NATIONAL ACCELERATOR LABORATORY

ENVIRONMENT, SAFETY & HEALTH DIVISION

Chapter 43: Wastewater

Quick Start Summary

Product ID: 761 | Revision ID: 2580 | Date published: 17 July 2026 | Date effective: 17 July 2026
URL: https://www-esh.slac.stanford.edu/eshmanual/references/iwQuickstart.pdf

1 Who needs to know about these requirements

The requirements of Wastewater apply to anyone who discharges wastewater to SLAC's sanitary sewer system, including workers, supervisors/line management, process owners, construction managers, area/building managers, subcontractors, the wastewater program manager, Environmental Protection, Radiation Protection, Chemical and Waste Management, Mechanical Fabrication, and Facilities and Operations. They cover routine, non-routine, prohibited, and delayed discharges; spill response, including sanitary sewer overflows and spills into the sanitary sewer; inspecting and maintaining the sanitary sewer system; changes to waste streams; and sampling.

2 Why

SLAC operations generate wastewater that is discharged into the site's sanitary sewer system, which is in turn connected to regional systems. Discharges into these systems are regulated to ensure their proper functioning and for the protection of regional water quality.

3 What do I need to know

SLAC's wastewater discharges are regulated under California's state-wide sanitary sewer system general order (Order 2022-0103-DWQ) and the wastewater permit (WB 211216) issued to SLAC by Silicon Valley Clean Water (SVCW) and the West Bay Sanitary District (WBSD). Discharges from SLAC's Metal Finishing Pretreatment Facility (MFPF) are also regulated by California's Permit by Rule (PBR) Tiered Permit Program (22 CCR 67450.1–67450.3).

Wastewater may only be discharged to SLAC's sanitary sewer if it complies with the above-listed permits. In addition, certain activities at SLAC may require project- and activity-specific discharge permits. Compliance with these permits includes development and implementation of SLAC's Sanitary Sewer Management Plan (SSMP), wastewater requirements, and a monitoring program.

4 When

These requirements take effect 17 July 2026.

5 Where do I find more information

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 43, "Wastewater"

Or contact the program manager.

NATIONAL ACCELERATOR LABORATORY

ENVIRONMENT, SAFETY & HEALTH DIVISION

Chapter 43

Wastewater

Product ID: 42 | Revision ID: 2579 | Date published: 17 July 2026 | Date effective: 17 July 2026
URL: https://www-esh.slac.stanford.edu/eshmanual/pdfs/ESHch43.pdf

1 Purpose

The purpose of this program is to ensure that any material (*wastewater*) that enters the sanitary sewer system (*discharges*) at SLAC complies with applicable rules and regulations.

It covers routine, non-routine, prohibited, and delayed discharges; spill response, including sanitary sewer overflows and spills or prohibited discharges into the sanitary sewer; inspecting and maintaining the sanitary sewer system; changes to waste streams; and sampling.

It applies to workers, supervisors/line management, process owners, construction managers, area/building managers, subcontractors, the wastewater program manager, Environmental Protection, Radiation Protection, Chemical and Waste Management, Mechanical Fabrication, and Facilities and Operations.

All discharges to the sanitary sewer are regulated by a mandatory wastewater discharge permit (wastewater permit) issued to SLAC by Silicon Valley Clean Water (SVCW) and West Bay Sanitary Sewer District (WBSD). The permit places restrictions on the type, quality, and quantity of material discharged to the sanitary sewer system.

2 Roles and Responsibilities

Functional roles and general responsibilities for each under this program are listed below. More detailed responsibilities and when they apply are provided in the procedures, processes, and requirements.

The roles may be performed by one or more individuals, and one individual may play more than one role, depending on the structure of the organizations involved. Responsibilities may be delegated.

2.1 Worker

- Requests authorization from the wastewater program manager from Environmental Protection to discharge any materials not listed in SLAC's wastewater permit to the sanitary sewer
- Treats unauthorized discharges to the sanitary sewer as spills and promptly reports them in accordance with SLAC's spill reporting protocols
- Coordinates with Chemical Waste Management to properly dispose of chemicals and hazardous waste

2.2 Supervisor

- Ensures workers under their supervision follow wastewater discharge requirements

- Instructs workers on proper disposal and storage of material to prevent accidental or unauthorized releases to the sanitary sewer
- Instructs workers on proper disposal of accumulated wastewater and on the process for obtaining approval for non-routine discharges to the sanitary sewer

2.3 Process Owner

- Adds wastewater discharge requirements to standard operating procedures and work practices for any processes or storage areas that require them
- Ensures wastewater requirements are implemented and met within their areas of responsibility
- Ensures that operations in buildings and areas under their control, including wastewater discharges, comply with wastewater discharge requirements (this includes ensuring delayed discharges are on schedule) (see Wastewater: General Requirements)
- Identifies processes that may be sources of *non-routine discharges* to the sanitary sewer system and reports them to the wastewater program manager for evaluation and possible inclusion in the wastewater permit.
- Pays associated fees for non-routine discharge permits
- Coordinates with the wastewater program manager when evaluating the installation of new wastewater-producing processes

2.4 Construction Manager

- Contacts the wastewater program manager to review projects that may impact the sanitary sewer system
- Ensures the proper permits are in place before work starts (see Wastewater: Construction Requirements)
- Implements construction management practices and performs construction activities in compliance with regulatory and wastewater requirements
- Notifies the wastewater program manager in advance of any planned non-routine discharges to the sanitary sewer system arising from work conducted under their direction, such as pipe flushing
- Obtains approval from Facilities before modifying or making new connections to the potable water system, sanitary sewer, or storm drain systems

2.5 Area / Building Manager

- Inspects their area periodically to ensure wastewater requirements are implemented and are adequate and wastewater discharge requirements are met
- Ensures floor drains are properly protected (see Wastewater: Floor Drain Requirements)

2.6 Subcontractor

- Implements wastewater requirements and other mitigation measures and meets wastewater discharge requirements

2.7 Facilities and Operations Division

- Approves any proposed or modified connections to the sanitary sewer system
- Ensures sewer pipes have capacity for new loading to the sanitary sewer system and new discharges will not exceed SLAC's sewer entitlement
- Schedules and documents quarterly cleaning of the SLAC Café grease interceptor and coordinates with WBSD for grease interceptor inspections
- Coordinates with the wastewater program manager and Radiation Protection to ensure wastewater discharges, including modified or new connections, comply with the wastewater permit
- Coordinates with the wastewater program manager to schedule discharges of boiler water, chiller water, and cooling tower blowdown in quantities greater than listed in Attachment B of the wastewater permit
- Inspects, cleans, services, calibrates, and maintains all flow meters required under the wastewater permit at least two times a year, or more frequently if specified in the permit
- Maintains the SLAC sanitary sewer system, including building plumbing, lift stations, sumps, valves, flow meters, and pipes. Maintenance activities may include replacements, repairs, cleaning and flushing, removing blockages, and implementing preventive maintenance programs.
- Tracks system repair needs and ensures repairs are completed in a timely manner
- Minimizes rainwater infiltration into the sanitary sewer
- Maintains systems on required delayed discharge by the wastewater permit, including maintaining system controllers, conductivity meters, and flow meters
- Responds promptly to and reports off-normal conditions, including failure of delayed discharge to Environmental Protection
- Is responsible for development and implementation of the Sanitary Sewer Management Plan (SSMP) for prevention of sanitary sewer spills, including carrying out system audits as required by the state-wide sanitary sewer system general order (Order 2022-0103-DWQ)
- Provides accurate system flow data to Environmental Protection
- Responds to and cleans up sanitary sewer spills
- Collects and delivers samples to Radiation Protection of wastewater that may have radiological constituents
- Pays fees for wastewater discharges and entitlement, with the exception of non-routine discharge fees paid by applicable discharger

2.8 Mechanical Fabrication Department

- Ensures that discharges of treated wastewater from the Building 38, Metal Finishing Pretreatment Facility (MFPF) complies with wastewater permit limits
- Operates the MFPF in accordance with tiered permitting requirements (see Hazardous Waste: Treatment Requirements)
- Only sends approved wastewater streams listed in the Waste Analysis Plan to the MFPF

- Reviews new wastewater streams with Environmental Protection and Chemical and Waste Management for approval to send to the MFPF
- Complies with monitoring and recordkeeping requirements for operations under its control, including but not limited to documenting procedures, process upsets and changes, and sampling results
- Reports any process upsets and changes to the wastewater program manager

2.9 Radiation Protection Department

- Works with the wastewater program manager, Facilities, and other departments to develop, implement, and review wastewater requirements for radiological protection
- Performs radioanalysis of wastewater with known or suspected radiological constituents before discharge to the sanitary sewer
- Summarizes radioanalysis results in the quarterly report to SVCW and WBSD
- Reviews and approves any new or modified systems or discharges for known or suspected radiological constituents
- Reports any changes or non-complaint discharges to the wastewater program manager

2.10 Chemical and Waste Management Department

- Coordinates off-site disposal of wastewater that cannot be discharged to the sanitary sewer system
- Reviews new wastewater streams with Environmental Protection and Mechanical Fabrication for approval to send to the MFPF

2.11 Environmental Protection Department

- Operates and maintains SLAC's groundwater remediation systems in a manner compliant with the wastewater permit

2.12 Wastewater Program Manager

- Acts as the primary point of contact for wastewater permit compliance with SVCW and WBSD
- Collaborates with Facilities on development of the Sanitary Sewer Management Plan (SSMP) and associated audit requirements
- Develops and maintains the Solvent Management Plan to prevent discharges of total toxic organic compounds to the sanitary sewer
- Addresses any compliance issues concerning the wastewater permit, including ensuring that discharges that violate permit requirements are reported within 24 hours to SVCW and WBSD
- Prepares, submits, and tracks non-routine discharge permit applications
- Prepares the semi-annual self-monitoring reporting of wastewater discharge for submittal to SVCW and WBSD
- Reviews proposed new equipment and process modifications from process owners for compliance with wastewater permit conditions

- Coordinates with Radiation Protection on matters concerning wastewater that potentially contains radioactivity, including compliance with permit conditions, system design and implementation, and reporting
- Coordinates with Facilities to address sanitary sewer system deficiencies
- Coordinates with Chemical and Waste Management and process owners on characterization of wastewater streams

3 Procedures, Processes, and Requirements

These documents describe the detailed requirements for this program and how to implement them:

- Wastewater: General Requirements (SLAC-I-750-0A16S-015). Describes requirements for routine, non-routine, prohibited, and delayed discharges; spill response; inspecting and maintaining the sanitary sewer system; changes to waste streams; and sampling
- Wastewater Non-routine Discharge Determination Flow Chart. Depicts process for determining whether a non-routine discharge into the sanitary sewer is allowable
- Wastewater: Construction Requirements (SLAC-I-750-0A16S-019). Describes requirements for planning, permitting, conducting, and completing construction, soil excavation, and grading activities that may affect wastewater discharges at SLAC
- Wastewater: Wet or Chemical Labs Requirements (SLAC-I-750-0A16S-016). Describes requirements for floor drains, chemical storage and disposal, secondary containment, and spill control inside wet or chemical laboratories
- Wastewater: Treatment of Pipe Flushing Water Requirements (SLAC-I-750-0A16S-017). Describes requirements for treatment of water used for pipe flushing
- Wastewater: Floor Drain Requirements (SLAC-I-750-0A16S-018). Describes requirements for the design, construction, and use of floor drains inside buildings

These are the forms and tools for this program:

- Wastewater Generating Activity Characterization Form. Form for documenting the characterization of proposed new or changing wastewater generating activities at SLAC that will occur following project completion
- Wastewater Discharge Request Form. Form for requesting approval to discharge wastewater into SLAC's sanitary sewer

These are other program documents and resources:

- SLAC Permitted Wastewater Generating Activities Mandatory Wastewater Discharge Permit No. WB 211216 - Attachment B
- Sanitary Sewer Management Plan (SSMP) (SLAC-I-750-0A16M-004). Describes procedures to reduce or eliminate *sanitary sewer overflows (SSO)*, as well as mitigate any SSOs that occur
- Slug Discharge Control Plan (SLAC-I-750-0A16M-006). Describes notification and response procedures for any spills or discharges to the sanitary sewer that do not conform to the wastewater permit

- Solvent Management Plan (SMP) (SLAC-I-750-0A03M-004). Identifies *total toxic organics (TTOs)* used at SLAC and describes their proper use, storage, and management
- Permit by Rule Waste Analysis Plan (SLAC-I-750-1A16M-004). Describes parameters, test and sampling methods, and frequency of analyses of wastewater
- Sanitary Sewer Spill Emergency Response Plan (SERP) (SLAC-I-750-0A16M-009). Describes procedures for ensuring prompt detection and response to sanitary sewer spill

4 Training

Sanitary sewer system operations and maintenance staff and subcontractors and sanitary sewer spill responders are required to take the following course:

- ESH Course 189, Sanitary Sewer General Order and Spill Emergency Response (ESH Course 189) (every 12 months)

5 Definitions

sanitary sewer. Pipes that carry SLAC's wastewater, including from toilets, sinks, and other process systems, to a wastewater treatment plant

sanitary sewer management plan (SSMP). A site-specific plan required by regulation, in place to reduce or eliminate *sanitary sewer overflows (SSO)* as well as mitigate any SSOs that occur

sanitary sewer overflow (SSO). An aboveground release of untreated or partially treated sewage into the environment

slug discharge. Any wastewater discharge to the sanitary sewer that does not comply with the conditions of SLAC's wastewater permit.

slug discharge control plan. A site-specific plan that describes all discharge practices, stored chemicals, procedures for immediately notifying of slug discharge, responding to slug discharges and prevention of slug discharges

solvent management plan (SMP). A site-specific plan that identifies toxic organic compounds used at a facility and describes their proper use, storage, and management

Silicon Valley Clean Water (SVCW). A joint powers authority, comprising the *West Bay Sanitary District (WBSD)* and the cities of Belmont, San Carlos, and Redwood City, that operates the wastewater treatment facility that serves southern San Mateo County, including SLAC

total dissolved solids (TDS). Measure of the combined content of all dissolved inorganic and organic substances present in a liquid in suspended form

total toxic organics (TTO). Summation of all quantifiable values of 40 CFR 433-designated toxic organics in the wastewater discharge

volatile organic compounds (VOCs). Organic compounds that have high enough vapor pressures under normal conditions to vaporize significantly and enter the atmosphere

wastewater. The liquid wastes generated from any process at SLAC. Common types of wastewater at SLAC include

- *domestic water (DCW).* Potable water provided by City of Menlo Park to SLAC
- *low conductivity water (LCW).* Domestic water that has been de-ionized to reduce conductivity. LCW circulates throughout SLAC in closed loop systems to cool experimental equipment. Some LCW may contain low levels of radioactivity; these systems are tracked by Radiation Protection on the LCW status sheet.
- *chiller water (CHW).* Domestic water that has been treated with small concentrations of anti-corrosive chemicals. CHW is circulated throughout buildings across SLAC for general cooling needs.
- *process cooling water (PCW).* Chiller water that has been warmed to a slightly higher temperature via heat-exchange systems to prevent condensation
- *cooling tower water (CTW).* Domestic water that is treated with chemicals and circulated through the cooling water system at SLAC. This typically has elevated concentrations of suspended and dissolved solids, and low concentrations of chemicals added to inhibit corrosion, scaling, and fouling of cooling-system piping.
- *groundwater.* Water that infiltrates into underground buildings, vaults, and other structures that extend below the elevation of the groundwater table. Groundwater that infiltrates these structures is extracted through underdrain, sub-drains, and sumps. Groundwater at SLAC contains naturally occurring minerals including elevated concentrations of sulfates, total dissolved solids, and calcium hardness.
- *heating hot water (HHW).* Domestic water that has been treated with small concentrations of anti-corrosive chemicals. HHW is circulated throughout SLAC and primarily used to heat office spaces.
- *ultra-pure water (UPW).* Domestic water that has been processed through a reverse osmosis system to purify the water to high levels of specification. This water is used in several labs at SLAC.

wastewater constituents. The individual chemical, physical, bacteriological, and radiological parameters, including volume and flow rate and such other parameters that serve to define, classify, or measure the contents, quality, quantity, or strength of wastewater.

wastewater discharge:

- *routine discharge.* Building sewage and non-hazardous process wastewater that is routinely discharged to the sanitary sewer during normal operations. Routine wastewater generating activities are described in Attachment B of the SLAC wastewater permit. Examples include cooling tower blowdown, *low conductivity water (LCW)* from cooling systems, groundwater treatment facility discharges, and cafeteria wastewater at levels at or below the daily averages listed in Attachment B of the permit.
- *non-routine discharge.* Any discharge to the sanitary sewer from a wastewater generating activity not included in Attachment B of the SLAC wastewater permit, or a listed wastewater generating activity in a quantity greater than the Attachment B listed daily average. Discharge to the sanitary sewer of any non-routine discharge requires a non-routine discharge permit issued by SVCW and WBSD.
- *prohibited discharge.* A discharge to the sanitary sewer explicitly prohibited under the terms of the wastewater permit, including spills

- West Bay Sanitary District (WBSD). Sanitary district that owns and maintains the sewer mains and pump stations that serve SLAC. A member of the Silicon Valley Clean Water (SVCW) joint powers authority.

West Bay Sanitary District Sharon Heights Recycled Water Project. A satellite wastewater treatment facility designed to distribute recycled water to Sharon Heights Golf and Country Club irrigation

6 References

6.1 External Requirements

- Title 33, *United States Code*, "Navigation and Navigable Waters", Chapter 26, "Water Pollution Prevention and Control", Subchapter 1, "Research and Related Programs"
  - Section 1251, "Congressional Declaration of Goals and Policy" (33 USC 1251)
- Title 33, *United States Code*, "Navigation and Navigable Waters", Chapter 26, "Water Pollution Prevention and Control", Subchapter 3, "Standards and Enforcement"
  - Section 1311, "Effluent Limitations" (33 USC 1311)
  - Section 1314, "Information and Guidelines", Subsection g, "Guidelines for Pretreatment of Pollutants" (33 USC 1314[g])
  - Section 1317, "Toxic and Pretreatment Effluent Standards" (33 USC 1317)
  - Section 1318, "Records and Reports; Inspections" (33 USC 1318)
  - Section 1319, "Enforcement" (33 USC 1319)
- Title 42, *United States Code*, "The Public Health and Welfare", Chapter 82, "Solid Waste Disposal" (42 USC 6901–6992)
- Title 10, *Code of Federal Regulations*, "Energy", Chapter 1, "Nuclear Regulatory Commission", Part 20, "Standards for Protection Against Radiation", Subpart K, "Waste Disposal", Section 20.2003, "Disposal by Release into Sanitary Sewerage" (10 CFR 20.2003)
- Title 40, *Code of Federal Regulations*, "Protection of the Environment", Chapter 1, "Environmental Protection Agency", Subchapter N, "Effluent Guidelines and Standards"
  - Part 403, "General Pretreatment Regulations for Existing and New Sources of Pollution" (40 CFR 403)
  - Part 433, "Metal Finishing Point Source Category" (40 CFR 433)
- Title 17, *California Code of Regulations,* "Public Health", Division 1, "State Department of Health Services", Chapter 5, "Sanitation (Environmental)", Subchapter 4, "Radiation", Group 3, "Standards for Protection against Radiation", Article 3, "Surveys and Tests" (17 CCR 30265–30289)
- Title 22, *California Code of Regulations,* "Social Security", Division 4.5, "Environmental Health Standards for the Management of Hazardous Waste", Chapter 45, "Requirements for Units and Facilities Deemed to Have a Permit by Rule", Article 1, "Permit by Rule", Sections 67450.1 through 67450.3 (22 CCR 67450.1–67450.3)
- *California Health and Safety Code*, Division 20, "Miscellaneous Health and Safety Provisions", Chapter 6.5, "Hazardous Waste Control", Article 9, "Permitting of Facilities" (HSC 25200.12–25205)

- *California Water Code,* Division 7, "Water Quality" (WAT 13100–16104)
- California Environmental Protection Agency, State Water Resources Control Board. Statewide Waste Discharge Requirements (WDR), General Order for Sanitary Sewer Systems, Order 2022-0103-DWQ (Order 2022-0103-DWQ) (as amended)
- Silicon Valley Clean Water and West Bay Sanitary District. Mandatory Wastewater Discharge Permit No. WB 211216 (WB 211216)
- Silicon Valley Clean Water. Regulations of Silicon Valley Clean Water
- West Bay Sanitary District. Code of General Regulations of the West Bay Sanitary District

6.2 Related Documents

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 16, "Spills"
  - Sanitary Sewer Spill Emergency Response Plan (SERP) (SLAC-I-750-0A16M-009)
- Chapter 17, "Hazardous Waste"
  - Hazardous Waste: Treatment Requirements (SLAC-I-750-0A08S-006)
- Chapter 26, "Stormwater"
- Chapter 58, "Laboratory Safety"
  - Laboratory Safety: Non-hazardous Waste Sink Disposal Procedure (SLAC-I-730-0A09C-009)

Other SLAC Documents

- Environment Resources
- Chemical and Waste Management (SharePoint)
- Radiation Protection
- Facilities and Operations
- Low Conductivity Water Status Sheet
- SLAC Utilities GIS

NATIONAL ACCELERATOR LABORATORY

ENVIRONMENT, SAFETY & HEALTH DIVISION

Chapter 43: Wastewater

General Requirements

Product ID: 762 | Revision ID: 2581 | Date published: 17 July 2026 | Date effective: 17 July 2026
URL: https://www-esh.slac.stanford.edu/eshmanual/references/wastewaterReqGeneral.pdf

1 Purpose

The purpose of these requirements is to ensure that any material (*wastewater*) that enters the sanitary sewer system (*discharges*) at SLAC complies with applicable rules and regulations.

They cover routine, non-routine, prohibited, and delayed discharges; screening discharges for radiological concerns; spill response; inspecting and maintaining the sanitary sewer system; changes to waste streams; sewer entitlement, and sampling.

They apply to workers, supervisors/line management, process owners, construction managers, area/building managers, subcontractors, the wastewater program manager, Environmental Protection, Radiation Protection, Chemical and Waste Management, Mechanical Fabrication, and Facilities and Operations.

2 Requirements

SLAC's on-site sanitary sewer system consists of approximately nine miles of sewer lines and several sanitary sewer lift stations owned by the Department of Energy (DOE) and maintained by SLAC. The SLAC sanitary sewer system is connected to West Bay Sanitary District (WBSD) system lines, which transport the wastewater to the WBSD recycled water plant at the Sharon Heights Country Club as well as to the Silicon Valley Clean Water (SVCW) Treatment Plant.

Note The WBSD recycled water plant is sensitive to certain wastewater constituents, which can disrupt plant operations. These include water treated with chemicals such as biocides and anti-corrosives, and water high in *total dissolved solids (TDS).* Accordingly, some wastewater discharges need to be coordinated with WBSD. During the hours of 12 AM to 2 AM, SLAC wastewater is on a bypass to the SVCW wastewater treatment plant; SLAC's wastewater permit includes requirements for certain waste streams to be discharged only during these hours.

SLAC's wastewater discharges are regulated under California's state-wide sanitary sewer system general order (Order 2022-0103-DWQ) and the wastewater permit (WB 211216) issued to SLAC by SVCW and WBSD. Wastewater discharges from on-site hazardous waste treatment facilities are also regulated by California's Tiered Permit Program.

Compliance includes development and implementation of SLAC's Sanitary Sewer Management Plan (SSMP), wastewater guidelines, and a monitoring program. In addition to complying with these requirements, certain activities at SLAC may require project- and activity-specific discharge permits.

Below are the requirements that apply generally to wastewater discharges. Detailed information concerning how the sanitary sewer system is operated and maintained can be found in the SSMP and related documents. (See Section 5.)

Wastewater requirements for specific activities are given in separate documents. (See Section 5.)

2.1 Routine Discharges

Routine wastewater discharges are those characterized in the current wastewater permit and itemized in Permitted Wastewater Generating Activities Reference. SVCW and WBSD characterize acceptable routine discharges to the sanitary sewer in terms of type and flow.

Each category of routine wastewater discharge has an associated discharge limit in gallons per day, realized over an annual averaging period. If wastewater will be generated above the specified permit limit or from a source/category not listed in the permit, the process owner must coordinate with the wastewater program manager to obtain approval before discharge.

Process owners must report any process change that significantly affects the constituents, strength, volume, temperature, or discharge period of a routine wastewater stream to the wastewater program manager. The wastewater program manager will characterize all new routine discharges and arrange to add them to the permit as needed.

2.2 Non-routine Discharges

Non-routine wastewater discharges are those that are not covered under the existing wastewater permit, including discharges of routine waste streams in excess of the daily discharge limit.

Important Discharges of wastes listed in the permit in quantities greater than the daily limits (such as boiler draining) require at least 48 hours advance notice to SVCW and WBSD and must be discharged within a pre-approved time coordinated with the agencies.

Depending on discharge characteristics, certain non-routine discharges require a *non-routine discharge permit* from SVCW and WBSD. The permit will include constraints on quantity and timing of discharge. Obtaining a permit requires sampling the waste stream and paying a fee, which will be charged to the process owner. Approval must be obtained before discharge. The process owner must work with the wastewater program manager to characterize the non-routine wastewater, apply for the permit, and coordinate the discharge with SVCW and WBSD. (See Figure 1 for the determination process.) Process owners may initiate the process by submitting the Wastewater Discharge Request Form.

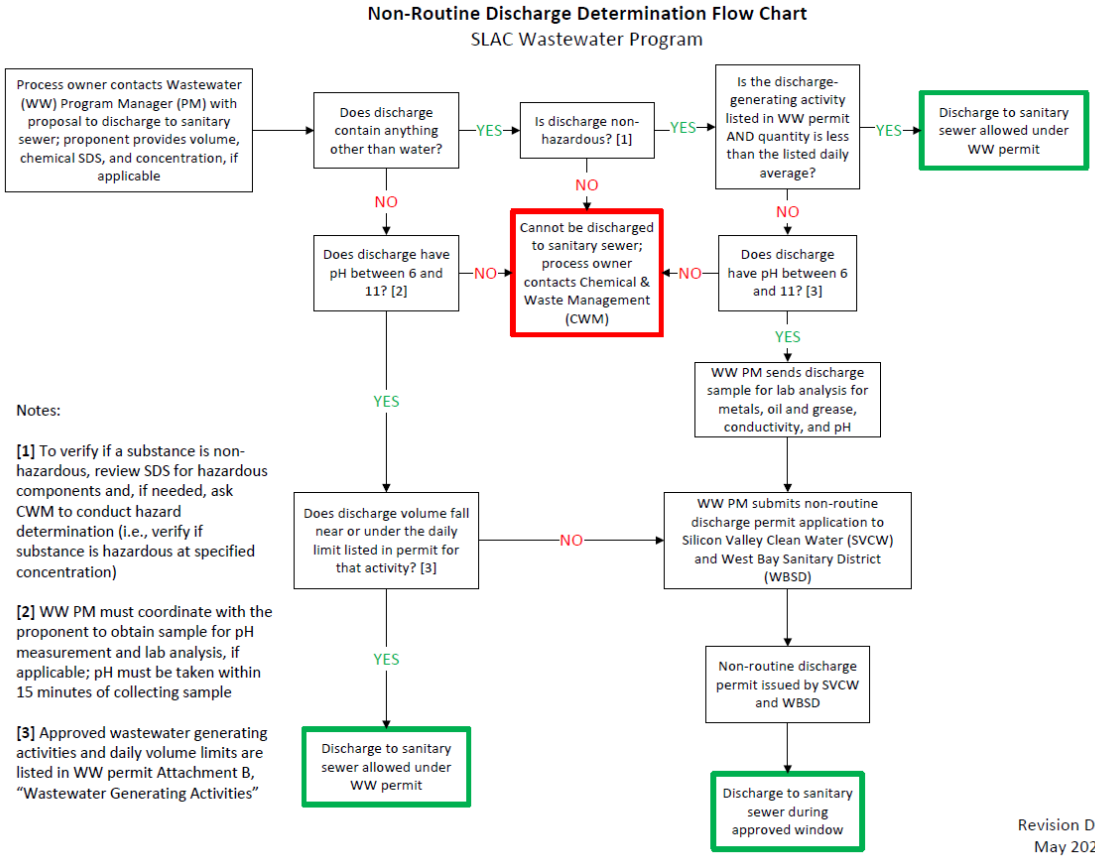

Figure 1 Non-routine Discharge Determination Flow Chart

2.3 Prohibited Discharges

Prohibited wastewater discharges are those explicitly prohibited under the terms of the permit. These discharges cannot be sent to the sanitary sewer and instead should be coordinated with Chemical and Waste Management for proper disposal. Prohibited discharges are those that may cause any of the following:

- Danger to human life or safety
- Fire or explosion
- Discharge of hazardous waste to the sanitary sewer
- Odors, air pollution, or any noxious, toxic, or malodorous gas or substance, or gas-producing substances
- Flow obstruction or injury to the sewerage facilities
- Interference or overloading of the wastewater treatment or reclamation process, or sewerage facilities, or excessive costs, or use of a disproportionate share of the capacity of the sewerage facilities

- A detrimental environmental impact or nuisance (for example, any discharge with detectable concentrations of polychlorinated biphenyls)
- Dilution of a discharge of waste or wastewater as a substitute for adequate treatment
- Inhibition of maintenance or operation of the sewerage facilities
- Any adverse action that impacts the ability of the sewage treatment plant to protect the San Francisco Bay

Additionally, discharges above the following concentrations are prohibited:

- United States Environmental Protection Agency listed total toxic organic (TTO) compounds >2.13 mg/L
- pH <6.0 or >11.0
- Metals, VOCs, or conductivity in concentrations that will cause SLAC to exceed permit mass loading limits

2.4 Delayed Discharges

SLAC's wastewater permit includes requirements for time-delayed discharges of certain waste streams that are significant contributors of TDS. Discharges from the IR-2 and IR-8 PEP Tunnel sumps may only be discharged to the sanitary sewer during a nightly window from 12 AM to 2 AM.

Important Discharge from either of these sources outside of the approved discharge window without providing advance notice to WBSD is a permit violation.

Facilities is responsible for ensuring that discharges from these sources occur only during the approved discharge windows. The wastewater program manager must be promptly notified of any failure to maintain delayed discharge.

2.5 Radiological Concerns

Water collected from certain locations and sources at SLAC may contain radiation. Radiation Protection (RP) has created a list of locations and requirements for discharge, including in some cases collection of samples and RP approval before discharge. The requirements must be adhered to before discharging wastewater to the sanitary sewer.

2.6 Cafeteria Discharges

Wastewater from SLAC's cafeteria has the potential for the presence of food, oil, and grease, which can clog sewer pipes and interfere with the proper operation of the recycled water plant. To reduce the presence of these constituents, the following practices are required:

- Garbage grinders must have the capacity to shred waste so that waste particles are carried freely into and through the sewerage facilities under normal flow conditions.
- Food-preparation sinks and dishwashers must be plumbed to grease traps that are inspected and pumped on a regular basis.
- The cafeteria grease interceptor must be cleaned and serviced on a quarterly basis. F&O is responsible for arranging these cleanings.

2.7 Spill Response

All spills or discharges to the sanitary sewer system that are non-routine must be reported to the wastewater program manager, who will ensure the spill or discharge is reported to SVCW and WBSD as required. (For more information, see the Slug Discharge Control Plan.)

These non-routine discharges to sanitary sewer include:

- A non-routine discharge due to a pipe break or similar event
- Any release with a pH less than six or greater than 12.5
- Any spill that may contain radioactivity (also report this to RP)
- Any treatment process upset that may allow a discharge outside of the permit conditions (such as high or low pH, discharge prior to treatment, equipment failure or operator error)
- Any release of fuel or oil
- Any release of chemicals or hazardous waste

In addition, any spills of wastewater from the sanitary sewer system into buildings or into the environment must be reported to the wastewater program manager, who will determine whether the sanitary sewer spill is reportable to the state (See Sanitary Sewer Spill Emergency Response Plan (SERP) for more details).

For more information on handling spills in general, see Chapter 16, "Spills".

2.8 Sanitary Sewer Inspections and Maintenance

Constructing and maintaining an adequate sanitary sewer system is critical for wastewater protection. Facilities is responsible for the operation and maintenance of the sanitary sewer system. This includes all gravity and forced main piping, sewer lift stations, and forced main valves.

To ensure continuous operation, a preventative maintenance program is used. Maintenance tasks are scheduled and tracked via a computerized management system and carried out by Facilities or subcontractors. Preventative maintenance activities include

- Regular maintenance tasks on sewer lift stations, wastewater pumps, force mains, and back-up generators
- Regular cleaning of flow flumes
- Quarterly cleaning of selected gravity sewer lines and root control activities by an outside subcontractor

Regular inspections are conducted by Facilities to ensure proper system operation. These include

- Visual inspections of sanitary sewer lift stations
- Automated monitoring of lift station status by the Distributed Control System (DCS)

For more information, see the SSMP.

2.9 Changes to Sanitary Sewer Waste Streams

Any changes to *routine wastewater discharges,* including the addition of new wastewater streams or changes in the quantity or composition of existing wastewater streams, must be coordinated in advance with the wastewater program manager. These changes may require an amendment to SLAC's wastewater permit.

2.10 Sewer Entitlement

SLAC is subject to a sewer capacity entitlement (i.e., cap on average gallons of discharge per day) that the site must continue to remain below while accommodating new construction across SLAC's campus.

Facilities is responsible for evaluating proposed construction projects to ensure SLAC's sewer has sufficient capacity.

2.11 Sampling

Samples are collected as described in the wastewater permit. The results are used to verify that the sanitary sewer system is working properly and discharges meet all applicable conditions.

3 Forms

The following forms and systems are required by these requirements:

- Wastewater Generating Activity Characterization Form. Form for documenting the characterization of proposed new or changing wastewater generating activities at SLAC that will occur following project completion
- Wastewater Discharge Request Form. Form for requesting approval to discharge wastewater into SLAC's sanitary sewer

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- Records relating the permits are to be kept by the wastewater program manager.
- Records of system maintenance and inspection are to be kept by Facilities.

Details on sampling, regulatory reporting, and so on may be found in the SSMP.

5 References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 43, "Wastewater"
  - Wastewater Non-routine Discharge Determination Flow Chart
  - Wastewater: Construction Requirements (SLAC-I-750-0A16S-019)
  - Wastewater: Wet or Chemical Labs Requirements (SLAC-I-750-0A16S-016)
  - Wastewater: Treatment of Pipe Flushing Water Requirements (SLAC-I-750-0A16S-017)
  - Wastewater: Floor Drain Requirements (SLAC-I-750-0A16S-018)
  - SLAC Permitted Wastewater Generating Activities Mandatory Wastewater Discharge Permit No. WB 211216 - Attachment B
  - Sanitary Sewer Management Plan (SSMP) (SLAC-I-750-0A16M-004)
  - Slug Discharge Control Plan (SLAC-I-750-0A16M-006)
  - Solvent Management Plan (SMP) (SLAC-I-750-0A03M-004)
  - Permit by Rule Waste Analysis Plan (SLAC-I-750-1A16M-004)
- Chapter 16, "Spills"
  - Sanitary Sewer Spill Emergency Response Plan (SERP) (SLAC-I-750-0A16M-009)
- Chapter 26, "Stormwater"
- Chapter 58, "Laboratory Safety"
  - Laboratory Safety: Non-hazardous Waste Sink Disposal Procedure (SLAC-I-730-0A09C-009)

Other SLAC Documents

- Environment Resources
- Chemical and Waste Management (SharePoint)
- Radiation Protection
- Low Conductivity Water Status Sheet
- SLAC Utilities GIS

Other Documents

- California Environmental Protection Agency, State Water Resources Control Board. Statewide Waste Discharge Requirements (WDR), General Order for Sanitary Sewer Systems, Order 2022-0103-DWQ (Order 2022-0103-DWQ) (as amended)
- Silicon Valley Clean Water and West Bay Sanitary District. Mandatory Wastewater Discharge Permit No. WB 211216 (WB 211216)
- Silicon Valley Clean Water. Regulations of Silicon Valley Clean Water
- West Bay Sanitary District. Code of General Regulations of the West Bay Sanitary District

NATIONAL ACCELERATOR LABORATORY

ENVIRONMENT, SAFETY & HEALTH DIVISION

Chapter 43: Wastewater

Construction Requirements

Product ID: 802 | Revision ID: 2915 | Date published: 17 July 2026 | Date effective: 17 July 2026
URL: https://www-esh.slac.stanford.edu/eshmanual/references/wastewaterReqConstruction.pdf

1 Purpose

The purpose of these requirements is to ensure that any material (*wastewater*) that enters the sanitary sewer system (*discharges*) at SLAC complies with applicable rules and regulations.

They cover planning, permitting, conducting, and completing construction, soil excavation, and grading activities that may affect wastewater discharges at SLAC.

They apply to workers, supervisors, project and construction managers, subcontractors, the wastewater program manager, and Facilities and Operations.

Construction activities include clearing, grading, and disturbances to the ground, such as stockpiling and excavating. Potential impacts from construction include spills, sediment, debris, and chemicals or other materials entering the storm drainage system.

2 Requirements

All projects must adhere to SLAC's wastewater permit, associated wastewater requirements, and pertinent federal, state, and local laws and regulations.

The project manager and/or construction manager (CM) are responsible for ensuring wastewater requirements are met by subcontractors. (See Chapter 42, "Subcontractor Safety".)

The CM is responsible for regularly inspecting construction sites to ensure all requirements are being met.

2.1 Project Design

Construction projects must consider the following during the project design and planning phase.

2.1.1 Characterization of Wastewater Generating Activities

During the design process, the project manager must develop an estimation of the primary wastewater generating activities, chemical concentrations, and their anticipated daily volumes during final operation. Some wastewater generating activities may require a modification to SLAC's wastewater permit.

Submit this information to the wastewater program manager using the Wastewater Generating Activity Characterization Form.

2.1.2 Delayed Discharge Requirements

Wastewater that contains elevated dissolved solids (for example, cooling tower water and groundwater) may be required to be placed on time-delayed discharge, with appropriate holding tanks and automated discharge controllers. Other wastewater streams that the sewer agency deems potentially impactful to their recycled water plant may also be required to be placed on time-delayed discharge.

2.1.3 Sewer Capacity and Entitlement

SLAC is subject to a sewer capacity entitlement (i.e., cap on average gallons of discharge per day) that the site must continue to remain below while accommodating new construction across SLAC's campus. Projects that are anticipated to generate substantial volumes of wastewater may be required to purchase additional entitlement capacity from the sewer agency before commissioning.

Facilities Engineering Group is responsible for evaluating proposed construction projects to ensure SLAC's existing sewer pipes have sufficient capacity for the anticipated additional wastewater streams, and to ensure that new pipes are designed to accommodate the appropriate volume of wastewater.

Projects should contact the wastewater program manager and Facilities Engineering Group early in the project design process to determine if additional entitlement capacity must be purchased.

2.2 Project Construction

Examples of construction activities that generate wastewater include the following:

- Draining of pipes (domestic water, fire water, low conductivity water [LCW], process chilled water [PCW]) before replacing or connecting into existing lines
- Commissioning activities of water system loops or lines treated with alkaline phosphate cleaner
- Flushing of new fire sprinkler lines and fire suppression lines following fire life safety inspection
- Flow testing of new fire lines
- Pressure testing of new aboveground and underground piping systems
- Cutting of transite pipes and asbestos removal activities
- Pressure washing of equipment and/or buildings
- Concrete mixing

Wastewater from construction activities, including domestic water treated with chemicals, may not be discharged to SLAC's sanitary sewer without prior approval from the wastewater program manager. Submit the Wastewater Discharge Request Form to initiate the approval process.

Important Discharge of hazardous waste to SLAC's sanitary sewer system is strictly prohibited.

Important Discharge of wastewater to SLAC's storm drainage system is strictly prohibited (see Chapter 26, "Stormwater").

2.2.1 Non-routine Discharge Permits

Generated wastewater from construction, cleaning/washing, jetting, and commissioning activities may need to be discharged under a non-routine discharge permit, which the wastewater program manager will procure on behalf of the project.

This wastewater will need to be contained and sampled before receiving discharge approval.

Note Allow one week to process non-routine discharge permits.

If the wastewater is not approved for discharge to the sanitary sewer, disposal must be coordinated with Chemical and Waste Management.

2.2.2 Reuse for Dust Control

Clean water from testing and flushing activities may be reused for dust control or as irrigation water, under the following conditions, and with approval from Environmental Protection:

- It is not a prohibited discharge.
- The water is not from copper piping.
- If the water has been chlorinated, it has been dechlorinated before discharge.
- No other chemicals have been added.
- The water will not be permitted to enter the storm drain system.

2.2.3 Asbestos Wastewater

Any water that comes into contact with asbestos fibers, or wastewater generated during transite pipe cutting work, needs to be collected and filtered in accordance with the following requirements as a prerequisite for obtaining approval of discharge of the water to the sanitary sewer system:

- Filter water using four in-line filter cartridges with 2-inch inlets and outlets.
- Connect the outlet of each filter cartridge in series to the inlet of the next cartridge.
- The first cartridge must contain 100 µm prefilters, the second and third cartridge 25 µm filters, and the final cartridge 0.5 µm absolute filters.
- Contact the wastewater program manager for sampling and discharge to the sanitary sewer under a non-routine discharge permit.

3 Forms

The following forms and systems are required by these requirements:

- Wastewater Generating Activity Characterization Form. Form for documenting the characterization of proposed new or changing wastewater generating activities at SLAC that will occur following project completion
- Wastewater Discharge Request Form. Form for requesting approval to discharge wastewater into SLAC's sanitary sewer

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- The wastewater program manager maintains completed characterization and discharge request forms.
- The wastewater program manager retains copies of wastewater analytical records, correspondence with sewer agency, copies of non-routine permits, and dates and volumes of discharges from construction sites.
- Subcontractors must track the date/time and volume of any discharges made under non-routine discharge permits and report that to the wastewater program manager.

5 References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 43, "Wastewater"
  - Wastewater: General Requirements (SLAC-I-750-0A16S-015)
- Chapter 26, "Stormwater"
- Chapter 42, "Subcontractor Safety"

Other SLAC Documents

- Environment Resources
- Chemical and Waste Management (SharePoint)

Other Documents

- Silicon Valley Clean Water and West Bay Sanitary District. Mandatory Wastewater Discharge Permit No. WB 211216 (WB 211216)

NATIONAL ACCELERATOR LABORATORY

ENVIRONMENT, SAFETY & HEALTH DIVISION

Chapter 43: Wastewater

Wet or Chemical Lab Requirements

Product ID: 799 | Revision ID: 2582 | Date published: 17 July 2026 | Date effective: 17 July 2026
URL: https://www-esh.slac.stanford.edu/eshmanual/references/wastewaterReqLab.pdf

1 Purpose

The purpose of these requirements is to protect water quality and maintain compliance with SLAC's wastewater permit by minimizing the potential for accidental release of hazardous chemicals to the sanitary sewer.

These requirements cover floor drains, chemical storage and disposal, secondary containment, and spill control inside wet or chemical laboratories.

They apply to workers (as *laboratory workers*), principal investigators, and laboratory managers.

2 Requirements

2.1 Floor Drain Protection

For detailed information on floor drains, see Wastewater: Floor Drain Requirements.

2.2 Chemical Storage

1. Store chemicals on low shelves or under countertops, on textured rubber mats whenever possible.
2. Store chemicals behind protective barriers at least 1/5 the height of the tallest container.
3. Never store chemicals above a sink.
4. Keep flammable chemicals in an approved fire-proof cabinet.
5. Do not leave chemical cabinet doors unlatched.
6. Never store incompatible chemicals together. Avoid accidental mixing.

For additional, detailed information on how to store hazardous materials properly, see Chapter 40, "Chemical Lifecycle Management".

2.3 Chemical Disposal

1. Collect and segregate hazardous waste for proper disposal.
2. Use signage and training to inform personnel that hazardous material or hazardous waste must never be discharged directly to the sewer. Signs above sinks have been effective.
3. Contact the wastewater program manager about discharging of non-hazardous laboratory solutions to lab sinks. Solutions that are within permitted discharge specifications may be disposed of in the sanitary sewer through laboratory sinks. Any solutions that do not meet discharge specifications must be shipped off site for proper disposal through Chemical and Waste Management. The permit discharge specifications require that a solution discharged to the sanitary sewer be non-hazardous, non-toxic to rats, rabbits, and Rainbow trout, and that it has a pH in the range of 6.0–11. (See Laboratory Safety: Non-hazardous Waste Sink Disposal Procedure.)
4. If you are not certain if a material is permitted to be poured down a drain, ask your ESH coordinator or contact the wastewater program manager.
5. Dispose of mop water appropriately. If you expect a hazardous component based on operational knowledge, contact Environmental Protection for characterization and approval to discharge to the sanitary sewer. If the mop water contains hazardous components, contact Chemical and Waste Management for proper disposal.

For detailed information on how to properly dispose of hazardous materials, see Chapter 17, "Hazardous Waste".

2.4 Secondary Containment

1. Provide secondary containment for all hazardous chemicals and hazardous waste, including countertop flasks and squirt bottles.
2. Keep secondary containment clean and dry.
3. Never use a sink as secondary containment.

2.5 Spill Control

1. Clean up spills whenever they occur.
2. Keep a well-stocked, accessible spill kit in the area. Make sure you have spill-control supplies for the type of materials you use and store.
3. Ensure that employees are trained in SLAC emergency response procedures in the event of an accidental discharge or spill.

For additional information on how to handle spills, see Chapter 16, "Spills".

3 Forms

The following forms and systems are required by these requirements:

- None

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- None

5 References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 43, "Wastewater"
  - Wastewater: General Requirements (SLAC-I-750-0A16S-015)
  - Wastewater: Floor Drain Requirements (SLAC-I-750-0A16S-018)
- Chapter 16, "Spills"
- Chapter 17, "Hazardous Waste"
- Chapter 40, "Chemical Lifecycle Management"
- Chapter 58, "Laboratory Safety"
  - Laboratory Safety: Non-hazardous Waste Sink Disposal Procedure (SLAC-I-730-0A09C-009)

Other SLAC Documents

- Environment Resources
- Chemical and Waste Management (SharePoint)

Other Documents

- Silicon Valley Clean Water and West Bay Sanitary District. Mandatory Wastewater Discharge Permit No. WB 211216 (WB 211216)

NATIONAL ACCELERATOR LABORATORY

ENVIRONMENT, SAFETY & HEALTH DIVISION

Chapter 43: Wastewater

Treatment of Pipe Flushing Water Requirements

Product ID: 800 | Revision ID: 2585 | Date published: 17 July 2026 | Date effective: 17 July 2026
URL: https://www-esh.slac.stanford.edu/eshmanual/references/iwastewaterReqPipeFlushing.pdf

1 Purpose

The purpose of these requirements is to protect water quality and maintain compliance with SLAC's wastewater permit.

They cover the disposal of water used for pipe flushing or pipe testing activities.

They apply to workers, supervisors, area/building managers, construction projects, and the Metal Finishing Pretreatment Facility.

2 Requirements

1. Water used to flush or test pipes in which chemicals have been added will need to be contained and sampled before discharge under a non-routine discharge permit, contact the wastewater program manager to coordinate sampling.
2. A limited amount of clean (no chemicals added) domestic water used to flush or test pipes may be discharged to the sanitary sewer under SLAC's wastewater permit, contact the wastewater program manager for approval. Additional water above the allowable amount may need to be discharged to the sanitary sewer under a *non-routine discharge* permit.
3. With approval from wastewater program manager clean water from testing and flushing activities may be reused for dust control or as irrigation water, under the following conditions:
   - It is not a prohibited discharge.
   - The water is not from copper piping.
   - If the water has been chlorinated, it is dechlorinated before discharge to the environment.
   - No chemicals have been added.
   - The water does not enter the storm drain system.
4. Any water that contacts asbestos fibers, or wastewater generated during transite pipe cutting work, needs to be collected and filtered in accordance with the following requirements before introduction into the sanitary sewer system:
   - Filter water using four in-line filter cartridges with 2-inch inlets and outlets.
   - Connect the outlet of each filter cartridge in series to the inlet of the next cartridge.
   - Make sure the first cartridge contains 100 micrometer (µm) prefilters, the second and third cartridges 25 µm filters, and the final cartridge 0.5 µm absolute filters.

  - Contact the wastewater program manager for sampling and discharge to the sanitary sewer under a non-routine discharge permit.

5. Water generated from the flushing of metal pipes may contain elevated levels of metals such as copper. When possible, water from pipe flushing of metal pipes should be treated at the Metal Finishing Pretreatment Facility (MFPF) to reduce the metal concentrations before release to the sanitary sewer.

   To perform MFPF treatment:

   1. The department performing the flushing will contact the MFPF supervisor to determine if the MFPF can accept and treat the water. MFPF has the right to refuse any wastewater stream that may interfere with proper operation of their facilities.
   2. The department performing the flush will arrange to containerize the pipe flush water in drums or tanks and transport these containers to the MFPF. Drums or small tanks may be obtained from Chemical and Waste Management.
   3. The MFPF will pretreat the wastewater before discharge to the sanitary sewer.

3 Forms

The following forms and systems are required by these requirements:

- None

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- None

5 References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 43, "Wastewater"
  - Wastewater: General Requirements (SLAC-I-750-0A16S-015)
- Chapter 26, "Stormwater"

Other SLAC Documents

- Environment Resources
- Chemical and Waste Management (SharePoint)

Other Documents

- Silicon Valley Clean Water and West Bay Sanitary District. Mandatory Wastewater Discharge Permit No. WB 211216 (WB 211216)

NATIONAL ACCELERATOR LABORATORY

ENVIRONMENT, SAFETY & HEALTH DIVISION

Chapter 43: Wastewater

Floor Drain Requirements

Product ID: 801 | Revision ID: 2916 | Date published: 17 July 2026 | Date effective: 17 July 2026
URL: https://www-esh.slac.stanford.edu/eshmanual/references/wastewaterReqLab.pdf

1 Purpose

The purpose of these requirements is to protect water quality and maintain compliance with SLAC's wastewater permit by minimizing the potential for accidental release of hazardous chemicals to the sanitary sewer.

These requirements cover design, construction, and use of floor drains inside buildings.

They apply to workers, supervisors, and area/building managers.

2 Requirements

2.1 Safety Shower and Eyewash Stations

1. Where feasible, floor drains should be installed below or near safety showers, with the floor sloped sufficiently to direct water from the shower into the sanitary sewer drain.
2. Any floor drain that may be in service during safety shower use must be installed with a temporary plug that remains closed except when the shower is in use or protected from spills by a covered sump or berm system.
3. If a safety shower is used, promptly inform the wastewater manager of the shower use and involved chemicals to facilitate potential sewer agency reporting. (See the Chemical Safety: Emergency Eyewash/Shower Use Procedure.)

Figure 1 Examples of Acceptable Floor Drain Plugs and Covers

2.2 Chemical or Hazardous Waste Storage Areas

1. Floor drains are prohibited in areas where hazardous materials or hazardous wastes are used or stored.
2. If floor drains are present in these areas, they must be protected from spills via plugs, covers, or other secondary containment such as berms or dikes.

2.3 Machining, Craft Shops, and Other Industrial Areas

1. All floor drains must be kept closed during periods of equipment operation. This can be accomplished through fail-safe valves, plugs, or covers.

2.4 Floor Drain Protection

It is the responsibility of the building manager to ensure floor drains are adequately protected.

1. Cap or plug floor drains that are not serving a useful and lawful purpose.
2. Use drip pans or similar devices to collect vehicle fluids before they reach the floor drain system.
3. Never put fluids like oil, solvents, paints or chemicals into a floor drain.
4. Install screens in drains to prevent solids from entering the floor drain system.
5. Develop and implement a maintenance schedule for inspecting and cleaning the floor drain system.
6. Prepare and train for emergencies. Have a plan in place to clean up a spill quickly before it escapes.

7. Keep floors as clean as possible. Use dry cleaning methods such as sweeping instead of water cleanup, whenever possible.
8. Consider sealing shop floors with epoxy or another suitable sealant.

3 Forms

The following forms and systems are required by these requirements:

- None

4 Recordkeeping

The following recordkeeping requirements apply for these requirements:

- None

5 References

SLAC Environment, Safety, and Health Manual (SLAC-I-720-0A29Z-001)

- Chapter 43, "Wastewater"
  - Wastewater: General Requirements (SLAC-I-750-0A16S-015)
- Chapter 16, "Spills"
- Chapter 17, "Hazardous Waste"
- Chapter 40, "Chemical Lifecycle Management"
- Chapter 53, "Chemical Safety"
  - Chemical Safety: Emergency Eyewash/Shower Use Procedure (SLAC-I-730-0A09C-008)
- Chapter 58, "Laboratory Safety"
  - Laboratory Safety: Non-hazardous Waste Sink Disposal Procedure (SLAC-I-730-0A09C-009)

Other SLAC Documents

- Environment Resources

Other Documents

- Silicon Valley Clean Water and West Bay Sanitary District. Mandatory Wastewater Discharge Permit No. WB 211216 (WB 211216)