THE CITY OF

# SAN DIEGO

PUBLIC UTILITIES DEPARTMENT

*Industrial Wastewater Control Program*

## POLICY FOR GROUNDWATER DISCHARGES TO SEWER

The polices in this document apply to the disposal of groundwater to the Metropolitan Sewerage System and its tributary systems from groundwater remediation projects, underground monitoring wells, underground tank removal projects, or construction dewatering projects. These discharges often contain pollutants from leaking underground storage tanks or fuel lines, surface spills or leaks, liquid waste impoundment areas, or resulting from decomposition of organic matter.

Whenever possible, extracted groundwater should be discharged to surface waters under the current general National Pollutant Discharge Elimination System (NPDES) permit adopted by the California Regional Water Quality Control Board (CRWQCB). However, to protect water quality in the San Diego area, the City recognizes that it may be necessary to accept discharges of extracted groundwater during the period required to obtain an NPDES permit, and in certain other cases, under the conditions defined in this document. Temporary discharges to sewer of groundwater extracted from remediation or dewatering projects will only be allowed if it is determined that sewering this wastewater is the most appropriate and prudent disposal alternative and when sufficient hydraulic and treatment plant capacity is available to allow such discharges into the sewer system.

The Industrial Wastewater Control Program (IWCP) is responsible for regulating industrial discharges to sewer in the City of San Diego and tributary Metropolitan Sewerage System Participating Agencies ("Participating Agencies") within San Diego County. Information about the Participating Agencies is provided in Section VII of this document. Businesses wishing to discharge groundwater to the Metropolitan Sewerage System, must apply for a groundwater discharge permit from the IWCP and must comply with all permit or discharge authorization conditions and the policies established in this document. Any noncompliance constitutes a violation and will be subject to enforcement action(s) which may include revocation of discharge authorization. The discharger shall take all necessary steps to correct violations resulting from permit or discharge authorization noncompliance.

## I. Applying for a Groundwater Permit:

1. **Applicant:** The party responsible for legal disposal of the wastewater is responsible for applying for the permit. Signatory authority can be delegated for applications, compliance/self-monitoring reports, and/or certification statements. A Confirmation/Delegation of Signatory Authority form may be submitted with the application for verification of signatory authority and delegation of signatory authority if so desired (see the form or 40 CFR 403.12(l) for further information).
   The Confirmation/Delegation of Signatory Authority form can be obtained from our website:

   https://www.sandiego.gov/public-utilities/permits-construction/industrial-user-permits/other

Original signed signatory authority delegation forms must be mailed to the IWCP office:
*9192 Topaz Way*
*San Diego, CA 92123-1119*
*Phone: (858) 654-4100*

2. **Permit Application:** Authorization to discharge extracted groundwater (includes both that from remediation and construction dewatering) may be issued in the form of an *Industrial User Discharge Permit* (Permit). The Groundwater Permit Application can be obtained from our website:

   https://www.sandiego.gov/public-utilities/permits-construction/industrial-user-permits/groundwater

   Note: After submitting an application with all required supplemental information, the IWCP will need to review and approve the application. After approval, pretreatment must be set up on-site prior to scheduling an inspection. After the inspection, it may take an additional 2-3 weeks for the permit to be issued. No discharge may occur until the permit is issued. Therefore, it is strongly recommended that applicants start this process early and well before the date they want to start discharging. For immediate water removal, where pretreatment is not necessary, the IWCP offers Trucked Industrial Waste Generator permits.

3. **Participating Agencies:** Discharges made to the Metropolitan Sewerage System or its tributary systems from sites outside the City of San Diego receive final approval from the Participating Agency in which the site is located. Participating Agencies may impose additional restrictions or fees not described in this document. To expedite the discharge approval process, the IWCP will coordinate with the Participating Agency during the application review process to reduce the need for the applicant to contact each agency separately. For a list of Participating Agencies, see Section V of this document.

4. **Initial Analysis:** The applicant must provide analytical results of a representative sample or multiple samples of the groundwater to be discharged with the permit application or discharge request. Where the wastewater is homogeneous and extracted from a small area, a single representative initial sampling event is generally acceptable. However, 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 of the wastewater to be discharged. All handling, preservation, and laboratory analyses of samples shall be performed in accordance with 40 CFR Part 136 and amendments thereto, unless specified otherwise in this policy or in the monitoring conditions of the discharge permit, and all analyses, with the exception of continuous monitoring, must be performed by an Environmental Laboratory Accreditation Program (ELAP) certified laboratory. The table below outlines the minimum analytical tests that shall be performed.

Table I

| Project | Known/Suspected Contaminant(s) | Initial Analyses Required | Units |
|---|---|---|---|
| Construction Dewatering | None (as supported by historic use of the property and monitoring) | Chemical Oxygen Demand<br>Solids, Total Suspended | mg/L<br>mg/L |

| Project | Known/Suspected Contaminant(s) | Initial Analyses Required | Units |
|---|---|---|---|
| Remediation or Construction Dewatering | Gasoline | Benzene<br>BTEX [1]<br>Flash Point- Instantaneous<br>Lead, Total<br>TPHg, DOHS modified 8015 [2]<br>Chemical Oxygen Demand<br>Solids, Total Suspended | ug/L<br>ug/L<br>Deg F<br>mg/L<br>mg/L<br>mg/L<br>mg/L |
| | Diesel/Jet Propellant (JP) | Flash Point- Instantaneous<br>Oil & Grease, SGT-HEM<br>TPHd, DOHS modified 8015 (optional) [3]<br>Chemical Oxygen Demand<br>Solids, Total Suspended | Deg F<br>mg/L<br>mg/L<br>mg/L<br>mg/L |
| | Other Contaminants | Discharger must contact the IWCP prior to applying for the permit to determine the initial monitoring requirements. | |

[1] BTEX - Shall be measured as the sum of benzene, toluene, ethylbenzene and xylenes. EPA methods 602, 624 or 1624 or equivalent shall be used for the measurement of benzene, ethylbenzene, and toluene. EPA methods 8021 or 8260 shall be used for the measurement of xylenes including ortho-, meta- and para-xylene. EPA methods 8021 or 8260 may be used as a substitute or equivalent for EPA methods 602, 624 or 1624 required under the CWA in 40 CFR Part 136.

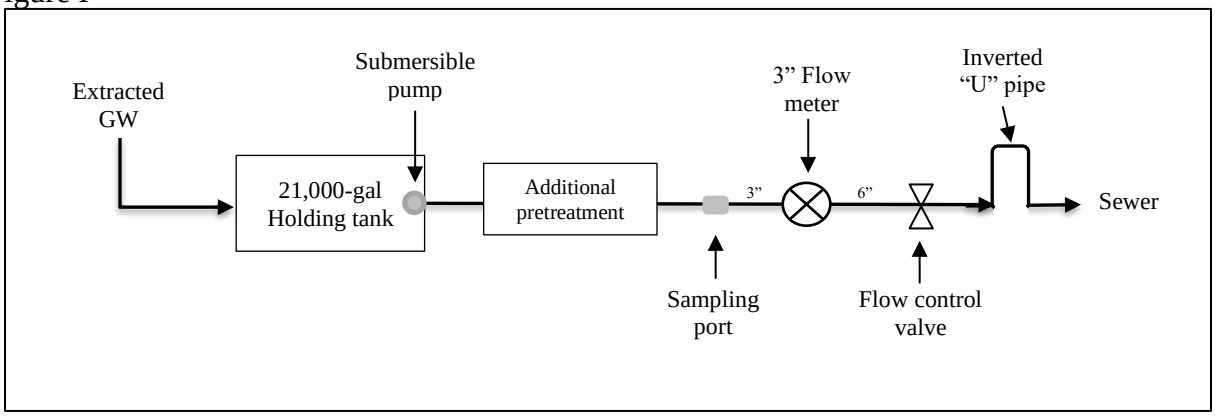
[2] TPHg - Total petroleum hydrocarbons in gasoline range (C4 – C12).

[3] TPHd - Total petroleum hydrocarbons in diesel range (C13 – C22).

If an environmental site assessment of the proposed project has been performed, this information must also be submitted in support of your discharge permit application.

5. **Pretreatment Schematic:** The applicant must provide a schematic of the pretreatment system, showing piping with lengths and diameters, from extraction to discharge point. The schematic must include at minimum, holding tank(s), pump(s), flow control valve(s), flow meter(s) – with straight pipe requirements met, sampling port(s), inverted "U" pipe(s), and any additional pretreatment. See below for a rudimentary example.

Figure I




The flow metering, sampling point, and pretreatment in the schematic must meet all conditions

of the permit as listed below in Section II of this document.

## II. Conditions of the Permit:

1. **Standard Conditions:** The permittee must comply with the Groundwater Standard Conditions of their permit. These standard conditions are available to preview on the IWCP website:

   https://www.sandiego.gov/public-utilities/permits-construction/industrial-user-permits/groundwater

2. **Discharge Prohibitions:** All discharges of extracted groundwater must be made in compliance with the general and specific Discharge Prohibitions of their permit. These Discharge Prohibitions are available to preview on the IWCP website:

   https://www.sandiego.gov/public-utilities/permits-construction/industrial-user-permits/groundwater

3. **Flow Metering:** The amount of wastewater discharged to sewer from permitted groundwater projects must be accurately measured, for reporting and billing purposes, using totalizing flow meter(s) that are non-resettable. The meter(s) must have a physical read-out display that allows for instantaneous and totalizing flow rate monitoring and must provide accurate readings within +/- 2% throughout the full operating range. To ensure accurate flow measurement, the meter(s) must be sized, installed, calibrated, and operated according to the manufacturer's specifications. The meter(s) must be in place and operational prior to commencing discharge.

   a. In most cases, it is necessary to consistently pump treated wastewater through the flow meter in order to satisfy the flow meter's minimum flow rate requirements.

   b. Generally, some combination of maximum pump capability and flow restrictors is used to ensure compliance with the maximum authorized discharge flow rate limitation. The maximum allowable flow rate will be either the receiving sewer pipe hydraulic capacity or the maximum flow rate accurately measured by the meter per the manufacturer's specifications, whichever is less.

   c. Accepted mechanisms to satisfy the "full pipe" requirement of some meter types include but are not limited to: 1) Elevating the discharge line downstream of the flow meter to a level exceeding the height of the meter. 2) Installing an inverted "U" on the discharge line downstream of the flow meter with a peak level exceeding the height of the meter.

4. **Sample Port:** A sample port that will allow representative sampling of groundwater being discharged to sewer must be in place prior to initiating discharge. The sample port shall be installed at a point that allows for collection of representative samples of this waste stream, after pretreatment, but prior to commingling with any other permitted or non-permitted wastewater. Contact the project's assigned inspector for review of your proposed sample point design prior to installation.

5. **Pretreatment:** The discharger must install, operate, and maintain any and all pretreatment equipment necessary to comply with the terms of the permit and with the General and Specific Prohibitions. At minimum, pretreatment equipment to remove silt, sand, or other solid material from groundwater will be required for all discharges. The solids settling pretreatment must

meet a retention time of 20 minutes. When discharges originate from sites contaminated with petroleum products (e.g., gasoline, diesel, AvGas, JP) or organic solvents, the permittee must provide pretreatment equivalent to the California Regional Water Quality Control Board's pretreatment technology standards for organics (carbon adsorption or air stripping). If using carbon adsorption the minimum treatment level accepted is 10 minutes of contact time with Granular Activated Carbon (GAC). Additionally, if free product is present or expected, the pretreatment system must include a free product recovery system/method to prevent pass through and the pretreatment equipment must be equipped with a feature, such as an automatic sensor with shut-off, that would cease all discharges to sewer in the event of breakthrough (free product release from the recovery device). For the purposes of this requirement, free product is defined as an immiscible liquid phase hydrocarbon existing in the subsurface with a positive pressure such that it can flow into a well. All pretreatment equipment must be in place and fully operational prior to commencing discharges to sewer.

6. **Discharge Limitations:** Discharge limitations established in the permit will depend on the source/type of contamination. See Table II for most frequently encountered sources and associated limitations.

Table II

| Project | Known/Suspected Contaminant(s) | Characteristic or Pollutant | Units | Limits |
|---|---|---|---|---|
| Remediation or Construction Dewatering | Gasoline | Benzene<br>BTEX [1]<br>Flash Point- Instantaneous | ug/L<br>ug/L<br>Deg F | 50<br>750<br>Must be > 140 |
| | Diesel/Jet Propellant (JP) | Flash Point- Instantaneous<br>Oil & Grease, HEM<br>TPHd, DOHS modified 8015 (optional) [2] | Deg F<br>mg/L<br>mg/L | Must be > 140<br>500<br>500 |
| Construction Dewatering | Suspended Solids | Requirement for solids removal [3] | | |

[1] BTEX - Shall be measured as the sum of benzene, toluene, ethylbenzene and xylenes. EPA methods 602, 624 or 1624 or equivalent shall be used for the measurement of benzene, ethylbenzene, and toluene. EPA methods 8021 or 8260 shall be used for the measurement of xylenes including ortho-, meta- and para-xylene. EPA methods 8021 or 8260 may be used as a substitute or equivalent for EPA methods 602, 624 or 1624 required under the CWA in 40 CFR Part 136.

[2] TPHd - Total petroleum hydrocarbons in diesel range (C13 – C22).

[3] Solids Removal - The discharger shall pretreat groundwater to remove solids using technology acceptable to the IWCP. For solids settling, there must be a minimum retention time of 20 minutes.

7. **Discharge Flow Limitations:** In all cases, the discharge of extracted groundwater (alone or in combination with other flows) must not exceed the capacity of the sewer or sewerage facilities used to transport or treat the wastewater. The discharger must not discharge wastewater at a rate violating any flow rate limitation (maximum or minimum) established in the permit. Additionally, should the discharger observe any evidence (e.g. overflows, surcharges, and spills) that their discharge is exceeding the carrying capacity of the sewer in their area; they must immediately cease discharge or reduce the flow rate until the problem is eliminated. Sewer overflows to the environment must be reported to the appropriate environmental control agencies. To report a sewer overflow in the City of San Diego, immediately call the Sewer

Emergency Hotline at (619) 515-3525.

a. ***City of San Diego:*** Upon receipt of an application to discharge extracted groundwater to sewer within the City of San Diego, the IWCP will coordinate with sewer collection system staff to evaluate if sufficient hydraulic capacity is available in the sewer system to allow the discharge. Flow limits or restrictions may be imposed.

b. ***Participating Agency****:* Should the request to discharge originate from a facility in a Participating Agency outside the City of San Diego, authorization must also be obtained from the City or Sanitation District where the wastewater will be discharged. The IWCP will coordinate with the Participating Agency, which is responsible for determining if sufficient capacity is available to accept the discharge and for imposing any flow limits or restrictions.

   Dischargers are required to configure discharge piping, size pumping equipment, and operate the system so that the maximum and minimum flow rate limits indicated in the permit are not violated. The minimum flow rate is based on the flow meter's operational requirements and only applies when the system is actively discharging.

8. **Discharge Point Restrictions:** The discharger is authorized to introduce process wastewater only to the discharge point specified in the permit. Waste may not be removed from the property or worksite and trucked or hauled to the discharge point unless specifically authorized under the permit.

9. **Discharges to Manholes:** Dischargers are encouraged to use private sewer connections whenever possible. However, when no private sewer connection is available, it may be possible to discharge the wastewater to a public manhole. Dischargers wishing to utilize a public sewer connection within the City of San Diego must submit a signed "Hold Harmless Agreement" with the permit application. Should the discharger wish to discharge to a public manhole in a Participating Agency, then authorization to access the manhole must be obtained from the City or Sanitation District where the wastewater will be discharged. The discharger is required to comply with all Federal, State, and Local laws and regulations pertaining to worker safety and traffic control when utilizing public sewer connections.

10. **Monitoring:** In addition to the initial monitoring required at the time of application, some permits will require periodic self-monitoring of the wastewater; these requirements will be established in Attachment B of the permit. To verify compliance with the terms of the permit, the IWCP may perform periodic inspections or unannounced sampling. The industrial user shall, upon the presentation of a valid City of San Diego I.D., allow IWCP personnel to enter the premises for inspection or sampling related to conditions of the permit.

11. **Planned Changes:** In addition to other reporting requirements, Groundwater dischargers shall give written notice to the IWCP:
    a. At least two weeks prior to any project expansion or process modification which results in a change in the nature of the discharge or an increase in the daily maximum flow rate or discharge volume by any amount in excess of the authorized values. Authorization must be received prior to commencing discharge from any project expansion area or modified process.
    b. Within 24 hours of making any modifications, changes or substitutions involving the

totalizing flow meter(s), including, but not limited to, replacement of the meter or modification of the meter installation and/or placement. Notification of meter replacement must include a copy of the manufacturer's specifications for the replacement meter, plus the ending meter read and removal date of the old unit and the beginning meter read and installation date of the new unit.

12. **Additional Conditions:** Dischargers may be identified as Significant Industrial Users (SIUs), as defined in 40 CFR 403.3(v), and as such are subject to the provisions set forth in the Code of Federal Regulations, Title 40, Part 403.

## III. Duration of the Permit:

Unless otherwise authorized in writing by the IWCP, discharge shall cease no later than the expiration date of the permit. In the City of San Diego where sewer capacity has not been purchased, groundwater extraction discharge permits are issued for an initial period of up to one year. For projects outside of the City of San Diego, the permit duration shall be established by the Participating Agency in which the project is located.

1. **Permit Renewals:** Issuance of the initial permit does not guarantee permit renewal. Discharges to sewer of groundwater extracted from remediation or dewatering projects will only be allowed if it is determined that further sewering this wastewater is the most appropriate and prudent disposal alternative and when sufficient hydraulic and treatment plant capacity is available to allow such discharges into the sewer system. In the City of San Diego, when capacity remains available, the waiver of capacity charges may be extended via a groundwater discharge permit for one additional year provided the permittee has submitted a renewal application and proof that the permittee has applied to the California Regional Water Quality Control Board to discharge the groundwater directly to the storm drain or receiving waters. Within the City of San Diego, permits will not be renewed unless the permittee purchases adequate sewer capacity, or obtains the waiver extension above. See Sewer Capacity Charges under Section IV-3. Permit extensions for projects located outside the City of San Diego are subject to approval and capacity charges established by the City or Sanitation District receiving the discharge

   Note: In order to avoid a lapse in sewer discharge authorization, permit renewal applications and proof of application for an NPDES permit to direct discharge must be received by the IWCP no less than 45 days prior to the expiration of the initial permit.

2. **Permit Expiration:** The permittee shall terminate groundwater discharges to sewer and remove the sewer connection upon the permit expiration date unless an extension is obtained from the IWCP.

3. **Permit Transference:** The discharge permit or authorization is non-transferable. The permittee must notify the IWCP immediately upon change in ownership or contract termination and the new owner or contractor must re-apply before authorization to discharge may resume.

4. **Permit Inactivation:** If groundwater discharge is completed prior to expiration of the permit, the permittee shall contact the assigned inspector to schedule an inactivation inspection.

## IV. Fees:

1. **Permit Fees:** Applicable permit fees will be invoiced to the billing contact and address after the permit is issued.
   a. ***City of San Diego:*** Permit fees are determined based on the category of permit issued, SIU – Standard or Enhanced Source Control. Information regarding permit rates within the City of San Diego can be found on the City of San Diego's website:

      https://www.sandiego.gov/public-utilities/permits-construction/industrial-user-permits

   b. ***Participating Agencies:*** Permit fees for projects in Participating Agencies are determined and by the agency. Billing policies differ among different agencies; some agencies will bill the permittee, and other agencies have authorized the City of San Diego to initiate permit billing directly.

2. **Disposal Fees:** All discharges of extracted groundwater are subject to sewer service fees, which vary depending on the agency in which the project is located.
   a. ***City of San Diego:*** The City will bill the permittee for the cost of wastewater treatment and conveyance of the discharges. The cost of disposal varies, depending on the strength of the wastewater as measured in Chemical Oxygen Demand (COD) and Total Suspended Solids (TSS), and will be calculated at currently approved rates. The permittee will be required to provide flow measurements and, in most cases, wastewater strength data (COD & TSS analyses) to allow for accurate billing. Sewer service charges are billed monthly during the term of the permit; a final invoice is sent after the discharge has ceased and sewer connection is removed.
   b. ***Participating Agencies:*** Agencies are responsible for billing the permittee for any costs associated with wastewater disposal. Billing policies differ among different agencies; some will require payment before authorizing the discharge, others will bill the permittee during, or after completion of the project. The permittee will be required to provide flow measurements and, in some cases, wastewater strength data (COD & TSS analysis) to allow for proper billing.

3. **Sewer Capacity Charges:**
   a. ***City of San Diego:*** Within the City of San Diego, persons discharging groundwater to the sewerage system under an IWCP permit are eligible for an initial waiver of sewer capacity charges for a period of one year (SD Municipal Code 64.0410). Provided that the applicant applies for authorization to discharge under the current general NPDES permit, this waiver from capacity charges can be extended for one additional year. Permittees wishing to purchase capacity are urged to contact the City's Development Services Department at (619) 446-5000 and the IWCP well in advance to determine if capacity is available for purchase and to initiate the process to purchase sewer capacity. Upon receipt of proof of purchase of capacity, the permit expiration date will be extended for one year, renewable annually.
   b. ***Participating Agencies:*** If the discharge of groundwater to the sewer system originates outside the City of San Diego, in an agency tributary to the Metropolitan Sewerage System, the Participating Agency will be responsible for determining the need to purchase capacity. In most cases, Participating Agencies will require the purchase of capacity for long-term

and permanent discharges of extracted groundwater.

# V. Agency Contact Information

**Table III**

| Area Name | Participating Agency | Phone/Fax |
|---|---|---|
| Chula Vista | City of Chula Vista Engineering Department<br>1800 Maxwell Road<br>Chula Vista, CA 91911 | Phone (619) 476-5387<br>**FAX** (619) 691-5171 |
| Coronado | City of Coronado<br>101 B Avenue<br>Coronado, CA 92118 | Phone (619) 522-7380<br>**FAX** (619) 435-4479 |
| Del Mar | City of Del Mar<br>Public Works Department<br>1050 Camino Del Mar<br>Del Mar, CA 92014 | Phone (858) 755-3294<br>**FAX** (858) 481-0254 |
| El Cajon | City of El Cajon<br>200 E. Main Street<br>El Cajon, CA 92020 | Phone (619) 441-5598<br>**FAX** (619) 579-5254 |
| Imperial Beach | City of Imperial Beach<br>825 Imperial Beach Boulevard<br>Imperial Beach, CA 91932 | Phone (619) 423-8311<br>**FAX** (619) 429-4861 |
| La Mesa | City of La Mesa<br>P.O. Box 937<br>La Mesa, CA 91944-0937 | Phone (619) 667-1153<br>**FAX** (619) 667-1380 |
| National City | City of National City<br>1243 National City Boulevard<br>National City, CA 91950-4397 | Phone (619) 336-4210<br>**FAX** (619) 336-4217 |
| Poway | City of Poway<br>P.O. Box 789<br>Poway, CA 92064 | Phone (858) 668-4719<br>**FAX** (858) 679-9603 |
| Santee | Padre Dam Municipal Water District<br>P.O. Box 719003<br>Santee, CA 92072-9003 | Phone (619) 258-4731<br>**FAX** (619) 258-8774 |
| Lemon Grove | City of Lemon Grove<br>3232 Main Street<br>Lemon Grove, CA 91945 | Phone (619) 825-3810<br>**FAX** (619) 825-3818 |
| Lakeside, Alpine, Spring Valley, Wintergardens, East Otay Mesa | County of San Diego<br>Department of Public Works<br>5555 Overland Dr., Bldg 2, Room 260<br>San Diego, CA 92123 | Phone (858) 694-2660<br>Phone (858) 694-2663<br>**FAX** (858) 505-6394 |