

Central Valley Regional Water Quality Control Board

28 November 2016

WDID: 5A450800001

Mr. Joseph Akers
Associate Safety Engineer
State of California Department of Parks and Recreation
Castle Crags State Park
400 Glen Drive
Oroville, CA 95966

CERTIFIED MAIL:
7015 0640 0001 7060 6210

NOTICE OF APPLICABILITY (NOA), WATER QUALITY ORDER 2014-0153-R5216, STATE OF CALIFORNIA DEPARTMENT OF PARKS AND RECREATION, CASTLE CRAGS STATE PARK, WASTEWATER TREATMENT AND DISPOSAL SYSTEM, SHASTA COUNTY

In January 2014, the Department of Parks and Recreation responded in agreement to enrollment into General Order 97-10-DWQ but at that time a new General Order was being adopted and enrollment was postponed. The Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff inspected the wastewater facilities at Castle Crags State Park (hereafter "Discharger") at that time and there have not been changes to the facility's wastewater system or operation since then. Based on the information provided to the Central Valley Water Board, 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-R5216 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 5-00-242 (WDRs) were adopted for this facility by the Central Valley Water Board on 27 October 2000. The Monitoring and Reporting Program requires the following monthly monitoring:

- Precipitation of total inches of daily rainfall.
- Leachfield observations.
- Depth to water in peizometers.

KARL E. LONGLEY ScD, P.E., CHAIR | PAMELA C. CREEDON P.E., BCEE, EXECUTIVE OFFICER

364 Knollcrest Drive, Suite 205, Redding, CA 96002 | www.waterboards.ca.gov/centralvalley

- Drinking water well analyses.
- Nitrate, Total and Fecal Coliform sampling of Indian Creek.
- Visual observations of the above ground storage tank.

DISCHARGE DESCRIPTION

Castle Crags State Park (hereafter Facility) is located approximately six miles south of Dunsmuir, California. The Facility is comprised of eight septic tanks and seven leach field areas. On the east side of I-5: 14-unit picnic area, a 12-unit campground with a host and restroom facility, two private residences, a remote campground with a vault toilet, three leach fields and two drinking water wells. On the west side of I-5: Vista Point and a remote campground both have a vault toilet, two private residences, an office/visitor center, maintenance shop, picnic area with a restroom, 20-unit campground with a host site and restrooms, 18-unit campground with restroom/shower facilities, 26-unit campground with restroom/shower facilities, four leach fields and two drinking water wells. The State of California Department of Parks and Recreation is designated as the responsible party for operation and maintenance of the Facility. The Facility is in Sections 14, T38N, R4W, MDB&M (APNs 014-610-002, 014-900-006, 014-480-008, 014-610-011, 014-610-012, and 014-610-043) in Shasta County. Domestic waste collected from the sanitary facilities within the Castle Crags State Park flows to septic tanks and affiliated leach fields.

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-R5216, 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	100 ft. ^o	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.					

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:

Mr. Joseph Akers
Castle Crags State Park

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28 November 2016

Program: WDR
Facility Name: Castle Crags State Park

WDID: 5A450800001
Order: 2014-0153-DWQ-R5216

Please note that WDRs Order 5-00-242 is proposed to be rescinded at the 23/24 February 2017 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 Heidi Bauer at (530) 224-4996, heidi.bauer@waterboards.ca.gov, or the footer address.


(for) Pamela C. Creedon
Executive Officer

HB:reb

Enclosures: Technical Memorandum
General Order 2014-0153-DWQ
Monitoring and Reporting Program
Castle Crags State Park Facility Maps

cc w/o encl.: Shasta County Environmental Health Dept, Redding
Tim O'Brien, State Water Board, Sacramento
Patrick Pulupa, SWRCB, Office of Chief Counsel, Sacramento

Castle Craggs State Park Map



Central Valley Regional Water Quality Control Board

TECHNICAL MEMORANDUM

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

FROM: Heidi Bauer.
Sanitary Engineering Associate

DATE: 28 November 2016

SIGNATURE:  (for)

SUBJECT: REVIEW OF NITRATE AND SETBACK CONDITIONS FOR CASTLE CRAGS
STATE PARK, SHASTA COUNTY GENERAL ORDER WQ 2014-0153-DWQ
ENROLLMENT

Staff has reviewed the case file and the 23 September 2013 Inspection Report for Castle Crags State Park. 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 approximately six miles south of Dunsmuir, California. The Facility is comprised of the following:

- East side of I-5: A 14-unit picnic area, a 12-unit campground with a host site and restroom facility, two private residences and a remote campground with a vault toilet. There are three leach fields on this side and two drinking water wells.
- West side of I-5: Vista Point and a remote campground have vault toilets. There are also two private residences, an office/visitor center, maintenance shop, picnic area with a restroom, 20-unit campground with a host site and restrooms, 18-unit campground with restroom/shower facilities, 26-unit campground with restroom/shower facilities. There are four leach fields on this side and two drinking water wells.

The State of California Department of Parks and Recreation 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 600 gallons per day (gpd) with a peak monthly maximum flow of approximately 15,700 gpd.

Potential Threats to Water Quality

Supplemental information provided by the discharger gives the following setbacks for each leach field and septic tank:

Septic tank and leach field location	Setback from River or Creek (feet)	Setback from domestic well (feet)
Riverside Day Use/Campground	>300	150 and 300
Residence #2	>200 and >300	250 and 100*
Residence #3	>1,000	350 and 100*
Lippincott Meadows Environmental Campground (vault toilet)	>200	NA
Flume Environmental Campground and Vista Point (vault toilets)	>100	NA
Residences #1 and #4	NA	>500
Residence #6 (abandoned)	NA	NA
Little Loop Campgrounds	>200	>1,000
Upper Combo Campground	>100	>600 and >150
Lower Combo Campground	>100	>1,400

*Domestic well uphill from leach field 100 feet.

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 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-R5216

FOR

CASTLE CRAGS STATE PARK

SHASTA 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 Electronic Content Management (ECM) database via email in portable document format (pdf). The email address for the ECM submittal is: centralvalleyredding@waterboards.ca.gov

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:

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow Rate	gpd	Metered ^a	Continuous	Annually

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.

<u>Parameter</u>	<u>Units</u>	<u>Measurement Type</u>	<u>Inspection/Reporting Frequency</u>
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.

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:

<u>Constituent</u>	<u>Inspection Frequency</u>	<u>Reporting Frequency</u>
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

- 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.

RECREATIONAL VEHICLE DISCHARGE MONITORING

Any wastewater system that has accepted recreational vehicle, portable toilet, or similar waste in the previous 12 months shall perform the following additional monitoring. Samples shall be collected to characterize effluent that is stored in wastewater ponds or that will be applied to a disposal area. Wastewater shall be monitored as specified below:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>	<u>Reporting Frequency</u>
Zinc	mg/L	Grab	Quarterly	Quarterly
Phenol	mg/L	Grab	Quarterly	Quarterly
Formaldehyde	mg/L	Grab	Quarterly	Quarterly

mg/L denotes milligrams per liter.

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.

SURFACE WATER MONITORING OF INDIAN CREEK

Because of the difficulty in monitoring bacteria in surface water, sample collection procedures must be described in a *Sampling and Analysis Plan*. Natural bacteria levels can vary significantly, and may be correlated with rainfall. When possible, surface water bacteria samples should be collected under dry weather conditions. It is critical when monitoring bacteria that all containers and surfaces a sample contacts are sterile. Sample containers must be autoclaved or manufactured to maintain sterility; use of screw top bottles, Whirl-pak[®] bags, or similar containers is acceptable. The sample hold time for bacteria samples is typically no more than six hours. Monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Weather (Rain/Dry)</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
<i>Escherichia coli</i> (E. coli) ^a	MPN/100 mL	Observation	Bi-annually	Bi-annually
Enterococci ^b	MPN/100 mL	Observation	Bi-annually	Bi-annually
Nitrate as Nitrogen	mg/L	Observation	Bi-annually	Bi-annually

MPN/100 mL denotes most probable number per 100 mL sample. mg/L denotes milligrams per liter.

a. Analysis by USEPA Method 1603 or equivalent.

b. Analysis by USEPA Method 1600 or equivalent.

GROUNDWATER AND WATER SUPPLY MONITORING

Because a groundwater monitoring network has not been developed at this facility, water samples shall be collected from the four drinking water wells Well A, Well B, Well C, and Residence 2 & 3 Well. Each sample shall be analyzed and reported in accordance with the standards provided by the State Water Resources Control Board, Division of Drinking Water. Annual and/or Tri-Annual analysis of the water supply monitoring shall be submitted with the quarterly 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. Bi-annual Report

Bi-annual Reports shall be submitted to the Regional Water Board by **July 1st and January 1st**.

C. Annual Report

Annual Reports shall be submitted to the Regional Water Board by **March 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:



PAMELA C. CREEDON, Executive Officer

11/28/2016

DATE