

## Central Valley Regional Water Quality Control Board

9 December 2015

WDID# 5A450116001

Ms. Sue Maxwell  
Tucker Oaks East Subdivision  
PO Box 1154  
Anderson, CA 96007

**CERTIFIED MAIL:**  
7015 1660 0000 2319 3103

### **NOTICE OF APPLICABILITY, WATER QUALITY ORDER 2014-0153-DWQ-R5195, TUCKER OAKS EAST SUBDIVISION, WASTEWATER TREATMENT AND SUBSURFACE DISPOSAL SYSTEM, ANDERSON, SHASTA COUNTY**

Tucker Oaks East Subdivision, wastewater treatment and disposal system (Facility) is currently regulated under individual Waste Discharge Requirements (WDRs) Order 87-187. The WDR's were adopted on 23 October 1987. Tucker Oaks Water District hereafter referred to as the Discharger.

Based on the findings of the original WDRs, recent self-monitoring reports and communications with the Facility's operator, 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-R5195 for your facility.

A copy of the General Order is enclosed. You can also find the General Order on the State Water Board's website at:

[http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2014/wqo2014\\_0153\\_dwq.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2014/wqo2014_0153_dwq.pdf)

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 that are applicable to your treatment and disposal methods must be completed in accordance with the sections of the General Order and the attached Monitoring and Reporting Program (MRP). This MRP was developed after consideration of your treatment system infrastructure and site conditions described in the attached Technical Memorandum.

### **REGULATORY BACKGROUND**

The Discharger's wastewater treatment and disposal system is currently regulated under the individual WDRs Order 87-187. The WDR was adopted on 23 October 1987 and is due for an update.

**FACILITY AND DESCRIPTION**

Tucker Oaks East Subdivision is located in Section 3, T30N, R4W, MDB&M with surface water drainage to Clover Creek, a tributary to the Sacramento River, as shown on Attachment A. Tucker Oaks Water District has been established as the entity responsible for the operation and maintenance of the wastewater treatment system for Tucker Oaks East Subdivision. The Facility is comprised of a wastewater collection system, wet well and pump station, septic tank and community leachfields.

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-R5195, with all attachments.

The General Order states in Section B.1.L that the Discharger shall comply with the setbacks as described in Table 3. The following applicable setback requirements from Table 3, for which the Discharger shall comply, are summarized below:

**Table 3: Summary of Wastewater System Setbacks**

Site Specific Applicable Setback Requirements					
Equipment or Activity	Domestic Well	Flowing Stream <sup>a</sup>	Ephemeral Stream Drainage <sup>b</sup>	Property Line	Lake or Reservoir <sup>d</sup>
Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System <sup>e</sup>	150 ft. <sup>y</sup>	50 ft. <sup>c</sup>	N/A	5 ft. <sup>c</sup>	N/A
Leach Field <sup>f</sup>	100 ft. <sup>o,c</sup>	100 ft. <sup>c</sup>	N/A	5 ft. <sup>c</sup>	N/A

- <sup>a</sup> A flowing stream shall be measured from the ordinary high water mark established by fluctuations of water elevation and indicated by characteristics such as shelving, changes in soil character, vegetation type, presence of litter or debris, or other appropriate means.
- <sup>b</sup> Ephemeral Stream Drainage denotes a surface water drainage feature that flows only after rain or snow-melt and does not have sufficient groundwater seepage (baseflow) to maintain a condition of flowing surface water. The drainage shall be measured from a line that defines the limit of the ordinary high water mark (described in "a" above). Irrigation canals are not considered ephemeral streams drainage features. The ephemeral stream shall be a "losing stream" (discharging surface water to groundwater) at the proposed wastewater system site.
- <sup>c</sup> Setback established by California Plumbing Code, Table K-1.
- <sup>d</sup> Lake or reservoir boundary measured from the high water line.
- <sup>e</sup> Septic Tank, Aerobic Treatment Unit, Treatment System, or Collection System addresses equipment located below ground or that impedes leak detection by routine visual inspection.
- <sup>f</sup> Leach Field includes all subsurface dispersal systems, including mound systems except seepage pits.
- <sup>o</sup> California Well Standards, part II, section 8. Site-specific conditions may allow reduced setback or require an increased setback. See discussion in Well Standards.

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

Failure to comply with the requirements in the documents could result in an enforcement action as authorized by provisions of the California Water Code. Discharge of wastes other than those described in this NOA is prohibited. If the method of waste disposal changes from that described in this NOA, you must submit a new Report of Waste Discharge describing the new operation.

The required annual fee specified in the annual billing from the State Water Board shall be paid until this NOA is officially terminated. You must notify this office in writing if the discharge regulated by the General Order ceases, so that we may terminate coverage and avoid unnecessary billing.

The Central Valley Water Board has gone to a Paperless Office System. All regulatory documents, MRPs, submissions, materials, data, monitoring reports, and correspondence should be converted to a searchable Portable Document Format (PDF) and submitted electronically. Documents that are less than 50MB should be emailed to: [centralvalleyredding@waterboards.ca.gov](mailto:centralvalleyredding@waterboards.ca.gov).

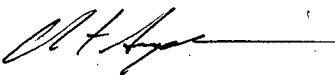
Documents that are 50MB or larger should be transferred to a disc and mailed to the appropriate regional water board office, in this case 364 Knollcrest Drive, Suite 205, Redding, CA 96002.

To ensure that your submittals are routed to the appropriate staff, the following information block should be included in any email used to transmit documents to this office:

Program:	Non-15	WDID:	5A450116001
Facility Name:	Tucker Oaks East Subdivision	Order:	2014-0153-DWQ-R5195

Please note upon rescission of your individual WDRs, coverage for your facility under the General Order shall be applicable subject to this notice. Your WDRs **Order 87-187 is proposed to be rescinded at the 18/19 February 2016**, meeting of the Central Valley Water Board.

If you have any questions regarding submitting an updated report of waste discharge, making changes to your permitted operations, compliance or enforcement please contact Ron S. Falkowski at (530) 224-3227, [rsfalkowski@waterboards.ca.gov](mailto:rsfalkowski@waterboards.ca.gov), or the footer address.

  
(for) Pamela C. Creedon  
Executive Officer

RSF: reb

Attachments: Attachment A - Site Location Map  
Attachment B - Facility Map  
Technical Memorandum  
Monitoring & Reporting Program (Discharger Only)  
General Order 2014-0153-DWQ (Discharger Only)

cc list on next page

Sue Maxwell  
Tucker Oaks East Subdivision

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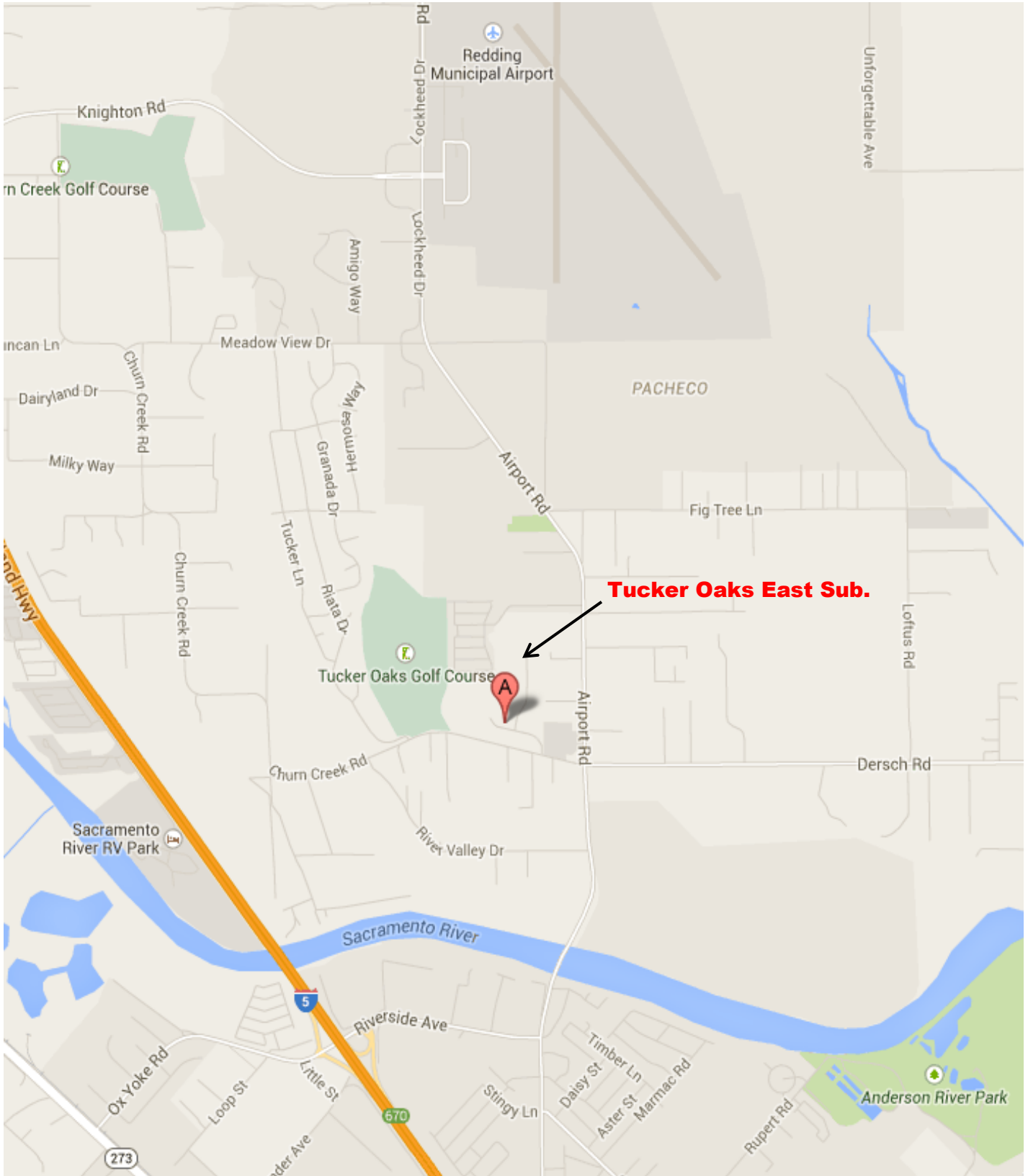
9 December 2015

cc (w/o enc.): Gordon Innes, State Water Board, Sacramento  
Shasta County Environmental Health Department, Redding  
Patrick Pulupa, SWRCB, Office of Chief Counsel, Sacramento

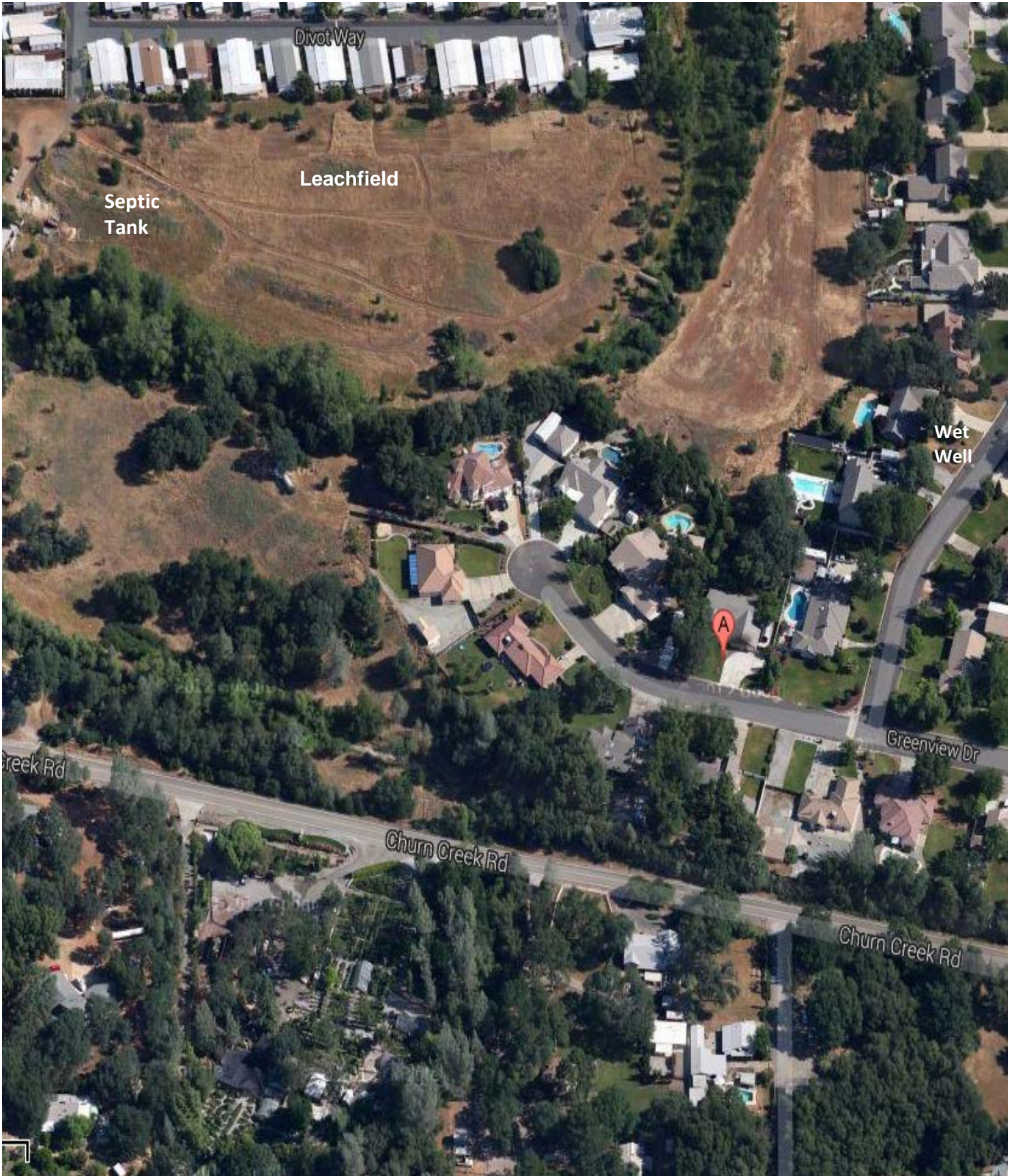
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# ATTACHMENT A

## SITE LOCATION MAP



ATTACHMENT B  
Facility Map



Central Valley Regional Water Quality Control Board

TECHNICAL MEMORANDUM

TO: George Low, PG  
Senior Engineering Geologist

FROM: Ron Falkowski  
Engineering Geologist

DATE: 9 December 2015

SIGNATURE:  (FOR RF)

SUBJECT: REVIEW OF NITRATE AND SETBACK CONDITIONS FOR TUCKER OAKS  
EAST SUBDIVISION, WDR ORDER 87-187 SHASTA COUNTY

I have reviewed the case file for Tucker Oaks East Subdivision. The file documents the general condition of the wastewater treatment and subsurface disposal system. The Discharger has kept adequate maintenance documentation and all treatment and collection infrastructure appears in good order.

The average daily wastewater flow is less than 14,000 gallons per day.

**Potential Threats to Water Quality**

The wastewater treatment system is located off Churn Creek Road, one mile southwest of Redding Municipal Airport, Redding, CA. The closest distance from the leachfield to the nearest property line is greater than 5 feet. The closest potable water well is greater than 500 feet. The closest surface water is greater than 500 feet from leachfield. Completion of the Nitrate Checklist in Attachment 1 of Order 2014-0153-DWQ indicates the following flow and rationale:

A1 Exceeds 20,000 gpd? No.

Wastewater flow generally less than 14,000 gpd.

Conclusion: No nitrogen removal is required.

**Monitoring Requirements**

To protect water quality, a monitoring program similar to the existing Order should be instituted. Effluent Limitations described in Table 4 are applicable. However Nitrate Limits are not required due to environmental and design conditions.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. 2014-0153-DWQ-R5195

FOR

TUCKER OAKS EAST SUBDIVISION  
SHASTA COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring a wastewater treatment system. This MRP is issued pursuant to Water Code section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Regional Water Quality Control Board (Regional Water Board) Executive Officer.

The State Water Resources Control Board (State Water Board) and Regional Water Boards are transitioning to the paperless office system. In some regions, Dischargers will be directed to submit reports (both technical and monitoring reports) to the State Water Board's Electronic Content Management (ECM) database via email in portable document format (pdf). The email address for the ECM submittal is:

[centralvalleyredding@waterboards.ca.gov](mailto:centralvalleyredding@waterboards.ca.gov)

Water Code section 13267 states, in part:

"In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports."

Water Code section 13268 states, in part:

"(a) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of section 13267, or failing or refusing to furnish a statement of compliance as required by subdivision (b) of section 13399.2, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with article 2.5 (commencing with section 13323) of chapter 5 for a violation of subdivision (a) in



an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.”

The Discharger owns and operates the wastewater system that is subject to the Notice of Applicability (NOA) of Water Quality Order 2014-0153-DWQ. The reports are necessary to ensure that the Discharger complies with the NOA and General Order. Pursuant to Water Code section 13267, the Discharger shall implement this MRP and shall submit the monitoring reports described herein.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The name of the sampler, sample type (grab or composite), time, date, location, bottle type, and any preservative used for each sample shall be recorded on the sample chain of custody form. The chain of custody form must also contain all custody information including date, time, and to who the 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.

### SEPTIC TANK MONITORING

Monitoring of septic tank shall include the following:

Parameter	Units	Sample Type	Sampling Frequency	Reporting Frequency
Flow Rate	gpd	Metered <sup>a</sup>	Continuous	Annually

gpd denotes gallons per day.

<sup>a</sup> Flow rate may be metered or estimated based on potable water supply meter readings or other approved method.

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	Measurement 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	NA	Annually

NA denotes 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.

### GROUNDWATER MONITORING

The Discharger shall monitor groundwater quality 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.

Tucker Oaks has ten (10) monitoring wells in its current monitoring network. All 10 wells are used for groundwater elevation measurements. In addition wells 1- 4 are sampled quarterly for all required constituents listed below. 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:

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

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

- a. Groundwater elevation shall be based on depth to water using a surveyed measuring point elevation on the well and a surveyed reference elevation.
- b. Using a minimum of 15 tubes or three dilutions.
- c. Monitoring of the constituents zinc, phenol, and formaldehyde are required only when recreational vehicles were allowed to discharge to the wastewater system in the previous 12 months.
- d. Analysis of data by a California licensed professional is required at least annually,

### SUBSURFACE DISPOSAL AREA

Subsurface disposal areas may be configured many different ways (e.g. traditional leachfield, 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:

Constituent	Inspection Frequency	Reporting Frequency
Pump Controllers, Automatic Valves, etc. <sup>a</sup>	Quarterly	Quarterly
Nuisance Odor Condition	Quarterly	Quarterly
Saturated Soil Conditions <sup>b</sup>	Quarterly	Quarterly
Plant Growth <sup>c</sup>	Quarterly	Quarterly
Vectors or Animal Burrowing <sup>d</sup>	Quarterly	Quarterly
Seepage Pit Condition <sup>e</sup>	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.

### 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.

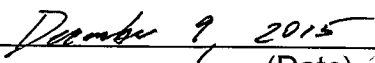
A letter transmitting the monitoring reports shall accompany each report. The letter shall report violations found during the reporting period, and actions taken or planned to correct the violations and prevent future violations. The transmittal letter shall contain the following penalty of perjury statement 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 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:

  
\_\_\_\_\_  
PAMELA C. CREEDON, Executive Officer

  
\_\_\_\_\_  
(Date)