

ERRATA SHEET

TENTATIVE ORDER NO. R9-2007-0046

**WASTE DISCHARGE REQUIREMENTS
FOR OAK TREE RANCH, INC.
OAK TREE RANCH PRIVATE RESIDENTIAL COMMUNITY
WASTEWATER TREATMENT AND DISPOSAL FACILITY**

The following changes have been made to tentative Order No. R9-2007-0046. Some changes/corrections below are shown in **bold and underline/strikeout** format to indicate added and removed language, respectively.

Errata #	SECTION	REVISION
1.	Table of Contents of tentative Order	Monitoring and Reporting Program No. R9-2006-0049 2007-0046
2.	Finding No. 9 of tentative Order	<p>The following text has been added as finding No. 9 and remaining findings have been renumbered accordingly:</p> <p><u>Disposal of treated wastewater involves the use of subsurface drip emitters placed six to eight inches below the ground, spaced on 27-inch centers. The subsurface disposal irrigation provides for a metered well dispersed application of the water over a large area at intermittent pulsing rates. Disposal is achieved by two methods: percolation through the soil and evapotranspiration. Treated wastewater will be applied to selected areas (zones) less than 75 minutes per day spread over any 24 hour period. The application cycle is broken down into 24 intermittent pulsing periods. Application pulse time is approximately 3 minutes out of every hour, thus allowing 57 minutes rest time out of each hour.</u></p> <p><u>The unsaturated soil thickness between the bottom of the subsurface disposal system and the groundwater level is 19 feet, which meets the conditions in the Basin Plan for soils with a percolation rate of 25 minutes per inch. Thus the infiltration of wastewater containing a total dissolved solids of 800 mg/l will not cause the Basin Plan groundwater quality objectives of 1000 mg/l for the Santa Maria Hydrologic Area to be exceeded.</u></p>
3.	Finding No. 9 of tentative	A summary of results for potable water supply monitoring, taken semiannually by the discharger, from 2003-2006 is as follows:

Errata #	SECTION	REVISION																																							
	Order	<table border="1"> <thead> <tr> <th>Constituent</th> <th>Units</th> <th>Range</th> <th>Mean</th> </tr> </thead> <tbody> <tr> <td>Total Dissolved Solids</td> <td>mg/l</td> <td>343-251-553-762.4</td> <td>433.7-477</td> </tr> </tbody> </table>	Constituent	Units	Range	Mean	Total Dissolved Solids	mg/l	343-251-553-762.4	433.7-477																															
Constituent	Units	Range	Mean																																						
Total Dissolved Solids	mg/l	343-251-553-762.4	433.7-477																																						
4.	Finding No. 10 of tentative Order	<p>A summary of results for groundwater monitoring, taken semiannually by the discharger, from 2003-1994-2006 is as follows:</p> <table border="1"> <thead> <tr> <th>Constituent</th> <th>Units</th> <th>Range</th> <th>Mean</th> </tr> </thead> <tbody> <tr> <td>Total Dissolved Solids</td> <td>mg/l</td> <td>381-374-441-468</td> <td>417.4-416.9</td> </tr> <tr> <td>Nitrate</td> <td>mg/l</td> <td>2.04-29-1-36.1</td> <td>20-0-21.1</td> </tr> </tbody> </table>	Constituent	Units	Range	Mean	Total Dissolved Solids	mg/l	381-374-441-468	417.4-416.9	Nitrate	mg/l	2.04-29-1-36.1	20-0-21.1																											
Constituent	Units	Range	Mean																																						
Total Dissolved Solids	mg/l	381-374-441-468	417.4-416.9																																						
Nitrate	mg/l	2.04-29-1-36.1	20-0-21.1																																						
5.	Finding No. 17 of tentative Order	<p>BASIN PLAN GROUNDWATER WATER QUALITY OBJECTIVES (mg/L or as noted)</p> <p>(Concentrations not to be exceeded more than 10% of the time during any one year period)</p> <table border="1"> <thead> <tr> <th>HYDROLOGIC AREA</th> <th>TDS</th> <th>Cl</th> <th>SO₄</th> <th>%Na</th> <th>*NO₃</th> <th>Fe</th> <th>Mn</th> <th>M B A S</th> <th>O D O R</th> <th>TURB (NTU)</th> <th>COLOR (UNITS)</th> <th>F</th> </tr> </thead> <tbody> <tr> <td>905.40</td> <td>1,000</td> <td>400</td> <td>500</td> <td>60</td> <td>10</td> <td>0.3</td> <td>0.05</td> <td>0.5</td> <td>0.75</td> <td>5</td> <td>15</td> <td>1</td> </tr> <tr> <td>Santa Maria Valley</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>*Nitrate concentrations are expressed either as concentration of NO₃ or concentration of N. Concentrations expressed as NO₃ are 4.5 times those expressed as N; thus the water quality objective of 10 as NO₃ corresponds to a value of 2.2 as N.</p>	HYDROLOGIC AREA	TDS	Cl	SO ₄	%Na	*NO ₃	Fe	Mn	M B A S	O D O R	TURB (NTU)	COLOR (UNITS)	F	905.40	1,000	400	500	60	10	0.3	0.05	0.5	0.75	5	15	1	Santa Maria Valley												
HYDROLOGIC AREA	TDS	Cl	SO ₄	%Na	*NO ₃	Fe	Mn	M B A S	O D O R	TURB (NTU)	COLOR (UNITS)	F																													
905.40	1,000	400	500	60	10	0.3	0.05	0.5	0.75	5	15	1																													
Santa Maria Valley																																									
6.	Finding No. 20 of tentative Order	<p>This Order reduces the 12-month average effluent limitation for TDS from 900 mg/l to 800 mg/l. Groundwater monitoring submitted by the discharger demonstrates the basin contains high quality water with a mean TDS of approximately 418 mg/l (between 2003-1994-2006). The Statement of Policy with Respect to Maintaining High Quality Waters in California requires that high quality waters of the state are maintained to the maximum extent possible, even where the quality is better than needed to protect the beneficial uses. Projected effluent concentrations submitted by the discharger indicate the proposed system will meet the limitation of 800 mg/l.</p> <p>Projected TDS effluent concentrations are anticipated to be less than 680 mg/l. Currently the average effluent TDS concentration is 633 mg/l. An increase in flow from 20,000 gallons per day to 40,000 gallons</p>																																							

Errata #	SECTION	REVISION
7.	Finding No. 21 of tentative Order	<p><u>per day has a potential to increase background concentrations above existing levels; however, the effects are anticipated to be minimal.</u></p> <p>Groundwater monitoring submitted by the discharger reveals concentrations of nitrates with a mean of 20 mg/l as NO₃ (between 2003 1994-2006). This value exceeds the Basin Plan Water Quality Objective of 10 mg/l for Nitrate (as NO₃). In order to avoid further impacts from nitrogen to the basin, this Order establishes effluent limitations for total nitrogen of 6-80 9.64 mg/l as a daily maximum and 2-70 3.36 mg/l as a 12-month average. Limitations and monitoring must be established for total nitrogen in the effluent since, in wastewaters, many forms of nitrogen exist including ammonia, organic nitrogen, nitrate, and nitrite. Also, discharge specifications and monitoring requirements for total nitrogen are required because it is assumed that there is complete conversion from all forms of nitrogen into nitrate, when the effluent reaches the groundwater.</p> <p>A denitrification rate of 20% has been applied in deriving the total nitrogen effluent discharge specification. The amount of nitrate that reaches the groundwater may be further reduced by vegetation uptake if followed by removal of the vegetation, however, the total nitrogen limitation did not consider plant uptake since the discharger reported subsurface irrigation will occur on an unmown grassy field (no crops).</p> <p><u>A 30% removal rate has been applied in deriving the total nitrogen effluent discharge specification. The removal rate includes a 20% removal by denitrification in the soil and a 10% uptake and removal by vegetation.</u></p>
8.	Finding No. 22 of tentative Order	<p>The following text has been added as finding No. 22</p> <p><u>The requirements of this Order were developed to minimize degradation of groundwater by constituents (e.g., toxic chemicals) other than those specified in the groundwater limitations in this Order, and by constituents that can be effectively removed by conventional treatment.</u></p> <p><u>Degradation of groundwater by constituents in the discharge after effective source control, treatment, and control are determined to be consistent with maximum benefit to the people of California and will not result in water quality of less than that prescribed in the Basin Plan. This determination is based on considerations of reasonableness under the circumstances of the domestic discharge. Factors considered include:</u></p> <ul style="list-style-type: none"> <u>a. past, present, and probable beneficial uses of the water (as specified in the Basin Plan);</u> <u>b. environmental aspects of the discharge; and</u> <u>c. the implementation of feasible alternative treatment or control methods.</u>

REVISION

SECTION

Errata #

9.

Section B of tentative Order

The following has been added as B.1:

The discharge of effluent shall comply with the following interim specifications, which will remain in effect until September 31, 2007:

Constituent	Unit	Daily ¹ Maximum	12-month ² Average
Biochemical Oxygen Demand (BOD ₅ @ 20°C)	mg/L	45	30
Total Suspended Solids	mg/L	45	30
Total Dissolved Solids	mg/l	1,000	900
Nitrate as NO ₃	mg/l	15	10

10.

Section B of tentative Order

The following table has been moved to B.2, the following language has been added and total nitrogen has been revised to include 30% removal:

Effective October 1, 2007, the discharge of effluent shall comply with the following specifications:

Constituent	Unit	Daily ¹ Maximum	12-month ² Average
Biochemical Oxygen Demand (BOD ₅ @ 20°C)	mg/L	45	30
Total Suspended Solids	mg/L	45	30
pH	within the limits of 6.0 to 9.0 at all times		
Total Dissolved Solids (TDS)	mg/L	1,000	800
Chloride	mg/L	450	270
Sulfate	mg/L	700	360
Percent Sodium	%	60	60
Total Nitrogen (as N)	mg/L	6.52 9.64	2.60 3.36 ³
Methylene Blue Activate Substances (MBAS)	mg/l	0.90	0.45
Boron	mg/l	1.35	0.65

3. This value is based on 20% denitrification in the soil and 10% uptake by plants. The discharger is required to remove clippings to ensure removal by vegetation.

Errata #	SECTION	REVISION
		<u>with no plant uptake) then the discharger is not required to remove clippings.</u>
11.	Section C.8 of the tentative Order	The discharger shall comply with the attached Monitoring and Reporting Program No. R9- 2006-0110 -2007-0046, and future revisions thereto as specified by the Executive Officer. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. R9- 2006-0110 -2007-0046.
12.	Section D. 1,2 of tentative Order	<p>1. Management of all solids and sludge must comply with all applicable requirements of 40 CFR Parts 257, 258, 501 and 503 ; CWA Part 405(d), and Title 27, CCR, applicable for the use or disposal option selected, including all monitoring, record keeping and reporting requirements. if the permittee discharges sludge/septage to another treatment facility for further treatment, the receiving facility must be in compliance with the above-cited CWA 405(d) requirements. Since the State of California, hence the State and Regional Boards, has not been delegated the authority by the USEPA to implement the sludge program, enforcement of sludge requirements of CFR Part 503 is under USEPA's jurisdiction. Once sludge leaves a facility, it is subject to all applicable local, state and federal laws and regulations.</p> <p>2. All collected screenings, sludges, and other solids removed from liquid wastes must be disposed of in a municipal solid waste landfill, reused by land application, or disposed of in a sludge-only landfill accordance with 40 CFR Parts 503 and 258, and Title 27 CCR, or discharged to another treatment facility that uses one of these use or disposal methods. If the discharger desires to dispose of solids or sludge by a different method, a request for permit modification must be submitted to the USEPA and this Regional Board 180 days prior to the initiation of the alternative disposal.</p>
13.	Section A.10 of tentative Monitoring and Reporting Program	The discharger shall report all instances of noncompliance not reported under Standard Provision E.5 of Order No. R9- 2006-0110 -2007-0046 at the time monitoring reports are submitted. The reports shall contain the information described in Provision E.5
14.	Section F of tentative Monitoring and Reporting Program	<p>The following text has been added to Section F:</p> <p>The Discharger submits an annual report that contains both tabular and graphical summaries of monitoring data obtained during the previous year. The annual report shall also include a log of clippings removed throughout the year, disposal method, and calculated % uptake and removal by vegetation.</p>
15.	Tentative Order (global)	Other typographical errors and other minor corrections to the wording in the tentative Order have been or will be made prior to sending out the final version.