
North Coast Regional Water Quality Control Board

December 10, 2018

Mr. John Chu
Dharma Realm Buddhist Association
4951 Bodhi Way
Ukiah, CA 95482

Dear Mr. Chu:

Subject: Notice of Applicability of General Order WQ 2014-0153-DWQ, City of Ten Thousand Buddhas and International Institute of Philosophy and Ethics, Wastewater Treatment System, Talmage Area of Ukiah, Mendocino County

File: Dharma Realm Buddhist Association WWTS, 495 Bodhi Way, Ukiah, CA; WDID No. 1B03114RMEN; CIWQS Place No. 220093

This letter serves as Notice of Applicability (NOA) from the North Coast Regional Water Quality Control Board (Regional Water Board) that General Waste Discharge Requirements for Small Domestic Wastewater Treatment Systems, Order WQ 2014-0153-DWQ (General Order) is applicable to the subject wastewater system and that the system is henceforth regulated under the General Order as described below. A Monitoring and Reporting Program (MRP) for the wastewater system is included as an enclosure of this NOA.

Dharma Realm Buddhist Association (Discharger) submitted a final report of waste discharge (ROWD) dated February 15, 2018, for the City of Ten Thousand Buddhas (CTTB) and International Institute of Philosophy and Ethics (IIPE) Wastewater Treatment System (WWTS) located at 495 Bodhi Way, Ukiah, in Mendocino County. Supplemental information was provided on May 7, May 16 and May 17, 2018 to complete the ROWD. Based on the information presented in the ROWD, the proposed WWTS and discharge are consistent with the requirements of the General Order.

An ROWD application fee of \$7,464.50, that serves as the first annual fee, was received on January 22, 2018. The application fee reflects a Threat to Water Quality and Complexity rating of 2B and a 50 percent fee discount because the authorized WWTS discharge is a domestic waste discharge of less than 50,000 gallons per day (GPD).

The General Order contains requirements that apply to all wastewater systems and requirements that apply only to specific types of treatment and/or disposal systems. Operational requirements and effluent limitations are discussed in Section 3 of this NOA and summarized in Table 1, an enclosure of the NOA. The General Order contains additional requirements that are not summarized in Table 1. The Discharger is responsible for all applicable requirements in the General Order, this NOA, and the MRP.

A copy of the General Order is enclosed with this NOA. The General Order is also available on the Internet at:

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

1. Facility and Discharge Description

Facility

The CTTB complex and IIPE campus are in Talmage, a census-designated place, in Ukiah, Mendocino County. The CCTB complex and IIPE campus, hereafter known as the Facility, are owned and operated by the Discharger. The Facility location is shown on **Attachment A**, which is attached hereto and is made part of this NOA by reference.

The CTTB complex is located near the unincorporated community of Talmage, approximately 3.2 miles southeast of downtown Ukiah, in Mendocino County. The complex occupies the former Mendocino State Hospital property and is comprised of the following seven parcels: 181-150-04 and 05; 181-160-26 and 28; 182-240-15; 182-250-02 and 03. The complex includes a monastery, school, bookstore, restaurant, residential units, supporting structures and infrastructure.

The proposed IIPE campus, will be located adjacent to, and east of, the CTTB complex on three parcels owned by DRBA. The IIPE campus will accommodate up to 500 residents and will be constructed in 3 phases. The men's area (parcel 181-190-05) will be constructed first, followed by the assembly hall area (parcel 181-190-05); and then the women's area (parcel 182-240-16).

Mendocino County Final Findings and Conditions of Approval of Use Permit Renewal No. UR 51-78/2009 and Use Permit Modification No. UM 11-99/2009 and Variance No. V7-99/2009, dated September 16, 2011, limits the permanent residency population of the Facility to 1,300. Domestic wastewater generated by the Facility, will be collected, treated and disposed of on-site via the WWTS. The WWTS will be constructed in phases, as additional treatment and disposal capacity is required for wastewater flows generated by the increasing population of the Facility.

The initial phase of the WWTS includes primary wastewater treatment via septic tanks, followed by secondary treatment via lined, subsurface-flow, wetland treatment cells (wetland cells), followed by disposal to an existing leach field currently serving the CTTB complex. The disposal capacity of leach field (LF-D), when applying effluent at a rate of 2.0 gallons per square foot, as proposed in the ROWD, is 33,271 GPD.

This NOA General Order coverage, is limited to the initial phase of the WWTS construction and a monthly average wastewater flow discharge volume of 33,000 GPD. To initiate subsequent proposed design phases of the WWTS, including expansion of the existing leach field area, or changes to the treatment or disposal method cited in this NOA, including recycled water re-use, the Discharger must submit a new ROWD to the Regional Water Board. The ROWD will be evaluated by Regional Water Board staff to determine whether the discharge from the expanded project is eligible for coverage under the General Order or whether individual waste discharge requirements are needed.

The WWTS design provided in the ROWD is shown on **Attachment B**, which is attached hereto and is made part of this NOA by reference.

Discharge Description

The ROWD cites the WWTS design for full build out of the Facility and maximum occupancy as 64,341 GPD projected average flow and 127,056 GPD maximum peak flow. Full build out of the Facility is projected to occur in 2056. As set forth above, this NOA general order coverage is applicable only to the initial phase of the WWTS construction and a discharge flow volume of 33,000 GPD.

The design of the WWTS is included in the *International Institute of Philosophy and Ethics Onsite Wastewater Treatment Wetland and Disposal System Draft Basis of Design Memorandum* and the *Technical Memorandum, Response to Comments*, for the Dharma Realm Buddhist Association, prepared by Pacific Watershed Associates, and dated May 7, 2018, and May 16, 2018, respectively. These documents are made part of this NOA by reference.

Primary Treatment and Collection System

Primary waste treatment will be provided using kitchen grease interceptors and septic tanks. The collection system will consist of a combination of gravity grease interceptor and septic tank influent lines, and pressurized septic tank and wetland cell effluent lines.

The CTTB complex is served by one grease interceptor, three septic tanks and a lift station. The lift station, Tank D, will receive effluent from septic tanks A, B, and C. Effluent from Tank D will be pumped directly to the wetland treatment cells. The IIPE campus will be served by one grease interceptor, seven septic tanks, and one lift station, following completion of the final phase of construction. The CTTB lift station and IIPE septic tanks will be equipped with effluent filters, effluent pumps, and electrical alarms and controls. The IIPE septic tanks will be sized to allow 24 hours of emergency storage. Emergency generators will be on hand to operate the CTTB septic tanks and lift station pumps during extended power outages. Septic tank effluent will be conveyed from the IIPE lift station to the wetland cells via a pressurized line.

Secondary Wastewater Treatment System

Secondary treatment will be provided using three parallel wetland cells equipped with a hydrogen sulfide biofilter to control odors. The cells will be lined with either a synthetic membrane liner or site soils compacted to a permeability of 1×10^{-6} cm/sec or less. Each cell has a design capacity of 40,000 GPD and will be equipped with an effluent distribution

manifold, drain rock, wetland plants, a water level control structure and effluent sampling port. The cells will be located on parcel 182-250-03.

Effluent will flow horizontally through the vegetated, drain-rock filter bed. A portion of the effluent will be recirculated through the wetland cells to allow for an increased rate of nitrification and denitrification of the effluent. Supplemental water may be added to the cells to ensure water levels are maintained during initial establishment of the vegetation and at times when evaporation may exceed effluent supply.

The wetland cells are designed to accept and contain precipitation from a 25-year (return-interval) 7-day (duration) storm event. Additionally, the wetland cells will be located within a containment berm to provide further storage capacity and protection from releases of effluent during large storm events. The containment berm around the cells has a design surge capacity of 1.1 million gallons. A sump located within the bermed area will pump secondary effluent from the wetland cells to the leach field.

According to the ROWD, the wetland cells are designed to achieve effluent concentrations of biochemical oxygen demand (BOD) less than 30 mg/l, total suspended solids (TSS) less than 30 mg/l, total nitrogen less than 10 mg/l, and nitrate (as N) less than 5 mg/l.

Wastewater Discharge System

Following secondary level treatment, effluent will be disposed of at an existing leach field located northeast of the CTTB complex, on parcel 182-250-03. A flow meter will measure the volume of effluent pumped to the leach field.

The existing pressurized leach field (LF-D) was installed in 1996. The leach field is composed of approximately 2,773 lineal feet of 4.5-foot-deep by 2-foot-wide trench. The pressurized effluent line is located at a depth of approximately 1.5 feet, leaving 3 feet between the disposal line and trench bottom. Site evaluation work performed by Rau and Associates, Inc. for the area of LF-D, reported the following: an absence of groundwater at a depth of 10 feet below ground surface; sandy loam as the primary soil type; and an average perc rate of 1.51 minutes per inch (MPI).

The disposal capacity of LF-D, when applying effluent at a rate of 2.0 gallons per square foot, as proposed in the ROWD, is 33,271 gallons per day (gpd). A reserve leach field area has been identified adjacent to LF-D. Leach field LF-D, the reserve area, and the treatment system components meet the set back requirements in the General Order.

General WDR Order Coverage

Commencing on the date of this NOA, waste discharges from the CTTB and IIPE domestic WWTS are regulated under the General Order.

2. California Environmental Quality Act

On September 15, 2011, the Mendocino County Planning Commission adopted a Mitigated Negative Declaration for Use Permit Renewal No. UR 51-78/2009 for the CTTB campus and for Use Permit Modification No. UM 11-99/2009 and Variance No. (V 7-99) for the IIPE

campus. The adopted Mitigated Negative Declaration and associated Final Findings and Conditions of Approval, found that the analysis prepared for a previously adopted EIR (SCH No. 1996062086) and a new assessment of the redesign adequately addressed present day environmental concerns pursuant to the provisions of the California Environmental Quality Act (CEQA).

3. Site-Specific Requirements and Effluent Limitations

A. General

The General Order contains prohibitions and specifications that apply to all wastewater systems covered under the General Order, and specifications that apply only to specific types of treatment and/or disposal systems. Table 1 of this NOA provides a summary of applicable discharge requirements for the subject wastewater system and associated effluent limitations. Discharge of wastes other than those described in the ROWD is prohibited.

Wastewater system managers and operators must be familiar with the applicable requirements contained in the General Order, this NOA, and MRP R1-2018-0054.

B. Technical Report Preparation

The following technical reports, which form the main components of a comprehensive Operation, Maintenance, and Monitoring program, shall be prepared and implemented within 90 days of issuance of this NOA:

1. By March 11, 2019, the Discharger shall have prepared and implemented a Spill Prevention and Emergency Response Plan (Response Plan). The Response Plan shall be consistent with the requirements of General Order Provision E.1.a. The Response Plan shall be maintained at the treatment facility and shall be presented to Regional Water Board staff upon request.
2. By March 11, 2019, the Discharger shall have prepared and implemented a Sampling and Analysis Plan (SAP). The SAP shall be consistent with the requirements of General Order Provision E.1.b. The SAP shall be maintained at the treatment facility and shall be presented to Regional Water Board staff upon request.

C. WWTS

The WWTS includes septic tanks that provide primary treatment of the wastewater. Septic tanks require proper operation, maintenance, and monitoring to provide adequate and reliable wastewater service. This includes periodic inspection and removal, as needed, of accumulated solids. Requirements for septic tanks are included in General Order section B.2, Septic Systems, and in the enclosed MRP.

The WWTS includes wetland treatment cells that provide secondary treatment of wastewater. The wetland cells require proper operation, maintenance, and monitoring to provide adequate and reliable wastewater service. The required operation, maintenance and monitoring activities are similar to those required for a lined pond system. This includes maintenance of sufficient capacity to accommodate the wastewater and seasonal

precipitation, odor and mosquito abatement management, wetland cell integrity management, periodic inspections and removal, as needed, of accumulated solids and decaying vegetation. Requirements for the wetland cells are included in General Order section B.5, Pond Systems, and in the enclosed MRP.

The WWTS includes subsurface dispersal of treated effluent from the wetland treatment cells to leach field LF-D. The subsurface disposal system requires proper operation, maintenance and monitoring to provide adequate and reliable disposal. This includes periodic inspection and maintenance of the dispersal system and leach field, in addition to maintaining the availability of the reserve leach field area. Requirements for the subsurface disposal system are included in General Order section B.6, Subsurface Disposal Systems, and in the enclosed MRP.

Operational maintenance and monitoring work on the WWTS shall be conducted by qualified service providers with appropriate oversight by the Discharger. The Discharger is responsible for ensuring proper operation, maintenance, and monitoring of the WWTS.

D. Effluent Limitations

Effluent limitations for BOD and Total Nitrogen are presented in Table 1. **The effluent limitation for BOD is 90 mg/L. The effluent limitation for Total Nitrogen is 10 mg/L.** The numeric value of the effluent limitation for BOD and Total Nitrogen are consistent with performance-based effluent limitations specified in Table 4 of the General Order for a trickling filter and subsurface disposal system. Effluent limitations for BOD and Total Nitrogen are expressed as monthly average limitations and are calculated by taking the arithmetic mean of all measurements collected in a calendar month.

E. APMP Geographic Area Eligibility

Existing, new, and replacement onsite wastewater treatment systems that use subsurface disposal of wastewater that are near water bodies listed as impaired for nitrogen or pathogens may be addressed by a Total Maximum Daily Load (TMDL) and its implementation plan, or special provisions contained in a Local Agency Management Program (LAMP). If there is no TMDL or special provisions, new and replacement OWTS within 600 feet of an impaired water body listed in Attachment 2 of the *Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems* (OWTS Policy) must meet specific requirements set forth in Tier 3 of the OWTS Policy. An Advanced Protection Management Program (APMP) is the minimum required management program for all OWTS near an impaired water body and its geographic area is defined by the applicable TMDL or LAMP. In general, wastewater systems located within the geographic area of an APMP are not eligible for coverage under this General Order unless the Regional Water Board's Executive Officer determines the discharge is acceptable based on site-specific conditions, the level of wastewater treatment, and/or TMDL implementation requirements.

The Facility is not within the geographic area of an APMP in an approved TMDL or LAMP. In the event that the Facility becomes subject to requirements of an APMP, this NOA will be reevaluated for continued eligibility under the General Order.

F. Basin Plan Groundwater Limitations

1. The collection, treatment, storage, and disposal of wastewater shall not cause or contribute to a statistically significant degradation of groundwater quality unless a technical evaluation is performed that demonstrates that any degradation that could reasonably be expected to occur, after implementation of all regulatory requirements (e.g., Basin Plan) and reasonable best management practices, will not violate groundwater quality objectives or cause impacts to beneficial uses of groundwater.
2. The collection, treatment, storage and disposal of the treated wastewater shall not cause or contribute to levels of chemical constituents in groundwater that exceed the maximum and secondary maximum contaminant levels specified in California Code of Regulations, title 22, Table 64431-A, Table 64444-A, Table 64449-A, and Table 64449-B. (Cal. Code Regs., tit. 22, § 64444 and § 64449.)
3. The collection, treatment, storage and disposal of the treated wastewater shall not cause or contribute to levels of radionuclides in groundwater in excess of the limits specified in California Code of Regulations, title 22, Table 64442 and Table 64443. (Cal. Code Regs., tit. 22, § 64442, and § 64443.)
4. The collection, treatment, storage, and disposal of wastewater shall not cause groundwater to contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses.
5. In groundwater used or potentially used for domestic and municipal supply (MUN), the collection, treatment, storage and disposal of the treated wastewater shall not cause the median concentration of coliform organisms over any 7-day period to exceed 1.1 MPN per 100 milliliters or 1 colony per 100 milliliters.
6. Groundwaters shall not contain toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in humans, or that adversely affects beneficial uses. This limitation applies regardless of whether the toxicity is caused by a single substance or the synergistic effect of multiple substances.

4. Monitoring and Reporting Program

The Discharger shall comply with enclosed MRP Order R1-2018-0054, for the Dharma Realm Buddhist Association Wastewater Treatment System, which is made part of this NOA by reference.

Quarterly self-monitoring reports and an annual summary report are to be submitted to the Regional Water Board in accordance with Table 5 of the MRP. The MRP should be consulted for all specific requirements.

5. Enforcement

The Dharma Realm Buddhist Association shall manage and discharge the waste subject to the terms and conditions of the General Order and this NOA and shall maintain exclusive control over the discharges. As such, Dharma Realm Buddhist Association is responsible for compliance with the General Order and this NOA.

Failure to comply with the requirements in the General Order, this NOA, or the MRP could result in an enforcement action as authorized by provisions of the California Water Code.

California 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.”

California 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 reports required in item 3.B are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to California Water Code section 13267, the Discharger shall submit the reports described herein.

Please review this NOA carefully to ensure that it completely and accurately reflects the discharge. If the discharge violates the terms or conditions listed, the Regional Water Board may take enforcement action, including assessment of administrative civil liability. Prior to allowing changes to the wastewater strength or generation rate, or if the method of waste discharge changes from that described in the ROWD, you must contact the Regional Water Board to determine if submittal of an ROWD is required.

6. Annual Fees

The waste discharge authorized by this NOA is subject to payment of annual fees under the State Water Board's annual fee schedule for regulated discharges. Annual fees are based in part on ratings for threat to water quality and complexity. The subject Facility is currently rated 2-B. The annual fee for this rating in accordance with the current (FY 2017-2018) Fee Schedule is \$14,929; however, based on the flow rate, the discharge qualifies for the 50-percent fee discount. The annual fee for the discharge is currently \$7,464.50.

The Fee Schedule is subject to change, and the fee for this Facility may change accordingly. Annual fees are due and payable as invoiced annually to the Discharger by the State Water Board.

7. Regional Water Board Contact Information

Regulation of the subject WWTS under the General Order is managed by the Regional Water Board's Groundwater Permitting Unit. The case is currently assigned to Regional Water Board staff environmental scientist Rachel Prat. Questions or concerns about this NOA, the attached MRP, or related matters should be directed to Rachel Prat at (707) 576-2542 or Rachel.Prat@waterboards.ca.gov.

Sincerely,

Matthias St. John
Executive Officer

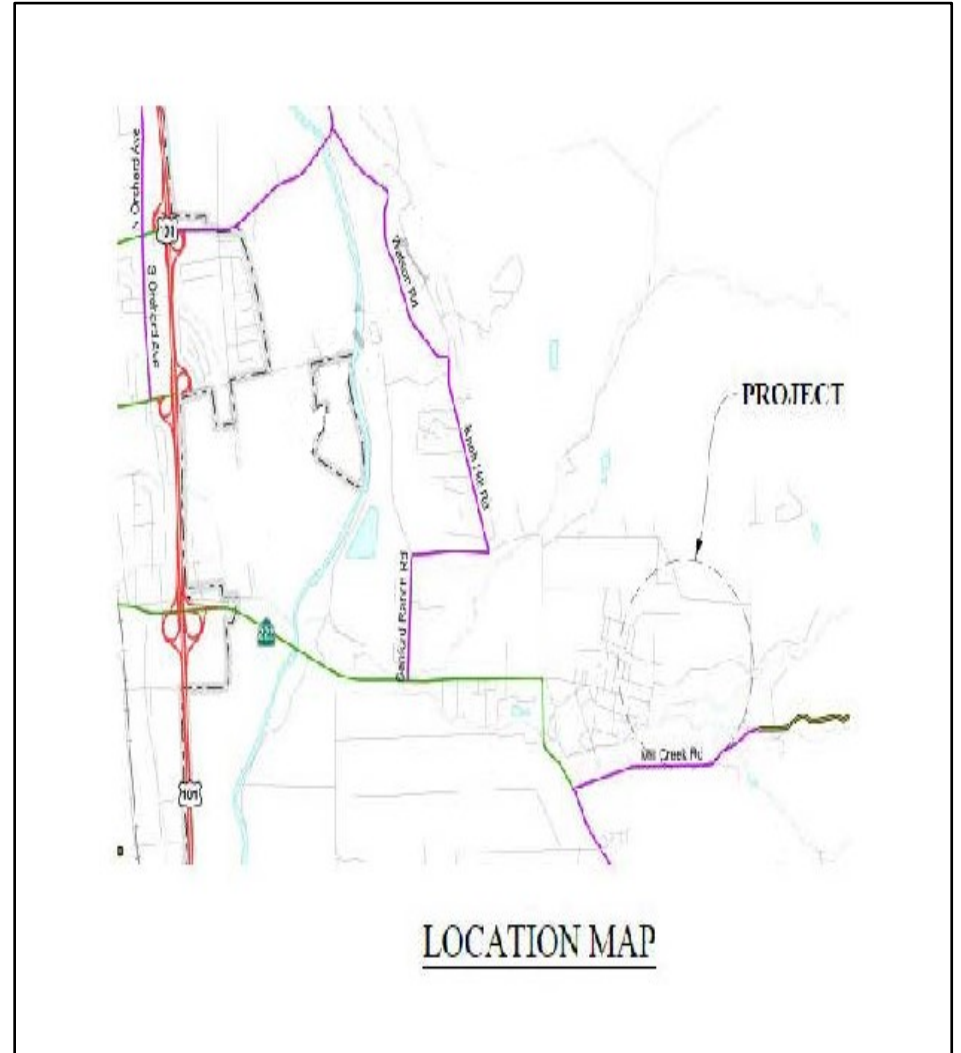
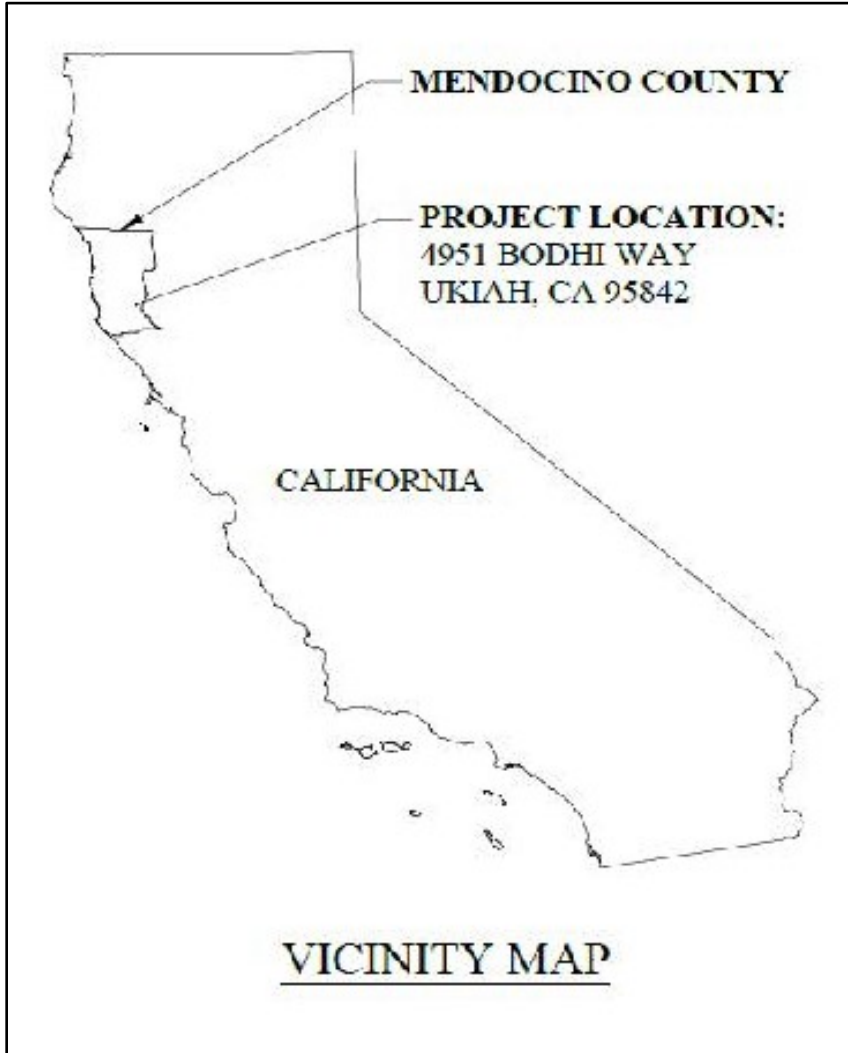
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Attachments: Attachment A, Site Location
Attachment B, Project Area
Attachment C, Wastewater Treatment System Schematic

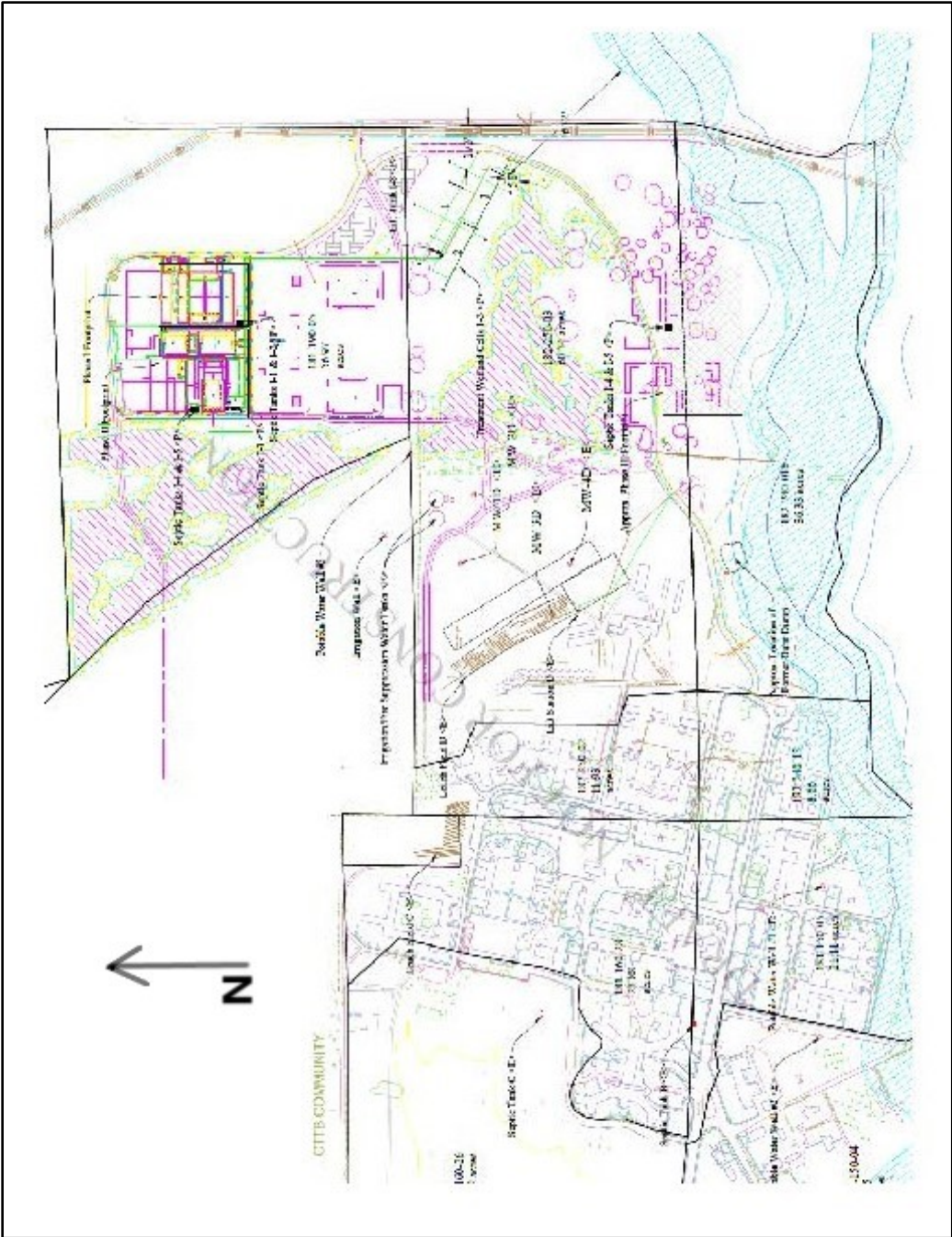
Enclosures: Table 1, Summary of Applicable Discharge Requirements
Monitoring and Reporting Program R1-2018-0054
[Water Quality Order WQ 2014-0153-DWQ](#)

cc: Marlayna Bourbonnais, Mendocino County Land Use, bourbonm@mendocinocounty.org
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Rachel Prat, North Coast Regional Water Board, Rachel.Prat@waterboards.ca.gov

Attachment A - Site Location



Attachment B - Project Area



Attachment C - Wastewater Treatment System Schematic

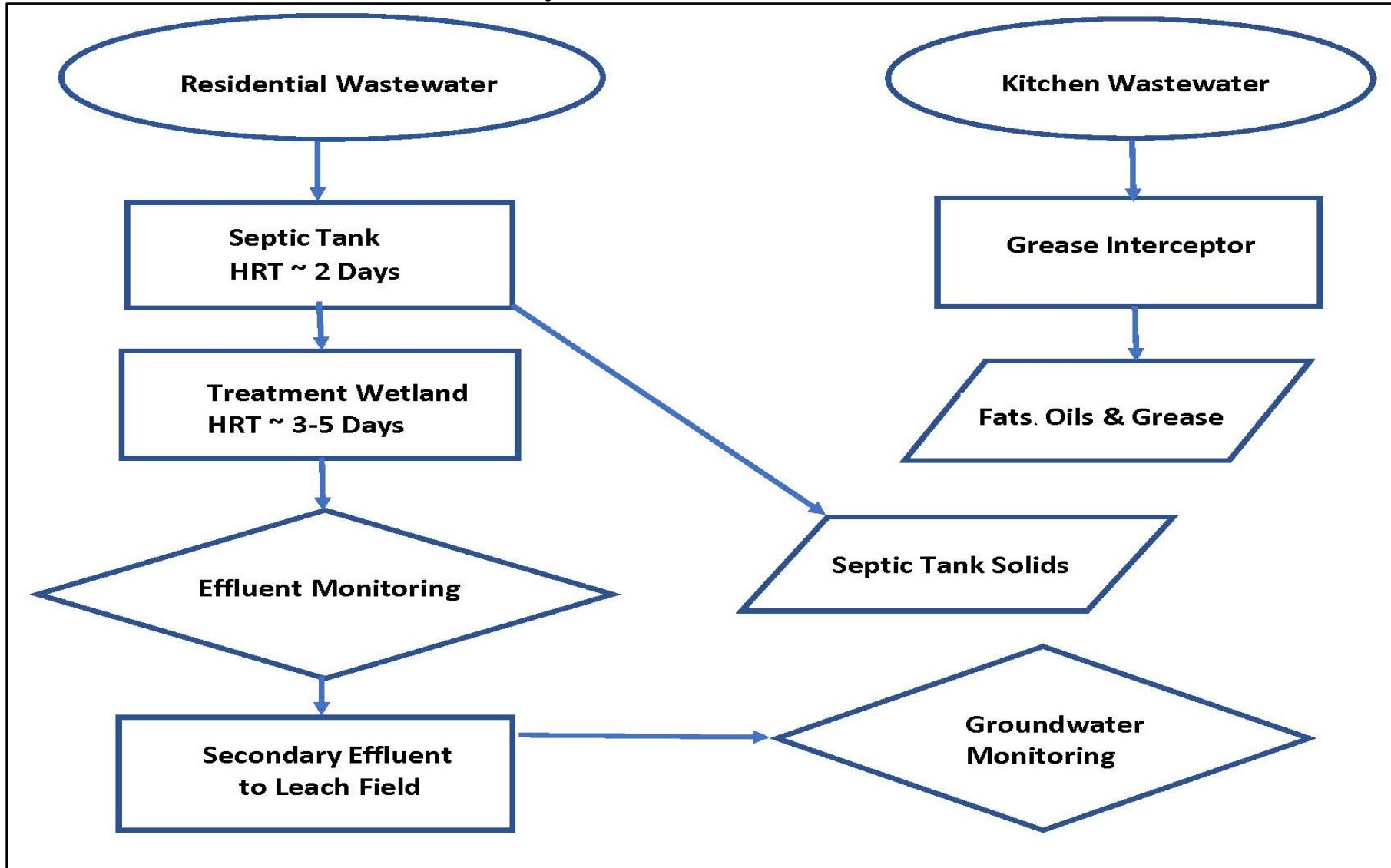


Table1, Summary of Facility Specific General Order Requirements (NOA Enclosure)

General Order Section	Page	Numeric Limitation	Requirement (refer to General Order and NOA for details)
A. PROHIBITIONS			
A.1-A.11	15	--	Prohibitions
B. REQUIREMENTS BY WASTEWATER SYSTEM TYPE			
B.1.a-B.1.l	16	--	All Wastewater Systems
B.1.a	16	33,000 gpd	Wastewater Flow Limit.
B.2.a-B.2.e	20	--	Septic Systems
B.5.a-B.5.f	23	--	Pond Systems (Subsurface Wetland Treatment Cells)
B.6.a-B.6.h	24	--	Subsurface Disposal System (Leach Field)
B.8.a-B.8.f	26	--	Sludge/Solids/Biosolids Disposal
C. GROUNDWATER AND SURFACE WATER LIMITATIONS			
C.1	27	--	Groundwater and Surface Water Limitations
D. EFFLUENT LIMITATIONS			
D.1.a	27	90 mg/L	Five Day Biochemical Oxygen Demand (BOD ₅), monthly average.
D.1.a	27	10 mg/l	Total Nitrogen, monthly average.
E. PROVISIONS			
Technical Report Requirements			
E.1.a	28	Have on-site.	Spill Prevention and Emergency Response Plan
E.1.b	29	Have on-site.	Sampling and Analysis Plan
E.1.c	30	Not Applicable	Sludge Management Plan
E.2.h	32	Have on-site	Copy of NOA, and General Order