This Order is issued to Lake Berryessa Enterprises, Inc. II, the United States Bureau of Reclamation, and Mr. Nick Petsas (hereafter jointly referred to as “Dischargers”) pursuant to Water Code section 13267, which authorizes the Executive Officer of the California Regional Water Quality Control Board, Central Valley Region (“Central Valley Water Board”) to issue an Order (the “Order”) requiring the submittal of technical reports.

The Executive Officer finds:

**PROPERTY OWNERSHIP AND OPERATIONS**

1. The property at 7600 Knoxville Road, Napa, Napa County (the “Site”) is owned by the U.S. Bureau of Reclamation (“Bureau”). The Bureau owned the property at the time of the petroleum release.

2. The property was leased to Lake Berryessa Enterprises, Inc. II (“LBE”), who owned and operated an underground tank system (“UST”) and leased the property at the time of a petroleum release from the underground tank system. Mr. Nick Petsas is subject to this Order because he was the owner of Lake Berryessa Enterprises, Inc. II, and he exercised substantial control over the day-to-day operations of the corporation. The Dischargers are jointly responsible for the tasks described herein.

**BACKGROUND**

3. The Site is located on the western shore of Lake Berryessa (Figure 1). The Site was used as a marina and operated a UST system until 1995 when the USTs were removed and an above ground storage tank (“AST”) system was installed. A petroleum discharge from the former UST system that resulted in soil and groundwater pollution occurred while the UST system was owned and operated by Mr. Nick Petsas (the corporate officer) and Lake Berryessa Enterprises, Inc. II. At the time the USTs leaked, Lake Berryessa Enterprises, Inc. II leased the property from the Bureau. The Bureau is the current property owner, and the discharge occurred during its ownership of the property.

4. Depth to groundwater ranges from 2 to 25 feet below ground surface (bgs). During the second quarter 2011 groundwater monitoring event, petroleum constituents were detected at maximum concentrations of total petroleum hydrocarbons (“TPH-G”)
310,000 micrograms per liter ("ug/L"), benzene 67,000 ug/L, toluene 52,600 ug/L, ethylbenzene 3,890 ug/L, total xylenes 20,000 ug/L, methyl tertiary butyl ether ("MTBE") 3,000 ug/L, and tertiary butyl alcohol ("TBA") 1,600 ug/L. This pollution has impaired the beneficial uses of the underlying water resource.

5. An ozone injection system operated from October 2002 to April 2003, and was shut down due to iron fouling of the ozone sparge points. A groundwater extraction ("GWE") system operated from March 2004 through February 2009.

6. This Monitoring and Reporting Order replaces the requirements listed in Monitoring and Reporting Program ("MRP") R5-2009-0819, which was issued on 6 July 2009. This Order includes changes to MTP R5-2009-0819, which include: listing recently installed wells MW-16 through MW-20, increasing the sampling frequency of well MW-6 to annually, elimination of analysis for total lead, tetraethyl lead, raising the reporting limit for methanol to 2,000 ug/l, and increasing the sampling frequency for wells MW-1 and MW-3 to semi-annually due to significant post remedial rebound. The Dischargers shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

DISCHARGER LIABILITY

7. The California Code of Regulations, title 23, section 2720, defines a responsible party as:

... any person who owns or operates an underground storage tank used for the storage of an hazardous substance... any person who owned or operated the underground storage tank immediately before the discontinuation of its use... any owner of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred, and any person who had or has control over a underground storage tank at the time of or following an unauthorized release of a hazardous substance.

A responsible party has a legal obligation to investigate and remediate contamination. The U.S. Bureau of Reclamation is responsible for the discharge because it owned the property at the time of the petroleum release and because it currently owns the property. Lake Berryessa Enterprises, Inc. II ("LBE"), is responsible because it owned and operated the tank system and leased the property at the time of the release. Mr. Nick Petsas is responsible because he was the owner of Lake Berryessa Enterprises, Inc. II, and he exercised substantial control over the day-to-day operations of the corporation.

8. Water Code section 13267 states, in part:

(b)(1) In conducting an investigation..., 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 . . . 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.

The Dischargers are required to provide the reports because they are the responsible parties under the Water Code, as detailed in Finding No. 8. The reports required herein are necessary to assure protection of waters of the state, and to protect public health and the environment.

9. 42 U.S.C.A. § 6991(f) states, in relevant part:

Each department, agency, and instrumentality of the executive, legislative, and judicial branches of the Federal Government (1) having jurisdiction over any underground storage tank or underground storage tank system, or (2) engaged in any activity resulting, or which may result, in the installation, operation, management, or closure of any underground storage tank, release response activities related thereto, or in the delivery, acceptance, or deposit of any regulated substance to an underground storage tank or underground storage tank system shall be subject to, and comply with, all Federal, State, interstate, and local requirements, both substantive and procedural (including any requirement for permits or reporting or any provisions for injunctive relief and such sanctions as may be imposed by a court to enforce such relief), respecting underground storage tanks in the same manner, and to the same extent, as any person is subject to such requirements, including the payment of reasonable service charges. The Federal, State, interstate, and local substantive and procedural requirements referred to in this subsection include, but are not limited to, all administrative orders and all civil and administrative penalties and fines, regardless of whether such penalties or fines are punitive or coercive in nature or are imposed for isolated, intermittent, or continuing violations...

The Federal Government is ordinarily not subject to state administrative actions in the same manner as private parties. However, in the Federal Facility Compliance Act, the federal government broadly waived sovereign immunity for all state substantive and procedural requirements relating to USTs. The Bureau is a part of the United States Department of the Interior, a department of the executive branch of the federal government. As an owner of the property where the leaking USTs were discovered, the Bureau has jurisdiction over the UST system. The Bureau must therefore comply this Order, a State requirement respecting underground storage tanks.

LEGAL PROVISIONS

10. Water Code section 13268 states, in part:

(a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267 . . . 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.

Failure to submit the required reports to the Central Valley Water Board according to the schedule detailed herein may result in enforcement action(s) being taken against you, which may include the imposition of administrative civil liability pursuant to Water Code section 13268.

11. Compliance with Central Valley Water Board directives is mandatory in order to be eligible for reimbursement of corrective action costs from the State’s Underground Storage Tank Cleanup Fund according to California Code of Regulations, title 23, section 2812.2.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that, pursuant to Water Code section 13267, MRP R5-2009-0704 is hereby rescinded, and Lake Berryessa Enterprises, Inc. II, the United States Bureau of Reclamation, and Mr. Nick Petsas shall:

1. Perform all work in accordance with permits required by State, County, and Local agencies.

2. Submit Semi-Annual Groundwater Monitoring Reports, both paper copies to the Central Valley Water Board office and electronic copies to the State Water Resources Control Board’s (State Water Board) GeoTracker database (see Reporting Section below).

3. As shown on Figure 1, there are 20 groundwater monitoring wells, MW-1 through MW-20, associated with the Site. The groundwater monitoring program for the 20 monitoring wells, 2 Lake Berryessa sampling locations, and any wells installed subsequent to the issuance of this MRP, shall follow the schedule below.

   (a) All wells shall be monitored semi-annually for the presence and thickness of free product. Monitoring wells with measurable free phase petroleum shall only be required to monitor for product thickness and depth to water. The volume of purged groundwater and thickness of free phase petroleum or visible sheen shall be provided in the monitoring reports.

   (b) Sample collection and analysis shall follow standard Environmental Protection Agency (EPA) protocol.
TABLE 1 - SAMPLING FREQUENCY

<table>
<thead>
<tr>
<th>Wells</th>
<th>Semi-annually¹</th>
<th>Annually²</th>
<th>Gauge³</th>
</tr>
</thead>
</table>

1. Wells shall be sampled semi-annually during the second and fourth quarters.
2. Wells shall be sampled annually during the fourth quarter.
3. These wells shall be gauged for water levels annually, but not sampled for water quality parameters, unless requested by Central Valley Water Board staff.
4. Lake 1 collected near boat docks, Lake 2 collected just off shore southwest and near MW-14

TABLE 2 – ANALYTICAL METHODS

<table>
<thead>
<tr>
<th>Constituents</th>
<th>EPA Analytical Method⁶</th>
<th>Maximum Practical Quantitation Limit (µg/l)⁷</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPH-G</td>
<td>8015M</td>
<td>50</td>
</tr>
<tr>
<td>Benzene</td>
<td>8020 or 8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>Toluene</td>
<td>8020 or 8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>Ethylbenzene</td>
<td>8020 or 8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>Xylenes</td>
<td>8020 or 8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>MTBE</td>
<td>8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>TBA</td>
<td>8260B</td>
<td>5.0</td>
</tr>
<tr>
<td>TAME</td>
<td>8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>DIPE</td>
<td>8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>ETBE</td>
<td>8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>1,2-Dichloroethane</td>
<td>8260B</td>
<td>0.5</td>
</tr>
<tr>
<td>Hexavalent Chromium⁶</td>
<td>7196A or 7199</td>
<td>1.0</td>
</tr>
<tr>
<td>Ethanol⁶</td>
<td>8260B</td>
<td>50</td>
</tr>
<tr>
<td>Methanol⁶</td>
<td>8260B or 8015B</td>
<td>2,000</td>
</tr>
<tr>
<td>Naphthalene⁶</td>
<td>8260B or 7196A</td>
<td>0.5</td>
</tr>
</tbody>
</table>

6. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as trace.
7. Report all discrete peaks identified during the normal course of analysis for petroleum constituents.
8. Analysis for hexavalent chromium, ethanol, methanol, and naphthalene may be discontinued after two consecutive monitoring events of non-detectable results with Central Valley Water Board staff concurrence.

4. Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Dischargers shall submit plans and specifications to the Central Valley Water Board staff for review and written approval. Once installed, all new wells shall be added to this monitoring program and shall be sampled and analyzed according to the schedule below.
REPORTING

5. When reporting the data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly compliance with this Order.

6. The Dischargers shall notify the Central Valley Water Board staff within 48 hours of any unscheduled shutdown of any remedial system.

7. As required by the California Business and Professions Code sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional or their subordinate and signed by the registered professional.

8. The Discharger shall submit a paper copy of all semi-annual reports to the Central Valley Water Board office and submit the electronic data reports, which conform to the requirements of the California Code of Regulations, title 23, division 3, chapter 30, electronically over the Internet to the State Water Board’s GeoTracker database system. Both the paper copy and the electronic submittals are due by the 1st day of the second month following the end of each second and fourth calendar quarter, by 1 August (1st half of the year), and 1 February (2nd half of the year), until such time as the Executive Officer determines that the reports are no longer necessary. Each semi-annual report shall include the following minimum information:

(a) A description and discussion of the groundwater sampling event and results, including trends in the concentrations of pollutants and groundwater elevations in the wells, how and when samples were collected, and whether the pollutant plume(s) is delineated to EPA method detection limits.

(b) Field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, depth of pump placement, etc.

(c) Groundwater elevation contour maps for all groundwater zones, if applicable.

(d) Concentration contour maps for all groundwater zones for TPH-G, benzene, and MTBE.

(e) A table showing well construction details such as well number, groundwater zone being monitored, ground surface elevation, screen interval, bentonite interval, filter pack interval, and total depth of the well.

(f) A table showing historical horizontal and vertical (if applicable) gradient directions and magnitudes.

(g) Cumulative data tables containing the water quality analytical results and depth to groundwater.
(h) A copy of the laboratory analytical data report.

(i) If applicable, the status of any ongoing remediation, including cumulative mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any field notes pertaining to the operation and maintenance of the system.

(j) If applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions.

9. The Second Semi-Annual Groundwater Monitoring Report, due 1 February of each year shall be an expanded report and will include the following additional information/items:

(a) Tabular summaries of all data obtained during the last year.

(b) Graphical summaries of TPH-G, benzene, and MTBE concentrations, groundwater elevation data, and remediation system operation versus time for wells MW-1, MW-2, MW-3, MW-4, MW-5, MW-8, MW-9, MW-12, MW-14, and additional wells as request by Central Valley Water Board staff.

(c) A rose diagram presenting groundwater flow direction and magnitude.

(d) Contaminant concentration contour maps for TPH-G, benzene, and MTBE for each monitoring event from the previous year.

(e) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells.

(f) An analysis of whether the pollutant plume is being captured by an extraction system or is continuing to migrate.

(g) A description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system effectiveness.

(h) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

(i) If desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.

10. The results of any monitoring done more frequently than required at the locations specified in the MRP also shall be reported to the Central Valley Water Board staff.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and
California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the 30th day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

This Order is effective upon the date of signature.

Ordered by: original signed by Frederick Moss for

PAMELA C. CREEDON
Executive Officer

5 January 2012
(Date)