
Central Valley Regional Water Quality Control Board

26 April 2018

WDID: 5A040105002

Kathy Stone
Richvale Sanitary District
PO Box 1
Richvale, CA 95974

**CERTIFIED MAIL:
7016 2140 0000 1629 7457**

NOTICE OF APPLICABILITY (NOA), WATER QUALITY ORDER 2014-0153-DWQ-R5271, RICHVALE WASTEWATER TREATMENT FACILITY, BUTTE COUNTY

On 15 November 2017 Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff inspected the wastewater facilities Richvale Sanitary District (hereafter "Discharger") located on Eucalyptus Road in Richvale, 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-R5271 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 94-361 (WDRs) were adopted for this facility by the Central Valley Water Board on 9 December 1994. The Monitoring and Reporting Program requires the following:

- Continuous monitoring of flows to the ponds.
- Monthly monitoring of pond freeboard and liquid depth.
- Monthly monitoring of dissolved oxygen concentration in all ponds.
- Monthly inspection of ponds including berm condition, excessive odors, and excessive weed growth.
- Quarterly groundwater monitoring for biochemical oxygen demand, and total coliform.

DISCHARGE DESCRIPTION

Richvale's Wastewater Treatment Facility (Facility) is located on Eucalyptus Road, approximately one mile south of Richvale, Butte County. The facility is in Section 21, T19N, R3E, MDB&M in Butte County.

The Facility discharges approximately 30,000 gallons per day of municipal wastewater, which consists of headworks and four unlined ponds encompassing approximately 20 acres.

Municipal wastewater from Richvale flows by gravity to headworks, which includes a parshall flume for flow measurement, wet well, and lift station. Two grinder pumps run in lead-lag mode and are float actuated conveying influent into two flow distribution boxes. The flow is conveyed in parallel, equal flows into two facultative lagoons with an approximately 30-day retention time. The Facility is also equipped with two land disposal basins that are fed by gravity from the facultative lagoons in the event that the lagoons exceed two feet freeboard.

The underlying soil is primarily Stockton Clay Adobe with an essentially impervious hard pan at 3 to 12 feet, with a depth to groundwater at 6 to 8 feet. There are three groundwater monitoring wells onsite.

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-R5271 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
^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.
- o California Well Standards, part II, section 8. Site-specific conditions may allow reduced setback or require an increased setback. See discussion in Well Standards.
- w Setback established by the Onsite Wastewater Treatment System Policy, section 7.5.5.
- y Setback established by Onsite Wastewater Treatment System Policy, section 7.5.6.
- z Collection system to property line setback in 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 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

WDID: 5A040105002

Facility Name: Richvale Wastewater
Treatment Facility

Order: 2014-0153-DWQ-R5271

Please note that WDRs Order 94-361 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 Valerie Rasmussen at (530) 224-6130, valerie.rasmussen@waterboards.ca.gov, or the footer address.

Original signed by Bryan Smith

(for) PATRICK PULUPA, Incoming Executive Officer for
PAMELA C. CREEDON, Executive Officer

VMR: ab

Attachments: Technical Memorandum
Monitoring and Reporting Program
Location Map
General Order 2014-0153-DWQ

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

Central Valley Regional Water Quality Control Board

TECHNICAL MEMORANDUM

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

FROM: Valerie Rasmussen
Water Resource Control Engineer

DATE: 26 April 2018

SIGNATURE: Original signed by Valerie Rasmussen

SUBJECT: REVIEW OF NITRATE AND SETBACK CONDITIONS FOR RICHVALE SANITARY DISTRICT'S WASTEWATER TREATMENT FACILITY, BUTTE COUNTY, GENERAL ORDER WQ 2014-0153-DWQ ENROLLMENT

Staff has reviewed the case file and the 28 November 2017 inspection Report for Richvale's Wastewater Treatment Facility (Facility). The Report assesses the general condition of the wastewater treatment system and ponds. The Discharger has kept adequate maintenance documentation and treatment infrastructure appears in working order. The collection system sees a significant increase in flows due to inflow and infiltration in the collection system.

The Facility discharges approximately 30,000 gallons per day of municipal wastewater to four unlined ponds and encompasses approximately 20 acres.

Municipal wastewater from Richvale flows by gravity to headworks, which includes a parshall flume for flow measurement, wet well, and lift station. Two grinder pumps run in lead-lag mode and are float actuated conveying influent into two flow distribution boxes. The flow is conveyed in parallel, equal flows into two facultative lagoons with an approximately 30 day retention time. The Facility is also equipped with two land disposal basins that are fed by gravity from the facultative lagoons in the event that the lagoons exceed two feet freeboard.

The underlying soil is primarily Stockton Clay Adobe with an essentially impervious hard pan at 3 to 12 feet, with a depth to groundwater at 6 to 8 feet. There are three groundwater monitoring wells onsite.

Potential Threats to Water Quality

The wastewater ponds are adjacent to two agricultural canals, Gravity Lateral to the south and High Gravity Lateral to the northeast. Depth to groundwater in the area is approximately 6 to 8 feet, with groundwater surfacing in the land disposal basin during storm events. The Facility is surrounded by agricultural land, predominately rice. The closest drinking water well is greater than 500 feet from the lagoons and basins.

Due to the permeable ponds and shallow groundwater, Order 94-361 required the installation of three groundwater monitoring wells, which are tested for BOD, specific conductance, and total

coliform quarterly. The groundwater flow direction is unknown; the Groundwater Information Center Interactive Map Application indicates that Richvale and the surrounding area has a regional groundwater flow to the southwest with a flat gradient.

Completion of the Nitrate Checklist in Attachment 1 of Order 2014-0153-DWQ indicates the following flow and rationale:

A1 Exceed 20,000 gpd? Yes, monthly maximum daily flows have reached 83,000 gpd; daily average dry weather flows are generally between 20,000 and 40,000 gpd. Flows for this facility are higher during the winter months due to inflow and infiltration in the collection system.

Conclusion: Nitrogen removal is not required at this time. Should future groundwater monitoring indicate that the Facility is impacting local groundwater, nitrogen removal may be required.

Monitoring Requirements

To protect water quality, General Order monitoring requirements will be sufficient. In summary, Staff recommends quarterly reporting of the average daily flow rate; quarterly pond monitoring; influent and effluent monitoring; and quarterly groundwater monitoring. Quarterly monitoring will be reported 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 R5271

FOR

RICHVALE WASTEWATER TREATMENT FACILITY

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 GeoTracker database over the Internet in portable document format (pdf). In addition, analytical data shall be uploaded to the GeoTracker database under a site-specific global identification number. Information on the GeoTracker database is provided on the Internet at:

http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml

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.

POND SYSTEM MONITORING

Influent Monitoring

Influent samples shall be taken from a location that provides representative samples of the wastewater and flow rate. At a minimum, 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 ^a	gpd	Meter	Continuous	Quarterly

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

^{a.} 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.

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 samples shall be taken from a location that provides representative samples of the wastewater. At a minimum, effluent monitoring shall consist of the following:

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

mg/L denotes milligrams per liter.

SOLIDS DISPOSAL MONITORING

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

GROUNDWATER MONITORING

The Discharger shall monitor groundwater quality in their groundwater 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^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

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Sampling/Reporting Frequency^c</u>
Nitrate as Nitrogen	mg/L	Grab	Quarterly
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.
6. 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 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:

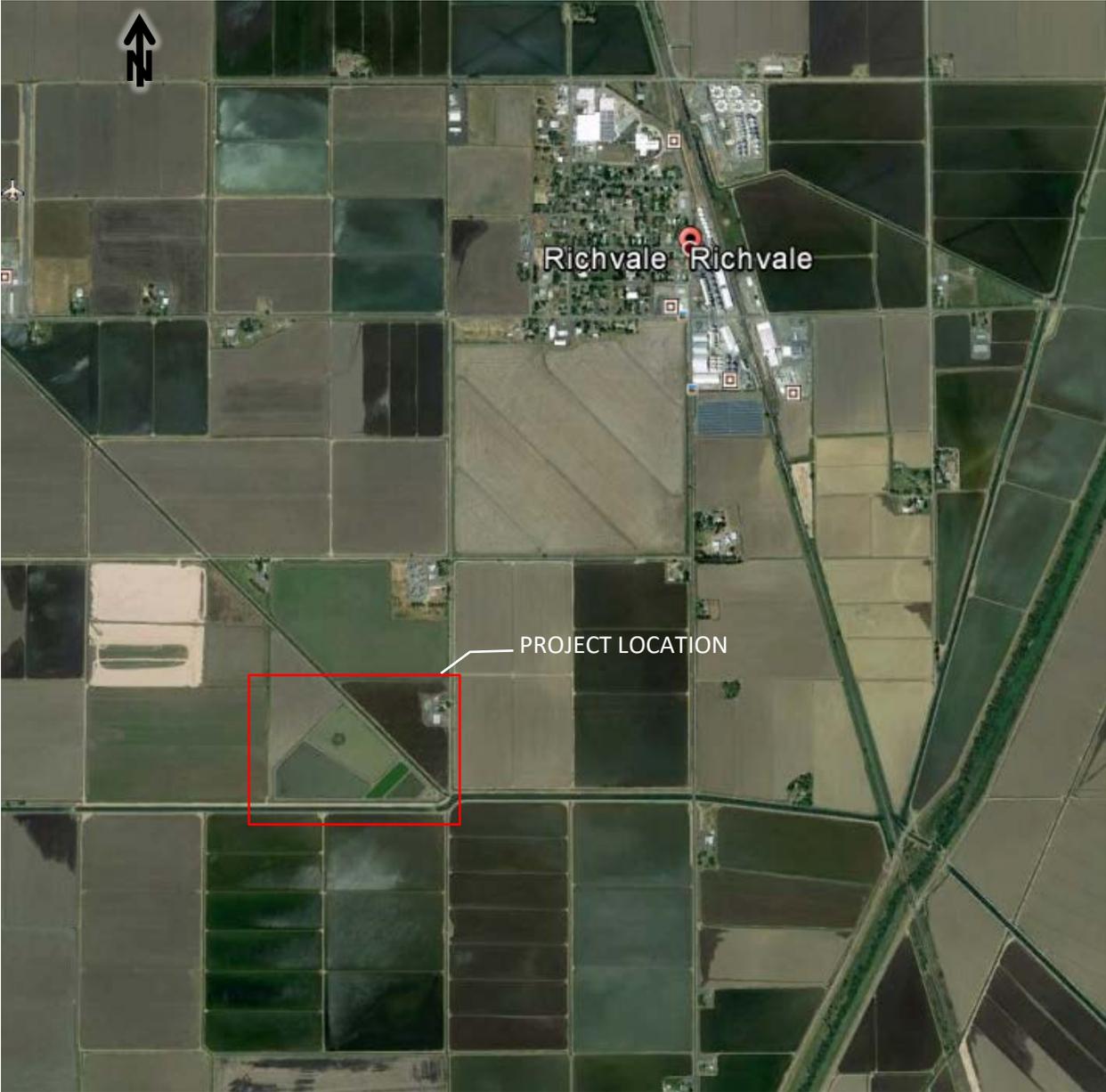
Original signed by Bryan Smith

PATRICK PULUPA, Incoming Executive Officer for
PAMELA C. CREEDON, Executive Officer

26 April 2018

DATE

LOCATION MAP



<p>DRAWING REFERENCE: GOOGLE EARTH MAP DATA: © 2017 GOOGLE NO SCALE</p>	<p>LOCATION MAP RICHVALE SANITARY DISTRICT BUTTE COUNTY</p>
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