UC Berkeley Environment, Health & Safety

Flood Water Discharges from Elevator Service Pits and Sumps
Standard Operating Procedure

REVISED 9/5/2025

Flood Water Discharges from Elevator Service Pits and Sumps

Scope

This procedure applies to any discharge of flood water from elevator service pits with the exception of those situations where life safety or catastrophic property damage is threatened.

This procedure is intended to prevent the release of prohibited pollutants to either the sanitary sewer system or storm system that would cause a violation of applicable regulations or ordinances or would otherwise cause significant harm to either surface waters, the surrounding environment or the sanitary sewer system. This procedure provides guidance to workers who encounter accumulated water that must be removed from elevator service pits in order to perform maintenance, inspection, installation, or repair of machinery and systems.

This procedure applies to personnel most likely to discover or respond to flooded elevator service pits such as Facilities Services, Residential & Student Service Programs, building or department trades people, building coordinators, or similar.

Discussion

Elevator pits on campus may flood with water due to their low-lying nature. This water may contact surfaces that have varying levels of contaminants ranging from simple trace residues to larger quantities of stored or spilled materials (e.g., dust, lubricants, hydraulic fluids). Improperly discharging this water to either the surface water storm system or the sanitary sewer system could result in damage to the environment as well as a violation of regulations designed to prevent discharges of polluted water.

The prevention of these potentially damaging discharges of contaminated water is best achieved by eliminating as much as is practicable the infiltration of water into interior spaces and buildings on campus. Most of the water intrusion issues arise from groundwater seeping through the porous concrete and cold joints. Upon discovery of such an area, Facilities Services

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staff or a contractor injects the concrete with an expanding poly foam that seals the floors and walls to prevent water infiltration.

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Procedure

- Upon discovery or notification of a flooded service pit, personnel must immediately notify their supervisor of the situation but refrain from discharging any water. Any sump pumps or valves known to drain the space should be secure in the off or closed position to prevent the unplanned release of water from the flooded area.
- 2. Personnel shall refrain from entering the flooded space until potential safety hazards (sources of electricity, hazardous materials, dangerous atmosphere, or physical hazards such as sharp or protruding obstructions) can be identified and eliminated or controlled. Initial responders should also isolate the source of the accumulating water if feasible to do so (i.e., turn off isolating valves, sand bag or cover inlets, plug or seal conduits or lines).
- 3. Only supervisory personnel trained in this procedure will determine the presence or absence of contaminants in accumulated water. This will be done primarily through visual observations of the water (for sheen, color, turbidity) and by taking note of any odors present. In a situation where the presence of oil on the water surface cannot be visually confirmed, an absorbent pad with oleophilic and hydrophobic properties shall be deployed as a verification tool to establish the presence or absence of hydrocarbon contamination. The absorbent pad allows for selective absorption of hydrocarbons, while repelling water. Determination will also include an investigation of the path and source of the water.
- 4. In addition, responding personnel will consult with persons familiar with the processes located in the immediate area and will review the use of the flooded area to determine whether or not a source of contaminants are in contact with accumulated water. Additional hazard categorization or even analysis may be required based on investigation of the flooded area. If there are reasonable doubts as to the presence of significant contaminants, do not pump or release the accumulated water.
- 5. If the water is suspected or proved to contain significant levels of contaminants, no pumping or other removal will take place until proper containment can be procured (i.e., drums, portable tanks, vacuum truck). Contact the Office of Environment, Health & Safety (EH&S) personnel to assist in analysis of the collected water and determination of the disposal method.

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- 6. If the source of the accumulated water is determined to be from domestic (drinking) water supply lines or domestic sewage lines and, upon assessment by a supervisor, determined to be free of prohibited materials (e.g., oil, fuel, paint, hydraulic fluid, coolants), this water may be pumped and discharged to the sanitary sewer.
- 7. If the source of accumulated water is found to be surface water from a storm event and is determined by a supervisor to be free of significant contamination (i.e., no chemicals or suspended solids), discharge to the storm conveyance system is allowed.
- 8. Care will be taken to prevent wash water from clean-up activities from entering storm drains. Inlets will be plugged or blocked and temporary dikes placed to protect the storm system and allow collection of generated wash water.
- 9. Wash water generated during clean-up activities will also be characterized to determine whether sanitary sewer drain disposal is allowable. Wash waters containing prohibited substances or exhibiting hazardous waste characteristics may not be discharged to the sewer and must be contained for off-site treatment. Contact EH&S for assistance.
- 10. Responding personnel will conduct a post clean-up investigation to determine both the source and path of the floodwater and develop a written action plan to prevent future occurrences. Plans must be kept on record and made available to authorized agency representatives upon request (e.g., East Bay Municipal Utility District, California State Water Resources Control Board, San Francisco Bay Regional Water Quality Control Board).

Essential Contacts

Name	Phone
Facilities Services (FS)	(510) 642-6556
Residential & Student Services Program (RSSP)	(510) 642-2828
Environment, Health & Safety (EH&S)	(510) 642-3073

Training

Personnel likely to be called to respond to flooded spaces shall be trained in this procedure and records of this training shall be made available upon request to authorized agency representatives. Training will include a discussion of means and methods to be used to determine the presence of contaminants in accumulated flood waters.