

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER NO. R5-2005-0154

REQUIRING OAKWOOD LAKE WATER DISTRICT AND BECK PROPERTIES  
OAKWOOD LAKE SUBDIVISION\_Mining RECLAMATION PROJECT  
SAN JOAQUIN COUNTY  
TO COMPLY WITH REQUIREMENTS PRESCRIBED IN ORDER NO. R5-2005-0153  
(NPDES PERMIT NO. CA0082783)

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Regional Board) finds that:

1. On 21 October 2005, the Regional Board adopted Waste Discharge Requirements (WDR's) Order No. R5-2005-0153, prescribing waste discharge requirements for Oakwood Lake Water District and Beck Properties, Oakwood Lake Subdivision Mining Reclamation Project in San Joaquin County (hereafter Discharger).
2. Waste Discharge Requirements (WDRs), Order No. R5-2005-0153, contains Effluent Limitation No. IV.A.1.a which reads, in part, as follows:

*“IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS*

*A. Effluent Limitations – Discharge Point 001*

*1. Final Effluent Limitations*

- a. The discharge of groundwater seepage and stormwater shall maintain compliance with the following limitations at Discharge Point 001 with compliance measured at Monitoring Location M-001 as described in the Monitoring and Reporting Program (Attachment E):*

<u>Constituents</u>	<u>Units</u>	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>
<i>Antimony (total recoverable)</i>	<i>µg/L</i>	<i>14</i>	<i>--</i>	<i>28</i>
	<i>lbs/day</i>	<i>2.2</i>	<i>--</i>	<i>4.4</i>
<i>Arsenic (total recoverable)</i>	<i>µg/L</i>	<i>10</i>	<i>--</i>	<i>--</i>
	<i>lbs/day</i>	<i>1.6</i>	<i>--</i>	<i>--</i>
<i>Arsenic (dissolved)</i>	<i>µg/L</i>	<i>--</i>	<i>--</i>	<i>10</i>
	<i>lbs/day</i>	<i>--</i>	<i>--</i>	<i>1.6</i>
<i>Barium (dissolved)</i>	<i>µg/L</i>	<i>--</i>	<i>--</i>	<i>100</i>
	<i>lbs/day</i>	<i>--</i>	<i>--</i>	<i>16</i>
<i>Iron (total recoverable)</i>	<i>µg/L</i>	<i>300</i>	<i>--</i>	<i>--</i>
	<i>lbs/day</i>	<i>47</i>	<i>--</i>	<i>--</i>
<i>Iron (dissolved)</i>	<i>µg/L</i>	<i>--</i>	<i>--</i>	<i>300</i>
	<i>lbs/day</i>	<i>--</i>	<i>--</i>	<i>47</i>
<i>Manganese (total recoverable)</i>	<i>µg/L</i>	<i>50</i>	<i>--</i>	<i>--</i>
	<i>lbs/day</i>	<i>7.8</i>	<i>--</i>	<i>--</i>

<u>Constituents</u>	<u>Units</u>	<u>Average Monthly</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>
<i>Manganese (dissolved)</i>	<i>µg/L</i>	--	--	50
	<i>lbs/day</i>	--	--	7.8
<i>Specific Conductance (EC at 25°C)</i>	<i>µmhos/cm</i>	<i>1000 (1 Sep - 31 Mar)</i>	--	--
		<i>700 (1 Apr - 31 Aug)</i>	--	--
<i>Aluminum (total recoverable)</i>	<i>µg/L</i>	71	--	140
	<i>lbs/day</i>	11	--	22
<i>Ammonia (June-Sep) (total recoverable)</i>	<i>mg/L</i>	0.52	--	--
	<i>lbs/day</i>	81	--	--
<i>Ammonia (Oct-May) (total recoverable)</i>	<i>mg/L</i>	0.72	--	--
	<i>lbs/day</i>	110	--	--

*c. The maximum 1-hour average effluent ammonia (total recoverable) in the discharge shall not exceed 2.1 mg/L or 330 lbs/day.”*

- The effluent limitations specified in Order No. R5-2005-0153 for aluminum and ammonia are based on the Basin Plan narrative objective, the effluent limitations for antimony are based on USEPA National Toxics Rule (NTR) water quality criteria, and the effluent limitations for arsenic, specific conductance, barium, iron, and manganese are based on the Basin Plan chemical constituents objective. The effluent limitations for antimony are based on NTR human health criteria which were established prior to 25 September 1995; effluent limitations for arsenic, specific conductance, barium, iron, and manganese are based on existing Basin Plan water quality objectives that were adopted prior to 25 September 1995. Effluent limitations for these pollutants are new limitations which were not prescribed in previous Order No. 98-123, adopted by the Regional Board on 5 June 1998.

NEED FOR TIME SCHEDULE ORDER (TSO) AND LEGAL BASIS

- The Discharger pumps groundwater seepage and stormwater from Oakwood Lake to the San Joaquin River to prevent portions of the Oakwood Lake Subdivision Mining Reclamation Project located below the pre-mining water table from being flooded.
- California Water Code (CWC) Section 13300 states: *“Whenever a regional board finds that a discharge of waste is taking place or threatening to take place that violates or will violate requirements prescribed by the regional board, or the state board, or that the waste collection, treatment, or disposal facilities of a discharger are approaching capacity, the board may require the discharger to submit for approval of the board, with such modifications as it may deem necessary, a detailed time schedule of specific actions the discharger shall take in order to correct or prevent a violation of requirements.”*
- Federal regulations, 40 CFR Part 122.44 (d)(1)(i), require that NPDES permit effluent limitations must control all pollutants which are or may be discharged at a level which will cause or have the reasonable potential to cause or contribute to an in-stream excursion above any State water quality standard, including any narrative criteria for water quality. Beneficial uses, together with their

corresponding water quality objectives or promulgated water quality criteria, can be defined per federal regulations as water quality standards.

7. In accordance with CWC Section 13385(j)(3), the Regional Board finds that, based upon results of effluent monitoring, the Discharger is not able to consistently comply with the effluent limitations for antimony, arsenic, specific conductance, barium, iron, manganese, aluminum, and ammonia. These limitations are new requirements that become applicable to the Order after the effective date of adoption of the waste discharge requirements, and after July 1, 2000, for which new or modified control measures are necessary in order to comply with the limitation, and the new or modified control measures cannot be designed, installed, and put into operation within 30 calendar days.
8. Immediate compliance with these new effluent limitations for antimony, arsenic, specific conductance, barium, iron, manganese, aluminum, and ammonia is not possible or practicable. The Clean Water Act and the California Water Code authorize time schedules for achieving compliance as soon as possible, up to a maximum duration of 5 years, which is the maximum term of any NPDES permit.
9. Facilities can be built to correct the violations that would otherwise be subject to mandatory penalties under CWC Section 13385(h) and (i). The Discharger can take reasonable measures to achieve compliance within five (5) years. This Order provides a time schedule for the Discharger to develop, submit, and implement methods to increase the capacity of Oakwood Lake and cease the discharge to the San Joaquin River or provide a means to meet these new effluent limitations in order to continue discharge.
10. Since the time schedule for completion of action necessary to achieve full compliance and bring the waste discharge into compliance exceeds one year, interim requirements and dates for their achievement are included in this Order. The compliance time schedule in this Order includes interim effluent limitations for antimony, arsenic, specific conductance, barium, iron, manganese, aluminum, and ammonia based on previous performance of the discharge. These interim effluent limitations consist of a maximum daily effluent concentration or value derived using effluent sample data summarized below and applying the statistical methodologies for estimating maximum concentrations identified in Chapter 3 of USEPA's Technical Support Document (TSD). Derivation of these interim limitations is summarized below:

Interim Effluent Limitations								
	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Iron (µg/L)	Manganese (µg/L)	Aluminum (µg/L)	Ammonia (µg/L)	Specific Conductance (µmhos/cm)
Number of Observations	4	5	5	10	10	5	4	215
Minimum Concentration	ND	ND	98	48	30	ND	ND	683
Maximum Concentration	24	8.4	198	300	1060	130	1100	1930
Coefficient of Variation <sup>1</sup>	0.6	0.6	0.6	0.8	0.9	0.6	0.6	0.2
Multiplier <sup>2</sup>	4.7	4.2	4.2	4.1	4.7	4.2	4.7	1.1
Projected Daily Maximum Effluent Concentration <sup>3</sup>	113	35	832	1230	4982	546	5170	2123

Footnotes:

- <sup>1</sup> A default CV of 0.6 was used where the number of observations was less than 10.
  - <sup>2</sup> The multiplying factor (for 99% confidence level and 99% probability basis) is dependent on the coefficient of variation (CV) and number of reported effluent results (From Table 3-1 of the USEPA Technical Support Document for Water Quality-based Toxics Control).
  - <sup>3</sup> The projected Daily Maximum Effluent Concentration is determined by multiplying the maximum detected concentration with a reasonable potential multiplying factor that accounts for statistical variation.
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11. This time schedule does not exceed five years. Actions can be taken to correct the violations that would otherwise be subject to mandatory penalties under CWC Section 13385(h) and (i), and the Discharger can take reasonable measures to achieve compliance within five (5) years from the date the waste discharge requirements were required to be reviewed pursuant to CWC Section 13380.
  12. CWC Section 13385(j)(3) requires the Discharger to prepare and implement a pollution prevention plan pursuant to CWC Section 13263.3.
  13. The California Water Code (CWC) Section 13385(h) and (i) require the Regional Board to impose mandatory minimum penalties upon dischargers that violate certain effluent limitations. CWC Section 13385(j) exempts certain violations from the mandatory minimum penalties. CWC Section 13385(j)(3) exempts the discharge from mandatory minimum penalties “*where the waste discharge is in compliance with either a cease and desist order issued pursuant to Section 13301 or a time schedule order issued pursuant to Section 13300, if all the [specified] requirements are met.*”
  14. Compliance with this TSO exempts the Discharger from mandatory penalties for violations of effluent limitations for antimony, arsenic, specific conductance, barium, iron, manganese, aluminum, and ammonia only, in accordance with CWC Section 13385(j)(3).
  15. On 21 October 2005, in Sacramento, California, after due notice to the Discharger and all other affected persons, the Board conducted a public hearing at which evidence was received to consider a Time Schedule Order under California Water Code Section 13300 to establish a time schedule to achieve compliance with waste discharge requirements.
  16. Issuance of this Order is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), in accordance with California Water Code Section 15321 (a)(2), Title 14, of the California Code of Regulations.
  17. Any person adversely affected by this action of the Board may petition the State Water Resources Control Board to review this action. The petition must be received by the State Water Resources Control Board, Office of the Chief Counsel, P.O. Box 100, Sacramento, CA 95812-0100, within 30 days of the date on which this action was taken. Copies of the law and regulations applicable to filing petitions will be provided on request.

**IT IS HEREBY ORDERED THAT:**

- Pursuant to California Water Code Section 13300, Oakwood Lake Water District and Beck Properties, Oakwood Lake Subdivision Mining Reclamation Project shall comply with the following time schedule to ensure compliance with the antimony, arsenic, specific conductance, barium, iron, manganese, aluminum, and ammonia effluent limitations contained in WDR's Order No. R5-2005-0153 as described in the above Findings:

<u>Task</u>	<u>Date</u>
Compliance Workplan/Implementation Schedule	<b>15 January 2006</b>
Compliance Progress Reports <sup>1</sup>	<b>Semi-Annual Due 15 January and 15 July</b>
<u>Full Compliance</u>	<b>1 May 2010</b>

<sup>1</sup> Reports shall detail steps implemented toward achieving compliance with WDR's limitations, including studies, construction progress, evaluation of measures implemented, and recommendations for additional measures as necessary to achieve full compliance by the final date.

- Discharge of groundwater seepage and stormwater shall not exceed the following interim performance-based limits:

<u>Constituents</u>	<u>Units</u>	<u>Daily Maximum</u>
Antimony (total recoverable)	µg/L	110
	lbs/day <sup>1</sup>	18
Arsenic (total recoverable)	µg/L	35
	lbs/day <sup>1</sup>	5.5
Barium (total recoverable)	µg/L	830
	lbs/day <sup>1</sup>	130
Iron (total recoverable)	µg/L	1200
	lbs/day <sup>1</sup>	190
Manganese (total recoverable)	µg/L	5000
	lbs/day <sup>1</sup>	770
Aluminum (total recoverable)	µg/L	550
	lbs/day <sup>1</sup>	85
Ammonia (total recoverable)	µg/L	5200
	lbs/day <sup>1</sup>	800
<u>Specific Conductance</u>	µmhos/cm	2100

<sup>1</sup> Based upon the maximum permitted effluent flow of 18.6 mgd.

- If, in the opinion of the Executive Officer, the Oakwood Lake Water District and Beck Properties fail to comply with the provisions of this Order, the Executive Officer may apply to the Attorney General for judicial enforcement.

TIME SCHEDULE ORDER NO. R5-2005-0154  
OAKWOOD LAKE WATER DISTRICT AND BECK PROPERTIES  
OAKWOOD LAKE SUBDIVISION MINING RECLAMATION PROJECT  
SAN JOAQUIN COUNTY

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I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 21 October 2005.

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THOMAS R. PINKOS, Executive Officer