSDOT furnished pits. The contractor is responsible for all pits and quarries not furnished by WSDOT.

The Bureau of Mines reports are in addition to reports required by the Washington State Department of Natural Resources (DNR). See WSDOT *Construction Manual* Section 1-2.2D.

See the WSDOT [Federal, State, and Local Permits](#) web page for information on DNR's Surface Mining Reclamation permit.

- (b) **Roadway Excavation** – Roadway excavation is specified in accordance with WSDOT *Standard Specifications* Section 2-03.1 and includes all materials within the roadway prism, side borrow area, and side ditches. Borrow, unsuitable excavation, ditches and channels outside the roadway section, and structure excavation are separately designated. See WSDOT *Construction Manual* Section 2-3 for detailed procedures including reestablishment of slopes in the event of landslide or erosion.

- (c) **Structure Excavation** – There are two classes of structure excavation. Class A is excavation necessary for construction of bridge footings, pile caps, seals, wing walls, and retaining walls. All other structure excavation is Class B. See *Standard Specifications* 2-09.3(2), 2-09.3(3), and 2-09.3(4).

All excavation four feet or more in depth shall be shored, or protected by cofferdams, or shall meet the open-pit requirements of *Standard Specifications* Section 2-09.3(3)B. Open pit excavation or “glory holes” are not allowed adjacent to running streams.

See WSDOT *Construction Manual* Section 2-9 for details on coffer dams, pile driving, backfilling, and other excavation operations.

- (d) **Ditch and Channel Excavation** – Areas where open ditches are to be constructed shall be cleared and grubbed the same as areas for roadway construction. See WSDOT *Construction Manual* Section 2-10.

(3) Borrow Pits

WSDOT *Standard Specifications* Sections 2-03.3(14K), 9-03.20, and 9-03.21 provide for the use of select and common borrow for use in construction of embankments. The requirements of WSDOT *Standard Specifications* Section 2-03.3(13) must be observed in the operation and cleanup of borrow pits. With the requirement for reclamation of all pits, a plan must be developed to meet the requirement of the specifications and special provisions and approved before the start of pit operations. See WSDOT *Construction Manual* Section 3.3 for guidelines on site reclamation.

See the WSDOT [Federal, State, and Local Permits](#) web page for DNR's Surface Mining Reclamation permits, and Authorization for Use of Public Lands.

620.03 Air Quality

Construction activities may result in temporary impacts on air quality from land clearing, burns, asbestos demolition, and operation of portable asphalt batching plants, rock crushers, and Portland concrete cement plants. See [Chapter 425](#) for background on air quality requirements that may apply to the project and the WSDOT [Federal, State, and Local Permits](#) web page for air quality permit information.

620.04 Water Quality

During construction, erosion control and prevention of hazardous material spills are most important to avoid impacts on water quality. Cooperation with other agencies is important to ensure compliance with environmental commitments made during project development. See [Chapter 430](#) for background on water quality requirements that may apply to the project.

(1) Applicable Statutes and Regulations

Please see [Section 430.02](#) for details.

(2) Policy Guidance

None identified.

(3) Interagency Agreements

See [Section 610.03](#) for information on interagency agreements applicable to water quality protection during construction, specifically the *Compliance Implementing Agreement Between Washington State Department of Ecology and Washington State Department of Transportation (2004)*.

(4) Technical Guidance

Please see [Section 430.05](#) for background information.

- (a) Stormwater and Erosion Control** – The primary concern with stormwater runoff during construction is erosion prevention and sediment control. Deposition of sediment in water bodies degrades water quality and severely impacts aquatic habitat.

WSDOT's [Highway Runoff Manual](#) provides guidance to fulfill the requirements for temporary erosion and sediment control, as well as permanent control measures to manage stormwater after construction is complete. Consult the [Highway Runoff Manual](#) for detailed information on Stormwater Planning and Temporary Erosion and Sediment Control Plan requirements. For technical assistance with the development of these plans, contact regional environmental staff, Hydraulics, or Water Quality Units.

General contract requirements for applying and enforcing the standards in the WSDOT *Highway Runoff Manual* on construction contracts are in WSDOT *Standard Specifications* Section 1-07.15 and 8-01 and in WSDOT *Construction Manual* Section 2-3.4.

Seasonal restrictions for erosion and sediment control practices apply to construction projects. The restrictions are identified in the WSDOT *Highway Runoff Manual*. Contact the Regional Hydraulics and Water Quality Program or Headquarters Water Quality Program for further information on erosion and sediment control guidance.

Information for designing and maintaining roadside vegetation to minimize long term erosion after construction is included in the Erosion Control chapter of the WSDOT *Roadside Manual* M 25-30.

- (b) **Herbicides** – For information on application of aquatic herbicides for noxious or non-noxious weeds, see [Section 430.05](#). When any herbicide application is made in or on the waters of the state, it is considered an aquatic herbicide application and falls under jurisdiction of the Department of Ecology. Prior to the application WSDOT or its contractor must meet conditions established in NPDES Programmatic Permit for aquatic noxious plant control and nuisance aquatic plant and algae control.

(5) **Permits and Approvals**

Below is summary information on several permits related to water quality.

- (a) **Stormwater Management and Erosion Control** – The Construction Stormwater General Permit (NPDES) is administered by the Department of Ecology. This permit regulates stormwater discharge on construction sites for each project that disturbs one acre or more. Low risk projects between one and five acres can apply for an Erosivity Waiver through Ecology. During project development, an NPDES Construction Stormwater General Permit covering activity in the WSDOT right of way will have been obtained. The permit should be kept in close proximity to the project site, along with the permit coverage letter, the Temporary Erosion and Sediment Control Plan, Spill Prevention Control and Countermeasures Plan, and the Site Log Book. For any stormwater discharge resulting from construction activity outside the WSDOT right of way, including offsite equipment staging areas, material storage areas, and borrow areas that have not been included in WSDOT's NPDES permit for the project, the contractor will be responsible for obtaining the necessary permits.

See WSDOT *Highway Runoff Manual* and [Section 430.05](#) for guidance on stormwater planning and how to develop TESC Plans.

For information about the NPDES permit, see [Chapter 610](#).

- (b) **Section 404 Permit** – Under the Clean Water Act, a Section 404 permit from the U.S. Army Corps of Engineers (Corps) is required for discharging, dredging, or placing fill materials within waters of the United States, including wetlands. The permit is required to construct temporary sedimentation basins.

If applicable, the permit will have been obtained during project development and should be included in the contract special provisions. See the [WSDOT Federal, State, and Local Permits](#) web page for details.

If the contractor's method of operations, weather conditions, design changes, or other factors affect waters of the United States in ways not anticipated or represented in the permit, the project engineer will work with the region environmental staff, the assigned representative of the Corps, and the contractor to modify the existing permit or obtain a new or revised one as appropriate.

(6) Non-Road Requirements

Please see [Section 430.07](#) for background.

620.05 Wildlife, Fisheries, and Vegetation

Transportation activities affecting fish species listed as threatened or endangered under the Endangered Species Act (ESA) include:

- Release of construction-related chemicals, products and by-products.
- Clearing, grubbing and filling.
- Runoff from impervious surfaces.
- Activities in areas having listed fish or potential for listed fish habitat.
- Stormwater discharge into a river or stream with a low-flow designation.

See [Chapter 436](#) for background on requirements related to wildlife, fisheries, and vegetation that may apply to the project.

(1) Applicable Statutes and Regulations

Please see [Section 436.02](#) for details.

(2) Policy Guidance

None identified.

(3) Interagency Agreements

See [Section 610.03](#) for information on the May 2008 Memorandum of Agreement between WDFW and WSDOT, which is applicable to wildlife protection during construction. See also [Section 436.04](#).

(4) Technical Guidance

Please see [Section 436.05](#) for details. Also see WSDOT [Highway Runoff Manual](#) regarding stormwater effects on fish species listed under the ESA.

Timing restrictions may apply to projects in the vicinity of spawning, nesting, migrating, or wintering habitat of many species, whether or not they are listed as threatened or endangered. For species not protected under the ESA, priority habitats and species recommendations by WDFW may be applied to protect their

habitat. In-water work and noise generating activities such as pile driving and blasting are of the greatest concern. Procedures listed in WSDOT's [Roadside Manual](#) include:

- Clearly flag or place construction fencing around all habitat areas and features that are to be protected.
- Erosion control should be implemented and maintained during construction to minimize impacts to aquatic species.
- Emphasize sensitive areas during preconstruction meetings. Note the kinds of activities not allowed in sensitive areas (clearing, grading, stockpiling materials, staging vehicles and equipment).

(5) Permits and Approvals

Construction in or near streams, rivers, or other water bodies, may require a Hydraulic Project Approval (HPA) from the Washington State Department of Fish and Wildlife (WDFW), which would have been obtained during project development. Please see the WSDOT [Federal, State, and Local Permits](#) web page for details.

For projects requiring an HPA, written approval must be obtained from WDFW before commencement of construction or other work.

As agreed between WSDOT and WDFW, for each project requiring an HPA, WDFW will issue the permit to WSDOT and not to its contractor. The HPA may cover other impacts from the project, including operations in contractor staging areas, material source sites, and waste disposal sites.

When an HPA has been obtained for the project, the project engineer shall provide copies of the permit to the contractor and ensure it is properly posted at the work site at all times work is in progress. The project engineer should ensure that both the intent and the specific provisions of the permit are rigidly enforced.

If the contractor's method of operations, weather conditions, design changes, or other factors affect waters of the state in ways not anticipated or represented in the HPA, the project engineer will work with the assigned representative of WDFW and the contractor to modify the existing permit or obtain a new or revised one as appropriate.

If permit conditions are modified, make sure changes are reflected within the Commitment Tracking System (see [Chapter 590](#)). See WSDOT [Construction Manual](#) Section 1-2.2.

(6) Non-Road Requirements

Please see [Section 436.07](#) for details.

620.06 Wetlands

See [Chapter 431](#) for background on wetland mitigation requirements that may apply to the project.

(1) **Applicable Statutes and Regulations**

Please refer to [Section 431.02](#) for background.

(2) **Policy Guidance**

Appendix 1 of WSDOT's *Protection of Wetlands Plan*, Directive D-3112, specifies that Construction Action Plans should include mitigation implementation, disposal sites, drainage facility construction, and pile driving (see [Section 431.02\(3\)](#)).

(3) **Interagency Agreements**

See [Section 610.03](#) for information on the Mitigating Agreement on Wetlands Protection and Management, which is applicable to wetlands protection during construction (see also [Section 431.04](#)).

(4) **Technical Guidance**

Coordination between WSDOT and Ecology is strongly encouraged to ensure compliance with wetland commitments. A preconstruction conference should be scheduled with Ecology for projects impacting wetlands (see [Section 690.02\(3\)](#)).

- (a) **Wetland Mitigation** – The final wetland mitigation plan prepared during PS&E will include a general grading plan and revegetation plan, planting plan, construction sequence and schedule, steps to minimize damage to buffers and wetlands and buffers, and methods for controlling invasive species. Contractor responsibilities should be included in contract plans and special provisions.

Within a month of completing construction and planting a wetland mitigation project, as-built plans must be sent to the lead agency, including an as-built topographical survey, plant species and quantities used, photographs of the site, and notes about any changes to the original approved plan. It should also list the contractor's responsibility concerning plant replacement, fertilization and irrigation, protection from wildlife, and contingency plan requirements (see [Section 431.05\(5\)](#)).

- (b) **Herbicides** – When any herbicide application is made in or on the waters of the state, it is considered an aquatic herbicide application and falls under jurisdiction of the Department of Ecology. Prior to the application WSDOT or its contractor must meet conditions established in NPDES Programmatic Permit for aquatic noxious plant control and nuisance aquatic plant and algae control (see the WSDOT [Federal, State, and Local Permits](#) web page).

(5) **Permits and Approvals**

Please see the WSDOT [Federal, State, and Local Permits](#) web page for permits that may apply to the project. If the project boundaries change during construction, request a biologist to inspect the area before amending permits or approvals to accommodate the change.

(6) **Non-Road Requirements**

No special requirements were identified.

620.07 Noise

Construction noise is temporary but may adversely affect nearby residents. During project development, the design engineer should have considered ways to reduce or mitigate the adverse impacts of construction and incorporated any requirements into contract plans and special provisions. All reasonable methods should have been incorporated in the contract special provisions. See [Chapter 446](#) for background on noise requirements that may apply to the project.

In most cases, daytime noise from construction activities is exempt from local laws. For some projects, permits from local jurisdictions may be needed. For each project, the local jurisdiction will need to be contacted to determine the local regulation and if a permit is required. Some acoustical analysis may be needed before the local agency will grant the permit. This is done on a case-by-case basis.

These same regulations apply to maintenance activities in all but emergency situations. In the latter case, the police department and the local permitting agency should be contacted and apprised of the situation at the earliest possible opportunity.

For guidance on obtaining a local variance, see the WSDOT [Federal, State, and Local Permits](#) web page.

620.08 Hazardous Materials

This section contains policies and procedures for identifying, managing and disposing of hazardous materials encountered on WSDOT sites during construction. This section refers to [Chapter 447](#), the WSDOT *Construction Manual*, and the WSDOT *Standard Specifications*.

(1) *Applicable Statutes and Regulations*

Please see [Section 447.02](#) for details.

(2) *Policy Guidance*

To support WSDOT's Environmental Policy Statement (2009), WSDOT conducts research prior to construction to identify potentially contaminated properties and determine mitigation options to avoid or minimize potential impacts. WSDOT implements Standard Specifications and Special Provisions to require contractors to implement project/site-specific measures to ensure that construction activities do not cause or contribute to the release of hazardous materials.

Several WSDOT standard specifications are applicable to ensuring continuity of work when hazardous materials are encountered. A summary of these specifications is provided in [Exhibit 620-1](#). Project-specific specifications may also be written into the contract to protect WSDOT from contractor overruns.

General Special Provision (GSP) 02033.FR2 (under GSP Division 2) should be used when subsurface contaminated materials are suspected to exist and may be removed as part of the project.

Special Provisions (SP) should be used when subsurface contaminated materials are known to exist and will be removed as part of the project. The SP should be project-specific.

(3) **Technical Guidance**

Hazardous materials can be encountered on WSDOT project sites in two forms; insitu contamination and spills during construction activities. This section describes the process for identifying, managing and disposing of insitu contamination and spills.

- (a) **In-situ Contamination** – When hazardous materials are encountered during the construction phase, the following steps below provide the general sequence of activities that WSDOT performs. This section also provides guidance on excavation, disposal, and other options that must be weighed by WSDOT project managers (e.g., the PE or Engineering Manager).

See [Section 447.01](#) for definitions different types of hazardous materials that require special handling when encountered during construction. These include hazardous substance, hazardous waste, dangerous waste, and problem waste.

(i) **Hazardous Materials Identification**

- a) **Identification** – Identification of hazardous materials is important to protect worker and public health and ensure appropriate management of material. The identification of hazardous materials depends on observations by trained WSDOT staff and consultants. Identification of hazardous materials starts during the project scoping and design phase. Documented and suspected contaminated sites are identified in discipline reports and other site-specific hazardous materials investigations (see [Section 447.05](#)). This process allows WSDOT staff and contractors to anticipate the types of hazardous materials that are most likely to be encountered during construction.

The discovery of unknown or unexpected encounters of hazardous materials is often identified by sight or smell. After proper notification (as described below), a WSDOT Hazardous Materials Specialist should be contacted to conduct additional field screening activities.

- b) **Notification Procedures** – Hazardous materials must be reported to the WSDOT PE if they are believed to be encountered. Once notified, the PE evaluates the circumstances and follows the ECAP procedures as appropriate. For pre-existing soil and water contamination on WSDOT property, the PE, in conjunction with the Regional Environmental Office (REO), should notify the ESO Hazardous Materials Program to coordinate necessary documentation, management strategies, and regulatory reporting (if required).

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. WSDOT requires

the PE and REO to document the notification process when hazardous materials are encountered. These documentation procedures are outlined in *Construction Manual* Section 1 2.2K(1)(D).

- **Underground Storage Tank (UST)** – Due to potential explosion hazards, special consideration is necessary when USTs are encountered at WSDOT sites. USTs are commonly present at gas and service stations along main roadways, along arterials, and at intersections. These USTs are typically registered with Ecology. Private USTs, such as home heating oil tanks and farm fuel USTs are not registered with Ecology. Removal of USTs requires several notices and permits (Ecology and local agencies) and must be performed by a licensed Washington state tank-decommissioning contractor and overseen by a licensed UST site assessor. See the WSDOT [Federal, State, and Local Permits](#) web page for additional details.

Thirty days prior to tank decommissioning (removal), a Notice of Intent form to remove a regulated UST is due to Ecology. Ecology can waive this requirement when an unknown tank is discovered during a WSDOT project and needs to be removed as soon as possible to avoid project schedule delays. The local fire marshal, health department, and planning department should be contacted to determine whether any local permits are required.

The owner/operator of a site must notify Ecology within 24 hours of discovering a confirmed release from a UST. A release from a UST is a notification trigger for the Environmental Compliance Assurance Procedure (ECAP).

If contamination from the UST is not confirmed a report must be submitted to the Ecology Toxic Cleanup Program within 30 days. If contamination from the UST is confirmed, a site characterization report must be submitted to the Ecology regional office within 90 days. The report 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 [Ecology’s UST](#) web page.

- (ii) **Management of Hazardous Materials** – On-site management includes handling, excavation, and dewatering activities. If known contamination is described in the special provisions (SPs), problem waste becomes the responsibility of the WSDOT contractor when encountered at a WSDOT site. The contractor is responsible to safely and responsibly manage contamination in a cost-effective manner in accordance with all federal, state, and local laws. A project-specific management plan can be developed to minimize schedule delays and excess costs for known contamination.

When unidentified contamination is discovered, the ESO coordinates and directs on-site hazardous material management activities. After the notification procedures have been initiated, the PE, in coordination with ESO and WSDOT's Safety Office, should assess the health and safety situation at the site to determine whether WSDOT workers can safely continue working.

- a) **Handling of Contaminated Materials** – On-site handling of contaminated material includes segregation followed by sampling and analysis. If not contained in the contract specifications, the ESO coordinates management of contaminated soil and water and specific hazardous materials such as asbestos, and lead-based paint. Refer to [Section 620.08\(4\)](#) for WSDOT requirements for specific hazardous materials.
- **Segregating Contaminated Material** – Soil or sediment suspected of being contaminated through visual and field evidence should be segregated and stockpiled. Adding clean material to existing contaminated material increases the volume of contaminated material and will increase overall disposal costs.

If sufficient space is unavailable on the project site, soil can be stockpiled on other WSDOT-owned sites such as maintenance yards or borrow areas until it can be characterized. At a minimum, a stockpile of potentially contaminated soil should be placed on an impervious surface and properly covered, as defined in [Standard Specifications](#) Section 8.01. The stockpile installation may also incorporate BMPs such as a lining, silt fences, straw bales, and cover material. Alternatively, roll-off boxes, Baker tanks, or 55-gallon drums may be used to contain the waste. Water should be diverted away from the stockpile, and any water that is exposed to contaminated soil or collects within the contaminated stockpile area may require sampling and/or treatment prior to disposal.

All drummed or containerized material should be labeled appropriately. Labeling is of prime importance when dealing with known or suspected contaminated wastes and materials. All containers must have a legible "Hazardous Materials" or "Analysis Pending" label including the project site, container contents (soil, water, and rags), type and amount of material spilled, date, location, and contact information. "Hazardous Materials" or "Analysis Pending" labels can be obtained on the World Wide Web. When the nature of the substance has been characterized, the containers shall be labeled with "Hazardous Waste Label" or a "Non-Hazardous Waste" label per USDOT labeling regulations (49 CFR 173.2).

"Non-Hazardous Waste" or "Hazardous Waste" labels can be obtained on the [Ecology](#) web page. See [Exhibit 447-3](#) for example waste labels.

Potentially contaminated groundwater or sludge should likewise be segregated through methods such as Baker tanks, drums, or similar methods.

Airborne contaminants such as dust laden with heavy metals should be controlled using dust suppression methods, such as water trucks and mulch.

- **Sampling Requirements for Disposal Characterization**

Proper sample collection methods provide reasonable assurance that sample results are accurate and representative of site conditions.

The ESO will collect waste characterization samples according to the requirements of the selected disposal facility, disposal contractor, or laboratory and according to Model Toxics Control Act (MTCA) or other regulatory requirements.

In the event ESO staff is not available to obtain samples for waste characterization, an environmental on-call consultant may perform sample collection activities. Regardless of who performs the sampling, the ESO must be consulted to oversee sample collection and provide coordination between the analytical laboratory and the disposal company to ensure that the proper sampling requirements are met.

If WSDOT staff is obtaining samples, the agency is mandated under state [Contract No. 01807](#) to use contract laboratories for waste characterization and other sample analysis.

On-call consultants may use a vendor of their choice, provided that the laboratory is accredited by Ecology. Laboratories are accredited by Ecology in Washington State under [Chapter 173-240 WAC](#).

- b) **Excavation Considerations** – When contaminated soil or water is encountered, an immediate cleanup is not typically required. 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, to cleanup areas where final construction might prevent or obstruct future cleanup, and to perform cleanup to protect environmentally sensitive areas.

Depending on the factors mentioned above the following options may be chosen to address additional unexcavated contaminated soil:

- **Option 1: Remove All Contaminated Soil Within WSDOT Right of Way** – This option is generally used for small, localized areas of contamination where removal and disposal will not substantially impact the construction schedule and budget. This option minimizes WSDOT's future liability.

Unless contamination is identified during the project scoping phase and remediation activities are budgeted, it is generally not possible to use construction project funds for complete cleanup of a site. Project funds should only be used if WSDOT causes or spreads the contamination, contamination increases WSDOT's liability, or Ecology determines the site is an immediate threat to human health and it imposes an administrative order on WSDOT to immediately perform remedial actions.

- **Option 2: Partially Remove Contaminated Soil Outside Planned Excavation Limits** – To the extent the project budget allows, WSDOT could require the contractor to remove contamination in limited areas, such as environmentally sensitive areas or where final construction would prohibit additional future cleanup or to ensure that construction activities do not cause contamination to spread. Due to the potential for substantial project delays and disposal costs, it is not recommended to “chase” the contamination when the extent of contamination is unknown.
- **Option 3: Leave Contamination in Place** – Although all soil removed from the project must be disposed of properly, the PE may leave contamination in place outside of planned excavation areas. This option is appropriate for contamination that is not considered an immediate risk to human health or project work can create preferential pathways for contamination (e.g., utility lines). If Ecology determines there is an immediate human health risk, Ecology may issue an order-requiring cleanup. The WSDOT Hazardous Materials office should be contacted if a project office plans to leave contamination in place.

Engineered controls may be an acceptable alternative when leaving contamination in place. Engineered controls means containment and/or treatment systems to prevent or limit the movement of, or public exposure to, hazardous substances.

Leaving contamination in place minimizes impacts to the project schedule and budget and is legally permissible; however, this option increases WSDOT's risk for future cleanup liability. Performing cleanup after construction is completed can be costly due to rising costs of site investigations, monitoring, equipment mobilization, labor, and disposal fees. If WSDOT was required to perform cleanup after construction, the agency would need to seek additional funding sources other than project construction funds (e.g., legislative requests).

- c) **Dewatering** – Contaminated groundwater generally requires containment and testing prior to determining management and disposal options. The burden of managing contaminated water can be minimized by scheduling excavation activities during dry periods when the water table is at its lowest level (i.e., during summer).

(iii) **Disposal/Reuse Considerations**

a) **Disposal and Reuse Options** – WSDOT is ultimately responsible for overseeing and managing the disposal of project wastes. Disposal/reuse options for contaminated soil, sediment, and groundwater are influenced by the following factors:

- The type and level of contamination (e.g., petroleum product vs. heavy metals).
- The future site use (e.g., residential vs. industrial, a parking lot or roadway), site access, and presence of critical areas could affect reuse options, and/or
- Permit requirements and environmental commitments.

Table 620-1 provides a summary of possible disposal options for contaminated soil and water.

Level of Contamination	Disposal Option
Soil	
Less than MTCA cleanup levels.	<ul style="list-style-type: none"> • Reuse on-site (may require county approval). • Contractor’s choice if excess (per Standard Specification 2-03.3(7)).
Greater than MTCA cleanup levels (problem waste).	<ul style="list-style-type: none"> • Possible limited reuse on-site with ESO coordination. • Treatment / recycling facility. • Limited-purpose landfill (Subtitle D).
Greater than dangerous waste criteria (dangerous waste).	<ul style="list-style-type: none"> • Hazardous waste landfill (Subtitle C). • Recycling facility.
Liquid	
Less than MTCA cleanup levels and Washington State surface water quality standards.	<ul style="list-style-type: none"> • Discharge to sanitary or storm sewer (with approval) . • Infiltrate.
Less than MTCA cleanup levels (problem waste) but greater than Washington state surface water quality standards.	<ul style="list-style-type: none"> • Transport to treatment facility. • Treatment on-site. • Discharge to sanitary sewer (with approval).
Greater than MTCA cleanup levels (problem waste) but less than dangerous waste criteria (dangerous waste).	<ul style="list-style-type: none"> • Transport to treatment facility. • Treatment on-site. • Discharge to sanitary sewer (with approval).
Greater than dangerous waste criteria (dangerous waste).	<ul style="list-style-type: none"> • Transport to treatment facility.

Contaminated Soil and Water Disposal Options
Table 620-1

- **Reuse Requirements** – Soils can be reused on a project site under certain circumstances as shown in Table 620-1. The contaminated soils most commonly encountered at WSDOT sites include soils containing heavy metals and petroleum products. The decision to reuse contaminated soils on-site depends on several factors

and should be made on a case-by-case basis after consulting with the ESO. Reuse must conform to all appropriate state and local guidance and regulations and materials be placed in a manner that prevents spreading of the contamination and exposure to the public (e.g., capping under asphalt, highway landscaping).

- **Metals-Contaminated Soils** – In many parts of Washington, soil contains low to moderate levels of arsenic and lead (known as area-wide soil contamination) from three main historical sources: emissions from metal smelters, use of arsenical pesticides, and combustion of leaded gasoline. Ecology also provides guidance on the reuse of soils contaminated by arsenic and lead at low to moderate levels through the *Area-Wide Soil Contamination Task Force Report*.

The report describes how physical barriers can be used at sites to prevent or limit exposure to metals-contaminated soil (arsenic and lead) or unauthorized access to a property similar to the petroleum-contaminated soils guidance. Examples of barriers include fences, grass cover, wood chips, clean soil cover, geotextile fabric (used under wood chips or clean soil cover), and pavement. Contaminated soil might be consolidated and covered with a physical barrier such as asphalt or landscape berm.

- **Disposal Requirements** – If disposal is necessary, a variety of facilities will treat and/or dispose of hazardous materials, including problem wastes such as contaminated soil and water, construction and demolition debris. Contaminated media should not remain on the project site for longer than 90 days without a permit. It is required that the contractor dispose of waste in accordance with all federal, state, and local regulations. See *Standard Specifications* Section 2-03.3(7)C for contractor-provided disposal site requirements.

For additional information on disposal of asbestos-containing materials (ACM) and lead-based paint see [Section 620.08\(4\)](#).

The types of facilities and the waste they accept are listed below:

- **Hazardous Waste Landfill (RCRA Subtitle C)** – Waste determined to be dangerous or hazardous must be disposed of by a USDOT-certified dangerous waste transport contractor at a Subtitle C landfill. Regional offices must obtain a RCRA Site Identification Number using the Ecology Dangerous Waste Site Identification Form before offering dangerous waste for transport. See Section 540.24 for information on obtaining identification numbers.
- **Municipal Solid Waste Landfills (RCRA Subtitle D)** – Generally accept problem wastes, asbestos and creosote-treated wood with notification.

- **Treatment Facilities** – Generally accept problem waste particularly petroleum contaminated soil
 - **Inert Waste Landfills** – Generally accept non-hazardous wastes such as concrete, asphalt, masonry, and glass that cannot be reused or recycled, defined in [WAC 173-350 990](#).
 - **Sanitary Sewer** – Depending on the contaminant types and concentrations and volumes, contaminated water generated may be disposed of on-site to a city sewer system after acquiring a local permit.
 - **Wood Waste Landfill** – Generally accepts land clearing wastes containing woody debris and creosote treated wood (notification usually required).
 - **Limited Hog Fuel Facilities** – Some hog fuel facilities accept creosote treated wood classified as nonhazardous (notification usually required).
- b) **Documentation Requirements** – The PE should maintain disposal documentation (e.g., lab data, sampling procedures, waste profile sheets, and disposal tickets) proving that contaminated waste was properly characterized and disposed at a legally permitted facility. Project-specific GSPs added to the construction contract require the Contractor to provide a copy of the shipping manifest or bill of lading indicating the amount of material hauled to disposal, and bearing the disposal site operator’s confirmation for receipt of the material. [Standard Specifications](#) Section 2-03.3(7) requires the contractor to provide the WSDOT Project Engineer with the location of disposal sites and copies of required permits and approvals before any waste is transported off the project site.

Local and state agencies also require documentation for certain activities when hazardous materials are encountered. For example, the local clean air agency may require documentation and notification for activities such as demolition or abatement of ACM, Ecology requires documentation for UST removal and site characterization and local health authorities may regulate and require documentation for disposal of solid waste to landfills.

- c) **Transportation** – Regulations regarding hazardous materials packaging, manifesting, transporting, and other requirements are set forth by the USDOT under [Chapter 49 CFR](#). Most of these regulations are listed in Parts 172 and 173. A summary of information regarding transportation and manifesting requirements for hazardous materials titled *Guide for Hazardous Materials Shipping Papers* can be viewed online at the [National Transportation Library](#) website

When contaminated media are classified through analytical testing as a hazardous waste, WSDOT is considered to be the generator and is responsible for obtaining hazardous waste permits (see the WSDOT [Federal, State, and Local Permits](#) web page). The transport/disposal facility or ESO office can assist with forms and regulations pertaining to hazardous waste transport and disposal.

- **Disposal Service Vendors/Contractors** – WSDOT is mandated to use state contracts for the disposal of hazardous materials from WSDOT sites. Contractors may use other vendors of their choice.
 - State [Contract No. 03505](#) – Hazardous Waste Handling and Disposal Services covers several types of hazardous waste, such as waste oil, waste paint, solvents, batteries, and Polychlorinated biphenyls (PCBs).
 - State [Contract No. 11601](#) – Spent Lighting, Computer, and Electronic Equipment Collection, Reuse, Recycling, and Disposal Services can be viewed online.
- (b) **Spills** – Project construction often requires the use of hazardous materials, such as gasoline, diesel, motor oil, hydraulic fluid, etc., that are used in construction equipment and vehicles. Cement, paint, liquid asphalt binder, and emulsified asphalt are also used to renovate or construct buildings, pedestrian walkways, parking areas, and roadways. Spills caused by the contractor are the contractor's responsibility to clean up, report, and dispose of properly.

For all WSDOT construction contracts, a Spill Prevention Control and Countermeasures (SPCC) plan must be completed and implemented in accordance with WSDOT [Standard Specifications](#) Section 1-07.15(1). SPCC plans are required to describe potential spill sources, spill prevention methods, response procedures and reporting requirements. The International Fire Code, Section 3406.2 has security and containment requirements for fuel tanks on construction sites. Secondary containment requirements are specified in Section S9.D.9 of the new 2011 Construction Stormwater General NPDES Permit. The WSDOT Hazardous Materials Program developed a number of documents and guidance materials to assist contractors in developing a SPCC plan. These include a SPCC plan template, a plan review form called the Reviewer's Protocol, an example site map, a spill reporting flowchart, and spill report form and guidance on secondary containment requirements and recommendations. Training for evaluating SPCC plans is available for WSDOT staff who review SPCC plans. These documents and training information are available through the WSDOT [SPCC](#) web page.

Spills of hazardous materials at a WSDOT site should be reported to the WSDOT Project Engineer (PE). Once notified, the PE evaluates the circumstances and follows the Environmental Compliance Assurance Procedures (ECAP) described in WSDOT [Construction Manual](#) Section 1-2.2K(1) as appropriate.

All spills should be contained, cleaned up and disposed of properly. Labeling is of prime importance when dealing with known or suspected contaminated wastes and materials. All containers must have a legible “Hazardous Materials”/“Analysis Pending” label including the project site, container contents (soil, water, and rags), type and amount of material spilled, date, location and contact information. “Hazardous Materials” or “Analysis Pending” labels can be obtained on the World Wide Web. When the nature of the substance has been characterized, the containers shall be labeled with a “Hazardous Waste” label or a “Non-Hazardous Waste” label per USDOT labeling regulations (49 CFR 173.2).

“Non-Hazardous Waste” or “Hazardous Waste” labels can be obtained on the [Ecology](#) website. See [Exhibit 447-3](#) for example waste labels.

(i) **Spills to Water** – Spills to water should be immediately contained and ECAP initiated. For life-threatening (i.e., dangerously toxic, explosive, flammable) or serious hazardous materials incidents, local police, fire, and rescue services should also be contacted by calling 911 immediately. For any quantity of spill or release to waters of the state (e.g., wetlands, groundwater, streams, creeks, lakes, and stormwater conveyance systems), the following regulatory agencies shall be contacted immediately:

- National Spill Response Center: 1-800-424-8802
- Washington State Emergency Management: 1-800-OILS-911
- Ecology Regional Offices
 - Central (Yakima): 509-575-2490
 - Eastern (Spokane): 509-329-3400
 - Northwest (Bellevue): 425-649-7000
 - Southwest (Lacey): 360-407-6300

(ii) **Spills to Soil** – For life-threatening (i.e., dangerously toxic, explosive, flammable) or serious hazardous materials incidents, local police, fire, and rescue services should be contacted by calling 911 immediately and ECAP initiated.

Spills to soil that are an immediate threat to human health and environment should be immediately contained and ECAP initiated.

For spills to soil that are not an immediate threat, but may be a threat to human health and the environment, the PE should coordinate with the WSDOT Hazardous Materials Program to determine whether the spill must be reported to the regional Ecology office within 90 days (per [WAC 173-340-300](#)). The determination to report to Ecology is based on an environmental professional’s best professional judgment that takes into consideration the site-specific circumstances and type of material spilled.

For spills to soil that are not a threat to human health and the environment, the PE should ensure the spill is immediately cleaned up and disposed of appropriately. Documentation of the cleanup and associated disposal tickets should be added to the project file.

- (iii) **Spills by Traveling Public** – Neither WSDOT nor the contractor is responsible to clean up spills that are caused by the traveling public. The responsibility of cleanup of spills by the traveling public (i.e., not a WSDOT employee or agent) is regulated under CERCLA Section 9607(b). WSDOT personnel are responsible to immediately notify the Washington State Patrol and Ecology to identify the responsible party.

If the spill is an immediate threat to human health or the environment (e.g., tank truck leaking into a water body of the state), WSDOT personnel should take action to contain the spill until Ecology or the Washington State Patrol arrive on the scene. Cleanup costs may be recovered at a later date if and when the responsible party is identified.

- (c) **Health and Safety** – All contractors working for WSDOT must provide controls to ensure the health and safety of their employees and the public. WSDOT contractors must comply with [WAC 296-62](#) and [296-155](#), which are enforced by the Washington State Department of Labor and Industries (L&I). Additional contractor health and safety requirements are presented in WSDOT *Construction Manual* Section 1-2.2(I).

WSDOT site workers (such as equipment operators, general laborers and supervisory personnel) engaged in activities which expose or potentially expose workers to hazardous substances and health hazards are required by law to receive a minimum of 40 hours of HAZWOPER training, and a minimum of three days actual field experience under the direct supervision of a trained experienced supervisor.

WSDOT site workers who are on-site for a limited task (such as surveyors) and are unlikely to be exposed over permissible exposure limits are required to receive a minimum of 24 hours of instruction off-site and a minimum of one day of actual field experience under the direct supervision of a trained experienced supervisor.

These training requirements are set forth in 29 CFR 1910.120 and [WAC 296-843](#). The regulation at 29 CFR 1910.120 can be viewed online at the [OSHA](#) web page.

It is not WSDOT policy to enforce L&I requirements, but rather to communicate with contractors when hazardous materials are known or anticipated to be present at a WSDOT site.

(4) **Requirements for Specific Hazardous Materials**

- (a) **Asbestos-Containing Materials** – Asbestos is a naturally occurring fibrous mineral that was used extensively in residential and commercial buildings. It is rarely used in new construction today. Asbestos was widely used as a

commercial product because it is non-combustible, is resistant to corrosion, and has a high tensile strength and low electrical conductivity. In residential and commercial buildings constructed before 1981, asbestos is often contained in thermal system insulation, various decorative spray-on texturing and fire-proofing, floor coverings, siding, adhesives, roofing materials, utility pipes and conduit, and thousands of other building materials and applications.

Asbestos is a known carcinogen and contributor to lung disease. In general, six types of asbestos are used in building materials. Building materials containing at least 1 percent asbestos are considered to be a regulated hazardous material. The Method for Determination of Asbestos in Bulk Samples is contained in Appendix A of Subpart F in 40 CFR Part 763.

Federal, state, and local regulations govern all aspects of asbestos management. Asbestos regulations are enforced by local air pollution control authorities, Ecology, and L&I ([WAC 296-62](#), Part I-1). Federal guidance about asbestos is found in 40 CFR 61 Subpart M, National Emissions Standards for Asbestos. Demolition of structures or excavation of buried utilities with ACM can expose workers and the public to asbestos. Management, removal, and disposal of ACM require special training, handling, and permitting.

Depending upon availability, the WSDOT ESO Hazardous Materials Program has Asbestos Hazard Emergency Response Act (AHERA)-accredited inspectors who can conduct asbestos surveys and provide assistance for management of ACM in structures and buried utilities.

- (b) **Lead-Based Paint** – Large quantities of lead-based paints (LBP) were used in the past on exterior painted wood, metal, and concrete, as well as interior window frames and doors. WSDOT projects typically encounter lead-based paint on pre-1980 buildings and almost all WSDOT and county steel structure bridges. Steel structure bridges may also contain other regulated heavy metals, such as cadmium, chromium, copper, and zinc. Environmental documentation should have been collected prior to any project to ascertain the existence of lead-based paint and determine if that paint will be disturbed.

Lead-based paint poses risks to environmental health and worker safety when disturbed for maintenance, renovation, and demolition of structures. In order to comply with applicable air, water, and safety and health regulations, lead-based paint poses significant management challenges related to construction and maintenance.

Lead-based paint also poses disposal challenges due to the toxicity of metals and may be regulated as dangerous waste. WSDOT, as a generator of hazardous materials, is responsible for overseeing and managing the disposal of project wastes. Disposal options vary depending on the toxicity and leachability of the waste determined by Toxicity Characteristic Leaching Procedure (TCLP) analysis. For example, lead concentrations in the waste materials greater than 5 milligrams per liter (mg/L) are required to be disposed of at a Subtitle C hazardous waste landfill and RCRA hazardous waste generator number will

need to be registered with Ecology. Lead concentrations less than 5 mg/L can be disposed of at a Subtitle D solid waste landfill as problem waste. Lead pipe or lead-painted metal can be recycled as scrap metal in accordance with [WAC 173-303-071\(3\)\(ff\)](#).

Leachability of the lead is reduced when contractors or maintenance personnel use binders such as Blastox in the removal of lead-based paints.

Since October 2004, individuals and contractors providing professional lead-based paint testing, abatement, or related activities in Washington have been required to be licensed by the Lead-Based Paint Program located within the Department of Community, Trade and Economic Development (CTED). Performing such activities without LBP certification from CTED is a violation of [WAC 365-230](#).

Information covering identification, disposal procedures, regulations, and health hazards is available through the Ecology [Lead Wastes Menu](#) web page.

The WSDOT *Standard Specification* 6-07.3(2)A discusses the requirements for sampling and disposing bridge paint waste. However, because of the rapidly changing policy concerning painting, any questions concerning bridge painting should be directed to the ESO Hazardous Materials Program Manager.

- (c) **Creosote Treated Wood** – Creosote-treated wood must be disposed of or reused within 180 days following removal from use. Creosote-treated wood typically falls under the “other preservative treated wood” exemptions from dangerous waste designation per [WAC 173-303-071](#). Municipal solid waste/Subtitle D landfills ([WAC 173-351](#)) will typically accept creosote-treated wood without analytical testing. Creosote treated wood may also be burned for energy recovery in an industrial furnace or boiler that has an order of approval issued pursuant to [RCW 70.94.152](#) or a local air pollution control authority. The facilities should be contacted prior to transporting waste for specific requirements. Reuse of creosote-treated wood is the recommended disposal method per Ecology’s January 2003 Publication 03-04-038.

If testing is required by the disposal facility, the following exemptions from dangerous waste apply to creosote treated wood:

- Not listed as a waste under [WAC 173-303-9903](#) and [WAC 173-303-9904](#).
- Not characterized as a TCLP waste under [WAC 173-303-090\(8\)](#).

If the treated wood does not comply with above exclusions the wood may be reused on site for its intended purpose or disposed of at:

- A permitted Transfer, Storage, and Disposal (TSD) facility or placed in an on-site facility which is permitted by Ecology under [WAC 173-303-800](#).
- A facility that will legitimately treat or recycle the treated wood waste, and manage any residue in accordance with that state’s dangerous waste regulations.

Additional exclusions from dangerous waste designation ([WAC 173-303-071](#)) apply to arsenical-treated and other preservative-treated wood. The WSDOT ESO Hazardous Materials Program can provide additional assistance for disposal options of preservative treated wood.

(5) Permits and Approvals

See the WSDOT [Federal, State, and Local Permits](#) web page for details.

(6) Non-Road Requirements

See [Section 447.07](#) for details.

620.09 Other Elements of the Environment

Other environmental issues that may arise during construction include consistency with land use plans or approvals, including Section 4(f) approvals, and the unanticipated or inadvertent discovery of historic/cultural resources. These issues will be analyzed and addressed to the extent possible during project development with any relevant requirements included into the contract. This section highlights potential issues that could arise during construction, and it references background information in [Chapter 450](#) through [Chapter 459](#).

(1) Land Use

See [Chapter 450](#) for background on land use requirements that may apply to the project. See the WSDOT [Federal, State, and Local Permits](#) web page for related permits and approvals.

For work in forested areas, the Project Engineer should encourage the contractor to comply with all federal and state forest rules and regulations governing the protection of forests and carrying out work within national and state forests. The contractor shall take all reasonable precautions to prevent and suppress forest fires. The Project Engineer shall report to the nearest forest fire warden at the earliest possible moment the location and extent of any fire and shall take immediate steps to control the fire if practicable (see WSDOT [Construction Manual](#) Section 1-2.2D). For a Memorandum of Understanding between WSDOT and the U.S. Forest Service regarding coordination of transportation activities on National Forest Lands, see [Section 450.04](#).

See the WSDOT [Federal, State, and Local Permits](#) web page for authorization to use federal lands, and easements and use permits on state-owned land.

(2) Historic and Cultural Resources

See [Chapter 456](#) for background on historic and cultural resource requirements that may apply to the project. See the WSDOT [Federal, State, and Local Permits](#) web page for federal Archaeological Resources Protection Act permit, and for state permits. Also see WSDOT [Construction Manual](#) Section 1-1.10.

It is both national and state policy to preserve historical and prehistorical objects and ruins. These may include sites, buildings, artifacts, fossils, or other objects of antiquity that may have some particular significance from a historical, cultural, or scientific standpoint.

Material sources, storage areas, pit sites, staging areas, and other areas used for WSDOT projects are subject to Section 106 compliance. For state-owned sites, the Project Engineer should coordinate with the region to ensure that material sources have been surveyed and cleared for cultural resources, so that known archaeological resources may be avoided. For contractor-owned sites, the contractor is required to obtain all necessary permits to operate the site. This will have included addressing historic and cultural preservation in the SEPA environmental checklist.

If there is a known probability of encountering historical objects, the contract will most likely have included provisions for archaeological and paleontological recovery. The special provision will usually define any potential sites and outline any recognized recovery procedures or required recovery provisions (see [Exhibit 620-2](#).)

If there is no special provision for archaeological and paleontological recovery in the contract, Section 1-07.16(2) Archaeological and Historical Objects, requires the contractor to notify the project engineer and take action to preserve the objects or ruins. Once they have been sufficiently protected, the Project Engineer should immediately notify the Region Construction Manager and the WSDOT Cultural Resources Program Manager who will provide any necessary initial assistance to the project engineer.

Where the region determines appropriate, the project engineer will contact and inform through existing region contracts and region affiliations, the State Historic Preservation Officer (SHPO), Indian tribes, and the appropriate federal agency of the discovery.

The project engineer will also help facilitate any onsite meetings for the appropriate parties should either WSDOT, SHPO, or the appropriate federal agency believes it necessary.

The most current information on unanticipated or inadvertent discovery during construction is on the WSDOT [Cultural Resources](#) web page.

(3) Social and Economic

See [Chapter 458](#) for background on social and economic considerations, including environmental justice requirements, that may apply to the project.

(4) Aesthetics and Visual Quality

See [Chapter 459](#) for background on aesthetics and visual quality requirements that may apply to the project.

Visual quality referred to in FHWA guidance on construction impacts.

620.10 Transportation/Traffic

Traffic control, pedestrian safety are environmental issues under NEPA/SEPA, and impacts will have been considered during project development. See [Chapter 460](#) for background on transportation and traffic requirements that may apply to the project.

When the work area encroaches upon a sidewalk, crosswalk, or other areas that are near an area utilized by pedestrians or bicyclists, special consideration should be given to their accommodation and safety. Pedestrians are more susceptible to personal injury in work areas than are motorists. Visibility and recognition of hazards is an important requirement for the safety of pedestrians and bicyclists. For details, see WSDOT [Construction Manual](#) Section 1-2.2 I(5).

When railroads are involved within the project limits, an agreement covering the work is usually entered into between WSDOT and the railroad company. If an agreement has not been made, the Project Engineer should coordinate and monitor the development and processing of the agreement. See WSDOT [Construction Manual](#) Section 1-2.2F.

620.11 Public Services and Utilities

See [Chapter 470](#) for background on public service and utilities requirements that may apply to the project. See also [Chapter 810](#) for utilities accommodation issues.

In some cases, utility adjustments will be completed prior to contract work. In other cases, adjustments are to be made concurrently with the work. For details on Project Engineer and contractor responsibilities, see WSDOT [Construction Manual](#) Section 12.2E.

620.12 Non-Road Requirements

No special requirements identified.

620.13 Exhibits

Exhibit 620-1 [WSDOT Standard Specifications for Hazardous Materials During Construction](#)

Exhibit 620-2 [Construction Procedures for Discovery of Archaeological and Historical Objects](#)

WSDOT Standard Specifications for Exhibit 620-1 Hazardous Materials During Construction

Condition	Specification	Title	Description
Different Site Conditions Than Anticipated <i>Example:</i> Unknown contamination or UST.	Section 1-04.7	Differing Site Conditions	This section requires the contractor to notify the WSDOT PE immediately of any changes in materials encountered that differ from that provided in the contract, including the detection of unanticipated contamination. The engineer then determines: <ul style="list-style-type: none"> • The action to be taken. • If additional monies are due to the contractor to perform the work. • If an extension of time will be granted to perform the work. The contractor and all WSDOT personnel must follow the notification procedures outlined in the WSDOT Construction Manual M 41-01 and summarized in the EPM Section 620.08(3) .
Spill Prevention, Control, and Countermeasures Plan <i>Example:</i> SPCC plan is not followed.	Section 1-07.15(1)	Spill Prevention, Control, and Countermeasures Plan	The contractor shall prepare a project-specific spill prevention, control, and countermeasures (SPCC) plan to be used for the duration of the project. The plan shall be submitted to the PE prior to the commencement of any on site construction activities. The contractor shall maintain a copy of the plan at the work site, including any necessary updates as the work progresses. If hazardous materials are encountered during construction, the contractor shall do everything possible to control and contain the material until appropriate measures can be taken. If preexisting contamination in the project area is described elsewhere in the plans or specifications, the SPCC plan shall indicate measures the contractor will take to conduct work without allowing release or further spreading of the materials.
Contractor is Not Following the Contract Requirements <i>Example:</i> Not adhering to SPCC Plan. <i>Example:</i> Not storing contaminated soil appropriately.	Section 1-05.1	Authority of the Engineer	This section stipulates that the contractor must follow the direction of the WSDOT PE. If the contractor fails to respond promptly to the requirements of the contract or orders from the PE: <ul style="list-style-type: none"> • The PE may use contracting agency resources, other contractors, or other means to accomplish the work. • The contracting agency will not be obligated to pay the contractor and will deduct from the contractor's payments any costs that result when any other means are used to carry out the contract requirements or engineer's orders. If the contractor is not adhering to the SPCC Plan and it becomes necessary for the agency to use on call environmental consultants, the agency has the ability to deduct from the contractor's payments any costs resulting from the need to carry out the contract requirements.

Condition	Specification	Title	Description
Leaking Equipment <i>Example: N/A</i>	Section 1-05.9	Equipment	<p>This section states that the PE will reject equipment that repeatedly breaks down or fails to produce results within the required tolerances. The contractor shall have no claim for additional payment or for extension of time due to rejection and replacement of any equipment.</p> <p>Over the course of a project, small leaks and drips can cumulatively add up to create a toxic cleanup site subject to Ecology regulations. Contractors should address leaks and drips onto soil in a timely manner so that a rain event does not result in contamination to surface water. In cases where the contractor has not addressed these problems as they occur, the contractor should be held accountable during final cleanup. WSDOT should not be held responsible for performing environmental cleanup because the contractor performed poorly.</p>
Negligent Employees Causing Harm to the Environment <i>Example: Intentional spills of hazardous materials.</i>	Section 1-05.13	Superintendents, Labor, and Equipment of Contractor	<p>This section states that, at the PE's written request, the contractor shall immediately remove and replace any incompetent, careless, or negligent employee. Noncompliance with the request shall be grounds for terminating the contract under the terms of Section 1-08.10.</p> <p>Any WSDOT employee that observes a contractor ignoring environmental responsibilities may notify the PE regarding having the contractor removed from the project.</p>
Contractor Not Obeying Regulations <i>Example: Disposing of contaminated soil at a nonregulated facility.</i>	Section 1-07.1	Laws to be Observed	<p>This section requires that the contractor shall always comply with all federal, state, or local laws, ordinances, and regulations that affect work under the contract. The contractor shall indemnify, defend, and save harmless the state (including the Commission, the Secretary, and any agents, officers, and employees) against any claims that may arise because the contractor (or any employee of the contractor or subcontractor or material person) violated a legal requirement.</p> <p>If the WSDOT inspector is having difficulty gaining voluntary compliance, it is acceptable to contact the regulatory agency for assistance. In such cases, if Ecology issues a fine, it will likely be issued to the contractor rather than WSDOT.</p>
Improper Treatment of Hazardous Materials <i>Example: Spill of hazardous materials into water bodies of the state.</i>	Section 1-07.5(3)	State Department of Ecology	<p>This section requires that the contractor shall dispose of all hazardous materials in ways that will prevent their entry into state waters:</p> <ul style="list-style-type: none"> • Toxicants (including creosote, oil, cement, concrete, and equipment wash water). • Debris, overburden, and other waste materials. <p>Notify the Ecology department immediately should oil, chemicals, or sewage spill into state waters. The contractor is contractually responsible for contacting Ecology should a spill occur. WSDOT is also legally responsible for ensuring that contact is made.</p>
Damage to Structures <i>Example: Damage to a monitoring well.</i>	Section 1-07.13(4)	Repair of Damage	<p>This section states that the contractor shall promptly repair all damage to either temporary or permanent work as directed by the engineer. For damage qualifying for relief under Sections 1-07.13(1), 1-07.13(2), or 1-07.13(3), payment will be made in accordance with Section 1-04.4. Payment will be limited to repair of damaged work only. No payment will be made for delay of disruption to the work. The PE may elect to accomplish repair by contracting agency forces or other means.</p>

Condition	Specification	Title	Description
Damage to Employees, Structures, or the Environment <i>Example:</i> Contamination caused by the contractor.	Section 1-07.14	Responsibility for Damage	<p>This section states that the contractor, and not WSDOT, is responsible for losses or damages. The state, Commission, Secretary, and all officers and employees of the state, including but not limited to those of WSDOT, will not be responsible in any manner for any loss or damage that may happen to the work or any part, or for damage to the public for any cause which might have been prevented by the contractor, or the workers, or anyone employed by the contractor.</p> <p>The contractor shall be responsible for any liability imposed by law for injuries to, or the death of, any persons or damages to property resulting from any cause whatsoever during the performance of the work, or before final acceptance.</p> <p>The contractor shall also bear sole responsibility for any pollution of rivers, streams, groundwater, or other waters which may occur as a result of construction operations. The contractor shall exercise all necessary precautions throughout the life of the project to prevent pollution, erosion, siltation, and damage to property.</p>
Reasons for Termination of Contract <i>Example:</i> N/A	Section 1-08.10(1)	Termination for Default	<p>This section states that the contracting agency may terminate the contract upon the occurrence of any one or more of the following events:</p> <ul style="list-style-type: none"> • If the contractor fails to supply sufficient skilled workers or suitable materials or equipment (ESC/Spill Lead). • If the contractor disregards laws, ordinances, rules, codes, regulations, orders, or similar requirements of any public entity having jurisdiction. • If the contractor disregards the authority of the contracting agency. • If the contractor performs work which deviates from the contract and neglects or refuses to correct rejected work. • If the contractor otherwise violates in any material way any provisions or requirements of the contract. <p>The contractor shall bear any extra expenses incurred by the contracting agency in completing the work, including all increased costs for completing the work, and all damages sustained, or which may be sustained, by the contracting agency by reason of such refusal, neglect, failure, or discontinuance of work by the contractor.</p>
Unanticipated Work <i>Example:</i> Unanticipated contamination.	Section 1-09.4	Equitable Adjustment	<p>This section provides the guidelines for determining equitable adjustment when performing unanticipated work.</p>

Source: Washington State Department of Transportation. 2008. [Standard Specifications for Road, Bridge, and Municipal Construction](#) M 41-10.

Following is a General Special Provision to be added to contract specifications as indicated. More recent updates may be available via WSDOT's website:

www.wsdot.wa.gov/design/projectdev/gspamendments.htm

Select Division 1

Also refer to Standard Specifications 2008, [page 1-68](#).

General Special Provisions Division 1

0716.GR1 – Protection and Restoration of Property

071604.GR1 - Archaeological and Historical Objects (December 6, 2004)

Use in projects when reconnaissance studies indicate that there is the probability of finding cultural remains within the project limits which will require monitoring the project area during clearing, grubbing, or excavation operations. Requires a pay item.

Section 1-07.16(4) is supplemented with the following:

The project area potentially contains archaeological or historical objects that may have significance from a historical or scientific standpoint. To protect these objects from damage or destruction, the contracting agency, at its discretion and expense, may monitor the contractor's operations, conduct various site testing and perform recovery and removal of such objects when necessary.

The contractor may be required to conduct its operations in a manner that will accommodate such activities, including the reserving of portions of the work area for site testing, exploratory operations and recovery, and removal of such objects as directed by the engineer. If such activities are performed by consultants retained by the contracting agency, the contractor shall provide them adequate access to the project site.

Added work necessary to uncover, fence, dewater, or otherwise protect or assist in such testing, exploratory operations and salvaging of the objects as ordered by the engineer shall be paid by force account as provided in Section 1-09.6. If the discovery and salvaging activities require the engineer to suspend the contractor's work, any adjustment in time will be determined by the engineer pursuant to Section 1-08.8.

To provide a common basis for all bidders, the contracting agency has entered an amount for the item "Archaeological and Historical Salvage" in the proposal to become a part of the total bid by the contractor.