

Central Valley Regional Water Quality Control Board

25 March 2016

WDID: 5A040800002

Ms. Barbara Holbrook
Associate Safety Engineer
Department of Water Resources
Oroville Field Division
460 Glen Drive
Oroville, CA 95966

CERTIFIED MAIL:
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NOTICE OF APPLICABILITY (NOA), WATER QUALITY ORDER 2014-0153-R5198, EDWARD HYATT POWER PLANT, BUTTE COUNTY

On 26 February 2016 Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff inspected the wastewater facilities at Edward Hyatt Power Plant (hereafter "Discharger") located within the Oroville Dam facilities in Oroville, Butte County. Based on the site inspection and a case file review, the facility treats and disposes of less than 100,000 gallons of wastewater per day, and is therefore eligible for coverage under the general and specific conditions of State Water Resources Control Board (State Water Board) Water Quality Order 2014-0153-DWQ *General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems* (General Order). This letter serves as formal notice that the General Order is applicable to your facility and the wastewater discharge described below. You are hereby assigned General Order 2014-0153-R5198 for your facility.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which prescribes mandatory discharge and monitoring requirements. Sampling, monitoring, and reporting requirements applicable to your treatment and disposal methods must be completed in accordance with the appropriate treatment system sections of the *General Order* and the attached *Monitoring and Reporting Program* (MRP). This MRP was developed after consideration of your waste characterization and site conditions described in the attached *Technical Memorandum*.

REGULATORY BACKGROUND

Waste Discharge Requirements Order 93-009 (WDRs) were adopted for this facility by the Central Valley Water Board on 29 January 1993. The Monitoring and Reporting Program requires the following monthly monitoring:

- Flow to the ponds and from the ponds to the leach field.
- Dissolved oxygen, liquid depth, and available freeboard in the ponds.
- Observations for weeds, excessive odors, seepage, and ponding.
- Inspections of the aboveground petroleum storage tanks.

DISCHARGE DESCRIPTION

The Edward Hyatt Power Plant (hereafter Facility) is located within the Oroville Dam facilities in Oroville, California. The Facility is comprised of the power plant, a control building, and a switchyard. The Department of Water Resources is designated as the responsible party for operation and maintenance of the Facility. The Facility is in Sections 2, T19N, R4E, MDB&M (APN 069-010-023) in Butte County. Domestic waste collected from the sanitary facilities within the power plant is lifted approximately 230 feet into a septic tank. Domestic waste from the switchyard and control building flows by gravity into the same septic tank. Septic tank effluent is then lifted into two lined evaporation ponds approximately 200 feet above the control building. Wastewater in excess of the ponds' capacities flows by gravity into a leach field. According to the WDRs the ponds have a combined capacity of 1.1 acre-feet, and the leach field has a design capacity of 3,000 gallons per day.

This is an existing facility; therefore enrollment under the General Order is categorically exempt from the California Environmental Quality Act (CEQA) pursuant to California Code of Regulations, title 14, section 15301 which applies to ongoing or existing projects.

FACILITY SPECIFIC REQUIREMENTS

The Discharger will maintain exclusive control over the discharge, and shall comply with the terms and conditions of this NOA and the General Order 2014-0153-DWQ-R5198, with all attachments.

Additionally the General Order states in Section B.1.L that the discharger shall comply with the setbacks as described in Table 3. This table summarizes different setback requirements for wastewater system equipment, activities, and storage and/or treatment ponds from sensitive receptors and property lines where applicable. The Discharger shall comply with the following applicable setback requirements as summarized in the following table.

| Site Specific Applicable Setback Requirements | | | | | |
|---|----------------------|-----------------------------|--|---------------|--------------------------------|
| Equipment or Activity | Domestic Well | Flowing Stream ^a | Ephemeral Stream Drainage ^b | Property Line | Lake or Reservoir ^d |
| Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System ^e | 150 ft. ^y | 50 ft. c | 50 ft. | 5 ft. c | 200 ft. w |
| Leach Field ^f | 100 ft. o,c | 100 ft. c | 50 ft. | 5 ft. c | 200 ft. w |
| ^a A flowing stream shall be measured from the ordinary high water mark established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means. ^b Ephemeral Stream Drainage denotes a surface water drainage feature that flows only after rain or snow-melt and does not have sufficient groundwater seepage (baseflow) to maintain a condition of flowing surface water. The drainage shall be measured from a line that defines the limit of the ordinary high water mark (described in "a" above). Irrigation canals are not considered ephemeral streams drainage features. The ephemeral stream shall be a "losing stream" (discharging surface water to groundwater) at the proposed wastewater system site. ^c Setback established by California Plumbing Code, Table K-1. ^d Lake or reservoir boundary measured from the high water line. | | | | | |

- ^e Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection.
- ^f Leach Field includes all subsurface dispersal systems, including mound systems except seepage pits.
- ^o California Well Standards, part II, section 8. Site-specific conditions may allow reduced setback or require an increased setback. See discussion in Well Standards.
- ^w Setback established by the Onsite Wastewater Treatment System Policy, section 7.5.5.
- ^y Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.

Failure to comply with the requirements in the documents could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

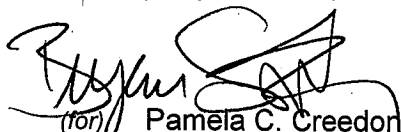
The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, MRPs, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: centralvalleyredding@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disc and mailed to the appropriate regional water board office, in this case 364 Knollcrest Drive, Suite 205, Redding, CA 96002. To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program: WDR
Facility Name: Edward Hyatt Power Plant

WDID: 5A040800001
Order: 2014-0153-DWQ-R5198

Please note that WDRs Order 93-009 is proposed to be rescinded at the 23/24 June 2016 meeting of the Central Valley Water Board. Upon rescission of your individual WDRs, coverage for your facility under the General Order shall become applicable subject to this Notice of Applicability.

If you have any questions regarding submitting an updated report of waste discharge, making changes to your permitted operations, compliance or enforcement please contact Rebecca Tabor at (530)226-3458, rebecca.tabor@waterboards.ca.gov, or the footer address.


(for) Pamela C. Creedon
Executive Officer

RLT:sjs

Attachments and cc list on next page

Attachments: Technical Memorandum
Monitoring and Reporting Program
Edward Hyatt Power Plant Facility Map
General Order 2014-0153-DWQ
Standard Provisions and Reporting Requirements

cc: Kevin Wright, DWR- Oroville
Trudy Payne, DWR- Oroville

cc w/o encl: Butte County Environmental Health, Chico
Tim OBrien, State Water Board, Sacramento
Patrick Pulupa, SWRCB, Office of Chief Counsel, Sacramento

Central Valley Regional Water Quality Control Board

TECHNICAL MEMORANDUM

TO: George Low, P.G.
Senior Engineering Geologist

FROM: Rebecca Tabor, P.E.
Water Resources Control Engineer

DATE: 25 March 2016

SIGNATURE:



**SUBJECT: REVIEW OF NITRATE AND SETBACK CONDITIONS FOR EDWARD HYATT
POWER PLANT, BUTTE COUNTY GENERAL ORDER WQ 2014-0153-DWQ
ENROLLMENT**

Staff has reviewed the case file and the 26 February 2016 Inspection Report for Edward Hyatt Power Plant. The Report assesses the general condition of the wastewater treatment system. The Discharger has kept adequate maintenance documentation, and all treatment and collection infrastructure appears in good order.

The Facility is located directly below the Oroville Dam. The Facility is comprised of the power plant, a control building, and a switchyard. The Department of Water Resources is designated as the responsible party for operation and maintenance of the Facility. Based on historical flow data average daily wastewater flow is less than 1000 gallons per day (gpd) with a monthly maximum daily flow of approximately 3000 gpd.

Potential Threats to Water Quality

According to Google Earth, the septic tank and lift station are located approximately 600 feet east of the head of the Thermalito Diversion Pool, at the foot of the Oroville Dam. The two lined evaporation ponds and leach field are located approximately 200 feet above the septic tank and lift station and at least 1000 feet west of the Thermalito Diversion Pool.

Completion of the Nitrate Checklist in Attachment 1 of Order 2014-0153-DWQ indicates the following flow and rationale:

A1 Exceed 20,000 gpd? No, daily average flows are generally less than 1000 gpd.

Conclusion: No nitrogen removal is required.

Monitoring Requirements

To protect water quality, General Order monitoring requirements will be sufficient. In summary, Staff recommends monthly monitoring and quarterly reporting for the ponds and the average daily flow rate; quarterly leach field monitoring, and annual inspections of the septic tank. Quarterly monitoring reports will be submitted by the first day of the second month after the quarter ends (e.g. January-March report is due by May 1st). Annual monitoring will be included with the fourth quarter monitoring

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM 2014-0153-DWQ-R5198

FOR

EDWARD HYATT POWER PLANT

BUTTE COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. 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 (Regional Water Board) Executive Officer.

The State Water Resources Control Board (State Water Board) and Regional Water Boards are transitioning to the paperless office system. In some regions, Dischargers will be directed to submit reports (both technical and monitoring reports) to the State Water Board's GeoTracker database over the Internet in portable document format (pdf). In addition, analytical data shall be uploaded to the GeoTracker database under a site-specific global identification number. Information on the GeoTracker database is provided on the Internet at:

http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml

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.”

The Discharger owns and operates the wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ. The reports are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

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 who samples were relinquished. If composite samples are collected, the basis for sampling (time or flow weighted) shall be approved by Regional 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 Board California 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.

SEPTIC TANK MONITORING

Monitoring of septic tank shall include the following:

| Parameter | Units | Sample Type | Sampling Frequency | Reporting Frequency |
|-----------|-------|----------------------|--------------------|---------------------|
| Flow Rate | gpd | Metered ^a | Continuous | Quarterly |

gpd denotes gallons per day.

^a. Flow rate may be metered or estimated based on potable water supply meter readings or other approved method.

Septic tanks shall be inspected and/or pumped at least as frequently as described below. Inspections of sludge and scum depth are not required if the tanks are pumped at least annually.

| Parameter | Units | Measurement Type | Inspection/Reporting Frequency |
|---|--------|------------------|--------------------------------|
| Sludge depth and scum thickness in each compartment of each tank | Feet | Staff Gauge | Annually |
| Distance between bottom of scum layer and bottom of outlet device | Inches | Staff Gauge | Annually |
| Distance between top of sludge layer and bottom of outlet device | Inches | Staff Gauge | Annually |
| Effluent filter condition (if equipped, clean as needed) | NA | NA | Annually |

NA denotes not applicable.

Septic tanks shall be pumped when any one of the following conditions exists:

1. The combined thickness of sludge and scum exceeds one-third of the tank depth of the first compartment.
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches of the outlet device.

If a septic tank is pumped during the year, the pumping report shall be submitted with the annual report. All pumping reports shall be submitted with the next regularly scheduled monitoring report. At a minimum, the record shall include the date, nature of service, service company name, and service company license number.

POND SYSTEM MONITORING

Influent Monitoring

Influent samples shall be taken from a location that provides representative samples of the wastewater and flow rate. At a minimum, influent monitoring shall consist of the following:

| <u>Constituent</u> | <u>Units</u> | <u>Sample Type</u> | <u>Sample Frequency</u> | <u>Reporting Frequency</u> |
|------------------------|--------------|--------------------|-------------------------|----------------------------|
| Flow Rate ^a | gpd | Meter | Continuous | Quarterly |

gpd denotes gallons per day. mg/L denotes milligrams per liter.

^a. At a minimum, the total flow shall be measured monthly to calculate the average daily flow for the month. If wastewater is stored and applied to land, flow rate measurement may also be needed on the effluent flow.

Wastewater Pond Monitoring

All wastewater and treated wastewater storage ponds (lined and unlined) shall be monitored as specified below:

| <u>Constituent</u> | <u>Units</u> | <u>Sample Type</u> | <u>Sample Frequency</u> | <u>Reporting Frequency</u> |
|--------------------|--------------|--------------------|-------------------------|----------------------------|
| Dissolved Oxygen | mg/L | Grab | Monthly | Quarterly |
| Freeboard | 0.1 feet | Measurement | Monthly | Quarterly |
| Odors | -- | Observation | Monthly | Quarterly |

| <u>Constituent</u> | <u>Units</u> | <u>Sample Type</u> | <u>Sample Frequency</u> | <u>Reporting Frequency</u> |
|--------------------|--------------|--------------------|-------------------------|----------------------------|
| Berm condition | -- | Observation | Monthly | Quarterly |

mg/L denotes milligrams per liter.

Effluent Monitoring

Effluent samples shall be taken from a location that provides representative samples of the wastewater. At a minimum, effluent monitoring shall consist of the following:

| <u>Constituent</u> | <u>Units</u> | <u>Sample Type</u> | <u>Sample Frequency</u> | <u>Reporting Frequency</u> |
|---------------------------|--------------|--------------------|-------------------------|----------------------------|
| Biochemical Oxygen Demand | mg/L | Grab | Monthly | Quarterly |

mg/L denotes milligrams per liter.

SUBSURFACE DISPOSAL AREA

Subsurface disposal areas may be configured many different ways (e.g. traditional leach field, pressure-dosed, drip system, mound/at grade, gravel less, etc.). In general, monitoring shall be sufficient to determine if wastewater is evenly applied, the disposal area is not saturated, burrowing animals and/or deep rooted plants are not present, and odors are not present. Inspection of dosing pump controllers, automatic distribution valves, etc. is required to maintain optimum treatment in the disposal area (and any sand or media filter if present). Monitoring shall include, at a minimum, the following:

| Constituent | Inspection Frequency | Reporting Frequency |
|---|----------------------|---------------------|
| Pump Controllers, Automatic Valves, etc. ^a | Quarterly | Quarterly |
| Nuisance Odor Condition | Quarterly | Quarterly |
| Saturated Soil Conditions ^b | Quarterly | Quarterly |
| Plant Growth ^c | Quarterly | Quarterly |
| Vectors or Animal Burrowing ^d | Quarterly | Quarterly |
| Seepage Pit Condition ^e | Quarterly | Quarterly |

- a. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
- b. Inspect a disposal area for saturated conditions. If a mound system is used, inspect perimeter base for signs of wastewater seepage or saturated soil conditions.
- c. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
- d. Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.
- e. Seepage pits shall be inspected to ensure they are allowing wastewater to infiltrate as designed. Visual inspection of the water level in the seepage pit is adequate.

SOLIDS DISPOSAL MONITORING

The Discharger shall report the handling and disposal of all solids (e.g., screenings, grit, sludge, biosolids, etc.) generated at the wastewater system. Records shall include the name/contact information for the hauling company, the type and amount of waste transported, the date removed from the wastewater system, the disposal facility name and address, and copies of analytical data required by the entity accepting the waste. These records shall be submitted as part of the annual monitoring report.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, solids, etc.), and reported analytical or visual inspection results are readily discernible. The data shall be summarized to clearly illustrate compliance with the 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.

During the life of this General Order, the State Water Board or Regional Water Board may require the Discharger to electronically submit monitoring reports using the State Water Board's California Integrated Water Quality System (CIWQS) program Internet web site or alternative database. Electronic submittal procedures will be provided when directed to begin electronic submittals. Until directed to electronically submit monitoring reports, the Discharger shall submit hard copy monitoring reports.

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 monitoring.
2. A comparison of monitoring data to the discharge specifications, applicable effluent limits, disclosure of any violations of the NOA and/or General Order, and an explanation of any violation of those requirements. (Data shall be presented in tabular format.)
3. If requested by staff, copies of laboratory analytical report(s) and chain of custody form(s).

B. Annual Report

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

1. Tabular and graphical summaries of all monitoring data collected during the year.
2. An evaluation of the performance of the wastewater treatment facility, including discussion of capacity issues, nuisance conditions, system problems, and a forecast of the flows anticipated in the next year. A flow rate evaluation as described in the General Order (Provision E.2.c) shall also be submitted.


3. 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.
4. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
5. The name and contact information for the wastewater 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 the 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.

Ordered by:

 For

PAMELA C. CREEDON, Executive Officer

25 March 2016
(Date)

FACILITY MAP



DRAWING REFERENCE:
GOOGLE EARTH
MAP DATA: © 2016 GOOGLE
NO SCALE

FACILITY MAP
EDWARD HYATT POWER PLANT
BUTTE COUNTY