

Central Valley Regional Water Quality Control Board

29 March 2018

WDID: 5A04NC00031

Mr. Les Doll, President
Rare Earth Estates Owners' Association
4128 Tiberon Way
Chico, CA 95973

**CERTIFIED MAIL:
7016 2140 0000 1629 7426**

NOTICE OF APPLICABILITY (NOA), WATER QUALITY ORDER 2014-0153-DWQ-R5264, RARE EARTH ESTATES, BUTTE COUNTY

On 23 February 2018 Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff inspected the wastewater facilities at Rare Earth Estates (hereafter "Discharger") located on Tiberon Way, 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-R5264 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 R5-2008-0095 (WDRs) were adopted for this facility by the Central Valley Water Board on 12 June 2008. The Monitoring and Reporting Program R5-2008-0095 required the following:

- Monthly reporting of average daily flows in gallons per day
- Monthly reporting of effluent quality including Nitrate as Nitrogen, Total Kjeldahl Nitrogen with frequency reduced to every two months once compliance with effluent limitations have been demonstrated for three consecutive sampling events.
- Every two months effluent quality for Total Dissolved Solids, BOD and Total Suspended Solids/Electrical Conductivity
- Annual reporting for a four point composite effluent sample for Nitrite, Boron, Chloride, Iron, and Manganese (January-February sampling)

- Monthly visual inspection of disposal fields for surfacing wastewater, erosion, saturation, or the presence of nuisance conditions. If liquid is present in the disposal field area, sample for pH, Total Coliforms, Fecal Coliforms, and Total Dissolved Solids.

Effluent samples should be collected after treatment, before delivery to the dispersal fields.

DISCHARGE DESCRIPTION

Rare Earth Estates is located at Tiberon Way, Butte County. The facility is in Sections 29 and 32, T23N, R1E, MDB&M in Butte County. Currently the facility serves 12 homes and is fully built out. Each home is equipped with 1,500-gallon a septic tank effluent pump (STEP) system which pumps wastewater to a centrally located treatment facility. After treatment the effluent is alternately dosed to two subsurface dispersal fields.

The design of the wastewater disposal system has a maximum flow of 4,500 gallons per day (gpd). The treatment system consists of a 5,000-gallon recirculation tank, two Orenco AX-100 textile filter pods, and a 1,500-gallon dosing tank. The dispersal fields consist of 2,950 linear feet and is divided into six dispersal zones. The six zones are divided into two fields which alternate treated effluent delivery with the cycling of each pump. A facility map and diagram are attached.

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-R5264, with all attachments.

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

Site Specific Applicable Setback Requirements					
Equipment or Activity	Domestic Well	Flowing Stream ^a	Ephemeral Stream Drainage ^b	Property Line	Lake or Reservoir ^d
Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System ^e	150 ft. ^y 100 ft. ^o 50 ft. ^c	50 ft. ^c	50 ft.	5 ft. ^{c,z}	200 ft. ^w 50 ft. ^c
Leach Field ^f	100 ft. ^{o,c}	100 ft. ^c	50 ft.	5 ft. ^c	200 ft. ^w 100 ft. ^c

LAA denotes Land Application Area. Sec denotes secondary.

^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.

^p Setback for drip or flood application methods. Spray irrigation is subject to additional setbacks and restrictions. (See footnote k.)

^w Setback established by the Onsite Wastewater Treatment System Policy, section 7.5.5.

^y Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.

^z Collection system to property line setback is not applicable.

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 to: 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: Rare Earth Estates

WDID: 5A04NC00031
Order: 2014-0153-DWQ-R5264

Please note that WDRs Order R5-2008-0095 is proposed to be rescinded at the **31 May/1 June 2018** 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, or the footer address.

Original signed by Bryan Smith

(for) Pamela C. Creedon
Executive Officer

MG: ab

Attachments: Technical Memorandum
Monitoring and Reporting Program
Rare Earth Estates Location Map
Rare Earth Estates Facility Map
Rare Earth Facility Diagram
General Order 2014-0153-DWQ

cc w/ encl: Les Doll, Rare Earth Estates Owners' Association
Hydrotec Solutions, Inc., Chico

cc w/o encl: Butte County Environmental Health Division, Oroville
Tim O'Brien, State Water Board, Sacramento
Patrick Pulupa, SWRCB, Office of Chief Counsel, Sacramento

Central Valley Regional Water Quality Control Board

TECHNICAL MEMORANDUM

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

FROM: Monique Gaido, P.G.
Engineering Geologist

DATE: 29 March 2018

SIGNATURE: Original signed by Monique Gaido

**SUBJECT: REVIEW OF NITRATE AND SETBACK CONDITIONS FOR RARE EARTH ESTATES,
BUTTE COUNTY GENERAL ORDER WQ 2014-0153-DWQ ENROLLMENT**

Staff has reviewed the case file and conducted a pre-permitting inspection on 23 February 2018 for the Rare Earth Estates subdivision. The Report assesses the general condition of the wastewater treatment system and the subsurface disposal fields.

The subdivision is located north of the city of Chico and south of Keefer Slough. The facility includes a collection system serving up to 12 homes served by a STEP (Septic Tank Effluent Pump) system and pumped to a centrally located treatment facility and dosed to adjacent subsurface dispersal fields.

Each residence has a 1,500-gallon septic tank equipped with a STEP pump package and control panel. The pump package consists of a screened pump vault, control and alarm floats and a high head pump. Each pump is connected to the 2-inch pressure force main. The wastewater treatment system consists of a 5,000-gallon recirculation tank, two Orenco AX-100 textile filter pods, and a 1,500-gallon dosing tank. The treatment system is designed for 4,500 gallons per day (gpd) and average daily flows range from 1,200 to 1,900 gpd.

Pumps in the dosing tank convey treated effluent to 2,950 linear foot of pressure dosed dispersal trench which is divided into six zones. Each zone consists of 490 lineal feet of 24-inch wide trench with 18 inches of gravel. The six distribution zones are divided into two fields using two 3-way automatic distribution valves which rotate treated effluent to a different zone with each pump cycle. A Facility Map and Facility Diagram are attached to this letter for reference.

Potential Threats to Water Quality

Each home in the Rare Earth Estates subdivision uses a private well as its primary water source. Rare Earth Estates home owners are responsible for their own well installation, maintenance and testing. The potable well nearest to the subsurface dispersal fields is located directly east of the fields with a 100-foot setback. The well completion report for this well indicates that the sanitary seal extend to 23 feet below ground surface (bgs), blank 6-inch steel casing to 80 feet bgs and unslotted 4-inch PVC casing to 160 feet bgs. No perforated interval is shown.

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, the treatment system capacity is 4,500 gpd and highest average daily flow was 1,900 gpd.

Conclusion: Monitoring of nitrogen removal through wastewater treatment will not be included at this time.

Monitoring Requirements

To protect water quality, General Order monitoring requirements will be sufficient with the addition of nitrogen monitoring to evaluate treatment system percent removal. In summary, Staff recommends quarterly reporting of average daily flow rate for each month in the period; monthly effluent monitoring for Biological Oxygen Demand; and quarterly visual observations for the disposal fields for monitoring for odors, saturated soils, surfacing wastewater, excessive vegetation, vectors and/or animal burrowing, and quarterly reporting for any offsite solids disposal. Quarterly groundwater monitoring, when groundwater is present, shall include depth to groundwater, groundwater elevation and gradient (calculated from depth and surveyed top of casing elevations), pH, Total Dissolved Solids, Nitrate as Nitrogen, Sodium, Chloride, and Total Coliform Organisms.

The onsite groundwater monitoring wells have remained dry since installation in 2011. A deeper groundwater monitoring well network or additional monitoring to check treatment system nitrogen removal efficiency may be required in the future.

Monitoring results shall be reported quarterly by the first day of the second month after the quarter ends (e.g. January-March report is due by May 1st). Annual monitoring will be included with the fourth quarter monitoring.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM 2014-0153-DWQ-R5264

FOR

RARE EARTH ESTATES

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

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

Effluent Monitoring

Samples of effluent shall be taken at an area that represents the effluent quality distributed to the disposal area. 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>
Flow Rate	gpd	Metered ^a	Continuous	Quarterly
Biochemical Oxygen Demand	mg/L	Grab	Monthly	Quarterly

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

^a. 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.

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

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

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
Seepage Pit Condition ^e	Quarterly	Quarterly

^a. All pump controllers and automatic distribution valves shall be inspected for proper operation as recommended by the manufacturer.

^b. Inspect a disposal area for saturated conditions. If a mound system is used, inspect perimeter base for signs of wastewater seepage or saturated soil conditions.

- c. Shallow-rooted plants are generally desirable, deep-rooted plants such as trees shall be removed as necessary.
- d. Evidence of animals burrowing shall be immediately investigated and burrowing animal populations controlled as necessary.
- e. Seepage pits shall be inspected to ensure they are allowing wastewater to infiltrate as designed. Visual inspection of the water level in the seepage pit is adequate.

SOLIDS DISPOSAL MONITORING

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

GROUNDWATER MONITORING

The Discharger shall monitor groundwater quality in the three groundwater monitoring wells (MW-1, MW-2, and MW-3). Consistent with the Business and Professions Code, groundwater monitoring reports, well construction work plans, 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^c</u>
Groundwater Elevation ^a	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

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sampling/Reporting Frequency^c</u>
Sodium	mg/L	Grab	Quarterly
Chloride	mg/L	Grab	Quarterly
Total Coliform Organisms ^b	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 1st). The reports shall bear the certification and signature of the Discharger's authorized representative. At a minimum, the quarterly reports shall include:

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

B. Annual Report

Annual Reports shall be submitted 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:

Original signed by Bryan Smith for

PAMELA C. CREEDON, Executive Officer

3-29-2018

DATE

LOCATION MAP

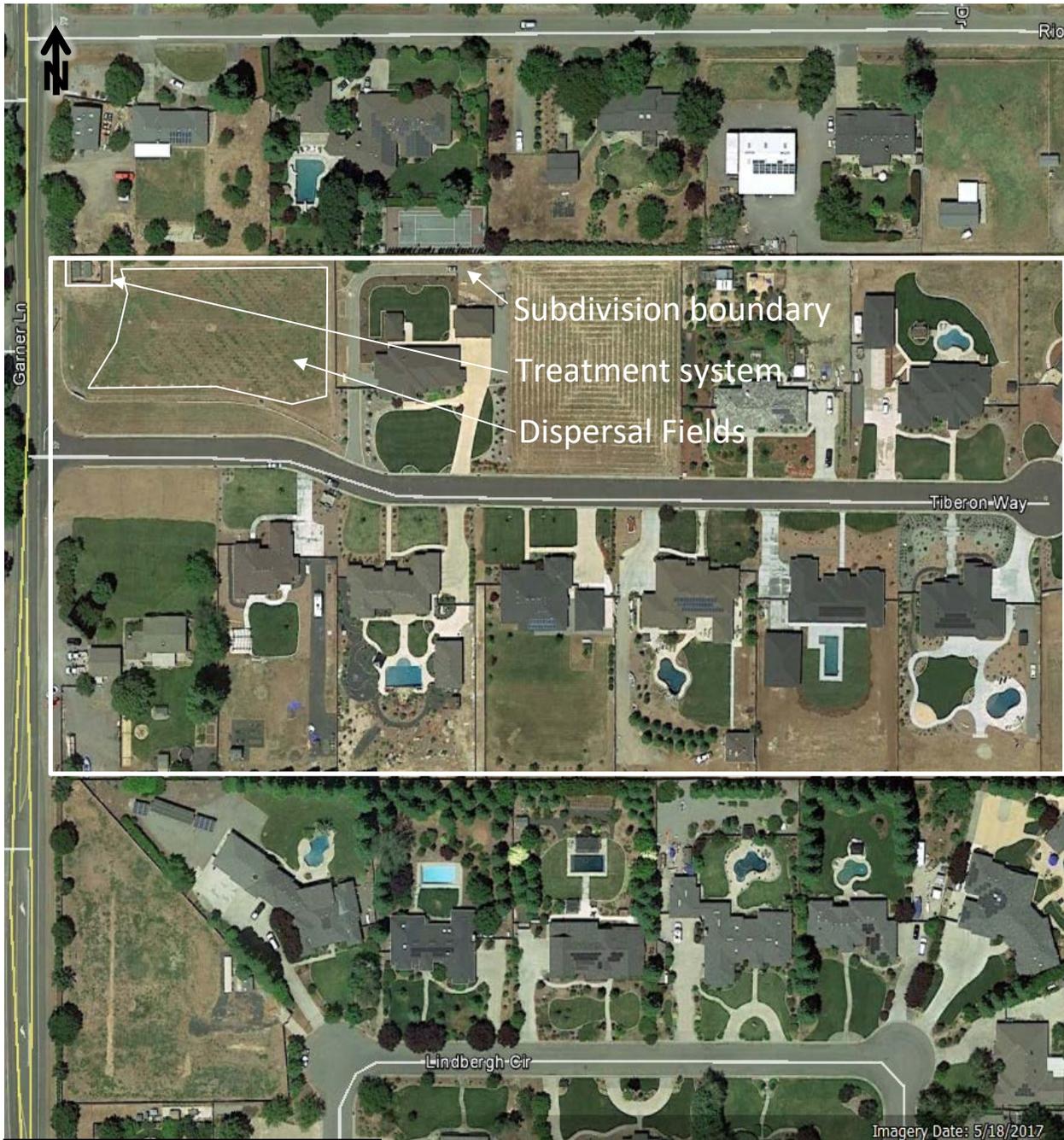


DRAWING REFERENCE:
GOOGLE EARTH
MAP DATA: © 2018 GOOGLE
NO SCALE

FIGURE 1: LOCATION MAP

**RARE EARTH ESTATES
BUTTE COUNTY**

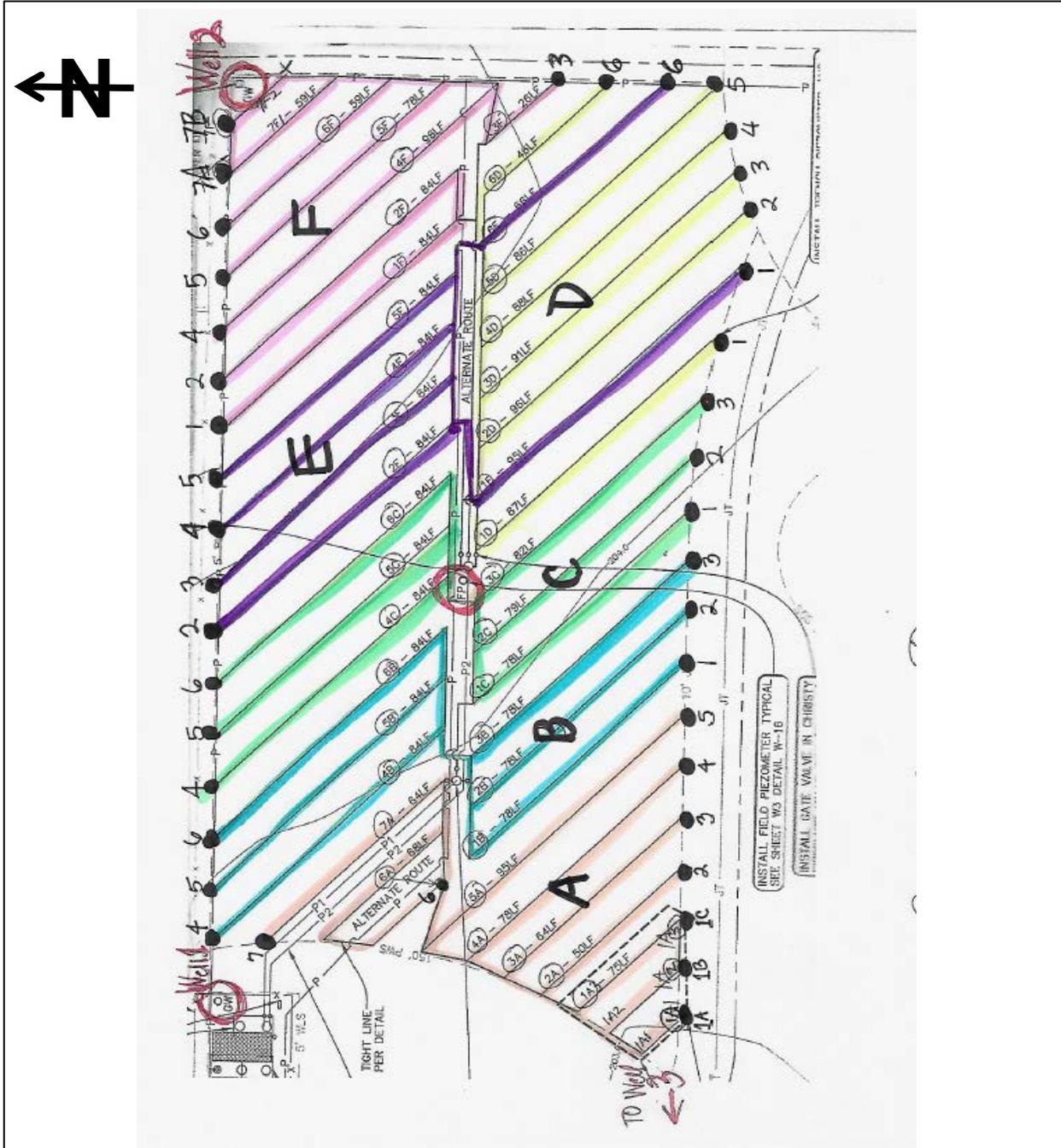
FACILITY MAP



DRAWING REFERENCE:
GOOGLE EARTH
MAP DATA: © 2018 GOOGLE
NO SCALE

FIGURE 2: FACILITY MAP
RARE EARTH ESTATES
BUTTE COUNTY

FACILITY DIAGRAM



DRAWING REFERENCE:
NO SCALE

FIGURE 3: FACILITY DIAGRAM

RARE EARTH ESTATES
BUTTE COUNTY