

INDUSTRIAL PRETREATMENT
SHORT-TERM GROUNDWATER DISCHARGE

Construction dewatering is needed when soil excavation performed below the groundwater table generates water that must be disposed.

Groundwater Discharge to the Wastewater System

The LOTT Clean Water Alliance occasionally receives requests to discharge groundwater into the regional wastewater system. These requests are typically related to dewatering a construction site or cleaning up contaminated soil and/or water as part of site development. LOTT may accept these discharges of groundwater as long as they are within discharge limits specified in the LOTT Pretreatment Regulations. While LOTT may accept groundwater, the associated sediments and potential contaminants must be kept out of the sewer system. Groundwater that is known or suspected to be contaminated must be adequately treated to remove the contaminants prior to discharge.

Construction Dewatering

Dewatering is needed when soil excavation performed below the groundwater table generates water that must be disposed. The primary pollutant of concern is sediment. The Budd Inlet Treatment Plant is not designed to treat mud slurries or other waste streams with a high sediment load.

While LOTT does not have a numerical limit for sediment discharges, water from construction sites must be treated in a sedimentation tank (or approved equivalent) before it can be sent to the sewer. The sediment tank must have baffles, and a draw-off valve located at the top or midway on the tank. This allows the sediment to settle and the water to be drawn off for discharge to an approved sanitary sewer connection.

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AUTHORIZATION, PROCESS & REQUIREMENTS

Authorization to Discharge

The LOTT Pretreatment Regulations, adopted in the Lacey, Olympia, and Tumwater city Sewer Use Ordinances, specifically prohibit the discharge of groundwater and other dilute water sources to the sewer system unless approved in writing. This requirement is to prevent unpermitted discharges of groundwater from diluting wastewater and affecting the ability to treat it. Unpermitted groundwater discharges can also allow contaminants from polluted sites to enter LOTT's Budd Inlet Treatment Plant, and possibly Budd Inlet. Discharge Authorization letters specify volume limits and require treatment of contaminants to protect the treatment plant and local water quality.

Associated Costs

LOTT does not charge fees for Discharge Authorization letters. However, if the site does not have a sewer account one must be established with the appropriate sewer service provider in order to pay for the volume of water discharged. (In the LOTT service area, this is one of the three cities – Lacey, Olympia, or Tumwater.) The other associated cost may be for lab analysis of samples, if required.

Groundwater Sampling

Groundwater sampling for construction dewatering is not required if there is no known or suspected site contamination. However, if signs of contamination are discovered during site excavation sampling may be required at that time.

Groundwater sampling is required for sites with suspected or known contamination. If the applicant has recent analytical data (within the past six months) demonstrating that pollutants are not present, then monitoring for those pollutants may not be required. If no analytical data is available, then weekly monitoring for all potential pollutants is required for the first month of discharge. After the first month, sampling may be reduced if pollutants are found at low levels, or eliminated if no pollutants are detected.

Application Process

Applicants must complete and return a Groundwater Discharge Application to LOTT. The information from the application is used to draft a Discharge Authorization letter. The letter is then forwarded to the appropriate sewer service provider for review prior to LOTT issuing the letter. Once a completed application is received, this process takes approximately two weeks. Upon approval, the applicant will receive the Discharge Authorization letter specifying volume limits and required treatment of contaminants.

What's Required

At a minimum, all applicants are required to install a sediment-settling tank (or approved equivalent) and have a flow meter with a sewer account with the appropriate sewer service provider. If the site has suspected or known contamination, then the applicant must list:

- Site history – What business was previously located onsite that caused, contributed to, or could potentially cause or contribute to soil contamination
- Known or suspected pollutants of concern
- Signs of contaminants
- Name of the oversight agency that is requiring the clean-up (if applicable)
- Copies of the administrative order requiring the clean-up (if applicable)
- Estimated volume of daily discharge
- Estimated start date of the project
- Estimated duration of the project
- Any lab analysis of soil or water samples
- Proposed groundwater treatment methods

CONTAMINATED SOIL REMEDIATION & MORE INFORMATION

Contaminated Soil Remediation

Groundwater from soil remediation is generated when pumping and treating groundwater to remove soil contaminants, or from dewatering at a site with known soil contamination.

Sediment and contaminants in groundwater must be removed or treated to allowable limits prior to discharge. In addition to sediment removal, carbon filtration, oil and water separation, or other treatment may be needed to remove contaminants.

Signs of Contaminants

If you note any of the following issues or odors prior to discharge, please include these observations in your discharge authorization application.

For More Information

LOTT Clean Water Alliance

Justin Boyes, Environmental Program Manager
(360) 528-5728 | JustinBoyes@lottcleanwater.org

Washington Department of Ecology

What's in My Neighborhood

Cleanup Site Search

CONTAMINATION YOU CAN SEE	CONTAMINATION YOU CAN SMELL
Oil or greasy appearance with visible oil droplets, film, or sheen	Gasoline
Tar, chemical sludge, or gummy resinous substance	Paint thinner
Distinct color changes (red, blue, green, etc.)	Furniture polish
Foam, scum, gel, slime, or soapy liquid material	"Magic marker" pen odors
Fibrous material, particularly white or grey in color	Rotten eggs
Powder, grit, or machine-formed pellets indicative of chemicals	"Skunky" smells
Metal containers such as drums, tanks, or pipelines	Mothballs
Molten slag	Creosote
Electrical equipment like transformers, batteries, or capacitors	Diesel fuel
Misty or smoky discharge	Other solvent, petroleum, or chemical odors
Unnatural color flecks or smear in the soil	

LOTT Clean Water Alliance

500 Adams Street NE, Olympia, Washington 98501 | 360.664.2333 | www.lottcleanwater.org