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## Central Valley Regional Water Quality Control Board

3 February 2017

WDID: 5A040121001

Ms. Kristen McKillop  
Butte County Department of Environmental Health  
202 Mira Loma Drive  
Oroville, CA 95965

**CERTIFIED MAIL:**  
7015 1660 0000 2319 3721

### **NOTICE OF APPLICABILITY (NOA), WATER QUALITY ORDER 2014-0153-DWQ-R5222, BUTTE COUNTY SERVICE AREA NO. 141 AND MOUNTAIN OAKS PROPERTIES, INC., BUTTE COUNTY**

On 5 October 2016 Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff inspected the wastewater facilities at Butte County Service Area No. 141 and Mountain Oaks Properties, Inc. (hereafter "Facility") located on Messilla Valley Road, 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-DWQ-R5222 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 93-206 (WDRs) were adopted for this facility by the Central Valley Water Board on 22 October 1993. A Revised Monitoring and Reporting Program, adopted on 16 April 1998, requires the following:

- Monthly monitoring of influent wastewater to the treatment system for Total Nitrogen
- Monthly monitoring of treated effluent for Total Nitrogen, Biological Oxygen Demand, Total Coliforms, and Turbidity
- Monthly monitoring of average daily flow rates to the storage pond, reported in gallons per day
- Monthly monitoring of dissolved oxygen concentrations in the storage pond

- Monthly visual observations of pond freeboard, liquid depth, and berm conditions to check for seepage through pond dikes, excessive odors or other nuisances, and excessive weed growth in the pond
- Monthly reporting of disposal field observations including dates of wastewater application, the quantity of wastewater applied, type of crop irrigated, and the presence or absence of runoff from the disposal field
- Quarterly groundwater monitoring for Depth to Groundwater, Groundwater Elevation\*, pH, Total Dissolved Solids, Nitrate as Nitrogen, Total Kjeldahl Nitrogen, Total Coliforms, Sodium, and Chloride
- Quarterly reporting

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\*Groundwater elevation shall be based on depth to water using a surveyed measuring point elevation on the well and a surveyed reference elevation.

## **DISCHARGE DESCRIPTION**

The Facility is located on Messilla Valley Road, just west of Pentz Road in Butte County. The Facility is in Sections 7, 18, and 19, T21N, R4E, MDB&M in Butte County. Homes in the subdivision are all equipped with a septic tank from which wastewater is pumped to a community treatment system, with the exception of one home where wastewater from the septic tank gravity flows to the collection system.

A 2,900 foot gravity-flow pipeline conveys the wastewater to Butte County Service Area No. 141, which consists of two recirculating gravel filter beds, a chlorination system, and settling tank prior to discharge to a 13.6 acre-foot (592,461-gallon) storage pond. In summer months the pond water is land applied to two irrigation areas located northeast and northwest of the treatment facility. According to Order 93-206, the capacity of the existing treatment system is 16,200 gallons per day.

Current monitoring and reporting indicate the presence of shallow groundwater and possible impacts of site activities on local groundwater quality. Based on the low flows and disinfection capacity of the system, Staff finds the wastewater treatment system design acceptable under the General Order provided that the Facility conducts quarterly monitoring to evaluate the treatment system effectiveness.

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-R5222, 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 applicable setback requirements as summarized in the following table.

Site Specific Applicable Setback Requirements					
Equipment or Activity	Domestic Well	Flowing Stream <sup>a</sup>	Ephemeral Stream Drainage <sup>b</sup>	Property Line	Lake or Reservoir <sup>d</sup>
Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System <sup>e</sup>	150 ft. <sup>y</sup> 100 ft. <sup>o</sup> 50 ft. <sup>c</sup>	50 ft. <sup>c</sup>	50 ft.	5 ft. <sup>c, z</sup>	200 ft. <sup>w</sup> 50 ft. <sup>c</sup>
Impoundment (disinfected tertiary recycled water) <sup>g</sup>	100 ft. <sup>t</sup>	100 ft.	100 ft.	50 ft.	200 ft.
Spray Irrigation (disinfected tertiary recycled water) <sup>k</sup>	No spray irrigation of any recycled water, other than disinfected tertiary recycled water, shall take place within 100 feet of a residence or a place where public exposure could be similar to that of a park, playground, or school yard.				
<p>LAA denotes Land Application Area. Sec denotes secondary.</p> <p><sup>a</sup> 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.</p> <p><sup>b</sup> 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.</p> <p><sup>c</sup> Setback established by California Plumbing Code, Table K-1.</p> <p><sup>d</sup> Lake or reservoir boundary measured from the high water line.</p> <p><sup>e</sup> Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection.</p> <p><sup>g</sup> Disinfected tertiary recycled water is defined in California Code of Regulations, title 22, section 60301.230.</p> <p><sup>k</sup> Additional restrictions for spray irrigation of recycled water are contained in California Code of Regulations, title 22, section 60310(f)</p> <p><sup>o</sup> California Well Standards, part II, section 8. Site-specific conditions may allow reduced setback or require an increased setback. See discussion in Well Standards.</p> <p><sup>t</sup> Setback established by California Code of Regulations, title 22, section 60310(b).</p> <p><sup>w</sup> Setback established by the Onsite Wastewater Treatment System Policy, section 7.5.5.</p> <p><sup>y</sup> Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.</p> <p><sup>z</sup> Collection system to property line setback is not applicable.</p>					

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](mailto: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: Butte CSA No. 141,  
Mountain Oaks Properties, Inc. (MOPS)

WDID: 5A040121001  
Order: 2014-0153-DWQ-R5222

Please note that WDRs Order 93-206 is proposed to be rescinded at the **6/7 April 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 Monique Gaido at (530) 224-4205, [Monique.Gaido@waterboards.ca.gov](mailto:Monique.Gaido@waterboards.ca.gov), or the footer address.

*Original signed by Bryan Smith*

(for) Pamela C. Creedon  
Executive Officer

MEG:reb

Enclosures: Technical Memorandum  
Monitoring and Reporting Program  
Butte CSA No.141, MOPS Location Map  
General Order 2014-0153-DWQ

cc w/ encl.: Mountain Oaks Properties Subdivision, Homeowners' Association  
Hydrotec Solutions, Inc., Chico

cc w/o encl.: Tim O'Brien, State Water Resources Control Board (SWRCB), Sacramento  
Patrick Pulupa, SWRCB, Office of Chief Counsel, Sacramento

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Central Valley Regional Water Quality Control Board

**TECHNICAL MEMORANDUM**

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

**FROM:** Monique Gaido, P.G.  
Engineering Geologist

**DATE:** 3 February 2017

**SIGNATURE:** Original signed by Monique Gaido

**SUBJECT: REVIEW OF NITRATE AND SETBACK CONDITIONS FOR BUTTE COUNTY NO.141,  
MOUNTAIN OAKS PROPERTIES, BUTTE COUNTY GENERAL ORDER WQ  
2014-0153-DWQ ENROLLMENT**

Staff has reviewed the case file and the 26 October 2016 Inspection Report for Butte County No. 141, Mountain Oaks Properties, Inc. The Report assesses the general condition of the wastewater treatment system and the land application areas. The Discharger has kept adequate maintenance documentation, and all treatment and collection infrastructure appears in good order since the improvements made in 2015.

The Mountain Oaks Properties subdivision (MOPS) is located approximately 3.5 miles south of the Town of Paradise and 12.5 miles southeast of the City of Chico. MOPS consists of 45 homes, each equipped with a septic tank. The partially treated effluent from individual septic tanks flows to a 2,900-foot gravity-flow conveyance to Butte County Service Area No. 141 (Facility) located a half-mile south of the subdivision. The Facility consists of two recirculating gravel filters and chlorine disinfection followed by discharge to a holding pond. In summer the treated wastewater is land-applied on two spray fields located immediately north of the Facility. The design capacity of the wastewater treatment system is 16,200 gallons per day. Based on historical flow data from 2001 to present, average daily wastewater flow is approximately 4,000 gallons per day (gpd) with a monthly maximum daily flow of approximately 10,000 gpd.

**Potential Threats to Water Quality**

The Facility is located approximately 200 feet north of a seasonal drainage which flows to Dry Creek, a tributary of the Sacramento River. There are three 15-foot-deep groundwater wells located around the holding pond. MW-1 is on the north side and MW-2 and MW-3 are located approximately 100 feet south of the pond. Clean surface runoff and groundwater flowing from the sloped land application areas to the northeast and northwest of the Facility are routed around the Facility by drainage ditches. The nearest potable water well is approximately 650 feet south of the Facility.

Depth to groundwater varies among the wells from 5.5 feet to 9.0 feet. The pond is 12 feet deep with 2-foot berms on the higher, northern side. An interceptor ditch runs along the uphill perimeter of the pond and treatment area to facilitate storm water drainage to the southwest and then southeast to the seasonal drainage.

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, monthly maximum daily flows have reached 10,000 gpd; however, daily average flows are generally less than 4,000 gpd. Flows for this Facility are seasonal, with higher flows usually occurring during the winter months (January–March). The General Order monitoring requirements do not require nitrogen monitoring for low-flow systems.

Conclusion: Since minimum depth to groundwater requirements are not met, monthly effluent monitoring for nitrogen is required. Additional monitoring requirements and/or a change in monitoring frequency may be reevaluated after one year to determine if the data are necessary for tracking the effectiveness of the Facility and protection of groundwater quality.

### **Monitoring Requirements**

To protect water quality, General Order monitoring requirements will be sufficient. However, due to shallow groundwater conditions, monthly nitrogen monitoring of the influent and effluent is required. In summary, Staff recommends quarterly reporting of the average daily flow rate; monthly influent monitoring for Total Nitrogen, monthly effluent monitoring for Total Nitrogen, Biological Oxygen Demand, Total Coliform Organisms and Turbidity, and monthly wastewater pond monitoring for Dissolved Oxygen, Freeboard, Berm Condition and Odor. Land application area monitoring includes monthly reporting of the amount of wastewater applied to land daily, local rainfall (inches), the acreage of the areas, application rate calculations, evidence of soil erosion, berm conditions, soil saturation or ponding, nuisance odors or vectors, and presence, if any, of offsite discharge. Groundwater monitoring includes quarterly measurements of depth to groundwater, groundwater elevation\*, groundwater gradient, pH, Total Dissolved Solids, Nitrate as Nitrogen, Sodium, Chloride, and Total Coliform Organisms. See the Monitoring and Reporting Program for more detail.

Additionally, the MOPS Homeowners' Association should recommend to its members to have annual inspections of the individual septic tanks. All monitoring will be reported on a quarterly basis by the first day of the second month after the quarter ends (e.g. First Quarter Monitoring Report is due by May 1st). Annual monitoring will be included with the Fourth Quarter Monitoring Report.

\*The groundwater monitoring wells must be surveyed to a reference point to calculate the groundwater elevation.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM 2014-0153-DWQ-R5222

FOR

BUTTE COUNTY SERVICE AREA NO. 141, MOUNTAIN OAKS PROPERTIES, INC.

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

### **AEROBIC TREATMENT UNIT MONITORING**

#### **Influent Monitoring**

Influent samples shall be taken from a location that provides representative samples of the wastewater quality prior to treatment. 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	gpd	Metered <sup>a</sup>	Continuous	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly

mg/L denotes milligrams per liter.

- a. Flow rates may be measured as influent or effluent flow. 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.

### Effluent Monitoring

Samples of effluent shall be taken at an area that represents the effluent quality distributed to the holding pond. At a minimum, effluent monitoring shall consist of the following:

<u>Parameter</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Biochemical Oxygen Demand	mg/L	Grab	Monthly	Quarterly
Total Nitrogen	mg/L	Grab	Monthly	Quarterly

gpd denotes gallons per day.

Aerobic treatment units may be integrated in a treatment train and all components shall be inspected to verify operational status. It is highly recommended that a service agreement with a qualified service provider/vendor be required by the Regional Water Board's Executive Officer. Because aerobic treatment units generate more biosolids than septic systems (similar to the activated sludge process), systems shall be inspected and/or pumped at least as frequently as described below. Depending upon the amount of solids removed from the aerobic treatment unit, less frequent inspections may be allowed by the Regional Water Board's Executive Officer. 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	Quarterly
Distance between bottom of scum layer and bottom of outlet device	Inches	Staff Gauge	Quarterly
Distance between top of sludge layer and bottom of outlet device	Inches	Staff Gauge	Quarterly
Effluent filter condition (if equipped, clean as needed)	NA	NA	Quarterly

NA denotes not applicable.

Aerobic treatment units 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 final settling tank or interferes with the operation of the system (mixed liquor aerator solids shall not exceed the manufacturer's recommendation).
2. The scum layer is within 3 inches of the outlet device.
3. The sludge layer is within 8 inches of the outlet device.

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.

### DISINFECTION SYSTEM MONITORING

Samples shall be collected from immediately downstream of the disinfection system. Disinfection monitoring shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sample Frequency</u>	<u>Reporting Frequency</u>
Total Coliform Organisms	MPN/100 mL	Grab	Quarterly	Quarterly

MPN/100 mL denotes most probable number per 100 mL sample. NTU denotes nephelometric turbidity unit.

### POND SYSTEM MONITORING

#### Influent Monitoring

Influent sample requirements for the pond system are covered by the effluent monitoring for the aerobic treatment system and by the disinfection system monitoring requirements.

#### 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
Berm condition	--	Observation	Monthly	Quarterly

mg/L denotes milligrams per liter.

#### Effluent Monitoring

Effluent monitoring from the pond system is covered by the land application monitoring requirements below.

### LAND APPLICATION AREA MONITORING

The Discharger shall monitor LAAs when wastewater and/or supplemental irrigation water is applied. If wastewater/supplemental irrigation water is not applied during a reporting period, the monitoring report shall so state. LAA monitoring shall include the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Supplemental Irrigation	gpd	Meter <sup>a</sup>	Monthly	Quarterly
Wastewater Flow <sup>a</sup>	gpd	Meter <sup>a</sup>	Monthly	Quarterly
Local Rainfall	Inches	Weather Station <sup>b</sup>	Monthly	Quarterly
Acreage Applied <sup>c</sup>	Acres	Calculated	Monthly	Quarterly
Application Rate	gal/acre/mo	Calculated	Monthly	Quarterly
Soil Erosion Evidence	--	observation	Monthly	Quarterly
Containment Berm Condition	--	observation	Monthly	Quarterly
Soil Saturation/Ponding	--	observation	Monthly	Quarterly
Nuisance Odors/Vectors	--	observation	Monthly	Quarterly
Discharge Off-Site	--	observation	Monthly	Quarterly

gpd denotes gallons per day.

- a. Meter requires meter reading, a pump run time meter, or other approved method.
- b. Weather station may be site-specific station or nearby governmental weather reporting station.
- c. Acreage applied denotes the acreage to which wastewater is applied.
- d. Application rate may also be reported as inch/acre/month.

### **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.

### **GROUNDWATER MONITORING**

The Discharger shall monitor groundwater quality for monitoring wells MW-1, MW-2 and MW-3. Consistent with the Business and Professions Code, groundwater monitoring reports, well construction workplans, etc. shall be prepared under the supervision of a California licensed civil engineer or geologist. Prior to construction of any groundwater monitoring wells, the Discharger shall submit plans and specifications to the Regional Water Board's staff for review and approval. Once installed, all monitoring wells designated as part of the monitoring network shall be sampled and analyzed according to the schedule below.

The data from routine groundwater monitoring events shall be submitted quarterly. Analysis of the data and groundwater flow directions shall be performed at least annually and shall be performed under the supervision of a California licensed professional (as described above). The Discharger may request a reduced monitoring and reporting schedule once adequate data has been collected to characterize the site. (Typically two years of quarterly sampling is required for adequate characterization.)

Prior to sampling, groundwater elevations shall be measured and the wells shall be purged of at least three well volumes and until pH and electrical conductivity have stabilized. No-purge, low-flow, or other sampling techniques are acceptable if they are described in an approved

Sampling and Analysis Plan. Depth to groundwater shall be measured to the nearest 0.01 feet. Groundwater elevations shall be calculated. Samples shall be collected using approved USEPA methods. Groundwater monitoring shall include, at a minimum, the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sampling/Reporting Frequency<sup>c</sup></u>
Groundwater Elevation <sup>a</sup>	0.01 Feet	Calculated	Quarterly
Depth to Groundwater	0.01 Feet	Measurement	Quarterly
Gradient	Feet/Feet	Calculated	Quarterly
Gradient Direction	degrees	Calculated	Quarterly
pH	Std. Units	Grab	Quarterly
Total Dissolved Solids	mg/L	Grab	Quarterly
Nitrate as Nitrogen	mg/L	Grab	Quarterly
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Total Coliform Organisms <sup>b</sup>	MPN/100 mL	Grab	Quarterly

MPN/100 mL denotes most probable number per 100 mL sample. Std. Units denotes standard units. mg/L denotes milligrams per liter.

- a. Groundwater elevation shall be based on depth to water using a surveyed measuring point elevation on the well and a surveyed reference elevation.
- b. Using a minimum of 15 tubes or three dilutions.
- c. Analysis of data by a California licensed professional is required at least annually,

## 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 1<sup>st</sup>). 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 to the Regional Water Board by **March 1<sup>st</sup> 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. If disinfection with ultraviolet light is performed, describe disinfection system maintenance activities performed in the calendar year. The description shall address inspections performed, lamp bulb replacement, lamp sleeve cleaning, and manufacturer recommended maintenance activities.
4. 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.
5. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
6. The name and contact information for the wastewater operator responsible for operation, maintenance, and system monitoring.
7. A groundwater monitoring report prepared by a California licensed professional. This report may be prepared separately from the rest of the Annual Report. The report shall contain an analysis of groundwater data collected during the year. The analysis shall include a description of the sample events, copies of the field logs, purge method and volume, groundwater elevation and trend, a groundwater elevation map for each sample event, summary tables showing results for parameters measured, comparison of groundwater quality parameters to standards in the NOA, chain-of-custody forms, calibration logs for field equipment used, and a general evaluation of any impacts the wastewater discharge is having on groundwater quality.

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:

*Original signed by Bryan Smith for*

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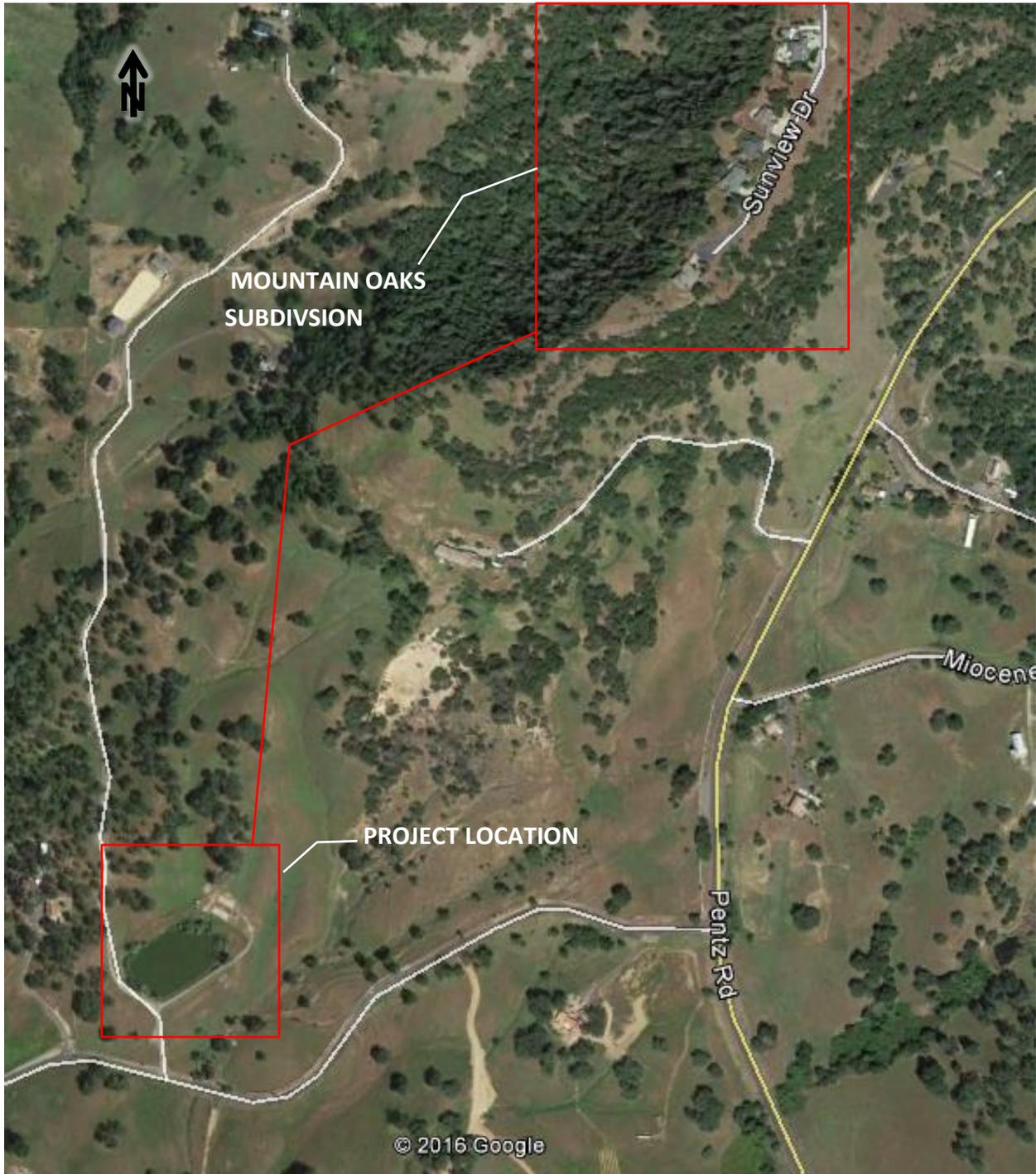
PAMELA C. CREEDON, Executive Officer

3 February 2017

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DATE

**LOCATION MAP**



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

LOCATION MAP  
  
BUTTE CSA NO. 141,  
MOUNTAIN OAKS PROPERTIES, INC.  
BUTTE COUNTY