

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. R4-2004-0146

**GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS**

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

1. California Water Code (CWC) section 13260(a)(1) requires that any person discharging wastes or proposing to discharge wastes within the Regional Board's jurisdiction to any place other than into a community wastewater collection system, which could affect the quality of the waters of the State, shall file a Report of Waste Discharge with the Regional Board. The Regional Board shall then prescribe waste discharge requirements (WDRs) to that person for the discharge or proposed discharge of wastes.
2. CWC section 13263(i) provides that a regional board may prescribe general WDRs for discharges produced by similar operations, involving similar types of waste and requiring similar treatment standards, when the regional board determines that the discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.
3. Discharges from residential onsite wastewater treatment systems¹ infiltrate groundwater and, where in hydraulic connection with nearby surface waters, can pose a threat to surface water quality, and are considered a discharge of waste that could affect the quality of waters of the State.
4. Discharges to land from residential onsite wastewater treatment systems have certain common characteristics, such as similar constituents, concentrations of constituents, disposal techniques, flow ranges and similar treatment standards. These types of discharges are more appropriately regulated under general WDRs.
5. General WDRs enable Regional Board staff to expedite the processing of requirements, simplify the application process for dischargers, better utilize limited staff resources, and avoid the expense and time involved in repetitive public noticing, hearings, and permit adoptions.

¹ For the purposes of this Order, onsite wastewater treatment systems are defined as a septic tank and subsurface disposal system.

6. These general WDRs apply to discharges from residential onsite wastewater treatment systems throughout the entire Los Angeles Region (Los Angeles and Ventura Counties). However, the Regional Board has determined that residential onsite wastewater treatment systems pose a significant threat to groundwater and surface water quality in areas of shallow groundwater, areas adjacent to water bodies listed as impaired pursuant to section 303(d) of the Clean Water Act (33 USC § 1313(d)), areas where groundwater is used for domestic purposes and areas with nitrogen or bacterial contamination of ground or surface waters. Therefore, these general WDRs include considerations specifically addressing onsite wastewater treatment systems in these areas.
7. Local agencies with land use and planning powers in the Los Angeles Region regulate onsite wastewater treatment systems based on California Uniform Building and Plumbing Codes. Local agencies require soil analysis, site evaluation, percolation tests, and determination of proximity to surface waters and depth to groundwater before onsite wastewater treatment system approval. These general WDRs supplement local agency regulations by ensuring that onsite wastewater treatment systems do not adversely affect groundwater and surface water quality, especially in the areas described in finding No. 6.
8. These WDRs shall not be issued where a local agency has signed a memorandum of understanding with the Regional Board for the management and oversight of onsite wastewater treatment systems and where the Regional Board has issued waivers to owners of residential onsite wastewater treatment systems.
9. The Regional Board previously adopted Order No. 91-94 for private subsurface sewage disposal systems in subdivisions and residential developments of more than two homes in areas where groundwater is used or may be used for domestic purposes and Order No. 01-031 for small commercial and multifamily residential subsurface sewage disposal systems. This Order covers residential discharges which are not included within the residential discharges covered by Order Nos. 91-94 and 01-031.
10. The Regional Board adopted a Revised Water Quality Control Plan (Basin Plan) for the Los Angeles Region on June 13, 1994. The Basin Plan designates beneficial uses of, and establishes water quality objectives for, groundwater and surface water within the Los Angeles Region. Beneficial uses designated for groundwater and surface water include, among others: municipal supply, industrial service supply, fresh water replenishment, marine and wetland habitats, estuarine and wildlife habitats, commercial and sport fishing, water contact and non-contact recreation, shellfish harvesting, and agricultural supply. To the extent that the Basin Plan designates additional or different beneficial uses, the Basin Plan shall control.
11. All WDRs must implement the Basin Plan. These general WDRs require dischargers to comply with all applicable Basin Plan provisions, including any prohibitions, water quality objectives and total maximum daily loads (TMDLs) governing the discharge.

12. This Order establishes minimum standards only for residential onsite wastewater treatment systems. Dischargers must comply with any more stringent standards in the Basin Plan.
13. Because this Order is intended to serve as general WDRs and covers discharges throughout the Los Angeles Region, the receiving water limits are established to comply with the most protective water quality objectives for existing and potential beneficial uses for groundwater and surface water in the Los Angeles Region.
14. These general WDRs are intended to cover both new and existing residential onsite wastewater treatment systems. The adoption of WDRs for existing residential onsite wastewater treatment systems is exempt from the California Environmental Quality Act (CEQA) under California Code of Regulations (CCR), title 14, section 15261 or section 15301 as ongoing projects or existing facilities.
15. The Regional Board has assumed lead-agency role for this project under the California Environmental Quality Act (Public Resources Code section 21000 et seq.) and has conducted an Initial Study in accordance with section 15063 of the "State CEQA Guidelines" at 14 CCR, section 15000 et seq. Based upon the Initial Study, the Regional Board staff prepared a Mitigated Negative Declaration. Regional Board staff found that the adoption of WDRs for new onsite wastewater treatment systems, as mitigated, will not have a significant adverse effect on the environment. The Regional Board is adopting the Mitigated Negative Declaration concurrently with its adoption of this Order.
16. This Order does not preempt or supersede the authority of municipalities, flood control agencies, or other local agencies to impose more stringent controls on discharges of waste subject to their jurisdiction.
17. The Regional Board has notified interested agencies and persons of its intent to prescribe general WDRs as described in this Order, and has provided them with an opportunity to submit their written views and recommendations for the tentative requirements.
18. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharges to be regulated under this Order and to the tentative requirements.
19. Pursuant to CWC section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, California 95812, within 30 days of adoption of the Order.
20. These general WDRs are exempt from the provisions of 23 CCR, div. 3, chp. 15 pursuant to 23 CCR 2511(a).

It is hereby ordered that: in order to meet the provisions contained in Division 7 of the CWC and regulations adopted thereunder, discharges of wastewater from residential onsite wastewater treatment systems that discharge to land and meet all conditions of applicability shall comply with the following:

A. Eligibility

1. Existing and future discharges of wastewater from residential onsite wastewater treatment systems to land are eligible for coverage under this Order.
2. To be covered under this Order, discharges must meet the following criteria:
 - a. Pollutant concentrations in the discharge shall not cause or contribute to violation of any applicable water quality objective for the receiving waters, including discharge prohibitions and receiving water limits, and
 - b. The discharge shall not cause or contribute to acute or chronic toxicity in receiving waters,
 - c. The discharge shall pass through an appropriate treatment system to meet the requirements of the Order, and
 - d. The discharger shall not come within the discharges subject to regulation under Regional Board Order Nos. 91-94 or 01-031.
3. Discharges covered under this Order shall be ranked as low-risk, medium-risk, or high-risk by the Regional Board Executive Officer (Executive Officer) based upon the information submitted by the discharger in accordance with part B of this Order and shall be subject to corresponding requirements.
 - a. Low-risk discharges are defined as discharges from residential onsite wastewater treatment systems not meeting the criteria for medium-risk or high-risk discharges in parts A.3.b. and A.3.c. of this Order.

Dischargers meeting the criteria for low-risk discharges shall submit an application in accordance with part B of this Order and comply with the Discharge Prohibitions, General Provisions and Compliance and Enforcement provisions of parts D, E, and I and the Standard Provisions in Attachment A of this Order.
 - b. Medium-risk discharges are defined as discharges from residential onsite wastewater treatment systems:
 - having less than a 10 foot vertical separation to groundwater, or
 - having less than a 100 foot setback to a water body not identified as impaired under section 303(d) of the Clean Water Act.

Dischargers meeting the criteria for medium-risk discharges shall submit an application in accordance with part B of this Order and comply with the Discharge Prohibitions, General Provisions and Compliance and Enforcement provisions, as well as Specific Provisions of parts D, E, F and I and the Standard Provisions in Attachment A of this Order.

- c. High-risk discharges are defined as discharges from residential onsite wastewater treatment systems:
- having less than a five foot vertical separation to groundwater, or
 - having less than a 600 foot setback from a water body identified as impaired for nutrients and/or bacteria under section 303(d) of the Clean Water Act, or
 - having less than a 600 foot setback from a water supply well where the subsurface consists of alluvial material, or
 - having less than a 900 foot setback from a water supply well where the subsurface geology consists of fractured bedrock, or
 - located in an area with documented nitrate or bacterial contamination of surface water or groundwater, or
 - located within 100 feet of areas designated as aquatic Significant Ecological Areas or Significant Biological Resources in the Basin Plan.

With regard to the criteria for less than 600 foot setback from a water supply well in alluvial material and less than 900 foot setback from a water well in fractured bedrock, the discharger may submit geologic or geographic physical conditions that mitigate the risk to the Executive Officer for consideration. The geologic or geographic physical conditions must be verified by a registered geologist or civil engineer.

In addition, if a TMDL is subsequently adopted for a watershed, then the criteria for determining high-risk discharges specified by the TMDL, if more protective than the criteria specified in this Order, shall be applied.

Dischargers meeting the criteria for high-risk discharges shall submit an application in accordance with part B of this Order and comply with the Discharge Prohibitions, General Provisions and Compliance and Enforcement provisions, as well as Specific Provisions, Receiving Water Limitations and Monitoring and Reporting Requirements of parts D, E, F, G, H and I and the Standard Provisions in Attachment A of this Order.

4. In the event that an individual permit with more specific requirements is issued to a discharger, the applicability of this Order to that discharger is automatically terminated on the effective date of the individual permit.

B. Application

1. Dischargers eligible for coverage under this Order shall submit the following:
 - a. Notice of Intent (NOI), in the form of Attachment B of this Order, to comply with these general WDRs.
 - b. A project map.
 - c. A first annual fee corresponding to the appropriate Threat to Water Quality and Complexity in the fee schedule listed in section 2200 of title 23, California Code of Regulations (CCR). The check or money order shall be made payable to the "State Water Resources Control Board".
 - d. Any additional information that the Executive Officer deems necessary to evaluate the discharge.
2. Deadline for Submission
 - a. New dischargers shall file a complete application at least 45 days before commencement of the discharge.
 - b. Existing dischargers shall file an application for the repair of any portion of the onsite wastewater treatment system or the addition of any plumbing fixture units or bedroom equivalents to the facility served by the onsite wastewater treatment system.
 - c. All existing discharges within 600 feet of a water body identified as impaired for nutrients and/or bacteria under section 303(d) of the Clean Water Act shall file an application by January 1, 2008.
 - d. The Executive Officer may require an existing discharger to file an application in order to meet the requirements of any applicable TMDL or in order to ensure compliance with any water quality objectives.

C. Authorization

1. To be authorized to discharge under this Order, the discharger must complete an application in accordance with the requirements of Part B of this Order.
2. Upon receipt of the application, the Executive Officer shall determine the applicability of this Order to the discharge and determine the appropriate risk level for the discharge. If the discharge is eligible, the Executive Officer shall notify the discharger that the discharge is authorized under the terms and conditions of this Order and prescribe an appropriate monitoring and reporting program for high-risk discharges. For new discharges, the discharge shall not commence until receipt of the Executive Officer's written determination of eligibility for coverage under this general permit.

D. Discharge Prohibitions

1. Wastes discharged into the onsite wastewater treatment system shall be limited to residential wastewater only; no industrial or commercial wastes shall be discharged into the onsite wastewater treatment system.
2. Any additional hookups to the residential onsite wastewater treatment system without prior written approval from the Executive Officer are prohibited.
3. The surfacing or overflow of sewage from the residential onsite wastewater treatment system at any time and at any location is prohibited.
4. The disposal of wastes in geologically unstable areas or so as to cause earth movement is prohibited.
5. The discharge of wastes containing any substance in concentrations toxic to human, animal, plant, or aquatic life is prohibited.
6. Bypass or overflow of treated or untreated waste is prohibited.
7. The unlawful discharge of waste to land not owned or controlled by the discharger is prohibited.
8. The discharge of wastes from residential onsite wastewater treatment systems not authorized by this general WDR or other Order or waiver by the Regional Board is prohibited.

E. General Provisions

1. Dischargers covered under this Order shall comply with all applicable Basin Plan provisions, including any prohibitions and water quality objectives governing onsite wastewater treatment systems.
2. The discharger shall not discharge waste in excess of the maximum design and disposal capacity of the onsite wastewater treatment system.
3. Odors of sewage origin shall not be detectable.
4. Septic tanks shall be pumped only by a duly authorized service.
5. The discharger shall ensure that the contents of the onsite wastewater treatment system are disposed of in accordance with all applicable laws and ordinances.
6. No part of the disposal system(s) shall extend to a depth where waste may pollute groundwater.

7. The onsite wastewater treatment systems shall be protected from damage by storm flows or runoff.
8. New residential onsite wastewater treatment systems shall reserve sufficient land area for future replacement of the subsurface disposal area until such time as the discharger's facility is connected to a municipal sewerage system. Traditional² onsite wastewater treatment systems shall provide future 100 percent replacement area. Alternative³ onsite wastewater treatment systems may provide less than 100 percent future replacement area if authorized by the Executive Officer.
9. The discharger shall maintain, for inspection by Regional Board staff, the as-built construction and operation details of the wastewater treatment and disposal system. Onsite wastewater treatment systems that were constructed prior to the effective date of this Order and have no such records are exempt from this requirement.
10. All residential onsite wastewater treatment systems shall be readily accessible for sampling and inspection.
11. 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:
 - a. Enter upon the discharger's premises, at reasonable times, 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 CWC, any substances or parameters at any location (CWC section 13267).
12. This Order does not relieve the discharger from responsibility to obtain other necessary local, State, and Federal permits to construct facilities necessary for compliance with this Order, nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.
13. Within six months after a community wastewater collection (sewer) system becomes available, the following dischargers shall connect to the community sewer system and properly close the onsite wastewater treatment system:

² Traditional onsite wastewater treatment systems are defined as systems consisting of a septic tank and leachfield or seepage pit.

³ Alternative onsite wastewater treatment systems are defined as systems consisting of a septic tank and leachfield or seepage pit plus an advanced treatment component.

- high-risk dischargers as defined in part A.3.c. of this Order,
- discharges from onsite wastewater treatment systems subject to repair, and
- discharges from onsite wastewater treatment systems serving a facility where any plumbing fixture units or bedroom equivalents are added to the facility.

The community sewer system shall be considered as being available when such community sewer system, or any building or exterior drainage facility connected thereto, is located within 200 feet of the discharger's property.

14. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the discharger's coverage under this Order. The discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.
15. After notice and opportunity for a hearing, coverage of an individual discharge under this Order may be terminated or modified for cause, including but not limited to the following:
 - a. Violation of any term or condition contained in this Order,
 - b. Obtaining this Order by misrepresentation or failure to disclose all relevant facts, or
 - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
16. The filing of a request by the discharger for an Order modification, revocation and issuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.
17. 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, do not protect the discharger from his liability under Federal, State or local laws, and do not create a vested right for the discharger to continue the waste discharge (CWC section 13263(g)).
18. This Order includes the attached Standard Provisions Applicable to Waste Discharge Requirements (Standard Provisions), adopted November 7, 1990 (Attachment A), which are incorporated herein by reference. If there is any conflict between provisions stated herein and the Standard Provisions, these provisions stated herein will prevail.
19. Attachments A, B, and C to this Order are incorporated herein by reference.

F. Specific Provisions

Specific provisions shall apply to discharges identified as medium-risk and high-risk in parts A.3.b and A.3.c of this Order.

1. Dischargers shall submit the results of the annual inspection of the onsite wastewater treatment system, including the septic tank and subsurface disposal system, to the Regional Board in accordance with the operation and maintenance requirements included in part A of Attachment C. If the inspection indicates a malfunction of any part of the onsite wastewater treatment system, then the discharger shall submit plans for corrective action in the inspection report.
2. Dischargers shall contract with a qualified service provider for the monitoring of the onsite wastewater treatment system as specified in part B of Attachment C.

G. Receiving Water Limitations

Receiving water limitations shall apply to discharges identified as high-risk in part A.3.c. of this Order.

1. Receiving water, for the purpose of the general WDRs, shall be defined as groundwater at a point no greater than fifty (50) feet hydraulically downgradient of the furthest extent of the disposal area, or the property line of the discharger, whichever is less. Compliance with receiving water limitations shall be determined using a downgradient well with site specific groundwater flow and direction. The number, location and construction details of all monitoring wells are subject to approval of the Executive Officer. Dischargers with disposal systems in close proximity to each other may, in order to reduce monitoring costs and complexity, and at the Executive Officer's discretion, propose a joint receiving water monitoring program. Dischargers may also enroll in a regional monitoring program approved by the Executive Officer.
2. The pH in the receiving water shall at all times be between 6.5 to 8.5 pH units.
3. The receiving water shall not contain constituents in excess of the following limits:

Constituent	Units ^(a)	Maximum
Total Nitrogen ^(b)	mg/L	10
Nitrate-nitrogen	mg/L	10
Nitrite-nitrogen	mg/L	1
Total Coliform	MPN/100mL	<1.1 ^(c)
Fecal Coliform	MPN/100mL	<1.1 ^(c)
Enterococcus	MPN/100mL	<1.1 ^(c)

(a) mg/L = milligrams per liter; MPN/100mL = most probable number per 100 milliliters.

(b) Total nitrogen includes ammonia-nitrogen, organic nitrogen, nitrite-nitrogen and nitrate-nitrogen.

- (c) Limits do not apply where it has been determined that groundwater is in hydrologic connection with ocean water. Where groundwater is in hydrologic connection with ocean water, the concentration of fecal coliform shall not exceed 200/100 mL (based on a 30-Day Geometric Mean) or 400/100 mL (based on a single sample). The concentration of enterococcus shall not exceed 35 /100 mL (based on a 30-Day Geometric Mean) or 104/100mL (based on a single sample). The concentration of total coliform shall not exceed 1,000/100mL (based on a 30-Day Geometric Mean) or 10,000/100 mL, or 1,000/100mL if the ratio of fecal coliform to total coliform is greater than 0.1 (based on a single sample) in accordance with 2001 California Ocean Plan objectives. Where groundwater is in connection with brackish surface waters, the total coliform, fecal coliform and enterococcus limits of <1.1 MPN/100mL shall apply.
4. Discharges characterized as high-risk based on a surface water quality concern shall be exempt from the limits in part G.3 if further assessment demonstrates that the discharge is not impacting surface waters. Such demonstrations may include regional or site specific groundwater quality monitoring or surface water quality monitoring that demonstrate compliance with the applicable surface water or groundwater limits defined in section G.3. Dischargers shall provide at least eight consecutive quarters of supporting monitoring data to demonstrate that the onsite wastewater treatment system is not impacting surface waters.
 5. Discharges to onsite wastewater treatment systems shall not result in concentrations of salts, heavy metals, or organic pollutants being present in the receiving water at levels that would impact the designated beneficial uses of groundwater or, in the event that groundwater is in hydraulic connection with surface waters, the designated beneficial uses of surface water.
 6. Dischargers that provide advanced treatment of sewage effluent may demonstrate compliance by sampling effluent prior to discharge to the subsurface disposal system. Effluent limits shall be determined by the Executive Officer on a case by case basis.
 7. Discharges to onsite wastewater treatment systems shall not impart tastes, odors, color, foaming, or other objectionable characteristics to the receiving water.
 8. Discharges to onsite wastewater treatment systems that result in non-compliance with any of the foregoing limits shall pass through an appropriate treatment system to meet the requirements of this Order.

H. Monitoring and Reporting requirements

A monitoring program shall be required for high-risk discharges as identified in part A.3.c. of this Order.

1. A monitoring program shall be established to determine if discharges from the disposal system have impacted or are impacting groundwater or surface water

- quality. The program may include participation of the discharger in a regional monitoring program approved by the Executive Officer.
2. Upon receipt of notification of enrollment under this Order, the discharger shall submit a monitoring plan in accordance with the requirements of part B of Attachment C. In lieu of submitting a monitoring plan, the discharger may show proof of enrollment in a regional monitoring program approved by the Executive Officer.
 3. The Executive Officer may revise the Monitoring and Reporting Program included in Attachment C based on site-specific conditions for a specific high-risk discharger.
 4. Should monitoring data indicate exceedances of applicable receiving water limits, the high-risk discharger shall submit, within 90 days after determination of the problem, plans for measures that will be taken, or have been taken, to mitigate any long-term effects that result from the subsurface disposal of wastes, including the repair of any failing portion of the onsite wastewater treatment system, the upgrade of onsite wastewater treatment systems to include advanced treatment such as disinfection or nitrification/denitrification or plans to cease discharge.
 5. Should monitoring data indicate continued compliance with applicable receiving water limits, the Executive Officer is hereby authorized to use his or her discretion to reduce the required frequency of monitoring for the high-risk discharger or to reassign a risk level to the discharge that reflects the results of the monitoring data. The monitoring data used to make this determination shall include, at a minimum, quarterly monitoring data for one year in which average or above average rainfall occurred. Average rainfall is defined as the mathematical mean of 24-hour totals of rainfall depth greater than 0.1 inches over the wet season based on the historical record for the closest standard rainfall gage for that location. Once a determination is made, the Executive Officer shall notify the discharger of the revised Monitoring and Reporting program, if appropriate.

I. Compliance and Enforcement

1. Dischargers enrolled under this Order are legally bound to maintain the applicable provisions of this Order. Violations may result in enforcement actions including Regional Board orders or court orders requiring corrective action or imposing administrative civil liability, or in modification or revocation of these waste discharge requirements by the Regional Board (CWC sections 13261, 13263, 13265, 13268, 13300, 13301, 13304, 13340, 13350).
2. In an enforcement action, it shall not be a defense for the discharger that it would have been necessary to halt or to reduce the permitted activity in order to maintain compliance with this Order. Upon reduction, loss, or failure of the onsite wastewater treatment system, the discharger shall, to the extent necessary to maintain compliance with this Order, control all discharges until the system is restored or an alternative method of treatment is provided.

3. The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the discharger becomes aware of the circumstances. A written submission shall also be provided within five days of the time that 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; steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance; whether the spill response plan was implemented and an initial assessment of the noncompliance on human health and the environment. The Executive Officer, 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.

J. Expiration Date and Continuation of this Order

This Order shall be revised upon adoption of statewide standards for onsite wastewater treatment systems adopted pursuant to sections 12390 and 13291 of the CWC if, after review, it is determined that statewide standards are more stringent than the requirements of this Order.

I, Jonathan Bishop, Interim Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on September 2, 2004.

Jonathan Bishop
Interim Executive Officer