Groundwater Discharge Permit Reference Sheet

Alternate Disposal Options: All reasonable alternatives to sewer disposal, such as legally permissible reuse, must be explored. Union Sanitary District (District) has the discretion to allow discharge when no reasonable alternative method of disposal is available (District Ordinance 36.04 Section 2.04).

Attention All Groundwater Permit Applicants: This Permit is a Conditional Discharge Permit subject to termination at any time by the District for cause. Refer to District Ordinance 36.04 Section 2.03 and Section 2.04 for details. Approval of discharge is also contingent on available sewer system capacity as determined by the District.

All discharges must comply with the limitations and prohibitions set forth under Ordinance 36.04 and Groundwater Discharge Limitations shown in Table 1 (attached). The District reserves the right to request additional information as necessary to adequately review the proposal.

Discharge Authorization Process

All dischargers must obtain a District-issued Groundwater Discharge Permit prior to discharge. To apply for a Discharge Permit, applicants must submit the following:

- ☐ Completed Union Sanitary District Groundwater Discharge Permit Application form
- ☐ Full payment of applicable fees
- ☐ Analytical results of representative discharge sample(s)
- ☐ Supporting documentation as requested (i.e. Remediation Plans, Treatability Study, Property Owner Site Discharge Authorization, other documents as applicable)
- ☐ Encroachment Agreement with supporting insurance documents (if applicable)
- ☐ Construction Permit (if applicable)

Complete application packages must be sent to:

Groundwater Discharge Permitting Program
Environmental Compliance Team
Union Sanitary District
5072 Benson Road
Union City, CA 94587

Permit Processing Time

Allow a minimum of ten (10) full business days for the complete Discharge Permit application package to be processed. Any missing or incomplete application package elements may delay the processing of your application.

Permit Issuance: Mandatory On-site Appointment

An on-site meeting with the District Environmental Compliance Inspector to inspect the fully installed treatment system and issue the permit is required before discharge may commence. A minimum of two (2) full business days advanced notice is required for scheduling this onsite appointment. On-site appointments may be scheduled during regular business hours Monday through Thursday between the hours of 7:30 a.m. to 3:00 p.m. with the exception of observed Holidays. Groundwater discharge inspections can be scheduled directly with the Groundwater Inspector or by phone at (510) 477-7500.

I. Groundwater Discharge Permit Application Form

A Groundwater Discharge Permit Application form must be completed, signed, and submitted for all groundwater discharge requests. The application form and associated instructions can be found on the District website at https://www.unionsanitary.ca.gov/businesses/pretreatment-program/groundwater-discharges.

All parts of the permit application form must be completed or marked "not applicable". Incomplete submittals may delay the process.

II. Payment of Fees

Applicable fee(s) are established in the most recent Resolution of Sewer Service Charge Ordinance 31.40, Capacity Charge Ordinance 35.23, and Pretreatment Ordinance 36.04.

A. Initial Fees

Effective *August 2024 to June 2025* the applicable fees are as follows:

Wastewater Discharge Permit Fee	$ 400.00
Sewer Service Charge	$ 538.95*
Capacity Fee	$ 1,000.90

**Covers the initial 134,067 gallons-per-year discharge*

Total fees to be collected for issuance of a Groundwater Discharge Permit: $1,939.85. Check shall be made payable to Union Sanitary District.

Please contact the District Groundwater Program Inspector for fee amounts outside the effective date range.

B. Volumetric Charges

Volumetric Sewer Service Charges are assessed at the end of the project for discharges exceeding the initial 134,067 gallon discharge volume. Effective *July 2024 to June 2025*:

Project duration < 1 year	$ 4.02 per 1,000 gallons

C. Long-Term Dischargers

For discharges greater than 1 year, Capacity Charges, Sewer Service Charges, and Permit Fees will be assessed.

III. Treatment System Requirements

All extracted groundwater must be effectively treated for suspended solids, sediments, turbidity and any other pollutant of concern prior to entering the sanitary sewer system. Applicant is expected to investigate potential sources of contamination. The treatment equipment must be appropriate for the project. Treatment system details shall be included with the Discharge Permit Application.

A. For Groundwater De-watering:

Wastewater from dewatering operations can contain high levels of fine sediment that must be removed prior to discharge. Sediment removal systems must be appropriately sized and designed to achieve effective sediment removal. Minimum sediment removal system requirements:

1. Primary Sediment Treatment
   - Weir Tank(s)
     - Required size and number of tanks will depend on the flow volume and residency period necessary to achieve adequate settling. Minimum tank size requirements based upon proposed discharge rates in gallons per minute (gpm):
       - 0 to <20 gpm - 5,000 gallon Weir Tank
       - 20 to <50 gpm - 10,000 gallon Weir Tank
       - 50 to 100 gpm - 18,000 gallon Weir Tank
       - For discharges >100 gpm, multiple tanks must be used
     - Wier tanks must have separate over and under baffles
     - Open-top tanks are preferred to allow for visual observation
2. Secondary Sediment Treatment
   - Sand Media Particulate Filter(s); and/or
   - Pressurized Bag Filter(s); and/or
   - Cartridge Filter(s)
     - Filter bags and cartridge filters must be replaced per manufacturer's recommendation.
3. Final Sample Port
   - A sample port shall be installed that allows for the collection of representative samples of wastewater after sediment removal/treatment. The discharger shall use this point to monitor the effectiveness of sediment and/or pollutant removal.
4. Discharge Flow Meter (see section V)

B. For Remediation or De-watering in Contaminated Areas:

In addition to a sediment removal system, treatment for contaminants may be necessary. All discharges must comply with the limitations set forth under District Ordinance 36.04 and Groundwater Discharge Limitations Table 1 (attached). All treatment equipment must be appropriately sized and designed to achieve effective contamination removal. Per District Ordinance 36.04 Section 4.25, additional studies or hazardous materials assessments may be required with the submittal.

Minimum treatment system requirements (hydrocarbons):

1. Two vessels system with virgin Granular Activated Carbon (GAC)
   - If any parameter is detected at half (1/2) the District Limit, treatment system carbon vessels and/or carbon filters shall be replaced.
2. Sample ports on the influent, midpoint, and effluent lines
3. Emergency Shut-off controls
4. If diesel is present, an oil/water separator is required

C. General Treatment System Requirements:

1. All treatment devices must be monitored daily during periods of discharge and maintained per manufacturer recommendations throughout the project.
2. No Bypass of the treatment system is allowed.
3. If the District determines that the proposed Pretreatment equipment is not adequate, additional requirements will be issued.
4. If the District determines that the Pretreatment equipment in use is inadequate, discharge will not be authorized.
5. The setup must consider public safety and prevent opportunities for illicit discharge and/or negative impacts to the sanitary sewer system.

IV. Initial Sampling and Analysis Requirements

The applicant must collect samples representative of the discharge and provide analytical results with the permit application package. This requirement may be waived for discharges of potable water only.

A. Provide sampling results for all pollutants listed in Table 1.
B. Provide sampling results for any other pollutants of concern that may be present in the wastewater. Applicant is expected to investigate potential sources of contamination.
C. For sites treating contamination prior to discharge, provide contaminant(s) treatability evaluation and validation sampling to confirm effectiveness of treatment.
D. Analytical parameters and limits may be modified or added based upon site investigation and/or impact to the District.
E. Brine solutions having high concentrations of salt interfere with the treatment works and the collection system. For the discharge of potential brine solutions, provide additional sampling results for Sodium and Magnesium.
F. All laboratory analysis must be performed by a State of California Environmental Laboratory Accreditation Program (ELAP) Certified Laboratory.
G. Sampling and analysis procedures shall conform to requirements in 40 CFR 136 or those specified in Standard Methods for the Examination of Water and Wastewater.
H. When multiple sources of contamination are known or suspected, or where the wastewater is extracted from a large area, the applicant shall take multiple samples as necessary to generate a representative profile.
I. In limited cases, sampling requirements may be waived if documentation is available which confirms that all groundwater encountered will meet District discharge requirements and is not within an area of potential or known contamination. Acceptable supporting documentation can include, but is not limited to:
    - Documentation of correspondence from the Regional Water Quality Control Board (RWQCB) that confirms the project is located in an area with no known contamination within the vicinity;
    - Groundwater sample results taken while performing soil borings, pothole sampling, etc.

V. Flow and Metering Requirements

A. The maximum discharge rate as determined by the District is typically 100 gallons per minute. Greater pumping rates require special approval, up to a maximum of 200 gallons per minute.

B. The applicant is responsible for obtaining and installing flow monitoring device(s) on the final discharge line(s) to monitor the flow rate and total volume of discharge. Flow monitoring requirements:

    1. Device(s) must monitor instantaneous Flow Rate (gallons per minute) and Total Discharge Volume (gallons).
    2. Flow meter must have non-resettable totalizer.
    3. To ensure accurate flow measurement, monitoring devices(s) must be sized, installed, calibrated, and operated according to the manufacturer's specifications.
    4. The User must follow the equipment provider/manufacturer specifications regarding the proper placement of monitoring device(s). It is the User's responsibility to make the appropriate accommodations to meet this requirement.
    5. Meter(s) must provide accurate readings within +/- 2% throughout the full operating range.
    6. Device(s) must be maintained in good working condition.

7. Permit holder must document the START and END readings of the meter's flow totalizer. Total discharge volume shall be reported to the District immediately upon project completion.
8. Monthly discharge totals must be documented in Monthly Groundwater Discharge Self-Monitoring Reports.
9. The permitee shall notify the District prior to changing any meter.

VI. Encroachment Agreement and Construction Permit

Depending on the scope of the project, an Encroachment Agreement or Construction Permit may be necessary to include with the permit application package submittal.

A. Encroachment Agreement

If a proposed discharge is intended to go directly into a District-owned manhole, all parties accessing the manhole (principal and subcontractors) must apply for an Encroachment Agreement. Discharge to a Private Control Manhole or clean-out is exempt from Encroachment Permit requirements but may require written approval from the property owner.

Per District Ordinance 34, all contractors and subcontractors applying for an Encroachment Agreement shall maintain, on file with the District, the insurance coverage indicated in the Agreement. These insurance documents must be submitted with the original signed Encroachment Agreement(s). Please work with the District's Groundwater Program Environmental Compliance Inspector to obtain an Encroachment Agreement once a draft of the Permit Application is ready for District review.

District Manhole Usage Requirements:

1. Manholes located on public right-of-way are chosen as last result.
2. Discharge to a District manhole may be allowed based on the site being secured by barricades when discharges take place and the discharge hose being suspended through the manhole with the lid closed over the top of it.
3. The Permittee or a designated representative must be present during the discharge period.
4. Prior to opening the manhole lid(s) each and every time, the atmosphere will be tested with a multi-gas meter to assure that it is safe to open the manhole.
5. Traffic safety trench plate (minimum 1") on top of manhole, diameter of trench plate must be wider than manhole diameter.
6. The District reserves the right to approve/disapprove access to District manholes.

B. Construction Permit

Submit a USD Sewer Lateral Permit Application if the project must construct a physical connection from the project site to any existing sewer facilities outside of the building.

Sewer Lateral Permits and associated fees are processed by the District's Customer Service Team. For additional details and requirements, contact District Customer Service at (510) 477-7500 or go to https://www.unionsanitary.ca.gov/permits-and-fees/plans-submittal/commercial-industrial.

VII. Alternate Disposal Plan

The Applicant must have alternative disposal plans if the discharge does not meet District discharge limits, requirements, or conditions. Off-site disposal must be handled by a licensed treatment, storage, disposal or recycling facility.

VIII. Self-Monitoring

In addition to the initial monitoring required at the time of application, permits will require periodic self-monitoring of the wastewater. These requirements will be listed in the permit conditions. If there is confirmation that no pollutants of concern are onsite or to be discharged, additional self-monitoring requirements may be waived.

IX. Non-Compliance with Discharge Limits and Permit Conditions

In the event of non-compliance with discharge limits or permit conditions, the permittee shall:

A. Immediately terminate discharge.
B. Immediately notify the District. A written follow-up report shall be filed within five days.
C. Implement District-approved corrective measures. Discharge shall not resume without authorization from the District.

X. General Requirements and Conditions

A. For remediation projects, provide copy of approved remedial action plan or other document submitted to the cleanup oversight agency to explain the work being performed.
B. The District must be notified in advance of any planned changes to the user's operations or system which might alter the nature, quality, or volume of its wastewater discharge.
C. Stormwater, rainwater, or drainage shall not be discharged per Ordinance 36.04 Section 2.03.
D. Wastewater may not be trucked or hauled to the discharge point unless specifically authorized under the permit.

XI. Project Completion

Upon completion of discharge:

A. Notify the District of project completion and provide the following:
    - final totalizer meter reading
    - final total discharge volume
B. Solids accumulated in the solids removal devices must be disposed appropriately.
C. The District will issue a Permit Termination letter and bill the permitee, if applicable.

UNION SANITARY DISTRICT
5072 BENSON ROAD
UNION CITY, CA 94587
(510) 477-7500

Groundwater Discharge Limitations

TABLE 1
Union Sanitary District Groundwater Discharge Limitations
Additional Parameters May Apply, see Groundwater Permit Reference Sheet Section IV

Pollutant		Limit for any 1 Sample	EPA Test Method
Arsenic		0.35 mg/l	200.7
Cadmium		0.2 mg/l	200.7
Chromium (T)		2.0 mg/l	200.7
Copper		2.0 mg/l	200.7
Lead		1.0 mg/l	200.7
Nickel		1.0 mg/l	200.7
Silver		0.5 mg/l	200.7
Zinc		3.0 mg/l	200.7
Mercury		0.01 mg/l	245.1
Cyanide		0.65 mg/l	4500 CN-E•
Oil and Grease (Animal & Vegetable)		300 mg/l	1664 A
Oil and Grease (Mineral)		100 mg/l	1664 A
* Total Petroleum Hydrocarbons		100.0 mg/l	8015 Modified
** Total Organics		2.0 mg/l	624/8260, 625/8270
Total Halogenated Organics		0.02 mg/l	624/8260, 625/8270
Phenolics		5.0 mg/l	420
pH		Between 6.0 and 12.0	4500 H^+ B •
Temperature		No higher than 150°F	2550B •
Ammonia	Avg. Flow <10,000 gpd	225 mg/L as N	350.1 - 350.3
	10,000 – 25,000 gpd	150 mg/L as N	
	> 25,000 gpd	75 mg/L as N	

*** Summation of Total Petroleum Hydrocarbons or TPH (Gas) & TPH (Diesel) shall not exceed 100 mg/L.**
**** Total Organics (TOs) is the summation of all quantifiable values greater than 0.010 mg/L (10 ug/L) for listed Total Organics (TTOs).**
**** Total BTEX shall be included as part of the TO limit of 2.0 mg/L. BTEX includes Benzene, Toluene, Ethylbenzene and Xylene.**
**** MTBE shall be included as part of the TO limit of 2.0 mg/L**
• Standard Methods Number

Basis of Standards: USD Sewer Use Ordinance No. 36.04.
Note: Test Methods listed are examples. Analyses must be performed using Approved Methods listed in 40 Code of Federal Regulations (CFR) 136.

Prohibited Wastes Include:

1. Flammable, explosive, highly toxic, or poisonous substances
2. Substances which may obstruct flow
3. Substances posing danger to District staff, the public or environment
4. Wastes which contain or result in the production of toxic, corrosive, explosive, or malodorous gases
5. Wastewater containing pesticides or PCB's
6. Hazardous wastes
7. Substances which may cause excessive foaming at the treatment plant
8. Substances which may interfere with the sewer system or wastewater treatment plant, including causing pass through of any pollutant which causes a violation of the District's NPDES Permit

For a complete list of prohibited wastes, see District Ordinance No. 36.04.

Groundwater Discharge Permit
Total Organic Pollutants

Total Organics (TO's) is the summation of all quantifiable values greater than 0.01 milligrams per liter (mg/L) (10 ug/L) for the following Total Organic pollutants:

Volatile Organics (624 / 8260)

☐Acrolein
☐Acrylonitrile
☐Benzene
☐Bromoform (Tribromomethane)*
☐Carbon Tetrachloride (Tetrachloromethane)*
☐Chlorobenzene*
☐Chloroethane*
☐2-Chloroethy vinyl ether (mixed)*
☐Chloroform (Trichloromethane)*
☐Chlorodibromomethane (Dibromochloromethane)*
☐Dichlorobromomethane (Bromodichloromethane)*
☐1,1-Dichloroethane (1,1-DCA)*
☐1,2-Dichloroethane (1,2-DCA)*
☐1,1-Dichloroethylene (1,1-DCE)*
☐1,2-Dichloropropane*
☐1,3-Dichloropropylene (1,3-Dichloropropene)*
☐Ethylbenzene
☐Methyl bromide (Bromomethane)*
☐Methyl chloride (Chloromethane)*
☐Methylene chloride (Dichloromethane)*
☐Tetrachloroethylene (PCE)*
☐1,1,2,2-Tetrachloroethane (1,1,2,2-PCA)*
☐1,1,1-Trichloroethane (1,1,1-TCA)*
☐1,1,2-Trichloroethane (1,1,2-TCA)*
☐Toluene
☐1,2-Trans-dichloroethylene*
☐Trichloroethylene (TCE)*
☐Vinyl chloride (Chloroethylene)*
☐Xylene++
☐Methyl Tertiary Butyl Ether (MTBE)++

Semi Volatile Organics (625 / 8270)

☐Acenaphthene
☐Acenaphthylene
☐Anthracene
☐Benzidine
☐1,2-Benzanthracene (Benzo(a)anthracene)
☐Benzo(a)pyrene (3,4-Benzopyrene)
☐1,12-Benzoperylene (Benzo(ghi)perylene)
☐11,12-Benzofluorantene (Benzo(k)fluoranthene)
☐3,4-Benzofluoranthene (Benzo(b)fluoranthene)
☐Bis (2-chloroisopropyl) ether*
☐Bis (2-chloroethoxy) methane
☐Bis (2-chloroethyl) ether*
☐Bis (2-ethylhexyl) phthalate
☐4-Bromophenyl phenyl ether
☐Butyl benzyl phthalate
☐2-Chloronaphthalene*
☐4-Chlorophenyl phenyl ether
☐Chrysene
☐1,2,5,6-Dibenzanthracene (Dibenzo(a,h)anthracene)
☐1,2-Dichlorobenzene (o-Dichlorobenzene)*
☐1,3-Dichlorobenzene (m-Dichlorobenzene)*
☐1,4-Dichlorobenzene (p-Dichlorobenzene)*
☐3,3-Dichlorobenzidine*
☐Diethylphthalate
☐Dimethyl phthalate
☐Di-n-butyl phthalate
☐Di-n-octyl phathalate
☐2,4-Dinitrotoluene
☐2,6-Dinitrotoluene
☐1,2-Diphenylhydrazine (Hydrazobenzene)
☐Fluoranthene
☐Fluorene
☐Hexachlorobenzene*
☐Hexachlorobutadiene*
☐Hexachlorocyclopentadiene*
☐ Hexachloroethane*
☐Indeno(1,2,3-cd)pyrene (2,3-o-phenlene pyrene)
☐Isophorone
☐N-nitrosodi-n-propylamine
☐N-nitrosodimethylamine
☐N-nitrosodiphenylamine
☐Naphthalene
☐Nitrobenzene
☐Phenanthrene
☐Pyrene
☐1,2,4-Trichlorobenzene*

** Halogenated Organic (Total Halogenated Organic limit is 0.02 mg/L (20 ug/L))*
++Groundwater Regulated Toxic Organics