



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

19 June 2015

Abdess Markella
Greek Orthodox Monastery of the Theotokos
38532 Dunlap Road
Dunlap, California 93621

NOTICE OF APPLICABILITY (NOA), STATE WATER RESOURCES CONTROL BOARD ORDER WQ 2014-0153-DWQ-R5184, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS, GREEK ORTHODOX MONASTERY OF THE THEOTOKOS, FRESNO COUNTY

On 17 October 2014, the Greek Orthodox Monastery of the Theotokos (hereafter "Discharger"), submitted a Report of Waste Discharge (RWD) for the wastewater treatment system that serves the Monastery near Dunlap. Revised design calculations for the wastewater treatment system certified by Mr. Rod Strahm, a California registered professional civil engineer with Strahm Engineering Associates, Inc., (RCE 18303) were submitted on 23 March 2015, and additional information to complete the RWD was submitted on 4 May 2015. Based on the information provided, the system treats and disposes of less than 100,000 gallons per day (gpd), 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 system and the wastewater discharge described below. You are hereby assigned General Order 2014-0153-DWQ-R5184 for your system.

You should familiarize yourself with the entire General Order and its attachments enclosed with this letter, which describe 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) No. 2014-0153-DWQ-R5184. This MRP was developed after consideration of your waste characterization and site conditions described in the attached memorandum.

DISCHARGE DESCRIPTION

The Greek Orthodox Monastery of the Theotokos is at 38532 Dunlap Road in Fresno County, Section 34, Township 13 South, Range 26 East, Mount Diablo Baseline & Meridian. The wastewater treatment system at the Monastery treats domestic wastewater for up to 56 full time residents and occasional daytime visitors. The Monastery also includes communal kitchen and laundry facilities for the residents.

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

1685 E Street, Fresno, CA 93706 | www.waterboards.ca.gov/centralvalley

The wastewater treatment system consists of three 3,000-gallon septic tanks and a subsurface leach field disposal area that is expected to handle the estimated maximum daily flow from the Monastery of 9,600 gallons per day.

FACILITY SPECIFIC REQUIREMENTS

The Discharger will maintain exclusive control over the discharge, and shall comply with the terms and conditions of this NOA, General Order 2014-0153-DWQ-R5184, with all attachments, and MRP 2014-0153-DWQ-R5184.

In accordance with the requirements of the General Order, discharges with flow rates less than 20,000 gpd are not required to meet a nitrogen effluent limitation.

The General Order states in Section B.1.I that the Discharger shall comply with the setbacks as described in Table 3. This table summarizes different setback requirements for wastewater system equipment, activities, land application areas, 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	Property Line
Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System ⁴	150 ft. ¹	5 ft. ³
Leach Field ⁵	100 ft. ^{2,3}	5 ft. ³

- ¹ Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.
- ² California Well Standards, part II, section 8. Site-specific conditions may allow reduced setback or require an increased setback. See discussion in Well Standards.
- ³ Setback established by California Plumbing Code, Table K-1.
- ⁴ Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection.
- ⁵ Leach Field includes all subsurface dispersal systems, including mound systems except seepage pits.

Failure to comply with the requirements in this NOA, General Order 2014-0153-DWQ-R5184, with all attachments, and MRP 2014-0153-DWQ-R5184 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 Regional Water Quality Control Board, Central Valley Region (Central Valley Water Board) has gone to a Paperless Office System. All regulatory documents, 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: centralvalleyfresno@waterboards.ca.gov. Documents that are 50MB or larger should be transferred to a disk and mailed to the Central Valley Water Board office at 1685 E Street, Fresno, CA 93706. 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: Non-15, WDID: 5C10NC00195, Facility Name: Greek Orthodox Monastery of the Theotokos in Dunlap, Order: 2014-0153-DWQ-R5184.

In order to conserve paper and reduce mailing costs, a paper copy of the General Order has been sent only to the Discharger. Others are advised that the General Order is available on the State Water Board's web site at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf

If you have any questions regarding this matter, please contact Katie Carpenter by phone at (559) 445-5551 or by email at kcarpenter@waterboards.ca.gov.



Pamela C. Creedon
Executive Officer

Attachments: Monitoring and Reporting Program 2014-0153-DWQ-R5184
Technical Memorandum for Greek Orthodox Monastery of the Theotokos,
Report of Waste Discharge
State Water Resources Control Board Order WQ 2014-0153-DWQ
(Discharger Only)

cc: Janet Gardner, Fresno County Department of Public Works and Planning, 2220
Tulare Street, 6th Floor, Fresno, California 93721
Rod Strahm, Strahm Engineering Associates, Inc., 5100 N. Sixth Street, Suite 117,
Fresno, California 93710

Central Valley Regional Water Quality Control Board

TECHNICAL MEMORANDUM

TO: Lonnie M. Wass 
Supervising Engineer

Clay L. Rodgers
Assistant Executive Officer

FROM: Kathleen Carpenter 
Engineering Geologist
PG 8014

Scott Hatton 
Water Resource Control Engineer
RCE 67889

DATE: 19 June 2015

SUBJECT: **APPLICABILITY OF COVERAGE UNDER STATE WATER RESOURCES CONTROL BOARD ORDER WQ2014-0153-DWQ, GENERAL WASTE DISCHARGE REQUIREMENTS FOR SMALL DOMESTIC WASTEWATER TREATMENT SYSTEMS, GREEK ORTHODOX MONASTERY OF THEOTOKOS, FRESNO COUNTY**

On 17 October 2014, Central Valley Water Board staff (staff) received a Report of Waste Discharge (RWD) for expanded operation of a wastewater treatment system to handle domestic wastewater from the Greek Orthodox Monastery of Theotokos at 38532 Dunlap Road in Fresno County. Revised design calculations for the wastewater treatment system certified by Mr. Rod Strahm, a California registered professional civil engineer with Strahm Engineering Associates, Inc. (RCE 18303), were submitted on 23 March 2015, and additional information to complete the RWD was submitted on 4 May 2015. This discharge was previously regulated by Fresno County. However, given the volume and nature of the expanded operations Fresno County has decided not to continue to regulate the discharge.

This memorandum provides a summary of staff's review of the RWD and the applicability of this discharge to be covered under State Water Resources Control Board Water Quality Order 2014-0153-DWQ, General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems (General Order).

DESCRIPTION OF DISCHARGE

Expanded design of the wastewater treatment system for the Monastery will treat domestic wastewater for up to 56 full time residents and occasional daytime visitors from the nearby St. Nicholas Ranch Retreat Center utilizing the existing septic tank and leach field system at the Monastery. The Monastery also includes communal kitchen and laundry facilities for the residents. Based on the revised design calculations provided by Mr. Strahm on 23 March 2015, the Monastery and communal kitchen and laundry facilities will generate a maximum flow of about 9,600 gallons per day (gpd).

POTENTIAL THREAT TO WATER QUALITY

The existing wastewater treatment system consists of three 3,000-gallon septic tanks and subsurface leach field disposal area, with an absorption area of about 5,800 square feet. Using the septic system design calculations in the California Plumbing Code, the existing septic tank and leach field system should have sufficient capacity to handle the estimated maximum daily flow of 9,600 gpd.

The septic tanks and leach field disposal area are south of the Monastery, in Assessor's Parcel Number (APN) 160-191-077, the closest point is at least 25 feet from the parcel boundary. The closest potable water supply well is greater than 300 feet to the northeast and the nearest surface water body, a stock water pond, is greater than 1,000 feet to the south. These setbacks meet the requirements for septic tanks and leach fields from Table 3: *Summary of Wastewater System Setbacks* of the General Order. Based on data from the on-site test pits, depth-to-groundwater in the vicinity of the existing leach field is greater than 10 feet below ground surface (bgs) the greatest depth explored. In accordance with the requirements of the General Order, discharges with flow rates less than 20,000 gpd are not required to meet a nitrogen effluent limitation.

Two percolation tests were conducted within the effluent disposal area. Percolation rates ranged from 8.4 minutes per inch (min/in) to 9.7 min/in. According to Table 5: *Minimum Depth to Groundwater and Minimum Soil Depth from the Bottom of Dispersal System* of the General Order, the minimum depth to groundwater requirement for percolation rates between 5 min/in and 30 min/in is 8 feet bgs.

MONITORING REQUIREMENTS

Monitoring requirements included in the following sections from Attachment C of the General Order are appropriate for this discharge:

- Septic Tank Monitoring;
- Subsurface Disposal Area; and
- Solids Disposal Monitoring.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5184

FOR

GREEK ORTHODOX MONASTERY OF THE THEOTOKOS
FRESNO 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, 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."

The Greek Orthodox Monastery of the Theotokos (hereafter Discharger), owns and operates the wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ-R5184. 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 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.

If monitoring consistently shows no significant variation in magnitude of a constituent concentration or parameter after at least 12 months of monitoring, the Discharger may request this MRP be revised to reduce monitoring frequency. The proposal must include adequate technical justification for reduction in monitoring frequency.

SEPTIC TANK MONITORING

Monitoring of septic tank shall include the following:

Constituent	Units ¹	Sample Type	Sampling Frequency	Reporting Frequency
Flow Rate	gpd	Metered ²	Continuous	Annually

¹. gpd = gallons per day and mg/L = milligram per liter.

². Flow rate may be metered or estimated based on potable water supply meter readings or other approved method. Flow rates may be measured as influent or effluent flow.

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	Sample 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 ¹	NA	Annually

¹. NA = 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

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. Monitoring shall include, at a minimum, the following:

Constituent	Inspection Frequency	Reporting Frequency
Pump Controllers, Automatic Valves, etc. ¹	Quarterly	Annually
Nuisance Odor Condition	Quarterly	Annually
Saturated Soil Conditions ²	Quarterly	Annually
Plant Growth ³	Quarterly	Annually
Vectors or Animal Burrowing ⁴	Quarterly	Annually

1. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.
2. Inspect a disposal area for saturated conditions.
3. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
4. Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.

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.

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Program: Non-15, WDID: 5C10NC00195, Facility Name: Greek Orthodox Monastery of the Theotokos, Order: 2014-0153-DWQ-R5184.

During the life of this General Order, the State Water Board or Central Valley 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. Electronic submittal to CIWQS, when implemented, will meet the requirements of our paperless office system.

A. 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:

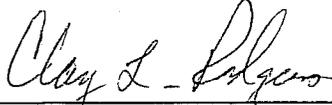
1. Tabular and graphical summaries of all monitoring data collected during the year.
2. If requested by staff, copies of laboratory analytical report(s) and chain of custody form(s).
3. An evaluation of the performance of the wastewater treatment system, including discussion of capacity issues, nuisance 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.
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.

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
6/19/2015
DATE