CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

AMENDED CLEANUP AND ABATEMENT ORDER NO. R6V-2008-0034A2

REQUIRING PAUL RYKEN, THE ESTATE OF NICK VAN VLIET, FLAMELING DAIRY,
INC., K&H VAN VLIET CHILDREN LLC, AND
THE PACIFIC GAS AND ELECTRIC COMPANY
TO CLEAN UP OR ABATE THE EFFECTS OF
CONTAMINANTS TO GROUNDWATERS OF
THE MOJAVE RIVER HYDROLOGIC UNIT,
DESERT VIEW DAIRY, HINKLEY,
WDID NO. 6B36040900

San Bernardino County

The California Regional Water Quality Control Board, Lahontan Region (Water Board), finds:

1. On November 10, 2008, the Water Board issued Cleanup and Abatement Order (Order) No. R6V-2008-0034 to Paul Ryken, the Estate of Nick Van Vliet, Flameling Dairy, Inc., K&H Van Vliet Children LLC, and the Pacific Gas and Electric Company (hereinafter referred to as the Dischargers). Amended Order No. R6V-2008-0034A1 (Amended Order) was issued on June 16, 2009 modifying the well sampling requirements of the original Order. Additionally, in the cover letter for the Amended Order, the Executive Officer accepted the proposal for providing long-term, uninterrupted, replacement water for private wells affected by nitrate pollution by continuing the supply of bottled water that was in place. This second amended Order provides subsequent findings and modifies the alternate water supply requirement of the Order. Findings and requirements that are in Cleanup and Abatement Order Nos. R6V-2008-0034 and R6V-2008-0034A1 and that are not amended by this Order remain in effect.

2. The Dischargers complied with directives in the Order by supplying interim bottled water in November 2008 to residents with private wells affected by nitrate pollution. The supplied water is provided at a volume sufficient for drinking and cooking purposes.

3. In the June 16, 2009 cover letter for Amended Order No. R6V-2008-0034A1, the Water Board Executive Officer accepted the Discharger's proposal to implement long-term, replacement water for private wells affected by nitrate pollution by continuing the supply of bottled water that was in place. At the time, the Water Board staff did not receive any objections to this plan from the residents receiving supplied water.

4. On December 15, 2009, the Dischargers submitted to the Water Board a document titled, Residential Well Sampling Results (Results), for sampling of ten residential wells in November 2009—the residence at 22619 Thompson Road contains two wells compared to one well at all other residences. The technical report was submitted in compliance
with directive No. 5 in the Amended Order. The Results show that analysis of well samples from four of the nine residences had concentrations of nitrate greater than the primary Maximum Contaminant Level (MCL) of 45 mg/l for nitrate as NO₃. The nitrate levels in the four affected wells ranged from 95 mg/l to 250 mg/l. The locations of the affected wells are on Thompson Road, east of Mountain View Road. The Results did not show any new private supply wells with nitrate concentrations exceeding the standard beyond those listed in previous technical reports. The Results also show that at the same four well locations, the secondary drinking water standards for other constituents were exceeded.

The following table shows the range of detected concentrations in the affected domestic wells and secondary MCLs established by the California Department of Public Health as consumer acceptance contaminant levels.

<table>
<thead>
<tr>
<th></th>
<th>Range of concentrations in Domestic Wells</th>
<th>Recommended</th>
<th>Upper</th>
<th>Short Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chloride (mg/L)</td>
<td>780-1200</td>
<td>250</td>
<td>500</td>
<td>600</td>
</tr>
<tr>
<td>Sulfate as SO₄ (mg/L)</td>
<td>900-1600</td>
<td>250</td>
<td>500</td>
<td>600</td>
</tr>
<tr>
<td>Total Dissolved Solids (mg/L)</td>
<td>3500-5800</td>
<td>500</td>
<td>1000</td>
<td>1500</td>
</tr>
<tr>
<td>Specific Conductance (EC) (µmhos/cm)*</td>
<td>5500-9000</td>
<td>900</td>
<td>1600</td>
<td>2200</td>
</tr>
</tbody>
</table>

* Specific Conductance estimated based on Total Dissolved Solids data and conversion factor of 1.56 µmhos/cm EC per mg/l TDS.

Chloride, sulfate and Total Dissolved Solids can impart objectionable tastes to water and sulfate can impart objectionable odors from water at levels above the secondary MCLs. Water containing salts at the levels found in the affected domestic wells will cause most vegetable crops production to decline at least 50 percent and will cause complete failure of many common vegetable crops. At the higher levels found in the domestic wells, the water has limited use for livestock watering, is unsuitable for pregnant or lactating livestock, and is unsuitable for poultry.

4. Also on December 15, 2009, the Water Board was contacted by a resident on Thompson Road who indicated that the replacement bottled water did not provide for all their domestic water needs. The resident complained about foul odor from using her well water for non-potable uses and objected to bathing in water from the contaminated well and indicated that washing clothes and dishes in with that contaminated water left residue on the clothes and dishes. The resident also believed that excessive salts in well water were causing skin rashes and adversely
affecting their appliances. The resident requested that the Water Board require the responsible parties for the groundwater contamination to provide a more extensive long-term water replacement plan than just bottled water that takes all domestic uses into consideration.

Other affected residents verbally indicated to Water Board staff in December 2009 and January 2010 that the current long-term water replacement plan did not provide for all their domestic water needs. Residents identified concerns about health effects of being exposed to impacted well water, providing it to their animals, and deterioration of appliances. One resident indicated they could no longer grow their garden because the well water caused failure of the vegetable crops.

5. This Amended Order requires workplans, monitoring, and reports pursuant to Water Code section 13267, subdivision (b). Workplans and technical reports required are essential to design a long-term water placement plan and implementation schedule to verify compliance with this Amended Order. Monitoring is required to verify that the Alternate Water Supply option implemented provides clean water to residences with wells impacted with pollution.

6. The issuance of this Amended Order is an enforcement action taken by a regulatory agency and is exempt from the provision of the California Environmental Quality Act (Public Resources Code, section 21000 et seq.), pursuant to California Code of Regulations (CCR), title 14, section 15321, subdivision (a)(2). The implementation of this Amended Order is also an action to assure the restoration of the environment and is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, section 21000 et seq.), in accordance with CCR title 14, sections 15308 and 15330.

IT IS HEREBY ORDERED, pursuant to the Water Code sections 13267 and 13304, that Mr. Paul Ryken, the estate of Nick Van Vliet, and Flameling Dairy, Inc., are primarily responsible for the discharge of waste that has caused or threatens to cause a condition of pollution or nuisance, and shall abate the effects of waste discharges at, near, and downgradient of the Facility as directed in Cleanup and Abatement Order No. R6V-2008-0034 and as amended below. As secondarily liable for the discharge of waste that has caused or threatens to cause a condition of pollution or nuisance, the K&H Van Vliet Children LLC and PG&E shall abate the effects of waste discharges at, near, or downgradient of the Facility as directed in Cleanup and Abatement Order No. R6V-2008-0034 and as amended below, in the event that Mr. Paul Ryken, the estate of Nick Van Vliet, and Flameling Dairy, Inc., fail to comply with all or any portion of this Amended Order after being so notified by the Water Board to comply with this Amended Order.

1. **By April 30, 2010**, submit a workplan detailing Alternate Water Supply implementation for long-term, uninterrupted, replacement water that allows for all domestic uses (drinking, cooking, bathing, washing, appliances, outdoor needs, etc.) for all private wells with nitrate as NO₃ concentrations exceeding 45 mg/L (10 mg/L nitrate as nitrogen). The workplan
must describe different options for alternate water supply, estimate completion times, maintenance if required, and impacts to private well owners. A recommended option and schedule must be listed with justification.

2. **By July 30, 2010**, complete implementation of the Alternate Water Supply option that was accepted by the Executive Officer for all wells with nitrate as NO₃ concentrations exceeding 45 mg/L (10 mg/L nitrate as nitrogen). Compliance will be viewed as providing clean water with no constituents above primary or secondary drinking water standards for all domestic uses to all affected residences. The Executive Officer may modify this schedule depending on the method recommended and justification given by the Dischargers.

3. **By August 20, 2010**, submit to the Water Board a technical report detailing Alternate Water Supply implementation, a list of all residences provided, and water sample results verifying that supplied water meets state drinking water standards. The report must contain a map showing the location of all residences receiving Alternate Water Supply, the location(s) of impacted private wells, and new water supply equipment, if applicable. The report must state and list each parcel owner and occupant receiving Alternate Water Supply who were provided a copy of the report. Future monitoring and reporting shall be in accordance with the schedule listed in Amended Order No. R6V-2008-0034A1.

Failure to comply with the terms or conditions of this Order will result in additional enforcement action that may include the imposition of administrative civil liability pursuant to Water Code sections 13268 and 13350 or referral to the Attorney General of the State of California for appropriate legal action.

Any person aggrieved by this action of the Lahontan 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 thirtieth day following the date of this Order falls on a Saturday, Sunday, of state holiday, or furlough day, 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/publicnotices/petitions/waterquality or will be provided upon request.

Ordered by: [Signature]  
HAROLD J. SINGER  
EXECUTIVE OFFICER  
Dated: March 9, 2010