

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM ORDER NO. R5-2003-0039
FOR
MILLENIUM HOLDINGS, INC.
BULLY HILL AND RISING STAR MINES
SHASTA COUNTY

MINE DRAINAGE MONITORING

Samples of mine drainage shall be obtained from Discharge Nos. 1 through 5 as identified in Finding No. 6 of Waste Discharge Requirements Order No. R5-2003-0039, from the effluent of any treatment system, and from any other significant point source discharge discovered on the Discharger's site. Flow measuring devices shall be installed at each monitoring point, as practical, to allow for accurate measurements of mine drainage flow. Time and date of each sample shall be recorded and reported. Discharge points are shown on Attachment B. The samples shall be obtained at the frequencies and analyzed for the parameters listed below:

Parameter	Unit	Type of Sample	Sampling Frequency
Flow	gpm	--	Quarterly
pH	pH Units	Grab	Quarterly
Dissolved Cadmium	mg/L	Grab	Quarterly
Dissolved Copper	mg/L	Grab	Quarterly
Dissolved Zinc	mg/L	Grab	Quarterly
Priority Pollutant Metals	mg/L	Grab	Semi-Annually ¹

¹Samples shall be obtained in the second and fourth quarters.

Any bulkhead seals shall be inspected at least quarterly to detect leakage, signs of possible failure, and to record hydrostatic pressure behind the seal.

RECEIVING WATER MONITORING

The Discharger shall establish receiving water monitoring stations at the locations described below.

<u>Station</u>	<u>Description</u>
R-1	Town Creek 200 feet upstream of confluence of drainage from Bully Hill Mine Portal (Discharge 1).
R-2	Town Creek approximately 1,000 feet below drainage from Bully Hill Mine Portal (Discharge 1), upstream of road crossing.
R-3	Town Creek upstream of tailings pond.
R-4	Town Creek downstream of tailings pond (when lake elevation allows).
R-5	Horse Creek approximately 200 feet upstream of confluence with unnamed tributary from Rising Star Mine.
R-6	Unnamed tributary from Rising Star Mine just prior to discharge to Shasta Lake or Horse Creek, depending upon elevation of lake.

<u>Station</u>	<u>Description</u>
R-7	Horse Creek 50 feet downstream of confluence with unnamed tributary from Rising Star Mine (when lake elevations allow).
R-8	Unnamed tributary to Horse Creek immediately upstream of drainage from Rising Star Portal (Discharge 2)

Samples at all receiving stations shall be analyzed for the constituents at the frequency given below:

Constituent	Unit	Sampling Frequency
Dissolved Copper	mg/L	Quarterly
Dissolved Zinc	mg/L	Quarterly
Dissolved Cadmium	mg/L	Quarterly
Hardness	mg/L	Quarterly
pH	pH Units	Quarterly
Flow	gpm	Quarterly
Priority Pollutant Metals	mg/l	Semi-Annually ¹

¹Samples shall be obtained in the second and fourth quarters.

REPORTING

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, the concentrations, and the sampling points are readily discernible. The data shall be summarized in such a manner as to clearly illustrate the compliance with waste discharge requirements.

Quarterly and semi-annual monitoring results shall be submitted to the Regional Board by the 1st day of the second month following the calendar quarter (e.g., the report for the 1st calendar quarter is due 1 May).

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

Upon written request of the Regional Board, the Discharger shall submit a report to the Regional Board by 30 January of each year. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

Ordered by:

Thomas R. Pinkos, Executive Officer

14 March 2003

(Date)

RSD/sae

25 March 2003

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2003-0039

NPDES NO. CA0084212

WASTE DISCHARGE REQUIREMENTS
FOR
MILLENNIUM HOLDINGS, INC.
BULLY HILL AND RISING STAR MINES
SHASTA COUNTY

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

1. Millennium Holdings, Inc., (hereafter Discharger) submitted a report of waste discharge on 6 January 2003 for a permit renewal to discharge waste under the National Pollutant Discharge Elimination System (NPDES) from the Bully Hill and Rising Star mines, Shasta County. The mines are currently regulated under Waste Discharge Requirements (WDRs) Order No. 97-214 (NPDES No. CA0084212)
2. The Discharger discharges acid mine drainage (AMD) from several portals at the Bully Hill and Rising Star Mines. Neither mine is currently operating. The mines are in Sections 15, 16, 21, and 21, T34N, R3W, MDB&M as shown on Attachment A, which is incorporated herein and made a part of this Order.
3. The mines are within the Lake Shasta Drainage Hydrologic Area (No. 506.20) as depicted on interagency hydrologic maps prepared by the Department of Water Resources (DWR) in August 1986. The mean annual rainfall at the mines is approximately 60 inches and the 10-year 24-hour storm is 7 inches. The pan evaporation rate in the area is approximately 68 inches per year, based on information obtained from DWR Bulletin 73-79 (November 1979).
4. Mining activities began in the 1860's. Gold and silver recovery was the primary reason for the initial mining efforts. In the late 1800's until 1927, copper, gold, silver, and zinc were mined. Although exploratory work was performed in the area in the 1950's, there has been no production since 1927. The extraction of ore from the mines resulted in extensive development of the underground workings and creation of large waste rock dumps. The mine workings and waste rock dumps are the principal sources of AMD.
5. AMD is formed when water infiltrates into the mine workings and contacts exposed sulfide deposits. The ensuing chemically and bio-chemically mediated reactions produce sulfuric acid and lower the pH of the water. As the water moves through the mine workings, it leaches metals from the ore body. The resultant discharge, commonly from mine portals, is toxic to aquatic organisms, including fish.

6. Current and past point source discharges of AMD to surface waters include the following:

<u>Source</u>	<u>Discharge Point</u>	<u>Discharge Identification Number</u>
Bully Hill Portal BH-3	Town Creek diversion structure at the Bully Hill waste rock pile	1
Rising Star Portal RS-5	Un-named tributary to Horse Creek, designated RS-5 Stream	2
Bully Hill Portal BH-1 ¹	Up-slope of road connecting Bully Hill Mine with Rising Star Mine	3
Bully Hill Portal BH-3A ¹	Up-slope of road connecting Bully Hill Mine with Rising Star Mine	4
Rising Star Portal RS-2	Down-slope of lower switchback of road leading from Bully Hill Mine to Rising Star Mine	5

¹ Portals BH-1 and BH-3A rarely discharge

The locations of the portals are shown on attachment B, which is part of this Order.

7. The Discharger discharges AMD from other point and non-point sources on their property including, but not limited to, seeps, exposed ore and mineral zones, and waste rock dumps.
8. From 1997 to the present, the Discharger has conducted remedial activities at the mines in an attempt to comply with WDRs. The activities include a preliminary site assessment, road reconstruction and access improvements, construction of a surface water diversion for Town Creek through the Bully Hill waste rock dump, installation of a surface water diversion channel at the Bully Hill Mine, installation of four monitoring wells at the Bully Hill Mine, installation of a pilot sulfate-reducing bacteria treatment cell (for metal removal) at the Rising Star Mine, and monthly compliance monitoring.
9. The Discharger submitted the following reports regarding activities completed at the mines:
 - o *Preliminary Assessment Report, Bully Hill and Rising Star Mines, Lake Shasta, California.* Dames and Moore, May 1997.
 - o *Preliminary Assessment Report, Addendum-Additional Site Investigation, Bully Hill and Rising Star Mines, Lake Shasta, California.* Dames and Moore, July 1999.
 - o *Design Report-Remedial Measures, Bully Hill and Rising Star Mines, Shasta County, California.* Dames and Moore, March 2000.
 - o *Summary of Compliance Report, Cease and Desist Order No. 97-215, Bully Hill and Rising Star Mines, Shasta County California.* URS Corporation, July 2001.

- *2001 Work Plan Interim Remedial Measures, Bully Hill and Rising Star Mines, Shasta County, California.* URS Corporation, August 2001.
 - *2001 Construction Report-Interim Remedial Measures.* URS Corporation, January 2002.
 - *Pilot-Scale Evaluation of SRB Treatment of Acid Rock Drainage, Rising Star Mine, Shasta County, California.* URS Corporation, April 2002.
 - Monthly monitoring reports
10. Inspections conducted by staff and review of the Discharger's monitoring reports have shown the remediation work performed to date to be partially effective. The diversion of Town Creek around the waste rock pile at the Bully Hill Mine has reduced metal loading to the creek by approximately 45 percent to 85 percent in the summer. Little abatement work has been accomplished at the Rising Star Mine with the exception of the pilot treatment cell. However, significant effort was expended to rehabilitate the access roads at both mines.
 11. Water Quality of the discharges from the main portals (BH-3 and RS-5) as well as receiving water quality is characterized, based on 2001 data, in Table 1, which is a part of this Order.
 12. The discharge of AMD from the Bully Hill and Rising Star mine portals, seeps, waste piles, and fractures are in violation of Discharge Prohibitions, Discharge Specifications, and Receiving Water Limitations contained in the existing NPDES permit and Cease and Desist Order No. 97-215 adopted by the Board. The continued discharge of AMD from these sources, despite the remedial efforts by the Discharger, constitutes a violation of this permit. A new Cease And Desist Order is proposed for adoption by the Regional Board that contains a reasonable time schedule for achieving compliance with all Prohibitions, Specifications, and Limitations in this revised Order.
 13. The Discharger has submitted a report titled *5-Year Work Plan, Bully Hill And Rising Star Mines, Shasta County, California* (December 2002). The Work Plan contains the Discharger's proposal for further investigation and remedial activities for the next five years to bring the discharges into compliance with this Order.
 14. The mines are in a remote, hilly area on the west side of the Squaw Creek Arm of Shasta Lake. Access to the mines is difficult, and neither power nor water is available at the site. Due to the difficulties of travel to the mines and constructing and operating conventional treatment facilities, it is unreasonable and inappropriate to apply effluent limits listed in 40 CFR 440.102, developed for active copper mines, to the mine portals. Therefore, rather than requiring adherence to numeric effluent limits which may only be obtained by application of active treatment technology (e.g. lime neutralization), the Regional Board finds the application of Best Management Practices (BMPs), which may include, but not be limited to, installation of concrete bulkhead seals, management to prevent surface water intrusion into tailings, waste piles, and ore bodies, capping of waste rock piles, and operation of passive treatment systems (i.e. constructed wetlands, anoxic limestone drains, etc.) to be appropriate.

GENERAL FINDINGS

15. The Regional Board adopted a *Water Quality Control Plan, Fourth Edition, for the Sacramento and San Joaquin River Basins* (hereafter Basin Plan). The Basin Plan designates beneficial uses, establishes water quality objectives, and describes an implementation program and policies to achieve water quality objectives for all waters of the Basin. This includes plans and policies adopted by the SWRCB and incorporated by reference, including Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality of Waters in California*. These requirements implement the Basin Plan.
16. The Basin Plan at page II-2.00 states: “Existing and potential beneficial uses which currently apply to surface waters of the basins are presented in Figure II-1. The beneficial uses of any specifically identified water body generally apply to its tributary streams.” The Basin Plan does not specifically identify beneficial uses for Horse Creek and Town Creek, but the Basin Plan does identify present and potential uses for Shasta Lake, to which Horse Creek and Town Creek are tributary.
17. The Basin Plan identifies the following beneficial uses for Shasta Lake: municipal and domestic supply (MUN); agricultural irrigation (AGR); hydropower generation (POW); contact and non-contact recreation (REC1, REC2); freshwater habitat (WARM, COLD); fish spawning (WARM, COLD); and wildlife habitat (WILD).
18. The Basin Plan states on page II-1.00: “Protection and enhancement of existing and potential beneficial uses are primary goals of water quality planning...” and with respect to disposal of wastewaters states that “...disposal of wastewaters is [not] a prohibited use of waters of the State; it is merely a use which cannot be satisfied to the detriment of beneficial uses.”
19. Upon review of the flow conditions, habitat values, and beneficial uses of Horse Creek and Town Creek, and the hydraulic continuity, potential aquatic life migration, potential for contact recreation, and potential for preservation and enhancement of fish, wildlife and other aquatic resources, the Regional Board finds that the beneficial uses identified in the Basin Plan for Shasta Lake are applicable for Horse Creek and Town Creek. However, not all the designated beneficial uses exist now nor have they existed in the unnamed tributary to Horse Creek and Town Creek.
 - a. Municipal and domestic supply and agricultural irrigation
The Regional Board is required to apply the beneficial uses of municipal and domestic supply to the tributaries of Shasta Lake based on State Board Resolution No. 88-63 which was incorporated in the Basin Plan pursuant to Regional Board Resolution 89-056. In addition, the State Water Resources Control Board (SWRCB) has issued water rights to existing water users along Shasta Lake for domestic and irrigation uses.

b. Contact and non-contact recreation

The Regional Board finds that: there is ready public access to the lower reaches of Horse Creek and Town Creek; exclusion of the public is unrealistic; and contact recreational activities currently exist at the mouth of each stream where it enters Shasta Lake.

c. Freshwater Replenishment

There is hydraulic continuity between Horse Creek, Town Creek, and Shasta Lake. These streams add incrementally to the quantity of water in Shasta Lake and may impact the quality of water flowing from Shasta Lake Reservoir.

d. Freshwater habitat and fish spawning

Horse Creek and Town Creek flow into Shasta Lake. Fish species present in Shasta Lake are consistent with both cold and warm water fisheries. There is a potential for trout migration, necessitating a cold water designation, and trout, a cold water species, have been found upstream of the mine discharges in Horse Creek. Trout and other fish species, both warm and cold, are present in Shasta Lake and its tributaries. The Basin Plan (Table II-1) designates Shasta Lake as being both a cold and warm freshwater habitat. Therefore, pursuant to the Basin Plan (Table II-1, Footnote (2)), the cold designation applies to Horse Creek, and Town Creek. The cold-water habitat designation necessitates that the in-stream dissolved oxygen concentration not fall below 85 percent of saturation in the main water mass, the 95th percentile concentration not fall below 75 percent saturation, and not fall below 7.0 mg/l at any time. This approach recognizes that if the naturally occurring in-stream dissolved oxygen concentration is below any of these criteria, the Discharger is not required to improve the naturally occurring level.

20. USEPA adopted the *National Toxics Rule* (NTR) on 5 February 1993 and the *California Toxics Rule* (CTR) on 18 May 2000. These Rules contain water quality standards applicable to this discharge. The State Water Resources Control Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy), which contains guidance on implementation of the NTR and the CTR.
21. The beneficial uses of the underlying groundwater are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
22. The U.S. Environmental Protection Agency (USEPA) and the Regional Board have classified this discharge as a minor discharge.
23. On 24 July 2002, the Discharger was issued a letter under the authority of California Water Code Section 13267 requesting effluent and receiving water monitoring to meet the requirements of the State Implementation Policy (SIP). The Discharger has sampled effluent from the Bully Hill Mine BH-3 Portal (Discharge 1), the Rising Star Mine RS-5 Portal (Discharge 2), and the receiving waters of Town Creek upstream of the Bully Hill Mine, (R-1) once to determine if the priority

pollutants established in the CTR and NTR were detected (There was no flow in the unnamed tributary to Horse Creek above its confluence with the discharge from Discharge 002 at the time the other samples were taken). Analytical results were submitted for volatile substances, semi-volatile substances (including PCBs), pesticide compounds, metals, asbestos, and dioxin.

24. Asbestos, dioxin, and 65 priority pollutant organic compounds were not detected in the effluent and receiving water samples at concentrations that will cause or contribute to a violation of any applicable water quality criteria contained in the Basin Plan. Water quality criteria have been established for the remaining 43 organic compounds (volatile substances, semi-volatile substances, including PCB's, and pesticides) at concentrations less than current laboratory minimum levels. It is reasonable to assume, based on the nature of the discharge (AMD from a sulfide ore deposit), that concentrations of these organic compounds in the AMD will not cause or contribute to violations of water quality objectives. Many priority pollutant metals were detected above minimum levels identified in the SIP, including antimony, arsenic, copper, lead, mercury, nickel, selenium, silver, thallium, and zinc.
25. Federal regulations contained in 40 CFR 122.44(d) require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above a narrative or numerical water quality standard. Based on information submitted as part of the application, in studies, and as directed by monitoring and reporting programs, the Regional Board finds that the discharge has a reasonable potential to cause or contribute to an in-stream excursion above a water quality objective for pH and dissolved arsenic, cadmium, copper, lead, mercury, nickel, and zinc. Narrative effluent limitations for these constituents are included in this Order.
26. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (CEQA) (Public Resources Code Section 21100, et seq.), in accordance with Section 13389 of the California Water Code.
27. Effluent limitations, and toxic and pretreatment effluent standards established pursuant to Sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 304 (Information and Guidelines), and 307 (Toxic and Pretreatment Effluent Standards) of the Clean Water Act (CWA) and amendments thereto are applicable to the discharge.
28. In complying with the Order, Millennium Holdings, Inc. reserves all rights and defenses it may have under that certain judgment in The California Zinc Company, et al. vs. The United States, entered on December 16, 1948 by Judge Sam E. Whitaker in the Court of Claims of the United States, No. 47594. The participation of Millennium Holdings, Inc., in responding to this Order shall not be considered as an admission of liability or a waiver of any right under such judgment. Millennium Holdings, Inc., retains its rights to assert claims against any and all potentially responsible parties at the site.
29. Nothing in this Order shall affect Millennium Holdings Inc.'s right to apply to participate or qualify for the program that permits public agencies and cooperative private parties to submit and have approved abandoned mine remediation plans in accordance with Water Code Section 13397,

et seq. Millennium Holdings Inc.'s performance under this Order is without prejudice to its rights to apply to participate in the abandoned mines program, to its qualification under such program, or to its right to seek an amendment of the Order as respects such program. The Regional Board and Millennium Holdings Inc., reserve their respective rights as to whether Millennium Holdings Inc., satisfies, or in the future will satisfy, the requirements for this program.

30. The Regional Board has considered the information in the attached Information Sheet in developing the findings in this Order. The attached Information Sheet is part of this Order.
31. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge and has provided them an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
32. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.
33. This Order shall serve as an NPDES permit pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect **on the date of the hearing**, provided USEPA has no objections.

IT IS HEREBY ORDERED that Order No. 97-214 is rescinded and that Millennium Holdings, Inc., its agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The direct, discreet, discharge of acid mine drainage (AMD) from portals, fissures, waste rock piles, seeps or waste piles to surface water drainage courses is prohibited, except as provided in Effluent Limitation B.1.

B. Effluent Limits

1. The average annual discharge rate (lbs/day) of arsenic, cadmium, copper, lead, mercury, nickel, and zinc from any discreet discharge, including Discharge Numbers 1-9, shall be reduced by 99 percent from the rate prior to control .
2. The Discharge shall implement site-specific Best Management Practices (BMPs) to reduce or prevent pollutant discharge associated with AMD. The BMPs may include installation of concrete bulkhead seals, passive treatment systems, injection of neutralizing agents into underground workings, run-on and run-off controls, consolidation and capping of reactive waste rock, or other technologies, including new technologies as they are developed.

C. Discharge Specifications

1. Neither the treatment nor the discharge shall cause a pollution or nuisance as defined by the California Water Code, Section 13050.
2. The discharge shall not cause degradation of any water supply.
3. Storm water discharges to any surface or ground water shall not adversely impact human health or the environment.
4. Storm water discharges shall not cause or contribute to a violation of any applicable water quality objectives contained in the Basin Plan.

D. Sludge, Overburden, and Waste Rock Management

1. Collected screenings, sludge and other solids removed from liquid waste, waste rock, overburden, and tailings shall be disposed of in a manner approved by the Executive Officer and consistent with *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, California Code of Regulations (CCR), Division 2, Subdivision 1, Section 20005, et seq.

E. Receiving Water Limitations

Receiving Water Limitations are based upon water quality objectives contained in the Basin Plan. As such, they are a required part of this permit.

The discharge shall not cause the following in Horse Creek, Town Creek, or Shasta Lake:

1. Concentrations of heavy metals to exceed the following:

<u>Parameter</u>	Concentration ¹ µg/l <u>(Dissolved)</u>
Cadmium	0.22 ^{2,3}
Copper	4.1 ^{2,4}
Zinc	16.0 ^{2,3}

¹ The above concentrations are water quality objectives based upon a receiving water hardness of 40 mg/l. Metal limitations vary with hardness of the receiving waters as follows:

$$\begin{aligned}
 \text{Cadmium} &= e^{(1.160)(\ln \text{ hardness})-5.777} \times 10^{-3} \\
 \text{Copper} &= e^{[(0.8545)(\ln \text{ hardness})-1.702] \times (0.960)} \times 10^{-3} \\
 \text{Zinc} &= e^{(0.830)(\ln \text{ hardness})-0.289} \times 10^{-3}
 \end{aligned}$$

<u>Parameter</u>	Concentration ¹ $\mu\text{g/l}$ (Dissolved)
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²The noted concentrations are those identified as Water Quality Objectives for the protection of the designated beneficial use for Freshwater Habitat based on toxicity studies on salmonids

³These Water Quality Objectives are listed in Table III-1 of the Basin Plan.

⁴Water Quality Objective contained in the California Toxics Rule.

2. The turbidity of receiving waters to increase over background levels by more than:
 - a. 1 NTU when background turbidity is between 0 and 5 NTUs;
 - b. 20 percent when background turbidity is between 5 and 50 NTUs;
 - c. 10 NTUs when background turbidity is between 50 and 100 NTUs; and
 - d. 10 percent when background turbidity is greater than 100 NTUs.

In determining compliance with the above limits, appropriate averaging periods may be applied upon approval by the Executive Officer.

3. Suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
4. Deposition of material that causes nuisance or adversely affects beneficial uses.
5. The normal ambient pH to fall below 6.5, exceed 8.5, or change by more than 0.5 units. In determining compliance with these limits, appropriate averaging periods may be applied upon approval by the Executive Officer.
6. Increase the normal ambient temperature of waters by more than 5°F (3°C). In determining compliance with these limits, appropriate averaging periods may be applied upon approval by the Executive Officer.
7. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
8. Oils, greases, waxes, floating material (liquids, solids, foams, and scum), or suspended materials to create a nuisance or adversely affect beneficial uses.
9. Aesthetically undesirable discoloration.
10. Fungi, slimes, or other objectionable growths.
11. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations, Title 22; that harm human, plant, animal or

aquatic life; or that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

12. Concentration of dissolved oxygen to fall below 7.0 mg/L. The monthly median of the mean daily dissolved oxygen concentration shall not fall below 85 percent of saturation in the main water mass, and the 95th percentile concentration shall not fall below 75 percent of saturation.
13. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or to cause nuisance or adversely affect beneficial uses.
14. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.
15. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulation in aquatic resources at levels which are harmful to human health.
16. Violations of any applicable water quality standard for receiving waters adopted by the Regional Board or the SWRCB pursuant to the CWA and regulations adopted thereunder

F. Provisions

1. The Discharger shall comply with all items of the “Standard Provisions and Reporting Requirements for Waste Discharge Requirements (NPDES),” dated *1 March 1991*, which are part of this Order. This attachment and its individual paragraphs are referred to as “Standard Provision(s).”
2. The Discharger shall comply with the attached Monitoring and Reporting Program No. R5-2003-0038, which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.
3. The Discharger shall submit hard copy and electronic summaries of all water quality monitoring data collected to the Regional Board on a quarterly basis. Any changes in the monitoring must be approved by the Executive Officer.
4. By **1 May 2003**, the Discharger shall submit a Sampling and Analysis Plan to the Regional Board for approval. The Sampling and Analysis Plan shall include specific methods for demonstrating compliance with the water quality protection standard and information on sample collection, handling, chain of custody control, analytical procedures, and field and laboratory quality assurance and quality control. Compliance monitoring activities shall comply with the Sampling and Analysis Plan.
5. This Order will be reopened if adequate information is presented to show site-specific objectives are warranted.

6. Prior to **15 October** of each year, the Discharger shall implement necessary erosion control measures and any necessary construction, maintenance, or repairs of drainage and erosion control facilities. A report summarizing these measures shall be delivered to the Regional Board by 30 October.
7. The Discharger shall immediately report to the Regional Board any spill that potentially impacts surface waters.
8. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
9. The Discharger shall comply with the standards contained in the Health and Safety Code, Chapter 6.67, Aboveground Storage of Petroleum.
10. The Discharger shall report promptly to the Regional Board any material change or proposed change in the character, location, or volume of the discharge.
11. The Discharger shall use the best management practices currently available and appropriate for site conditions to comply with discharge limits specified in this Order.
12. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
13. This Order expires on 1 March 2008 and the Discharger must file a Report of Waste Discharge in accordance with Title 23, CCR, not later than **180 days** in advance of such date for renewal of waste discharge requirements if it wishes to continue the discharge.
14. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.

To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of the Order. The request must contain the requesting entity's full legal name, the State of incorporation if a corporation, the name, address, and the telephone number of the persons responsible for contact with the Regional Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision D.6 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved in writing by the Executive Officer.

I, Thomas R. Pinkos, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 30 January 2003.

Thomas R. Pinkos, Executive Officer

(Date)

RSD/PVW: sae