

## Portland Harbor

# Characterizing and Managing Catch Basin and In-line Sediments in Portland Harbor



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Stormwater runoff from upland sites has been identified as one of the potential sources of contamination to the Willamette river.

Evaluating and controlling discharges of contaminants via stormwater is an important consideration in source control at Portland Harbor sites.

The purpose of this fact sheet is to clarify DEQ's expectations regarding characterization and management of sediments removed from a stormwater catch basin or the stormwater conveyance system as part of a source control investigation at cleanup sites within the Portland Harbor (PH) study area.

### Contaminants of Interest

When removing sediments from stormwater catch basins and conveyances, DEQ will generally require the property owner to analyze the sediments for all contaminants of interest (COIs) identified for the upland site and certain risk-driving chemicals of potential concern (COPCs) for Portland Harbor sediments.

For each clean-out activity, DEQ project managers will provide direction on the suite of chemicals for which laboratory analysis is required. General procedures for sampling stormwater and associated sediments are specified in the *Framework for Portland Harbor Storm Water Screening Evaluations (Appendix D of the Joint Source Control Strategy)*.

DEQ project managers will consider the need to screen for COIs based on available site-specific information, available in-line sediment data from stormwater conveyances "downstream" of the site (if the site's stormwater discharges to another stormwater conveyance system before reaching the river) and analyses of in-river sediment adjacent to the outfall. In addition, DEQ is requiring all stormwater sediment samples to be analyzed for all of the phthalates and polychlorinated biphenyls (PCBs) listed in the *Joint Source Control Strategy*.

DEQ's *Framework for Portland Harbor Storm Water Screening Evaluations* provides guidance for developing site-specific work plans for evaluating stormwater runoff from upland sites. It is intended to ensure that information on stormwater discharges is collected in a consistent and thorough manner in support of the goals of the *Joint Source Control Strategy*. These documents are available at <http://www.deq.state.or.us/lq/cu/nwr/PortlandHarbor/jointsource.htm>

If contaminants are detected in stormwater solids at levels exceeding the contaminant screening levels listed in Table 3.1 of the *Joint Source Control Strategy*, further sampling may be required to identify the source and extent of contamination.

### Source Control May be Required

If contaminants are detected in stormwater catch basin sediments at concentrations exceeding screening criteria, property owners will be expected to implement best management practices (BMPs) and conduct follow up stormwater monitoring (i.e., whole water sampling) to ensure that the source has been effectively controlled. It is likely that ongoing stormwater control measures will be necessary at most Portland Harbor upland sites to ensure that future stormwater discharges do not recontaminate the river or sediments.

### Why is this Necessary?

Adequate characterization of stormwater discharges is an important step in the source control process. Properly identifying contaminants will help to ensure that effective controls are in place to prevent upland sources from contributing to ongoing contamination, and to future potential recontamination of Portland Harbor sediments.

Stormwater sediment data can provide critical information toward that end by determining if

hazardous substance releases at an upland facility have impacted, or have the potential to impact Portland Harbor. This information will help ensure that source control measures are tailored to the specific source control needs of a site.

DEQ is requiring PCB and phthalate screening at all sites because these contaminants have been identified as preliminary risk drivers throughout the Portland Harbor area, and because of the varied and widespread use of these substances.

### **Additional Considerations**

If source control efforts include the removal of sediments from stormwater conveyance lines, the line cleaning work plan should include analysis of both solids and wastewater generated by the cleaning process and a disposal plan for all wastes.

Sediments removed from the stormwater collection system may require dewatering and additional testing to ensure appropriate disposal in accordance with applicable DEQ Solid and Hazardous Waste regulations.

Wastewater generated from line cleaning activities may not be discharged to the private or municipal stormwater conveyance system. Wastewater disposal options include offsite disposal by a permitted private waste management company capable of appropriate treatment and disposal, or discharge to the City of Portland's sanitary sewer system through a batch discharge process (see below for details).

### **Notification Requirements**

The City of Portland, Bureau of Environmental Services (BES) must be notified before you begin stormwater line cleanouts if any of the following three conditions apply to your facility:

- *Lines are connected to a municipal stormwater conveyance system.*

BES has requested notification of proposed cleaning operations in order to ensure worker safety for City and contract personnel and to verify that prohibited discharges of solids or wastewater are not made to the municipal conveyance system. A permit will be required if cleaning or sampling activities necessitate access to the City system. All stormwater line cleaning activities that connect to the City's conveyance system, and affiliated proposed access to City stormwater lines should be coordinated with the BES Portland Harbor Program, at (503) 823-2296.

- *Facility operations are covered by a General NPDES stormwater permit.*

For facilities with a General NPDES stormwater permit, notification will also allow for technical assistance and oversight from BES Permit Managers. BES administers stormwater General Permits for facilities within the City of Portland through a Memorandum of Understanding with DEQ. Contact the BES Industrial Stormwater Program at (503) 823-5320.

- *Line cleaning wastewater will be discharged to the sanitary sewer.*

Wastewater collected from these cleaning operations may not be discharged to the stormwater conveyance system even if the facility has an NPDES permit. It may be discharged to the City sanitary sewer system through a batch discharge process if it meets the wastewater discharge limitations established in City Code Chapter 17.34 "Industrial Wastewater Discharges" and is approved by the BES Industrial Source Control Division. Prohibited discharges include discharges of chemicals in toxic concentrations, of visible floating solids, and discharges that may cause a hazard to the City's system, personnel, or receiving waters. Coordinate batch discharge requests with the BES Industrial Projects Section at (503) 823-5320. Information and forms can also be found at the following link:

<http://www.portlandonline.com/index.cfm?c=37681#batch>.

Facilities with Industrial Wastewater Discharge Permits administered by BES should consult directly with their BES Permit Managers.

Additional information on sampling and cleaning stormwater conveyance lines are included as attachments to *Appendix D* of the *Joint Source Control Strategy*.

### **For more information**

If you have questions regarding Portland Harbor stormwater issues, please contact your DEQ Project Manager for more information, or contact Karen Tarnow, DEQ's Portland Harbor Stormwater Coordinator at 503-229-5988 or [tarnow.karen.e@deq.state.or.us](mailto:tarnow.karen.e@deq.state.or.us)

### **Alternative formats**

*Alternative formats (Braille, large type) of this document can be made available. Contact DEQ's Office of Communications & Outreach, Portland, at (503) 229-5317, or toll-free in Oregon at 1-800-452-4011.*