

EDMUND G. BROWN JR. GOVERNOR MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTION

San Diego Regional Water Quality Control Board

Suggestions for Preparing a Report of Waste Discharge for Discharges to Land

California Water Code (CWC) Section 13260 requires that a Report of Waste Discharge (ROWD) be submitted by any person discharging or proposing to discharge waste that could affect the quality of the waters of the state. The ROWD is used to develop waste discharge requirements for adoption by the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) in accordance with CWC Sections 13263. The ROWD must therefore provide enough technical information for the San Diego Water Board staff to develop tentative Order that includes draft Waste Discharge Requirements (WDR) for the proposed discharge. The provided information should support a demonstration of the following:

- a. The constituent concentrations in the discharge will not cause the concentration of chemical constituents in groundwater beneath or downgradient of the site to exceed the applicable ground water quality objectives, as established in Table 3-3 of the *Water Quality Control Plan* for the San Diego Basin (Basin Plan);¹
- b. The constituent concentrations in the discharge will not cause the concentrations of chemical constituents in groundwater beneath or downgradient of the site to exceed the primary and secondary maximum contaminant levels (MCLs), as established in Title 22 of the California Code of Regulations (CCR) and referenced in Tables 3-4 and 3-5 of the Basin Plan;
- c. The wastewater would not be classified as either a hazardous waste as defined in section 25140 of the California Health and Safety Code or a designated waste as defined in section 13173 of the CWC; and
- d. The discharge will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained

A Report of Waste Discharge (ROWD) for proposed discharges of wastewater to land in the San Diego Region must include the following minimum information:

- 1. Form 200, Application for Facility Permit/Waste Discharge, filled out in accordance with the instructions.²
- 2. A "Contributions Disclosure Statement" filled out in accordance with the instructions.
- 3. An application fee in the amount of the first year's annual WDR fee based upon Threat to Water Quality (TTWQ) and Complexity (CPLX) ranking per California Code of Regulations, Title 23, Section 2200. Please contact the San Diego Water Board staff to determine the appropriate TTWQ/CPLX ranking for the proposed discharge of waste.

TOMAS MORALES, CHAIR DAVID GIBSON, EXECUTIVE OFFICER

¹ Water quality objectives for groundwater can be found in Chapter 3 of the Basin Plan on the following webpage:

https://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/docs/update080416/Chpt_3_2016.pdf

² The Form 200 can be dow nloaded from the follow ing web page:

https://www.waterboards.ca.gov/publications_forms/forms/docs/form200.pdf

In addition, a complete Report of Waste Discharge (ROWD) for proposed discharges of wastewater to land must include adequate supporting technical information that allows the San Diego Water Board staff to develop draft waste discharge requirements for the proposed discharge. That supporting technical information may include some or all of the following information:

- 1. A technical report prepared and stamped by a **California Professional Engineer** containing the following information:
 - a. <u>Waste Characterization</u>: For a new discharge, sampling and analysis of the discharge is not required, but the characterization of the wastewater may be based upon information regarding the proposed facility's use of chemicals, source water, potential waste sources, and any analysis of wastewater at similar facilities. The applicant may also provide estimates based on available inhouse or contractor's engineering reports or other studies. Using the data or other supporting information, the applicant should justify why any specific pollutant will not have a reasonable potential to be present in the waste stream. Please note that testing and reporting may be required for all pollutants after the discharge is initiated to confirm the conclusions in the technical report. A full characterization of the wastewater may include the pollutants listed in Tables 3-3, 3-4, and 3-5, and 3-6 of the Basin Plan.

The waste characterization should also describe the average daily flow, the peak daily flow, and any seasonal or other variation in the expected waste discharge flow volumes.

b. Treatment Facility: A description of the methods of wastewater treatment should include a treatment train schematic showing unit operations and processes. The report should identify the design capacities and unit sizes of the processes and any chemicals proposed to be used and explain how the process and physical design of each component will result in achieving the quality in the effluent necessary to achieve the above water quality criteria. The report should describe the treatment, storage, and disposition of any wastes removed from wastewater by the treatment facility; the measures to be taken to protect the wastewater treatment facility from the effects of runoff from a 100-year frequency 24-hour storm and from the effects of 100-year peak stream flows; and a monitoring program to verify the effectiveness of treatment facility.

The report should also include redundancy or alternative reliability requirements for wastewater treatment facilities set forth in California Code of Regulations, Articles 8 and 10, Title 22.

- c. <u>Best Management Practices (BMPs)</u>: A description of any BMPs, such as nutrient or salinity management measures, that are proposed to supplement the wastewater treatment facility. The description should be as detailed as practical, providing justification for expected pollutant reductions resulting from implementation of the BMPs. The description should include a proposal for monitoring the effectiveness of the BMPs.
- d. <u>Disposal Site</u>: A discussion of how the effluent will be discharged, including basic data and calculations, of the quantities of wastewater that can be disposed or used for the proposed purpose(s) and manner on a long-term basis without surfacing downgradient of the disposal and storage areas. Due consideration should include varying seasonal climatic conditions; effective hydraulic conductivity; operational constraints; soil profile characterization; and measurements of groundwater depth, flow, and quality. The discussion should include a description of any recommended measures or monitoring

necessary for the proper operation of the disposal facilities and other factors pertinent to the disposal facilities.

- e. <u>Storage Facility</u>: A description of any storage or alternative disposal methods that are proposed to be used during wet weather periods and other periods when effluent cannot be disposed. If no alternative means of disposal are available during such periods, storage facilities must have the capacity to contain the volume of effluent produced over a period of 84 days, unless water balance calculations are submitted which demonstrate that a smaller capacity is adequate. Information on the storage facilities should include: design capacity; a description of the means by which odor, vector, and other nuisance problems will be prevented; a description of the measures to prevent percolation from storage facilities; a description of measures to be taken to protect the storage facilities from the effects of runoff from a 100-year frequency 24-hour storm and from the effects of 100-year peak stream flows; and a list of any chemicals used for treatment of wastewater while in storage.
- f. <u>Groundwater</u>: A description of the interaction of the discharge with the groundwater to demonstrate compliance with the above criteria, if necessary. Problems with mounding, drainage, offsite travel, and fate of pollutants in the discharge to the groundwater may need to be evaluated. Information related to the depth to the groundwater table, groundwater flow and horizontal hydraulic conductivity, groundwater quality, and analysis of the mixing of the discharge with the underlying groundwater also may be necessary. In addition, submittal of a proposal for conducting groundwater monitoring at the disposal site should be considered.
- g. <u>Water Supply</u>: A description of the source water, including identification of the source(s) of the water supply, and characterization of the quality of the water supply if not a municipal supply. The characterization should include pH, total dissolved solids, calcium, magnesium, percent sodium, chloride, sulfate, nitrate (as nitrogen), iron, manganese, boron, fluoride, aluminum, arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.
- h. <u>Other</u>: Any other pertinent information that is necessary to support conclusions regarding compliance with the above criteria.
- 2. A topographic scale map clearly showing: (a) the boundaries of the Hydrologic Unit, Area, and Subarea; (b) the exact locations of all wastewater storage facilities; (c) the location of the 100-year flood plain; (d) the proposed area(s) for disposal; (e) the locations of wells, noting the well numbers, within one mile of waste storage and disposal area(s); (f) the locations of all municipal water reservoirs and inland surface watercourses located within one mile of disposal area(s); (g) the locations for storage and disposition of any wastes removed from wastewater; and (h) any other pertinent features.
- 3. Adequate documentation for compliance with the California Environmental Quality Act (CEQA). This may include the following:
 - a. If an Environmental Impact Report (EIR) has been prepared for the project, a copy of the final EIR, summary of the final EIR, and Notice of Determination shall be submitted;
 - b. if a Negative Declaration has been prepared for the project, a copy of the Initial Study, Notice of Determination, and Negative Declaration shall be submitted;

- c. if a public agency has determined that the project is exempt from CEQA, a copy of the Notice of Exemption shall be submitted; and
- d. if a public agency has certified one of the CEQA actions above, a copy of the Notice of Determination (NOD) shall be submitted to the San Diego Water Board.

If the project will expand or change facilities, locations, operations, activities, or quantities described in or regulated by existing waste discharge requirements, such changes should be clearly identified and described in the ROWD. If any of the items above are not applicable to the project, the ROWD should explain why the items do not apply.

Within 30 days of receipt of the ROWD, San Diego Water Board staff will conduct a preliminary review of the ROWD to determine if the ROWD is complete. If the ROWD is incomplete, staff will notify the project proponent to submit additional information to complete the ROWD. If the ROWD is complete, staff will process the ROWD in accordance with state regulations within 120 days. If the project has a peak flow less than 100,000 gallons per day it may be eligible for enrollment under the General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems.³ This still requires filing a ROWD with all the information listed above.

If the treated wastewater is intended to be reused (i.e., as recycled water) in any beneficial matter a title 22 report must also be filed with Division of Drinking Water and the contact information for your district can be find at the following webpage:

https://www.waterboards.ca.gov/drinking_water/programs/documents/ddwem/DDWdistrictofficesmap.p

Title 22 report can be filed in conjunction with a ROWD because similar information is required for treatment methods and processes for both reports. If the proposed project does not treat wastewater to Title 22 recycled water standards but only purveys recycled water from another producer, then it may be eligible for enrollment under the General Water Reclamation Requirements for Recycled Water Use.⁴ This still requires filing a ROWD with all the information listed above.

³ General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems can be found on the following webpage: <u>https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wgo2014_0153_dwg.pdf</u>

⁴ General Water Reclamation Requirements for Recycled Water Use can be found on the following webpage: <u>https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_guality/2016/wgo2016_0068_ddw.pdf</u>