2020

City of Portland

Source Control Manual

ENVIRONMENTAL SERVICES
CITY OF PORTLAND

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Table of Contents

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Chapter 1. Purpose and Authority

The Source Control Manual (SCM) is a City of Portland administrative rule that is adopted, implemented, and enforced by the Bureau of Environmental Services (BES). The purpose of the SCM is to describe source control requirements specific to development and post-development activities that have the potential to discharge to surface waters, groundwater, or the storm, sanitary, or combined sewer systems. A source control is a structural, treatment, or operational best management practice (BMP) required by the SCM to prevent or control the release or potential release of pollutants generated by certain site activities or characteristics.

This SCM describes required structural, treatment, and operational BMPs designed to control specific types of sources of pollutants and prevent or reduce the release of pollutants for projects or sites with specific site activities or characteristics.

1.1. Goals of the SCM

The specific source control requirements of this manual are based on the following goals and objectives:

- Prevent soil, groundwater, and surface water pollution by eliminating pathways that may introduce pollutants
- Prevent negative impacts to the City stormwater, sanitary, and combined sewer systems
- Protect water quality
- Protect human health
- Segregate onsite stormwater and sanitary flows up to the connection with the appropriate receiving system
- Direct wastewater discharges and areas with the potential for wastewater discharges (such as vehicle washing facilities) to the sanitary or combined sewer system
- Direct areas that have the potential for accidental spills and are not expected to regularly discharge stormwater (such as covered fuel islands or covered containment areas) to an allowable method of containment and point of discharge approved by BES

- Safely contain spills onsite, avoiding preventable discharges to storm, sanitary, or combined sewers; surface waterbodies; groundwater; and underground injection control structures (UICs)

1.2. Regulatory Authority of the SCM

The Federal Water Pollution Control Act of 1948, as amended in 1972, is commonly known as the Clean Water Act (CWA). The CWA addresses water pollution and establishes the foundation for regulating pollutant discharges into the waters of the United States. The CWA requires the City to regulate discharges into the public sewer and drainage systems to ensure that pollutants, and the flow and volume of pollutant discharges, do not harm the public sewer systems or receiving water. The discharges also must not endanger the life and health of the public or City personnel, or cause or contribute to an exceedance of water quality standards and Portland City Code (PCC) requirements.

The City operates under a federal National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit, which requires the implementation of pollutant reduction measures for development and post-development activities within the City. The City also operates under an NPDES permit for wastewater treatment plant effluent, which includes requirements for collection system capacity, management, operation, and maintenance (CMOM) for the sanitary and combined sewer systems.

In addition, the federal Safe Drinking Water Act (SDWA) of 1974 provides a comprehensive framework to ensure the quality and safety of drinking water supplies. Within the state of Oregon, the Department of Environmental Quality (DEQ) regulates stormwater discharges to UIC systems under the SDWA and 40 Code of Federal Regulations (CFR) parts 144 through 146. The U.S. Environmental Protection Agency (EPA) delegated authority to the DEQ. The DEQ regulates this program under Oregon's Groundwater Protection Act and Oregon's Groundwater Protection Rules (Oregon Administrative Rule [OAR] 340, Divisions 40 and 44). The City manages public UICs for stormwater under a DEQ-issued water pollution control facility (WPCF) permit and implements a UIC program. The goal of the City's UIC program is to protect groundwater resources, primarily used for drinking water, from contamination and to protect public health. Private drainage to a city-owned UIC is prohibited.

The City's required compliance with the federal and state permits, and regulations described above provides the authority for BES to implement Portland City Code

(PCC). PCC Chapter 3.13 includes the mission of BES to protect public health, water quality and the environment.

PCC Chapters 3.13, 17.32, 17.33, 17.34, 17.38, and 17.39 and the associated BES administrative rules grant the City the authority to require parties to implement pollution-reduction and source controls and dispose of wastewater to a City sanitary sewer discharge point approved by BES.

PCC Section 3.13.050 grants BES the authority to develop and require permits, authorizations, inspections, and other forms of review and approval to implement and ensure compliance with the above-mentioned city code chapters.

The SCM is part of BES's administrative rules (ENB 4.34) authorized by PCC Chapters 17.34, 17.38, and 17.39.

The SCM supports the City's regulatory mandates by providing source control requirements to reduce the impacts of stormwater and wastewater within the City of Portland.

1.3. SCM Revision and Amendment Process

The SCM is reviewed and updated as necessary. SCM revisions may be based on considerations including, but not limited to, the following:

- Consideration of new or pending regulatory requirements
- Consideration of updated and new technologies
- Review and outcomes from appeals made during the previous implementation period
- Review of BES staff comments and concerns
- Review of community comments and concerns, including those from advisory bodies and professional organizations
- Review of other City requirements and technical standards
- Review for consistency with city code and BES administrative rules

The amendment process will also include a public comment period to review amendments, as described in PCC Chapter 3.13, with documentation and explanation of significant changes made.

Chapter 2. Applicability

The SCM requirements apply to specific site activities or characteristics associated with commercial, industrial, and multi-family housing projects or sites. Projects or sites with proposed activities or existing site characteristics covered by the SCM are required to meet all applicable SCM requirements. The SCM requirements apply to private development activities, projects, or sites on public or private property.

The SCM requirements are applicable during the following processes:

- During development or redevelopment, based on:
    - The type of activities that occur or are proposed to occur
    - When dewatering will occur during construction
    - When ground disturbance or infiltration will occur at sites that have known or potential contamination or are located adjacent to or nearby contaminated sites
- BES notification of code requirements or enforcement activities

Removal or remedial action projects that meet the criteria of Oregon state law (ORS 465.315(3)) 1 may be exempt from local permits, licenses, authorizations and procedural requirements. Those clean-up projects still must meet the substantive requirements of local code, and those portions of a clean-up project that fall outside of the DEQ-approved portion will be subject to all state and local requirements. The non-procedural requirements of the SCM are substantive. Applicable substantive SCM requirements must be met for all projects. ORS 465.315(3) requires the person performing a removal or remedial action project to notify the appropriate state or local governmental body of that body's permits, licenses, authorizations or procedural requirements that are potentially subject to the exemption. Upon receipt of the notification, the City will determine which procedural requirements will be waived and whether all the applicable local code requirements will be met. Alternatively, the person performing the removal or remedial action project may elect to obtain local permits, licenses or authorizations and comply with procedural requirements.

[1] The DEQ Fact Sheet can be found online at https://www.oregon.gov/deq/FilterDocs/DescriptionPermitWaiverProvisions.pdf

Contact BES Development Review at 503-823-7122 for help in determining if SCM requirements apply.

2.1. Applicable Site Activities and Characteristics

Projects or sites with the following site activities and characteristics are subject to the SCM requirements:

- Waste Storage
- Food Cart Pods
- Covered Vehicle Parking
- Material Transfer and Loading Docks
- Aboveground Storage, Processing, or Transfer of Liquids
- Fuel Transfer and Fuel Dispensing
- Equipment or Vehicle Washing
- Motorized Vehicle or Equipment Storage and Repair
- Exterior Storage or Processing of Solid Materials
- Contaminated Site Requirements
- Site Dewatering Requirements

BES will evaluate source controls for other activities not listed above on a case-by-case basis to ensure compliance with applicable city code and administrative rule requirements.

These site activities and characteristics are described in detail in Chapters 6, 8, and 9.

2.2. Development Review Applicability

The SCM requirements apply when development or redevelopment is proposed; dewatering will occur; or if the site is contaminated, potentially contaminated, or adjacent to a contaminated site.

Projects or sites required to obtain permits from the Bureau of Development Services (BDS), such as requiring the issuance of a commercial (CO), site development (SD), development review (DR), major projects (MG), or facility (FA) type permit, must meet the requirements of the SCM. All permits that have the potential to affect activity

areas regulated by the SCM (e.g., waste storage areas, exterior storage areas, or loading docks) are subject to BES review during the BDS permitting process.

2.2.1. Applicability for Sites Required to Obtain Permits from BDS

The SCM requirements apply to the following projects or sites during the permitting process (refer to **Section 5.3** for additional information on the permitting process) with the following criteria:

For new discharge locations. Projects or sites proposing a new direct discharge to a waterbody; a new connection to the public storm, sanitary, or combined sewer or drainage system; or a new discharge to groundwater must meet all applicable SCM requirements for the area draining to the new connection or receiving system.

New construction and redevelopment. Projects or sites proposing new construction, including redevelopment, are subject to all SCM requirements, based on the activities proposed. The SCM requirements are applicable only within the project area described by the applicant in the plan set in the scope of work.

Additions and alterations to existing facilities, including tenant improvements, core and shell permits and change of occupancy. Projects or sites proposing additions, alterations, or tenant improvements to existing facilities based on the activities proposed within the areas included in, and affected by, the scope of work proposed or within the project area described by the applicant in the plan set are subject to the SCM requirements. Existing activity areas of the site that are not included in, or affected by, the proposed scope of work will not be required to include site modifications to meet the SCM requirements. Site activities and type of waste generated vary over time, therefore all tenant improvements, core and shell permits and change of occupancy projects must meet the requirements for waste storage described Section 6.1.

2.2.2. Applicability for Sites with Suspected or Known Contamination or Adjacent to Contaminated Sites

The requirements in **Chapter 8** apply to projects or sites, including proposed private development projects located on, adjacent to, or nearby a property with known or suspected contamination in soil, stormwater, or groundwater and are proposing work that could mobilize or exacerbate contamination.. These sites will be identified based on review of site characterization data provided by the applicant as required in **Section 8.1.** An applicant may be required to provide previously collected information or complete an additional site characterization of the project area and conduct

additional sampling. As stated above, removal or remedial action projects that meet the criteria of Oregon state law (ORS 465.315(3)) may be exempt from local permits, licenses, authorizations and procedural requirements.

The SCM requirements apply to projects or sites with known or suspected contamination or adjacent to, or nearby contaminated sites that are proposing or meeting the following conditions:

- Onsite stormwater infiltration
- Discharges (construction-related and post-construction) from new development or redevelopment projects
- New or additional discharges to a City system or surface waters
- Changing a point of discharge from a private or City system to a City system or surface waters
- Dewatering activities
- Soil management (e.g., excavation, grading, filling, capping) during construction or implementation of environmental cleanup activities

Even if a site is not listed in one of DEQ's or EPA's databases or has received some form of regulatory closure (such as DEQ's No Further Action determination), contamination may still be present. In addition, BES may have specific reason to suspect the presence of contamination, based on the location of the project. For example, potential areas of concern include but are not limited to upland areas that drain or ultimately discharge to the Portland Harbor Superfund Site on the lower Willamette River, the Columbia Slough watershed, South Waterfront industrial areas, and sites in other areas with a history of industrial uses (e.g., the Pearl District) or certain commercial uses (including but not limited to dry cleaners, auto repair facilities, gas stations, or construction debris landfills).

Examples of site conditions when BES may require additional soil or groundwater characterization, as described in **Chapter 8**, if the site or project proposes onsite stormwater infiltration, dewatering activities, or will manage soils during construction or environmental cleanup activities. These activities include but are not limited to:

- Known or suspected soil or groundwater contamination within the work area and the work area that may disturb the contamination
- Known or suspected soil or groundwater contamination at nearby and adjacent sites and contamination that might migrate to a project site or discharge

contaminants to a City sanitary or storm sewer or surface waters, or the project has the potential to exacerbate existing conditions by mobilizing contaminants

- Potential transport of contaminants to the City's storm or sanitary sewer during construction or post-construction (e.g., direct discharge to conveyance lines, indirect discharge via preferential pathways)

Given the complex nature of soil and hydrogeology and contaminant migration, BES reserves the right to require additional investigations and analyses to ensure the City's sewer systems, public health and the environment (including groundwater, rivers, streams, wetlands, or other surface waterbodies) are adequately protected.

2.2.3. Applicability for Site Dewatering

The dewatering requirements of **Chapter 9** of the SCM apply to all construction-related dewatering discharges from private development-related projects or sites.

Projects or sites with new construction, additions, or improvements must comply with **Chapter 9** requirements if they include any of the following:

- Below-grade excavation that is likely to encounter groundwater
- Offsite discharge of construction-related groundwater and impounded stormwater
- Offsite discharge of groundwater post-construction
- Dewatering of sediment, sludges, dredged materials, or other materials
- Structures designed to flood

A project or site that has a 1200C permit is required to meet the dewatering requirements of **Chapter 9** of this SCM if the project includes a discharge to a city receiving system.

Additional site characterization requirements may also apply to dewatering at sites with known or suspected contamination or sites adjacent to or nearby a property with known or suspected contamination, as described in **Chapter 8**.

The SCM requirements do not apply to:

- Discharges from subsurface drains that the City determines are not a significant source of pollutants or a significant flow rate
- Stormwater runoff from the project site

Please call 503-823-5600 for information on the appropriate dewatering permits or authorizations.

2.3. BES Violation Case Applicability

Projects or sites issued a BES enforcement action, or other notification of BES code requirements, that include a requirement to meet the SCM requirements as a result of that violation must meet SCM requirements applicable to the site activity or characteristic or applicable to the area of the site that contributed to the violation.

The project or site issued a BES violation or notification of BES code requirements must meet all applicable SCM requirements for the required scope of work to correct the violation, as described in the violation or notification. The BES violation or notification will require the project or site to contact the BES Source Control Hotline at 503-823-7122 to pre-screen the application before permit submittal. The necessary corrective actions may be subject to BDS Development Review and require building permits to be reviewed by BES.

2.4. Special Circumstances Review

Special circumstances for a project or site may make it impracticable to meet the SCM requirements. BES has a Special Circumstance Review process for projects or sites to propose alternative measures for development proposals with site conflicts or technical constraints. In addition, the project or site may request an exemption from SCM requirements for development proposals when the site uses are not known at the time of permitting, in order to defer meeting the SCM requirements until subsequent permitting when the site activities are known.

Refer to **Chapter 10** for criteria and submittal requirements related to Special Circumstance reviews.

Chapter 3. Relationship to Other Requirements and Standards

The SCM does not incorporate or address all regulatory requirements potentially applicable to a project or site and, therefore, does not eliminate the need to comply with other applicable local, state, and federal regulatory requirements. The SCM supplements but does not replace other local, state, and federal requirements and technical standards. Other requirements and standards may conflict with SCM requirements. It is the responsibility of the site or permit applicant to contact the City to resolve potential conflicts between the requirements.

All discharges to the City's stormwater, sanitary, or combined sewer systems must meet applicable city code and administrative rule requirements, including discharge limits and applicable requirements of the Stormwater Management Manual (SWMM; ENB-4.01). Discharges must be directed to a discharge point approved by BES. Discharge to the City sanitary sewer must meet requirements of PCC Chapter 17.34. Discharge to the City storm sewer must meet requirements of PCC Chapter 17.39. Wastewater and stormwater treatment may be required to meet these requirements.

3.1. Stormwater Management Manual

The SWMM[2] provides post-construction stormwater management policy and design requirements addressing infiltration, discharge, pollution reduction, and flow and volume control standards. Implementing requirements of the SWMM will help protect Portland's water resources and conserve the existing and future conveyance capacity of storm sewers and combined sewers.

Together, the SCM and the SWMM make up a BES portfolio of administrative rules authorized by PCC Chapter 17.38, Drainage and Water Quality. Together, the SCM and SWMM describe City requirements to protect the environment, City assets, and the public. The content of the two manuals may overlap while addressing different aspects of stormwater management. Developers and design professionals must reference both manuals to determine the appropriate standards that apply to a project or site.

[2] The SWMM can be found online at https://www.portlandoregon.gov/bes/64040.

The requirements of the SCM pertaining to specific site activities and characteristics are applied in addition to the applicable pollution reduction, flow control, infiltration, and discharge requirements identified in the City's SWMM.

3.2. Sewer and Drainage Facilities Design Manual

The Sewer and Drainage Facilities Design Manual (SDFDM) (ENB-4.14)[3] is the primary reference for designing public sewers and drainage facilities. These requirements apply to all public sanitary, combined, and storm sewers and drainage facilities owned by the City and those owned by private parties but located in public rights-of-way or in public easements.

3.3. Public Works Permit

The Portland Bureau of Transportation (PBOT) has broad code authority over public improvements in the right-of-way under PCC Title 17 and Title 33. Street improvements required as a condition of private development activity will often trigger SWMM requirements. Street and stormwater improvements in the public right-of-way, including those required as a condition of approval for private development or other utility construction such as sanitary sewer extensions, are most often constructed under a Public Works Permit. Private development activity in the public right-of-way has applicable design standards and construction requirements. Projects going through the Public Works Permit process will have opportunities during concept design review to identify and resolve any conflicting requirements with City staff.

3.4. Oregon Plumbing Specialty Code

Oregon Plumbing Specialty Code (OPSC)[4] provides design standards and criteria to assist City staff, consultants, designers, and others who are responsible for planning, designing, constructing, reviewing, and approving private sewer and plumbing associated with drainage facilities on private property within the City of Portland. Plumbing code requirements are implemented through BDS during the development review process for private property.

[3] The Sewer and Drainage Facilities Design Manual can be found online at https://www.portlandoregon.gov/citycode/28175.
[4] The Oregon Plumbing Specialty Code can be found online at http://epubs.iapmo.org/2017/Oregon/mobile/index.html#p=1.

3.5. Erosion and Sediment Control Manual

PCC Title 10, Erosion and Sediment Control Regulations, provides requirements for development and construction-related activities to control the transport of sediment and to reduce erosion associated with ground-disturbing activities. The City's Erosion and Sediment Control Manual (ENB-4.10)[5] provides technical guidance for meeting the erosion control requirements of PCC Title 10. Soil erosion and sediment transport negatively impact public health, waterways and stormwater systems, and public infrastructure.

Erosion control is a requirement of the City's NPDES MS4 permit. BDS enforces temporary and permanent erosion control measures for development and construction projects within the City of Portland during the development review and construction inspection processes for permitted sites. BES is responsible for enforcing PCC Chapter 10.10 on non-permitted sites. BES enforces the requirements of PCC Chapter 10.10 through ENB 4.30.

3.6. Columbia South Shore Well Field Wellhead Protection Area Reference Manual

The Columbia South Shore Well Field Wellhead Protection Area Reference Manual (UTL-2.04)[6] describes groundwater protection requirements within the Columbia South Shore Well Field Wellhead Protection Area (CSSWF WHPA), which encompasses portions of the cities of Fairview, Gresham, and Portland. The Portland Water Bureau review is required to verify compliance with the wellhead protection regulations.

The CSSWF WHPA Reference Manual outlines specifications and requirements for existing sites located in the designated CSSWF WHPA that transport, store, or use any mobile hazardous or toxic material. The wellhead protection requirements also apply to development activities in the CSSWF WHPA that, upon commencement of operations, will transport, store, or use any mobile hazardous or toxic materials.

The CSSWF WHPA Reference Manual requires protection of groundwater using both structural and non-structural measures. CSSWF WHPA regulations apply to indoor and outdoor storage areas, loading and unloading areas, fuel dispensing facilities, storage maintenance and repair of vehicles and equipment, and transportation routes on private property and in public rights-of-way. In conjunction with this SCM, CSSWF

[5] The Erosion and Sediment Control Manual can be found online at https://www.portlandoregon.gov/citycode/article/81661.

[6] The Columbia South Shore Well Field Wellhead Protection Area Reference Manual can be found online at https://www.portlandoregon.gov/citycode/article/319605.

WHPA requirements focus on spill control measures and preventing pollutants from entering groundwater.

3.7. Port of Portland Stormwater Design Standards Manual

As of January 1, 2014, the Port of Portland adopted the Stormwater Design Standards Manual (DSM; revised in 2017).[7] Within the City of Portland, this SCM, the SWMM, and the Port's DSM may all apply. Projects on Port-owned property within the City of Portland require coordination with both Port and City staff to determine the applicable standards. The Port requires that coordination with Port staff occurs prior to submitting relevant development permit applications to the City.

The Port requires that projects within the DSM applicability area that include the following activities implement source control measures in accordance with the requirements of the SCM:

- Solid waste storage areas, containers, and trash compactors
- Material transfer areas/loading docks
- Fuel dispensing facilities and surrounding traffic areas
- Aboveground storage of liquid materials, including tank farms
- Equipment and vehicle washing facilities
- Covered and uncovered vehicle parking area
- Exterior storage and/or processing of bulk materials
- Water reclaim and reuse systems

[7] The Port of Portland Stormwater Design Standards Manual can be found online at http://cdn.portofportland.com/pdfs/Stormwater_Design_Standards_Manual_app.pdf.

Chapter 4. Additional Permitting and BES Requirements

Depending on site uses and discharges, the project applicant or site may be subject to additional regulatory discharge permitting requirements. BES will evaluate site uses and discharges to determine additional permitting requirements.

For questions regarding these requirements, contact BES Development Review at 503-823-7122.

4.1. NPDES Construction General Stormwater Permitting Requirements

For projects that involve 1 acre or more of soil-disturbing activity during construction and have the potential to discharge stormwater to surface waters from construction activities, the applicant is required to obtain a DEQ 1200-C NPDES Construction General Stormwater Permit.

If required, it is the applicant's responsibility to obtain a DEQ 1200-C permit.

For more information on 1200-C permitting requirements, contact the DEQ Water Quality Division.[8]

4.2. Industrial Wastewater Permitting Requirements

The City administers a federally approved pretreatment program that is designed to protect the City's publicly owned treatment works and the environment from potentially adverse impacts. Depending on business activities, site uses, and the types of wastewater pollutants generated, a discharger may be required to obtain an industrial wastewater discharge permit or other discharge authorization[9] prior to introducing wastewater to the sanitary or combined sewer system.

If a wastewater discharge permit may be required, the applicant may be required to revise a building permit application to address site- or pollutant-specific regulatory permitting compliance requirements (e.g., sampling points, pretreatment facilities).

[8] Information about the 1200-C NPDES Construction General Stormwater Permit can be found at https://www.oregon.gov/deq/wq/wqpermits.

[9] Authorized discharges must meet applicable discharge standards before discharge commences to the City's sanitary or combined sewer system.

4.3. NPDES Industrial Stormwater General Permitting Requirements

Depending on site activities and standard industrial classification (SIC) codes, a discharger may be required to obtain an NPDES Industrial Stormwater General Permit (1200-Z) [10] from the State of Oregon before discharging to the City's separated storm sewer system or to waters of the State. The City is an agent for DEQ's Industrial Stormwater General Permit Program.

The City considered the requirements of the NPDES Industrial Stormwater General Permit and No Exposure Certification guidance[11] in developing the source control requirements in the SCM to better enable stormwater dischargers to meet requirements of the 1200-Z permit or qualify for a No Exposure Certification.

If an NPDES Industrial Stormwater General Permit is required, the applicant may be required to revise a building permit application to address site- or pollutant-specific regulatory permitting compliance requirements (e.g., sampling points, stormwater treatment facilities).

4.4. Water Pollution Control Facility (WPCF) Permitting Requirements

DEQ regulates groundwater under Oregon's Groundwater Protection Act and Oregon's Groundwater Protection Rules (OAR 340, Division 40 and 44). The intent of the program is to protect groundwater resources, primarily used for drinking water, from contamination and to protect public health.

If the stormwater from the property will discharge to a private UIC, it is the applicant's responsibility to obtain a DEQ-issued UIC authorization by rule or obtain an individual WPCF permit. DEQ requires that the applicant obtain a permit from the DEQ before constructing, operating, or modifying a subsurface injection system, per OAR 340-044-0020(1) and 340-044-0035.

OAR 340-044-014 and 340-044-0015 describe DEQ UIC prohibitions. These DEQ regulations may prohibit stormwater discharge to UICs from areas with the following activities described in the SCM, depending on site use and conditions, particularly if substances onsite are petroleum-related or hazardous:

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[10] Information about the NPDES Industrial Stormwater General Permit can be found at https://www.portlandoregon.gov/bes/31844 or https://www.oregon.gov/deq/wq/wqpermits/Pages/Stormwater-Industrial.aspx.

[11] Information about the No Exposure Certification can be found at https://www3.epa.gov/npdes/pubs/noxguide.pdf and https://www.oregon.gov/deq/FilterPermitsDocs/indSTnoexposureexcl.pdf

- Material Transfer and Loading Docks
- Above-Ground Storage, Processing, or Transfer of Liquids
- Fuel Transfer and Fuel Dispensing
- Equipment or Vehicle Washing
- Motorized Vehicle or Equipment Storage and Repair
- Exterior Storage or Processing of Solid Materials
- Contaminated Sites Requirements

Complete DEQ UIC regulations, requirements, current exclusions or exemptions, and contact information are available on the DEQ UIC Program website.[12]

It is the project applicant or site's responsibility to coordinate with the DEQ UIC Program and ensure discharges to the UIC meet DEQ requirements and obtain applicable permits.

4.5. Other Local, State, and Federal Regulations, Requirements, and Standards

The requirements presented in this SCM do not exclude or replace the requirements of other applicable codes or regulations, such as the hazardous substances storage requirements of Articles 79 and 80 of the Oregon State Fire Code; Oregon DEQ Environmental Cleanup regulations; Oregon DEQ Solid or Hazardous Waste regulations; Oregon DEQ Water Quality regulations; the federal Spill Prevention Control and Countermeasure (SPCC) regulations of 40 CFR 112; the federal Resource Conservation and Recovery Act; the CWA; the SDWA; or any other applicable local, state, or federal regulations or permit requirements.

In the event of a conflict, the most stringent requirement of the local, county, state, or federal regulations generally applies. The City will resolve any conflict in consultation with appropriate agencies, as necessary.

4.6. Additional BES Requirements

4.6.1. BES-Issued Permits

[12] Information about the DEQ UIC Program can be found at https://www.oregon.gov/deq/wq/wqpermits/Pages/UIC.aspx.

BES may require the project applicant or site provide additional information to determine the appropriate receiving system authorized to receive certain discharges. BES may also require a project applicant or site to apply for a BES-issued discharge permit. Additional information and required authorizations may include the following:

- Program-specific environmental survey(s)
- Industrial Wastewater Discharge Permit
- Alternative Discharge Control Mechanism for discharge to the sanitary sewer system
- Batch Discharge Authorization
- BES-issued Stormwater Discharge Permit
- Stormwater Discharge Authorization

4.6.2. Monitoring Access Structures

BES may require the project applicant or site to install a permanent monitoring access structure that meets the requirements of the Administrative Rules for Monitoring Access Structures (ENB-4.35)[13] to ensure compliance with the requirements of a regulatory permit or discharge authorization or for billing purposes. BES will determine the need and requirements for monitoring and sampling, in accordance with PCC Chapters 17.34, 17.36, and 17.39 and associated administrative rules, during the BES plan review process (BES Development Review).

4.6.3. Sub-Meter Requirements

BES may require the project applicant or site to install a sub-meter for commercial and industrial sites to determine the volume of water discharged to the City's sewer systems and to facilitate sewer use and charge assessments.

If a discharge sub-meter is required, it must comply with the discharge meter specifications and requirements stipulated in PCC Chapter 17.36, BES Sub-Meter Program Administrative Rules (ENB-4.32),[14] and other associated administrative rules. Submeters must be the appropriate type and appropriately located and sized. Submeters must be calibrated and maintained at ±2.5 percent accuracy.

[13]BES Administrative Rules for Monitoring Access Structures (ENB 4.35) can be found at https://www.portlandoregon.gov/citycode/article/590513.
[14] BES Administrative Rules for the Sub-Meter Program (ENB 4.32) can be found at https://www.portlandoregon.gov/citycode/article/518084.

For a Sub-Meter Application or additional information on the sub-meter program, call BES at 503-823-7856 or contact BES via email at submeterprogram@portlandoregon.gov.

Chapter 5. Source Control Manual Overview and Usage

BES Development Review is BES's process for evaluating development plans and site activities and characteristics against SCM requirements. BES Development Review occurs during the permitting process administered by BDS.

The site activities and characteristics identified in the SCM may generate specific pollutants that are not addressed solely through the installation of stormwater facilities identified in the SWMM for new development and redevelopment activities or violation cases. Pollutants addressed by the SCM include but are not limited to oil and grease, toxic hydrocarbons, heavy metals, toxic compounds, solvents, abnormal pH levels, nutrients, organics, bacteria, chemicals, and suspended solids.

5.1. Activities That Require Source Control Best Management Practices (BMPs)

As listed in Chapter 2, projects or sites with the following site activities and characteristics are subject to the SCM requirements:

- Waste Storage
- Food Cart Pods
- Covered Vehicle Parking
- Material Transfer and Loading Docks
- Aboveground Storage, Processing, or Transfer of Liquids
- Fuel Transfer and Fuel Dispensing
- Equipment or Vehicle Washing
- Motorized Vehicle or Equipment Storage and Repair
- Exterior Storage or Processing of Solid Materials
- Soil, Stormwater, and Groundwater Management on Land with Suspected or Known Contamination or Area Adjacent to Contaminated Sites
- Site Dewatering

To quickly determine which source control BMPs are required for site activities or characteristics (proposed or current), refer to **Table 5-1**. For detailed information, go to the applicable site activity and characteristics sections in Chapters 6 through 9,

and follow the requirements to design source controls for the project or site for each site activity or characteristic subject to the requirements of the SCM.

5.2. Mandatory Source Control BMPs

The mandatory source control requirements detailed in the SCM fall into three BMP categories:

- Structural BMPs
- Treatment BMPs
- Operational BMPs

Structural BMPs

A structural source control BMP is a physical structure or device that controls or prevents pollutants from entering groundwater, a waterbody, or the public sewer or drainage system. Examples may include physical covers, or berms that segregate or enclose pollution sources.

This manual emphasizes structural controls over operational procedures because they are not operator-dependent and are considered to provide a more permanent and reliable means of source control.

Treatment BMPs

A treatment source control BMP is a mechanism that is intended to remove pollutants from a pollutant source and requires ongoing maintenance. Treatment BMPs specifically referenced in this manual include oil-water separators and grease interceptors. Treatment BMPs may be required on a case-by-case basis, as determined by BES.

Chapter 7 describes oil-water separator design requirements.

Operational BMPs

An operational source control BMP is a non-structural practice that prevents or reduces pollutants from entering groundwater, a waterbody, or the public sewer or drainage system. Examples include but are not limited to signage, modifications of facility processes, and treatment system maintenance.

Chapter 7 describes signage design requirements and oil-water separator operations and maintenance (O&M) procedures and O&M submittal requirements.

Table 5-1. Mandatory BMPs by Site Activities and Characteristics*

	Structural						Treatment		Operational				
Site Activities and Characteristics (SCM Section Number)	Pavement	Cover	Containment	Drainage	Shut-off valves	Soil management	Oil-water separator	Grease interceptor	Signage	Recorded O&M Plan	Shut-off valve testing	Discharge logs	BMPs described in text
Waste Storage (6.1)	✓	✓	✓	✓					✓				
Food Cart Pods (6.2)				✓				✓	✓				
Covered Vehicle Parking (6.3)				✓									
Materials Transfer and Loading Docks (6.4)	✓			✓	✓				✓		✓		
Aboveground Storage, Processing, or Transfer of Liquids (6.5)	✓	✓	✓	✓	✓				✓		✓	✓	
Fuel Transfer and Fuel Dispensing (6.6.2)	✓	✓	✓	✓	✓		✓		✓	✓	✓		
Mobile Fueling (6.6.3)													✓
Equipment or Vehicle Washing (6.7)	✓	✓		✓			✓			✓			
Motorized Vehicle and Equipment Storage and Repair (6.8)	✓	✓		✓	✓		✓		✓	✓	✓		
Exterior Storage or Processing of Solid Materials (6.9)	✓	✓	✓	✓	✓				✓		✓		
Contaminated Site Requirements (8)				✓		✓							
Site Dewatering Requirements (9)				✓									

*Additional treatment may be required by BES to meet discharge requirements.

5.3. Overview of the BES SCM Review Process

BES Development Review is BES's process for evaluating development plans and site activities (current and proposed) against SCM requirements. Projects or sites that choose to install or are required to install source controls must apply for relevant development permits and comply with the BES Development Review process requirements before BES will authorize the project or approve discharge to a proposed receiving system.

BDS manages the permit application and permit review process. Contact BDS Permitting Services at 503-823-7300 for permitting and submittal requirement questions.

BES Development Review will be conducted during the permit review process, following submittal of the permit application to ensure SCM requirements are met. To initiate the BES Development Review, at a minimum the permit applicant must submit a completed Building Permit Application Form, construction plans, other supporting documents and required fees to:

City of Portland Bureau of Development Services
Development Services Center
1900 SW Fourth Avenue
Portland, OR 97201

The permit application must include site plans detailing where the applicable site activities or characteristic (as described in Chapters 6 through 9) occurs or will occur onsite and, if applicable, identify the known areas of contamination. Documents must clearly label pertinent structures required per the SCM. The SCM O&M Plans and, as applicable, the Construction Dewatering Discharge Application Form, must also be provided.

In addition, BES may also require compliance with the SCM through site inspections and associated enforcement action or notification of city code requirements. BES may require a facility to make source control-related modifications if site activities or conditions are in violation of city code or administrative rules. The BES violation or notification will require the project or site to contact the BES Source Control Hotline at 503-823-7122 to pre-screen applications before permit submittal to BDS if permits are applicable to the required source control-related modification.

Any proposal for an alternative source control BMP that is not already specified in this manual as a mandatory source control BMP must follow the source control

Special Circumstances Review process described in **Chapter 10**. A proposal for an alternative source control must describe the long-term viability of the alternative BMP to meet the intent of the SCM requirements in the Source Control Special Circumstances Form.

For questions regarding these requirements, contact BES Development Review at 503-823-7122.

Chapter 6. Site Use and Activity-Based Source Control Requirements

This chapter describes the mandatory source control requirements or BMPs that a project applicant or site must meet, based on specific site activities or characteristics. The following sections (Section 6.1 through 6.9) correspond to specific site activities listed previously in **Chapter 2**.

The project applicant or site is required to meet all the source control requirements that apply. The project applicant or site must identify all applicable site activities and associated mandatory source control BMPs in the permit application submittal package. Detailed design drawings must be provided to show how BMPs are configured or applied onsite to meet the requirements of the SCM.

This chapter also aids the project applicant or site in meeting city code and administrative rule requirements. All discharges must meet applicable city code and administrative rule requirements, including discharge limits and applicable requirements of the SWMM. Discharges must be directed to a discharge point approved by BES. Discharges to the City sanitary and combined sewer systems must meet City sanitary sewer discharge requirements per PCC Chapter 17.34. Discharge to the City storm sewer must meet requirements of PCC Chapter 17.39. The project applicant or site must ensure these requirements are met. Wastewater and stormwater treatment may be required.

All drainage installed to meet SCM requirements needs to conform with applicable OPSC and SWMM requirements. OPSC requirements will be reviewed by BDS. It is the responsibility of the project applicant or site to ensure these requirements are met and they must contact the City to resolve potential conflicts between the requirements.

Contact BES Development Review at 503-823-7122 for help in determining if requirements apply or with questions regarding requirements.

6.1. Waste Storage

6.1.1. Applicability

The requirements in this section apply to all projects or sites where there is waste storage onsite.

A waste storage area is an indoor or outdoor area where waste is collectively stored for disposal or recycling offsite. The waste can be uncontained or in containers, such as dumpsters, compost bins, grease bins, recycle bins, garbage bins, or compactors (including self-contained compactors with a "belly/bladder" liquid containment area). This includes areas used to collect and store refuse or recyclable materials, such as can or bottle return stations and debris collection areas.

Some examples of wastes may include:

- Putrescible (capable of rotting or decomposing) and non-putrescible waste
- Recyclable materials, including food scraps, yard debris, paper, metal, tires, and glass
- Waste oil/grease of animal or vegetable origin ("polar grease")
- Toxic, greasy, or oily materials
- Solid wastes from hospitals, restaurants, grocery stores, hotels, offices, or stores

SCM requirements apply even if the property owner or tenant proposes to use a waste pickup service or otherwise dispose of waste offsite. This ensures that structural facilities are in place onsite to store waste materials until offsite disposal or in cases where offsite disposal is temporarily discontinued.

The requirements of this section do not apply to:

- Single-family homes, or duplex, triplex or fourplex multi-family residential projects or sites without a shared trash collection area
- Areas used only for the temporary storage of wood pallets, or for cardboard or paper that is not comingled with other recyclables, before these materials are removed for recycling
- Indoor waste storage areas that are hydraulically isolated and do not have a potential to discharge pollutants to outdoor areas
- Development projects, including tenant improvements and change of use or occupancy permits (even if no construction is proposed), if both of the following conditions are met:
    - The wastes generated by the proposed are non-putrescible or very low-putrescible, nontoxic, and free of excess liquids. Examples of uses that generate low-risk solid wastes may include, but are not limited to, realtor offices, retail stores, or office buildings.

- The development projects do not include a new waste storage area, relocation of the existing waste storage area, or modification of the existing waste storage area.

The following activities are not covered in this section and are covered elsewhere in the manual:

- Facilities that recycle/process materials, such as wood pallets, cardboard, tires, or paper or dispose of waste materials as their primary business activity are described in **Section 6.9.**
- The storage and processing of liquids is described in **Section 6.5.**

Note: Project applicants will be asked to indicate on the plan set submitted for permitting where waste storage and grease bins are located.

6.1.2. Source Control Requirements

6.1.2.1. Structural BMPs

Pavement. The entire waste storage area must be paved with asphalt or concrete. Permeable pavement is not allowed.

Cover. A permanent canopy, roof, or awning must cover the waste storage area to prevent rainfall from contacting the stored waste. The cover must completely cover the waste storage area and extend sufficiently to prevent stormwater from impacting the hydraulically isolated area.

Cover exemption. Compactors do not require a cover.

Containment. Liquids stored within the waste storage area must have secondary containment of liquids to mitigate potential impacts from spills or leaks. Secondary containment is required for automotive fluids and recyclable restaurant grease and may be required additionally on a case-by-case basis. The type of secondary containment used can be determined by the applicant, as appropriate, for site activities.

Containment can typically be accomplished with a curb, berm, or containment system (e.g., a spill pallet) with the capacity to capture a minimum of 110 percent of the volume of the largest container, or 10 percent of the total volume of all containers, whichever is larger.

Containment exemption. Multi-family residential sites are exempt from the secondary containment requirement.

Drainage. The paved waste storage area must be hydraulically isolated to prevent stormwater run-on and runoff. This can be achieved by reverse-grading at the perimeter of the waste storage area, perimeter curbing or berming, or the use of area drains to collect and divert runoff.

Drainage generated within the covered hydraulically isolated storage area must be directed to a City sanitary sewer approved by BES. Areas with hose-bibs (or similar) must be directed to a City sanitary sewer discharge point approved by BES.

Drainage outside the covered hydraulically isolated storage area must be directed away from the hydraulically isolated area to the onsite storm system.

Rainfall from the cover must be directed to the onsite storm system.

6.1.2.2. Treatment BMPs

BES will determine if treatment BMPs are required to meet the standards of the discharge location.

6.1.2.3. Operational BMPs

Signage. Plainly visible signage must be provided at the waste storage area if hazardous materials or other materials of concern are present. More information is provided in **Chapter 7**, and signage examples are located in **Section 7.1.2**.

O&M Plan. An O&M Plan for any treatment BMP installed per SCM requirements must be recorded with the County and submitted to the City per **Section 7.2**.

6.1.2.4. Additional Requirements

Other City requirements may apply to waste storage areas, such as walls and screening.

DEQ may prohibit discharge to an UIC for this site use. Refer to OAR 340-044 for prohibitions and requirements. It is the responsibility of the project applicant or site to meet applicable UIC requirements.

DEQ may require waste storage permits and other regulatory requirements for the storage of wastes, including but not limited to hazardous wastes and waste tires. It is the responsibility of the project applicant or site to meet all applicable state and federal requirements.

Refer to **Figure 6-1** for a site layout and typical details of required source controls for waste storage. These illustrations are for reference only.

Figure 6-1. Waste Storage

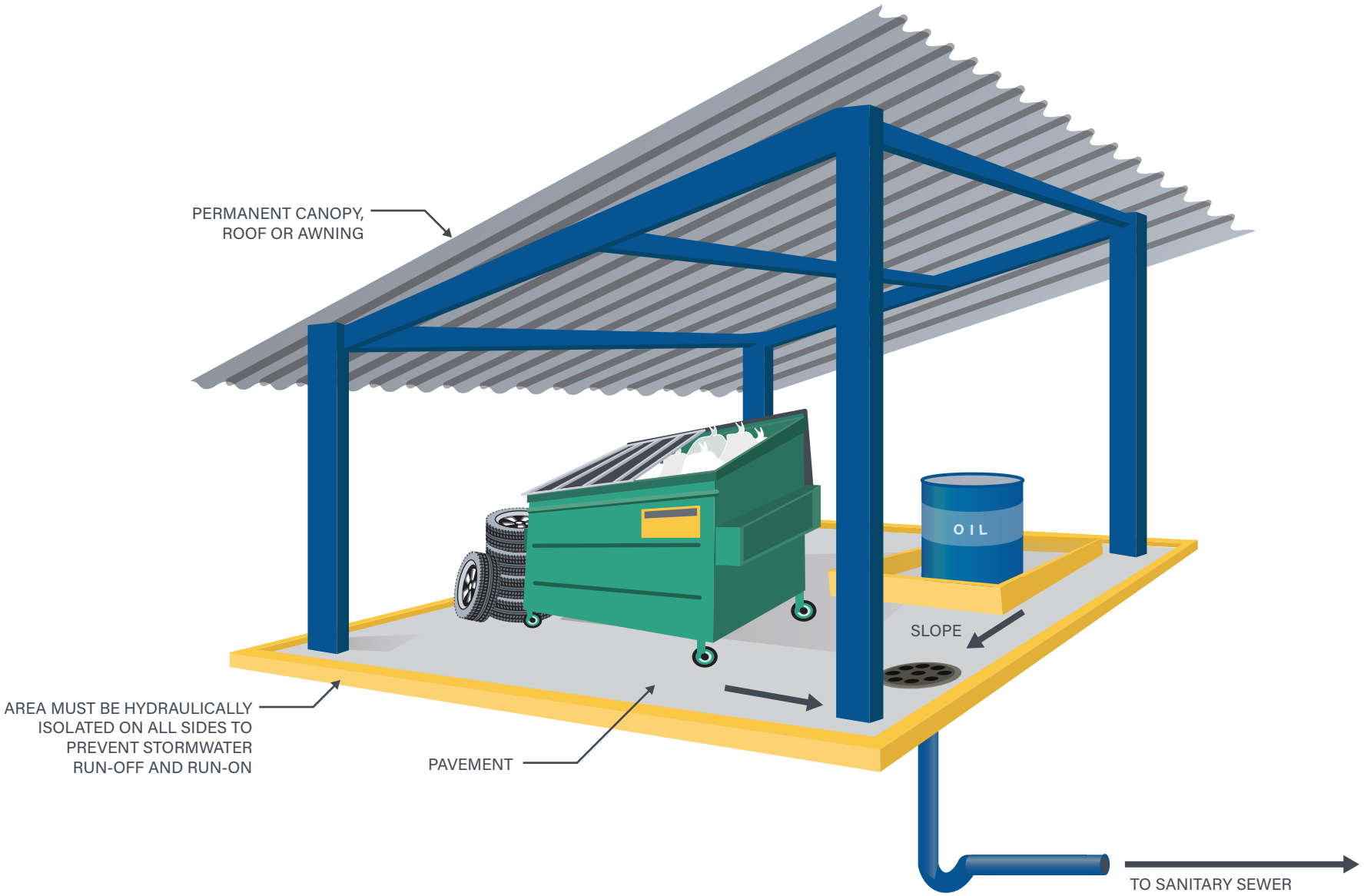


FIGURE IS FOR REFERENCE ONLY.

6.2. Food Cart Pods

6.2.1. Applicability

The SCM requirements apply to all projects or sites meeting at least one of the following conditions:

- A property that hosts more than one food cart for more than 8 hours per day for one or more days
- A property that hosts more than one food cart for longer than 14 days cumulatively within a 365-day period

The requirements of this section do not apply to the following:

- A property that hosts a single food cart for any amount of time
- A property that hosts more than one food cart for less than 8 hours per day and the food carts take their wastewater with them for offsite disposal upon leaving the property
- Sidewalk vending food carts
- A property without an available public sewer in the area

Contact BES Development Review at 503-823-7211 for help in determining the closest available public sewer.

The following activities are not covered in this section and are covered elsewhere in the manual:

- Waste storage requirements are described in **Section 6.1.**

Note: Additional regulations apply to the disposal of food cart wastewater, including PCC Chapters 17.33, 17.34, and 17.39 and ENB 4.26.

The discharge point for any food cart that does not trigger the applicability criteria above and that chooses to dispose of food cart wastewater offsite must discharge to the sanitary sewer. For example, the disposal location may be located offsite (e.g., an internal storage tank is transported with the food cart for disposal in a multi-compartment sink in a commissary kitchen that drains to a grease interceptor, or a wastewater tank is hauled by a licensed wastewater hauler to an offsite permitted disposal location).

Discharge of sewage and hazardous materials into a food cart dump station is prohibited.

Discharge of food cart wastewater to any storm drain, roof downspout, or sanitary sewer fixture not connected to a grease interceptor is prohibited.

6.2.2. Source Control Requirements

6.2.2.1. Structural BMPs

Drainage to sanitary sewer. The property hosting a food cart pod must provide dump stations for food cart wastewater that are connected to the sanitary sewer. At a minimum, at least one dump station must be provided for every four food carts in the pod. A dump station must be located within 30 feet of every food cart within the food cart pod. Wastewater drainage hoses must not be located in areas accessed by the general public. The dump station must be hydraulically isolated through grading, berms, or an elevated standpipe with a lid to prevent stormwater run-on and runoff.

Drainage to stormwater. Stormwater runoff from the property hosting a food cart pod must be directed to the onsite storm system.

6.2.2.2. Treatment BMPs

Grease interceptor. Discharges from dump stations receiving food cart wastewater must be treated using a grease interceptor. All dump stations must be directed to approved and properly sized grease interceptors. Multiple dump stations may be directed to a single grease interceptor. Human waste must not be directed to the grease interceptor.

A grease interceptor required by the SCM must meet the requirements prescribed in this section. A grease interceptor installed to meet SCM requirements needs to conform to applicable OPSC requirements. OPSC requirements will be reviewed by BDS.

Note: Project applicant or sites installing a grease interceptor with a cumulative capacity of 500 gallons or greater must install a monitoring access structure that meets the requirements of ENB-4.35, Administrative Rules for Monitoring Access Structures. See **Section 4.6.2**.

6.2.2.3. Operational BMPs

Signage. Signage must be posted at the dump station area and plainly visible to anyone accessing the dump station. Signage must clearly identify the dump station and state that the purpose of the dump station is to collect food cart wastewater and discharge it to the City sanitary sewer. Signage must state that the dump station is not for dumping anything other than food cart wastewater. Signage must direct the reader to contact both the site's emergency response team and the City's spill response line (503-823-7180) in the event of a spill.

O&M. The property owner hosting a food cart pod, or their operator or agent must maintain the grease interceptor in accordance with the City of Portland Fats, Oils, and Grease Removal Program under Administrative Rule ENB-4.26.

Refer to **Figure 6-2** for a typical site layout of required source controls for food cart pods. This schematic is for reference only.

Figure 6-2. Food Cart Pods

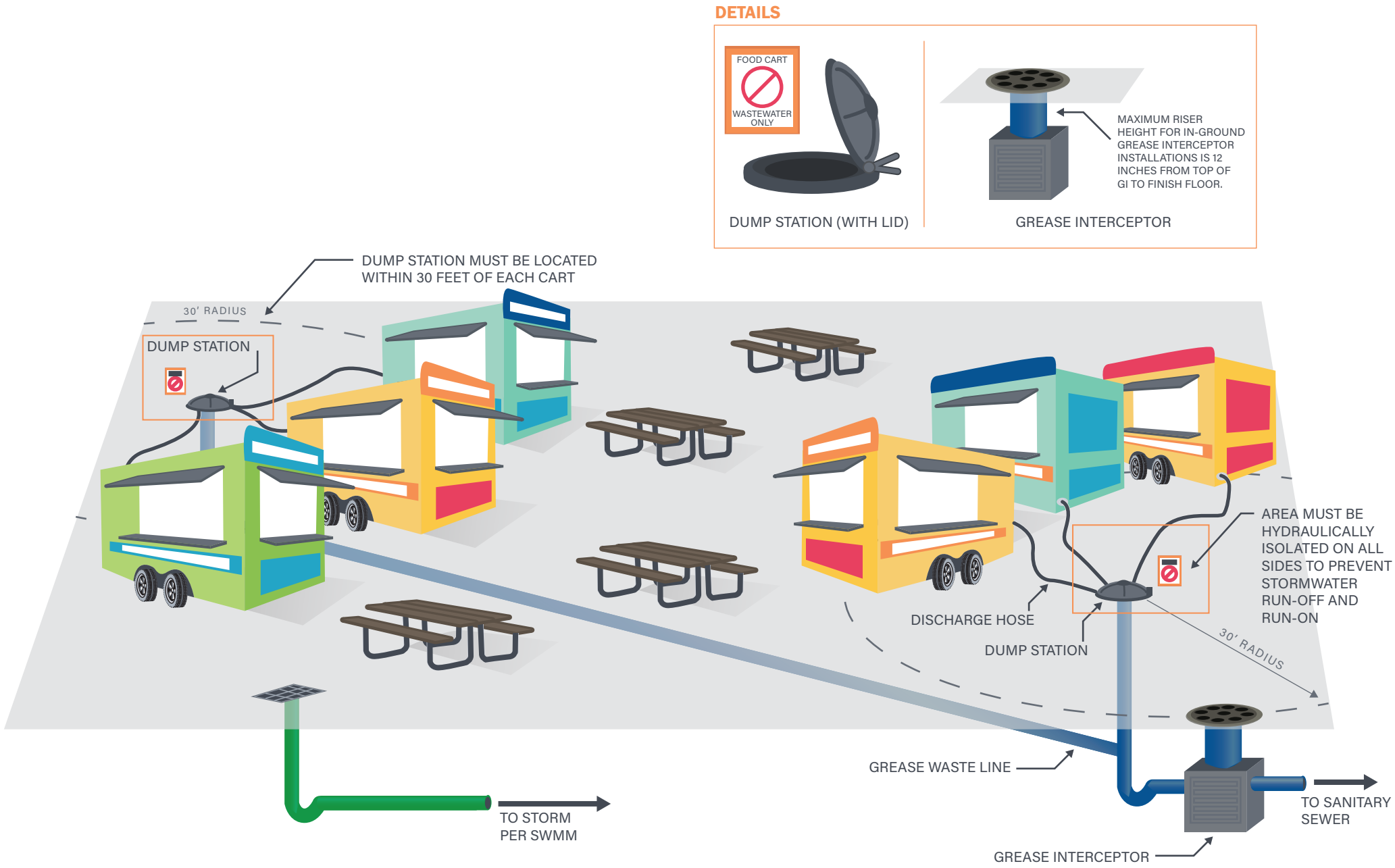


FIGURE IS FOR REFERENCE ONLY.

6.3. Covered Vehicle Parking

6.3.1. Applicability

The SCM requirements apply to all projects or sites with covered parking structures and areas. This includes the following:

- Below-grade parking structures
- Multi-story above-grade parking structures
- Grade-level parking areas with covers such as canopies, overhangs, and carports
- Above-grade and below-grade structures designed to flood during a flood event

The requirements of this section do not apply to:

- Uncovered surface parking lots
- Single-family, duplex, triplex, or fourplex residential parking areas

6.3.2. Source Control Requirements

6.3.2.1. Structural BMPs

Drainage for all covered structures. The site must be designed so stormwater run-on does not enter the covered areas. This can be accomplished through grading, berms, or area drains. Drainage systems to collect and transport stormwater are not required for the interior areas of the structure. If the applicant elects to install an interior drainage system to collect and transport stormwater, the drainage must be directed to City sanitary or combined sewer discharge point approved by BES. Rainfall must be directed from the cover to the onsite storm system.

Drainage for below-grade parking structures. Trench drains must be installed at the entrance to the parking structure and discharge to the storm sewer system in accordance with the following site configurations:

- For a sloped ramp **longer than 10 feet** long, the trench drain must be located within the first 10 feet of the covered entrance.
- For a sloped ramp **less than or equal to 10 feet** long, the trench drain must be located within 2 feet of the covered entrance.

Drainage for multi-story above-grade parking structures. Stormwater from the uncovered top floor of the parking structure or roof of the structure must be directed to the onsite storm system.

Drainage grade-level parking areas with covers (e.g., canopies, overhangs, or carports). Stormwater from the cover must be directed to the onsite storm system.

6.3.2.2. Treatment BMPs

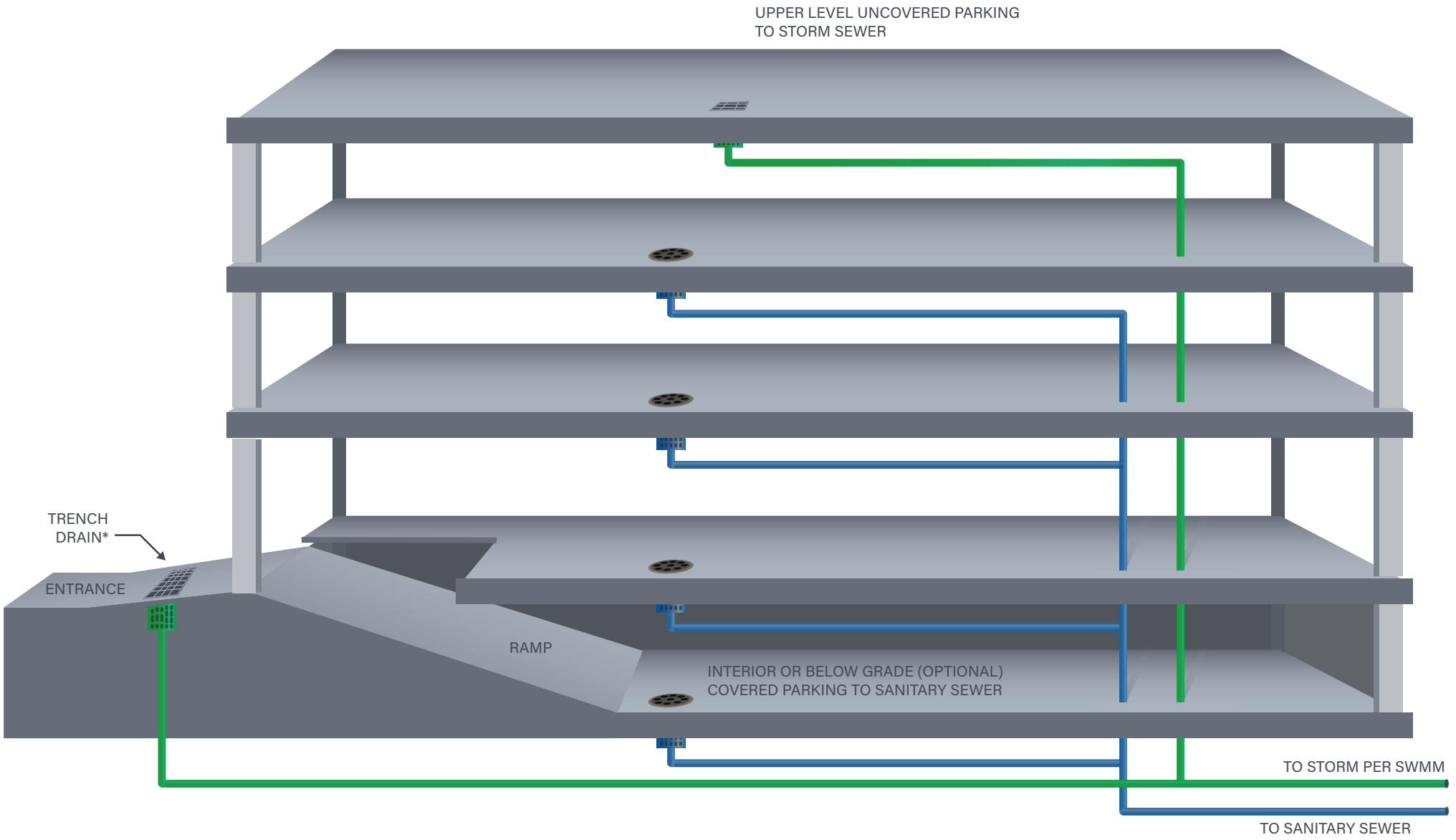
No treatment BMPs are required for this section.

6.3.2.3. Operational BMPs

No operational BMPs are required for this section.

Refer to **Figure 6-3** for a typical site layout of required source controls for covered vehicle parking. This schematic is for reference only.

Figure 6-3. Covered Vehicle Parking



*TRENCH DRAINS TO STORM SEWER MUST BE INSTALLED FOR BELOW GRADE PARKING STRUCTURES.

- INSTALL WITHIN TWO FEET OF ENTRANCE WHERE RAMP IS LESS THAN 10 FEET LONG
- INSTALL WITHIN TEN FEET OF ENTRANCE WHERE RAMP IS GREATER THAN 10 FEET LONG

FIGURE IS FOR REFERENCE ONLY.

6.4. Material Transfer and Loading Docks

6.4.1. Applicability

The SCM requirements apply to all projects or sites with material loading and unloading transfer areas. This includes projects proposing to make structural alterations to existing loading and unloading material transfer areas (e.g., access ramp regrading, or leveler installations) with the following characteristics:

- The area is designed (size, width, etc.) to accommodate a truck, trailer, or railcar being backed up to or into it.
- The area is expected to be used specifically to receive or distribute materials to and from trucks, trailers, or railcars.

Loading and unloading areas typically include:

- Loading and unloading docks
- Shipping and receiving areas
- Bay doors and associated interior transfer areas
- Rail car loading or unloading areas

The following activities are not covered in this section and are covered elsewhere in the manual:

- Transfer of liquids (e.g., chemicals, food products, oils, solvents, cleaners, wastewater or petroleum) to an onsite storage tank or within a site via valves and pipes, which is described in **Section 6.5**
- Fuel transfer and dispensing, which are described in **Section 6.6**

The requirements do not apply to structural alterations that convert a loading or unloading material transfer area to another use (e.g., a raised sidewalk).

Contact BES Development Review at 503-823-7122 for help in determining if requirements apply.

6.4.2. Source Control Requirements

6.4.2.1. Structural BMPs

Pavement. All sections of interior and exterior material transfer areas where loading and unloading occur must be paved with asphalt or concrete. Permeable pavement is not allowed.

Drainage. Exterior loading or unloading material transfer areas, require the following:

- For an elevated loading dock, the first 3 feet of the paved area, measured perpendicularly from the building or dock face, must be hydraulically isolated using grading, berms, or drains.
- For a railcar loading and unloading area, the transfer area must be hydraulically isolated using grading, berms or drains, or appropriately sized drip tray or underground containment vault.
- Drainage within the hydraulically isolated area must be directed to a City sanitary sewer discharge point approved by BES or to an authorized sanitary pretreatment facility.
- Drainage outside the hydraulically isolated area must be directed to the onsite storm system.

Interior loading or unloading material transfer areas, such as ground-level bay doors or ramped loading areas require the following:

- Bay doors and associated interior loading or unloading material transfer areas must be designed so that stormwater does not enter the building. This can be accomplished with grading or drains.
- Interior loading or unloading material transfer areas must be designed so they slope toward the inside of the building to prevent spills or material drag-out from entering the storm sewer system.
- Interior loading or unloading material transfer areas are not typically exposed to rainfall. Therefore, the installation of drainage facilities (e.g., floor drains) is not required or recommended. If the applicant elects to install drainage facilities inside an interior transfer area, the drainage facilities must be directed to a City sanitary sewer discharge point approved by BES or to an authorized sanitary pretreatment facility.

Shut-off valves. A shut-off valve is required on a sanitary discharge line when a site is exposed to, or is expected to be exposed to, any of the following:

- Known or potentially harmful materials, such as corrosives, oxidizers, and hazardous materials
- Substances, such as oils and grease, that could inhibit function of the sewer conveyance system

- Substances that are known to infiltrate through soils and contaminate groundwater

For material transfer areas and loading docks, a shut-off valve must meet the following requirements:

- The shut-off valve must be installed downstream of the material transfer area and upstream of any domestic waste-line tie-ins.
- The shut-off valve must be closed prior to initiating the transfer of the above-mentioned substances and reopened only after the transfer is complete.
- Discharge to the sanitary system is allowed only if it does not exceed sanitary system discharge standards and does not pose a threat or risk to the publicly owned treatment system.
- Shut-off valves are not allowed in the public right-of-way. They must be located onsite and downstream of material transfer activity areas.
- Shut-off valves must be clearly labeled to identify open and closed valve positions.
- Shut-off valves must be installed and maintained per manufacturer recommendations.
- Shut-off valves must be tested regularly to ensure they are functional.

6.4.2.2. Treatment BMPs

BES will determine if treatment BMPs are required to meet the standards of the discharge location.

6.4.2.3. Operational BMPs

Signage. Spill response signs must be posted at the loading and unloading area and must be plainly visible.

The signs must direct personnel to contact both the site's emergency response team and the City's spill response line (503-823-7180) in the event of a spill.

Signs must also be posted at all shut-off valve areas directing personnel to keep the valve closed to contain spills during loading and unloading. More information is provided in **Chapter 7**, and signage examples are in **Section 7.1.2.**

O&M Plan. An O&M Plan is required for any treatment BMP installed per SCM requirements and must be recorded with the County and submitted to the City per **Section 7.2**.

Note: If the site has additional regulatory reporting requirements (required by DEQ, SPCC Plan, industrial stormwater, or pretreatment), these also should be included on the signage. City code requires immediate spill notification.

Shut-off valves. Shut-off valves must be tested on a regular basis to ensure they are functional in the event of a spill. The testing date must be documented.

6.4.3. Additional Requirements

DEQ may prohibit the discharge to an UIC for this site use. Refer to OAR 340-044 for prohibitions and requirements. It is the responsibility of the permit applicant or site to meet applicable UIC requirements.

Refer to **Figure 6-4** for a typical site layout showing required source controls for material transfer and loading docks. This schematic is for reference only.

Figure 6-4. Material Transfer and Loading Docks

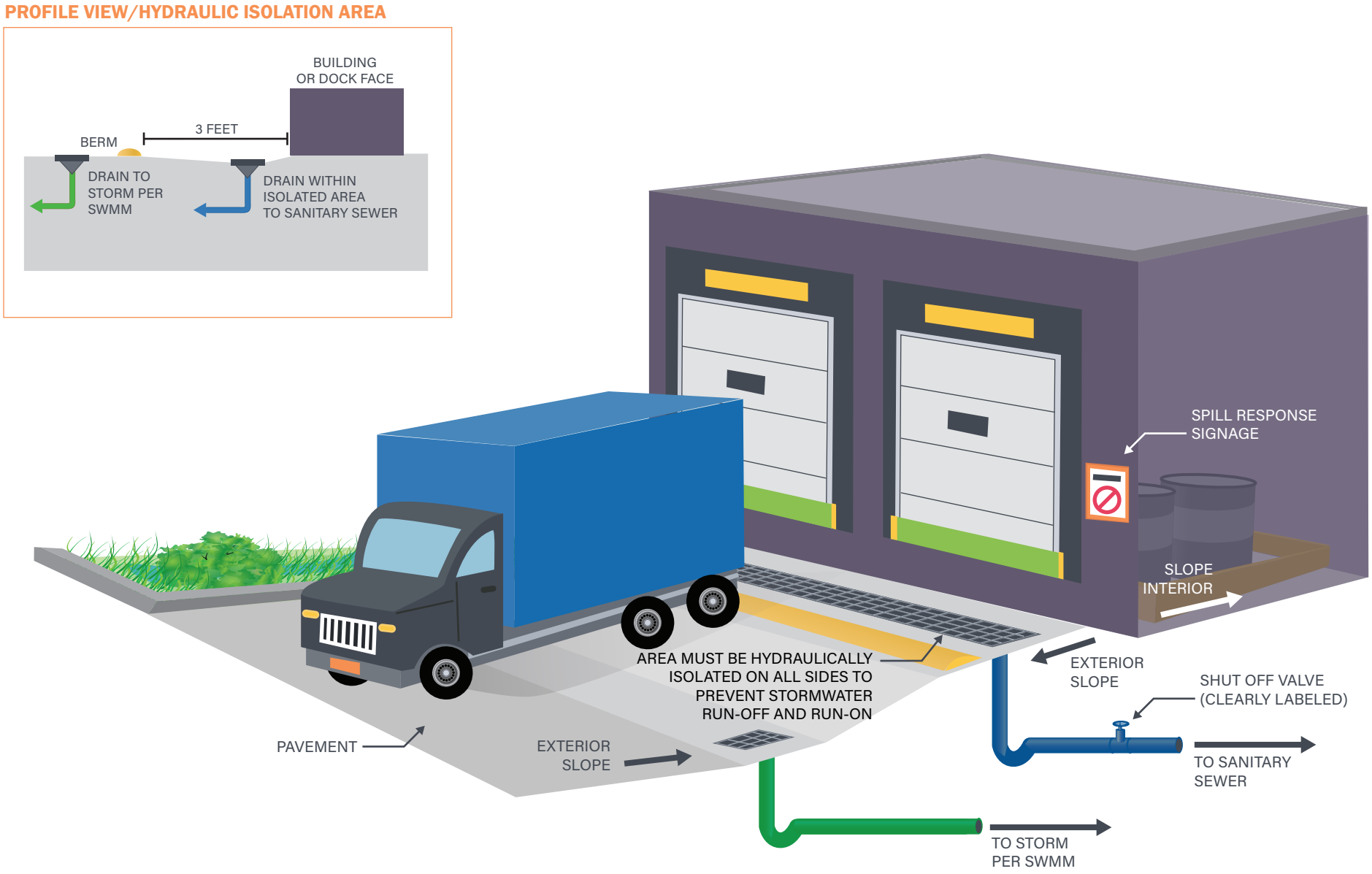


FIGURE IS FOR REFERENCE ONLY.

6.5. Above-Ground Storage, Processing, or Transfer of Liquids

6.5.1. Applicability

The SCM requirements apply to all projects or sites where there is interior or exterior storage, processing, or transfer of liquids materials via valves, pumps, connections, or nozzles. Examples of liquid materials include but are not limited to chemicals, food products, oils, solvents, cleaners, leachate, wastewater, process waters, or petroleum products in above-ground storage tanks (ASTs) or other containers.

The requirements of this section do not apply to:

- Retail establishments where goods are sold as the sole activity onsite (e.g., home improvement stores, grocery stores).
- Materials that exist in a gaseous form at ambient temperatures and do not exist in liquid form for any time period.
- Liquid material storage associated with construction. During construction, sites are required to implement the BMPs outlined in the City's Erosion and Sediment Control Manual.[15]

The following materials are not covered in this section and are covered elsewhere in the manual:

- Storage of waste oil and grease of animal or vegetable origin ("polar"), which is described in **Section 6.1**
- Fuel Transfer and Fuel Dispensing, which is described in **Section 6.6**

An exemption to the requirements of this section may be granted under select circumstances. If applicable, the applicant must propose an alternative that meets or exceeds these requirements and submit a Source Control Special Circumstances Form (see **Chapter 10**) to evaluate exemption qualifications. Conditions may include but are not limited to the following:

- The use of oversized equipment (e.g., cranes, large forklifts, or railroad tank cars), which cannot maneuver under a roof or canopy to access the storage, processing, or transfer area

[15] The Erosion and Sediment Control Manual can be found online at https://www.portlandoregon.gov/citycode/article/81661.

- SCM requirements conflict with another regulatory program's requirements
- Safety concerns exist

6.5.2. Source Control Requirements

6.5.2.1. Structural BMPs

Pavement. The entire liquid storage, processing, or transfer area must be paved with asphalt or concrete and must meet all applicable building code requirements.

The paved area must be sealed (e.g., with epoxy) to prevent spills from contaminating subsurface soils and groundwater. The paving materials and sealant must be compatible with the material being stored. Permeable pavement is not allowed.

Cover.[16] A permanent canopy, roof, or awning must cover containers, transfer pads, and processing areas to prevent rainfall from contacting areas used for the storage, transfer, or processing of liquids.

- Covers **10 feet high or less** must have an overhang that extends a minimum of 3 feet beyond the perimeter of the paved area.
- Covers **higher than 10 feet** must have an overhang that extends a minimum of 5 feet beyond the perimeter of the paved area.

Transfer valves, pumps, connections, and nozzles not located within a covered secondary containment must be covered independently using a rain shield or other comparable cover designed to prevent stormwater from washing accumulated materials into the receiving system.

Cover exemptions. Storage tanks or other containers that do not have a detachable lid are not required to be covered.

Containment for tanks. ASTs must have secondary containment to mitigate potential impacts from spills or leaks. This requires the use of a secondary containment system with the capacity to capture a minimum of 110 percent of the volume of the largest container, or 10 percent of the total volume of all containers, whichever is greater. The use of a double-walled AST meets the requirements of the SCM.

[16] Exterior requirement only – i.e., cover requirements do not apply to indoor ASTs.

Containment for transfer valves, pumps, connections, and nozzles. Valves, pumps, connections, and nozzles that are not located within secondary containment must be hydraulically isolated**.** Hydraulic isolation techniques may include curbs, berms, a blind sump, or an appropriately sized drip tray.

Drainage in covered areas[17]

- Covered areas must be hydraulically isolated through grading, berms, or drains to prevent uncontaminated stormwater run-on.
- Drainage facilities are not required for the hydraulically isolated area beneath the cover or rain shield since rainfall is unlikely to accumulate in the covered area.
- If the applicant elects to install drainage facilities, the drainage from within the hydraulically isolated area must be directed to the City sanitary sewer discharge point approved by BES.
- Rainfall from the cover must be directed to the onsite storm system.

Drainage in uncovered secondary containment areas

- Uncovered secondary containment areas may accumulate stormwater and therefore require drainage facilities and disposal to a receiving system approved by BES.
- Additional considerations for disposal may be required based on the type of liquid materials transferred, or the type of storm system available.
- The accumulated stormwater will be directed to the onsite storm system. If no stormwater discharge system is available onsite, or the accumulated stormwater does not meet the requirements of applicable city code and administrative rules, it must be either be:
    - Pumped from the containment area and hauled offsite for disposal or
    - Discharged at a flow rate of 50 gallons per minute or less to the City sanitary sewer system with prior authorization and permitting.[18]
- If the applicant elects to install drainage facilities for hydraulically isolated valves, pumps, connections, and nozzle areas, based on specific facility needs, the

[17] Exterior requirement only—i.e., drainage requirements do not apply to indoor ASTs.
[18] BES does not typically allow stormwater to discharge to a sanitary-only sewer system (per PCC 17.32.030). Proposals to discharge stormwater to a city-owned sanitary-only sewer system will be reviewed on a case-by-case basis and may require a Discharge Authorization.

discharge location for accumulated stormwater must be directed to the onsite sanitary drainage system.

Shut-off valves. All storage, processing, and transfer of liquid areas require shut-off valves, including all drainage facilities in secondary containment areas and associated with transfer valves, pumps, connections, and nozzles. This will allow for the containment of stormwater and evaluation for evidence of spills prior to discharge of impounded stormwater. This also prevents the uncontrolled discharge of spilled materials.

For above-ground storage, processing, and transfer of liquid areas, a shut-off valve must meet the following requirements:

- The shut-off valve installed on a stormwater discharge line must be installed upstream of any stormwater management facilities, in order to provide spill containment.
- The shut-off valve installed on a sanitary discharge line must be installed upstream of any domestic waste line tie-ins.
- In covered or uncovered secondary containment areas, the shut-off valve must be kept closed to contain any spills. Drainage of impounded stormwater is allowed only if it does not violate discharge standards or pose a threat or risk to the receiving system. The shut-off valves must be closed immediately after drainage ceases.
- In uncovered areas outside secondary containment areas, the shut-off valve should be kept open to allow for drainage and closed in the event of a spill or leak.
- Shut-off valves are not allowed in the public right-of-way. They must be located onsite and downstream of any secondary containment areas.
- Shut-off valves must be clearly labeled to identify open and closed valve positions.
- Shut-off valves must be installed and maintained per manufacturer recommendations.
- Shut-off valves must be tested regularly to ensure they are functional.

6.5.2.2. Treatment BMPs

BES will determine if treatment BMPs are required to meet the standards of the discharge location if a drainage device is installed.

6.5.2.3. Operational BMPs

Signage. Spill response signs must be posted at the liquid storage, processing, or transfer area and must be plainly visible. The signs must direct personnel to contact both the site's emergency response team and the City's spill response line (503-823-7180) in the event of a spill. Signs must also be posted at all shut-off valve areas directing personnel to keep the valve closed to contain spills during processing or transfer. More information is provided in **Chapter 7** and signage examples are in **Section 7.1.2**.

> Note: If the site has additional regulatory reporting requirements (required by DEQ, SPCC Plan, industrial stormwater, or pretreatment), these also should be included on the signage. City code requires immediate spill notification.

O&M Plan. An O&M Plan for any treatment BMP required to be installed per SCM requirements must be recorded with the County and submitted to the City per **Section 7.2** of this SCM.

Shut-off valves. Shut-off valves must be tested on a regular basis to ensure they are functional in the event of a spill. The testing date must be documented.

Discharge logs. If the accumulated stormwater will discharge to a receiving stream, the discharge must be documented in a discharge log that details the date, volume, and criteria used for discharge disposal. The discharge log must be made available to the City upon request by City personnel to ensure that all applicable city code, standards, administrative rules, and policies are met.

6.5.3. Additional Requirements

Storage of hazardous materials located in the designated wellhead protection area is subject to additional requirements, as identified in the Portland Water Bureau CSSW WHPA Reference Manual.[19]

Storage of reactive, ignitable, or flammable liquids must comply with the Uniform Fire Code as adopted by the State of Oregon. Contact Portland Fire and Rescue at 503-823-7366 or BES Development Review at 503-823-7122 for further information and requirements.

[19] The manual can be found on the Portland Water Bureau website at http://www.portlandoregon.gov/water/29880.

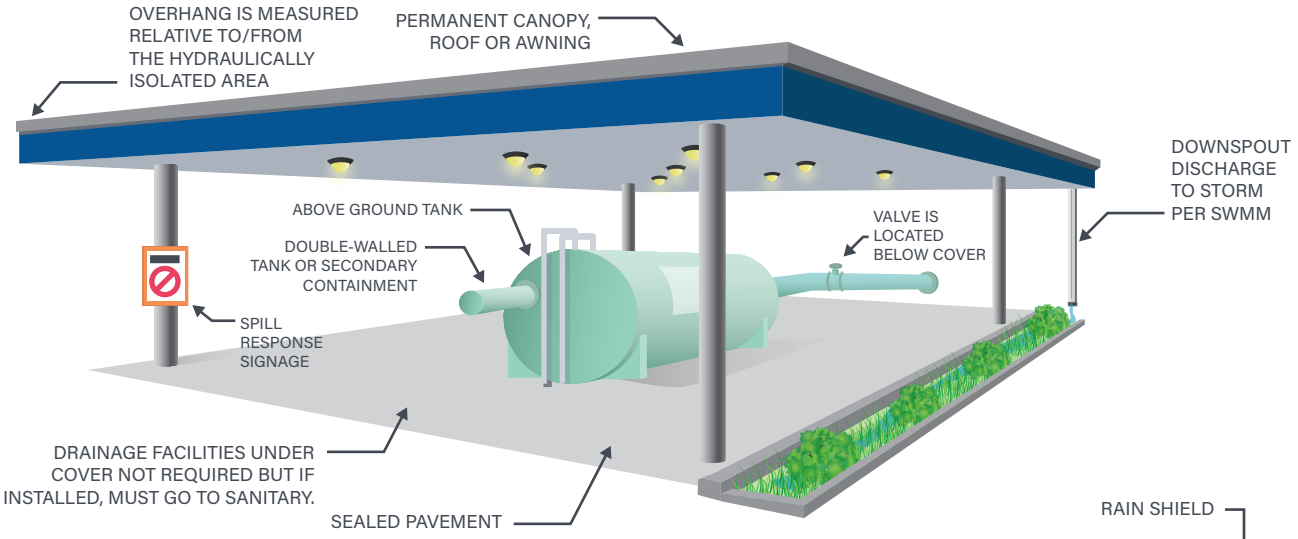
DEQ may require the submittal of an SPCC Plan and other regulatory requirements for the storage and transfer of fuels. It is the responsibility of the project applicant or site to meet all applicable state and federal requirements.

DEQ may prohibit the discharge to an UIC for this site use. Refer to OAR 340-044 for prohibitions and requirements. It is the responsibility of the project applicant or site to meet applicable UIC requirements.

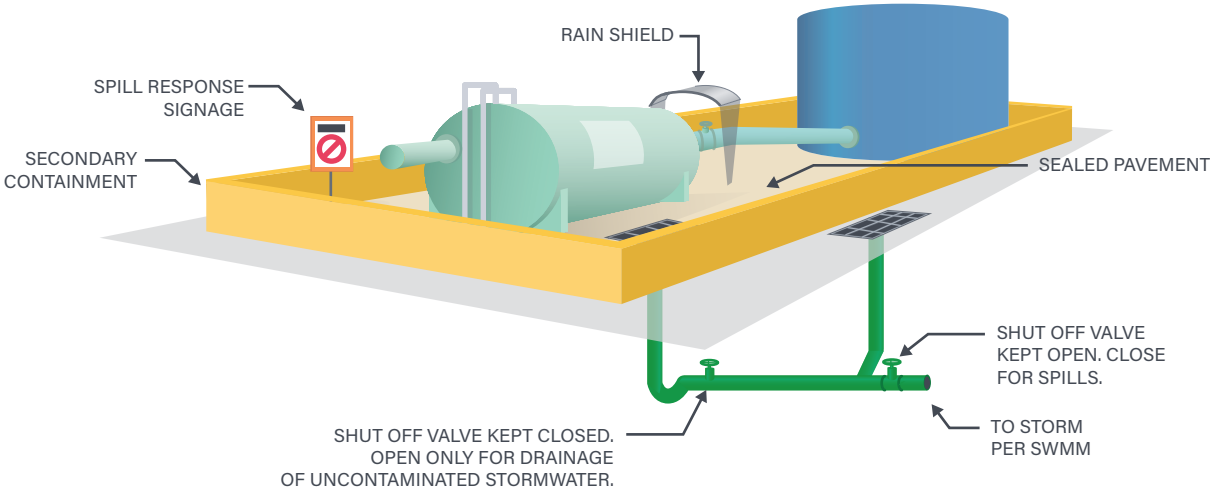
Refer to **Figure 6-5** for a typical site layout of required source controls for above-ground storage, processing, or transfer of liquids. This schematic is for reference only.

Figure 6-5. Aboveground Storage, Processing, or Transfer of Liquids

A. COVERED SECONDARY CONTAINMENT



B. UNCOVERED SECONDARY CONTAINMENT



C. ISOLATION TECHINIQUES-VALVES/PUMPS OUTSIDE OF CONTAINMENT

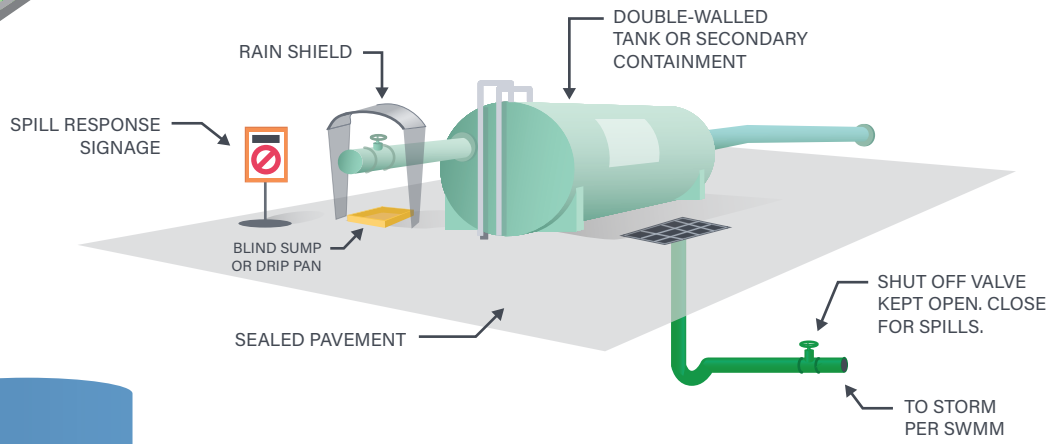


FIGURE IS FOR REFERENCE ONLY.

6.6. Fuel Transfer and Fuel Dispensing

6.6.1. Applicability

The SCM requirements apply to all projects or sites where there are stationary or mobile fuel transfer or fuel dispensing activities. The SCM requirements apply to interior or exterior fuel transfer or fuel dispensing areas and to the associated surrounding exterior traffic pathways.

A fuel transfer area is where fuel trucks, tanker trucks, or railroad tank cars are loaded or off-loaded, or fuel tanks are refilled. A fuel dispensing area is where fuel is pumped or conveyed into vehicles or equipment. This includes areas where fuel and fuel additives are moved from one tank or container to another or conveyed from storage tanks or containers to vehicles, equipment, or mobile containers.

A stationary fueling area includes stationary fuel pumps, fuel islands, above-ground or below-ground fuel tanks, and the surrounding pad. In contrast, mobile fueling is the operation of dispensing liquid fuels from tank vehicles into the fuel tanks of motor vehicles or equipment and does not occur at a stationary location.

The requirements of this section apply but are not limited to the following areas:

- Gas stations or other fueling areas
- Maintenance yards
- Bus and automobile fleet yards
- Truck and rail tank car loading and off-loading areas located at fuel facilities or terminals
- Fueling tanks and fueling ports associated with emergency generators, both on the unit and away from the unit
- Mobile fueling operations

Stationary fueling must meet the BMPs described in **Section 6.2.2**. Mobile fueling activities must meet the BMPs specified in the mobile fueling requirements in **Section 6.6.3**.

The requirements in **Section 6.5,** Above-Ground Storage, Processing, and Transfer of Liquids, must also be met, if applicable.[20]

[20] Applicants are required to meet all source control requirements associated with all site activities and uses that apply. See **Chapter 2** for details.

Site modifications to an existing fuel transfer or fuel dispensing area that meet the applicability criteria described in **Chapter 2** require modifications of the entire fuel transfer or fuel dispensing area to comply with requirements in this section. However, if the extent of proposed modification is limited to the installation of a new or replacement cover over an existing fuel pad, this type of modification is only required to meet the cover requirements described in **Section 6.6.2.1.**

The requirements of this section do not apply to:

- Propane and other substances that are in a gaseous state at ambient temperatures and that do not exist in liquid form for any period of time, liquefied gas, or natural gas fueling facilities and tanks.
- Replacement of an underground tank (not located within a fuel dispensing area) to comply with state regulations.
- Replacement of a fuel pump on an existing fuel pad that is not being upgraded.
- Temporary fueling areas associated with construction activity. During construction, onsite fueling areas must implement the applicable BMPs outlined in the City's Erosion and Sediment Control Manual.[21]

6.6.2. Requirements for Stationary Fuel Transfer and Dispensing

6.6.2.1. Structural BMPs

Pavement. A paved concrete fueling pad must be placed under and around the fuel dispensing and fuel transfer areas, the associated refueling parking areas for vehicles or equipment for each pump, and the associated ports to underground storage tanks (USTs).

Pavement must meet all applicable building code requirements. The paved area must be sealed (e.g., with epoxy) to prevent spills from contaminating subsurface soils and groundwater. The paving material and sealant must be compatible with the fuel being stored. Areas that contain above-ground fuel tanks with a pump and nozzle attached must be paved under the pump and nozzle system. Permeable pavement is not allowed.

Fuel pumps or fuel islands must be located a minimum of 7 feet in from the edge of the fueling pad. For above-ground fuel tanks with only one pump, where fueling

[21] The Erosion and Sediment Control Manual can be found online at https://www.portlandoregon.gov/citycode/article/81661.

occurs on only one side of the pump, the fueling pad must extend a minimum of 7 feet on the fueling side only (i.e., not on the side where fueling does not occur).

Cover.[22] A permanent canopy, roof, or awning must cover the hydraulically isolated fueling pad associated with fuel dispensing or fuel transfer areas to prevent rainfall from coming into contact with the fuel transfer and fuel dispensing area.

- Covers **10 feet high or less** must have an overhang that extends a minimum of 3 feet beyond the perimeter of the fueling pad on all sides.
- Covers **higher than 10 feet** must have an overhang that extends a minimum of 5 feet beyond the perimeter of the fueling pad on all sides.

The fuel pump, nozzles, and dispenser must be covered on above-ground fuel tanks, but the entire tank does not need to be covered. Transfer valves, pumps, connections, and nozzles not located within a covered area must be covered independently using a rain shield or other comparable cover designed to reduce or prevent stormwater from washing contaminants into the receiving system.

Cover exemptions. If the fuel dispensing area is or will be generally used to service oversized equipment (e.g., cranes, railcars) that cannot maneuver under a cover, an exemption to the cover requirement may be granted. The applicant must propose an alternative that meets or exceeds these requirements and submit a Source Control Special Circumstances Form (see **Chapter 10**) to evaluate exemption qualifications.

Containment for tanks. ASTs must have secondary containment to mitigate potential impacts from spills or leaks. This requires the use of a secondary containment system with the capacity to capture a minimum of 110 percent of the volume of the largest container or 10 percent of the total volume of all containers, whichever is greater. The use of a double-walled AST meets the requirements of the SCM.

Containment for transfer valves, pumps, connections, and nozzles. Valves, pumps, connections, and nozzles that are not located within secondary containment associated with the tanks must be hydraulically isolated. Hydraulic isolation techniques may include grading, berms, a blind sump, or appropriately sized drip tray.

[22] Exterior requirement only – i.e., cover requirements do not apply to indoor ASTs.

Drainage in covered areas[23]

- The covered fueling pad must be hydraulically isolated through grading, berms, or drains to prevent stormwater run-on.
- Drainage facilities from within the hydraulically isolated area must be directed to a City sanitary sewer discharge point approved by BES.
- Rainfall must be directed from the cover to the onsite storm system.

Drainage in uncovered areas

- Stormwater from the area surrounding the covered hydraulically isolated fueling pad must be directed the onsite storm system.

Shut-off valves. All fuel transfer and dispensing areas require shut-off valves. A shut-off valve is required on a sanitary discharge line from a hydraulically isolated covered area and on stormwater drainage lines for traffic pathways surrounding the fueling pad.

For fuel transfer and dispensing areas, shut-off valves must meet the following requirements:

- The shut-off valve installed on a stormwater discharge line must be installed upstream of any stormwater management facilities, in order to provide spill containment.
- The shut-off valve installed on a sanitary discharge line must be installed upstream of any domestic waste line tie-ins.
- The shut-off valve must be installed downstream of the oil-water separator.
- In covered areas, the shut-off valve must be kept closed to contain any spills. Drainage of impounded stormwater is allowed if it does not violate discharge standards or pose a threat or risk to the receiving system. The valve must be closed immediately after drainage ceases.
- In uncovered areas surrounding the fuel pad, the shut-off valve should be kept open to allow for drainage and closed in the event of a spill or leak.
- Shut-off valves are not allowed in the public right-of-way and must be located onsite and downstream of the fuel dispensing area.

[23] Exterior requirement only – i.e., drainage requirements do not apply to indoor ASTs.

- Shut-off valves must be clearly labeled to identify open and closed valve positions.
- Shut-off valves must be installed and maintained per manufacturer recommendations.
- Shut-off valves must be tested regularly to ensure they are functional.

6.6.2.2. Treatment BMPs

Oil-water separator. All discharges to the sanitary and storm systems from areas associated with stationary fuel transfer and dispensing areas must be treated with an oil-water separator. The oil-water separator must be equipped with a shut-off valve. The shut-off valve must be installed upstream of the point of discharge. The oil-water separator must be sized to treat the discharge and must meet the requirements for oil-water separators in **Section 7.1.1**.

6.6.2.3. Operational BMPs

Signage. Spill response signs must be posted at the stationary fueling area and must be plainly visible. The signs must direct personnel to contact both the site's emergency response team and the City's spill response line (503-823-7180) in the event of a spill. Signs must also be posted at all shut-off valve areas directing personnel to keep the valve closed to contain spills during fueling. More information is provided in **Chapter 7**, and signage examples are in **Section 7.1.2**.

O&M plan. An O&M Plan for the oil-water separator required by the SCM must be recorded with the applicable County and submitted to the City per **Section 7.2** requirements of this SCM.

All oil-water separators must be maintained in accordance with manufacturer specifications or per **Section 7.2** specifications.

Note: If the site has additional regulatory reporting requirements (industrial stormwater or pretreatment), these also should be included on the signage. City code requires immediate spill notification.

Shut-off valves. Shut-off valves must be tested on a regular basis to ensure they are functional in the event of a spill. The testing date must be documented.

Refer to **Figure 6-6** for a typical site layout of required source controls for stationary fuel transfer and fuel dispensing. This schematic is for reference only.

Figure 6-6. Stationary Fuel Transfer and Fuel Dispensing

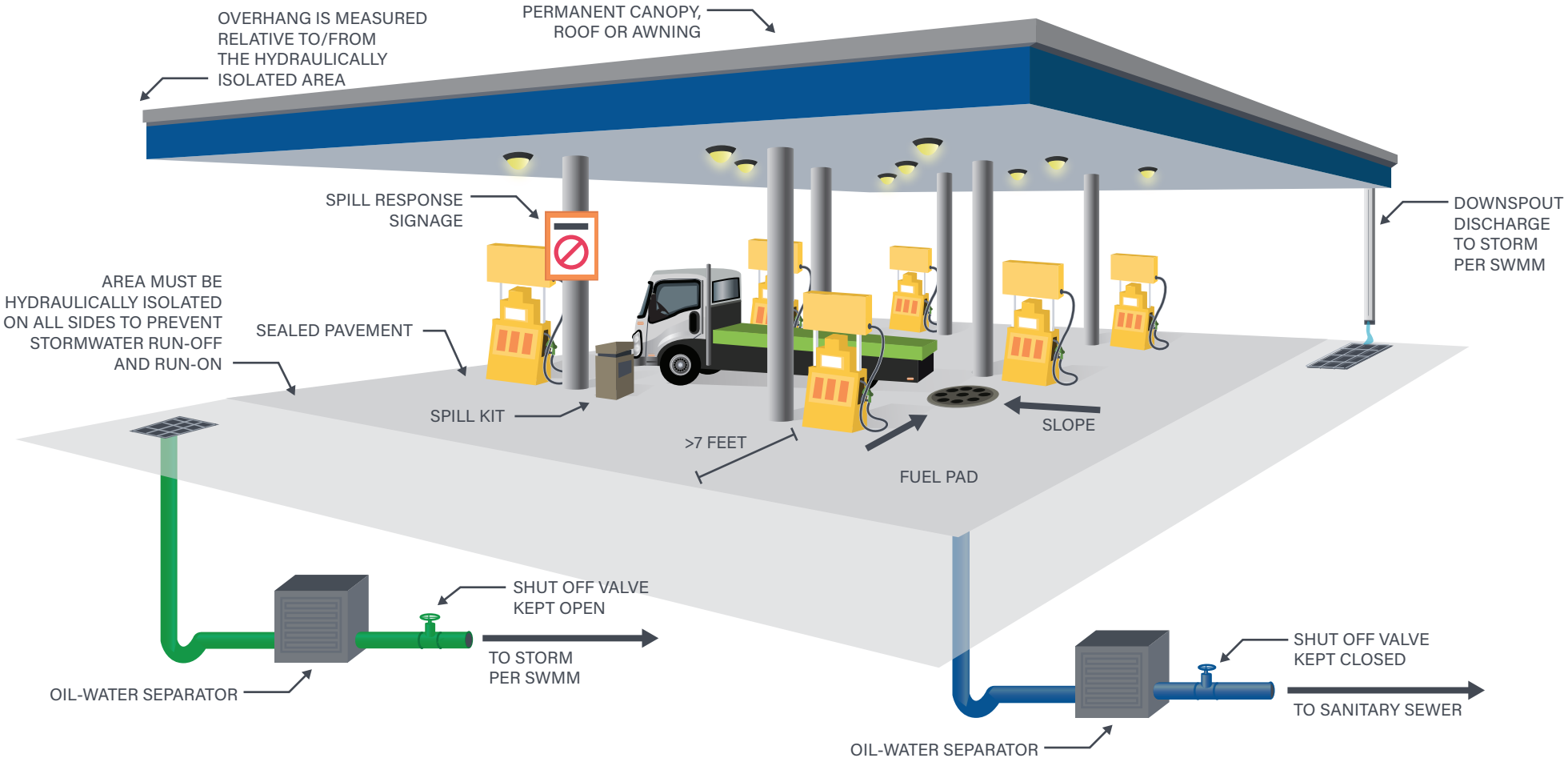


FIGURE IS FOR REFERENCE ONLY.

6.6.3. Requirements for Mobile Fueling

The SCM requirements apply to all projects or sites where mobile fueling activities occur or will occur onsite. If feasible, mobile fueling should be centralized in one location designed with spill protection and containment features. The applicant must identify the source control measures in the submittal package.

6.6.3.1. Operational BMPs

- Fueling nozzles must be equipped with an automatic shut-off mechanism. At no time should the automatic shut-off mechanism be bypassed or removed.
- Drip pans must be used to capture potential leaks during the fueling activity. In addition, fueling nozzles must be stored in drip tubes when not in use.
- Employees and contractors performing mobile fueling activities must remain with the vehicle being fueled until fueling activity ceases.
- A mobile fueling vehicle must be no further than 50 feet from the vehicle being fueled.
- Mobile fueling vehicles must be equipped with adequate spill response equipment, including but not limited to drain covers and absorbent material for use in the event of a spill or hose breakage.
- The location of onsite spill cleanup materials must be communicated to and made available to employees and contractors conducting mobile fueling operations.
- Nearby storm drains and catch basins must be covered with drain covers during fueling operations to prevent illicit discharge to a receiving system.
- Employees and contractors performing mobile fueling activities must be properly trained in pumping equipment emergency shutdown and spill response procedures.
- The Oregon Emergency Response System (OERS) spill contact number and directions for spill reporting must be posted on signage at the stationary fueling site or on the mobile fueling vehicle (1-800-452-0311). Contact the City at 503-823-7180 if the sewer system is impacted or threatened. Note: If the site has additional regulatory reporting requirements (industrial stormwater or pretreatment), these also should be included on the signage. City code requires immediate spill notification.
- Mobile fueling services must have an environmental cleanup contractor available on-call to respond in the event of a fuel spill.

- Mobile fueling vehicles must be stored in a manner that minimizes exposure and releases to the environment.
- Drip pans, drain covers, and fueling equipment must be routinely checked for leaks or degraded components.
- If a company contracts mobile fueling services, it must ensure that the contractor meets the above-described operational BMPs.

6.6.4. Additional Requirements

Storage of hazardous materials located in the designated wellhead protection area is subject to additional requirements, as identified in the Portland Water Bureau CSSW WHPA Reference Manual.[24]

Underground fuel tanks, except those holding heating oil, are subject to additional permitting requirements by the DEQ. For technical questions and permitting, call DEQ's Northwest Region main office at 503-229-5263 and ask for the Underground Storage Tank Duty Officer.

DEQ may require the submittal of an SPCC Plan and other regulatory requirements for the storage and transfer of fuels. It is the responsibility of the project applicant or site to meet all applicable state and federal requirements.

Storage of reactive, ignitable, or flammable liquids must comply with the Uniform Fire Code as adopted by the State of Oregon. Contact Portland Fire and Rescue at 503-823-7366 or BES Development Review at 503-823-7122 for further information and requirements.

The installation, alteration, or removal of fuel tanks and any related equipment is subject to additional permitting requirements[25] by the Portland Fire Marshall's Office. For technical and permitting questions, call the Portland Fire and Rescue Fire Code Enforcement and Permit Office at 503-823-3712, or visit the permit center at 1300 SE Gideon St., Portland, OR 97202.

DEQ may prohibit discharge to an UIC for this site use. Refer to OAR 340-044 for prohibitions and requirements. It is the responsibility of the project applicant or site to meet applicable UIC requirements.

[24] The manual can be found on the Portland Water Bureau website at http://www.portlandoregon.gov/water/29880.
[25] The permit application can be found online at https://www.portlandoregon.gov/fire/article/76833.

6.7. Equipment or Vehicle Washing

6.7.1. Applicability

The requirements of this section apply to all projects or sites where there are equipment or vehicle washing or steam cleaning areas. This also includes small washing and cleaning areas, such as wheel-washing stations.

The onsite wash water recycling system exceptions are described in **Section 6.7.3**.

The requirements of this section do not apply to:

- Single-family, duplex, triplex, and fourplex residential sites.
- Mobile washing activities that are permitted under an Alternative Discharge Control Mechanism.[26]
- Temporary washing areas associated with construction activities. These activities require implementation of BMPs identified in the City's Erosion and Sediment Control Manual.

6.7.2. Source Control Requirements

6.7.2.1. Structural BMPs

Pavement. The entire equipment or vehicle washing area must be paved with asphalt or concrete. Permeable pavement is not allowed. The paved area ("wash pad") must be sized to:

- Encompass the entire area where the vehicle, equipment, or equipment part will be located for cleaning
- Capture overspray drainage from the washing activity

Cover. A permanent canopy or roof must cover the wash pad so rainfall cannot contact the wash pad.

- Covers **10 feet high or less** must have an overhang that extends a minimum of 3 feet beyond the perimeter of the wash pad and evaporation unit (if applicable) on all sides.

[26] Mobile washing activities that are not operating under the conditions of an Alternative Discharge Control Mechanism are subject to the requirements of this section.

- Covers **higher than 10 feet** must have an overhang that extends a minimum of 5 feet beyond the perimeter of the wash pad and evaporation unit (if applicable) on all sides.

Cover exemption. If a wash area is generally used to service oversized equipment (cranes, sail boats, etc.) that cannot be maneuvered under a cover, an exemption to the roof or canopy requirement may be granted. The applicant must propose an alternative that meets or exceeds these requirements and submit a Source Control Special Circumstances Form (see **Chapter 10**) to evaluate exemption qualifications.

- If an exemption to the cover requirement is granted through the Source Control Special Circumstances process, a flow regulator valve with an automatic actuator to divert discharges to the appropriate receiving system is required and must be installed as specified in the "Drainage in uncovered area" section below.

Drainage in covered areas

- Wash pads must be hydraulically isolated through grading, berms, or drains to prevent uncontaminated stormwater run-on.
- Drainage facilities from within the hydraulically isolated wash pad must be directed to the City sanitary sewer discharge point approved by BES.
- Rainfall from the wash pad cover must be directed to the onsite storm system.

Drainage in uncovered areas

- Stormwater runoff from the area surrounding the hydraulically isolated wash pad must be directed to the onsite storm system.
- Drainage from within the uncovered hydraulically isolated wash pad with an approved exemption for oversized equipment must be directed to a City sanitary sewer discharge point approved by BES.
- Drainage to the storm system from a hydraulically isolated wash pad is prohibited unless the following conditions are met:
    - The hydraulically isolated wash pad has been granted an exemption to the cover requirement—i.e., a permanent roof or canopy is not required (see **Chapter 10** for Source Control Special Circumstance requirements).
    - The discharge line that serves an uncovered hydraulically isolated wash pad must be equipped with a flow regulator valve and automatic actuator to divert discharges from the wash pad to the sanitary sewer once the wash water source is turned on.

- Drainage from an uncovered hydraulically isolated wash pad must be directed through an oil-water separator and must meet the oil-water separator design requirements in **Section 7.1.1**.

6.7.2.2. Treatment BMPs

Oil-water separator. All discharges to the sanitary and storm systems from areas associated with equipment or vehicle washing must be treated with an oil-water separator. The oil-water separator must be equipped with a shut-off valve. The shut-off valve must be installed upstream of the point of discharge. The oil-water separator must be sized to treat the discharge and must meet the requirements for oil-water separators in **Section 7.1.1**.

Note: Discharge to the storm sewer from the wash pad is allowed only as a part of an exemption granted per the Source Control Special Circumstances process.

6.7.2.3. Operational BMPs

O&M Plan. An O&M Plan for an oil-water separator required to be installed per SCM requirements and must be recorded with the County, per **Section 7.2** requirements of this SCM.

All oil-water separators must be maintained in accordance with manufacturer specifications and per **Section 7.2** specifications in this SCM.

6.7.3. Exceptions for Onsite Wash Water Recycling Systems

Wash water reuse or recycling systems must meet the above-mentioned pavement, cover, and drainage BMPs. The treatment BMPs described above will not apply if one of the exceptions below applies:

- A wash water recycling system may be used for oil control instead of an oil-water separator. If used for oil control, the recycling system must meet effluent discharge limits for the City's sanitary sewer system. The applicant must submit a detail of the wash water recycling system and vendor specifications identifying effluent efficiencies during land use or development review. The use of a wash water recycling system will not require a Source Control Special Circumstances review.
- An evaporation unit is installed as part of a wash recycling system, the applicant may seek an exception to the sanitary sewer connection requirement. The applicant must submit a Source Control Special Circumstances Form (see **Chapter 10**) during land use or development review to facilitate evaluation of exception qualifications.

6.7.4. Additional Requirements

The DEQ may prohibit the discharge to an UIC for this site use. Refer to OAR 340-044 for prohibitions and requirements. It is the responsibility of the project applicant or site to meet applicable UIC requirements.

Refer to **Figure 6-7** for a typical site layout of required source controls for equipment or vehicle washing. This schematic is for reference only.

Figure 6-7. Equipment or Vehicle Washing

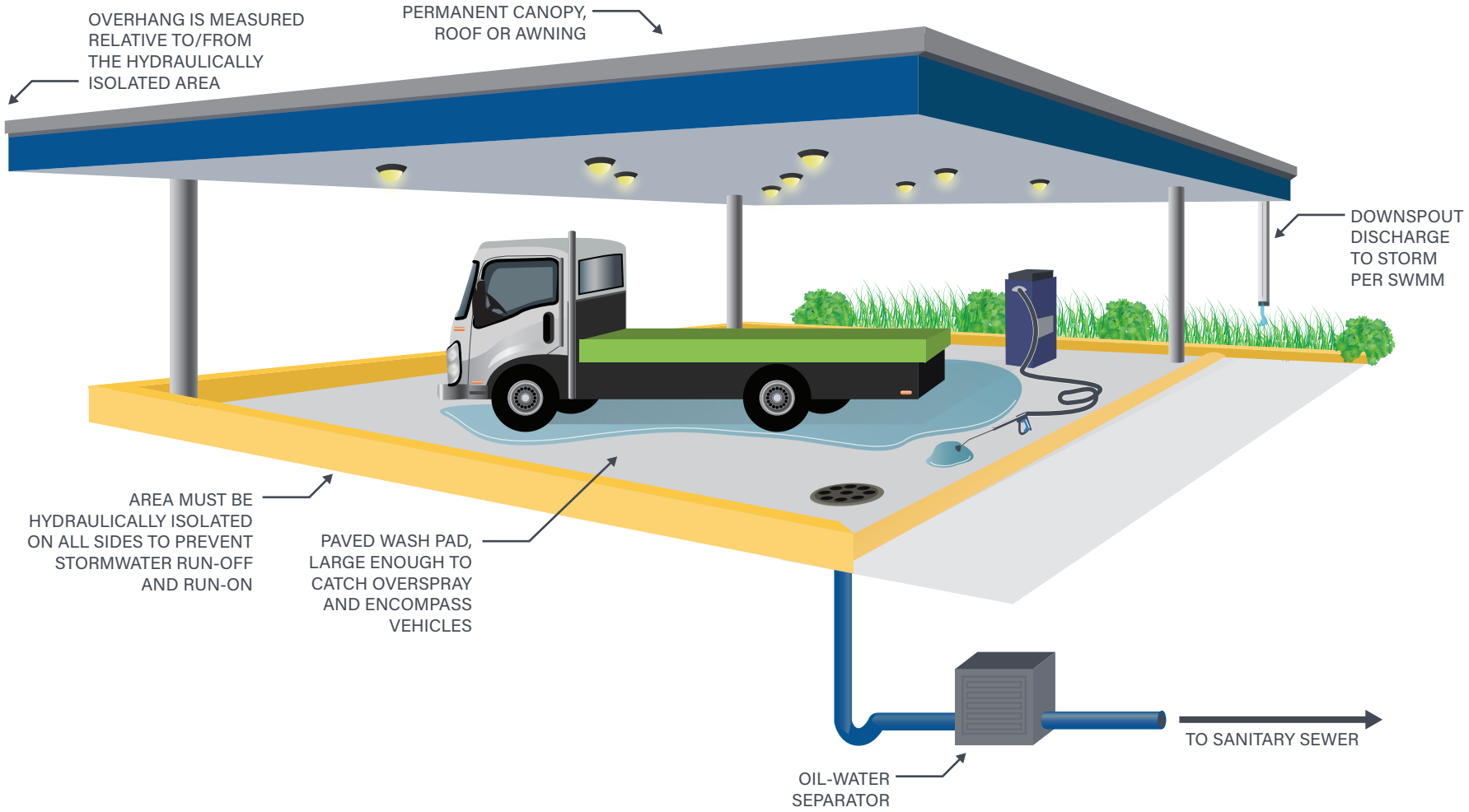


FIGURE IS FOR REFERENCE ONLY.

6.8. Motorized Vehicle and Equipment Storage and Repair

6.8.1. Applicability

The SCM requirements apply to all projects or sites where there is motorized vehicle and equipment storage and repair. These areas include, but are not limited to:

- Vehicle or equipment dismantling or crushing areas
- Vehicle and equipment repair and service areas
- Parking or storage areas for vehicles and equipment awaiting repair or service
- Parking or storage areas for wrecked or impounded vehicles and equipment
- Salvage, scrap, and junk yards

The following materials are not covered in this section and are covered elsewhere in the manual:

- Fuel transfer and fuel dispensing activities, which are described in **Section 6.6**
- Stockpiling and processing of waste or recyclable materials (e.g., metals, tires), which are described in **Section 6.9**

The requirements of this chapter do not apply to:

- New vehicle and equipment sales
- Fleet vehicle parking and equipment storage
- Truck trailer storage

6.8.2. Source Control Requirements

6.8.2.1. Structural BMPs

Pavement. All motorized vehicle and equipment storage and repair areas must be paved. Permeable pavement is not allowed.

Cover. A permanent canopy, roof, or awning must cover vehicle and equipment repair and service areas and areas in which vehicle or equipment parts that contain fluids or mercury are dismantled, drained, or crushed.

- Covers **10 feet high or less** must have an overhang that extends a minimum of 3 feet beyond the perimeter of the applicable site area on all sides.

- Covers **higher than 10 feet** must have an overhang that extends a minimum of 5 feet beyond the perimeter of the applicable site area on all sides.

Cover exemption. If the area is generally used to repair or service oversized equipment (e.g., cranes) that cannot maneuver under a cover, an exemption to the cover requirement may be granted. The applicant must propose an alternative that meets or exceeds these requirements and submit a **Source Control Special Circumstances Form** (see **Chapter 10**) to evaluate exemption qualifications. Areas that are not able to be covered must be hydraulically isolated through grading, berms, or curbing to prevent uncontaminated stormwater run-on.

A cover is not required for the following:

- Storage areas for wrecked or impounded vehicles
- Parking or storage areas for vehicles and equipment waiting for repair or service
- Salvage, scrap, or junk yards

Drainage in covered areas

- Applicable site areas must be hydraulically isolated through grading, berms, or drains to prevent uncontaminated stormwater run-on.
- Drainage from within the hydraulically isolated area beneath the cover must be directed to a sanitary sewer discharge point approved by BES.
- Rainfall from the cover must be directed to the onsite storm system.

Drainage in uncovered areas

- Stormwater from the area surrounding the hydraulically isolated area must be directed to the onsite storm system.
- Motorized vehicle and equipment storage and repair areas that include the following activities are not required to be covered, and stormwater from the following areas must be directed to the onsite storm system:
    - Storage areas for wrecked or impounded vehicles
    - Parking or storage of vehicles and equipment awaiting repair or service
    - Salvage, scrap, or junk yards
- Drainage from within uncovered hydraulically isolated areas with an approved exemption for oversized equipment must be directed to a City sanitary sewer discharge point approved by BES.

Shut-off valves. All motor vehicle and equipment storage and repair areas require shut-off valves. The shut-off valve will allow for the containment of water and evaluation for evidence of spills prior to discharge for areas under cover. The traffic pathway areas are considered high-use and high-risk areas, with a high likelihood of a spill. The shut-off valve also prevents the uncontrolled discharge of spilled materials.

For motorized vehicle and equipment storage and repair areas, shut-off valves must meet the following requirements:

- The shut-off valve installed on the stormwater discharge line must be installed upstream of all applicable stormwater management facilities in order to provide spill containment.
- The shut-off valve installed on the sanitary discharge line must be installed upstream of any domestic waste-line tie-ins.
- Shut-off valves must be installed downstream of the oil-water separator.
- In covered areas, the shut-off valve must be kept closed and opened only to allow drainage that does not exceed any sanitary system discharge standards and does not pose a threat or risk to the publicly owned treatment works system. The shut-off valve must be closed immediately after drainage ceases.
- In an uncovered high-use and high-risk area, shut-off valves must be left open for stormwater drainage and immediately closed in the event of a spill or release of prohibited substances.
- Shut-off valves are not allowed in the public right-of-way. They must be located onsite and downstream of the motor vehicle and equipment area.
- Shut-off valves must be clearly labeled to identify open and closed valve positions.
- Shut-off valves must be installed and maintained per manufacturer recommendations.
- Shut-off valves must be tested regularly to ensure they are functional.

6.8.2.2. Treatment BMPs

Oil-water separator. All discharges to sanitary and storm systems from areas associated with motorized vehicle and equipment storage and repair areas must be treated with an oil-water separator. The oil-water separator must be equipped with a shut-off valve. The shut-off valve must be installed upstream of the point of

discharge. The oil-water separator must be sized to treat the discharge and must meet the requirements for oil-water separators in **Section 7.1.1.**

6.8.2.3. Operational BMPs

Signage. Spill response signs must be posted at the vehicle and equipment repair area and must be plainly visible. The signs must direct personnel to contact both the site's emergency response team and the City's spill response line (503-823-7180) in the event of a spill. Signs must also be posted at all shut-off valve areas directing personnel to keep the valve closed to contain spills. More information is provided in **Chapter 7** and signage examples are in **Section 7.1.2**.

O&M Plan. An O&M Plan for the oil-water separator required by the SCM must be recorded with the County and submitted to the City per **Section 7.2**.

All oil-water separators must be maintained in accordance with manufacturer specifications and per **Section 7.2** specifications.

Shut-off valves. Shut-off valves must be tested on a regular basis to ensure they are functional in the event of a spill. The testing date must be documented.

6.8.3. Additional Requirements

The storage, use, and transportation of hazardous materials located in designated wellhead protection areas is subject to additional requirements, as identified in the Portland Water Bureau CSSW WHPA Reference Manual.[27]

DEQ may prohibit the discharge to an UIC for this site use. Refer to OAR 340-044 for prohibitions and requirements. It is the responsibility of the project applicant or site to meet applicable UIC requirements.

Refer to **Figure 6-8** for a typical site layout of required source controls for motorized vehicle or equipment storage and repair. This schematic is for reference only.

[27] The manual can be found on the Portland Water Bureau website at http://www.portlandoregon.gov/water/29880.

Figure 6-8. Motorized Vehicle or Equipment Storage and Repair

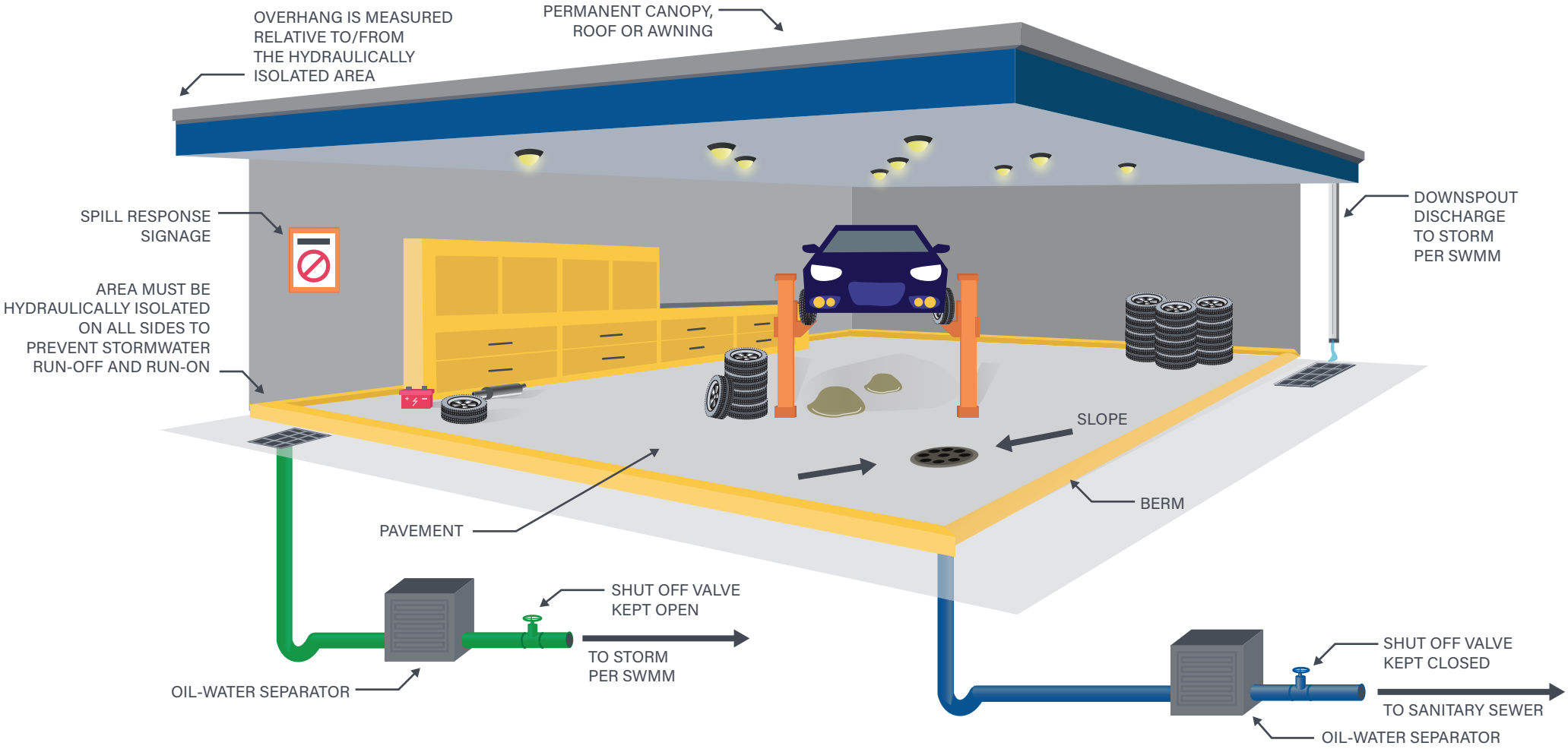


FIGURE IS FOR REFERENCE ONLY.

6.9. Exterior Storage or Processing of Solid Materials

6.9.1. Applicability

The SCM requirements apply to all projects or sites where exterior storage or processing of solid materials occurs. Applicable storage or processing activities include but are not limited to:

- Stockpiling of solid materials outdoors
- Storage of solid materials in outdoor containers
- Processing, shredding, grinding, or sorting of solid materials outdoors

Materials subject to requirements of this section generally display the properties listed in the subsections that follow. Examples of typical materials are provided in **Table 6-1**. Materials with similar properties that are not included in **Table 6-1** will be evaluated on a case-by-case basis.

The requirements of this section do not apply to:

- Temporary storage areas associated with construction activities. During construction, onsite storage areas must implement of BMPs identified in the City's Erosion Control Manual.

6.9.1.1. Materials Subject to All Requirements

Materials with any of the following properties are subject to all requirements of this section:

- Soluble or mobile in water
- Has the potential to discharge pollutants that could enter or impact storm sewer and drainage or sanitary sewer systems, such as metals, solids, oils and greases, biochemical oxygen demand (BOD), and bacteria (e.g., *E. coli*)
- Potentially produces effluent
- Has hazardous, toxic, or flammable properties
- Has the potential to generate an outflow of water or other liquid

6.9.1.2. Materials Subject Only to Containment and Drainage Requirements

Materials with the following properties are subject only to containment and drainage requirements and are not required to be paved or covered:

- May be mobilized by stormwater or wind
- Has the potential to discharge pollutants that could enter or impact storm sewer and drainage or sanitary sewer systems, such as solids or debris
- Does not potentially produce effluent
- Has no hazardous, toxic, or flammable properties

6.9.1.3. Materials Exempt from the Requirements

Materials with all of the following properties are exempt from the requirements of this section:

- Will not be mobilized by stormwater or wind
- Has low potential to discharge pollutants that could enter or impact storm sewer and drainage or sanitary sewer systems
- Contains inert materials
- Has no hazardous, toxic, or flammable properties

Table 6-1. Examples of Materials Subject to Exterior Storage or Processing of Solid Materials Requirements*

Materials Subject to All Structural BMPs	Materials Subject to Containment and Drainage BMPs only	Materials Exempt from Structural BMPs
• Products or materials with corrosive properties or ingredients (e.g., lead-acid batteries) • Scrap, salvage, and recyclable materials (e.g., metal, cardboard, paper, plastic, scrap treated, or painted wood) • Used tires intended for reuse • Waste tires • Food items • Chalk/gypsum products • Feedstock/grain • Fertilizers • Pesticides • Asphalt debris, used concrete, or stockpiles • Lime/lye/soda ash • Animal/human wastes • Baghouse dust • Sandblasting grit • Unfinished compost • Containers with residual product (within or on the exterior surfaces) • Soils that do not meet DEQ clean-fill criteria and other contaminated media (e.g., building materials containing asbestos)	• Sawdust/bark chips • Sand/dirt/soils that that meet DEQ clean-fill criteria • Finished compost • Unwashed gravel/rock	• Washed gravel/rock • Finished lumber • Wood pallets that are free and clean of residual product • Rubber and plastic products (e.g., hoses, gaskets, pipe) • New tires • Clean concrete products (e.g., blocks, pipe) • Glass (new, clean, or free of residual product) • Materials in fully sealed watertight containers that have no residual materials on the exterior of the container • Temporary storage areas associated with construction activities

*Materials that are not included in this list, but have the properties described in **Section 6.9.1,** will be evaluated on a case-by-case basis.

6.9.2. Source Control Requirements

6.9.2.1. Structural BMPs

Pavement. For applicable materials, described in **Section 6.9.1.1** and **Table 6-1**, the storage, stockpile, or activity area must be paved with asphalt or concrete and must meet all applicable building code requirements. Permeable pavement is not allowed.

Cover. For applicable materials, described in **Section 6.9.1.1** and **Table 6-1**, a permanent canopy, roof, or awning must cover the storage, stockpile, or activity area to prevent rainfall from coming in contact with the area.

- Covers **10 feet high or less** must have an overhang that extends a minimum of 3 feet beyond the perimeter of the paved storage, stockpile, or activity area on all sides.
- Covers **higher than 10 feet** must have an overhang that extends a minimum of 5 feet beyond the perimeter of the paved storage, stockpile, or activity area on all sides.

Containment. For applicable materials, described in **Section 6.9.1.1** and **6.9.1.2** and **Table 6-1,** a structural containment barrier must be placed on at least three sides of every storage, stockpile, or activity area.

The barrier must be high enough to prevent stormwater run-on from entering the storage or processing area and to prevent the stored materials from being blown or washed away. If the area is paved, the barrier can be constructed of asphalt berms, concrete curbing, or retaining walls. If the area is unpaved, the barrier can be constructed of sunken retaining walls or ecology blocks. The applicant must clearly identify the method of containment on the building plans.

Drainage in covered areas

- Covered areas must be hydraulically isolated through grading, berms, or drains to prevent uncontaminated stormwater run-on.
- Drainage facilities are not required for the hydraulically isolated area beneath the cover since rainfall is unlikely to accumulate in the covered area.
- If the applicant elects to install drainage facilities, the drainage from within the hydraulically isolated area must be directed to the City sanitary sewer discharge point approved by BES.
- Rainfall from the cover must be directed to the onsite storm system.

Drainage in uncovered containment. For applicable materials, described in **Section 6.9.1.2** and **Table 6-1,** which are not required to be covered, the drainage must meet the following requirements:

- The open side of the storage, stockpile, or activity area must be hydraulically isolated through grading, berms, or drains to prevent uncontaminated stormwater run-on and contaminated stormwater runoff.
- Drainage facilities are not required for the hydraulically isolated area since significant amounts of rainfall are unlikely to accumulate in the unpaved area.
- If the applicant elects to install drainage facilities, the drainage from within the hydraulically isolated area must be directed to the City sanitary sewer discharge point approved by BES.

Shut-off valves. All exterior storage or processing of solid material areas require shut-off valves if a drainage system is installed. This will allow for the containment of stormwater and evaluation for evidence of spills prior to discharge of impounded stormwater. This also prevents the uncontrolled discharge of spilled materials.

The shut-off valve must be kept closed to contain any spills. Drainage of impounded stormwater is allowed only if it meets sanitary system discharge standards and does not pose a threat or risk to the publicly owned treatment system. The shut-off valve must be closed immediately after drainage ceases.

6.9.2.2. Treatment BMPs

BES will determine if treatment BMPs are required to meet the standards of the discharge location if a drainage device is installed.

6.9.2.3. Operational BMPs

Signage. Spill response signs must be posted at the storage, stockpile, or activity area if hazardous materials or other materials of concern are present. The signage must be plainly visible. The signs must direct personnel to contact both the site's emergency response team and the City's spill response line (503-823-7180) in the event of a spill. Signs must also be posted at all shut-off valve areas, if installed, directing personnel to keep the valve closed to contain spills. More information is provided in **Chapter 7,** and signage examples are in **Section 7.1.2**.

Note: If the site has additional regulatory reporting requirements (required by DEQ, SPCC Plan, industrial stormwater, or pretreatment), these also should be included on the signage. City code requires immediate spill notification.

O&M Plan. An O&M Plan for any treatment BMP required to be installed per SCM requirements must be recorded with the County and submitted to the City per **Section 7.2** of this SCM.

Shut-off valves. Shut-off valves must be tested on a regular basis to ensure they are functional in the event of a spill. The testing date must be documented.

6.9.3. Additional Requirements

Sites that store, manufacture, repackage, or otherwise handle pesticides and fertilizers may need to comply with DEQ regulations. For answers to technical questions, call DEQ's Northwest Region main office at 503-229-5263.

In designated wellhead protection areas, sites with hazardous materials are subject to additional requirements, as identified in the Portland Water Bureau CSSW WHPA Reference Manual.[28]

DEQ may prohibit the discharge to an UIC for this site use. Refer to OAR 340-044 for prohibitions and requirements. It is the responsibility of the project applicant or site to meet applicable UIC requirements.

Refer to **Figure 6-9** for a typical site layout showing required source controls for exterior storage or processing of solid materials. This schematic is for reference only.

[28] The manual can be found on the Portland Water Bureau website at https://www.portlandoregon.gov/citycode/article/24624.

Figure 6-9. Exterior Storage or Processing of Solid Materials

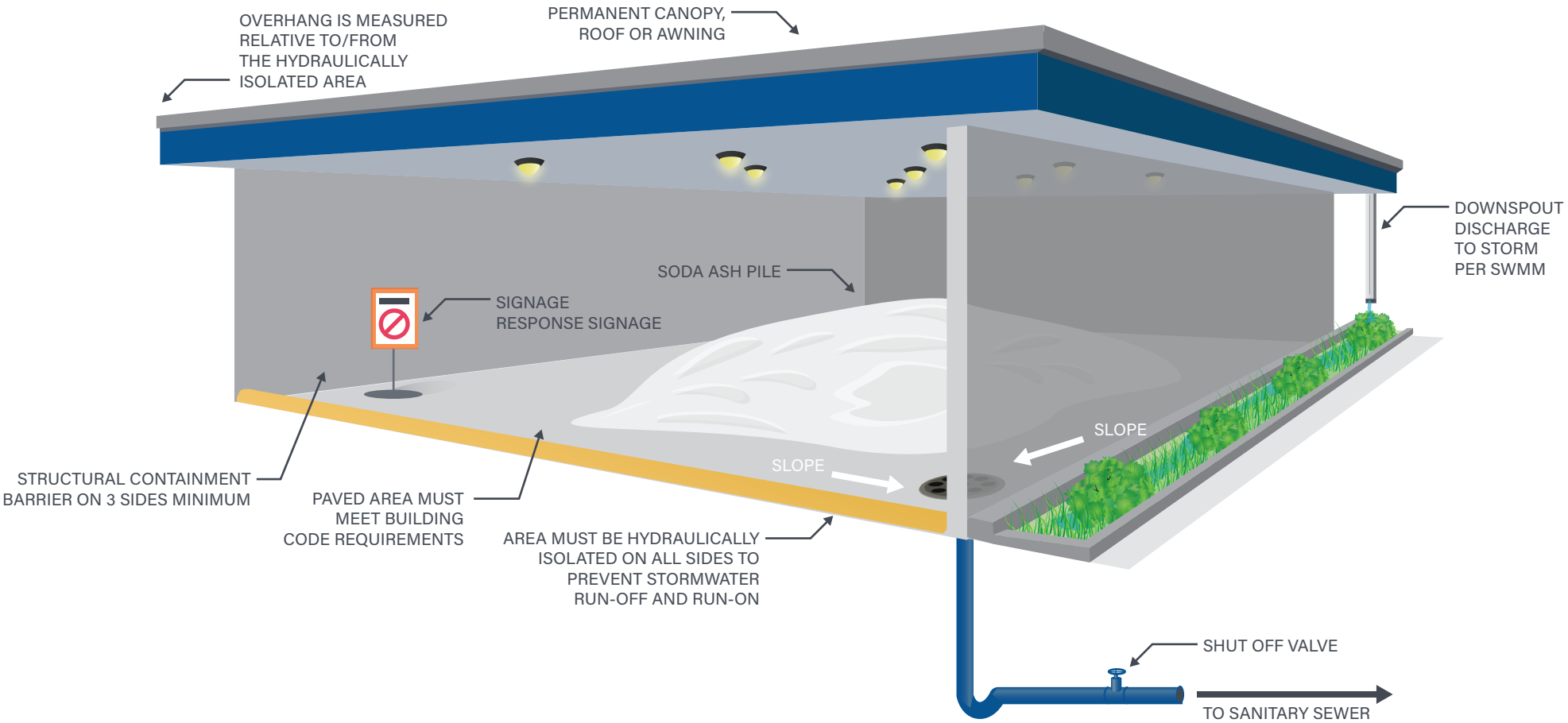


FIGURE IS FOR REFERENCE ONLY.

Chapter 7. BMP Design and Operations and Maintenance Requirements

7.1. BMP Design Requirements

7.1.1. Oil-Water Separators

An oil-water separator required by the SCM must meet the design requirements prescribed in this section. The oil-water separator must be approved by BES during plan review. The oil-water separator needs to conform with all applicable OPSC requirements. OPSC requirements will be reviewed by BDS.

The applicant must install an oil-water separator for treatment for discharge to either storm or sanitary sewer if required by any applicable section of **Chapter 6**, or as indicated by BES as required treatment.

There are various types of oil-water separators. Selection of an oil-water separator should consider several factors, including the intended receiving system, design, maintenance frequency, oil concentration, flow rate, pollutant loading, sedimentation rate, and particle size (sediment and oil). BES prefers use of a coalescing plate separator; however, an American Petroleum Institute (API)-type separator may also be acceptable, provided the applicant can demonstrate that city code requirements for discharge will be met.

Applicants may propose an alternative oil control option. The applicant must propose an alternative that meets or exceeds the requirements and submit a Source Control Special Circumstances Form (see **Chapter 10**) to evaluate alternatives.

Note: Discharge to the City sanitary sewer must meet City sanitary sewer discharge requirements per PCC Chapter 17.34. Discharge to the City storm sewer must meet requirements of PCC Chapter 17.39. It is the responsibility of the project applicant or site to ensure these requirements are met.

7.1.1.1. Design Requirements for Oil-Water Separators to the Sanitary Sewer or Combined Sewer System for Areas Protected with a Cover or Located Inside a Structure

Discharges to the sanitary or combined sewer that have or are expected to contain oil and grease, or other hydrocarbons may be treated using either a baffled API-type oil-water separator or a coalescing plate separator. The oil-water separator with a discharge to the sanitary sewer or combined sewer system must:

- Be designed using the following major design criteria:
    - Specific gravity (SG) of oil is 0.9 kg/m^3.
    - Temperature of discharge is 50°F to 60°F.
    - Oil droplet size is 50 microns.
- Be designed to achieve a maximum of 100 parts per million (ppm)[29] non-polar oil and grease in the effluent from the peak flow generated by the activity. Or, it should be designed to achieve a maximum of 10 ppm non-polar oil and grease in effluent from the peak flow generated by activities, such as washing, that involve the use of surfactants or water temperatures greater than 60°F. The estimated peak flow rate dictates the number and volume of separators needed on a site.
- Be designed based on the following retention time criteria:
    - The minimum retention time for a coalescing plate separator is 15 minutes.
    - Baffled oil-water separators require a retention time of 45 minutes.
    - The flow rate of fixtures (gpm) multiplied by retention time will equal the minimum storage capacity of the oil-water separator unit that is required. As guidance, a standard 5/8-inch hose will generate a flow rate of 10 gpm.
- Be installed upstream of any pumping device to prevent oil emulsification, unless the oil-water separator is a coalescing plate separator or equivalent alternative oil control option.

7.1.1.2. Design Requirements for Oil-Water Separators to the Storm Sewer for Areas Exposed to Rainfall

Discharges to the storm sewer that have or are expected to contain oil and grease, or other hydrocarbons may be treated using either a baffled API-type oil-water

[29] BES may periodically update local limits. Refer to ENB 4.03 for current local limits. Information about local limits can be found at https://www.portlandoregon.gov/citycode/article/73401.

separator or a coalescing plate separator. The oil-water separator in an area exposed to rainfall with a discharge to the onsite storm system must:

- Be designed to treat the stormwater flow rate generated by the water quality storm event (0.19 inch/hour for a 5-minute time of concentration, additional intensities are in the Sewer and Drainage Facilities Design Manual (SDFDM), as calculated with the Rational Method.
- Be designed with a high-flow bypass to route flows greater than the operational rate of the unit unless the operational rate exceeds the flow rate generated by a 10-year storm (2.86 inches/hour for a 5-minute time of concentration), as calculated with the Rational Method.
- Be designed to achieve a maximum of 10 ppm total oil and grease in effluent from the peak flow generated by the activity if the separator is discharging to the storm sewer system. The estimated peak flow rate dictates the number and volume of separators needed on a site.
- Be installed upstream of any pumping device to prevent oil emulsification, unless the oil-water separator is a coalescing plate separator or equivalent alternative oil control option.
- Be installed upstream of any roof drainage that is introduced into the storm system unless the oil-water separator is sized to account for the additional flow.
- Be installed upstream of any vegetated water quality treatment facility.

7.1.1.3. Oil-Water Separator Submittal Requirements

If an oil-water separator is used, the project applicant must include the following in the submittal package:

- Oil-water separator details, including the unit flow rate, effluent water quality, and maximum process flow rate
- Manufacturer's testing information that supports the unit's ability to meet the relevant effluent oil and grease standard (i.e., 100 ppm for discharges to the sanitary or combined sewer system and 10 ppm for discharges to the storm sewer system) at the calculated flow rate
- The outlet location and disposal location (either to the sanitary, combined, or storm sewer)
- The pollutant loading assumptions used to meet the applicable design criteria (e.g., non-polar oil and grease or total oil and grease)

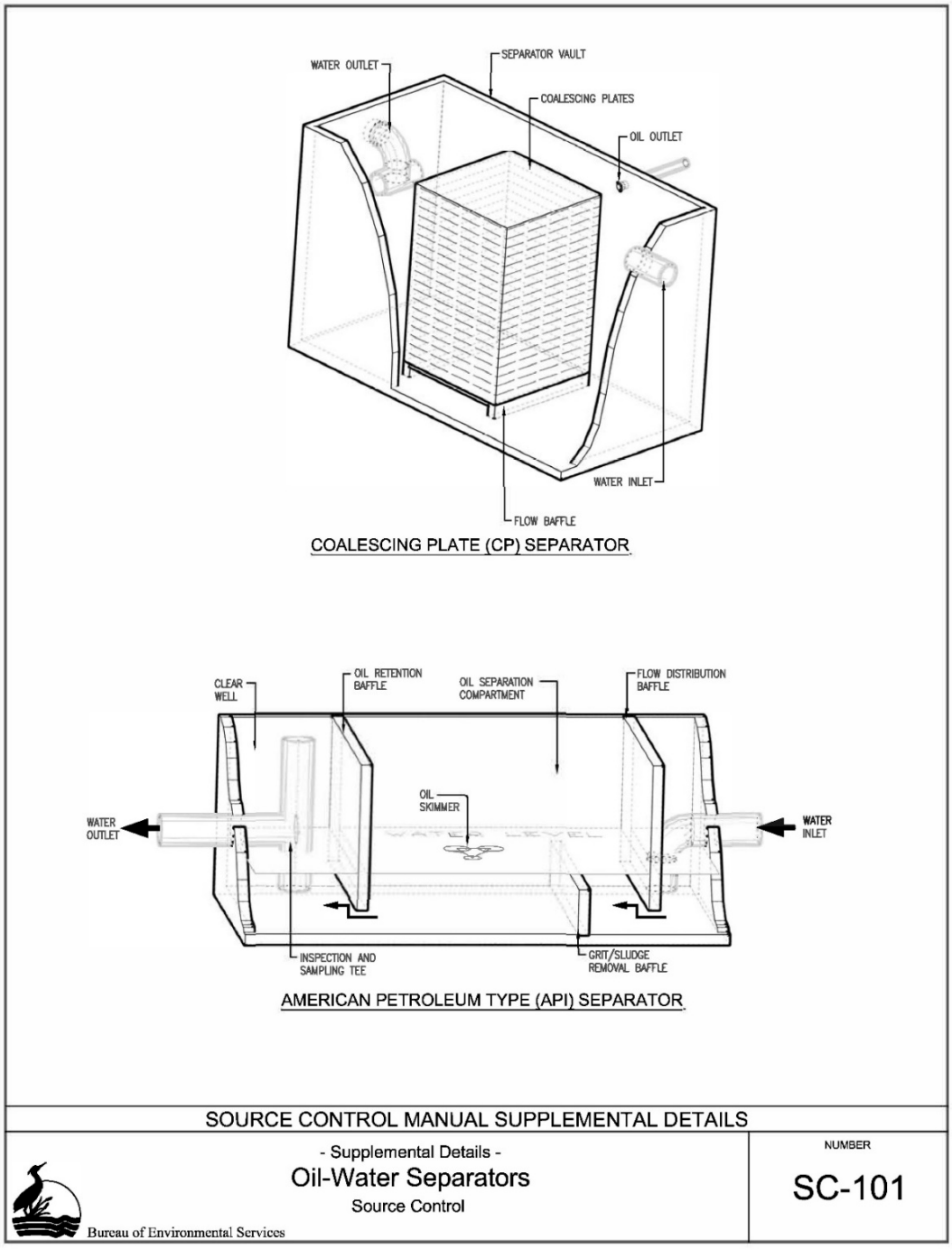
- Location of shut-off valve, if used
- O&M Form and O&M Plan (see **Section 7.2**)

BES may require the applicant to provide additional information to assist in the review,[30] including but not limited to the following:

- A description of the activity and size (square feet) of the activity area proposed to drain to the oil-water separator or alternative oil control facility.
- A description of the products used or stored onsite, including tank or container volume (gallons), in the area served by the oil-water separator.
- The type (make and model) and volume of the oil-water separator unit.
- Profile view of oil-water separator, including typical cross-section details with dimensions. These details must be equivalent to the manufacturer's specifications and details.
- All piping associated with the oil-water separator, including pipe materials, sizes, orifice size, slopes, and invert elevations at every bend or connection.
- Oil-water separator dimensions and setbacks from property lines and structures.

[30] BES may require this additional information for larger or more complex projects.

Figure 7-1. Oil-Water Separator Details



7.1.2. Signage and Spill Response Requirements

Signage. Informational signage is required for some site activities that have spill potential, as described in **Chapter 6.** Signage is an operational BMP. Signage must describe emergency response measures in case of a spill. The project applicant must identify that the signage and spill response requirements are met in the submittal package.

All signage must conform to the general requirements described below. Signage requirements for specific activities are noted in applicable sections in **Chapter 6.** A spill signage example is provided in typical detail in **Figure 7-2**.

- Signs must be located where they are plainly visible from all activity areas. More than one sign may be needed to accommodate larger activity areas.
- Signs must be water-resistant.
- Signs must provide safety precautions.
- Signs must provide immediate spill response procedures. For example: "Close the valve located at ..." and "Contain the spill."
- Signs must have emergency contact(s) and telephone number(s)—for example, "Call the City of Portland (BES) Spill Response Number at 503-823-7180." The City must be notified immediately in the event of a spill.
- Additional notifications may be required if the facility has additional regulatory requirements (e.g., Oregon Emergency Response System (OERS), Industrial stormwater or pretreatment permits).
- Additional procedures to open shut-off valves to drain uncontaminated stormwater from containment areas are recommended.
- Additional language translations are recommended.

Spill response equipment. Any applicable spill response supplies need to be clearly marked and located where the signage is posted and near the activity area. More than one spill response kit may be necessary to accommodate larger activity areas. BES requires spill response supplies, such as catch basin covers, absorbent material, and protective clothing, to be available at all potential spill areas. Employees should be familiar with the site's O&M Plan and proper spill cleanup procedures.

Figure 7-2. Spill Signage Example

IN THE EVENT OF A SPILL

1. Close the shut off valve located at _____

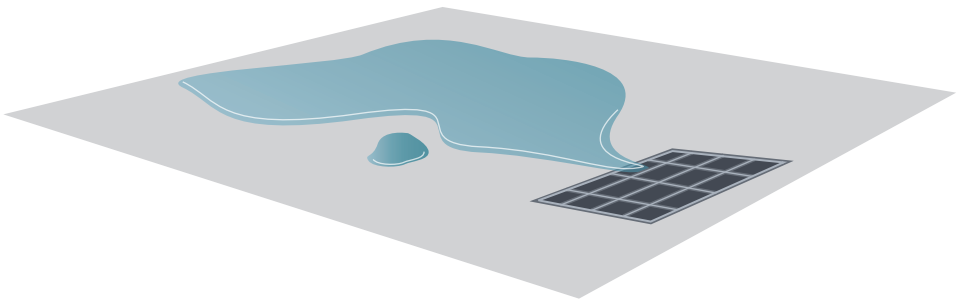
(your location, ie: NE comer of parking lot)

2. Call

- Supervisor
  503-XXX-XXXX
- City of Portland Bureau of Environmental Services
  Emergency Spill Response
  503-823-7180

USE SAFETY PRECAUTIONS

- Wear protective gear
- Keep vehicles and people out of spill
- Contain the spill
  1. Seal off drains
  2. Berm to contain the spill
  3. Clean up with absorbent materials
  4. Dispose of cleanup materials properly



Oregon Emergency Response System must be contacted
@ 1-800-452-0311 for hazardous material or oil spills of reportable quantity

7.2. Operations and Maintenance (O&M) Requirements

Maintaining the source control treatment BMPs is required to ensure the BMPs function as intended. An O&M Plan describes the ongoing O&M requirements associated with the source control treatment BMP. The O&M Plan must meet the requirements of this section.

The property owner or a designated responsible party is required to operate and maintain the source control treatment BMP in accordance with the O&M Plan. The O&M Plan is recorded with the County and is on file with the City. O&M requirements are binding on all current and future owners of the property. Failure to comply with the O&M Plan may result an enforcement action, including civil penalties.

The property owner or designated responsible party must keep a copy of the recorded O&M Form (see **Appendix 4**) and the O&M Plan. The property owner or designated responsible party is responsible for completing maintenance and record keeping. Records must be made available to the City upon request.

7.2.1. O&M Submittal Requirements

The SCM O&M submittal includes the completed O&M Form and an O&M Plan. The submittal of an O&M Form and O&M Plan is for all required source control treatment BMPs required or installed per the SCM.[31] The Source Control O&M submittal must meet the requirements of this section. BES must review and approve the O&M submittal.

The O&M Form is similar to a cover page. The O&M Form includes a site map. The Source Control O&M Form is located in **Appendix 4**.

The O&M Plan can be a site-specific maintenance plan, or the standard operations procedures described below can be used in lieu of a site-specific maintenance plan.

O&M Form Instructions

The applicant must complete and submit the O&M Form. The O&M Form must be signed, and the signature must be notarized. The O&M Form must be recorded and

[31] The Source Control O&M Form is a separate document from the O&M Form for stormwater management facilities required per the SWMM. In addition, a separate O&M is required for post-construction groundwater discharge to infiltration facilities and must follow the same standards as stormwater facilities, which are outlined in the SWMM.

filed with the Department of Assessment and Taxation in the county where the property site is located.

The O&M Form must be competed in full as described below. Call BES Development Review 503-823-7122 for general assistance.

Site Legal Description

- The Site Legal Description must include all the tax lots (parcels) managed by the onsite source control treatment BMP. The information must be accurate and complete on the O&M Form prior to submittal to the County.
- To find a property's legal description, visit Portland Maps at http://www.portlandmaps.com and find the property using the exact address. To locate the Site Legal Description of the property, select the "Assessor" link in the top menu and locate the boxes labeled "Tax Roll" and "Instrument Number." If the Tax Roll description has "TL" in it, include the Instrument Number where indicated on Form 2. This information is intended as guidance; it may not be adequate for filing by the County.

Site Plan

The O&M Form includes a small space for a sketched site plan. If the space is insufficient to include all the information below, attach a separate site plan. The site plan must include:

- Property boundaries and a north arrow
- All source control treatment BMP locations and conveyance features in relation to labeled streets, buildings, or other permanent features
- The location of utilities, including existing-to-remain and proposed water, sanitary, and storm sewers
- Flow arrows illustrating sources of runoff to each source control treatment BMP, the direction of flow through each facility, and the location and type of discharge point for each facility
- A cross-section for each source control treatment BMP with general dimensions
- Offsite discharge locations, including the ownership and type of system to which the discharge drains

BES may require additional information or updated site plan information during permit review, depending on individual site conditions.

The O&M Form shall be filed with the applicable County Recorder's office:

Multnomah County Recorder
501 SE Hawthorne St.
Suite 175
Portland, OR 97214
https://multco.us/recording/recording-documents
Phone: 503-988-3326

Clackamas County Recording Division
1710 Red Soils Ct., #110
Oregon City, OR 97045
http://www.clackamas.us/recording/
Phone: 503-655-8551

Washington County Recording Division
155 N. First Ave.
Suite 130, MS 9
Hillsboro, OR 97124
http://www.co.washington.or.us/AssessmentTaxation/Recording/
Phone: 503-846-8752

O&M Plan Instructions

Completed and recorded O&M Forms and Plans must be filed with BES by the applicant. Submit completed documents submittals to:

City of Portland, BES
Document Services
1900 SW Fourth Ave., Suite 5000
Portland, OR 97201

Standard Oil-Water Separator O&M Plan

Structural components, including inlets, outlets, pipes, coalescing plates and vaults, must be operated and maintained in accordance with the manufacturer's specifications and design specifications.		
	MAINTENANCE INDICATOR	CORRECTIVE ACTION
	Clogged catch basins, inlets, or pipes	Remove sediment, oil, and debris from catch basins when 1/3rd full and from gutters, inlets, outlets, and pipes to maintain at least 50% conveyance capacity at all times Vactor vault when sediment is 4 inches deep or when oil is 2 inches deep or covers 50% of the coalescing plates
	Diminished capacity of coalescing plates or vault	Close effluent shutoff valve before cleaning. Clean coalescing plates upstream or in the facility. Use low pressure, cool temperature, and biodegradable chemicals (if necessary).
	Saturated absorbent pads or socks	Change absorbent pads or socks when 50% of the surface is coated in oil and sediment.
	Cracked pipe or vault	Repair with grout or City-approved material or replace when cracks are identified, or if 1 inch wide or more.
Vegetation, including surface cover and nearby plantings.		
	MAINTENANCE INDICATOR	CORRECTIVE ACTION
	Large shrubs and trees	Prevent large root systems from damaging subsurface structural components.

Annual Maintenance Schedule

Summer	Complete quarterly inspection. Remove sediment, oil, and debris from the conveyance system. Make any necessary structural repairs.
Fall	Complete quarterly inspection. Test shut-off valve. Clean vault and/or coalescing plates. Change absorbent pads or socks.
Winter	Complete quarterly inspection.
Spring	Complete quarterly inspection. Test shut-off valve. Clean vault and/or coalescing plates. Change absorbent pads or socks.
All seasons	Clean clogged catch basins, inlets, or pipes as necessary.

Maintenance records: Facility operators are required to keep an inspection and maintenance log. Record date, description, and contractor (if applicable) for all repairs, maintenance, and facility cleanout activities. Keep work orders and invoices on file and make available upon request of the City inspector.

Pollution prevention: All sites must implement Best Management Practices to prevent the introduction of pollutants to stormwater and/or sanitary systems.

In the event of a spill: Contact Spill Protection and Citizen Response at 503-823-7180 to immediately report spills. If the facility has additional regulatory permits, there may be additional reporting requirements (e.g., stormwater or pretreatment permit manager). Document the circumstances and the corrective action taken; include the date/time, weather, and site conditions. Never wash spills into a stormwater facility. Immediate cleaning of the oil-water separator will likely be required.

Vectors (mosquitoes and rats): Source control treatment oil-water separators must not harbor mosquito larvae or rodents that pose a threat to public health or that undermine the facility structure. Record the time/date, weather, and site conditions when vector activity observed. Record when vector abatement started and ended. Call Multnomah County Vector Control at 503-988-3464 for immediate assistance to eradicate vectors.

O&M Log: Oil-Water Separator

Date	Work Performed by	Type of Work Performed				Notes	Initials
	(Vendor name or self)	Clean separator-remove sediment, clean	Structural repairs – type, location	Clean catch basins or inlets	Other		

7.2.2. Revisions to Recorded O&M Submittals

If the treatment system design needs to be modified during a project or prior to project completion, or if there are inaccuracies in the O&M submittal, contact BES Development Review at 503-823-7122 for guidance on how best to modify and update the O&M Form and O&M Plan to reflect the system as built.

If revisions are required and the owner requests and receives approval from the City for the revisions, the owner must record a revised O&M Form and O&M Plan with the County and submit the revised submittal to the City.

Contact BES at 503-823-5600 for guidance on modifications to the O&M Form and O&M Plan that occur after project completion. Property owners must receive BES approval prior to making changes to the discharge location, site modifications affecting the source of flow into treatment, or structural changes to the source control treatment BMP.

Chapter 8. Contaminated Site Requirements

Sites with known or suspected contamination may require special handling and management of soils, collected groundwater, and surface drainage under federal, state, and local regulations. BES may also consider possible contamination originating from adjacent or nearby properties with known or suspected contamination that may have migrated to, or have the potential to migrate to, the site. This chapter describes additional site characterization requirements, that BES may require of these sites, to determine the following, in order to determine if a project can move forward as submitted:

- Feasibility of proposed onsite stormwater infiltration
- If additional soil or groundwater management practices will be required during the project, and
- The appropriate receiving stream for stormwater or groundwater discharge

This chapter also describes additional operational controls for sites with known or suspected contamination.

In order to determine if sites with known or suspected contamination or adjacent to or nearby contaminated sites must meet the requirements of this section, a project applicant or site may be required to provide previously collected information, or complete an additional site characterization of the project area and conduct additional sampling, as required in **Section 8.1.**

Sites are advised to contact BES Development Review at 503-823-7122, DEQ's Environmental Cleanup Program, or the applicable NPDES discharge permit manager if they are aware or suspect that the site has contaminants or is adjacent to or nearby a property with known or suspected contamination for assistance early in the plan design process (i.e., before plan submittal).

8.1. Contaminated Site Characterization

The following sections are intended to provide project applicants or sites with the tools needed to characterize a site to determine if contamination is present that may be mobilized or exacerbated as a result of proposed site activities or development.

If BES requires the completion of a site characterization, the project applicant or site must initially evaluate the site history to determine if contaminants may be present. Based on the initial site characterization findings, the project applicant or site may be required to submit a project-specific Sampling and Analysis Plan (SAP) and a corresponding Environmental Site Investigation (ESI) report that documents site conditions and evaluates potential negative or adverse impacts from the proposed project.

BES may require a site characterization as part of the permit application and may request additional site characterization as early as the land-use review phase of site development. BES typically recommends a site characterization and any associated analytical testing of the applicable media (soil and groundwater) early in the design phase so BES can determine if the project can move forward as submitted.

If data has been recently collected from locations within or near the project site, BES may accept this data in lieu of the applicant collecting new data. For BES to accept existing third-party soil or groundwater data, the samples must have been collected and documented in a technical report signed and stamped by a qualified environmental professional (qualified state-licensed Professional Engineer [PE], Registered Geologist [RG], or Certified Engineering Geologist [CEG]).

Sampling and reporting described in this section must be completed under the direct supervision of a qualified environmental professional (qualified state-licensed PE, RG, or CEG) to ensure that potential contaminants are adequately addressed.

8.1.1. Identification of Contaminants

As part of the site characterization, the project applicant or site must identify potential contaminants that may be present at the site. This is typically completed using direct owner/operator knowledge and by searching available public records related to former and current site uses (e.g., during a Phase I or Phase II Environmental Site Assessment [ESA]). Examples of public records search tools include but are not limited to:

- EPA Envirofacts
- DEQ Facility Profiler[32]

[32] DEQ Facility profiler information can be found online at https://www.oregon.gov/deq/Data-and-Reports/Pages/default.aspx

- Property records, including but not limited to historical city directories and Sanborn Maps
- Any other existing and available information including but not limited to site reconnaissance, interviews, DEQ files, and owner knowledge

8.1.2. Development of a List of Contaminants of Interest (COIs)

BES may require the project applicant or site to develop a site-specific list of contaminants of interest (COIs) for each potential contaminant source historically or currently onsite. Examples include, but are not limited to:

- UST or fueling operations: petroleum-based fuels and metals (lead, cadmium, chromium, etc.). If petroleum hydrocarbons are detected, samples should also be tested for specific constituents present in petroleum products such as benzene, toluene, ethylbenzene, xylenes (BTEX), and polycyclic aromatic hydrocarbons (PAHs).
- Dry cleaning: chlorinated solvents (chlorinated volatile organic compounds).
- Agricultural: pesticides, herbicides, petroleum-based carriers, and metals.

8.1.3. Sampling and Analysis Plan (SAP) Requirements

If contamination is present on, adjacent to, or nearby a site proposed for development, BES may impose site- or project-specific monitoring requirements or require the site or permit applicant to prepare an SAP. Previous sampling and analysis may sufficiently characterize site contamination, and additional sampling may not be required.

The project applicant or site must develop an SAP to ensure the collection of relevant environmental data to determine if a project can move forward as submitted and ensure adequate controls are applied (including but not limited to determining pollution reduction, volume control, and discharge location requirements).

The SAP scope must be sufficiently broad to address known and possible contaminants within the project area and within the area of influence for the project area. The SAP must include an assessment of applicable media (e.g., soil, groundwater) that may be encountered during permitted construction activities. The number and location of soil and groundwater samples must be of sufficient frequency, quantity, and location to characterize soil and groundwater quality in the project area and area of influence and to evaluate potential negative or adverse impacts to the City's sewers and to the environment.

At a minimum, the SAP must include the following:

- A description of the project area, including a brief discussion of current and former site uses adjacent to and within the project area.
- Indication if the project area is within a wellhead protection area.[33]
- A visual depiction of the planned subsurface work within the project area.
- The maximum depth of planned subsurface work within the project area.
- Analytical protocols, including laboratory name (if known), analytes to be tested, analytical methods, and analyte reporting limits. Samples must be analyzed using EPA-approved analytical methods by an environmental laboratory accredited by the National Environmental Laboratory Accreditation Program. Laboratory reporting limits must be low enough to demonstrate compliance with applicable standards described in **Section 8.1.5.**
- Soil characterization activities, if required,[34] must include the following:
    - The number, location, and target depths of proposed borings, test pits, or soil samples (if applicable).
    - Soil borings and samples must be logged and soil classified under the direction of an Oregon-licensed PE, RG, or CEG consistent with the most recent version of ASTM D2488, Standard Practice for Classification for Description and Identification of Soils (Visual-Manual Procedure).
- Groundwater characterization activities, if required,[35] must include the following:
    - The number, location, and target depths of proposed groundwater sampling locations (if applicable)
    - An estimate of groundwater depths in the project area, including the estimated depth to seasonal high groundwater (DTW) and the estimated depth of any perched water tables (aquifers)

The project applicant or site must collect soil and groundwater samples using applicable approved sample collection and test procedures by trained individuals

[33] Information about the Wellhead Protection area can be found at https://www.portlandoregon.gov/water/29890.
[34] Methodologies for soil boring and sampling (including boring logs and test pit log requirements) are described in the SWMM.
[35] Methodologies for determining the depth to groundwater are described in the SWMM.

with experience collecting samples and under the direction of an Oregon-licensed PE, RG, or CEG.

The proposed SAP must be submitted as part of the permit application. BES must accept the SAP prior to its implementation to ensure the monitoring data will be sufficient to determine whether the project can go forward as proposed.

For questions regarding these requirements, contact BES Development Review at 503-823-7122.

Note: The project applicant or site must conduct their own waste characterization of excavated soil, drill cuttings, groundwater, etc., to ensure compliance with all federal, state, and local requirements regarding the transport and disposal of solid waste and hazardous wastes. Information regarding waste characterization, waste determination, and waste generator requirements is available from the DEQ Materials Management Program.

8.1.4. Environmental Site Investigation (ESI) Report Requirements

BES will require the project applicant or site to submit the monitoring and investigation results, resulting from implementation of an approved SAP, in a professionally prepared technical Environmental Site Investigation (ESI) report. The report must be stamped by an Oregon PE, RG, or CEG qualified to assess the contaminant nature, extent, and severity, contaminant leachability, contaminant fate and transport, groundwater hydrogeology, and potential negative or adverse impacts to groundwater or surface water quality or the City's sewer systems. The ESI will be used to determine if the project can go forward as proposed.

The ESI report must include the following components (if applicable to the project scope):

- Project description and location, including if it is located within the CSSWF WHPA
- Summary of sampling activities
- Deviations from SAP (if applicable)
- Scaled figures depicting the project area, sample locations, subsurface utilities, and other relevant project features
- Monitoring data provided in tables, with results compared with applicable and relevant reference values (refer to **Section 8.1.5**, Interpreting the Results)

- Analytical laboratory reports, including the following:
    - Analytical data for known contaminants or contaminants of interest (COIs) identified through historical data, research, or environmental assessments
    - City-required pollutant analyses
    - Analytical testing method(s)
    - Analyte method detection level(s)(MDLs) and analyte method reporting limits (MRLs) for detection
    - Quality assurance/quality control flags and pages of the associated laboratory reports
    - Relevant field and laboratory sample chain-of-custody forms
- Field forms or notes
- Soil boring logs
- Depth and extent of any contaminants found in soil or groundwater (i.e., profile- and plan-view project design plans overlaid with contaminated media zones)
- Elevation of the seasonal high-water table, and the depth of any perched water tables (aquifers)
- Rate and direction of groundwater flow
- Groundwater contaminant fate and transport
- Evaluation of potential project-related negative or adverse impacts to the City's sewer systems
- Evaluation of potential project-related negative or adverse impacts to the environment
- Demonstration that the proposed project meets all applicable SWMM and SCM requirements

BES may require a project applicant or site to provide DEQ concurrence, if applicable, that the project is not likely to mobilize contaminants or exacerbate existing conditions prior to approval or relevant land use or permit reviews. If BES discovers that DEQ does not have all relevant information (e.g., development plans, hydrologic, environment, and geotechnical reports), BES will share the relevant information with DEQ, which may result in project delays.

8.1.5. Interpreting the Results

BES will evaluate the analytical data to determine if the proposed project meets city code, administrative rules, and other applicable standards. This will confirm appropriate pretreatment, volume control, and receiving stream discharge requirements, as necessary.

BES will evaluate analytic results for soil and groundwater by comparing concentrations to applicable and relevant standards (e.g., water quality standards, City discharge limitations, DEQ screening criteria, and human health criteria) and by considering the potential for the discharge to meet these standards. Oregon DEQ screening criteria includes but is not limited to the following:

- DEQ soil clean fill screening levels[36] (DEQ 2019)
- DEQ risk-based concentrations (RBCs)[37] for soil ingestion, dermal contact, and inhalation for applicable current and future site uses (e.g., residential, occupational, construction workers, and excavation workers) and for drinking water if the site is within the CSSWF WHPA
- DEQ source control screening level values for sites within the Portland Harbor Superfund site (DEQ/EPA, 2005)' Columbia Slough Cleanup Site (DEQ, 2010 and 2014), and near a surface water body[38]

For questions regarding these requirements, contact BES Development Review at 503-823-7122.

8.2. Source Control Requirements for Contaminated Sites

8.2.1. Structural BMPs

Drainage to onsite stormwater management facilities. Stormwater infiltration into contaminated soils is prohibited per SWMM requirements, without DEQ concurrence.

If infiltration is infeasible due to site contamination, and the applicant proposes to install a lined stormwater management facility, BES will assess whether an impervious liner (minimum of 40-mil HDPE liner, installed to manufacturer

[36] DEQ Clean Fill Determinations Guidance can be found here: https://www.oregon.gov/deq/Filtered%20Library/IMDcleanfill.pdf
[37] DEQ Risk Based Decision Making for the Remediation of Contaminated Sites can be found here: https://www.oregon.gov/deq/FilterDocs/RBDMTable.pdf
[38] DEQ Water Quality Standards can be found here: https://www.oregon.gov/deq/wq/Pages/WQ-Standards.aspx.

instructions) is required. BES will assess whether an impervious liner is needed based on site characterization data and proposed plans.

If onsite stormwater management is not practicable for all of the discharge, the project applicant or site must evaluate all viable options for offsite discharge (e.g., direct discharge to surface water via a private site outfall or hauling offsite) before the City will consider allowing discharge to a City system.

Drainage to a City system or surface waters. If onsite infiltration is infeasible, a proposed stormwater discharge to a City system or surface waters require authorization from BES to ensure that all applicable city codes, standards, rules, and policies are met.

BES will review site characterization information available and will determine the following:

- Whether the proposed discharge can be approved with or without conditions (e.g., permit requirements or installation of treatment equipment to address contaminants of concern)
- The appropriate receiving system
- Whether more information is needed to determine if the discharge can be approved (e.g., additional site data)

BES will determine the appropriate receiving system as follows:

- Proposed discharges will be approved to discharge to an available City storm sewer and drainage system if they meet the applicable discharge standards (per city code and administrative rules) for that system.
- Proposed discharges will be approved to discharge to surface waters if they meet applicable discharge standards (see **Section 8.1.5**).
- Proposed discharges that do not meet applicable standards for the storm sewer and drainage system or surface water discharge will require the project applicant or site to implement appropriate measures (e.g., treatment) to achieve the required standards. The project applicant or site must identify the proposed measures in the submittal package and provide data that demonstrate the proposed measures will achieve the required standards.
- Proposed discharges that do not meet the applicable standards for the storm sewer and drainage system or surface water discharge, with added treatment may be directed to an available City sanitary sewer system if they meet the applicable discharge standards, with prior authorization and permitting.

Discharge of stormwater into the sanitary is not allowed unless prior authorization is granted through the Source Control Special Circumstances process detailed in **Chapter 10**.

- Proposed discharges that do not meet applicable standards for the sanitary or combined sewer systems will require the applicant to implement appropriate measures (e.g., treatment or flow reduction) to achieve the required standards. The project applicant or site must identify the proposed measures in the submittal package and provide data that demonstrate that the proposed measures will achieve the required standards.

Soil management. The project applicant or site must utilize site controls to prevent offsite migration of contaminated soils during construction. These may include wheel washing, dust suppression, inlet protection, and storage protection.

Requirements for storage protection include the following:

- Stockpiles of contaminated soils must be covered with plastic film or sheeting to prevent contact with rainfall.
- Stockpiles of contaminated soils must have a containment barrier around the entire perimeter to prevent stormwater run-on and material runoff. Barriers may consist of concrete curbing, silt fencing, or other appropriate containment material.
- An impervious layer must be placed beneath the stockpile to protect uncontaminated areas from potential leachate. Examples of impervious layers include HDPE geomembrane, PVC, or existing concrete or asphalt.

8.2.2. Treatment BMPs

BES will determine if a treatment BMPs may be required to meet the required standards of the discharge location if a drainage device is installed.

8.2.3. Operational BMPs

O&M Plan. An O&M Plan for any treatment BMP required to be installed per SCM requirements must be recorded with the County and submitted to the City per **Section 7.2** of this SCM.

8.2.4. Post-Construction Water Reclamation or Reuse Systems on Contaminated Sites

Water reclamation or reuse systems provide innovative ways to use natural resources and save money. However, using groundwater or stormwater as a

resource from sites with contamination may have additional requirements, depending on the nature and extent of contamination and if any remediation has been completed.

Authorizations for all reuse systems are typically required from BDS, BES, the Oregon Water Resources Department, and DEQ. On contaminated sites, the City will coordinate with DEQ prior to approving a groundwater or stormwater reuse system.

8.2.5. Additional Requirements

During construction, sites are required to implement the BMPs outlined in the City's Erosion and Sediment Control Manual.[39]

DEQ may prohibit the discharge to a UIC for this site use. Refer to OAR 340-044 for prohibitions and requirements. It is the responsibility of the project applicant or site to meet applicable UIC requirements.

Refer to **Figure 8-1** for a typical site layout of required source controls for soil management on land with suspected or known contamination or adjacent to contaminated sites. This schematic is for reference only.

[39] Information can be found online at https://www.portlandoregon.gov/citycode/article/81661.

Figure 8-1. Soil Management on Land with Suspected or Known Contamination or Adjacent to Contaminated Sites

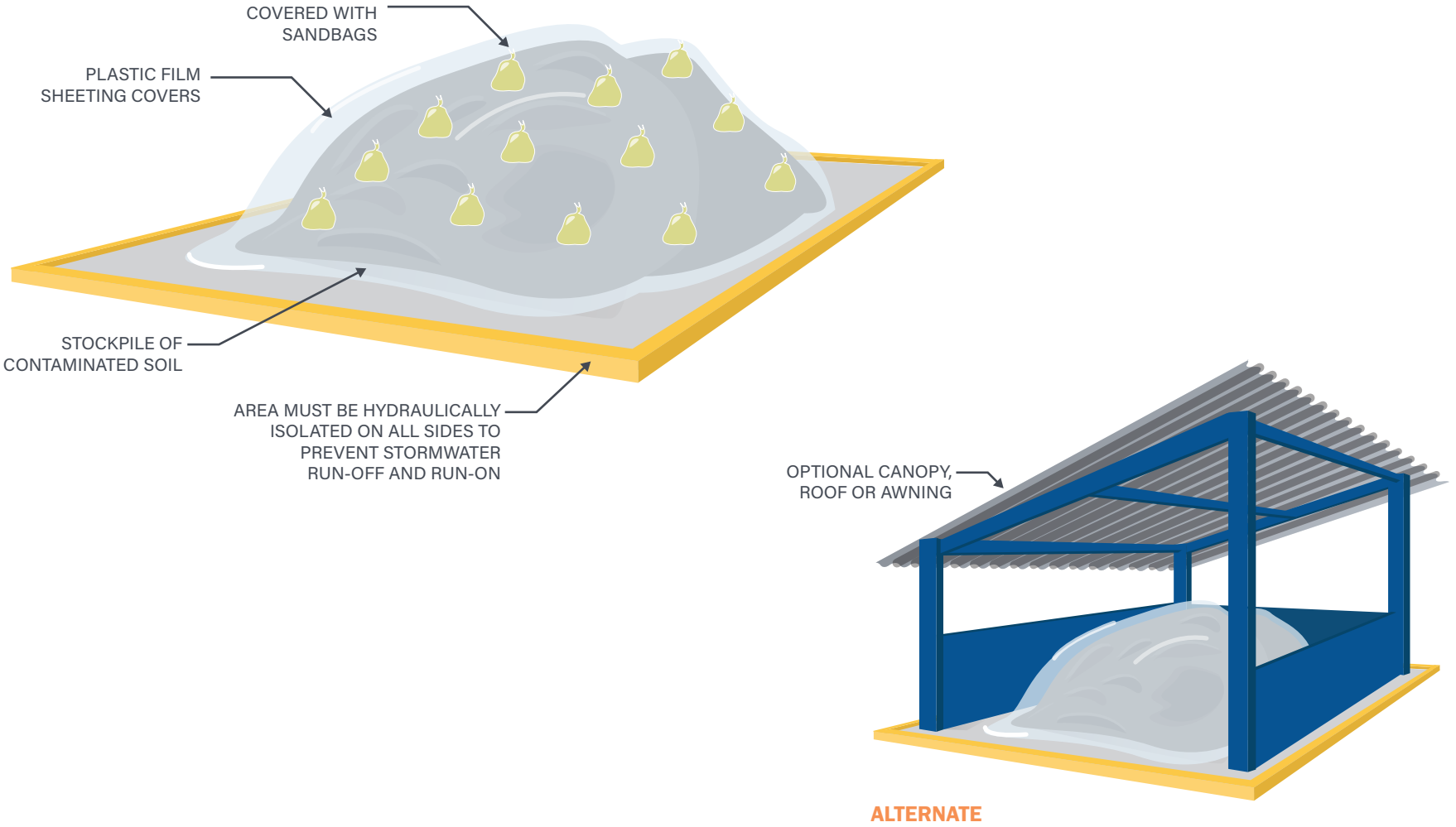


FIGURE IS FOR REFERENCE ONLY.

Chapter 9. Site Dewatering Requirements

This chapter describes the requirements related to the onsite management and offsite discharge of groundwater and impounded stormwater encountered during construction activities and accumulated, post-construction groundwater.

This chapter describes the process BES requires for determining the appropriate discharge system. This chapter also describes submittal requirements during permitting and associated with a Construction Dewatering Discharge Application for review by BES and the additional BMPs required for dewatering activities. The project applicant or site is required to meet all of the source control requirements that apply. The project applicant or site must identify the source control measures in the submittal package. The project applicant or site must receive authorization prior to discharge.

Implementation of the requirements described in this chapter help to:

- Ensure that discharges to a City system are properly authorized, directed to the appropriate discharge system, and assessed appropriate fees
- Minimize site dewatering discharges to the extent feasible
- Manage discharges onsite to the greatest extent practicable
- Minimize soil settlement that may compromise City infrastructure or adjacent structures
- Recharge groundwater
- Meet water quality and capacity requirements for City systems

9.1. Onsite Management Requirements

The project applicant or site must minimize the rate and volume of groundwater and impounded stormwater discharges to the greatest extent practicable by utilizing onsite infiltration systems (e.g., infiltration facilities). Post-construction facilities must comply with all relevant requirements specified in the SWMM. The applicant must demonstrate that the infiltration facility is sized adequately to account for the anticipated flows, per SWMM requirements. The design, depending on the receiving system, may need to incorporate water quality and flow control.

If onsite management is not practicable for the entire discharge, offsite discharge may be needed, and additional requirements will apply. The stormwater facility design may need to incorporate water quality and flow control, depending on the receiving system in accordance with the City's SWMM. The appropriate receiving system needs to be identified in the permit application materials.

BES will not approve discharge to a City system if another conveyance system (e.g., private outfall) is available for discharge to a surface waterbody. The applicant must consult with DEQ to determine if discharge to a private conveyance system is appropriate. BES may also coordinate with DEQ regarding the proposed discharge to a surface waterbody. Failure of DEQ or other regulatory agencies to authorize a discharge through a private conveyance system does not automatically authorize discharge to a City system.

9.2. Discharge to a City System

Once the onsite management requirements of **Section 9.1.** have been met by the project applicant or site, BES will evaluate the proposed discharge according to the conditions and process detailed below. Based on the review, BES will determine if the discharge to a City system is allowed. If allowed, BES will determine the appropriate City system to receive the discharge.

9.2.1. Conditions of Approval

BES will accept construction-related and post-construction groundwater discharges into a City system under the following conditions:

- The receiving system is available and has sufficient capacity
- The discharge meets the terms of the provisions specified in PCC Chapters 17.34 and 17.39 and associated administrative rules

In areas where the existing City system has limited capacity, BES may require additional detention, limit discharge rates, or impose additional discharge restrictions, including denial of the discharge.

The City may require dischargers to install treatment facilities or make other structural or operational modifications to protect the City systems and to comply with city code and rule requirements or any other applicable state or federal requirements.

BES will not accept post-construction groundwater discharges into a City system for aesthetic purposes, as opposed to protection of structures or use of structures.

9.2.2. Site Analytical Data

The project applicant or site must submit available analytical reports (e.g., previously collected or prepared laboratory analytical reports, geotechnical reports, or ESI reports) that identify the characteristics and potential contaminant concentrations in soils and groundwater at the site in the dewatering submittal (see **Section 9.3**). BES will use the available analytical data to help determine the appropriate City system to receive the discharge based on the applicable discharge standards of the receiving system.

BES may require the project applicant or site to submit additional analyses if the site has known or suspected contamination and available analysis is insufficient to determine the appropriate receiving system. BES will specify site-specific sampling and laboratory analysis requirements. Refer to **Chapter 8** of this manual for additional requirements for these sites.

9.2.3. Determination of City Receiving System

Discharges will be directed to an available City storm sewer and drainage system if they meet the applicable city code and administrative rule requirements, including discharge limits. For contaminated sites, BES will interpret analytical results as described in **Section 8.1.5** when determining the appropriate receiving system.

If the proposed discharge does not meet the applicable standards for discharge to the storm sewer and drainage system, BES may require the project applicant or site to implement appropriate control measures (e.g., treatment to reduce sediment or discharge flow rate control) to achieve the required standards. The project applicant or site must identify the proposed measures in the submittal package.

Discharges that do not meet the applicable standards of the storm sewer and drainage system may be directed to available City sanitary or combined sewer systems if they meet the applicable requirements of those systems.

If the proposed discharge does not meet the applicable standards for discharge to the storm sewer system, sanitary sewer system, or combined sewer systems, BES may require the project applicant or site to implement additional control measures (e.g., treatment) to achieve the required standards. The applicant must identify the proposed measures in the submittal package.

If a proposed discharge meets the discharge standards of the storm sewer and drainage system, the discharge must be routed to the storm sewer. Discharge of stormwater into the sanitary sewer system is not allowed unless approval is granted through the Source Control Special Circumstances process detailed in **Chapter 10**.

Public UIC Prohibition: Connections and private discharges to a City UIC system are prohibited. Other alternatives must be selected, which may include onsite management of uncontaminated groundwater via surface infiltration or discharge to a private UIC, discharge to a sanitary, combined, or storm sewer, or hauling the water offsite to a discharge location approved by BES.

9.2.4. Permits and Authorizations

Depending on the receiving system, a state or City-issued permit or authorization may be required (e.g., pretreatment permit or discharge authorization). See **Section 9.3** for a summary of all submittal requirements. The project applicant or site must receive authorization prior to discharge.

- If a **construction-related** discharge is proposed for a City system, and the requirements of **Sections 9.1** and **9.2** have been met, the applicant must also submit a Construction Dewatering Discharge Application to enable the City to determine the appropriate permits or authorizations. See **Appendix 1**, Construction Dewatering Discharge Application Form.
- If a **post-construction** groundwater discharge is proposed to a City system, and the requirements of **Sections 9.1** and **9.2** have been met, the applicant must submit a request to discharge and receive authorization from BES. See **Appendix 1**, Construction Dewatering Discharge Application Form.

Please call 503-823-5600 for information on the appropriate permits or authorizations.

9.3. Submittal Requirements

Dewatering submittal requirements. When construction-related or post-construction dewatering is proposed, the applicant must submit the following required information to the City as part of the permit application:

- **Scaled site plans**. At a minimum, the scaled site plan must include:
    - Property lines
    - North arrow
    - Footprints of proposed and existing structures
    - Surface drainage

- Location and details of any groundwater or stormwater treatment system, if applicable
- Estimated groundwater flow rate of discharge during all phases of development if groundwater will be encountered
- Dewatering plan if collecting, channelizing, or impounding stormwater or encountering groundwater during construction activity
- NPDES 1200-C Construction General Permit number
- Erosion and Sediment Pollution Control Plan (ESPCP) drawings that match the NPDES 1200-C Construction General Permit ESPCP drawings submitted to DEQ
- Proposed discharge location(s)
- Sub-meter(s), if applicable, must meet sub-meter specifications and administrative rules (refer to **Section 4.6.3** for additional sub-meter requirements)
- Sampling location and structure details
- Utility plans, including both private and public, and existing and proposed storm and sanitary conveyance systems

The site plan information must be located on the erosion control and civil sheets of the plan set.

- **Construction Dewatering Discharge Application Form**. The Construction Dewatering Discharge Application Form (see **Appendix 1**) must be completed and signed by a duly authorized representative.
- **Post-construction groundwater.** Post-construction groundwater discharges to a City system must receive prior authorization from BES. Please call 503-823-5600 for information on the appropriate permits or authorizations. Documentation of prior authorization must be submitted with the permit application.
- **Dewatering plan**. If dewatering of groundwater or impounded stormwater during construction is required, the ESPCP required under PCC Title 10 or the NPDES 1200-C Construction General Permit is required to accompany the submittal package. The ESPCP must meet the requirements of the City's Erosion and Sediment Control Manual and identify construction-related dewatering activities (e.g., a narrative describing the means and methods for construction-related dewatering, including discharge location, storage, testing, sampling,

treatment, or monitoring and maintenance) and associated BMPs and pollution controls used on the project site.

- **Site analytical data**. Analytical reports must be provided as directed by BES.
- **O&M Form** and **O&M Plan**. When using a private onsite management facility for groundwater flows, the SWMM O&M Form and O&M Plan must be recorded with the County and submitted. This applies to permanent groundwater dischargers that have vegetated facilities or other permanent dewatering water quality treatment or detention devices.
- **Notice of conditions.** Dischargers of post-construction groundwater to the City's system must record a Notice of Conditions of the discharge against the property deed. The Notice of Conditions will inform future property owners of the groundwater discharge and the City's authorization of the discharge. It will also provide the City's mailing address in order to notify the City when the characteristics of the discharge change or when there is a new property owner.

  See **Appendix 2** for a sample Notice of Conditions. The applicant must submit the Notice of Conditions during the land use or development review process.

Note: Before applying for City development permits, it is recommended that the project applicant or site contact the DEQ Land and Water Quality Divisions to obtain DEQ approval or denial of a private system management proposal. Depending on the disposal location for the discharge, DEQ may require the applicant to obtain NPDES or WPCF permits. DEQ will not authorize the discharge of construction-related groundwater to a UIC under the 1200-C permit.

9.4. Associated Charges

Sub-meter program and volume fees. Construction-related and post-construction groundwater discharges are subject to the sub-meter program requirements and fees specified in PCC Chapter 17.36 and BES Sub-Meter Program Administrative Rules (ENB-4.32). Construction-related stormwater discharges may also incur volume fees. The applicant must install a charge sub-meter on the final discharge (after the final treatment, if applicable) to the City sewer system to assess volume fees. The applicant must submit the Construction Dewatering Discharge Application for construction related discharges, if applicable.

Post-construction groundwater discharges to a City system must receive authorization from BES. Please call 503-823-7856 for information on the Sub-Meter Program.[40]

9.5. Requirements for Structures Designed to Flood

This section describes the requirements the project applicant or site must meet regarding structures designed to flood. Structures designed to allow floodwaters to enter must maintain structural integrity during flood events exceeding the design flood and must be equipped with an automatic emergency internal flooding system (e.g., a snorkel system). The project applicant or site is required to meet all of the source control requirements that apply. The applicant must identify the source control measures in the submittal package.

9.5.1. Structural BMPs

Drainage. The structures must drain to sewer ejector sump pumps that are plumbed to the sanitary sewer system. The pumping system must be equipped with a sensor that disables the power and turns the pumps off when flooding occurs.

Pumping systems must be designed to limit the total discharge rate to the City sewer system to a maximum of 50 gallons per minute or another site-specific flow rate approved by BES.

9.5.2. Treatment BMPs

No treatment BMPs are required for this section.

9.5.3. Operational BMPs

Signage. Signs must be posted next to the pumping system's control panel, outlining the discharge procedure for the accumulated water.

[40] Alternately, for information about the Sub-Meter Program, contact BES via email at submeterprogram@portlandoregon.gov.

Chapter 10. Source Control Special Circumstances Review

Special circumstances may make it impracticable for an applicant to meet the source control requirements specified in the SCM. BES manages a Source Control Special Circumstances Review process to review requests to meet source control requirements in alternative ways.

10.1. Special Circumstances Review

If source control requirements per the SCM are unable to be met because of zoning, property or site constraints, or other regulations, the applicant may request approval of alternative source control BMPs through a Special Circumstances Review process. The applicant must demonstrate that the proposed alternative source control BMPs meet or exceeds the required source control measures. The applicant must demonstrate that the proposed alternative source control measures can be effectively maintained and operated and provide associated procedures in an O&M Plan, prepared consistent with the requirements of **Chapter 7**.

The applicant may also request exemptions to requirements of the SCM through a Special Circumstances Review process for development proposals related to core and shell permits where (1) tenant-specific site plan layouts, uses, and activities are not known, and (2) the facility will be subject to future permitting evaluations (e.g., tenant improvements, additions, alterations, etc.). In this case, the facility will be subject to SCM requirements at the time of later alterations, which will require subsequent permitting.

The applicant can initiate a Special Circumstances Review by completing the Source Control Special Circumstances Form located in **Appendix 3** and submitting the associated application fee, site plans, and additional materials (see **Section 10.2**) with the permit application. The applicant may request a Special Circumstances Review meeting to discuss the submittal.

10.2. Source Control Special Circumstances Review Application Process

10.2.1. Application Filing

The completed Special Circumstances Review application must be submitted concurrently with the development proposal; building permit, land use, and early assistance applications; or public improvement permit for BES review. Special Circumstances Review applications will be screened for completeness within 3 business days of staff assignment. Inaccurate or incomplete applications will be returned and will cause a delay in considering the request.

Special Circumstances Review applications should be mailed or delivered to:

City of Portland, Bureau of Environmental Services
Attention: Source Control Special Circumstances
1900 SW 4th Ave, Suite 5000
Portland, OR 97201

Special Circumstances Review requests may also be provided via email to BES staff reviewing the proposed project or permit application.

For questions about the Source Control Special Circumstances application, call 503-823-7122.

10.2.2. Application Requirements

BES will not review the Special Circumstances Review application unless it is complete. A complete Special Circumstances Review application consists of the following items, which are discussed further below:

- A completed Source Control Special Circumstances Form
- One complete set of plans
- A Source Control Special Circumstances fee
- Supplemental information specific to the project circumstances

It is critical that information in the application be clear, concise, accurate, and completely written. Each application must stand on its own merit and will be reviewed based on the specific conditions of the project under consideration.

Source Control Special Circumstances Form. The Source Control Special Circumstances Form consists of the following sections:

- **Site information**. Provide the site or business name and phone number, location, type of business, and contact person or owner.
- **Applicant information**. Provide the permit applicant's name, address, phone number, and email address and the building permit number.
- **Special circumstance requested**. Specify the request being made, along with the features of the project that make it require a special circumstance.
- **Accompanying items**. Provide the required accompanying items, including the detailed information for the alternative source control, O&M, site plans, and required fee.

Plans. One complete set of plans (in addition to any plans submitted for permit processing) must accompany the Special Circumstance Review application. Plans should provide information detailing the areas considered to be a special circumstance, as well as any areas that may be affected by or that may affect those circumstances. The plans submitted under the Special Circumstances Review application must match the plans submitted for the development proposal.

Fee. The Special Circumstance Review application requires payment of an application fee. The amount of the fee is listed with the current fiscal year's Sewer and Drainage Rates and Charges. The application fee should be submitted by check with the Special Circumstances application form.

There is no application fee for Special Circumstances requests made by public agencies through public improvement projects.

Supplemental information (optional). Supplemental information (engineering analyses, test data, etc.) that will help clarify the Special Circumstance Review request or make it easier to understand may accompany the submittal, if desired.

10.2.3. Special Circumstances Review Decisions

BES staff will conduct the Special Circumstances Review within 21 calendar days of receipt of the complete submittal. BES will notify the applicant of the decision in writing.

The Special Circumstances decision is valid for 2 years from the decision date but can be nullified sooner as determined by BES if the area of development or redevelopment or other project circumstances change significantly.

If a Special Circumstances Review applicant disagrees with the issued Special Circumstances decision, the applicant has a right to request a modification to the

decision via an Administrative Review as outlined in PCC Chapter 17.38 and **Chapter 11** of the SCM. Following the decision of the Administrative Review Board, the applicant may have the right to appeal to the Code Hearings Officer.

Note: Some source control BMPs in the SCM overlap with the Portland Water Bureau's CSSWF WHPA Reference Manual. Therefore, if an alternative or exception to the SCM requirements is authorized under a Special Circumstances Review decision, there may be additional protective measures from the CSSWF WHPA Reference Manual that apply. The CSSWF WHPA Reference Manual can be found on the Portland Water Bureau website at http://www.portlandoregon.gov/water/29880.

Chapter 11. Administrative Reviews and Appeals

A person may request reconsideration of a BES decision through an administrative review as described in this Chapter. Administrative review and appeal of an enforcement action is also governed by BES Enforcement Program Administrative Rules. After the requestor has exhausted all BES administrative reviews, the requestor may file for an appeal of a decision with the Code Hearings Officer per PCC Title 22. A person may only appeal a decision that is subject to administrative review by BES.

11.1. Administrative Review Requests

A person to whom a notice was addressed will have 20 business days from the date the notice was issued to submit a written request for administrative review of a decision described in the notice. The requestor must provide all known and relevant information that supports an assertion made in the written request for administrative review. The requestor must provide such information via graphic, written, or recorded communication, or in person at the administrative review meeting.

BES will hold an administrative review meeting within 15 business days of receipt of the written request for administrative review unless BES determines in its reasonable discretion that a delay is justified. The requestor may provide detailed information in writing in lieu of attending the administrative review meeting.

Non-reviewable items. All BES decisions made under these rules are subject to administrative review requests, with the exception of the following:

- The content of Bureau policy or specific technical parameters, such as design criteria and requirements for oil-water separators, design storms, design coefficients, and other technical criteria
- The requirement to submit a plan, report, test result, form, record, or other source of information necessary for BES staff to determine compliance with standards of the SCM
- A facial challenge—as that term is defined in these rules—to a requirement in these rules or associated city code, or to any technical standard

Administrative review requests should be mailed or delivered to:

City of Portland, Bureau of Environmental Services
Attention: Source Control Plan Review
1900 SW 4th Ave, Suite 5000
Portland, OR 97201

11.2. BES Evaluation

BES will use authorizing city code, the provisions of these rules, the BES Enforcement Program Administrative Rules, City records, and the testimony and documentation provided by the requestor to make a final determination regarding the issue that is the subject of the administrative review.

11.3. Final Determination

BES will issue a final written determination within 15 business days of the administrative review meeting, unless BES determines that extenuating circumstances justify a reasonably longer period of evaluation. The written final determination will provide information about the process for filing an appeal to the Code Hearings Officer.

Chapter 12. Enforcement of SCM Requirements

12.1. Enforcement Authority

PCC Chapters 17.32, 17.33, 17.34, 17.38, and 17.39 and the associated administrative rules grant the City authority to enforce the requirements specified in the SCM.

BES will implement enforcement in accordance with the provisions of these city code chapters, in conjunction with the BES Enforcement Program Administrative Rules (ENB-4.15), the Fats, Oils, and Grease Removal Program Administrative Rules (ENB 4.26), the Administrative Rules for Discharges to the City Storm Sewer and Drainage System (ENB 4.13), Sanitary Discharge and Pretreatment Program Administrative Rules (ENB 4.03), and BES Public Works Enforcement Program Administrative Rules (ENB 4.22).

12.2. Violations

BES may assess penalties per violation and per day and each day that a violation continues may be considered a separate violation. The person against whom BES takes enforcement action is ultimately required to resolve the violation(s). Typical violations include, but are not limited to, the following:

- Failure to construct a treatment source control BMP or structural source control BMP to the standards of the SCM
- Failure to connect to the receiving system consistent with an approved plan
- Failure to comply with a written notice of the Director made under authority of this Chapter
- Failure to comply with any condition of an O&M Plan
- Failure to comply with a dewatering permit or authorization, causing an introduction of unpermitted materials
- Failure to maintain a treatment source control BMP or structural source control BMP leading to a potential or actual operating deficiency of the facility
- Failure to implement an operational source control BMP to the standards of the SCM leading to a potential or actual operating deficiency
- Failure to have a properly recorded or accurate O&M Plan on file with BES

- Failure to comply with enforcement actions as identified in the BES Enforcement Program Administrative Rules

12.3. Violation Classification

Persons violating these rules may be subject to the enforcement actions specified in the BES Enforcement Program Administrative Rules. Penalties for violations will be assessed as described in the BES Enforcement Program Administrative Rules and applicable guidance documents.

Violations are categorized by severity and include, but are not limited to, the following:

- **Class I violation.** A Class I violation is one that has a high degree of deviation from the regulations or that poses a substantial threat to human health and safety, property, or the environment. Examples include:
    - Removal of a treatment source control BMP without prior BES approval
    - Removal of a structural source control BMP without prior BES approval
    - Allow or cause a connection that results in the discharge to an unpermitted receiving system
    - Introduction of unpermitted materials into a receiving system
- **Class II violation.** A Class II violation is one that has a moderate degree of deviation from the regulations or that poses a significant threat to human health and safety, property, or the environment. Examples include:
    - Failure to construct a treatment source control BMP to the standards of the SCM
    - Failure to construct a structural source control BMP to the standards of the SCM
    - Conducting a site use or activity inconsistent with approved plans
    - Failure to implement an operational source control BMP to the standards of the SCM
    - Modification of a source control BMP without prior BES approval
    - Repeat failure to comply with any condition of an O&M Plan
- **Class III violation.** A Class III violation is one that has a minor deviation from the regulations or poses a minimal threat to human health and safety, property, or the environment. Examples include:

- Repeated failure to have a properly recorded or accurate O&M Plan on file with BES
- Failure to maintain a source control BMP leading to an actual operating deficiency of the facility

- **Warning notice violation**. A warning notice may be issued for a minor reporting or operational violation arising from a minor deviation from the regulations or poses no observable or measurable impacts to human health and safety, property, or the environment. Warning notice violations include but are not limited to:
  - Failure to have a properly recorded or accurate O&M Plan on file with BES
  - Failure to maintain a source control BMP leading to a potential operating deficiency of the facility
  - Failure to comply with any condition of an O&M Plan

  Issuance of a warning notice does not exempt the facility operator or discharger from escalating enforcement actions when the underlying violation has not been addressed.

Appendices

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Appendix 1. Construction Dewatering Discharge Application Form

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CITY OF PORTLAND
Source Control Manual

Construction Dewatering Discharge Application

This application is to request temporary discharges of groundwater and/or impounded stormwater generated from construction activities to the City of Portland's (City) storm, sanitary, or combined sewer system. All application fees, sewer charges, permits, authorizations, and enforcements, if applicable, will be issued and billed to the Responsible Party.

Date: _____ **City Project Manager:** _____

Building Permit #/ Project #: _____

REQUESTER–RESPONSIBLE PARTY *(contact for billing purposes)*

Contact Name: _____

Company Name: _____

Company Address: _____

City/State/Zip: _____

Phone: _____ Mobile: _____

Email: _____

DISCHARGE GENERATOR *(if different than requestor)*

Contact Name: _____

Company Name/Contractor: _____

City/State/Zip: _____

Phone: _____ Mobile: _____

Email: _____

DISCHARGE DESCRIPTION

Groundwater: Subsurface water that occurs in soils and geological formations that are fully saturated. Groundwater fluctuates seasonally and includes perched groundwater.

Impounded Stormwater: Water that originates as precipitation on a particular site which is channelized, collected, or pumped.

Will there be discharges of groundwater and/or impounded stormwater (including mixed groundwater and impounded stormwater)? If **NO**, skip to No Discharge Statement on back. ◯ Yes ◉ No

Will there be any discharge, other than groundwater or impounded stormwater? If **YES**, describe: ◯ Yes ◉ No

Duration (MM/DD/YY): _____ OR from _____ to _____

Discharge Flow Rate (e.g. 50 gpm): _____ Estimated Total Discharge Volume (*in gallons*): _____

The Bureau of Environmental Services' standard flow restriction is limited to 50 gpm. Requests above **50 gpm** will require additional processing. Increased flow rate requests **cannot be accommodated** if the City's system lacks sufficient capacity in that area.

OFFICIAL USE ONLY

Permit: *(circle)* Issued / Denied — Permit or Authorization #:

Asset ID: — Type: *(circle)* Storm Sanitary Combined

Date issued: — Initials: — Invoice #:

Construction Dewatering Discharge Application

PROPOSED DISCHARGE LOCATION

- ◯ Storm Sewer
- ◯ Sanitary Sewer
- ◯ Combined Sewer
- ◯ Other, describe:

BES Asset ID #:_____

To find the asset ID,
1. Go to: **www.portlandmaps.com**
2. Enter site address.
3. Click "Sewer Assets".
4. Locate the unique 6-digit code on the map.

Describe discharge location (*e.g. manhole, catch basin, etc.*) and attach a drawing, map, or photo.

MONITORING SUBMITTAL_

Attach all data relevant to stormwater or groundwater characterization *(e.g. analytical data, site assessments, etc.)*

NPDES PERMIT

Is a 1200-C NPDES construction stormwater discharge general permit, required for this site? ◯ Yes ◯ No

If YES, what is the permit number? _____

BILLING INFORMATION

How will the discharge be measured?

- ◯ **METERED.** If metered, the meter must be compatible with the approved discharge flow rate/pipe size and must have a continuous read in gallons or cubic feet. *Attach photos of the meter.*
- ◯ **MEASURED BY BATCH.** If measured by batch, describe how you will calculate your discharge volume:

NO DISCHARGE STATEMENT

I certify there will be no impounded stormwater discharge associated with construction activities or groundwater entering a City conveyance system on a permanent or temporary basis. I am also aware that sewer volume charges or system development charges may apply per Portland City Code 17.36 for this discharge. If it is found there is an offsite discharge of either groundwater or stormwater as defined in this statement and the discharge has not been authorized, I am aware that penalties can be assessed per Portland City Code 17.39 and 17.34. If site conditions change, and a discharge to a City system is needed, I will contact the City by calling 503-823-5600 to obtain an authorization prior to discharge.

☐ I certify there will be no discharge.

CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) who manage the system or persons directly responsible for gathering the information, the information submitted is to the best of my knowledge true, accurate, and complete. I am aware there are penalties for submitting false information.

By signing this application, you understand that no discharges may occur without a City-issued permit.

RESPONSIBLE PARTY

Printed Name: _____ Date:_____

Signature: _____

Appendix 2. Notice of Conditions

SAMPLE LONG-TERM DEWATERING
NOTICE OF CONDITIONS

After Recording Return Copy to: This Space Reserved For Recorder's Use:

PORTLAND BUREAU OF ENVIRONMENTAL SERVICES (BES)
ENVIRONMENTAL COMPLIANCE DIVISION
1900 SW Fourth Avenue, Suite 5000
Portland, OR 97201

NOTICE OF DEVELOPMENT PERMIT APPROVAL CONDITIONS

This notice pertains to the lot or parcel described as [insert legal description] located at [Site Address]. Approval of the development permit for this parcel is based in part on compliance with Portland City Code Title 17.38. Section 17.38.035 requires that long-term dewatering flows obtain authorization and that the authorization establish volume, flow rate, and pollutant load limits for the site's specific long-term discharge. To maintain continued compliance with the authorization, the parcel or lot owners and future parcel/lot owners are required to notify the Bureau of Environmental Services (BES) of ownership changes and any discharge characteristic changes e.g. volume or flow rates and pollutant loadings. The written notification must be sent to BES, Environmental Compliance Division, 6543 N Burlington, Ave, Portland, OR 97203. Parcel or lot owners and future parcel/lot owners are advised to verify the constraints on their property in the applicable land use and building permit decisions and conditions of approval, and with BES land use review staff.

DATED this _____ day of _____, 2016.

_____
Name

_____
Title

State of OREGON

County of Multnomah

This instrument was acknowledged before me on _____, 2016 by

_____.

_____
Notary Public – State of Oregon

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Appendix 3. Special Circumstances Form

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CITY OF PORTLAND
Source Control Manual

SOURCE CONTROL
SPECIAL CIRCUMSTANCES

This form is required if you are requesting alternatives to standard structural source controls or exceptions to the City's Source Control Manual requirements. This form may also be used for other pollution prevention requests an applicant would like reviewed by Environmental Services staff.

Special Circumstances will require an additional review process and may delay issuance of related building permits. If this request cannot be satisfied by Source Control Special Circumstances review process, an applicant may request an Administrative Review.

Date of Request: _____ **Building Permit Application Number:** _____

1 SITE INFORMATION

Site Name (if applicable): _____

Phone: _____

Address or Location: _____

City/State/Zip: _____

Type of Business: _____

Facility Contact or Owner: _____

2 APPLICANT INFORMATION

Applicant Name: _____

Applicant Phone: _____ Applicant Email: _____

Applicant Mailing Address: _____

City/State/Zip: _____

3 SPECIAL CIRCUMSTANCE REQUESTED *(check appropriate box and provide a description)*

☐ Request for an alternative source control method.

☐ Request for review of EXCEPTION qualifications.

☐ Other

Please describe:

4 THE FOLLOWING ITEMS NEED TO ACCOMPANY THIS FORM:

- A detail or vendor specification for each alternative source control.
- A site plan of the facility/property clearly identifying the location on the site that will be impacted by this special request and an O&M Form.

  Existing and proposed utilities may need to be shown to ensure regulatory compliance with local, state and federal regulations. (A hand-drawn sketch, not to scale, is acceptable as long as it is legible.)
- A check made payable to the City of Portland for the Special Circumstance Review application fee (see Sewer and Drainage Rates and Charges Fee Schedule for current fees).

Provide a brief explanation for your request *(use additional pages if necessary)*:

Signature: _____ Date: _____

Printed Name: _____

(for office use only)

Received by: _____ Date: _____

Fee Required: ☐ Yes ☐ No

Fee Paid: ☐ Yes Check No._____ ☐ No

☐ Approved ☐ Denied ☐ Other (see comments below)

City Comments:

_____

_____

Signature: _____ Date: _____

Appendix 4. Source Control Operations and Maintenance Form

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CITY OF PORTLAND
Source Control Manual

OPERATIONS & MAINTENANCE FORM
SOURCE CONTROL FACILITIES

☐ This O&M Form supercedes document number _____

(for official county use only)

PROJECT NAME _____

PERMIT INFORMATION

Permit # _____

Permit Submittal Date _____

SITE INFORMATION *(include all parcels)*

R# (6 Digits) _____

Site Address _____

City / State / Zip _____

Preparation Date: _____

OWNER INFORMATION (ALL LEGAL OWNERS)

Name (1) _____

Name (2) _____

Address *(Mailing)* _____

City / State / Zip _____

O&M PREPARER INFORMATION

Name _____

Address *(Mailing)* _____

City / State / Zip _____

Phone *(area code required)* _____

Email _____

Site Legal Description:

Responsible Party for Maintenance *(check one)*

☐ Homeowners Association ☐ Property Owner

☐ Property Management Company ☐ Tenant

☐ Other (describe) _____
(not Contractor or Consultant)

Contact Information for Responsible Party

Contact Name _____

Contact Organization _____

Phone *(area code required)* _____

Email: _____

Maintenance Practices and Schedule

These operations and maintenance practices are required in accordance with Portland City Code, Chapter 17.38.

The requirements are based on the current version of the *City of Portland Source Control Manual* on the date of permit submittal.

OPERATIONS & MAINTENANCE FORM
SOURCE CONTROL FACILITIES

SITE PLAN

Provide a site plan sketch in the area provided below, or attach a scaled site plan to this submittal that includes all of the information required as shown in the Source Control Manual section on Operations & Maintenance Submittal Requirements, Site Plan.

STEP 1 – COMPLETE THE FOLLOWING TABLE

Source Control Facility Type	Uncovered Area Treated (sf)	Covered Area Treated (sf)	Discharge Point (Sanitary or Storm)
Totals			

Maintaining the source control facility or facilities listed above shown on the following (or attached) site plan is a required condition of building permit approval for the identified property. Property owners are required to operate and maintain facilities in accordance with the O&M plan on file with the City of Portland. This requirement is binding on all current and future owners of the property. Failure to comply with the O&M plan can trigger an enforcement action, including penalties. The O&M plan may be modified by written consent of current owners and written approval of the Bureau of Environmental Services.

STEP 2 – REQUIRED SITE PLAN
(insert or draw here, or attach separate sheet)

☐ I have attached a site plan.

OPERATIONS & MAINTENANCE FORM
SOURCE CONTROL FACILITIES

SIGNATURE AND ACKNOWLEDGEMENT

By signing below, the owner accepts and agrees to the terms and conditions contained in this O&M Form and in any document executed by filer and recorded with it. The owners further acknowledge that this documentation has been prepared on their behalf and that they are responsible for the quality and completeness of the O&M Plan. Any failure to comply with the terms of these plans may result in enforcement actions by the Bureau of Environmental Services requiring the property owners to restore the stormwater facilities to a functional state as approved under original requirements.

The owners also accept that the City requires property owners to submit and record, with the County, complete and accurate O&Ms enforceable under City Code 17.38 and that substantial changes to the O&M require City approval prior to County recording. A revised O&M must state that it supersedes a previous O&M (with cited county document number; See Page 1).

THIS PAGE MUST BE SIGNED IN THE PRESENCE OF A NOTARY.

Property Owner or Authorized Representative (1) Signature	*Property Owner or Authorized Representative (2) Signature*

NOTARY SIGNATURE AND STAMP

☐ INDIVIDUAL Acknowledgement

This acknowledgement is intended for property owned by individuals or trusts.

STATE of OREGON county of: _____

This instrument was acknowledged before me on: *(date)* _____

By: *(owner 1)* _____

By: *(owner 2)* _____

Notary Signature _____

My Commission Expires _____

Notary Seal:

OR

☐ CORPORATE Acknowledgement

This acknowledgement is intended for corporation, government agencies, school districts, or other formal entities

STATE of OREGON county of: _____

This instrument was acknowledged before me on: *(date)* _____

By: *(representative)* _____

As: *(Title)* _____

Of: *(Corporation)* _____

Notary Signature _____

My Commission Expires _____

Notary Seal:

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Acronyms and Abbreviations

API	American Petroleum Institute
AST	above-ground storage tank
BDS	Bureau of Development Services, City of Portland
BES	Bureau of Environmental Services, City of Portland
BMP	best management practice
CEG	Certified Engineering Geologist
CMOM	capacity, management, operation, and maintenance
CSSWF WHPA	Columbia South Shore Well Field Wellhead Protection Area
CWA	Clean Water Act
CO	Commercial permit (BDS)
COI	contaminants of interest
CFR	Code of Federal Regulations
DEQ	Oregon Department of Environmental Quality
DR	Development Review permit (BDS)
DSM	Port of Portland Stormwater Design Standards Manual
ESPCP	Erosion and Sediment Pollution Control Plan
EPA	U.S. Environmental Protection Agency
ESA	Environmental Site Assessment
ESI	Environmental Site Investigation
FA	Facility permit (BDS)
GPM	gallons per minute
MG	Major Projects permit (BDS)
MS4	Municipal Separate Storm Sewer System

NPDES	National Pollution Discharge Elimination System
O&M	operations and maintenance
OAR	Oregon Administrative Rule
OERS	Oregon Emergency Response System
OPSC	Oregon Plumbing Specialty Code
ORS	Oregon Revised Statute
PCC	Portland City Code
PE	Professional Engineer
ppm	parts per million
RG	Registered Geologist
RCRA	Resource Conservation and Recovery Act
SAP	Sampling and Analysis Plan
SCM	Source Control Manual
SD	Site development permit (BDS)
SDFDM	Sewer and Drainage Facilities Design Manual
SDWA	Safe Drinking Water Act
SPCC	Spill Prevention Control and Countermeasure
SWMM	Stormwater Management Manual
UIC	underground injection control
UST	underground storage tank
WPCF	water pollution control facility

Definitions

NOTE: The definitions from PCC Chapters 17.04, 17.34, 17.38 and 17.39 and BES Administrative Rules referenced below apply to terms used in this manual, in addition to the following:

Alternative discharge control mechanism: A mechanism issued by the Director in lieu of an industrial wastewater discharge permit to control the discharge of industrial wastewater to the City sewer system. Alternative discharge control mechanisms include, but are not limited to, discharge authorizations and best management practices.

Applicant: See SWMM Definitions

Batch discharge: See ENB 4.03 Definitions

Best management practices (BMPs): See PCC 17.04.010 Definitions

Capacity: See PCC 17.38.020 Definitions

Combined sewer: See PCC 17.34.020 Definitions

Containerized: Describes the storage of any product, byproduct, or waste that is completely held or contained on all sides, within a discrete volume or area.

Containment: A structural control measure or BMP designed to capture and temporarily store potentially contaminated stormwater or process wastewater that is not appropriate for discharge to City systems without pollution, flow, or volume reduction BMPs.

Contaminants: Pollutants or hazardous substances (as defined by Oregon Revised Statute 465.200(16)), at levels above those that occur naturally (i.e., background levels), including those that may be present based on historical and current use.

Contaminants of interest: Contaminants that are suspected or known to be at a site based on site history or the results of preliminary testing, but which have not yet been screened against any generic risk-based concentrations or other screening criteria. Also known as constituents of interest or chemicals of interest.

Construction-related dewatering: When groundwater or impounded stormwater is temporarily drained or pumped from a subsurface or surface system during the preconstruction or construction site work. Specific activities include, but are not

limited to, construction dewatering, dewatering wells, trench systems, or sediment control ponds.

Covered vehicle parking areas: Parking structures used to store and cover parked vehicles, including below-grade parking structures, above-grade parking structures, and grade-level parking structures, with covers such as canopies, overhangs, and carports.

Development: See SWMM Definitions

Dewatering: The process of removing water, typically by draining or pumping, from a subsurface or surface system

Discharge point: See PCC 17.38.020 Definitions

Discharge rate: See PCC 17.38.020 Definitions

Dump station: An approved plumbing fixture, such as those used for RVs, where food cart pod wastewater may enter the sanitary sewer system in a safe and controlled manner.

Enforcement action: See ENB 4.15 Definitions

Facial challenge: See ENB 4.15 Definitions

Flow: See SWMM Definitions

Flow control: See SWMM Definitions

Food cart pod: A property that hosts a group of food carts comprised of more than one food cart. The food carts in a food cart pod remain onsite for a duration of greater than 4 hours per day for one or more days.

Food cart: A trailer, cart, mobile unit, truck, or other vehicle or structure that is not considered a building by the Bureau of Development Services and that is used to prepare or sell food.

Groundwater: See SWMM Definitions

Groundwater discharge: See PCC 17.38.020 Definitions

Hazardous substance: See PPC 17.34.020 Definitions

Hydraulically isolated area: An area where measures such as grading, curbing, or berming are installed to prevent uncontaminated stormwater from entering the area or contaminated water from flowing out of an area.

Mobile fueling: The operation of dispensing liquid fuels from tank vehicles into the fuel tanks of motor vehicles or equipment.

Operational BMPs: An operational source control BMP is a non-structural practice that prevents or reduces pollutants from entering groundwater, a waterbody, or the public sewer or drainage system. Examples include, but aren't limited to, modifications of facility processes, signage, shut-off valve testing, and housekeeping pollution control practices.

Parking area: The area of a site devoted to the temporary or permanent storage, maneuvering or circulation of motor vehicles. Parking areas do not include driveways or areas devoted exclusively to non-passenger loading.

Permit: see SWMM Definitions

Pollutant: See 17.34.020 Definitions

Post-construction dewatering: When groundwater is drained or pumped from a subsurface or surface system during the post-construction period for the constructed subsurface system. For example, groundwater remediation systems or structures designed to flood.

Practicable: See 17.38.020 Definitions

Receiving system: See 17.38.020 Definitions

Redevelopment: See 17.38.020 Definitions

Sidewalk vending food cart: A food cart that sells prepackaged food and does not cook or assemble food and does not generate food cart wastewater or contain plumbing fixtures.

Site: See SWMM Definitions

Source control: A structural, treatment, or operational measure required by the Stormwater Management Manual or the Source Control Manual to prevent or control the release or potential release of pollutants generated by certain site activities or characteristics.

Stormwater: See PCC 17.38.020 Definitions

Stormwater management: See PCC 17.38.020 Definitions

Stormwater management facility: See PCC 17.38.020 Definitions

Structural BMPs: A structural source control BMP is a physical structure or device that controls or prevents pollutants from entering groundwater, a waterbody, or the public sewer or drainage system. Examples may include physical structures that cover, segregate, or enclose pollution sources.

Tenant improvements: See SWMM Definitions

Treatment BMPs: A treatment BMP is a mechanism that is intended to remove pollutants from a pollutant source and requires maintenance.

Underground injection control (UIC): See SWMM Definitions

Waste containers: Compactors, dumpsters, compost bins, grease bins, recycle bins, and garbage cans. Compactors include self-contained compactors with a "belly/bladder" liquid-containment area.

Waste storage area: An indoor or outdoor area where wastes or waste containers are collectively stored. Solid wastes include both food and non-food waste or recycling.

The City of Portland ensures meaningful access to City programs, services, and activities to comply with Civil Rights Title VI and ADA Title II laws and reasonably provides: translation, interpretation, modifications, accommodations, alternative formats, auxiliary aids, and services. To request these services, call 503-823-7740, City TTY 503-823-6868, Relay Service: 711.

口笔译服务 | Chiaku me Awewen Kapas | अनुवादन तथा व्याख्या | Traducere și interpretariat | Устный и письменный перевод | Turjumaad iyo Fasiraad | Traducción e interpretación | Письмовий і усний переклад | Biên Dịch và Thông Dịch ✆ **503-823-7740**