

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

STAFF REPORT FOR REGULAR MEETING OF SEPTEMBER 23-25, 2020

Prepared on August 24, 2020

ITEM NUMBER: 14
SUBJECT: Issuance of General Waste Discharge Requirements Order No. R3-2020-0020 for Discharges from Domestic Wastewater Systems with Flows Greater than 100,000 Gallons Per Day

STAFF CONTACTS: Howard Kolb, (805) 549-3332,
Howard.Kolb@waterboards.ca.gov
Kelsey Gerhart, (805) 594-6182,
Kelsey.Gerhart@waterboards.ca.gov

KEY INFORMATION:

Location: Central coast region.
Type of Discharge: Treated domestic wastewater.
Design Capacity: Greater than 100,000 gallons per day.
Treatment: Secondary to disinfected tertiary through ponds (e.g., facultative, aerobic, anaerobic), constructed wetlands, aerobic treatment systems (e.g., activated sludge, sequencing batch reactors, extended aeration, membrane biological reactors, etc.), biofiltration (e.g., attached growth systems, trickling filters, etc.), filtration, clarification, settling, and/or disinfection systems.
Disposal: Land application: evaporation/percolation ponds, spreading basins, rapid infiltration beds, non-potable water reuse, or another engineered alternative approved by the Executive Officer.
Reclamation: Allows the production and onsite use of recycled water; recycled water use offsite must be covered by separate permit.
Existing Permits: The General Permit will update and replace approximately 40 existing individual permits.

ACTION: **Adopt Proposed General Order No. R3-2020-0020 (General Permit)**

SUMMARY

Waste Discharge Requirements (WDR) program staff developed a regional general permit to regulate the larger domestic wastewater systems in the central coast region that discharge to land. This permit will improve consistency of regulation for more than 40 wastewater systems currently regulated by individual WDRs (permits), and will increase overall programmatic efficiency. The adoption of the proposed *General Waste Discharge Requirements Order No. R3-2020-0020 for Discharges from Domestic Wastewater Systems with Flows Greater than 100,000 Gallons Per Day* (General Permit) will allow staff to prioritize tasks that focus on helping dischargers to improve wastewater system performance and achieve and maintain compliance with permit requirements; resulting in measurable water quality improvements.

Central Coast Water Board staff worked collaboratively with existing permit holders (dischargers) and interested persons via various outreach efforts to finalize the proposed General Permit. The proposed General Permit includes prohibitions, discharge specifications, effluent and groundwater limitations, provisions, and monitoring requirements. Compliance with the General Permit will result in water quality that is protective of beneficial uses. Central Coast Water Board staff recommends adoption of the proposed General Permit.

DISCUSSION

Background

WDR program staff currently oversee approximately 800 different facilities that discharge to land. Of those 800 facilities, there are approximately 185 facilities regulated by individual permits. Three quarters of these 185 permits are over 10 years old and some are over 20 years old. These older permits require updates because they typically do not have the same level of water quality protection, allowance for recycled water production, or updated monitoring requirements relative to the newer permits, creating inconsistent regulation across the region.

Of the 185 facilities that are regulated by individual permits, over 40 facilities treat domestic wastewater with flows greater than 100,000 gallons per day. Development and adoption of the proposed General Permit to regulate these higher flow domestic wastewater discharges is an effective way to update the waste discharge requirements for over 40 facilities in the central coast region, while simultaneously creating permitting efficiency by decreasing the number of permits requiring development and regular updating. The following benefits will be achieved by enrolling these larger facilities into the proposed General Permit:

1. **Effluent and groundwater limitations are updated and more consistent among similar facilities.** Facilities will have consistent requirements for biochemical oxygen demand, total suspended solids, total dissolved solids, sodium, chloride, sulfate, boron, and nitrogen. All facilities will also have groundwater limitations to protect beneficial uses. Currently, requirements in existing individual permits differ significantly for similar facilities depending on when the permit was issued and what staff member wrote the permit. For example, most facilities with individual permits do not have nitrogen effluent limits and for those that do have nitrogen effluent limits,

the concentration and form of nitrogen measured in accordance with permit requirements vary with the limit (e.g., 30-day average nitrate, maximum total nitrogen, 30-day average ammonia, etc.).

2. **An allowance for recycled water production to avoid delay in implementing recycling.** Currently, most of the individual permits do not have recycling requirements incorporated into their permit, which prevents recycling until the facility applies and obtains an additional permit.
3. **Updated monitoring requirements are included to improve consistency among similar treatment processes at facilities.** Monitoring requirements will be consistent for similar facilities with similar threats to water quality. Currently, monitoring requirements for facilities with similar treatment processes vary greatly and there is a lack of consistency between each facility without any correlation to threat to water quality (i.e., the facilities with the most extensive monitoring requirements are not necessarily the facilities that have the greatest potential to impact water quality).
4. **Improved water quality protection requirements.** The proposed General Permit includes requirements that are more protective of water quality than existing requirements included in many individual permits.
5. **Staff resources will be optimized to spend more time assisting facilities achieve compliance with permit requirements.** Staff will be able to minimize resources associated with individual permit development and maximize staff time for data and technical report review, wastewater system evaluations, and compliance assistance and inspections. WDR staff finds that inspections and consultation with facility operators is one of the most effective means for helping facilities achieve and maintain compliance with their permit requirements.
6. **Consistent reporting of monitoring results will improve efficiency of data review.** The proposed General Permit requires reports and data be uploaded electronically to the GeoTracker database. Having a consistent data set with the same reporting units for each monitoring parameter will enable staff to manage their facilities more efficiently and compare data across facilities and against permit requirements. Monitoring data is currently submitted as PDF files and it is a time-consuming effort for staff to review facility data and determine permit compliance because individual permit requirements and the results reported vary between each facility.
7. **Easier enrollment process for both staff and dischargers will create time savings that can be directed to other priority staff tasks and have financial benefits to dischargers.** Enrolling a facility into the proposed General Permit takes only a fraction of time compared to updating and adopting individual permits. This reduces the administrative cost for both staff and dischargers and enables staff to redistribute time savings towards compliance assistance, inspections, data review, and communications with the dischargers. Obtaining a permit more quickly is also a positive financial benefit to dischargers.

8. **Dischargers can better anticipate and plan for permit requirements.** When a discharger applies for an individual permit, they do not know what their permit requirements will be. Enrollment in a General Permit has a significant advantage over individual permits for planning, design, and budgeting purposes because the process and result of obtaining an individual permit is much less certain.

Proposed General Permit Considerations

Many domestic wastewater systems with flows less than 100,000 gallons per day in the central coast region are regulated pursuant to a statewide general permit.¹ The statewide general permit became effective on September 23, 2014. The Central Coast Water Board currently has approximately 90 facilities enrolled in this statewide general permit.

The proposed General Permit will regulate facilities with flows greater than those covered under the existing statewide general permit and the proposed General Permit incorporates many of the same requirements as the statewide general permit. The General Permit proposed for adoption includes:

1. **Flow Limitations** – that allow for flows of 100,000 gallons per day or greater (no upper flow limit).
2. **Effluent Limitations** – that are consistent with USEPA secondary treatment standards, the Water Quality Control Plan for the Central Coastal Basin (Basin Plan), and title 22 recycling requirements (if title 22 is applicable).
3. **Reclamation of non-potable treated wastewater** – that is in compliance with effluent limitations specified in the General Permit, and with the requirements established in the State Water Resources Control Board (State Water Board) Division of Drinking Water conditionally accepted title 22 Engineering Report and Division of Drinking Water conditional acceptance letter for the wastewater system.
4. **Groundwater Limitations** – to protect beneficial uses as prescribed in the Basin Plan. The discharger is required to meet waste discharge requirements that will result in the best practicable treatment or control of the discharge necessary to ensure pollution or nuisance will not occur, and the highest water quality consistent with the maximum benefit of the people is maintained.
5. **Water Recycling** – that allows for recycled wastewater production consistent with Division of Drinking Water title 22 requirements.
6. **Pretreatment Requirements** – that requires dischargers that own or operate publicly owned treatment works designed to treat an average dry weather flow of five million gallons per day or more to implement a pretreatment program. The General Permit also requires wastewater systems to implement a pretreatment program if the

¹ State Water Resources Control Board (State Water Board) Order No. WQ 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems
https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wq2014_0153_dwq.pdf.

Central Coast Water Board Executive Officer has determined a pretreatment program is necessary.

7. **Disposal Requirements** – that requires management of the wastewater effluent organic load (e.g., biochemical oxygen demand) in their discharge.
8. **Provisions** – that requires dischargers to submit the following technical reports:
 - a. Pretreatment Program Plan
 - b. Operations and Maintenance Manual
 - c. Climate Change Adaptation Plan
 - d. Salt and Nutrient Management Plan (if directed by the Central Coast Water Board Executive Officer)
 - e. Time Schedule Order Request (if the discharger needs additional time to comply with permit requirements)
9. **Monitoring and Reporting Requirements** – that provides an example template of a monitoring and reporting program. Each individual discharger's wastewater system will be issued a facility specific monitoring and reporting program at the time of enrollment in the General Permit. Groundwater monitoring will be required if a discharger elects to not comply with effluent limitations.
10. **GeoTracker Requirements** – that requires electronic upload of water quality data and reports to the State Water Board GeoTracker database.

Public Outreach

Central Coast Water Board staff implemented an outreach plan to solicit input from dischargers and other interested persons concerning the development of the General Permit. The outreach actions included:

1. Public Outreach Kickoff Meeting – January 31, 2020.
2. Public Outreach Meeting – February 12, 2020.
3. Public Outreach Meeting with Sanitary Agency's Management Association – June 10, 2020.
4. Public Notice of 30-day public comment period – June 19, 2020.
5. Outreach Meetings During Public Comment Period – June 25, June 30, July 8, and July 15, 2020.
6. Public Outreach Meeting – September 14, 2020 to discuss changes made in response to comments.
7. Meetings/conference calls with individual dischargers (e.g., operators and managers) to discuss the proposed General Permit.
8. Ongoing email notifications and project status updates to over 100 interested parties.

See Attachment 1, Response to Comments, for additional information on the General Permit public outreach and how comments were addressed.

Human Right to Water

California Water Code section 106.3, subdivision (a) states that it is a policy of the State of California “that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation purposes.” On January 26, 2017, the Central Coast Water Board adopted Resolution No. R3-2017-0004, which affirms the realization of the human right to water and the protection of human health as one of the Central Coast Water Board's top priorities.

This General Permit incorporates the human right to water resolution by containing requirements that will protect the drinking water beneficial use.

Disadvantaged Communities

The Central Coast Water Board implements regulatory activities and water quality projects in a manner that ensures the fair treatment of people of all ethnicities, cultures, backgrounds and income levels, including disadvantaged communities (DACs). Additionally, the Central Coast Water Board is committed to providing all stakeholders the opportunity to participate in the public process and provide meaningful input to decisions that affect their communities.

The proposed General Permit allows for the regulation of the production of recycled water and the discharge of treated domestic wastewater to land. Based on 2016 census data, there are multiple DAC census block groups in various communities located throughout the central coast region that contribute to wastewater systems that will be regulated by the proposed General Permit. Central Coast Water Board staff have determined that the regulation of these public and privately-owned treatment works, in compliance with the proposed General Permit, will not pose a significant threat to water quality and is therefore unlikely to impact DACs. If impacts to surface or groundwater results from the discharges regulated by the proposed General Permit, Central Coast Water Board staff will help facilitate outreach and education programs to inform affected parties and connect them with available resources to address their concerns.

Climate Change

The Central Coast faces the threat and the effects of climate change for the foreseeable and distant future. To proactively prepare and respond, the Central Coast Water Board has launched the Central Coast Water Board's Climate Action Initiative, which identifies how the Central Coast Water Board's work relates to climate change and prioritizes actions that promote adaptation and mitigation to improve resilience and protect beneficial uses. The Climate Action Initiative is consistent with the Governor's Executive Order B-30-15 and the State Water Board's Climate Change Resolution No. 2017-0012.

The proposed General Permit aligns with the Climate Action Initiative's objectives. To take steps towards building climate change resiliency on the Central Coast, the proposed permit requires dischargers to identify and assess the viability of beneficially reusing the wastewater system's treated effluent to achieve recycled water benefits and diversify community water supplies and mitigate the impacts of climate change.

The proposed General Permit also requires dischargers to consider the siting of new facilities away from hazards and vulnerabilities. Additionally, the proposed General Permit requires dischargers to continue to identify and plan for hazards and

vulnerabilities at their facilities related to flooding, temperature, and influent flow and loading fluctuations exacerbated by climate change.

COMMENTS

The following stakeholders submitted comment letters on the June 18, 2020 draft General Permit: City of Guadalupe; City of Santa Maria; Mission Hills Community Services District; California American Water; Cambria Community Services District; Wallace Group; Cypress Ridge Limited Partnership; and City of Greenfield.

Central Coast Water Board staff reviewed and responded to these comment letters and made modifications to the General Permit and General Monitoring and Reporting Program as appropriate. Many of the comments were questions that Central Coast Water Board staff responded to but they did not result in changes to the proposed General Permit or General Monitoring and Reporting Program.

Several dischargers expressed concern about financial and time constraints for their wastewater systems to achieve compliance with the conditions of the proposed draft General Permit. Central Coast Water Board staff modified the General Permit to phase in the effluent limitation requirements over time. For the first 24 months after enrollment, dischargers may continue to comply with the effluent limitations contained in their current individual permits. For those facilities that will need more than 24 months, staff added language to the proposed General Permit to allow time for a discharger to develop and implement a Time Schedule Compliance Plan to revise its operations and/or upgrade the wastewater system as necessary.

See Attachment 1 for complete comments and Central Coast Water Board staff responses. For reference, Attachment 1 also includes a link of the redline strikeout of the draft General Permit to show the changes that were made in response to the comments received. Attachment 2 to this staff report is the final proposed General Permit.

CONCLUSION

The proposed General Permit will mitigate impacts and threats to water quality and protect public health and beneficial uses of groundwater. Once enrolled in this General Permit, all domestic wastewater systems will have consistent requirements and the ability to implement recycled water projects. This General Permit will also improve data collection and evaluation for potential impacts to water quality from a discharge. Data entry will be automated with input to the GeoTracker database directly from the laboratory. The GeoTracker database will allow Central Coast Water Board staff and the public to view data digitally, graphically, and spatially. The data will be available online, increasing public access.

In the future, Central Coast Water Board staff plans to update the General Permit after staff evaluates data submitted in accordance with the General Permit to ensure the best requirements are in place to protect water quality.

RECOMMENDATION

Adopt proposed General Waste Discharge Requirements Order No. R3-2020-0020.

ATTACHMENTS

1. Response to Comments
2. Proposed General Waste Discharge Requirements, Order No. R3-2020-0020
 - a. Attachment A - Definitions
 - b. Attachment B - Permit Application Process Summary
 - c. Attachment C - Application Format
 - d. Attachment D - General Monitoring and Reporting Program
 - e. Attachment E - Standard Provisions and Reporting Requirements for Waste Discharge Requirements

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