

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM WQ 2016-0068-DDW-R5009

FOR

CITY OF MANTECA
WATER QUALITY CONTROL FACILITY
SAN JOAQUIN COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring portions of the wastewater treatment system at the Water Pollution Quality Facility (WQCF) regulated by the Notice of Applicability (NOA) of Water Quality Order WQ 2016-0068-DDW-R5009. The WQCF is owned and operated by the City of Manteca (the Discharger). This MRP is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) or Executive Officer.

Water Code section 13267 states, in part:

“In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports and shall identify the evidence that supports requiring that person to provide the reports.”

Water Code section 13268 states, in part:

“(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267 or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

Pursuant to Water Code section 13267, the Discharger shall implement this MRP and submit the monitoring reports described herein. The reports are necessary to ensure that the Discharger complies with the NOA and General Order.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to whom samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Central Valley Water Board staff.

Field test instruments (such as those used to test pH, dissolved oxygen, and electrical conductivity) may be used provided that they are used by a State Water Resources Control Board, Environmental Laboratory Accreditation Program certified laboratory, or:

1. The user is trained in proper use and maintenance of the instruments;
2. The instruments are field calibrated prior to monitoring events at the frequency recommended by the manufacturer;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are maintained and available for at least three years.

DISINFECTION SYSTEM MONITORING

Samples shall be collected immediately downstream of the disinfection system and prior to discharging to the Tertiary Storage Pond. When monitoring requirements listed in this MRP duplicate existing requirements under other WDRs or waivers, duplication of sampling and monitoring is not required if the monitoring activity satisfies the requirements of the General Order and this MRP. The results of such monitoring shall also be included as part of the annual report required by this MRP. Disinfection monitoring shall include the following:

| Parameter | Units | Type of Sample | Monitoring Frequency | Reporting Frequency |
|--------------------------|------------|----------------|----------------------|---------------------|
| Total Coliform Organisms | MPN/100 mL | Grab | Daily ¹ | Quarterly |
| Turbidity | NTU | Meter | Continuous | Quarterly |

Note 1: Daily monitoring shall occur on days that recycled water is being discharged to the Tertiary Storage Pond

MPN/100 mL = most probable number per 100 mL sample

NTU = nephelometric turbidity unit

USE AREA MONITORING

The Discharger will designate an Administrator who shall monitor use areas(s) at a frequency appropriate to determine compliance with this General Order and the recycled water use program requirements. The Administrator may assign monitoring responsibilities to a User as part of the Water Recycling Use Permit program; the Administrator retains responsibility to ensure the data is collected, as well as prepare and submit the annual report.

The following shall be recorded for each user with additional reporting for use areas as appropriate. The frequency of use area inspections shall be based on the complexity and risk of each use area. Use areas may be aggregated to combine acreage for calculation or observation purposes. Use area monitoring shall include the following parameters:

| Parameter | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|---------------------------------|------------------|--------------------|--------------------|---------------------|
| Recycled Water User | | -- | -- | Annually |
| Recycled Water Flow | gpd | Meter ¹ | Monthly | Annually |
| Acreage Applied ² | acres | Calculated | -- | Annually |
| Application Rate | inches/acre/year | Observation | -- | Annually |
| Soil Saturation/Ponding | -- | Observation | Quarterly | Annually |
| Nuisance Odors/Vectors | -- | Observation | Quarterly | Annually |
| Discharge Off-Site | -- | Observation | Quarterly | Annually |
| Notification Signs ³ | -- | Observation | Quarterly | Annually |

NOTES:

- 1 Meter requires meter reading, a pump run time meter, or other approved method.
- 2 Acreage applied denotes the acreage to which recycled water is applied.
- 3 Notification signs shall be consistent with the requirements of California Code of Regulations, Title 22, section 60306 (g)

REPORTING

In reporting monitoring data, the Administrator shall arrange the data in tabular form so that the date, data type (e.g., flow rate, bacteriological, etc.), and reported analytical or visual inspection results are readily discernible. The data shall be summarized to illustrate compliance with this General Order and NOA as applicable. The results of any monitoring done more frequently than required at the locations specified in the MRP shall be reported in the next regularly scheduled monitoring report and shall be included in calculations as appropriate.

All monitoring reports should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleysacramento@waterboards.ca.gov.

Documents that are 50 MB or larger should be transferred to a CD, DVD, or flash drive and mailed to the following address:

Central Valley Regional Water Quality Control Board
ECM Mailroom
11020 Sun Center Drive, Suite 200
Rancho Cordova, California 95670

To ensure that your submittal is routed to the appropriate staff person, the following information should be included in the body of the email or transmittal sheet:

Attention: Compliance/Enforcement Section
Water Quality Control Facility
City of Manteca
San Joaquin County
Place ID: 239343

Monitoring information shall include the method detection limit (MDL) and the Reporting limit (RL) or practical quantitation limit (PQL). If the regulatory limit for a given constituent is less than the RL (or PQL), then any analytical results for that constituent that are below the RL (or PQL) but above the MDL shall be reported and flagged as estimated. For a Discharger conducting any of its own analyses, reports must be signed and certified by the chief of the laboratory.

A. Quarterly Monitoring Reports

Quarterly reports shall be submitted to the Regional Water Board on the **first day of the second month after the quarter ends** (e.g., the January-March Quarterly Report is due by May 1st). The reports shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the quarterly reports shall include:

1. Results of all required quarterly monitoring. Data shall be organized by the associated monitoring section (Disinfection System Monitoring) and presented in tabular format.
2. A comparison of monitoring data to the discharge specifications and requirements.
3. A disclosure of any violations of the NOA and/or General Order requirements and an explanation of corrective actions.
4. If requested by staff, copies of laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

Annual Reports shall be submitted to the Regional Water Board by **April 1st following the monitoring year**. The Annual Report shall include the following:

1. A summary table of all recycled water Users and use areas. Maps may be included to identify use areas. Newly permitted recycled water Users and use areas shall be identified. When applicable, supplement to the Title 22 Engineering Report and the State Water Board approval letter supporting those additions shall be included.
2. A summary table of all inspections and enforcement activities initiated by the Administrator. Include a discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into compliance with the NOA and/or General Order. Copies of documentation of any enforcement actions taken by the Administrator shall be provided.
3. An evaluation of the performance of the recycled water treatment facility, including discussion of capacity issues, system problems, and a forecast of the flows anticipated in the next year.
4. Tabular and graphical summaries of all monitoring data collected during the year, including priority pollutant monitoring, if required.
5. The name and contact information for the recycled water operator responsible for operation, maintenance, and system monitoring.

A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement and shall be signed by the Discharger or the Discharger's authorized agent:

"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."

The Discharger shall implement the above monitoring program as of the date of this MRP.

I, PATRICK PULUPA, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a Monitoring and Reporting Program issued by the California Regional Water Quality Control Board, Central Valley Region on 22 July 2019.

Original signed by Robert Busby for

PATRICK PULUPA, Executive Officer

GLOSSARY

| | |
|-------------------|---|
| BOD5 | Five-day biochemical oxygen demand |
| CaCO ₃ | Calcium carbonate |
| DO | Dissolved oxygen |
| EC | Electrical conductivity at 25° C |
| FDS | Fixed dissolved solids |
| NTU | Nephelometric turbidity unit |
| TKN | Total Kjeldahl nitrogen |
| TDS | Total dissolved solids |
| TSS | Total suspended solids |
| Continuous | The specified parameter shall be measured by a meter continuously. |
| 24-hr Composite | Samples shall be a flow-proportioned composite consisting of at least eight aliquots over a 24-hour period. |
| Daily | Every day except weekends or holidays. |
| Twice Weekly | Twice per week on non-consecutive days. |
| Weekly | Once per week. |
| Twice Monthly | Twice per month during non-consecutive weeks. |
| Monthly | Once per calendar month. |
| Bimonthly | Once every two calendar months (i.e., six times per year) during non-consecutive months. |
| Quarterly | Once per calendar quarter. |
| Semiannually | Once every six calendar months (i.e., two times per year) during non-consecutive quarters. |
| Annually | Once per year. |
| mg/L | Milligrams per liter |
| mL/L | Milliliters [of solids] per liter |
| µg/L | Micrograms per liter |
| µmhos/cm | Micromhos per centimeter |
| gpd | Gallons per day |
| mgd | Million gallons per day |
| MPN/100 mL | Most probable number [of organisms] per 100 milliliters |
| MTF | Multiple tube fermentation |

Appendix A to 40 CFR, Part 423--126 Priority Pollutants

| | | |
|---|---|--|
| 001 Acenaphthene | 047 Bromoform (tribromomethane) | 090 Dieldrin |
| 002 Acrolein | 048 Dichlorobromomethane | 091 Chlordane (technical mixture and metabolites) |
| 003 Acrylonitrile | 051 Chlorodibromomethane | 092 4,4-DDT |
| 004 Benzene | 052 Hexachlorobutadiene | 093 4,4-DDE (p,p-DDX) |
| 005 Benzidine | 053 Hexachloromyclopentadiene | 094 4,4-DDD (p,p-TDE) |
| 006 Carbon tetrachloride (tetrachloromethane) | 054 Isophorone | 095 Alpha-endosulfan |
| 007 Chlorobenzene | 055 Naphthalene | 096 Beta-endosulfan |
| 008 1,2,4-trichlorobenzene | 056 Nitrobenzene | 097 Endosulfan sulfate |
| 009 Hexachlorobenzene | 057 2-nitrophenol | 098 Endrin |
| 010 1,2-dichloroethane | 058 4-nitrophenol | 099 Endrin aldehyde |
| 011 1,1,1-trichloroethane | 059 2,4-dinitrophenol | 100 Heptachlor |
| 012 Hexachloroethane | 060 4,6-dinitro-o-cresol | 101 Heptachlor epoxide (BHC-hexachlorocyclohexane) |
| 013 1,1-dichloroethane | 061 N-nitrosodimethylamine | 102 Alpha-BHC |
| 014 1,1,2-trichloroethane | 062 N-nitrosodiphenylamine | 103 Beta-BHC |
| 015 1,1,2,2-tetrachloroethane | 063 N-nitrosodi-n-propylamin | 104 Gamma-BHC (lindane) |
| 016 Chloroethane | 064 Pentachlorophenol | 105 Delta-BHC (PCB-polychlorinated biphenyls) |
| 018 Bis(2-chloroethyl) ether | 065 Phenol | 106 PCB-1242 (Arochlor 1242) |
| 019 2-chloroethyl vinyl ether (mixed) | 066 Bis(2-ethylhexyl) phthalate | 107 PCB-1254 (Arochlor 1254) |
| 020 2-chloronaphthalene | 067 Butyl benzyl phthalate | 108 PCB-1221 (Arochlor 1221) |
| 021 2,4, 6-trichlorophenol | 068 Di-N-Butyl Phthalate | 109 PCB-1232 (Arochlor 1232) |
| 022 Parachlorometa cresol | 069 Di-n-octyl phthalate | 110 PCB-1248 (Arochlor 1248) |
| 023 Chloroform (trichloromethane) | 070 Diethyl Phthalate | 111 PCB-1260 (Arochlor 1260) |
| 024 2-chlorophenol | 071 Dimethyl phthalate | 112 PCB-1016 (Arochlor 1016) |
| 025 1,2-dichlorobenzene | 072 1,2-benzanthracene (benzo(a)anthracene) | 113 Toxaphene |
| 026 1,3-dichlorobenzene | 073 Benzo(a)pyrene (3,4-benzo-pyrene) | 114 Antimony |
| 027 1,4-dichlorobenzene | 074 3,4-Benzofluoranthene (benzo(b)fluoranthene) | 115 Arsenic |
| 028 3,3-dichlorobenzidine | 075 11,12-benzofluoranthene (benzo(b)fluoranthene) | 116 Asbestos |
| 029 1,1-dichloroethylene | 076 Chrysene | 117 Beryllium |
| 030 1,2-trans-dichloroethylene | 077 Acenaphthylene | 118 Cadmium |
| 031 2,4-dichlorophenol | 078 Anthracene | 119 Chromium |
| 032 1,2-dichloropropane | 079 1,12-benzoperylene (benzo(ghi)perylene) | 120 Copper |
| 033 1,2-dichloropropylene (1,3-dichloropropene) | 080 Fluorene | 121 Cyanide, Total |
| 034 2,4-dimethylphenol | 081 Phenanthrene | 122 Lead |
| 035 2,4-dinitrotoluene | 082 1,2,5,6-dibenzanthracene (dibenzo(h)anthracene) | 123 Mercury |
| 036 2,6-dinitrotoluene | 083 Indeno (,1,2,3-cd) pyrene (2,3-o-pheynylene pyrene) | 124 Nickel |
| 037 1,2-diphenylhydrazine | 084 Pyrene | 125 Selenium |
| 038 Ethylbenzene | 085 Tetrachloroethylene | 126 Silver |
| 039 Fluoranthene | 086 Toluene | 127 Thallium |
| 040 4-chlorophenyl phenyl ether | 087 Trichloroethylene | 126 Silver |
| 041 4-bromophenyl phenyl ether | 088 Vinyl chloride (chloroethylene) | 128 Zinc |
| 042 Bis(2-chloroisopropyl) ether | 089 Aldrin | 129 2,3,7,8-tetrachloro-dibenzo-p-dioxin (TCDD) |
| 043 Bis(2-chloroethoxy) methane | | |
| 044 Methylene chloride (dichloromethane) | | |
| 045 Methyl chloride (dichloromethane) | | |
| 046 Methyl bromide (bromomethane) | | |