



# **1200-Z Industrial Stormwater Discharge General Permit**

**Applying for Permit Coverage and  
Developing A Stormwater Pollution Control  
Plan**

**Technical Assistance for Industrial  
Operators**

**2021-2026 Permit Revision**



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# Executive summary

The purpose of this document is to provide technical assistance when applying for an industrial stormwater permit and developing a Stormwater Pollution Control Plan. This guide is intended for an operator or consultant of an industrial facility required to develop a SWPCP that complies with a National Pollutant Discharge Elimination System Industrial Stormwater General Permit No. 1200-Z.



This guide is organized in the following manner:

- Section 1.0 outlines how to apply for this permit.
- Sections 2.0 through 4.0 provides direction on how to develop a SWPCP.
- The appendices are additional resources to assist in writing a SWPCP.

The permit expires every five years. The 1200-Z permit is scheduled to expire on June 30, 2026.

On March 25, 2021, the Environmental Quality Commission adopted the renewed permit into Oregon's Administrative Rules. Please see summary in Appendix I, for a comparison of the new permit requirements to the old permit requirements. A copy of the permit can be found on DEQ's [Industrial Stormwater Permits web page](#).



# Coverage requirements

Industrial facilities which have the potential to discharge stormwater to surface waters or to conveyance systems that discharge to surface waters and conduct industrial activities identified in Table 1 or Table 2 in 1200-Z permit, are eligible for coverage under the 1200-Z industrial stormwater discharge general permit. Facilities may apply for an exemption from the permit if there is no exposure of industrial activities or materials to stormwater or snowmelt. These facilities must submit a signed No Exposure Certification every five years.

For DEQ administered sites, application materials and payment portal is in our electronic system, [Your DEQ Online](#).

[Visit our YDO website](#) for general user guides and registration instructions. There are specific [stormwater instructional guides](#) available too on our industrial stormwater permits web page.

Copies of the application form, Land Use Compatibility Statement and fee information can be found within Your DEQ Online Public Portal. Please see Appendix II for the SWPCP checklist. The checklist is required to be submitted with an application. Appendix V provides contact information and addresses for DEQ regional offices and our agents. Our agents administer the permit for DEQ. Therefore, if an industrial site is located within our agent's authority, instead of applying through YDO, paper forms can be found on each individual website at the links below.

- City of Portland, Bureau of Environmental Services: [The City of Portland Industrial Stormwater Program](#)
- City of Eugene: [Documents](#) (under Public Works > Wastewater > Industrial Source Control)
- Clean Water Services: [Stormwater Program](#)

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# 1.0 Applying for the Industrial Stormwater Discharge General Permit

New facilities must submit application materials at least 60 calendar days before beginning operations. Existing facilities operating without permit coverage must submit the application materials upon learning of the need for the permit.

A complete application includes: the application form, the SWPCP and checklist, Land Use Compatibility Statement and fees. For those facilities in DEQ's jurisdictions, applicants must create a profile and fill out the electronic application in [Your DEQ Online](#). The required forms can be uploaded into YDO. Applications for sites located in our agent's jurisdictions, will submit paper applications until the electronic system can accommodate agents' applicants too.

## Agents

DEQ has entered into agreements with several local jurisdictions known as "agents" to administer the permit on DEQ's behalf. The agents typically conduct the following activities: review application materials, review monitoring data, review no exposure certifications, conduct inspections and evaluate compliance with the permit. If a facility is operating in an agent's jurisdiction, they typically submit application materials and other permit documents to the agent rather than DEQ. For industrial facilities located within Clean Water Services, City of Portland and Eugene, please see Appendix V for contact information and addresses for these agent jurisdictions.

## Additional requirements for new discharges to impaired waters

There are additional application requirements for new applicants which discharge to waters that do not meet water quality standards and need a Total Maximum Daily Load (i.e., Category 5, 303(d) listed waters). DEQ's Integrated Report describes the condition of Oregon's waters and includes the 303(d) list of impaired waters. More information on impaired waters can be found on [DEQ's website](#). A [1200-Z specific map](#) is also available with georegion layers and impairment status.

This requirement is limited to new discharger to an impaired water without a Total Maximum Daily Load, based on the USEPA-approved Category 5: 303(d) list in effect at the time of permit application for pH, copper, lead, zinc, iron and E. coli that correspond to the specific pollutant(s) for which the water body is impaired. The receiving stream impairment status is determined by the USEPA-approved Integrated Report in effect at the time of permit application. These requirements apply to new dischargers, which can be a newly constructed facility as well as an existing facility required to obtain permit coverage, when stormwater discharges directly to an impaired water body or indirectly through a storm sewer system, ditch or other conveyance system they will need to meet these additional application requirements.



Operators need to determine the first receiving water stormwater discharges into from their property. The receiving water may be a lake, stream, river, wetland or other water body and may or may not be located adjacent to your facility. Industrial discharge may flow into a man-made conveyances, such as a municipal separate storm sewer system pipe. The specific receiving water is the first natural water body your stormwater discharge enters. For example, if the discharge enters a storm sewer system, which empties into Johnson Creek in the Portland area, which flows into the Willamette River, the receiving water is Johnson Creek, because it is the first natural water body the discharge will reach. If stormwater discharges into a municipal system, you'll need to identify the receiving water body where the storm sewer pipe discharges. This information should be readily available from the city or county operating the municipal system.

To obtain coverage under the permit, the new discharger must meet and document one of the following conditions:

- Prevent exposure to stormwater for pH, copper, lead, zinc, iron and E. coli that correspond to the specific pollutant(s) for which the water body is impaired.
- Provide technical demonstrations that sources of pH, copper, lead, zinc, iron and E. coli that correspond to the specific pollutant(s) for which the water body is impaired are not present at the site.
- Provide DEQ or our agent stormwater discharge analytical sampling results to demonstrate the discharge of stormwater is not expected to cause or contribute to an exceedance of water quality standards for pH, copper, lead, zinc, iron and E. coli that correspond to the specific pollutant(s) for which the water body is impaired at the point of discharge.
- Or, if unable to demonstrate pH, copper, lead, zinc, iron and E. coli that correspond to the specific pollutant(s) for which the water body is impaired will not be present in the discharge, but the discharge is not expected to cause or contribute to a water quality standards exceedance at the point of discharge.

Prior to granting permit coverage, DEQ or our agent will decide if the new discharger is eligible for coverage under a general permit. If the permitting authority determines the discharge will impact impaired waters, coverage will be required under an individual discharge permit or discharge must cease.

Impairment information must be included with the application materials and documented in the SWPCP. For more information, please see page 5 of the permit (Condition I, Coverage and Exclusion from Coverage section of the permit).

## **2.0 Developing and Revising a Stormwater Plan**

The SWPCP is a stormwater management plan specific to each regulated site. The plan contains detailed information regarding the specific industrial activities, stormwater capture and conveyance features, an assessment of potential pollution sources and description and

locations of control measures and management practices implemented on site to address stormwater pollution. The SWPCP requirements are in Schedule A of the permit.

The first step in developing a plan is to gain a thorough understanding of how rainfall interacts with the activities and equipment at your facility. This will identify potential pollutant discharge concerns. To complete this step, conduct detailed walk-through of your facility and have discussions with facility staff and ownership. The aim is to identify industrial materials or material handling activities that are exposed to stormwater, the direction of stormwater flows through and from your facility, the location of all stormwater discharge points and areas where stormwater controls or practices are needed or are already in place. If possible, conduct one walk-through during a rain event so you can observe and map the flows of stormwater on your site. In addition to walk-throughs, communicate with fellow site employees who are familiar with daily operations to comprehensively identify any activities and locations that may contribute to stormwater pollution.

The SWPCP contents are grouped into four basic areas:

- A map and description of the permitted site, including ongoing industrial activities, current and previous significant materials storage, buildings and pavement areas, rainfall exposure and flow paths, stormwater capture and conveyance system features and all discharge points (including locations where any sheet flow leaves the site).
- Identification of the potential pollutants that may be present in stormwater runoff, such as sediments, oil and grease and metals.
- A discussion of the site controls implemented to prevent stormwater pollution and meet the both narrative and numeric technology-based effluent limit requirements in the permit.
- A description of the procedures and schedules for conducting required housekeeping, spill prevention and response, operations and maintenance and employee education.

The following guidance outlines how to prepare the SWPCP to ensure it includes all the required information. Also, please use the SWPCP checklist in Appendix II to assist in developing a plan and ensuring it contains all the required elements of Schedule A of the permit. The checklist must be filled out and submitted with your application materials.

## **SWPCP Preparation**

The plan must be prepared by a person knowledgeable in stormwater management and familiar with the facility. This person may be the plant manager, environmental manager, facility engineer, or any other person with knowledge of the site and of stormwater management practices. As part of permit coverage, the plan must be implemented and revised as necessary.

## **Proper Signatory**

The plan must be signed in accordance with code of federal regulations. Changes to the plan must also be signed in this manner. By signing the plan, the authorized representative is

attesting the information contained in the plan is true and accurate. The application and plan are to be signed and certified as follows as set forth in 40 CFR Part 122.22:

“(a) *Applications.* All permit applications shall be signed as follows:

(1) *For a corporation.* By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision- making functions for the corporation, or

(ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) *For a partnership or sole proprietorship.* By a general partner or the proprietor, respectively; or

(3) *For a municipality, State, Federal, or other public agency.* By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:

(i) The chief executive officer of the agency, or

(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA)...

...(d) *Certification:* Any person signing these documents must make the following certification:

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 assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Electronic signatures are accepted within Your DEQ Online after applicants have completed the electronic registration process.

## **SWPCP Recordkeeping**

The most recent copy of the SWPCP and any previous revisions made in the last three years must be kept at the facility and made available upon request to DEQ or other government agencies responsible for stormwater management in your area.

## **SWPCP Revisions**

The SWPCP is a living document. Keep it up to date to reflect changes at your site both for your use and for review by the regulatory agencies responsible for overseeing permit compliance. As conditions change at the site, revise your plan to reflect practices and procedures such as site design, monitoring locations or new control measures. Update the plan no later than 30 calendar days of these changes occurring. Examples of circumstances which require a change to the plan may include: a new person is hired as the site contact for the permit, a new industrial process may require additional potential pollutants to be used onsite, discovery of a new hazardous substance on the property, or adding or removing a building may causes a re-routing of stormwater through a different discharge point.

You are encouraged to revise your plan as often as needed to accurately reflect site conditions and revisions submission is not always required. Plan revisions are required to be submitted to DEQ or our agent when there are: (1) changes to site point of contact; (2) changes based on a corrective action or inspection; (3) changes to monitoring locations or discharge points and (4) changes to the site or control measures that may significantly change the nature of pollutants in your discharge, significantly increase pollutant levels, discharge frequency, volume or flow rate.

For all plan revision submittal, upload the revised plan into Your DEQ Online under Submit a Required Report no later than 30 calendar days. Hard copies must be submitted for sites located in our agents' jurisdictions. All pan revisions, except proposed changes to monitoring locations, are deemed accepted after 30 calendar days without a response. Permit registrants must not change monitoring points prior to receiving approval from DEQ or our agent.

## 3.0 SWPCP Elements

### SWPCP Title Page

List the following information on the title page:

- The site name or common name. Provide the legal name as listed with the Oregon Department of Commerce Corporation Division. To find the legal name, use the for corporate name from the Secretary of State's Business Registry database. Please note, the corporation needs to be listed as an active corporation on the database and cannot be an assumed business name. If the company legal name is an individual, this person does not need to be listed on the database but must be able to provide legal documentation of their ability to operate a business in the state of Oregon under this name.
- The name of the site operator or owner.
- The name of the person preparing the SWPCP.
- If you are currently operating under a permit, provide the PLC (permit/license/certificate from YDO) number and EPA permit number, as listed on the permit assignment documents.
- Contact person's name and telephone number and email address if available. This should be the person which DEQ, or our agent can contact regarding the SWPCP.
- Physical address of the facility, including county and mailing address, if different from physical address.
- Primary and any co-located Standard Industrial Classification code(s).
- Date of the SWPCP. When submitting a revision to the SWPCP, include revision schedule dates and current date ensure DEQ or our agent has the most recent copy.

### Site Description

Prepare an introductory paragraph that includes a brief history of the operations at the industrial facility, the current activities and any plans for expansion. The following questions should be answered. What does the facility manufacture or what services are provided? What types of raw materials or products does the facility receive? What are some of the processes used to manufacture the products and to ship them?

Next provide a description of potential pollutant sources from significant materials exposed in stormwater runoff, including any left from past uses at the site that may no longer occur. List the significant materials that are treated, stored, or discarded on the site. The name of the material given should reflect either the common name or the industrial name along with the usage of the material on the site. In addition, the quantity of the material stored on the site should be given in units appropriate for the material as well as the potential impact to stormwater runoff. If the facility is involved in clean-up activities for past contamination of the site or significant materials remain from past activities, include this information in this section of the plan.

It is helpful to provide in this section a description of external building construction, roofing and paving materials. This information will assist DEQ or agent in providing technical assistance regarding pollutant sources. For example, stormwater runoff from galvanized roofing and siding often contains high concentrations of zinc.

Make sure the plan includes hours of operation.

## **Potential Pollutant Sources**

The plan must contain a detailed description of industrial activities conducted at the site and significant materials stored, used, treated or disposed of in a manner which exposes those activities or materials to stormwater. Don't forget to include the methods of storage, usage, treatment and schedules of disposal.

The following industrial facilities activities have the potential to be major sources of pollutants in stormwater.

### **Loading and unloading operations**

Loading and unloading operations can include pumping of liquids or gases from tankers to storage facilities, pneumatic transfer of dry chemicals, transfer by mechanical conveyor systems, or transfer of bags, boxes, drums or other containers by forklift or other material handling equipment. Material spills or losses from loading and fueling in these areas can accumulate and be washed offsite or into the stormwater conveyance system during a storm.

### **Outdoor storage**

Outdoor storage activities include storage of fuels, raw materials, by-products, intermediate products, final products, and process residuals. Materials may be stored in containers, on platforms or pads, in bins, boxes or silos, or as piles. Storage areas that are exposed to rainfall and/or runoff can contribute pollutants to stormwater when solid materials wash off.

### **Outdoor process activities**

Although many manufacturing activities are performed indoors, some activities, such as timber processing, rock crushing, and concrete mixing, occur outdoors. Outdoor processing activities can result in liquid spillage and losses of material solids, which makes associated pollutants available for discharge in runoff.

### **Dust or particulate generating processes**

Dust or particulate generating processes include industrial activities with stack emissions or process dusts that settle on surfaces. Some industries, such as mines, cement manufacturing, and refractories, also generate significant levels of dust that can be mobilized in stormwater runoff.

### **Illicit connections and non-stormwater discharges**

Illicit connections of process wastes or other pollutants to stormwater collection systems can be a significant source of stormwater pollution. Non-stormwater discharges include any discharge from the facility that is not generated by rainfall or snowmelt runoff. This does not include any authorized non-stormwater discharges allowed under the permit.



## Waste management

Waste management practices include everything from landfills to waste piles to trash containment. Dumpsters must remain closed when not in use. All industrial facilities conduct some type of waste management at their site, much of it outdoors, which must be controlled to prevent stormwater pollution. Identify and list any potential pollutants that are associated with industrial activities on site that could reach and contaminate stormwater discharge. This includes all chemical solid and chemical liquid materials that have the potential to spill or be tracked onto exposed surfaces and impact stormwater flowing off the site. Oils, greases, fuels, or hazardous wastes that are stored anywhere on-site, even if they are stored in a covered area, should be considered potential pollutants.

Additional examples of potential pollutants that should be identified in the plan are:

- Sediment that can be tracked off site or flow off site during a rain event.
- Metals such as copper, lead and zinc, and oil and grease may be in stormwater runoff from manufacturing facilities due to high volumes of truck traffic.
- Zinc from unsealed galvanized roofs, downspouts or fences.

EPA developed [industrial stormwater fact sheets](#) that describes the types of facilities included in the sector, typical pollutants associated with the sector, and types of stormwater control measures used to minimize the discharge of the pollutants.

## Stormwater Control Measures, Best Management Practices and Treatment

In the narrative of the plan, include the control measures and management practices that are installed and implemented on site to meet the technology and water quality-based requirements in Schedule A.1 –A.4, Schedule A.13 and any applicable sector-specific requirements in Schedule E of the permit, as well as controls in response to corrective actions. For further information, please see section 4.0 of this document. Include safety data sheets for any stormwater treatment chemicals or substances used in stormwater treatment and stored on site.

## How to Estimate Impervious Area

Once the site map is complete, determine the amount of impervious area and total area for each drainage area identified on the site map. Remember to consider roof areas, paved areas and compacted unpaved areas as impervious area. Provide this information in area units. This estimate should be done for each area that drains to a different discharge point. Google Earth's ruler tool is a good resource to get accurate dimensions.

## Identify Receiving Waterbody

Your receiving water may be a lake, stream, river, wetland or other waterbody, and may or may not be located adjacent to your facility. Your facility may discharge directly into its receiving water, or indirectly to the receiving water by discharging first through a municipal separate storm sewer system (MS4), ditch, or other conveyance. Your receiving water is the first natural waterbody your stormwater discharge enters. For example, if the discharge enters a storm sewer system, that empties into Johnson creek in the Portland area, which flows into the Willamette River, the receiving water is Johnson Creek, because it is the first natural waterbody

the discharge will reach. Man-made conveyances, such as an MS4 system are not considered receiving waters. If you discharge into an MS4 system, you must identify the waterbody into which that portion of the storm sewer discharges. That information should be readily available from the MS4 operator.

If the discharge from your facility does not discharge into an MS4 storm sewer system, you can use your site map and local topographic maps to pinpoint the closest waterways. Using the contours on the topographic map and your facility's discharge point locations, determine the direction stormwater runoff flows from your facility. Once you know the direction of flow, you should be able to identify the receiving waters into which you discharge.

Resources to help you identify your receiving waters:

- Use your site map and local topographic maps to pinpoint the closest waterways or walk the site and trace the discharge to the nearest receiving waters.
- Often local jurisdictions have GIS mapping tools to help determine the closest discharge points from municipal storm sewer system.
- Try DEQ's [Integrated Report Web Map](#), by opening the hydrology layers.

The SWPCP must list all receiving waters, latitude and longitude of each associated discharge points, and applicable SIC code, if facility has co-located operations. If discharge point is to a municipal storm sewer system, list the name(s) and latitude and longitude of the receiving waters and the name of the municipality.

## Mapping Requirements

Please see Appendix III for examples of general location maps, web addresses and information on where to obtain base maps.

### General location map

The purpose of the general location map is to show the permitted site's boundaries and its proximity to major streets, bodies of water and prominent landmarks or features. This information is required on the general location map for both the industrial site and the area surrounding it. For example, copies of city or county tax maps are acceptable general location maps, if accompanied by a street map showing the location of the facility. Online street and satellite maps are also acceptable as general location maps. The property boundary must be highlighted and must show the required features both on the site and around it for about a one-mile radius. A street map pin-pointing the location of the facility on a roadway network is also helpful.

Make sure to show transportation routes.

### Site map requirements

The site-specific map is required to show detailed information about the ongoing activities and stormwater drainage both on and off the industrial site. The site map can be a drawing or sketch of the site. This map illustrates the conditions, operations and stormwater drainage patterns for the overall site and includes property boundaries; buildings; pavement and unpaved areas;

process and storage areas; drainage areas and flow paths, stormwater control and conveyance structures such as catch basins, oil/water separators, pipes; all stormwater discharge points and surface water bodies. All these elements need to be clearly identified on the map.

Make the map large enough so the information provided can be read easily. Several site maps may be used to provide all the required information rather than providing too much information on one site map making it difficult to read and decipher.

### **Drainage patterns**

The drainage patterns of precipitation flows should be identified. For instance, use arrows to indicate the flow direction of stormwater overland as the grade of the surface changes, into drainage pipes, ditches and sheet flows to various discharge points. In addition, indicate areas where infiltration occurs.

### **Conveyance and discharge structures**

Identify conveyance structures and discharge points for each drainage area. Such structures refer to definite points where stormwater runoff is collected and leaves the site. Such as piping, discharge points and sheet flow. Examples of conveyance and discharge structures include pipes, ditches, channels, tunnels, conduits, inlets and monitoring points. For clarity, the locations of all monitoring points must be numbered on the map with unique identifiers starting with 001, 002 and so on. Sheet flow discharges may be infiltrated or directed to a discharge structure to avoid having to identify them as individual discharge points.

### **Monitoring points**

Identify each discharge point and locations where represent discharge from industrial activity sampling will occur. Clearly mark “monitoring point” with a unique three-digit identifier on the map. There may be several more discharge points if claiming substantially similar effluent under the permit. Also, pay special attention to any areas that may sheet flow from your property. These areas must be channeled and sampled when discharging and, therefore, should be marked accordingly.

An important part of a plan is accurate identification of all monitoring point(s) where stormwater sampling will occur. To support electronic reporting, please number the discharge points on the site map using unique 3-digit identifiers starting with 001, 002, etc. and provide a general description of their location as well as the latitude and longitude in the SWPCP.

If the site contains multiple discharge points but monitoring occurs at only a few substantially similar discharge points, you must provide justification for reducing the number of monitoring points. For example, a single monitoring point can be used if all the discharge points on the site have drainage for similar activities and the same controls and management practices are used within all the drainage area. It is expected that the discharges from these discharge points will be similar in composition. The data or analysis supporting that the discharges are substantially similar must be included in the SWPCP. Also, it is also important to outline on the site map the

drainage areas for each discharge point and the topography of the site so that DEQ or agents can verify the drainage areas and the direction of stormwater runoff.

Please see Appendix IV for guidance on substantially similar discharge points. If sampling is subject to a numeric water quality-based effluent limits, all discharge points into the impaired water body must be sampled. There is no sampling reduction allowed for substantially similar discharge points.

### **Outline drainage area for each discharge point and associated water body**

Drainage areas are specific areas within the site where stormwater runoff flows to a common discharge or discharge point based upon the slope of the land. An approximation of the surface area covered by the drainage area should be included on the map. Color coded maps are good for illustrating separate drainage areas. Drainage areas should be drawn with a bold line onto the map to indicate stormwater flow patterns both on and off the permitted site.

Each discharge point must list the associated receiving water if discharge to more than one water body, latitude and longitude and applicable SIC code if the facility has co-located operations. If discharge point is to a municipal storm sewer system, name the municipality and final receiving water body.

The map must include location of springs, wetlands and other surface water on the property and adjacent to the property.

### **Paved areas, buildings and infrastructure**

Identify buildings, structures, pavement and compacted unpaved areas that direct stormwater runoff to a discharge point. These areas are impervious surfaces, that do not allow the runoff to infiltrate or be absorbed by the ground surface. An approximation of the surface area covered by these impervious portions of the site should be noted on the map.

Sometimes stormwater infiltrates into the ground through wells, including waste injection wells, seepage pits, drywells and groundwater wells. Identify where and how this occurs on the map. If the site contains underground injection wells these must be [registered with DEQ](#).

### **Significant materials**

Identify locations used for outdoor manufacturing, treatment, storage or disposal of current use or remaining significant materials from previous uses. Significant materials include, but are not limited to, the following: raw materials; fuels; materials such as solvents, detergents and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act; any chemical the facility is required to report pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act; TSCA, fertilizers; pesticides; and waste products such as ash, slag and sludge that have the potential to be released with stormwater discharges.

If you generate hazardous waste, don't forget to mark treatment, storage and disposal facilities. All location of the following materials and activities must be labelled:

- fueling stations;
- vehicle and equipment maintenance cleaning areas;
- loading/unloading areas;
- locations used for the treatment, storage, or disposal of wastes;
- liquid storage tanks;
- processing and storage areas;
- immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
- transfer areas for substances in bulk;
- machinery; and
- locations and sources of run-on to your site from adjacent property.

Identify any loading areas, including garages and roadway access points, drum storage bins, or drum loading areas. Identify locations of treatment, storage and disposal, fueling stations, machinery and vehicle and equipment maintenance cleaning areas.

### **Structural control and treatment measures**

Stormwater runoff can be controlled physically by installing structural control measures. Examples of structural controls are berms, vegetative swales, collection or reuse, inlet controls, diversion ditches used as outlet control, infiltration areas or devices and wet ponds. Identify on the map any structural controls used at your site. Also, identify any structural features for reducing flow or minimizing impervious areas.

### **Non-stormwater discharges**

Identify the location of authorized non-stormwater discharges. A non-stormwater discharge is any discharge that is not composed entirely of rainfall or snowmelt runoff. Examples of authorized non-stormwater discharges are landscape watering, groundwater wells, uncontaminated condensate from air compressors, or pavement wash waters that does not use detergents or hot water. For a full list of authorized non- stormwater discharges, please see page 8 of the [permit](#).

### **Spill prevention**

Identify the location of the spill prevention and cleanup materials.

## **4.0 Narrative Technology-based Effluent Limits**

Control measures and management practices used on site to meet the permit requirements can include operational, structural, infiltration or treatment measures and is commonly a combination of these. The site operator is given the flexibility to select the type of control measures, including specific technologies, which they believe are best suited to the facility and will meet the permit

requirements. This flexibility is necessary given the variability of each industrial operation, the differences in the topography from site to site and the varieties in the activities and materials exposed to stormwater.

Facilities must implement operational or structural control measures to minimize the potential for industrial pollutants encountering stormwater that discharges to receiving waters. The permit refers to these measures and practices as narrative technology-based effluent limits. Examples of operational measures are employee education and training, good housekeeping measures and spill prevention. Structural measures are physical, structural or mechanical devices used to keep stormwater from encountering industrial activities. Examples of structural measures are using roofs over storage areas, re-grading the site to direct stormwater away from material storage areas, installing berms and coating galvanized metal roofs. If operational and structural control measures are not feasible or adequate at controlling the pollutants in discharge, stormwater treatment measures that remove pollutants from stormwater may be necessary. Examples of treatment measures include detention/retention/infiltration basins, media filtration and constructed wetlands.

A combination of these control measures usually results in the most effective stormwater management for minimizing the offsite discharge of pollutants in stormwater runoff. Most control measures require regular maintenance to function as intended. Some control measures have simple maintenance requirements, while others may require more extensive upkeep to maximize their performance.

The following are helpful resources for selecting, installing and implementing control measures at an industrial site:

- DEQ's [Industrial Stormwater Best Management Practices Manual](#)
- USEPA's [Sector-specific Industrial Stormwater Fact Sheet Series](#)
- USEPA's [National Menu of Stormwater Best Management Practices](#)
- Washington Department of Ecology's [Stormwater Management Manuals](#)

## Required Narrative Effluent Limits in SWPCP

At a minimum, the plan must include a description of each of the control measures implemented on site to address the following narrative technology-based limits: (1) minimize exposure, (2) oil and grease control, (3) waste chemicals and material disposal, (4) erosion and sediment control, (5) debris control, (6) dust generation and vehicle tracking of industrial materials, (7) housekeeping, (8) spill prevention and response, (9) preventative maintenance, (10) employee education and (11) non-stormwater discharges. In addition, certain facilities are also required to meet sector-specific requirements in Schedule E of the permit.

If there are any additional control measures required to meet sector-specific requirements or in response to corrective actions, include a description of these measures in the plan.

The technology-based limits require control measure to minimize stormwater exposure to pollutants using technologically available, economically practicable and achievable considering best industry practice. When determining what is “best” for your industry, evaluate control



measures for similarly situated industries in Oregon and nearby states such as Idaho, Washington and California. Also, consider the age of the equipment and facilities involved, the processes employed; the engineering aspects of the application of various types of control techniques, the pollutant reduction likely to be achieved, any adverse environmental or energy effects of potential measures and the costs of achieving pollutant reductions. Keep in mind that control measures selected must be designed and implemented in accordance with good engineering practices and manufacturer's specification.

## **Minimize exposure**

The first step in an effective stormwater control program is minimizing exposure of manufacturing, processing, material storage areas, loading and unloading areas, dumpsters and other disposal areas, maintenance activities and fueling operations to rain, snow, snowmelt and runoff by both locating industrial materials and activities inside or protecting them with storm resistant coverings.

Describe all structural controls and operational practices used to minimize the exposure of industrial activities to stormwater runoff in the SWPCP. Examples of control measures which could be used at any facility and may be described in the plan include:

- The location and extent of grading, berms, or curbs used to contain contaminated stormwater or divert stormwater around areas of industrial activity.
- A description of the types of materials and equipment stored within secondary containment and the location of contained storage areas. All hazardous substances, petroleum/oil and other chemical solid or chemical liquid materials that have the potential to contaminate stormwater should be stored within berms or other secondary containment devices to prevent leaks and spills. If the use of berms or secondary containment devices is not possible, then hazardous materials must be stored in areas that do not drain to the storm sewer system. Also include how the retained water within the containment berm is disposed. Questions pertaining to material classification under hazardous materials, refer the table of hazardous substances and corresponding reportable quantities found in 40 CFR 302 Designation, Reportable Quantities and Notification. The [hazardous waste fact sheet](#) may help to determine if waste is considered hazardous waste:
- The location of spill cleanup kits and a description and spill cleanup procedures.
- Proper procedures for leaky vehicles and equipment, such as drip pans; parking in a contained area, or parking indoors.
- The use and location of spill/overflow protection equipment.
- Procedures for long-term storage or disposal of equipment and vehicles, such as draining all fluids.
- The location of covered or contained equipment cleaning areas.
- The disposal method for all wash water, such as an on-site sump (if a sump is used, specify the pumping frequency) or into the sanitary sewer.

Facilities can opt out of the permit by submitting a “No Exposure Certification” to DEQ or our agent when all industrial activities are protected from contact with stormwater. Please see page 8 of the permit for the “No exposure Certification” qualifications. USEPA’s [No Exposure Guidance Manual](#) may be used to determine whether the no exposure criteria can be met.

## **Oil and grease**

If applicable, oil/water separators, booms, skimmers or other methods must be used to minimize oil and grease in stormwater discharges.

## **Waste chemicals and material disposal**

Wastes chemicals and other refuse must be recycled or properly disposed of in a manner to eliminate or minimize exposure of pollutants to stormwater. All waste contained in bins or dumpsters must be covered to ensure contaminated stormwater does not seep through the bins or dumpsters. Acceptable covers include, storing of bins or dumpsters under roofed areas and use of permanent secure lids. If temporary covers are chosen such as tarps, they must be secured properly. Contact the garbage company in your area and request a lidded dumpster.

## **Erosion and sediment control**

Erosion control methods such as vegetating exposed areas, paving or clean gravel cover should be used to minimize soil erosion at the site. Sediment control methods such as detention facilities, sediment control fences, vegetated filter strips, bioswales, or grassy swales may be used to minimize sediment loads in stormwater discharges.

For activities that involve land disturbance, contact the local municipality to determine if there are other applicable requirements. In addition, if construction activities disturb an acre or more of land, a Construction Stormwater Discharge General Permit No. 1200-C, is likely required.

## **Debris control**

To minimize debris in stormwater discharges, use screens, booms, sealing ponds, or other methods.

## **Dust generation and vehicle tracking of industrial materials**

Dust, soil and particulates can be carried offsite by wind or vehicle tracking, thereby increasing soil loss from disturbed areas and increasing the likelihood of sedimentation and water pollution. As an operator, you are responsible for minimizing generation of dust and off-site tracking of site materials and soil. Some examples of control practices on site are covering material piles and disturbed soil, limiting traffic patterns to and from unpaved areas, frequent sweeping, use of dust suppressants or water, pavement cleaning and egress shaker plates and wheel washes can reduce tracking and dust generation to prevent dust, disturbed soil and site materials from being moved offsite.

## Housekeeping

Good housekeeping practices offer a practical and cost-effective way to maintain a clean and orderly facility to prevent potential pollution sources from encountering stormwater. Areas that may contribute pollutants to stormwater must be kept clean. Sweeping, prompt cleanup of spills and leaks and proper maintenance of vehicles help to minimize exposure of stormwater to pollutants. Establish protocols to reduce the possibility of mishandling materials or equipment and train employees in good housekeeping techniques.

## Spill prevention and response procedure

Spills and leaks can be a significant source of industrial stormwater pollution. For this reason, identify control measures in your plan to minimize the potential for spills, leaks and other releases that may encounter stormwater.

Much of this information may be found in spill prevention plans required by other regulations such as the Spill Prevention Control and Countermeasure Plan as required by 40 CFR Part 112 or the Contingency Plan required by Subpart D of 40 CFR Part 264 or 265. These plans may be sufficient and substitute for spill prevention and response procedure section of your plan, if they address stormwater management concerns. If the stormwater management concerns are not addressed in the SPCC, you must develop a Spill Prevention and Response Procedures plan to describe how stormwater will be managed for spill prevention and response on site. Also be aware local jurisdictions may have reporting requirements as well if the spill is to a municipal system. Check with the local jurisdiction to make this determination and include it the plan if pertinent.

Describe any structural controls or procedures put into place to minimize the potential for leaks, spills and other releases. At a minimum, conduct and document spill prevention and response measures including the following:

- Clean up spills or leaks promptly using absorbents or other effective methods to prevent discharge of pollutants and use spill/overflow protection equipment.
- Store all hazardous substances, petroleum/oil liquids and other chemical solid or chemical liquid materials that have potential to contaminate stormwater within berms or other secondary containment devices to prevent leaks and spills. If the use of berms or secondary containment devices is not practicable, then store such substances in areas that do not drain off-site or into the storm sewer system.
- Plainly label containers to encourage proper handling and facilitate proper response if spills or leaks occur as required by local, state and federal rules.
- Implement preventative measures, such as barriers between material storage and traffic areas, secondary containment provisions and procedures for material storage and handling.
- Develop procedures for expeditiously stopping, containing and cleaning up leaks, spills and other releases. Make the methods and procedures available to appropriate personnel. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures. Have the necessary clean-up material on-site and readily available.

- Procedures for notification of appropriate facility personnel, DEQ or our agent and the Oregon Emergency Response System (1-800-452-0311), when a spill may endanger health or the environment. Contact information must be in locations that are readily accessible and available. DEQ's [How to Report a Spill web page](#) provides information on who to call and reportable quantities. Information on reportable quantities and notification procedures required by state and federal law can be found in Oregon Administrative Rules, Chapter 340, Division 108, Oil and Hazardous Material Spills and Releases.

Employees must be knowledgeable of the spill response plan. It is useful to include in the spill plan information on employee training on spill prevention and clean-up and how often it occurs. The spill plan must be part of the required employee education.

You are also required to maintain records of any spill or leaks of significant materials that impacted or had the potential to impact stormwater or surface waters, including the clean-up procedures. It may be useful to include where the incident reports are kept and to whom the incident was reported.

In addition, large facilities with multiple tenants must indicate how spill response will be coordinated between the permit registrant and tenants at the site.

## **Preventative maintenance**

A preventative maintenance programs are intended to ensure structural control measures and industrial equipment are kept in good operating condition and to prevent or minimize leaks and other releases of pollutants. A good maintenance program requires regular inspections and testing along with maintenance and repair of industrial equipment and industrial systems.

Describe preventative maintenance to:

- Maintain industrial equipment to avoid leaks and other releases.
- Maintain stormwater control measures in effective operating condition.
- Include a schedule for inspections, maintenance and repair activities and regular litter pick up and disposal of waste materials.

## **Employee education**

As part of operational controls, there must be an employee orientation and education program. The purpose of this program is to inform personnel of the SWPCP, the spill response procedures, materials management practices and good housekeeping measures to prevent pollution of stormwater runoff. The program can be implemented in various ways through presentations at safety meetings, by posting good housekeeping signs and by providing training for employees on the SWPCP and its components. Most often a combination of these approaches.

A schedule for employee education needs to be included in the SWPCP. Such education and training must occur no later than 30 calendar days of hiring a new employee, who works in areas where stormwater is exposed to industrial activities or conducts duties related to the

implementation of the SWPCP. This education and training must also occur annually thereafter. Documentation of employee training must be kept and made available on site for review upon request.

### **Authorized non-stormwater discharges**

Identify the location of authorized non-stormwater discharges. A non-stormwater discharge is any discharge from your facility that is not composed entirely of rainfall or snowmelt runoff. For a full list of authorized non-stormwater discharges, please see page 8 of the [permit](#).

## **Sector-specific Requirements**

Certain facilities are required to meet the following sector-specific requirements in Schedule E of the permit:

- Tailoring their SWPCP to meet additional sector-specific plan requirements
- Narrative and numeric technology-based effluent limits. For example, Sector AA has additional housekeeping requirements based on raw steel handling storage areas. The SWPCP needs to specifically document how to comply with those requirements.
- Sector-specific benchmarks.

Not all sectors will have additional sector-specific discharge requirements. Please see table below for the list of sectors. For the transportation and warehousing sectors, the SWPCP must address all stormwater discharge associated with industrial activities at the site.

You are responsible for complying with sector-specific requirements associated with your primary industrial activity and all co-located industrial activities. Co-located industrial activities are secondary activities located on-site that are identified in Table 1 or Table 2 (for Portland Harbor and Columbia Slough dischargers) of the permit.

Your primary Standard Industrial Classification code best describes the primary industrial activities performed by your facility under which you are required to obtain permit coverage. The SIC code is a four-digit number assigned to businesses. These SIC codes may differ from companywide SIC codes or those used for other programs such as worker's compensation insurance. If you do not know your SIC code, see [U.S. Department of Labor SIC Manual](#) or contact DEQ or agent for assistance.

Some facilities may have multiple industrial activities and may be subject to more than one sector requirement. There may be different requirements for different discharge points depending on the type of industrial activity conducted in each drainage area. Facilities are required to conduct benchmark or numeric effluent monitoring for those discharge points associated with industrial activities that have sector-specific monitoring listed in Sector E

## 5.0 Numeric Effluent Limitations

The USEPA establishes effluent limit guidelines for certain sectors. Most of these industry technology-based regulations apply to wastewater discharges; however, the standards apply to a handful of stormwater discharges as well. The 1200-Z incorporates numeric technology-based effluent limits for the following industry discharges:

| Regulated Activity  | 40 CFR Part/Subpart | Effluent Limit     |
|---|---------------------|--------------------|
| Discharge from asphalt emulsion facilities (co-located SIC code only, 2951 covered under the 1200-A)  | Part 443, Subpart A | See Schedule E.D.2 |
| Discharge from material storage piles at cement manufacturing facilities  | Part 411, Subpart C | See Schedule E.E.5 |
| Discharge from hazardous waste landfills  | Part 445, Subpart A | See Schedule E.K.3 |
| Discharge from non-hazardous waste landfills  | Part 445, Subpart B | See Schedule E.L.7 |
| Discharge from coal storage piles at steam electric generating facilities   | Part 423, Subpart E | See Schedule E.O.4 |
| Discharge containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures | Part 449, Subpart S | See Schedule E.S.7 |

In addition to USEPA established numeric effluent limits, DEQ has established water quality-based regulations that apply to discharges to 303(d) impaired waters.

### Water quality-based numeric effluent limits for discharges into 303(d) impaired waters

The permit includes a framework for managing elevated levels of copper, lead, zinc, iron, pH, and E. coli, discharged to waterways impaired for those pollutants and do not have a Total Maximum Daily Load. Numeric water quality-based effluent limits apply to copper, lead, zinc and pH.

E. coli and iron monitoring exceedances require mandatory best management practices to control sources of those pollutants.

If required monitoring for copper, lead, zinc and pH is twice the concentration, or two consecutive monitoring results exceed the concentration, then increased response actions to elevated levels of those pollutants may result in numeric water quality-based effluent limits for facilities that discharge into 303(d) listed impaired waters. The permit allows existing facilities subject to numeric water quality-based effluent limits to be given a two-year compliance



schedule to install needed controls to meet the numeric effluent limit. This condition includes reporting milestones and likely site improvements.

If the receiving water body is on the current USEPA-approved 303(d) list for copper, lead, zinc or pH, the plan needs to include the timelines and triggers for escalating monitoring from impairment monitoring to a numeric effluent limit to ensure the operator does not miss important deadlines.

## Appendix I: New 1200-Z permit requirements

| Category   | 2021 Ref.     | 2018 1200-Z  | New 1200-Z (Effective July 1, 2021)  |
|--|---------------|--|--|
| <b>Sources Covered</b>                             | Table 1       | Transportation sectors industrial activity regulation limited to auxiliary activities listed in Table 1.                               | Eligibility for coverage determined by auxiliary activities at facility; however, once regulated under permit must include all industrial activities, as defined in Schedule D, in stormwater pollution control plan.  |
| <b>Permit Coverage and Exclusion from Coverage</b> | Condition I.1 | New applicants must evaluate all discharge points associated with industrial activity into Category 5: 303(d) listed receiving waters. | New applicants must meet eligibility requirements for all discharge points associated with industrial activity into Category 5: 303(d) listed receiving waters for copper, lead, zinc, pH, iron and E. coli.   |
| <b>Mass Reduction Measures</b>                     | Sch. A.6      | No similar requirement.  | Mass reduction devices that reduced the mass of pollutants at or above DEQ-approved design storm capacity, prior to this permit cycle must re-certify proper operation and maintenance by hiring a professional engineer or certified engineering geologist. |
| <b>Impairment Exceedances</b>                      | Sch. A.13     |  | Tier 1 corrective action does not apply to an exceedance of impairment monitoring.   |

| Category                     | 2021 Ref.                         | 2018 1200-Z   | New 1200-Z<br>(Effective July 1, 2021)   |
|------------------------------|-----------------------------------|---|--|
|                              |                                   | Complete Tier 1 corrective actions when stormwater sample results exceed impairment reference concentrations. Submit Tier 1 corrective action to DEQ or agent no later than 60 calendar days from receiving monitoring results. | Two consecutive exceedance of impairment monitoring for copper, lead, zinc or pH (outside range), impairment monitoring escalates to numeric water quality-based effluent limit.<br><br>For iron and E. coli, two consecutive exceedance requires narrative water quality-based effluent limit.<br><br>No corrective action response for exceedance of fecal coliform or enterococcus. |
| <b>Benchmarks</b>            | Sch. B.2                          | Statewide benchmarks specific to Portland Harbor, Columbia River, Columbia Slough and the rest of the state.  | Geographic benchmarks set using seven georegions and marine waters.<br><br>Columbia Slough benchmark for BOD <sub>5</sub> lowered from 33 mg/L to 24 mg/L.   |
| <b>Benchmarks</b>            | Sch. B.2                          | Modeling used EPA translators to convert modeled results from dissolved to total.   | Regional translators applied where appropriate based on conversion from dissolved to total.  |
| <b>Impairment Monitoring</b> | Sch. B.3, B.4, B.5 and Appendix A | Monitor for all Category 5: 303(d) list impairments for which the receiving water is impaired.  | Limited monitoring to Category 5: 303(d) list impairments for which the receiving water is impaired for one or more of the following:<br>copper, lead, zinc, pH, iron, E. coli, fecal coliform and enterococcus.   |
| <b>Monitoring Waiver</b>     | Sch. B.9                          | Monitoring waiver can be obtained for individual parameters after four consecutive samples are below the benchmarks based on  | Monitoring waiver can be obtained for individual parameters after five consecutive samples are equal to or below the benchmarks  |

| Category           | 2021 Ref. | 2018 1200-Z   | New 1200-Z<br>(Effective July 1, 2021)  |
|--------------------|-----------|---|---|
|                    |           | geometric mean evaluation or due to background natural conditions.  | based on geometric mean evaluation or due to background natural conditions.<br><br>All monitoring must be reinstated on July 1, 2025, and continue until the end of the permit term.  |
| <b>Inspections</b> | Sch. B.12 | Visual observation for the presence of floating, suspended or settleable solids, color, odor, foam, visible oil sheen, or other obvious indicators of pollution in the stormwater discharge at all discharge point(s), including discharge points that have been authorized to be substantially similar in accordance with Schedule B.2.c.ii. | Visual observation for the presence of floating, color, odor, foam, visible oil sheen, or other obvious indicators of pollution in the stormwater discharge at all discharge point(s), including discharge points that have been authorized to be substantially similar accordance with Schedule B.7.c.ii.<br><br>Conduct visual observations of a sample in a clean, colorless glass or plastic container in well-lit area during regular business hours of operation and safe conditions at all discharge points during a runoff event. |
| <b>Reporting</b>   | Sch. B.13 | Permit registrant must submit all monitoring results required in this permit via DEQ approved Discharge Monitoring Report (DMR) forms.  | Electronic reporting through "Your DEQ Online" will be required when directed by DEQ or agent.  |

| Category                          | 2021 Ref. | 2018 1200-Z                                 | New 1200-Z<br>(Effective July 1, 2021)  |
|-----------------------------------|-----------|---|---|
| <b>Compliance Schedule</b>        | Sch. C    | No similar requirement.                     | <p>If impairment monitoring escalates to a numeric water quality-based effluent limit and the permit registrant is unable to immediately comply, the permit registrant may request a compliance schedule up to 2-years prior to being subject to the numeric limit.</p> <p>Permit registrants must submit status reports and must comply with the numeric limit within 24 months.</p> |
| <b>Sector-specific Benchmarks</b> | Sch. E    | Benchmarks concentrations adopted from EPA. | Adjusted benchmark calculations applicable to water quality standards.  |

## Appendix II: Industrial Stormwater Pollution Control Plan checklist

**Instructions:** Complete this form and submit with SWPCP. Fill in the appropriate page number(s) indicating the location of information in the SWPCP. New requirements are italicized. At a minimum, the SWPCP must include the components below and describe how the permit registrant intends to comply with the narrative technology-based effluent limit to eliminate or reduce the potential to contaminate stormwater and prevent any violation of instream water quality standards.

|                   |  |                 |  |
|-------------------|--|-----------------|--|
| <b>Site Name:</b> |  | <b>PLC No.:</b> |  |
|-------------------|--|-----------------|--|

| Permit Schedule             |                      | Requirement   | Page # | Comments (For official use only) |
|-----------------------------|----------------------|---|--------|----------------------------------|
| <b>New Discharger</b>       | Condition I.1.a or b | A new discharger to an impaired water without a TMDL must meet one of the conditions in this section of the permit to obtain coverage |        |                                  |
| <b>Signature</b>            | A.8.b                | Signed and certified in accordance with 40 CFR Part 122.22  |        |                                  |
| <b>Title Page</b>           | A.10.a               | Plan date   |        |                                  |
|                             |                      | Name of the site  |        |                                  |
|                             |                      | Name of the site operator or owner  |        |                                  |
|                             |                      | The name of the person(s) preparing the SWPCP   |        |                                  |
|                             |                      | PLC No. and EPA permit No.  |        |                                  |
|                             |                      | Primary SIC code and any co-located SIC codes   |        |                                  |
|                             |                      | Contact person(s) name, telephone number and email  |        |                                  |
|                             |                      | Physical address, including county  |        |                                  |
|                             |                      | Mailing address if different  |        |                                  |
| <b>General Location Map</b> | A.10.b.i.1           | General location of the site in relation to surrounding properties, transportation routes, surface waters and other relevant features |        |                                  |
| <b>Site Map</b>             | A.10.b.i (2-19)      | Drainage patterns, with flow arrows   |        |                                  |
|                             |                      | Conveyance and discharge structures, such as piping or ditches  |        |                                  |

| Permit Schedule           |  | Requirement  | Page # | Comments<br>(For official use only) |
|---------------------------|--|--|--------|-------------------------------------|
| (please identify clearly) |  | Exact location of all monitoring points labelled with a unique three-digit identifying number starting with 001, 002, etc. |        |                                     |
|                           |  | Outline of the drainage area for each discharge point  |        |                                     |
|                           |  | Paved areas and buildings within each drainage area  |        |                                     |
|                           |  | Locations of discharge points if different from monitoring points  |        |                                     |
|                           |  | Areas used for outdoor manufacturing, treatment, storage, or disposal of significant materials                             |        |                                     |
|                           |  | Areas of known or discovered significant materials from previous operations  |        |                                     |
|                           |  | Existing structural control measures for minimizing pollutants in stormwater runoff  |        |                                     |
|                           |  | Structural features that reduce flow or minimize impervious areas  |        |                                     |
|                           |  | Material handling and access areas   |        |                                     |
|                           |  | Hazardous waste treatment, storage and disposal facilities   |        |                                     |
|                           |  | Location of wells including waste injection wells, seepage pits, drywells  |        |                                     |
|                           |  | Location of springs, wetlands and other surface waterbodies both on-site and adjacent to the site                          |        |                                     |
|                           |  | Location of groundwater wells  |        |                                     |
|                           |  | Location and description of authorized non-stormwater discharges   |        |                                     |
|                           |  | Location and description of spill prevention and cleanup materials   |        |                                     |
|                           |  | Locations of the following materials and activities if they are exposed to stormwater and applicable:                      |        |                                     |
|                           |  | Fueling stations   |        |                                     |
|                           |  | Vehicle and equipment maintenance cleaning areas   |        |                                     |



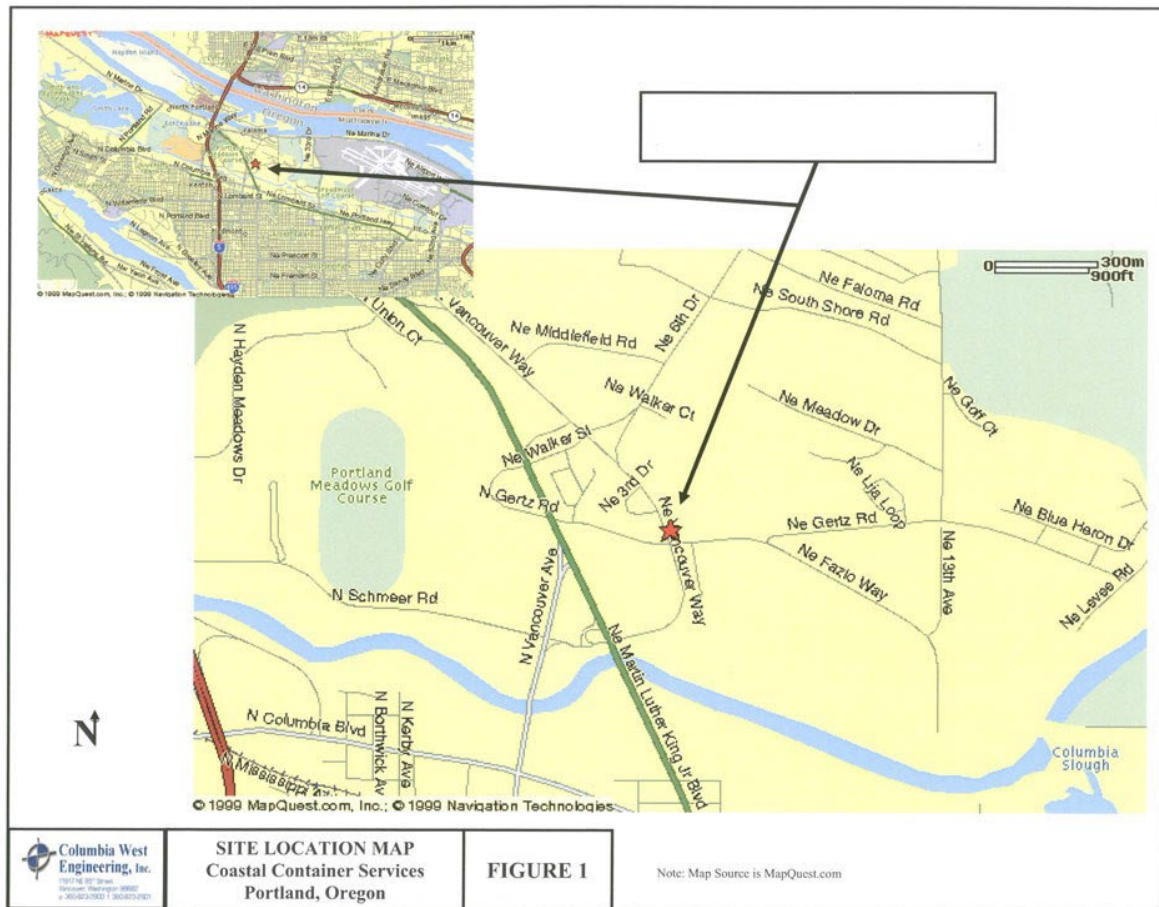
| Permit Schedule         |                 | Requirement  | Page # | Comments (For official use only) |
|-------------------------|-----------------|--|--------|----------------------------------|
|                         |                 | Loading/unloading areas  |        |                                  |
|                         |                 | Locations used for the treatment, storage, or disposal of wastes   |        |                                  |
|                         |                 | Liquid storage tanks   |        |                                  |
|                         |                 | Processing and storage areas   |        |                                  |
|                         |                 | Immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;  |        |                                  |
|                         |                 | Transfer areas for substances in bulk  |        |                                  |
|                         |                 | Machinery  |        |                                  |
|                         |                 | Locations and sources of run-on to your site from adjacent property  |        |                                  |
|                         |                 |  |        |                                  |
| <b>Site Description</b> | A.10.b.ii       | A description of industrial activities conducted at the site and significant materials stored, used, treated or disposed of in a manner which exposes those activities or materials to stormwater. Include in the description the methods of storage, usage, treatment or disposal |        |                                  |
|                         | A.10.b.iii      | Location and description, with any available characterization data, of areas of known or discovered significant materials from previous operations   |        |                                  |
|                         | A.10.b.iv       | Regular business hours of operation  |        |                                  |
|                         | A.10.b.v        | For each area of the site where a reasonable potential exists for contributing pollutants to stormwater runoff, a description of the potential pollutant sources that could be present in stormwater discharges and if the source is associated with a co-located SIC code         |        |                                  |
|                         | A.10.b.vii<br>i | An estimate of the amount of impervious surface area (including paved areas and building roofs) and the total area drained by each stormwater discharge point to be reported in area units   |        |                                  |

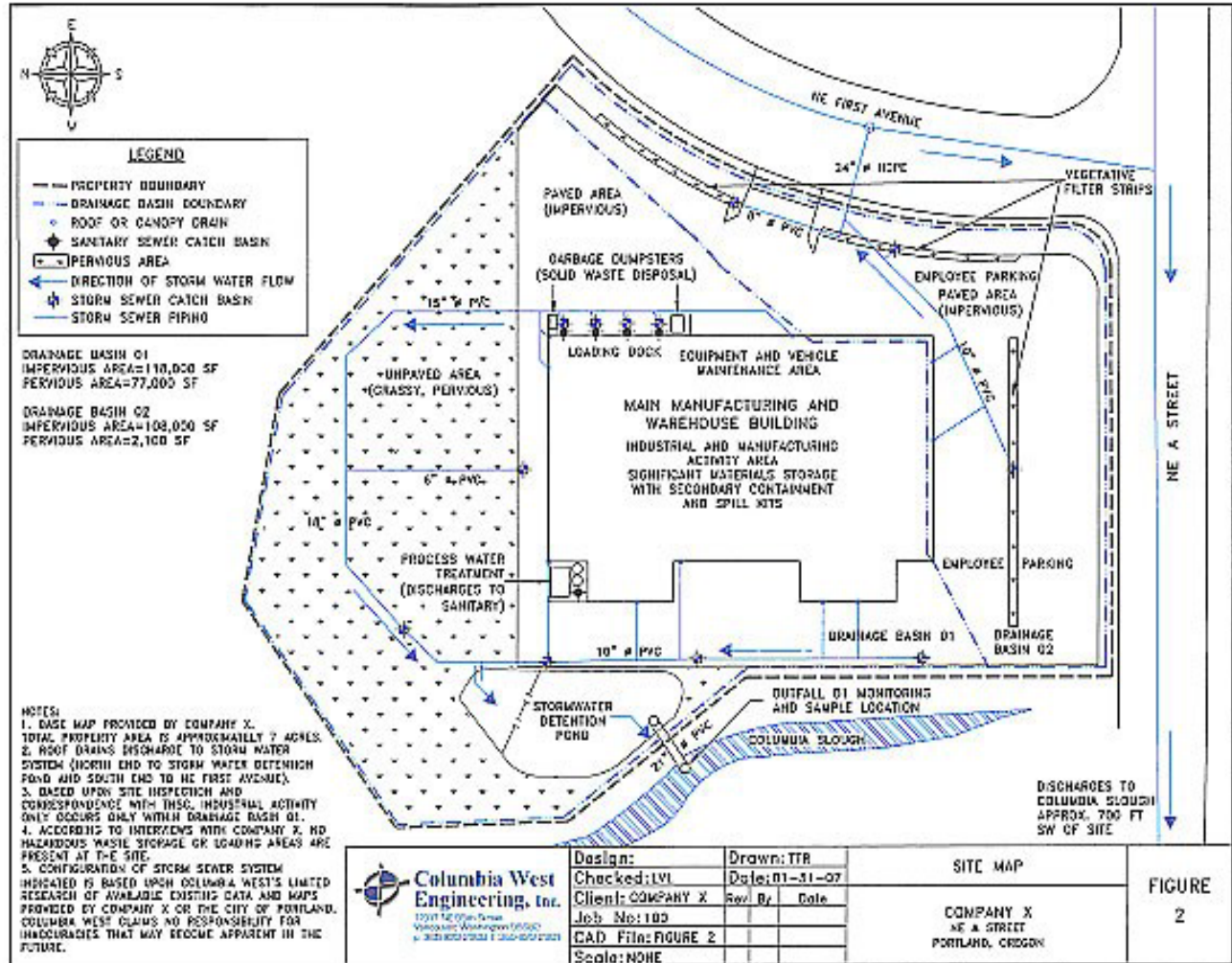
| Permit Schedule          |                  | Requirement  | Page # | Comments<br>(For official use only) |
|--------------------------|------------------|--|--------|-------------------------------------|
|                          | A.1.k            | Non-stormwater discharges  |        |                                     |
| Site Controls            | A.10.b.vi        | A description of control measures installed and implemented to meet the technology and water quality-based requirements and any applicable sector-specific requirements in Schedule E                            |        |                                     |
|                          |                  | A description of how the stormwater control measures address potential pollutant sources from industrial activities and significant materials on-site, spills and leaks and authorized non-stormwater discharges |        |                                     |
|                          | A.1.a            | Minimize Exposure  |        |                                     |
|                          | A.1.b            | Oil and Grease   |        |                                     |
|                          | A.1.c            | Waste chemicals and material disposal  |        |                                     |
|                          | A.1.d            | Erosion and sediment control   |        |                                     |
|                          | A.1.e            | Debris control   |        |                                     |
|                          | A.1.f            | Dust generation and vehicle tracking   |        |                                     |
|                          | A.1.g            | Housekeeping   |        |                                     |
| Procedures/<br>Schedules | A.10.b.vi        | Include known maintenance schedules and frequency of housekeeping measures   |        |                                     |
|                          | A.1.h and A.10.c | <b>Spill prevention and response procedures:</b>   |        |                                     |
|                          | A.10.c.i         | Procedures for preventing and responding to spills and cleanup   |        |                                     |
|                          |                  | Indicate who is responsible for on-site management of significant materials and include their contact information  |        |                                     |
|                          |                  | Spills prevention plans required by other regulations may be substituted for this provision if the spill prevention plan addresses stormwater management concerns and the plan is included with the SWPCP        |        |                                     |
|                          | A.1.h.v          | Develop procedures for expeditiously stopping, containing and cleaning up leaks, spills and other releases   |        |                                     |

| Permit Schedule |                  | Requirement   | Page # | Comments (For official use only) |
|-----------------|------------------|---|--------|----------------------------------|
|                 | A.1.h.vi         | Documentation and notification, including OERS number   |        |                                  |
|                 | A.1.i and A.10.d | <b>Preventative maintenance:</b>  |        |                                  |
|                 |                  | Procedures for conducting inspections, maintenance and repairs to prevent leaks, spills, and other releases from drums, tanks and containers exposed to stormwater  |        |                                  |
|                 |                  | Schedules or frequency of maintaining all control measures  |        |                                  |
|                 |                  | Schedules of waste collection   |        |                                  |
|                 | A.10.e           | <b>Operations and Maintenance:</b>  |        |                                  |
|                 |                  | Include an operation and maintenance plan for active treatment and passive treatment systems  |        |                                  |
|                 |                  | Include system schematic, manufacturer's maintenance and operations specifications  |        |                                  |
|                 |                  | Include routine maintenance standards and schedules   |        |                                  |
|                 | A.10.f and A.1.j | <b>Employee Education:</b>  |        |                                  |
|                 |                  | Develop and maintain an employee orientation and education program to inform personnel of the pertinent components and goals of this permit and the SWPCP   |        |                                  |
|                 |                  | Orientation no later than 30 calendar days of hire or change in duties, annually thereafter   |        |                                  |
|                 |                  | Include a description of the training content and the required frequency  |        |                                  |
| Tier 2 Status   | A.10.b.vii       | Facility triggered Tier 2 under current permit term <input type="checkbox"/> Yes<br>A description of stormwater treatment controls or source controls, including low impact development, in response to corrective action requirements and operation and maintenance procedures |        |                                  |
|                 |                  | Include safety sheets for any stormwater treatment chemicals or substances used in stormwater treatment and stored on site  |        |                                  |

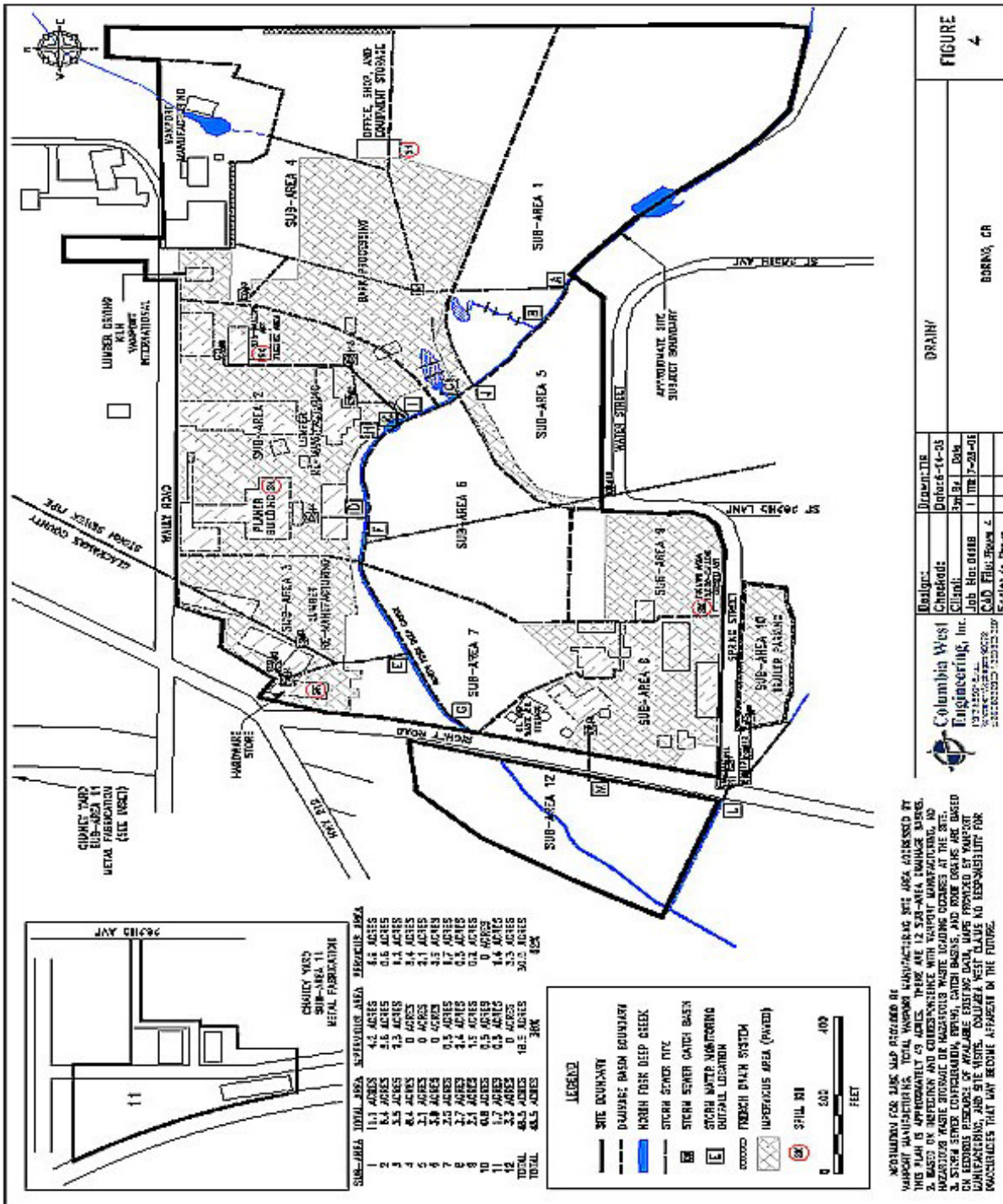
| Permit Schedule      |         | Requirement   | Page # | Comments<br>(For official use only) |
|----------------------|---------|---|--------|-------------------------------------|
| Receiving Waters     | A.10.ix | The name(s) of the receiving water(s), latitude and longitude of discharge points, and applicable SIC code, if facility has co-located operations   |        |                                     |
|                      |         | If discharge point is to a municipal storm sewer system, name(s) and latitude and longitude of the receiving water and municipality   |        |                                     |
| Monitoring Locations | A.10.x  | The identification of each discharge point and the location(s) where stormwater monitoring will occur as required by Schedule B.6   |        |                                     |
|                      |         | Existing discharge points excluded from monitoring must include a description of the discharge point(s) and data or analysis supporting that the discharge point(s) are substantially similar as described in Schedule B.7.c.ii |        |                                     |

## Appendix III: Example SWPCP site maps









## Useful Websites

For very large industrial sites, maps such as the United States Geological Survey (USGS) 7.5 Minute Series Topographic Map can be purchased from the Oregon Department of Geology and Mineral Industries, (503) 731-4444, or from sporting goods stores. Beyond of Google Earth and Google Maps, the following websites can provide printable aerial photographs, property maps, surface waters, wells and street view maps to assistance in site maps and receiving water identification.

|  |                                       |
|--|---------------------------------------|
| USGS   | <a href="#">Topographic Maps</a>      |
| Site location street maps  | <a href="#">OpenStreetMap</a>         |
| City of Portland: <ul style="list-style-type: none"><li>• Utility maps</li><li>• Tax lot maps</li><li>• Color aerial photographs</li></ul> | <a href="#">Portland Maps Gallery</a> |
| Department of Transportation: <ul style="list-style-type: none"><li>• Statewide maps</li><li>• County maps</li><li>• City maps</li></ul>   | <a href="#">ODOT Maps and GIS</a>     |
| DEQ Geographic Information Systems   | <a href="#">DEQ GIS Services</a>      |
| Department of Water Resources Access Data Maps <ul style="list-style-type: none"><li>• Drinking water well logs</li></ul>                  | <a href="#">OWRD Mapping Tools</a>    |
| U.S. Fish and Wildlife Service National Wetlands Inventory   | <a href="#">Wetlands Mapper</a>       |
| Natural Resource Conservation Service soil maps  | <a href="#">USDA Web Soil Survey</a>  |

These maps will provide information about the elevations of the land on and around the site. However, the USGS maps are drawn to a scale that may be too small (1 inch - 2000 feet) and may not provide enough detail for the topography of the specific industrial site.

It is important to note that some local governments, such as the City of Portland Map Reproduction Department, 503-823-4444, have topographic maps for purchase that are drawn to a larger scale (1 inch- 100 feet). These will show greater detail in the topography of the land.



If the larger scale map does not provide enough detail for additional information to be added, a land surveyor or professional engineer should be able to map the site and develop a base map to the appropriate scale. An appropriate scale will vary depending on the size of the site. For very small sites, a base map drawn to a scale of 1 inch - 10 feet or 1 inch - 20 feet may be needed. Sites that are larger can be mapped and drawn to scales such as 1 inch - 30 feet, 1 inch - 40 feet, or larger. Remember that additional information (the location of buildings, process areas, drainage patterns, and stormwater control structures) will need to be added to the base map.

# **Appendix IV: Determining Substantially Similar Effluent at Multiple Discharge Points**

## **Determining the Number of Sampling Points**

You must identify in the SWPCP the discharge points that you will sample. Where discharge points have substantially similar effluents, you are not required to monitor each discharge point. In the SWPCP, you must describe the location of discharge points and a detailed explanation of why these discharge points are expected to discharge substantially similar effluent. This determination should be based on past monitoring or an analysis of industrial activities, site characteristics, significant materials, and management practices and activities within the area drained by the discharge points. If the Department or agent determines that the discharges are not substantially similar, you may be required to sample additional discharge points.

A variety of methods can be used to demonstrate that stormwater discharge points have substantially similar effluents. Three options are discussed below: (1) submission of a narrative description and a site map; (2) submission of matrices, or (3) submission of model matrices. Detailed guidance on each of the three options is provided below. The owner/operator should certify the option selected. If this information is provided in the SWPCP, then the SWPCP certification is sufficient.

## **Identifying Substantially Similar**

### **Option 1: Narrative description and site map**

Facilities demonstrating that stormwater discharge points are substantially similar may submit a narrative description of the facility and a site map to DEQ or agent. The narrative portion must include a description of why the discharge points have substantially similar effluents.

Permit registrant may demonstrate that these discharge points contain stormwater discharges associated with:

- Substantially similar industrial activities and processes.
- Substantially similar significant materials that may be exposed to stormwater [including, but not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical that a facility is required to report pursuant to section 313 of title III of SARA; TSCA, fertilizers; pesticides; and waste products such as ash, slag, and sludge that have the potential to be released with stormwater discharges.
- Substantially similar stormwater best management practices (retention ponds, enclosed areas, diversion dikes, gutters, and swales) and material management practices (protective coverings and secondary containment); or
- Substantially similar flows, as determined by the estimated runoff coefficient and approximate drainage area at each discharge point.

The site map should include:

- Facility's topography or surface water runoff flow direction
- Each of the drainage and discharge structures
- Drainage area of each stormwater discharge point
- Paved areas and buildings within the drainage area for each stormwater discharge point
- All past or present areas used for outdoor storage or disposal of significant materials
- Identification of the significant materials in each drainage area
- Identification of each existing structural control measures used to reduce pollutants in stormwater runoff, materials loading and access areas
- Areas where pesticides, herbicides, soil conditioners, and fertilizers are applied

Use an estimate runoff coefficient for impervious surfaces such as roofs or paving of 0.90 and 0.50 for pervious surfaces or a more specific runoff coefficient from other sources to determine the estimated average runoff coefficient for the drainage area.

Estimated Average Runoff Coefficient (for N areas) =

$$\frac{((\text{Area A})(\text{Runoff Coeff. A}) + (\text{Area B})(\text{Runoff Coeff. B}) + \cdots (\text{Area n})(\text{Runoff Coeff n}))}{\text{Area A} + \text{Area B} + \cdots \text{Area n}}$$

For more areas, add the Area multiplied by the Runoff Coefficient in the numerator and add the area in the denominator.

Please see Exhibit 1 below for an example of this option.

## **Option 2: Use of matrices to indicate substantially similar discharge points**

Facilities demonstrating that stormwater discharge points are substantially similar may include matrices describing specific information associated with each discharge point in the facility's SWPCP. Matrix information is required only for those discharge points that the permit applicant is attempting to demonstrate are similar, not for all discharge points. Permit registrants must demonstrate, using the matrices, that the discharge points have stormwater discharges that meet the criteria for substantially similar discharge points, as described in Option 1 above. Refer to Exhibit 2 for examples of matrices that demonstrate substantially similar discharge points.

## **Option 3: Model matrices**

Facilities demonstrating that stormwater discharge points are substantially similar may include model matrices in the SWPCP. This option is particularly appropriate for facilities with several stormwater discharge points and the potential for numerous groupings of similar discharge points.

Model matrices should contain information for one grouping of substantially similar discharge points. For example, if a facility has 150 discharge points comprised of several groupings of

similar discharge points, the facility will choose one of the groupings of similar discharge points to provide information in the model matrices. The permit registrant must demonstrate, using these matrices, that all discharge points within this grouping have stormwater discharges that meet the criteria for substantially similar discharge points, as described in Option 1 above.

## **Substantially Similar Effluents – Exhibits**

### **Exhibit 1 – Example of request for reduced monitoring based on substantially similar discharge points: Narrative description**

The Pepper Company of Philadelphia, Pennsylvania, is primarily engaged in manufacturing paperboard, including paperboard coated on the paperboard machine (from wood pulp and other fiber pulp). This establishment is classified under SIC code 2631. Pursuant to the November 16, 1990, NPDES stormwater permit application regulations, this facility is considered to be “engaging in industrial activity” for the purposes of stormwater permit application requirements in 40 CFR Part 122.26(b)(14)(i) and (ii).

“When an applicant has two or more discharge points with substantially similar effluents, the Director may allow the applicant to test only one discharge point and report that the quantitative data also apply to the substantially similar discharge points.” [40 CFR Part 122.21(g)(7)]

In accordance with 40 CFR Part 122.21(g)(7) of the NPDES regulations, the Pepper Company hereby petitions the State of Pennsylvania (the permitting authority) for approval to sample certain representative stormwater discharge points in groupings of stormwater discharge points that are substantially similar. The Pepper Company will demonstrate that of the ten (10) discharge points discharging stormwater from our paperboard manufacturing plant, there are two pairs of substantially similar discharge points. Discharge points 3 and 4 are substantially similar and should be grouped together. Discharge points 8 and 9 are substantially similar and should be grouped together. Discharge points 1, 2, 5, 6, 7, and 10 have distinct characteristics and, therefore, will not be grouped together with other discharge points for the purposes of stormwater discharge sampling.

The Pepper Company will demonstrate that the substantially similar discharge points that have been grouped together contain stormwater discharges associated with:

1. substantially similar industrial activities and processes that are occurring outdoors
2. substantially similar significant materials (including raw materials, fuels, finished materials, waste products, and material handling equipment) that may be exposed to stormwater
3. substantially similar material management practices (such as runoff diversions, gutters and swales, protective coverings, and structural enclosures)
4. substantially similar flows, as determined by the estimated runoff coefficient and approximate drainage area at each discharge point

### **Description of industrial activities at the Pepper Company**

The Pepper Company receives wastepaper in bales. This baled wastepaper is sent through a hydro pulper and converted to pulp. The fiber material is concentrated, stored, and then drawn through refiners to the paper machines. Wires, plastics, and miscellaneous material are removed during the pulping.

Three systems are used to produce top liner, back paper, and filler. The highest quality fiber is used for the top liner, the medium quality is used for the back paper, and the poorest quality is used for the filler paper. Wireforming or conventional boxboard processes are employed to produce clay-coated boxboard, using a water-based clay-coating material. Additional materials may be used as binders. These are stored indoors and are not exposed to precipitation. Ammonia is used in the clay-coating process. Off-grade fiber and trim material are ground up and returned to the liquid process stream. Slime control agents, consisting of bactericides, are used in association with this process. These agents are organic materials used to prevent souring of mill operations. They are received in drums and stored indoors. Empty drums are returned to the supplier to reuse. In addition, the Pepper Company operates an onsite landfill for the

disposal of miscellaneous waste materials removed during pulping and paper cuttings operations.

### **Demonstration for Substantially Similar Discharge Points in terms of Industrial Activities Conducted Outdoors.**

#### **Discharge points 3 and 4**

Discharge points 3 and 4 are substantially similar in terms of industrial activities conducted outdoors. Both discharge points contain stormwater discharges associated with the outdoor storage of baled wastepaper. The wastepaper, which consists of old corrugated containers, mixed paper, and other types of wastepaper, is received weekly and stored for up to 3 weeks in Storage Areas #1 and #2. These uncovered storage areas are enclosed by chain-link fencing.

#### **Discharge points 8 and 9**

Discharge points 8 and 9 drain stormwater runoff from areas where all industrial activities occur indoors. The industrial activities occurring under roof cover at these two discharge points include hydro pulping, storage of concentrated fiber material, refining and paperboard production. These industrial processes have no potential for contact with precipitation.

### **Description of significant materials at the Pepper Company**

The significant materials listed below are used by the Pepper Company to manufacture paperboard. These materials are stored indoors, unless otherwise indicated.

1. **Raw materials**, including baled wastepaper (off-spec damaged paper stock or recycled paper) [wastepaper is stored outdoors at Storage Areas 91 and 12]; clays, ammonias and slime control agents (chlorine dioxide); caustic; ammonia, which is stored in two tanks. [See Storage Area 93].

2. **Waste Materials**, including miscellaneous materials removed during pulping and paper cuttings (such as staples, rubber bands, styrofoam, etc.). These waste materials are stored indoors in open dumpsters. However, prior to disposing of the waste in the onsite landfill, these dumpsters are moved outdoors where they are potentially exposed to precipitation for 12 hours or less. [See Storage Area 43].
3. **Finished Products**, including paperboard and molded fiber products. These are always stored indoors.
4. **Miscellaneous**, including wood pallets (which are used to transport and haul raw materials, waste materials, and finished products) are stored both indoors and outdoors. [See Storage Area #3].

The Pepper Company has an above-ground fuel tank with a pump. [See Storage Area #3].

### **Demonstration for substantially similar discharge points in terms of industrial activities that potentially may be exposed to stormwater**

#### **Discharge points 003 and 004**

Discharge points 003 and 004 are substantially similar in terms of significant materials that may be exposed to stormwater. Both discharge points contain stormwater discharges associated with the outdoor storage of baled wastepaper. The wastepaper, which consists of old corrugated containers, mixed paper, and other types of wastepaper, is received weekly and stored for up to 3 weeks in Storage Areas #1 and #2. These uncovered storage areas are enclosed by chain-link fencing.

#### **Discharge points 8 and 9**

Discharge points 008 and 009 are substantially similar in terms of significant materials. Both discharge points contain stormwater runoff from areas that have no significant materials potentially exposed to stormwater. All industrial activities occurring in the areas drained by Discharge points 008 and 009 occur completely indoors.

### **Description of material management practices at the Pepper Company**

The Pepper Company uses a wide range of stormwater management practices and material management practices to limit the contact of significant materials with precipitation. Non-structural stormwater management practices include employee training, spill reporting and clean-up, and spill prevention techniques. Structural stormwater management practices include:

1. **Diversion Devices** (both above-ground trenches and subterranean drains) are used to divert surface water from entering a potentially contaminated area.
2. **Gutters/Swales** (constructed of concrete or grass) channel stormwater runoff to drainage systems leading to separate storm sewers.
3. **Overland Flow** (which is the flow of stormwater over vegetative areas prior to entrance into a stormwater conveyance) allows much of the stormwater to infiltrate into the

ground. The remainder is naturally filtered prior to reaching the stormwater conveyance. This is not considered sheet flow since natural drainage channels may be carved out during a heavy storm event.

### **Demonstration for substantially similar discharge points in terms of stormwater best management practices**

Discharge points 003 and 004 are substantially similar in terms of stormwater management practices used. Both discharge points contain stormwater discharges associated with the outdoor storage of baled wastepaper, located in Storage Areas #1 and #2. Concrete gutters at both sites channel stormwater away from the storage areas down to the respective discharge points.

#### **Discharge points 008 and 009**

Discharge points 008 and 009 are substantially similar in terms of stormwater management practices used. Both discharge points contain stormwater runoff from areas that have no significant materials potentially exposed to stormwater. All industrial activities occurring in the areas drained by Discharge points 008 and 009 occur completely indoors. Both discharge points receive overland flow stormwater. From roof drains, the stormwater in both drainage areas is then conveyed over similarly graded vegetative areas prior to entrance into the respective discharge points.

### **Demonstration for substantially similar discharge points in terms of flow, as determined by the estimated runoff coefficient and approximate drainage area at each discharge point**

#### **Discharge points 003 and 004**

Discharge points 003 and 004 are substantially similar in terms of flow. Both drainage areas have a 2 to 7 percent grade and contain fine textured soil (greater than 40 percent clay) with a vegetative cover. The estimated runoff coefficient for both discharge points is 0.2. The approximate drainage area for each discharge point is similar. Discharge point 003 has an approximate drainage area of 3,500 square feet- Discharge point 004 has an approximate drainage area of 2,900 square feet

#### **Discharge points 008 and 009**

Discharge points 008 and 009 are substantially similar in terms of flow. Both drainage areas have a 2 to 7 percent grade and contain fine textured soil (greater than 40 percent clay) with a vegetative cover. The estimated runoff coefficient for both discharge points is 0.2. The approximate drainage area for each discharge point is similar. Discharge points 008 has an approximate drainage area of 7,600 square feet. Discharge point 009 has an approximate drainage area of 8,700 square feet.

### **Exhibit 2 – Example of request for reduced monitoring based on substantially similar discharge points: Matrix table description**

| Industrial Activities |   |         |                                   |   |                   |
|-----------------------|---|---------|-----------------------------------|---|-------------------|
| Discharge Points      | Outdoor Storage of Raw Material and Material Handling Equipment | Fueling | Waste Material Storage (Dumpster) | Loading/Unloading of Raw Materials, Intermediate Products, and Final Products | Landfill activity |
| 003                   | X   | -       | -                                 | X   | -                 |
| 004                   | X   |         |                                   | X   | -                 |
| 008                   | -   | -       | -                                 | -   | -                 |
| 009                   | -   | -       | -                                 | -   | -                 |

| Significant Materials Exposed to Stormwater |                      |              |                      |                 |                  |                   |
|---|----------------------|--------------|----------------------|-----------------|------------------|-------------------|
| Discharge Points                            | Outdoor Ammonia Tank | Wood Pallets | Aboveground Gas Tank | Waste Materials | Baled Wastepaper | Finished Products |
| 003   | -                    | -            | -                    | -               | X                | -                 |
| 004   | -                    | -            | -                    | -               | X                | -                 |
| 008   | -                    | -            | -                    | -               | -                | -                 |
| 009   | -                    | -            | -                    | -               | -                | -                 |

| Stormwater Best Management Practices |                  |                |                         |  |                 |
|--------------------------------------|------------------|----------------|-------------------------|--|-----------------|
| Discharge Points                     | Runoff Diversion | Wetland/Swales | Vegetative Filter Strip | Catch Basin Insert Bags (without overflow) | Vacuum Sweeping |
| 003                                  | -                | X              | -                       | -  | -               |
| 004                                  | -                | X              | -                       | -  | -               |
| 008                                  | -                | -              | X                       | -  | -               |
| 009                                  | -                | -              | X                       | -  | -               |

| Flow Characteristics |                              |  |
|----------------------|------------------------------|--|
| Discharge Points     | Estimated Runoff Coefficient | Approximate Drainage Area of Discharge Point (sq. ft.) |
| 003                  | 0.2                          | 3,500  |
| 004                  | 0.2                          | 2,900  |
| 008                  | 0.2                          | 7,600  |
| 009                  | 0.2                          | 8,700  |



## Appendix V - DEQ and agent offices

| DEQ Regional Offices   |   |  |
|--|---|--|
| <b>Northwest Region</b><br>700 NE Multnomah St.,<br>Suite 600<br>Portland, OR 97232<br>503-229-5696 or<br>1-800-452-4011 | <b>Western Region</b><br>165 East 7th Avenue,<br>Suite 100<br>Eugene, OR 97401<br>541-686-7838 or<br>800-844-8467 | <b>Eastern Region</b><br>475 NE Bellevue Drive,<br>Suite 110<br>Bend, OR 97701<br>541-3886146 or<br>800-863-6668 |

| Western Region counties |         |         |           |
|-------------------------|---------|---------|-----------|
| Benton                  | Marion  | Coos    | Josephine |
| Douglas                 | Jackson | Lincoln | Linn      |
| Lane                    | Polk    | Curry   | Yamhill   |

| Northwest Region counties |            |
|---------------------------|------------|
| Clackamas                 | Tillamook  |
| Multnomah                 | Columbia   |
| Clatsop                   | Washington |

| Eastern Region counties |         |            |         |          |         |
|-------------------------|---------|------------|---------|----------|---------|
| Baker                   | Gilliam | Hood River | Lake    | Sherman  | Wallowa |
| Crook                   | Grant   | Jefferson  | Malheur | Umatilla | Wasco   |
| Deschutes               | Harney  | Klamath    | Morrow  | Union    | Wheeler |

| Agents Offices  |   |   |
|---|---|---|
| <b>City of Portland</b><br>Bureau of Environmental<br>Services<br>Water Pollution Control<br>Laboratory<br>6543 N. Burlington Ave.<br>Portland, OR 97203-5452<br>503-865-6555 | <b>Clean Water Services</b><br>(includes all or part of<br>Beaverton, Cornelius, Forest<br>Grove, Hillsboro, Sherwood,<br>Tigard, and Tualatin)<br>2550 SW Hillsboro Highway<br>Hillsboro, OR 97123<br>503-681-4456 | <b>City of Eugene</b><br>410 River Avenue<br>Eugene, OR 97404<br>541-682-8616 |