

E. Claim of Copyright or Other Protection

Any and all reports and other documents submitted to the Regional Board pursuant to this request will need to be copied for some or all of the following reasons: 1) normal internal use of the document, including staff copies, record copies, copies for Board members and agenda packets, 2) any further proceedings of the Regional Board and the State Water Resources Control Board, 3) any court proceeding that may involve the document, and 4) any copies requested by members of the public pursuant to the Public Records Act or other legal proceeding.

If the Discharger or its contractor claims any copyright or other protection, the submittal must include a notice, and the notice will accompany all documents copied for the reasons stated above. If copyright protection for a submitted document is claimed, failure to expressly grant permission for the copying stated above will render the document unusable for the Regional Board's purposes, and will result in the document being returned to the Discharger as if the task had not been completed.

III. TIME SCHEDULE

A. Submittal of Technical Reports and Financial Assurance Documents

1. Preliminary Closure and Post-Closure Maintenance Plan

By August 30, 2004, or 30 days prior to discharge, whichever comes first, the Discharger shall submit a Preliminary Closure and Post-Closure Maintenance Plan (PCPCMP) for the Facility in accordance with the requirements in Title 27. The PCPCMP shall contain a proposal to either clean close the Facility or close the Facility as a land treatment unit. The PCPCMP shall include a cost estimate to implement the plan. The PCPCMP and cost estimate to implement the PCPCMP shall be prepared by, or under the supervision of, either a California Certified Engineering Geologist or a California Registered Civil Engineer.

2. Reasonably Foreseeable Release Plan

By August 30, 2004 or 30 days prior to discharge, the Discharger shall submit a plan for addressing a reasonably foreseeable release from the Facility in accordance with the requirements in Title 27. The CAP shall include a cost estimate to implement the plan. The CAP and cost estimate to implement the CAP shall be prepared by, or under the supervision of, either a California Certified Engineering Geologist or a California Registered Civil Engineer.

3. Financial Assurance Documents.

By **August 30, 2004** or 30 days prior to discharge, whichever comes first, the Discharger shall submit Instruments of Financial Assurance acceptable to the Regional Board and adequate to cover the costs of Closure, Post-Closure Maintenance and all Known and Reasonable Foreseeable Releases for the Facility.

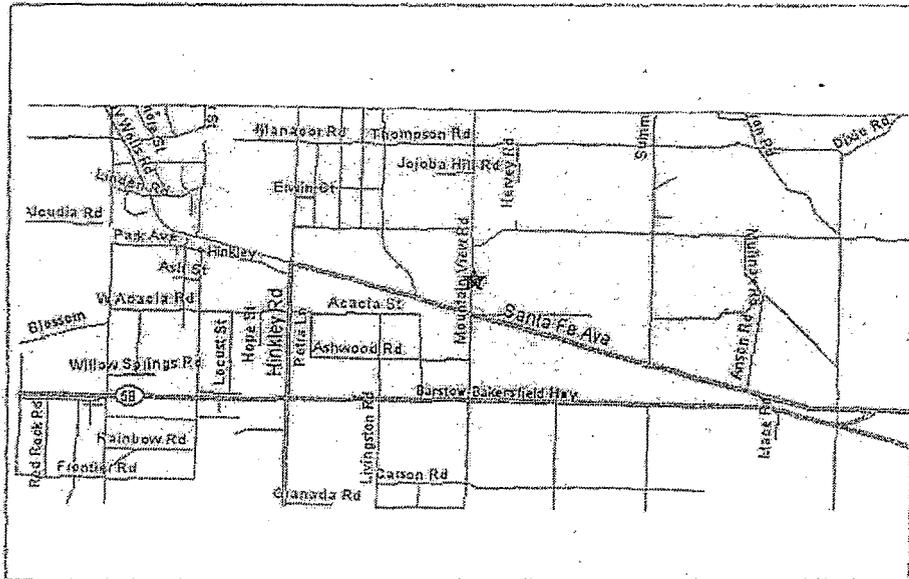
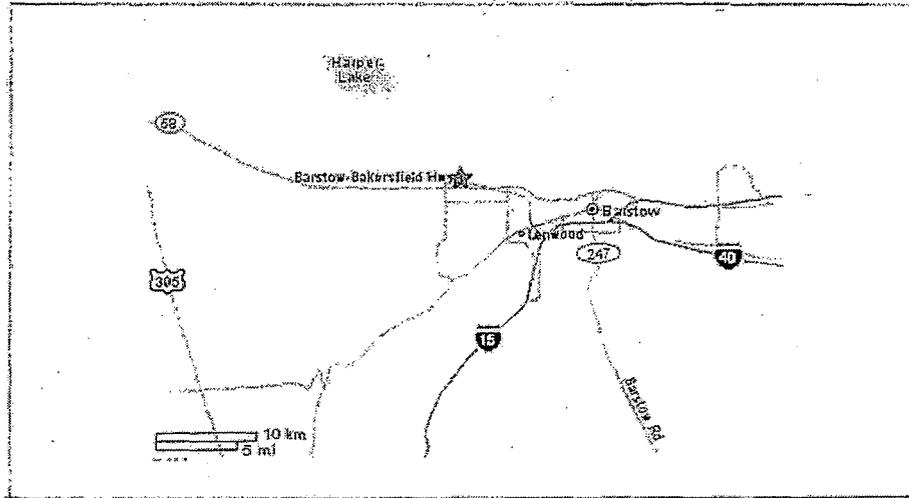
I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Lahontan Region, on July 27, 2004.

HAROLD J. SINGER
EXECUTIVE OFFICER

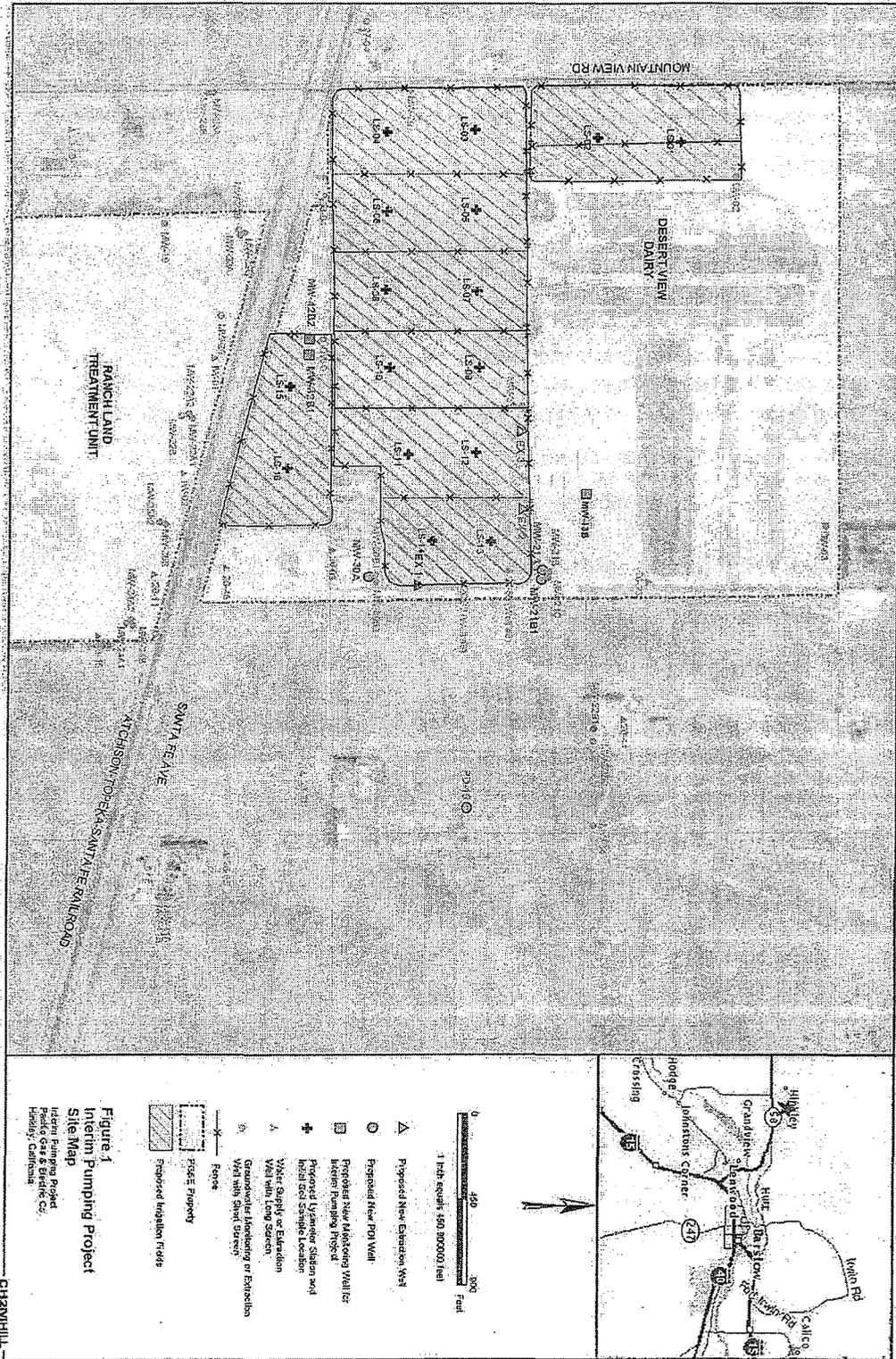
Attachments: A. Location Map
B. Irrigation Sites
C. References
D. Standard Provisions for Waste Discharge Requirements

JK/tp (PG&E WDR FINAL)

Attachment A



Attachment B



Attachment C. References

Bibliography for Interim Plume Containment and Hexavalent Chromium Treatment Project Report of Waste Discharge Documents

- CH2M HILL. 2004. *Draft Extraction Well Field Design Work Plan, Interim Pumping Project, Desert View Dairy, Hinkley, California*, January 9.
- CH2M HILL. 2004. *Project Description, Interim Pumping Project at the Desert View Dairy, Pacific Gas & Electric, Hinkley, California*. January 12.
- CH2M HILL. 2004. Response to LRWQCB Comments on Application for Report of Waste Discharge for Interim Pumping Project at Desert View Dairy - *Dr. Bruce James's Report on Evaluation of Cr(VI) Reduction and Cr(III) Oxidation in Soils*. January 12.
- CH2M HILL. 2004. *Draft Detection Monitoring Program Interim Pumping Project, Desert View Dairy*, January 14.
- CH2M HILL. 2004. *Draft Construction Drawings, Interim Pumping Project, Desert View Dairy*, January 14.
- CH2M HILL. 2004. Technical Memorandum: *DVD Interim Pumping Project: Evaluation of LTU Operation on Nitrate in Groundwater* February 5.
- CH2M HILL. 2004. Water Balance Model Documentation and Output. February 6.
- CH2M HILL. 2004. *Response to Comments on Project Description and Response to the Regional Board Staff Comments*, March 5.
- CH2M HILL. 2004. *Desert View Dairy Land Treatment Unit Potential Future Scenarios*, May 11.
- James, Dr. Bruce. 2003. *Evaluation of Potential Chromium(VI) Reduction and Chromium(III) Oxidation in Soils Used for Subsurface Irrigation with Groundwater Containing Chromium(VI), Hinkley, California*, University of Maryland (James Report). July 22.
- Pacific Gas and Electric Company (PG&E) 2003. Application for Report of Waste Discharge for Waste Discharge Requirements (WDR) for the Interim Pumping Project at the PG&E Compressor Station, Hinkley, San Bernardino County, for the proposed Interim Pumping Project located on the Desert View Dairy (DVD) at 37501 Mountain View Road, Hinkley, California. August 4.
- PG&E. 2004. *Addendum to Application / Report of Waste Discharge for Waste Discharge Requirements for the Interim Pumping Project at the Desert View Dairy, PG&E Company, Hinkley California, dated August 4, 2003*. Letter from Linda M. Gonsalves, P.E. Senior Project Manager to Harold Singer, Executive Director of the LRWQCB, January 12.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

STANDARD PROVISIONS
FOR WASTE DISCHARGE REQUIREMENTS

1. Inspection and Entry

The Discharger shall permit Regional Board staff:

- a. to enter upon premises in which an effluent source is located or in which any required records are kept;
- b. to copy any records relating to the discharge or relating to compliance with the Waste Discharge Requirements (WDRs);
- c. to inspect monitoring equipment or records; and
- d. to sample any discharge.

2. Reporting Requirements

- a. Pursuant to California Water Code 13267(b), the Discharger shall immediately notify the Regional Board by telephone whenever an adverse condition occurred as a result of this discharge; written confirmation shall follow within two weeks. An adverse condition includes, but is not limited to, spills of petroleum products or toxic chemicals, or damage to control facilities that could affect compliance.
- b. Pursuant to California Water Code Section 13260 (c), any proposed material change in the character of the waste, manner or method of treatment or disposal, increase of discharge, or location of discharge, shall be reported to the Regional Board at least 120 days in advance of implementation of any such proposal. This shall include, but not be limited to, all significant soil disturbances.
- c. The Owners/Discharger of property subject to WDRs shall be considered to have a continuing responsibility for ensuring compliance with applicable WDRs in the operations or use of the owned property. Pursuant to California Water Code Section 13260(c), any change in the ownership and/or operation of property subject to the WDRs shall be reported to the Regional Board. Notification of applicable WDRs shall be furnished in writing to the new owners and/or operators and a copy of such notification shall be sent to the Regional Board.
- d. If a Discharger becomes aware that any information submitted to the Regional Board is incorrect, the Discharger shall immediately notify the Regional Board, in writing, and correct that information.

- e. Reports required by the WDRs, and other information requested by the Regional Board, must be signed by a duly authorized representative of the Discharger. Under Section 13268 of the California Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation.
- f. If the Discharger becomes aware that their WDRs (or permit) are no longer needed (because the project will not be built or the discharge will cease) the Discharger shall notify the Regional Board in writing and request that their WDRs (or permit) be rescinded.

3. Right to Revise WDRs

The Regional Board reserves the privilege of changing all or any portion of the WDRs upon legal notice to and after opportunity to be heard is given to all concerned parties.

4. Duty to Comply

Failure to comply with the WDRs may constitute a violation of the California Water Code and is grounds for enforcement action or for permit termination, revocation and re-issuance, or modification.

5. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge in violation of the WDRs which has a reasonable likelihood of adversely affecting human health or the environment.

6. Proper Operation and Maintenance

The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the WDRs. Proper operation and maintenance includes adequate laboratory control, where appropriate, and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by the Discharger, when necessary to achieve compliance with the conditions of the WDRs.

7. Waste Discharge Requirement Actions

The WDRs may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for waste discharge requirement modification, revocation and re-issuance, termination, or a notification of planned changes or anticipated noncompliance, does not stay any of the WDRs conditions.

8. Property Rights

The WDRs do not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

9. Enforcement

The California Water Code provides for civil liability and criminal penalties for violations or threatened violations of the WDRs including imposition of civil liability or referral to the Attorney General.

10. Availability

A copy of the WDRs shall be kept and maintained by the Discharger and be available at all times to operating personnel.

11. Severability

Provisions of the WDRs are severable. If any provision of the requirements is found invalid, the remainder of the requirements shall not be affected.

12. Public Access

General public access shall be effectively excluded from treatment and disposal facilities.

13. Transfers

Providing there is no material change in the operation of the facility, this Order may be transferred to a new owner or operation. The owner/operator must request the transfer in writing and receive written approval from the Regional Board's Executive Officer.

14. Definitions

- a. "Surface waters" as used in this Order, include, but are not limited to, live streams, either perennial or ephemeral, which flow in natural or artificial water courses and natural lakes and artificial impoundments of waters. "Surface waters" does not include artificial water courses or impoundments used exclusively for wastewater disposal.
- b. "Ground waters" as used in this Order, include, but are not limited to, all subsurface waters being above atmospheric pressure and the capillary fringe of these waters.

15. Storm Protection

All facilities used for collection, transport, treatment, storage, or disposal of waste shall be adequately protected against overflow, washout, inundation, structural damage or a significant reduction in efficiency resulting from a storm or flood having a recurrence interval of once in 100 years.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

**MONITORING AND REPORTING PROGRAM NO. R6V-2004-0034
WDID NO. 6B360303001**

FOR

**PACIFIC GAS AND ELECTRIC COMPANY
INTERIM PLUME CONTAINMENT AND HEXAVALENT CHROMIUM
TREATMENT PROJECT**

San Bernardino County

I. MONITORING

A. Flow and Extracted Ground Water

The following shall be conducted and reported in graphic and tabular form accordingly as specified:

1. Volumes of Extracted Ground Water

The volumes of extracted ground water discharged to the land treatment unit from each well shall be recorded in a permanent log book. (i.e., maximum, total and average daily pumping rate in gallon per minute(gpm), total monthly and cumulative total volumes for each extraction well). Flows will be recorded on a daily basis during the start-up and optimization period. Once routine operations are established, flows will be recorded weekly. The information shall be reported quarterly.

2. Water Applied to the Land Treatment Unit (LTU)

Samples of combined extracted ground water shall be collected every two weeks for the first three months during system startup and optimization and analyzed for total chromium Cr(T), hexavalent chromium Cr(VI), nitrate (as nitrogen) and total dissolved solids (TDS). The results of sampling shall be reported after the system startup and optimization is complete.

During the routine operation (after first three months for system startup and optimization), grab samples of combined extracted ground water shall be collected quarterly for the four monitoring parameters listed above. The results of sampling shall be reported quarterly.

B. Detection Monitoring

The Discharger is required, pursuant to Section 20385, Title 27, to establish a detection monitoring program for a land treatment unit. A detection monitoring program has been proposed by the Discharger pursuant to Article 1, Subchapter 3, Chapter 3, Division 2, Title 27. The detection monitoring program includes:

- a. Site monitoring for the LTU condition;
- b. Unsaturated zone monitoring for soil pore liquid quality;
- c. Soil monitoring for soil loading for chromium;
- d. Ground water monitoring for ground water quality;
- e. Plant tissue monitoring for plant tissue uptake of chromium; and
- f. Aquifer characteristics from upgradient and downgradient wells.

The detection monitoring program shall be completed and reported quarterly as follows:

1. Site Monitoring

Daily, the land treatment unit shall be visually inspected and the following recorded in a permanent log book:

- a. condition of runoff control facilities;
- b. condition of perimeter site fencing;
- c. condition of drainage control facilities;
- d. any sign of surface runoff leaving the land treatment unit; and
- e. any sign of the presence of ponded water.

2. Unsaturated (Vadose) Zone Monitoring System

Sixteen lysimeter stations shall be installed in the irrigated fields. Each station consists of a lysimeter at five and twenty feet below ground surface (bgs). These specific locations of the lysimeter station shall be proposed in the Sampling and Analysis Plan (SAP). Lysimeters are to be capable of extracting soil pore liquid under unsaturated soil conditions.

Quarterly, soil pore liquid samples, if a sufficient quantity is encountered, shall be collected from the lysimeters at five feet bgs for Cr(T) and Cr(VI) analyses and at twenty feet bgs for nitrate and TDS.

3. Soil Monitoring

Monthly, for the first six months, soil samples shall be collected at depths to be proposed in the SAP at 5 feet below surface at locations within the land treatment area and analyzed for Cr(VI) and Cr(T) (in units of mg/kg). The random sampling approach and the numbers of samples shall be proposed in the SAP required in Section G.1.

During the routine operation (after the first six months), soil samples shall be collected at 5 feet below the ground surface at random locations proposed in the SAP required in Section G.I. within the land treatment area on a quarterly frequency soil samples shall be analyzed for Cr(VI) and Cr(T)

and reported in units of mg/kg. The random sampling approach shall be specified in a Sampling and Analysis Plan (SAP) required in Section G.1. If results of sample analysis indicate Cr(VI) and Cr(T) concentrations greater than the concentration limits established in the Board Order (Tentative) Section I.C.5, the Discharger shall establish a concentration gradient below the LTU. Soil samples shall be collected at one foot intervals until laboratory analytical results show that concentrations are less than the concentration limit identified in Section I.C.5. If Cr(VI) and Cr(T) concentrations above the concentration limits are found below the five-foot treatment zone, the Discharger shall report evidence of a release.

4. Ground Water Monitoring

Quarterly, ground water samples will be collected at ten proposed monitoring wells for Cr(T), Cr(VI), nitrate (as N) and TDS analyses. The ground water monitoring shall be detailed in a Sampling and Analysis Plan (SAP) required in Section G.1.

5. Plant Tissue Monitoring

Semi-annually, representative samples of crop tissue irrigated by the extracted ground water shall be sampled and analyzed for Cr(VI) and Cr(T). The SAP shall propose the plant tissue sample collection methodology. The units for monitoring parameters reported shall be in mg/kg (dry weight) of plant tissue.

6. Aquifer Characteristics

Quarterly, the parameters listed below shall be determined from proposed monitoring wells.

<u>Field Parameter</u>	<u>Units</u>
Depth to ground water	feet bgs
Static water level	feet above mean sea level
Electrical conductivity	micromhos/cm
pH	pH units
temperature	deg. F or C
Slope of ground water gradient	ft/ft

7. Summary

Sampling Frequency for Detection Monitoring

Monitoring	Frequency
Site Monitoring	Daily ² Weekly ³
Unsaturated Zone Monitoring - Soil Pore Liquid	Quarterly
Soil Monitoring	Monthly ^{1,2} Quarterly ^{1,3}
Ground Water Monitoring	Quarterly
Plant Tissue Monitoring	Semi-Annually ¹
Aquifer Characteristics	Quarterly

Note: Results shall be reported quarterly

II. DATA ANALYSIS

A. Statistical Analysis Method

The Discharger shall propose a descriptive statistics (i.e., sample mean, sample variation) for sample analysis of liquid collected from the lysimeters and soil samples from the land treatment units to indicate evidence of a release. The Executive Officer may approve proposed statistical methods which are different than the method in this Monitoring and Reporting Program provided that such methods are capable of determining statistically significant evidence of a release from the Facility.

B. Nonstatistical Method

In accordance with the WDRs, evaluation monitoring will be initiated without statistical verification if there is significant physical evidence of a release. Physical evidence can include time series plots, vegetation loss, or unusual soil discoloration. Each annual report shall comment on these physical elements.

¹ Analyses only for hexavalent chromium [Cr(VI)] and total chromium [Cr(T)] in unit of mg/kg

² For the first six months after startup of the operation

³ After first six months after startup of the operation if consistent compliance has been demonstrated for the first 6 months of operation.

III. REPORTING REQUIREMENTS

A. Scheduled Reports To Be Filed With The Regional Board

The following periodic reports shall be submitted to the Regional Board pursuant to Section 13267 of the California Water Code (CWC) as specified below.

Detection Monitoring Reports

1. Results of sampling and laboratory analysis of samples collected from the Facility. The semi-annual report must include a map showing the locations where pore liquid and soil samples were collected during the previous semester.

The results of sample analysis of monitoring parameters for the extraction wells and extracted ground water samples shall be reported in tabular and graphic form. Each graph prepared for ground water data shall be plotted with raw data at a scale appropriate to show trends or variations in water quality. For graphs showing the trends of similar constituents, the scale shall be the same.

2. A transmittal letter summarizing the essential points in each report shall accompany each semi-annual report. The letter shall include a discussion of any requirement violations found since the last report was submitted, and shall describe actions taken or planned for correcting those violations.

The transmittal letter shall also include a discussion of any violations of the WDRs and a description of action(s) taken to correct those violations. If no violations have occurred since the last report, this shall be stated in the transmittal letter. Monitoring reports and the transmittal letters shall be signed by a principal executive officer at the level of vice-president, or higher, or their designated representative who is responsible for the overall operation of the facility. The letter shall contain a statement that, under penalty of perjury, to the best of their knowledge the report is true, complete, and correct.

3. If the Discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting this schedule will be satisfactory. If no violations have occurred since the last submittal, this shall be stated in the letter of transmittal.
4. The results of sampling conducted in accordance with the approved Sampling and Analysis Plan for the Facility.

B. Unscheduled Reports To Be Filed With The Regional Board

The following reports shall be submitted to the Regional Board pursuant to Section 13267 of the CWC as specified below.

1. Notice of Evidence of a Release

Should the appropriate statistical or non-statistical data analysis indicate, for a given monitoring parameter and/or constituent of concern, that there is evidence of a release, the Discharger shall:

- a. Immediately notify the Regional Board verbally as to the monitoring point(s) and constituent(s) or parameter(s) involved;
- b. Provide written notification by certified mail within seven days of such determination (Section 2550.8(j)(1), Article 5, Chapter 15, Title 23, California Code of Regulations). The notification should indicate the Discharger's intent to conduct verification sampling, initiate evaluation monitoring procedures, or demonstrate that a source other than the Facility is responsible for the release.
- c. If the Discharger chooses to attempt to demonstrate that a source other than the Facility is responsible for the release, the Discharger shall submit a supporting technical report within 90 days of detection of the release.

2. Evaluation Monitoring

The Discharger shall, within 90 days of verifying a release, submit a technical report pursuant to Section 13267(b) of the California Water Code proposing an Evaluation Monitoring Program. If the Discharger decides not to conduct verification procedures, or decides not to make a demonstration that a source other than the Facility is responsible for the release, the release will be considered verified.

3. Engineering Feasibility Study Report

The Discharger shall, within 180 days of verifying the release, submit an Engineering Feasibility Study (Section 2550.8(k)(6) of Article 5) to preliminarily propose methods for corrective action.

C. General Provisions

The Discharger shall comply with the "General Provisions for Monitoring and Reporting," dated September 1, 1994, which is attached to and made a part of this Monitoring and Reporting Program.

D. Submittal Periods

Beginning **October 30, 2004**, the Discharger shall submit quarterly monitoring reports to the Regional Board on the 30th day of the month following the monitoring period. All daily and monthly reporting requirements shall be summarized and reported with the quarterly report. Any reporting required for mitigation monitoring during construction shall be reported in the next quarterly report.

E. Annual Report

On or before **July 30, 2004**, and every year thereafter the Discharger shall submit an annual report to the Regional Board. This report shall include the items described in the General Provisions for Monitoring and Reporting.

F. Mitigated Measures Monitoring and Reporting

Mitigation Measures Monitoring and Reporting are required as described in Attachment "A." Monitoring and Reporting of Air Quality Measures (items 1 through 4) are required monthly until construction is complete. Monitoring and Reporting of Hazards and Hazardous Materials and Hydrology and Water Quality Measures (items 6 through 16) are required for the project duration. The daily logs prepared by the construction superintendent and PG&E representative shall be kept in a permanent onsite log or record. The first report is due **August 30, 2004** and future reports to be submitted on a monthly basis thereafter, until notice is provided by an authorized representative of PG&E that construction activities are completed. Following construction, quarterly reports shall be submitted. All reports shall be signed by an authorized representative of PG&E.

G. Time Schedule

1. Sampling and Analysis Plan

Pursuant to General Provision No. 1D of the General Provisions for Monitoring and Reporting, the Discharge shall submit to the Regional Board by **August 30, 2004**, or 30 days prior to initiating a discharge or whichever occurs first, a Sampling and Analysis Plan (SAP). The SAP shall be updated and re-submitted as appropriate. The SAP shall include a detailed description of procedures and

techniques for:

- a. Sample collection, including sampling techniques, sampling equipment, and decontamination of sampling equipment;
- b. Sample preservation and shipment;
- c. Analytical procedures;
- d. Chain of custody control;
- e. Quality assurance/quality control (QA/QC);
- f. Proposed ground water monitoring and locations of monitoring well; and
- g. Random sampling approach for soil monitoring.

2. Statistical Analysis Method

The Discharge shall submit a proposed statistical analysis method for soil-pore liquid and soil samples from the LTU to indicate evidence of a release by **August 30, 2004**.

Ordered by: _____
HAROLD J. SINGER
EXECUTIVE OFFICER

Dated: **July 27, 2004**

Attachments: A Mitigation Monitoring and Reporting Plan
B General Provisions for Monitoring and Reporting

KD/tp p/PGE (PG&E MRP)

Attachment A
Mitigation Monitoring and Reporting Plan

Mitigation Measure	Monitoring	Reporting
Air Quality		
<p>1. Comply with the requirements of the MDAQMD including Rule 403.2 to mitigate the impact of dust and PM10 emission. The requirements of Rule 403.2 for the proposed project are: a) use periodic watering for short-term stabilization of disturbed surface area to minimize visible fugitive dust emission; b) take actions sufficient to prevent project-related trackout onto paved surfaces; c) cover loaded haul vehicles while operating on publicly maintained paved surfaces; d) stabilize graded site surfaces upon completion of grading when subsequent development is delayed or expected to be delayed more than thirty days; e) cleanup project-related trackout or spills on Publicly Maintained paved surfaces within twenty-four hours; and f) reduce non-essential earth-moving activity under high wind conditions.</p>	<ul style="list-style-type: none"> ▪ The onsite construction superintendent is responsible to ensure daily logs reflect monitoring compliance with MDAMD requirements. ▪ Information regarding construction activity shall be recorded in a permanent log book. Such information will include but is not limited to the time construction started and ended for the day and any unusual condition that may have occurred during the construction period. 	<p>A summary of the Daily Logs will be submitted to the Regional Board in the Monthly Reports as required in MRP until construction is complete.</p>
<p>2. During construction, all dust generating activities shall be restricted to periods of low wind (less than 25 miles per hour) to reduce dust emission.</p>	<ul style="list-style-type: none"> • Wind conditions shall be monitored onsite or from local information representative of the site. • The onsite construction superintendent is responsible to cease construction activities during a high wind condition. • The onsite construction superintendent is responsible to ensure daily logs reflect wind speed conditions, construction activity violations, and any corrective actions. 	<p>See above.</p>
<p>3. All dust generating activities shall be halted whenever local wind speeds exceed 25 miles per hour.</p>	<ul style="list-style-type: none"> ▪ See Monitoring for No. 2, above. 	<p>See above.</p>
<p>4. Construction speed on unpaved roads is limited to 25 miles per hour to minimize vehicle-related dust emission.</p>	<ul style="list-style-type: none"> ▪ The onsite construction superintendent is responsible to ensure daily logs reflect construction equipment driving speeds, any violations, and any corrective actions. 	<p>See above.</p>
<p>5. Speed-limit signs will be posted.</p>	<ul style="list-style-type: none"> ▪ See Monitoring for No. 4, above. 	<p>See above.</p>
Hazards and Hazardous Materials		
<p>6. No chemicals will be stored onsite.</p>	<ul style="list-style-type: none"> ▪ The PGE site representative will ensure compliance and record results of a site inspection at least monthly in a permanent log book. 	<p>A Summary of the PGE Permanent Log will be submitted to the Regional Board in the Quarterly Reports as required in</p>

Mitigation Measure	Monitoring	Reporting
		MRP. This summary will include a Certification that no chemicals such as hydrogen peroxide and citric acid were stored on site.
7. Chemical ingredients for irrigation drip line cleaning will be completely consumed during each periodic maintenance.	<ul style="list-style-type: none"> ▪ See Monitoring for No. 6, above. ▪ The volume of the chemicals applied and duration of application for citric acid and hydrogen peroxide will be recorded. ▪ The soil field moisture content will be recorded during each chemical application. 	A Summary of the PGE Permanent Log will be submitted to the Regional Board in the Quarterly Reports as required in MRP. This summary will include a Certification that all chemical ingredients were completely consumed. This summary will also include information on the volume and duration off chemical treatments and field soil moisture.
8. The offsite 750-gallon tank used for mixing the citric acid solution will be double-walled. Curbing must be placed along the perimeter of the concrete pad for containment of the full-volume	<ul style="list-style-type: none"> ▪ See Monitoring for No. 6, above. ▪ An Emergency Response Plan will be prepared, implemented and retained onsite and available to PGE staff and shown to regulatory staff if requested. 	A Summary of the PGE Permanent Log will be submitted to the Regional Board in the Quarterly Reports as required in MRP. This summary will include a Certification that all tanks are double-walled in the first monthly report after installation.
9. Hydrogen peroxide totes will be placed on a containment pallet to provide containment in the event of a leak.	<ul style="list-style-type: none"> ▪ See Monitoring for No. 6, above. 	A Summary of the PGE Permanent Log will be submitted to the Regional Board in the Quarterly Reports as required in MRP. This summary will include a Certification that containment pallets were used.
10. Herbicides may be used only if mowing does not provide sufficient weed control through a grass cover. If any herbicides are used, the application will be in accordance with the product label recommendations.	<ul style="list-style-type: none"> ▪ See Monitoring for No. 6, above. ▪ PGE will maintain photograph documentation of the soil grass cover. ▪ PGE will record the type and amount of any herbicides used. 	A Summary of the PGE Permanent Log will be submitted to the Regional Board in the Quarterly Reports as required in MRP. This summary will include a Certification that no herbicides were used or a summary of the type and amount applied.
11. The operation of the LTU will be evaluated and the distribution of crops as fodder will cease if monitoring data of plant tissue exceed 100 mg/kg of Cr(T) or indicate a threat to human health or the environment. The reasonable Cr(T) threshold concentration in crop (alfalfa) harvested for use as cattle feed presented no human health risk at concentrations below 1000	<ul style="list-style-type: none"> ▪ A LTU monitoring program is established in the MRP and will include soil and plant tissue testing to assess the concentrations of chromium. ▪ The monitoring program includes data evaluation to assess whether there is a threat to human health or the environment. 	Separately, as required by the MRP

Mitigation Measure	Monitoring	Reporting
mg/kg. It is conservative to apply a plant tissue concentration (100 mg/kg) for grasses other than alfalfa using 10 percent of the maximum threshold concentration of Cr(T).	<ul style="list-style-type: none"> ▪ The criteria to stop LTU use is based on information published in the Public Health Assessment. 	
Hydrology and Water Quality		
12. Subsurface drip irrigation systems will be used to distribute extracted ground water so that natural processes can reduce the Cr(VI) to Cr(III).	<ul style="list-style-type: none"> ▪ PGE will collect photograph documentation as irrigation systems are installed. 	Separately, as required by the MRP. Certification will be provided in the first report after installation that drip lines were used.
13. Grasses will be planted to provide nitrogen uptake.	<ul style="list-style-type: none"> ▪ The LTU monitoring program established in the MRP includes soil moisture sampling and analysis for nitrogen migrating past the root zone. 	Separately, as required by the MRP
14. During summer and most of the fall, the irrigation system will be operated at agronomic rates to prevent percolation below the LTU.	<ul style="list-style-type: none"> ▪ PGE will ensure that the plan is implemented and effective. ▪ Each month the amount of water applied versus agronomic requirements of the crop will be established and recorded in acre feet/acre/month 	Separately, as required by the MRP
15. The LTU operations will be operated to have not ponded water or ground water on the surface of the ground.	<ul style="list-style-type: none"> ▪ The LTU will be inspected daily during the start-up and optimization period. The inspection will look for ponded water or visible signs of ponding on ground surface. When optimization is complete and routine operation are established, the LTU will be inspected weekly. ▪ The PGE site representative will ensure compliance and record results of a site inspection in a permanent log book 	Separately, as required by the MRP
16. The pumping of ground water will remain within the 656 acre feet/year allowed under the Mojave River Ground Water Adjudication.	<ul style="list-style-type: none"> ▪ The total volume of water extracted per year for the project as compared to the total adjudication of 656 acre ft/year 	Information to be reported for the prior year in the first submitted monitoring report of the year.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION

GENERAL PROVISIONS
FOR MONITORING AND REPORTING

1. SAMPLING AND ANALYSIS

- a. All analyses shall be performed in accordance with the current edition(s) of the following documents:
 - i. Standard Methods for the Examination of Water and Wastewater
 - ii. Methods for Chemical Analysis of Water and Wastes, EPA
- b. All analyses shall be performed in a laboratory certified to perform such analyses by the California State Department of Health Services or a laboratory approved by the Regional Board Executive Officer. Specific methods of analysis must be identified on each laboratory report.
- c. Any modifications to the above methods to eliminate known interferences shall be reported with the sample results. The methods used shall also be reported. If methods other than EPA-approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Regional Board prior to use.
- d. The Discharger shall establish chain-of-custody procedures to insure that specific individuals are responsible for sample integrity from commencement of sample collection through delivery to an approved laboratory. Sample collection, storage, and analysis shall be conducted in accordance with an approved Sampling and Analysis Plan (SAP). The most recent version of the approved SAP shall be kept at the facility.
- e. The Discharger shall calibrate and perform maintenance procedures on all monitoring instruments and equipment to ensure accuracy of measurements, or shall insure that both activities will be conducted. The calibration of any wastewater flow measuring device shall be recorded and maintained in the permanent log book described in 2.b, below.
- f. A grab sample is defined as an individual sample collected in fewer than 15 minutes.
- g. A composite sample is defined as a combination of no fewer than eight individual samples obtained over the specified sampling period at equal intervals. The volume of each individual sample shall be proportional to the discharge flow rate at the time of sampling. The sampling period shall equal the discharge period, or 24 hours, whichever period is shorter.

2. OPERATIONAL REQUIREMENTS

a. Sample Results

Pursuant to California Water Code Section 13267(b), the Discharger shall maintain all sampling and analytical results including: strip charts; date, exact place, and time of sampling; date analyses were performed; sample collector's name; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.

b. Operational Log

Pursuant to California Water Code Section 13267(b), an operation and maintenance log shall be maintained at the facility. All monitoring and reporting data shall be recorded in a permanent log book.

3. REPORTING

- a. For every item where the requirements are not met, the Discharger shall submit a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements at the earliest time, and shall submit a timetable for correction.
- b. Pursuant to California Water Code Section 13267(b), all sampling and analytical results shall be made available to the Regional Board upon request. Results shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- c. The Discharger shall provide a brief summary of any operational problems and maintenance activities to the Board with each monitoring report. Any modifications or additions to, or any major maintenance conducted on, or any major problems occurring to the wastewater conveyance system, treatment facilities, or disposal facilities shall be included in this summary.
- d. Monitoring reports shall be signed by:
 - i. In the case of a corporation, by a principal executive officer at least of the level of vice-president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge originates;
 - ii. In the case of a partnership, by a general partner;
 - iii. In the case of a sole proprietorship, by the proprietor; or

- iv. In the case of a municipal, state or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.
- e. Monitoring reports are to include the following:
 - i. Name and telephone number of individual who can answer questions about the report.
 - ii. The Monitoring and Reporting Program Number.
 - iii. WDID Number.
- f. Modifications

This Monitoring and Reporting Program may be modified at the discretion of the Regional Board Executive Officer.

4. NONCOMPLIANCE

Under Section 13268 of the Water Code, any person failing or refusing to furnish technical or monitoring reports, or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in an amount of up to one thousand dollars (\$1,000) for each day of violation under Section 13268 of the Water Code.

x:PROVISIONS WDRS

file: general pro mrp

Lahontan Regional Water Quality
Control Board

EXECUTIVE OFFICER'S REPORT

September 2001

NORTH BASIN

1. *Decision Notice Appeal Resolved, Noxious Weed Control Program, Humboldt-Toiyabe National Forest – Jason Churchill*

In June, 2001 I filed a Notice of Appeal regarding the Decision Notice/Finding of No Significant Impact (DN/FONSI) issued by the U.S. Forest Service, Humboldt-Toiyabe National Forest (HTNF) for its Noxious Weed Control Program. The program affects parts of Mono, Alpine, Nevada, Plumas, Lassen, and Sierra Counties and relies heavily on herbicide use. The appeal was based on the failure of the Noxious Weed Control Program to ensure compliance with Basin Plan water quality standards through adequate mitigation and monitoring of herbicide applications. The appeal was necessary because the DN/FONSI did not address staff comments and concerns previously communicated to the HTNF.

A negotiated settlement was achieved during a meeting on July 12, 2001. The HTNF Forest Supervisor subsequently issued a memorandum incorporating the agreements into the Noxious Weed Control Program and Decision Notice. The supplemental Decision Notice provisions adequately water quality concerns, and on August 29, 2001 I issued a letter withdrawing the appeal. Under the terms of the agreement staff will coordinate

with the HTNF in developing a mutually acceptable herbicide monitoring plan that requires my approval before herbicide applications under the Noxious Weed Control Program may proceed.

2. *Submittal of Indian Creek Reservoir TMDL Technical Support Document to USEPA – Chuck Curtis*

Regional Board staff submitted the Technical Support Document for the Indian Creek Reservoir Phosphorus Total Maximum Daily Load (TMDL) to the USEPA on August 10, 2001 to fulfill a commitment for completion of the TMDL. The report was sent with a letter indicating it is the Regional Board staff's intention to bring the TMDL to the Regional Board for adoption when the Regional Board has a quorum for this item. In a subsequent discussion with USEPA staff, the USEPA indicated they would take no action on the TMDL provided the wait for a Board quorum did not extend greater than a few months. The USEPA has authority to adopt the TMDL based on the Technical Support Document. Whether or not the USEPA adopts the TMDL based on this report, the TMDL, including an implementation plan, will ultimately come before the Regional Board for adoption and incorporation into the Basin Plan.

3. *Swiss Mart Gas Station, El Dorado County*
- Lisa Dernbach

MTBE has been detected above the primary maximum contaminant level (MCL) in two private drinking water wells on Eloise Avenue in South Lake Tahoe during this summer. Concentrations increased in one private well three times above concentrations detected the previous year.

The Swiss Mart Gas Station is the source of the MTBE, based on monitoring well data submitted in quarterly reports. The MTBE ground water plume extends 1,100 ft from the gas station beneath a commercial and residential area. I issued letters to the responsible parties directing them to provide wellhead treatment or alternate water supply to the owners of the private drinking water wells. The responsible parties have installed a carbon filter at each well, and the filters are effectively removing MTBE from the well water.

The increase in MTBE concentrations on Eloise Avenue likely occurred because the plume was not being fully contained by the ground water extraction well network located one block upgradient. Staff contacted the responsible parties who have since submitted a proposal to expand ground water extraction to Eloise Avenue and other locations. The new extraction wells should be on-line before the end of the year.

4. *CAO Rescinded: Bodie Hills Recreational Vehicle Park, Mono County - Bud Amorfini*

I recently rescinded a Cleanup and Abatement Order (CAO) issued to the proponents of the proposed Bodie Hills RV Park project. I issued the CAO in July 2000 due to unauthorized grading operations that threatened to discharge sediment to Clearwater Creek (a stream already impaired by sedimentation) and because the property owners failed to submit a report of waste discharge (RWD) for the project as I required in an April 2000 letter. The CAO required the discharger to remove waste soils from an ephemeral drainage tributary to Clearwater Creek, stabilize disturbed soils from erosion, and submit a complete report of waste discharge before proceeding with any additional land disturbance or construction activities. After I issued the CAO, the proponent undertook measures necessary to abate the potential erosion problems and removed the soils discharged to the ephemeral stream.

Staff has monitored the site over the last year and no additional unauthorized construction activities have occurred. Based on the most recent inspection by staff (August 21, 2001), I believe the CAO has produced the desired results and I therefore rescinded it. Since a RWD has not yet been provided for the project, the CAO rescission reiterated my standing request, and provided clear direction that no further ground disturbance from construction activities is authorized unless a complete RWD is received by the Regional Board and processing is completed.

5. *Issuance of Administrative Civil Liability Complaint Against El Dorado Department of Transportation for the Discharge of Fresh Concrete Waste to a Storm Water*

***Conveyance and Thence to Trout Creek,
Tributary to Lake Tahoe – Robert Larsen***

The Pioneer Trail III Erosion Control Project was initiated to improve storm water conveyance and treatment facilities on portions of Pioneer Trail and several side streets in South Lake Tahoe. Regional Board staff inspected the project during a thunderstorm on August 8, 2001 to ensure appropriate best management practices (BMPs) were in place to control storm runoff. At approximately 4:15 PM staff drove by Golden Bear Trail and noticed a construction employee washing fresh concrete from curb and gutter equipment directly into a nearby storm water inlet. Concrete laden water was flowing from the inlet through a conveyance directly to Trout Creek.

Staff requested the employee cease the washing activity. Photographs were taken of concrete being washed from the equipment, contaminated water flowing into the storm drain, and the visible contaminated plume at Trout Creek. Once notified of the situation, construction staff immediately blocked the storm drain and shoveled the remaining concrete out of the drainage path. A silt fence was installed at the culvert outfall at Trout Creek within thirty minutes of the initial violation to contain any additional contaminated runoff.

Staff met with the contractor and representatives from El Dorado County the following day to discuss the violation and actions that will be taken to prevent such violations in the future. According to El Dorado County representatives, concrete washing is only to occur in an unfinished curb and gutter area contained with BMPs.

The employee acted negligently when washing the equipment outside of the designated area.

On September 11, 2001 I signed an Administrative Civil Liability Complaint in the amount of \$3,000 for violation of applicable General Waste Discharge Requirements and Prohibitions contained in the Water Quality Control Plan for the Lahontan Region. The contractor has recently informed staff that he intends to pay the ACL.

6. ***Meeting with the Lake Tahoe Unified School District (LTUSD) Regarding Vehicle Maintenance Facility Noncompliance - Lauri Kemper***

Regional Board staff met with Diane Scheerhorn, LTUSD Superintendent, and Steve Morales, LTUSD Director of Facilities, to discuss LTUSD's ongoing noncompliance with the Statewide Industrial Stormwater Permit for the vehicle maintenance facility.

The meeting stemmed from an inspection by Regional Board staff on March 9, 2001. Upon the inspection, several violations were noted and a copy of the Storm Water Pollution Prevention Plan (SWPPP) was requested. No SWPPP had been completed as required in the General Industrial Stormwater Permit for the facility. Staff sent several letters requesting a SWPPP be submitted. LTUSD failed to meet the deadlines and submitted insufficient drafts of the SWPPP. Regional Board staff determined that a meeting with the LTUSD Superintendent and Director of Facilities was needed to obtain future permit compliance.

On August 23, 2001, Regional Board staff discussed the deficiencies of the drafts submitted and presented a list of the required constituents to assist LTUSD in completing a SWPPP. Staff gave LTUSD a week to submit a sufficient draft of a SWPPP before a Notice of Intent to Issue an Administrative Civil Liability (ACL) for continued violations and failure to submit a SWPPP would be issued. An acceptable SWPPP was received on September 7, 2001.

7. ***All Levels of Government Pledge to Save Lake Tahoe-Lake Tahoe Restoration Summit - Mary Fiore-Wagner***

The theme of collaborating to protect Lake Tahoe resonated at the Lake Tahoe Restoration Summit held on August 21, 2001. Federal and state lawmakers including EPA Administrator Christie Todd Whitman joined with basin-wide local officials and scientists in committing to the implementation of over \$900 million in environmental improvement projects.

Chief level staff from the U.S. Geological Survey, Army Corps of Engineers, and U.S. Forest Service all echoed that collaboration and good science would be necessary to effectively protect the future of Lake Tahoe. The same sentiment was also voiced by the Secretaries of California's Business, Transportation, and Housing Agency and Resources Agency who also ensured that the resources pledged by California were still dedicated for restoration projects within the Basin.

Regional Board staff participated in a poster session which highlighted three major water quality projects: the Trout Creek Restoration Project, the Lake Tahoe Polycyclic Aromatic Hydrocarbon Study, and the Lake Tahoe

Research and Monitoring Program. All projects involve financial and technical Regional Board commitments as well as collaboration with numerous university, local, state, and federal entities.

The 2001 Summit assured that the Bush Administration would continue to invest in the protection of Lake Tahoe, a commitment set forth with the passage of the Lake Tahoe Restoration Act which resulted from the first Lake Tahoe Summit held in 1997 during the Clinton Administration.

8. ***Leviathan Mine Discharge Successfully Treated – Chris Stetler***

This summer Regional Board staff successfully neutralized all acidic drainage contained in evaporation ponds at Leviathan Mine.

Constructed ponds at the site receive a continuous flow of acidic drainage from remnant underground tunnels. The tunnel drainage is an acidic solution containing elevated concentrations of iron, aluminum, arsenic, nickel, and copper. Without treatment, the ponds would fill and overflow into Leviathan Creek, a tributary to the East Fork of the Carson River in Nevada. Since 1999, the Regional Board has been treating pond water during the summer months in an effort to minimize the potential for pond overflow. This year's work resulted in the complete evacuation of the pond system (a first), thereby maximizing pond storage capacity and minimizing the potential for pond overflow. The ponds have not overflowed since Board staff commenced pond water treatment in 1999.

In addition to pond water treatment, Board staff 1) implement an extensive monitoring program that includes monthly water quality sampling and continuous flow recording at locations above, inside, and below the mine site, 2) revegetate disturbed areas, and 3) conduct infrastructure assessments and site facilities maintenance. Board staff and our contractors plan to re-assemble and operate the treatment system again during the 2002 field season.

9. ***Snapshot Day Follow-up Sampling - Abigail O'Keefe***

On September 6, 2001, State and Regional Board staff, along with citizen monitors conducted follow-up sampling to the June 2, 2001 Snapshot Day. The follow-up sampling occurred at locations that had high fecal coliform and *E. coli* numbers on June 2, 2001, and at areas that were suspected of having high levels of fecal coliform and *E. coli*.

Samples were taken at 15 locations throughout the Lake Tahoe Basin. Each sample was split and processed for identifying fecal coliform, *E. coli* and total coliform. Violations for the fecal coliform standard were found at Ski Run Marina, the Tahoe Keys Marina and in Angora Creek. As a result of this investigation, staff is requesting the owners of the Hornblower Cruises (see item #10) to take corrective action. Fecal coliform levels at the Tahoe Keys Marina were slightly above standards and will be investigated. Sources at Angora Creek are thought to be from beaver activity. Overall, the numbers showed good correlation between the fecal coliform and *E. coli* methods. Staff plan to continue comparing the different techniques to further

evaluate any variations. Regional Board staff will perform follow-up sampling at the Tahoe Keys Marina and Angora Creek.

10. ***Corrective Action Taken by Hornblower Cruises – Mary Fiore-Wagner***

On September 12, 2001, staff requested the owners of Hornblower Cruises to take corrective action to prevent the discharge of water containing sewage. During a sampling event at Ski Run Marina on September 6, 2001, staff observed Hornblower staff pumping sewage from the tour boat to the sewer manhole. After the hose was disconnected, Hornblower staff allowed the hose to discharge wash water to the marina. Staff took samples prior to the discharge and in the vicinity of the discharge and measured a substantial increase in fecal coliform after the discharge occurred.

Staff requested an alternate plan for pumping sewage (complete containment) and sampling of the marina following sewage pump out operations. Hornblower has informed staff that measures have already been taken to prevent sewage from entering the marina through pump out operations by enclosing the hose in a corrugated metal pipe. Hornblower staff also informed staff that wash water would be disposed of in a bucket when disconnected and flushed to the sanitary sewer.

SOUTH BASIN

11 **Drinking Water Sampling Results at Pacific Gas and Electric (PG&E) Hinkley**

—
Joe Koutsky

The California Department of Health Services Environmental Health Investigation Branch (CDHS EHIP) asked the Regional Board to sample drinking water wells of Hinkley residents in the vicinity of PG&E's chromium plume. A January 2001 Public Health Assessment by CDHS EHIP recommended the sampling.

Board staff collected samples from a total of 24 private drinking water wells that supply 27 residences. Water samples were analyzed for general minerals and metals in addition to total and hexavalent chromium.

Preliminary results indicate that all samples were below the maximum contaminant level (MCL) of 50 parts per billion (ppb) for total chromium. However, all the wells sampled exhibited hexavalent chromium concentrations that exceed the Public Health Goal (PHG) of 0.2 ppb. With respect to total chromium, 20 of the 24 wells exhibited concentrations that exceed the PHG of 2.5 ppb. Several wells were found to contain elevated nitrates, total dissolved solids, chloride and sulfates. In seven of the wells, nitrate as N was detected above the MCL of 10 parts per million (ppm). Most of these wells are located near a large dairy. CDHS EHIP and the San Bernardino County Environmental Health Department notified those residents with infants that could be at risk from the nitrate-contaminated ground water during the week of September 24, 2001. Board staff plans to resample wells that have elevated constituents. CDHS EHIP mailed notification letters with this

information to all the well owners in the week of September 10, 2001.

All of the other well owners and residents (not at risk from contaminants in their ground water) received notification letters from CDHS EHIP informing them of the analytical results of their well water.

12. **IMC Chemicals (IMCC), Trona - Kai Dunn**

Improving Technology

IMCC and their consultants continue to study the analytical methods to support site-specific analytical monitoring and compliance testing as required in the WDRs. Analytical methods are also being evaluated to take into consideration the interference that arises from highly brine discharges. A final report is scheduled for later this year.

Compliance with Board Orders

Daily reporting data from IMCC shows that the interim effluent limitations set forth in the WDRs have not been exceeded during the month of August 2001. Thirty-eight bird deaths were reported during the same time period. Bird fatalities increased during the month of August. The possible reason is due to increased seasonal migration. Records of wildlife found last year reflect that bird population for migration increased in the last half of August, but decreased in the first half of September. As part of Cleanup and Abatement Order No. 6-00-64A1, IMCC and their consultants have proposed an additional sampling plan for the Dredge Pond characterization and submitted IMCC's Best Management Practice (BMPs) and evaluation. Board staff approved the additional sampling plan for the Dredge Pond characterization and is in the process of reviewing the BMPs and evaluation.

Basin Plan Beneficial Uses

Staff is preparing a Notice of Preparation (NOP) for an environmental document to support proposed changes to beneficial use designation for Searles Lake within the next Basin Plan update.

13. *Proposed Development Project in the Rovana Area – Doug Feay*

A project has been proposed to develop housing in Round Valley located about 10 miles northwest of Bishop. The project proposes 355 housing units and associated infrastructures over 280 acres. The project is currently generally underdeveloped pasture land with grazing as a predominant land use. The small housing Community of Rovana is located in the area. Two major creeks and associated drainages and wetlands are found on the site. Inyo County has prepared a Notice of Preparation of an EIR for the project. Board staff requested the lead agency consider impacts to water quality related to the proximity of the project to the creeks and wetlands. Sewer service to the project is proposed by connection to an existing sewage treatment plant. Board staff also requested cumulative impacts due to the extensive project and associated infrastructure and land use impacts be evaluated. Board staff will request the project proponent design the project to maintain buffer zones to protect water quality and avoid wetland impacts. The DEIR for the project is expected in October or November of this year.

14. *Update of Mojave River/El Mirage Area Sampling – Patrice Copeland*

Board staff has worked with stakeholders in the Mojave Watershed to develop a comprehensive strategy for assessment of water quality in the Mojave River system. The plan called for the quarterly collection of both surface and ground water samples for a minimum of eight quarters. The study began in January 1999, and final samples were collected in August and September 2001. Samples were collected from numerous locations ranging from the headwaters of the Mojave River to Afton Canyon. Samples were analyzed for a variety of constituents, including general chemistry parameters, metals, volatile organic compounds (VOCs), and radon. Staff is in the process of evaluating the data collected, and the results of this study will be presented to the stakeholders and Regional Board members.

Aerostructures (formerly Aerochem) continues to investigate chromium contamination in El Mirage area ground water. No results have yet been received. Also, Reports of Waste Discharge have been requested for two dairies in the El Mirage area.

15. *Molycorp CAO Compliance Status Update – Steve Fischenich / Curt Shifrer*

Molycorp temporarily ceased operations during the summer, partly because of the California energy crisis. It plans to resume mining in October 2001. Progress continues on the environmental review for a new long-term tailings disposal facility. P-16 will not be used for tailings disposal after November 1, 2002.

To comply with the Amended CAO, Molycorp installed two additional extraction wells to improve the existing systems for

addressing leakage. The wells were placed into operation in the first quarter of 2001. Ground water levels at the two extraction well sites have dropped over 100 feet. Levels further from the wells continue to drop steadily since the wells were initially started up. Molycorp disposes of captured leakage by evaporators located on the lined portion of P-16.

In October 2001, Molycorp expects to startup a recently constructed extraction well located in the western portion of the Mine Site near the old tailings pond (P-1). Mathematical modeling results predict the new extraction well along with an existing extraction well will:

- Capture any residual pollutants migrating to ground water from the vadose zone underlying P-1,
- Prevent pollutants present in the onsite portion of the P-1 Ground Water Hot Spot from migrating offsite, and
- Cause pollutants in a significant part of the offsite portion of the P-1 Hot Spot to be drawn onsite and into the extraction wells.

Molycorp continues to work with Bureau of Land Management to obtain right-of-way agreements to drill offsite ground water monitoring wells. These wells are needed to complete the investigation of ground water plumes.

EXHIBIT G

ENGINEERED WASTE MANAGEMENT PLAN

Prepared For:

DESERT VIEW DAIRY
37501 Mountain View Road
Hinkley, CA 92347
(760) 253-1089



JOB NO. IE0139
February 2002

This Engineered Waste Management Plan was prepared under the direction and supervision of Francisco V. Calderon, Professional Engineer.

Francisco V. Calderon, P.E. No. 58840

For additional questions and comments, please contact:

Francisco V. Calderon
Project Manager

Paul Hacunda
Associate

Hans Leduc
Assistant Engineer

NOLTE ASSOCIATES, INC.
255 East Rincon Street, Suite 110
Corona, CA 92879
Tel: (909) 739-5700
Fax: (909) 739-7510

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ENGINEERED WASTE MANAGEMENT PLAN
For
DESERT VIEW DAIRY
37501 Mountain View Road
Hinkley, CA 92347
(760) 253-1089

This plan describes the recommended procedures of the operation and management of the dairy wastewater collection retention and disposal system at the Desert View Dairy.

I. INTRODUCTION

The Desert View Dairy is owned by the Van Vliet Children's fund and operated by Paul Ryken. The property is located at 37501 Mountain View Road in the county of San Bernardino. The dairy is situated 1 mile north of CA-58 and about 8 miles west of Bakersfield; CA. Paul Ryken is responsible for the implementation of this EWMP report.

The dairy facility is located in the Southwest corner of Mountain View Avenue and Santa Fe Avenue in San Bernardino County. On the San Bernardino's County assessor's map, 494-21, the property is located in the northern half of the northwest ¼ of Section 26. The entire property is approximately 180 acres. The property is comprised of the dairy operations, two homes along the southeast corner of the property, the Ryken home, dirt roads and crop fields. Mr. Paul Ryken Smith farms the crop fields on this property.

II. OPERATION

The dairy operations (approx. 20.2 acres) consist of feed storage areas; haystacks, hay barns, a grain commodity barn, citrus pits and a milk barn. There are 12 corrals made up of milk cows, dry cows, and heifers, 3 cement feed lanes; two in the center, one along the west side, and 1 wastewater lagoon, which captures and handles the storm water. All of the wash water is collected in the sump; it is located east of the milk barn and south of the shop.

The current animal population is approximately 1360 animals or 1540 animal units, which is based on 1000 lb. body weight. There are 1100 milk cows, 210 dry cows and 50 bred heifers.

The dairy is currently milking twice a day. There are 7 milk cow strings, each consisting of approximately 150 to 165 cows per string. There is also a hospital string consisting of about 50 to 100 fresh and older cows, etc.

The operation water generated was calculated by figuring out how much water is used for cooling the milk through the plate coolers and the ice machines. This volume equals how much generated water is available for reuse in the wash pen by sprinklers and to wash the wash pen, drip pen and milk parlor floor. The calculated volume is approximately 60 gallons