

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

ORDER NO. R9-2008-0081

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR IN-SITU GROUNDWATER
REMEDIATION PROJECTS WITHIN THE SAN DIEGO REGION**

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

1. Petroleum hydrocarbon fuel and volatile organic chemicals (VOCs) have been detected in ground water at various cleanup sites throughout the San Diego Region that cause or threaten to cause adverse impacts to beneficial uses of ground water.
2. Cleanup of ground water at these sites may include the use and application of chemical, biological, and physical treatment systems, such as the addition of chemicals and other reactive materials into soil and ground water (in-situ) to promote ground water remediation. Persons proposing to apply these treatment systems to ground water are hereinafter Dischargers.
3. In-situ treatment processes include oxygen enhancement, chemical oxidation, biostimulation (addition of nutrients and bacteria to enhance biodegradation), bioaugmentation (introducing appropriate bacteria) and groundwater extraction and treatment, with return of treated ground water to the area in the aquifer undergoing treatment. The application of the amendments¹ can be done actively with hydraulic control of the treatment zone as the amendments are added to the extracted ground water and injected upgradient into the treatment area. The application also can be done at times in a passive mode where the amendments are injected into the treatment zone and there is no nearby hydraulic control of the treatment zone.
4. The addition of materials to remediate ground water may require bench-scale and/or small-scale pilot testing prior to design and implementation of full-scale remediation. The addition of amendments to conduct pilot studies is covered under this Order.
5. The injection of chemicals and other materials into ground water may result in unintended adverse effects to ground water quality, through their discharges, and are therefore subject to waste discharge requirements prescribed in accordance with the California Water Code. With proper management, however, the potential effects will be localized, of short term duration, and are not expected to unreasonably impair any existing or prospective use of ground water.

¹ For purposes of this Order, "amendments" include chemicals and other reactive materials, nutrients, and/or biological agents that help to advance/mediate degradation of groundwater pollutants. For a listing of covered amendments, see Conditions of Eligibility [Section A.1(a) through A.1(f)] of this Order.

6. The adoption of general waste discharge requirements (WDRs) for groundwater remediation treatment systems would: a) simplify the application process for Dischargers, b) allow more efficient use of Regional Board resources, c) enhance the protection of surface water by providing alternatives to the discharge of wastewater to surface waters, and d) provide a level of protection comparable to individual WDRs.
7. This Order regulates the use and application of in-situ biological, chemical, and physical treatments to clean up waste constituents in ground water. Water Code section 13263(i) establishes criteria to be used by the Regional Board in developing and adopting general waste discharge requirements (WDRS). This Order satisfies the statutory criteria in the following manner:
 - a. Order No. R9-2008-0081 applies to in-situ discharges of specific materials/ wastes using similar methods of application of the same or similar materials for purpose of enhancing groundwater cleanup at a variety of sites located in the San Diego Region.
 - b. The discharges of the same or similar materials referenced in this Order, for purposes of groundwater cleanup, requires similar monitoring and treatment standards at a variety of sites located in the San Diego Region.
 - c. The use of general waste discharge requirements for in-situ discharge of the materials included in this Order allows groundwater cleanup to proceed in a timelier manner than prescribing individual WDRs for each site.
8. State Water Resources Control Board (SWRCB) Resolution No. 68-16 requires the Regional Board, in regulating the discharge of waste, to maintain high quality waters of the State until it is demonstrated that any change in quality will be consistent with the maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than that described in the Regional Board's policies. The temporary degradation allowed by this Order is consistent with Resolution No. 68-16 since (1) the purpose is to accelerate and enhance remediation of groundwater pollution and such remediation will benefit the people of the State; (2) the discharge facilitates a project to evaluate the effectiveness of cleanup technology; (3) the degradation is limited in scope and duration; (4) best practicable treatment and control, including adequate monitoring and hydraulic control to assure protection of water quality, are required; and (5) the discharge will not cause Water Quality Objectives (WQOs) to be exceeded beyond the treatment zone and increases in concentrations above WQOs caused by the treatment are expected to be reduced over time.
9. The materials that can be used to remediate VOCs and petroleum hydrocarbons in soil and/or ground water at a site in the San Diego Region under this Order are limited to those listed in the Section A, Conditions of Eligibility, listed below. This Order is not intended for use and application of other materials to remediate groundwater pollution or for remediation of waste constituents in ground water other than VOCs, and petroleum hydrocarbons.

10. The Regional Board provides regulatory oversight of cleanup and abatement of groundwater pollution in compliance with the provisions and specifications of SWRCB Resolution No. 92-49: "Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304," other applicable water quality policies and procedures, and regulations adopted by the SWRCB.
11. This Regional Board, acting in accordance with Water Code section 13244, adopted the Water Quality Control Plan for the San Diego Basin (9), (hereinafter Basin Plan) on September 8, 1994. The Basin Plan was subsequently approved by the SWRCB on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Board and approved by the SWRCB. The Basin Plan contains beneficial uses and water quality objectives. The requirements contained in this Order are consistent with the Basin Plan.
12. In accordance with section 2200, Title 23 of the California Code of Regulations (CCR), the threat to water quality and complexity of the discharge of the wastes is category 3C.
13. The discharge of chemicals and other materials for groundwater remediation is a project under the California Environmental Quality Act (CEQA; Public Resources Code, section 21000 *et seq.*). The Regional Board is the lead agency for the project and adopted a Negative Declaration on June 13, 2003, determining that there was no substantial evidence that the proposed project could have a significant effect on the environment.
14. The Regional Board has notified the Discharger and all known interested parties of its intent to adopt waste discharge requirements for the discharge of wastes into ground water.
15. The Regional Board in a public meeting heard and considered all comments pertaining to the discharge of in-situ treatment systems or amendments into ground water.

IT IS HEREBY ORDERED THAT in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, each Discharger regulated under these WDRs shall comply with the following requirements:

A. CONDITIONS OF ELIGIBILITY

1. Coverage under this Order applies to the following groups of amendments, except as specifically excluded in A2 below, provided the conditions in A3, A4, A5, and A6 are satisfied:
 - a. Amendments that create reducing conditions (i.e., amendments that provide carbon, energy, electrons, and/or macronutrients). Examples include:

- i. Zero valent iron
 - ii. Easily degradable carbon sources such as glucose, acetate, citric acid, acetic acid, ethanol and others
 - iii. Slowly degradable carbon sources such as edible oils, poly-lactate, and other hydrogen release compounds
 - iv. Polysulfides
 - v. Macro nutrients such as nitrate, phosphate, and potassium
 - vi. Microorganisms cultured on site materials
 - b. Amendments that create oxidizing conditions (i.e., amendments that provide oxygen to promote biological degradation of groundwater pollutants, or otherwise gain electrons). Examples include:
 - i. Ozone
 - ii. Potassium or sodium permanganate
 - iii. Oxygen release compounds
 - iv. Hydrogen peroxide
 - c. Multiple amendments (includes application of reducing agents or oxidizing agents or both applied concurrently or over time as in an approved Remedial Action Plan. Examples include:
 - i. Establishing a reducing zone immediately downgradient of an oxidizing zone to reduce hexavalent chromium that may be produced under oxidizing conditions
 - ii. Providing a slowly degradable carbon source along with polysulfides to precipitate sulfates as metal sulfides
 - d. Buffer solutions, such as sodium bicarbonate, which create groundwater pH conditions favorable to degradation of groundwater pollutants.
 - e. Tracer compounds such as bromide.
 - f. Biofouling control agents such as chlorine dioxide, chlorine and bleach.
2. Fenton's reagent due to its potential for violent exothermic reactions is specifically excluded from coverage under this Order.
 3. Dischargers proposing to discharge pursuant to this Order shall submit a completed Report of Waste Discharge (ROWD). The ROWD shall include a completed Standard Form 200 (Attachment A), a monitoring plan that will achieve compliance with Monitoring and Reporting Program No. R9-2008-0081, and a technical report documenting that the proposed discharge will meet the requirements of this Order. The technical report shall be prepared and signed by a licensed civil engineer or licensed geologist as appropriate, and include, at a minimum, the following information:

- a. A copy of the Remedial Action Plan and the Site Conceptual Model for the site, including a characterization of the nature of petroleum hydrocarbon fuel and VOCs plume in soil and ground water, and a description of the treatment system.
 - b. A description of site-specific hydrogeologic characteristics including significant water bearing zones, aquitards, and hydraulic conductivity.
 - c. The Hydrologic Unit, beneficial uses, and water quality objectives designated in the Basin Plan for the site.
 - d. The background quality of ground water not affected by the groundwater plume.
 - e. Material Safety Data Sheets and other product information for any materials, including specific impurities, to be discharged in compliance with this Order.
 - f. Working/reacting mechanisms of the amendments to be discharged in compliance with this Order, including breakdown reactions, reaction (by)products, and toxicity information of the (by)products.
 - g. A detailed description of the amendment delivery system, including application rate(s), material type(s), applied concentrations, and injection point and/or well spacing, to assure adequate coverage of the pollutant plume, and sufficient hydraulic control of injected amendments in the treatment zone.
 - h. Information on the possibility of any adverse impact to current or potential designated beneficial uses of groundwater quality, and whether the impacts will be localized and short-term.
 - i. Location of nearby supply wells.
 - j. A Contingency Plan to be implemented to correct unexpected water quality effects that may cause or threaten to cause a condition of pollution or nuisance, or an adverse impact to beneficial uses of ground water.
4. The following minimum information must be included in the monitoring plan:
- a. All information required in Monitoring and Reporting Program No. R9-2008-0081.
 - b. A proposed schedule for the initiation and completion of the treatment process.
 - c. A proposed frequency for reporting results from a technical evaluation of the effectiveness of the treatment process, with conclusions and recommendations regarding continuation of the existing process or modifications thereto.

5. Before initiating any discharge to soil and/or ground water, the Discharger must receive prior written notification from this Regional Board that the project's ROWD, including the proposed monitoring plan, is complete, and the project has been enrolled under this Order. Notification of project enrollment under this Order will not be forthcoming if the Regional Board finds that there may be significant effects on water quality, or that significant public controversy has arisen or will likely arise from enrolling the project under this Order and that individual Waste Discharge Requirements should be considered at a regularly scheduled Regional Water Board meeting.
6. The Discharger shall submit the first annual fee in accordance with the current version of the California Code of Regulation, Title 23, Division 7, Chapter 9, Waste Discharge Report and Requirements Article 1 fees for a discharge. The check or money order shall be made payable to the "State Water Resources Control Board."

B. PROHIBITIONS

1. Discharge of wastes in a manner other than as described in the findings of this Order is prohibited unless the Discharger obtains revised WDRs that provide for the proposed change.
2. Discharge of treated or untreated solid or liquid waste to a navigable water or tributary of a navigable water is prohibited.
3. Discharge of wastes shall not cause a violation of the prohibitions contained in the Basin Plan, incorporated herein by reference.
4. The discharge of any amendment or other materials not specifically regulated by this Order is prohibited. The amendments and materials are those listed in the approved ROWD required in A.1. and "Condition of Eligibility" as listed above.

C. DISCHARGE SPECIFICATIONS

1. The discharge of any amendment or waste shall not create a condition of pollution, contamination or nuisance, as defined by Water Code section 13050.
2. The discharge of amendments or wastes shall not cause the pH of the receiving ground water at the point of compliance² to go beyond the range of 6.5 to 8.5.
3. The discharge of amendments or wastes shall not cause the remediation-target constituents, including their intermediate degradation products, in ground water at a point of compliance to exceed background concentrations.

² A point of compliance is a monitoring point, located downgradient and outside the groundwater plume, and outside the treatment area used to assess the impacts to water quality and the effectiveness of the remediation.

4. The discharge of amendments or wastes shall not contain salts, heavy metals, microorganisms, or organic pollutants at levels that would cause ground water at a point of compliance to exceed the applicable water quality objectives for ground water, or surface water that may be in hydraulic connection with ground water.
5. The discharge of amendments or wastes shall not cause the ground water at a point of compliance to contain concentrations of injected chemical substances, and/or their by-products, in amounts that adversely affect any designated beneficial uses.
6. The discharge of amendments or wastes shall not cause the ground water at a point of compliance to contain residual taste or odor in concentrations that cause nuisance or adversely affect any designated beneficial uses.
7. The discharge of amendments or wastes shall not cause the concentrations of chemical constituents and radionuclides of ground water designated for use as domestic or municipal supply at the point of compliance, to exceed the applicable Water Quality Objectives or the applicable Maximum Contaminant Levels (MCLs).³
8. The discharge of amendments to property that is not under the control of the Discharger is prohibited. The "area under the control" of the Discharger is considered to be at the horizontal borders of the waste plume, owned by the Discharger, and/or where the Discharger holds an agreement with the property owner for purposes of investigation and remediation.

D. STANDARD PROVISIONS

1. **ENFORCEMENT**: The Regional Board may initiate enforcement action against the Discharger should the discharge of waste be in a manner which creates, or threatens to create conditions of pollution, contamination, or nuisance, as defined in Water Code section 13050.
2. **DUTY TO COMPLY**: The Discharger must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the Water Code and is grounds for (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a ROWD in application for new or revised WDRs.
3. **ENTRY AND INSPECTION**: The Discharger shall allow the Regional Board, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to do the following:

³ MCLs are specified in Title 22 of the California Code of Regulations, which are incorporated by reference in the Basin Plan: Table 64431-A of section 64331 (inorganic chemicals), Table 64431-B of section 64431 (fluoride), Table 64444-A of section 64444 (organic chemicals), and Table 4 of section 64443 (radioactivity).

- a. Enter upon the Discharger's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order,
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order,
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order, and
 - d. Sample or monitor, at reasonable times for the purposes of assuring compliance with this Order or as otherwise authorized by the Water Code, any substances or parameters at any location.
4. CIVIL MONETARY REMEDIES: The Water Code provides that any person who intentionally or negligently violates any WDRs issued, reissued, or amended by this Regional Board shall be liable civilly in accordance with Water Code section 13350 (d), (e), or (f).
5. PENALTIES FOR INVESTIGATION, MONITORING OR INSPECTION VIOLATIONS: The Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor and is subject to a civil liability in accordance with Water Code section 13268.
6. ENDANGERMENT OF HEALTH AND ENVIRONMENT: The Discharger shall report any noncompliance that may endanger health or the environment. Any such information shall be provided orally to the Regional Board within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the Discharger becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Regional Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
7. PRIOR NOTICE OF BYPASS: If a need for a discharge bypass is known in advance, the Discharger shall submit prior notice (stating, at a minimum, the purpose, anticipated dates, duration, level of treatment, and volume of bypass) and, if at all possible, such notice shall be submitted at least 10 days prior to the date of the bypass. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility to other than a sewer system.

8. **CORRECTIVE ACTION:** The Discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
9. **TREATMENT FAILURE:** In an enforcement action, that halting or reducing the permitted activity would have been necessary in order to maintain compliance with this Order shall not be a defense for the Discharger. Upon reduction, loss, or failure of the treatment facility, the Discharger shall, to the extent necessary to maintain compliance with this Order, control production or all discharges, or both, until the facility is restored, or an alternative method of treatment is provided. This provision applies for example, when the primary source of power of the treatment facility is failed, reduced, or lost.
10. **HAZARDOUS RELEASES:** Except for a discharge which is in compliance with these WDRs, any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Director of Environmental Health Services, County of San Diego in accordance with California Health and Safety Code section 5411.5, and the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Article 3.7 (commencing with section 8574.7) of Chapter 7 of Division 1 of Title 2 of the Government Code, and immediately notify the SWRCB or the appropriate Regional Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of Water Code section 13271 unless the Discharger is in violation of a prohibition in the applicable Water Quality Control Plan.
11. **PETROLEUM RELEASES:** Except for a discharge which is in compliance with these WDRs, any person who, without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Article 3.5 (commencing with section 8574.1) of Chapter 7 of Division 1 of Title 2 of the Government Code. This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to section 311 of the federal Clean Water Act or the discharge is in violation of a prohibition in the applicable Basin Plan.

12. ORDER REPOSITORY: A copy of this Order shall be maintained at the Discharger's facility and shall be available to operating personnel at all times.
13. RETENTION OF RECORDS: The Discharger shall retain records of all monitoring information, including all calibration and maintenance records, copies of all reports required by this Order, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board.
14. GENERAL REPORTING REQUIREMENT: The Discharger shall furnish to the Regional Board, within a reasonable time, any information which the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
15. ORDER REVISION: This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:
 - a. Violation of any terms or conditions of this Order.
 - b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.
 - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the Discharger for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

16. CHANGE IN DISCHARGE: The Discharger shall file a new ROWD at least 120 days prior to the following:
 - a. Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the wastes.
 - b. Significant change in the treatment or disposal method (e.g., change in the method of treatment which would significantly alter the nature of the waste).
 - c. Change in the disposal area from that described in the findings of this Order.
 - d. Increase in flow beyond that specified in this Order.
 - e. Other circumstances that result in a material change in character, amount, or location of the waste discharge.
 - f. Any planned change in the regulated facility or activity which may result in noncompliance with this Order.

17. **CHANGE IN OWNERSHIP:** This Order is not transferable to any person except after notice to the Regional Board. The Discharger shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new owner containing a specific date for the transfer of this Order's responsibility and coverage between the current Discharger and the new owner. This agreement shall include an acknowledgement that the existing Discharger is liable for violations up to the transfer date and that the new Discharger is liable from the transfer date on. The Regional Board may require modification or revocation and reissuance of this Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the Water Code.
18. **INCOMPLETE REPORTS:** Where the Discharger becomes aware that it failed to submit any relevant facts in a ROWD or submitted incorrect information in a ROWD or in any report to the Regional Board, it shall promptly submit such facts or information.
19. **REPORT DECLARATION:** All applications, reports, or information submitted to the Regional Board shall be signed and certified as follows:
 - a. The ROWD shall be signed as follows by either a principal Executive Officer or ranking elected official.
 - b. All other reports required by this Order and other information required by the Regional Board shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if all of the following are true:
 - (1) The authorization is made in writing by a person described in paragraph (a) of this provision,
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, and
 - (3) The written authorization is submitted to the Regional Board.
 - c. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."
20. **REGIONAL BOARD ADDRESS:** The Discharger shall submit reports required under this Order or other information required by the Regional Board to the following address:

California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, California 92123

F. NOTIFICATIONS

1. VESTED RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Discharger from liability under federal, state or local laws, nor create a vested right for the Discharger to continue the waste discharge.

2. U.S. ENVIRONMENTAL PROTECTION AGENCY REVIEW

These requirements have not been officially reviewed by the US Environmental Protection Agency and are not issued pursuant to section 402 of the federal Clean Water Act.

3. SEVERABILITY

The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

4. EFFECTIVE DATE

This Order becomes effective on the date of adoption by the Regional Board. This Order is in effect until terminated by the Regional Board. Project enrollment under this Order may be terminated, by the Regional Board at any time upon giving reasonable notice to the Discharger.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on November 12, 2008.


JOHN H. ROBERTUS
Executive Officer

**ATTACHMENT A
To
ORDER NO. R9-2008-0081**

**Application / General Information Form for WDRs
FORM 200**

INTRODUCTION

This application package constitutes a Report of Waste Discharge (ROWD) pursuant to California Water Code Section 13260. Section 13260 states that persons discharging or proposing to discharge waste that could affect the quality of the waters of the State, other than into a community sewer system, shall file a ROWD containing information which may be required by the appropriate Regional Water Quality Control Board (RWQCB).

This package is to be used to start the application process for all waste discharge requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permits* issued by a RWQCB except:

- a) Those landfill facilities that must use a joint Solid Waste Facility Permit Application Form, California Integrated Waste Management Board Form E-1-77; and
- b) General WDRs or general NPDES permits that use a Notice of Intent to comply or specify the use of an alternative application form designed for that permit.

This application package contains:

1. Application/General Information Form for WDRs and NPDES Permits [Form 200 (10/97)].
2. Application/General Information Instructions.

Instructions

Instructions are provided to assist you with completion of the application. If you are unable to find the answers to your questions or need assistance with the completion of the application package, please contact your RWQCB representative. *The RWQCBs strongly recommend that you make initial telephone or personal contact with RWQCB regulatory staff to discuss a proposed new discharge before submitting your application.* The RWQCB representative will be able to answer procedural and annual fee related questions that you may have. (See map and telephone numbers inside of application cover.)

All dischargers regulated under WDRs and NPDES permits must pay an annual fee, except dairies, which pay a filing fee only. The RWQCB will notify you of your annual fee based on an evaluation of your proposed discharge. Please do NOT submit a check for your first annual fee or filing fee until requested to do so by a RWQCB representative. Dischargers applying for reissuance (renewal) of an existing NPDES permit or update of an existing WDR will be billed through the annual fee billing system and are therefore requested NOT to submit a check with their application. Checks should be made payable to the State Water Resources Control Board.

Additional Information Requirements

A RWQCB representative will notify you within 30 days of receipt of the application form and any supplemental documents whether your application is complete. If your application is incomplete, the RWQCB representative will send you a detailed list of discharge specific information necessary to complete the application process. The completion date of your application is normally the date when all required information, including the correct fee, is received by the RWQCB.

*** NPDES PERMITS:** If you are applying for a permit to discharge to surface water, you will need an NPDES permit which is issued under both State and Federal law and may be required to complete one or more of the following Federal NPDES permit application forms: Short Form A, Standard Form A, Forms 1, 2B, 2C, 2D, 2E, and 2F. These forms may be obtained at a RWQCB office or can be ordered from the National Center for Environmental Publications and Information at (513) 891-6561.



APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



INSTRUCTIONS FOR COMPLETING THE APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR: WASTE DISCHARGE REQUIREMENTS/NPDES PERMIT

If you have any questions on the completion of any part of the application, please contact your RWQCB representative. A map of RWQCB locations, addresses, and telephone numbers is located on the reverse side of the application cover.

I. FACILITY INFORMATION

You must provide the factual information listed below for ALL owners, operators, and locations and, where appropriate, for ALL general partners and lease holders.

- A. FACILITY: Legal name, physical address including the county, person to contact, and phone number at the facility. (NO P.O. Box numbers! If no address exists, use street and nearest cross street.)
B. FACILITY OWNER: Legal owner, address, person to contact, and phone number. Also include the owner's Federal Tax Identification Number.
OWNER TYPE: Check the appropriate Owner Type. The legal owner will be named in the WDRs/NPDES permit.
C. FACILITY OPERATOR (The agency or business, not the person): If applicable, the name, address, person to contact, and telephone number for the facility operator. Check the appropriate Operator Type. If identical to B. above, enter "same as owner".
D. OWNER OF THE LAND: Legal owner of the land(s) where the facility is located, address, person to contact, and phone number. Check the appropriate Owner Type. If identical to B. above, enter "same as owner".
E. ADDRESS WHERE LEGAL NOTICE MAY BE SERVED: Address where legal notice may be served, person to contact, and phone number. If identical to B. above, enter "same as owner".
F. BILLING ADDRESS: Address where annual fee invoices should be sent, person to contact, and phone number. If identical to B. above, enter "same as owner".



**APPLICATION/REPORT OF WASTE DISCHARGE
GENERAL INFORMATION FORM FOR
WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT**

**II. TYPE OF DISCHARGE**

Check the appropriate box to describe whether the waste will be discharged to: A. Land, or B. Surface Water.

Check the appropriate box(es) which best describe the activities at your facility.

Hazardous Waste - If you check the Hazardous Waste box, STOP and contact a representative of the RWQCB for further instructions.

Landfills - A separate form, APPLICATION FOR SOLID WASTE FACILITY PERMIT/WASTE DISCHARGE REQUIREMENTS, California Integrated Waste Management Board Form E-1-77, may be required. Contact a RWQCB representative to help determine the appropriate form for your discharge.

III. LOCATION OF THE FACILITY

1. Enter the Assessor's Parcel Number(s) (APN), which is located on the property tax bill. The number can also be obtained from the County Assessor's Office. Indicate the APN for both the facility and the discharge point.
2. Enter the Latitude of the entrance to the proposed/existing facility and of the discharge point. Latitude and longitude information can be obtained from a U.S. Geological Survey quadrangle topographic map. Other maps may also contain this information.
3. Enter the Longitude of the entrance to the proposed/existing facility and of the discharge point.

IV. REASON FOR FILING**NEW DISCHARGE OR FACILITY:**

A discharge or facility that is proposed but does not now exist, or that does not yet have WDRs or an NPDES permit.

CHANGE IN DESIGN OR OPERATION:

A material change in design or operation from existing discharge requirements. Final determination of whether the reported change is material will be made by the RWQCB.

CHANGE IN QUANTITY/TYPE OF DISCHARGE:

A material change in characteristics of the waste from existing discharge requirements. Final determination of whether the reported change would have a significant effect will be made by the RWQCB.

CHANGE IN OWNERSHIP/OPERATOR:

Change of legal owner of the facility. Complete Parts I, III, and IV only and contact the RWQCB to determine if additional information is required.

WASTE DISCHARGE REQUIREMENTS UPDATE OR NPDES PERMIT REISSUANCE:

WDRs must be updated periodically to reflect changing technology standards and conditions. A new application is required to reissue an NPDES permit which has expired.

OTHER:

If there is a reason other than the ones listed, please describe the reason on the space provided. (If more space is needed, attach a separate sheet.)



**APPLICATION/REPORT OF WASTE DISCHARGE
GENERAL INFORMATION FORM FOR
WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT**

**V. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

It should be emphasized that communication with the appropriate RWQCB staff is vital before starting the CEQA documentation, and is recommended before completing this application. There are Basin Plan issues which may complicate the CEQA effort, and RWQCB staff may be able to help in providing the needed information to complete the CEQA documentation.

Name the Lead Agency responsible for completion of CEQA requirements for the project, i.e., completion and certification of CEQA documentation.

Check YES or NO. Has a public agency determined that the proposed project is exempt from CEQA? If the answer is YES, state the basis for the exemption and the name of the agency supplying the exemption on the space provided. (Remember that, if extra space is needed, use an extra sheet of paper, but be sure to indicate the attached sheet under Section VII. Other.)

Check YES or NO. Has the "Notice of Determination" been filed under CEQA? If YES, give the date the notice was filed and enclose a copy of the Notice of Determination and the Initial Study, Environmental Impact Report, or Negative Declaration. If NO, check the box of the expected type of CEQA document for this project, and include the expected date of completion using the timelines given under CEQA. The date of completion should be taken as the date that the Notice of Determination will be submitted. (If not known, write "Unknown")

VI. OTHER REQUIRED INFORMATION

To be approved, your application MUST include a COMPLETE characterization of the discharge. If the characterization is found to be incomplete, RWQCB staff will contact you and request that additional specific information be submitted.

This application MUST be accompanied by a site map. A USGS 7.5' Quadrangle map or a street map, if more appropriate, is sufficient for most applications.

VII. OTHER

If any of the answers on your application form need further explanation, attach a separate sheet. Please list any attachments with the titles and dates on the space provided.

VIII. CERTIFICATION

Certification by the owner of the facility or the operator of the facility, if the operator is different from the owner, is required. The appropriate person must sign the application form.

Acceptable signatures are:

1. **for a corporation**, a principal executive officer of at least the level of senior vice-president;
2. **for a partnership or individual (sole proprietorship)**, a general partner or the proprietor;
3. **for a governmental or public agency**, either a principal executive officer or ranking elected/appointed official.

DISCHARGE SPECIFIC INFORMATION

In most cases, a request to supply additional discharge specific information will be sent to you by a representative of the RWQCB. If the RWQCB determines that additional discharge specific information is not needed to process your application, you will be so notified.



APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



I. FACILITY INFORMATION

A. Facility:

Name:			
Address:			
City:	County:	State:	Zip Code:
Contact Person:		Telephone Number:	

B. Facility Owner:

Name:		Owner Type (Check One)	
Address:		1. <input type="checkbox"/> Individual	2. <input type="checkbox"/> Corporation
City:	State:	3. <input type="checkbox"/> Governmental Agency	4. <input type="checkbox"/> Partnership Agency
Zip Code:		5. <input type="checkbox"/> Other: _____	
Contact Person:		Telephone Number:	Federal Tax ID:

C. Facility Operator (The agency or business, not the person):

Name:		Operator Type (Check One)	
Address:		1. <input type="checkbox"/> Individual	2. <input type="checkbox"/> Corporation
City:	State:	3. <input type="checkbox"/> Governmental Agency	4. <input type="checkbox"/> Partnership Agency
Zip Code:		5. <input type="checkbox"/> Other: _____	
Contact Person:		Telephone Number:	

D. Owner of the Land:

Name:		Owner Type (Check One)	
Address:		1. <input type="checkbox"/> Individual	2. <input type="checkbox"/> Corporation
City:	State:	3. <input type="checkbox"/> Governmental Agency	4. <input type="checkbox"/> Partnership Agency
Zip Code:		5. <input type="checkbox"/> Other: _____	
Contact Person:		Telephone Number:	

E. Address Where Legal Notice May Be Served:

Address:		
City:	State:	Zip Code:
Contact Person:		Telephone Number:

F. Billing Address:

Address:		
City:	State:	Zip Code:
Contact Person:		Telephone Number:



APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



II. TYPE OF DISCHARGE

Check Type of Discharge(s) Described in this Application (A or B):

[] A. WASTE DISCHARGE TO LAND

[] B. WASTE DISCHARGE TO SURFACE WATER

Check all that apply:

- [] Domestic/Municipal Wastewater Treatment and Disposal
[] Cooling Water
[] Mining
[] Waste Pile
[] Wastewater Reclamation
[] Other, please describe:

- [] Animal Waste Solids
[] Land Treatment Unit
[] Dredge Material Disposal
[] Surface Impoundment
[] Industrial Process Wastewater

- [] Animal or Aquacultural Wastewater
[] Biosolids/Residual
[] Hazardous Waste (see instructions)
[] Landfill (see instructions)
[] Storm Water

III. LOCATION OF THE FACILITY

Describe the physical location of the facility.

1. Assessor's Parcel Number(s) Facility: Discharge Point:

2. Latitude Facility: Discharge Point:

3. Longitude Facility: Discharge Point:

IV. REASON FOR FILING

[] New Discharge or Facility [] Changes in Ownership/Operator (see instructions)
[] Change in Design or Operation [] Waste Discharge Requirements Update or NPDES Permit Reissuance
[] Change in Quantity/Type of Discharge [] Other:

V. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Name of Lead Agency:
Has a public agency determined that the proposed project is exempt from CEQA? [] Yes [] No
Basis for Exemption/Agency:
Has a "Notice of Determination" been filed under CEQA? [] Yes [] No
Expected CEQA Documents: [] EIR [] Negative Declaration
Expected CEQA Completion Date:

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY



State of California Regional Water Quality Control Board

APPLICATION/REPORT OF WASTE DISCHARGE GENERAL INFORMATION FORM FOR WASTE DISCHARGE REQUIREMENTS OR NPDES PERMIT



VI. OTHER REQUIRED INFORMATION

Please provide a COMPLETE characterization of your discharge. A complete characterization includes, but is not limited to, design and actual flows, a list of constituents and the discharge concentration of each constituent, a list of other appropriate waste discharge characteristics, a description and schematic drawing of all treatment processes, a description of any Best Management Practices (BMPs) used, and a description of disposal methods.

Also include a site map showing the location of the facility and, if you are submitting this application for an NPDES permit, identify the surface water to which you propose to discharge. Please try to limit your maps to a scale of 1:24,000 (7.5' USGS Quadrangle) or a street map, if more appropriate.

VII. OTHER

Attach additional sheets to explain any responses which need clarification. List attachments with titles and dates below:

Blank lines for listing attachments with titles and dates.

You will be notified by a representative of the RWQCB within 30 days of receipt of your application. The notice will state if your application is complete or if there is additional information you must submit to complete your Application/Report of Waste Discharge, pursuant to Division 7, Section 13260 of the California Water Code.

VIII. CERTIFICATION

"I certify under penalty of law that this document, including all attachments and supplemental information, were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Print Name: _____ Title: _____
Signature: _____ Date: _____

FOR OFFICE USE ONLY

Table with 4 columns: Date Form 200 Received, Letter to Discharger, Fee Amount Received, Check #.

California Environmental Protection Agency

Bill of Rights for Environmental Permit Applicants

California Environmental Protection Agency (Cal/EPA) recognizes that many complex issues must be addressed when pursuing reforms of environmental permits and that significant challenges remain. We have initiated reforms and intend to continue the effort to make environmental permitting more efficient, less costly, and to ensure that those seeking permits receive timely responses from the boards and departments of the Cal/EPA. To further this goal, Cal/EPA endorses the following precepts that form the basis of a permit applicant's "Bill of Rights."

1. Permit applicants have the right to assistance in understanding regulatory and permit requirements. All Cal/EPA programs maintain an Ombudsman to work directly with applicants. Permit Assistance Centers located throughout California have permit specialists from all the State, regional, and local agencies to identify permit requirements and assist in permit processing.
2. Permit applicants have the right to know the projected fees for review of applications, how any costs will be determined and billed, and procedures for resolving any disputes over fee billings.
3. Permit applicants have the right of access to complete and clearly written guidance documents that explain the regulatory requirements. Agencies must publish a list of all information required in a permit application and of criteria used to determine whether the submitted information is adequate.
4. Permit applicants have the right of timely completeness determinations for their applications. In general, agencies notify the applicant within 30 days of any deficiencies or determine that the application is complete. California Environmental Quality Act (CEQA) and public hearing requests may require additional information.
5. Permit applicants have the right to know exactly how their applications are deficient and what further information is needed to make their applications complete. Pursuant to California Government code Section 65944, after an application is accepted as complete, an agency may not request any new or additional information that was not specified in the original application.
6. Permit applicants have the right of a timely decision on their permit application. The agencies are required to establish time limits for permit reviews.
7. Permit applicants have the right to appeal permit review time limits by statute or administratively that have been violated without good cause. For state environmental agencies, appeals are made directly to the Cal/EPA Secretary or to a specific board. For local environmental agencies, appeals are generally made to the local governing board or, under certain circumstances, to Cal/EPA. Through this appeal, applicants may obtain a set date for a decision on their permit and, in some cases, a refund of all application fees (ask boards and departments for details).
8. Permit applicants have the right to work with a single lead agency where multiple environmental approvals are needed. For multiple permits, all agency actions can be consolidated under a lead agency. For site remediation, all applicable laws can be administered through a single agency.
9. Permit applicants have the right to know who will be reviewing their application and the time required to complete the full review process.

**ATTACHMENT B
To
ORDER NO. R9-2008-0081**

Monitoring and Reporting Program No. R9-2008-0081

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**MONITORING AND REPORTING PROGRAM NO. R9-2008-0081
FOR IN-SITU GROUNDWATER REMEDIATION PROJECTS WITHIN
THE SAN DIEGO REGION**

A. MONITORING PROVISIONS

1. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this Order. Monitoring points shall not be changed without the Discharger providing notification and justification for the change to the California Regional Water Quality Control Board, San Diego Region (hereafter Regional Board).
2. Monitoring must be conducted according to US Environmental Protection Agency test procedures "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (also known as SW-846), that have been approved for use in complying with the Resource Conservation and Recovery Act (RCRA) regulations, unless other test procedures have been specified in this Order.
3. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Public Health or a laboratory approved by the Regional Board.
4. Monitoring results must be reported on discharge monitoring report forms approved by the Regional Board.
5. If the Discharger monitors any pollutants more frequently than required by this order, using applicable SW 846 test procedures, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Discharger's monitoring report. The increased frequency of monitoring shall also be reported.
6. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The individual(s) who performed the sampling or measurements;
 - (c) The methods used for ground water purging/sampling;
 - (d) The date(s) analyses were performed;
 - (e) The individual(s) who performed the analyses;
 - (f) The analytical techniques or method used; and
 - (g) The results of such analyses.

7. All monitoring instruments and devices which are used by the Discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy.
8. The Discharger shall report all instances of noncompliance, submit a statement of actions undertaken or proposed that will bring the discharge into full compliance with requirements, and submit a timetable for corrective action.
9. All reports, plans and documents required under this Order shall be prepared under the direction of appropriately qualified professionals. The lead professional performing engineering and geologic evaluations and judgments shall sign and affix their professional geologist or civil engineering license stamp to all technical reports, plans or documents submitted to the Regional Board.
10. All information submitted to the Regional Board in compliance with this Order in paper copy format is also required to be submitted on CD and electronically via the Internet into the GeoTracker database. To comply with state regulations,⁴ the update to the Geotracker database must include the following minimum information:
 - a. Data generated after the effective date of the regulations³ by chemical analysis of soil, vapor, or water samples (including surface water, ground water and influent/effluent water samples from remediation systems), shall be submitted in Electric Data File (EDF) format.
 - b. The latitude and longitude of any permanent monitoring well for which data is reported in EDF format, accurate to within 1 meter and referenced to a minimum of two reference points from the California Spatial Reference System (CSRS-H), if available.
 - c. The surveyed elevation relative to a geodetic datum of any permanent monitoring well.
 - d. The elevation of ground water in any permanent monitoring well relative to the surveyed elevation.
 - e. A site map or maps showing the location of all sampling points referred to in the report.
 - f. The depth to the screened interval and the length of screened interval for any permanent monitoring well.
 - g. Boring logs, in PDF format.

⁴ California Code of Regulations, Title 23, Sections 3893, et seq.

- h. A complete copy of the report, in PDF format, which includes the signed transmittal letter and professional certification.

The GeoTracker website address is
[https:// geotracker.waterboards.ca.gov](https://geotracker.waterboards.ca.gov). Deadlines for electronic
submittals coincide with deadlines for paper copy submittals.

B. MONITORING PLAN

1. The Discharger shall develop and implement a site specific monitoring and reporting plan that will adequately assess the effectiveness of the project's management measures to prevent impacts to the quality and beneficial uses of the ground water downgradient of the contaminant plume. In addition the plan shall include measures to assess the effectiveness of the project to remediate petroleum hydrocarbons and VOCs at the subject site. The plan shall identify the following:
 - (a) The point(s) of compliance⁵ and monitoring points, including monitoring well and locations, to be used assess the impacts to water quality during the discharge of wastes.
 - (b) The constituents to be analyzed, which at a minimum shall include the constituents of concern, anticipated byproducts (including aqueous and vapor phase byproducts), process residual wastes, pH, total dissolved solids, dissolved oxygen, hexavalent chromium, other geochemical parameters potentially impacted by the waste, and other constituents as needed to assess impacts to water quality.
 - (c) The frequency of the monitoring prior to, during, and after completion of the remediation project.⁶
2. The Executive Officer is hereby authorized to prescribe changes to the Monitoring and Reporting Program No. R9-2008-0081 and the monitoring and reporting plan submitted by each authorized Discharger.

⁵ A point of compliance is a monitoring point, located downgradient, outside the groundwater plume, and outside the treatment area used assess the impacts to water quality and the effectiveness of the chemicals.

⁶ Monitoring of ground water (and soil vapor, if applicable), at a minimum, should be on a quarterly basis in the first year after the injection of chemicals into soil and/or ground water; depending on site conditions more frequent monitoring may be proposed as necessary; monitoring frequencies after the first year of injection should be proposed as appropriate in the monitoring plan based on site conditions.

C. REPORT SCHEDULE

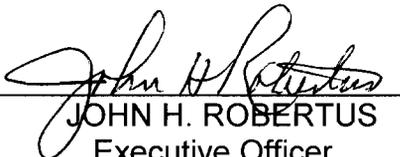
1. Monitoring reports shall be submitted to the Regional Board in accordance with the following schedule:

REPORTING FREQUENCY*	REPORT PERIOD	REPORT DUE
Quarterly	January – March April – June July – September October - December	May 1 st August 1 st November 1 st February 1st

* Frequency listed for the first year of monitoring

Monitoring reports shall be submitted to:

Executive Officer
California Regional Water Quality Control Board
San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Ordered by: 
JOHN H. ROBERTUS
Executive Officer

Date: November 12, 2008