CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2012-XXXX

WASTE DISCHARGE REQUIREMENTS
FOR
CALIFORNIA NATURAL RESOURCES CORPORATION,
AND
MAURICE ALTSHULER AND BARTLETT BURNAP,

MINING, PROCESSING, AND RECLAMATION
FRENCH CORRAL MINE
NEVADA COUNTY

The California Regional Water Control Board, Central Valley Region ("Central Valley Water Board" or "Board") finds that:

1. California Natural Resources Corporation (facility owner and operator) and Maurice Altshuler and Bartlett Burnap (landowners), collectively referred to as "Discharger", own and operate the French Corral Mine (the "Facility") located on the North San Juan Ridge above the South Yuba River, between French Corral and Birchville, in the southwestern quarter of Section 24 and a portion of the western half of Section 25, Township 17 North, Range 7 East of the United States Geological Survey (USGS) French Corral 7.5-minute quadrangle map, as shown in Attachment A, which is incorporated herein and made part of this Order by reference. The facility is a gold mine regulated by the Board under the authority of the Water Code and Title 27 of the California Code of Regulations ("Title 27").

2. The Facility is on a 65-acre property at 21235 Pleasant Valley Road, North San Juan California as shown in Attachment B, which is incorporated herein and made part of this Order by reference. The Facility is comprised of Assessor's Parcel Numbers (APN) 30-090-07, and portions of APNs 30-510-20 and 30-510-22.

3. On 15 March 2012, the Discharger submitted a Report of Waste Discharge (ROWD) for the Facility. The information in the ROWD has been used to develop these waste discharge

requirements (WDRs). The ROWD and supporting documents contain information related to construction, operations, and closure of the Facility.

4. Based on the characterization described in Findings Nos. 37-44 of these WDRs, mining waste at the Facility is classified as Group C mining waste. Therefore, all mining units must meet the minimum construction standards of Title 27, section 22490 and closure standards in Title 27, section 22510.

5. The proposed waste management units (Mining Units) for the treatment, storage, or disposal of mining waste are described in Table 1:

Table 1: Mining Units

Unit	**Description of Location**
Mining Unit-1	Tailings Placement Area
Mining Unit-2	Phase 1C Mining Area
Mining Unit-3	Area between Phase 1C Mining Area and Phase 1A and 1B Mining Area
Mining Unit-4	Phase 1A and 1B Mining Area

6. This Order, the February 2009 Standard Provisions and Reporting Requirements (SPRRs) for Mining Wastes (hereby incorporated by reference), and Monitoring and Reporting Program (MRP) R5-201X-XXXX implement the applicable regulations for discharges of mining waste to land. Monitoring and reporting requirements are included in MRP R5-201X-XXXX and in the SPRRs. Any site-specific changes to a requirement in the SPRRs are included in the applicable section (A through E) of these WDRs, and the requirement in these WDRs supersedes and replaces the requirement in the SPRRs.

PREVIOUS MINING ACTIVITY

7. Hydraulic mining for placer gold was performed at the Facility from the middle 1850's to the 1880s. The buried Tertiary channel of the Yuba River runs in a southerly direction from North San Juan through the French Corral Mining District. The channel reaches 1,000 feet in width and the gravels average 150 feet in depth. It is estimated that thirty two million cubic yards of gravels were mined in the French Corral district during the period of hydraulic mining.

8. In 1884, the Sawyer Decision prohibited the dumping of hydraulic mine debris into the Sacramento and San Joaquin Rivers and their tributaries. The Sawyer Decision ended large scale hydraulic mining in most of California, including the French Corral Mining District. Small scale intermittent mining operation continued in the area from the late 1880s through the early 1970s.

9. Larger surface mining operations were conducted most recently at the Facility in the 1970s and 1980s by Pantle Mining Corporation (Pantle) and Richard Schmittel's company (Schmittel). Since 1993, the Facility has been "idle," as that term is defined in the Surface Mining Reclamation Act of 1975 (SMARA)(Pub. Resources Code, § 2727.1.)

FACILITY DESCRIPTION

10. The Facility is part of the French Corral diggings, within the French Corral Mining District. Wyatt Reservoir is located east of the Facility, within the McClain Ravine drainage. The Facility can be described as three distinct segments, described below from north to south:

Manzanita Hill

11. Manzanita Hill, an undisturbed segment of the Tertiary channel deposit, is located on the northern end of the Facility. The Discharger estimates that this area contains approximately 24.5 acres of mineable gravel. Bedrock depths are believed to range from 70 to 130 feet below the ground surface. The Manzanita Hill area is described in the Mining and Reclamation Plan

(Enviroanalysis 1981) as "Phase 2" of the mining operation. Phase 2 mining operations in the Manzanita Hill area are not regulated by these WDRs.

Matthews Pond and Vicinity

12. Phase 1 mining operations will focus on channel deposits present within the Matthews Pond area, an approximately 20-acre portion of the upper French Corral pit that extends approximately 1,200 feet south from the main headwall and has an average east-west dimension of approximately 725 feet. Ponds in this area were formerly referred to as Minona Pond and Brandtley Pond. Past mining operations resulted in a single pond measuring approximately 3 acres, which is now known as Matthews Pond. Upper gravel deposits have generally been removed from this Phase 1 mining area, and excavation was deepest within the Matthews Pond location. The Discharger estimates that 20 to 60 feet of undisturbed gravels are present to the east, west and south of Matthews Pond. Processing operations are to be located southeast of Matthews Pond. The proposed mining and processing areas are shown on Attachment B.

Pantle-Schmittel Tailings

13. The Pantle-Schmittel Tailings area extends approximately 1,230 feet south from the gravel road running east-west across the southern end of the Matthews Pond area. Gravels in this area were washed and screened with reportedly significant losses of the finer particles of gold. Testing of this area by the Discharger indicates that the existing placer tailings can be economically processed a second time.

GEOLOGY

14. The Facility is situated on the North San Juan Ridge above the South Yuba River, within the Sierra Nevada physiographic province on the western foothills of the Sierra Nevada mountain range.

15. According to Earth Sciences Associates (ESA, 1981), the French Corral mine was developed along part of a Tertiary channel that extends between North San Juan and Smartsville. Parts of the channel are preserved in the upland area between the main and south fork of the present Yuba River. Near French Corral, the channel remnant is approximately 1,500 feet wide. Where not modified by mining in the area between French Corral and Birchville, the channel is expressed topographically by low, rounded hills with intervening reaches of low ground.

16. Much of the Tertiary channel deposits within the French Corral diggings were removed by hydraulic mining in the late 1800s. The approximate boundaries of the channel are shown on Attachment B. The Facility is located within a hydraulically mined area known as the French Corral pit. The pit is generally flat-lying with steep walls, and extends south from the main headwall where the historic hydraulic mining operations were terminated.

17. Channel deposits remain in-place at the northern end of the French Corral pit, in the proposed Phase 1 mining area. More recent small-scale mining and prospecting in the Phase 1 area has resulted in shafts, pits, tailings piles and diked settling ponds.

18. ESA describes the channel gravels as dense, partially-cemented, clayey, sandy gravel to gravelly, silty sand. The tailings are described as sandy gravel with lenses of relatively clean sand.

19. Bedrock is exposed to the south of the Facility, at the base of the diggings near the unincorporated community of French Corral. The Geologic Map of the Chico Quadrangle, California (Department of Conservation, Division of Mines and Geology (DMG) 1992) maps local bedrock as volcanic and intrusive rocks (quartz diorite and tonalite) associated with the Smartville Complex.

Soil Conditions

20. The United States Department of Agriculture Conservation Soil Service, “Soil Survey of Nevada County Area, California” (1975), maps the Facility location as Placer diggings and Tailings,

containing little remnant soil. Manzanita Hill, an un-mined area located immediately north of the Facility, is typified by the Horseshoe gravelly loam soil type. The Horseshoe soil type is described as having a moderate erosion hazard and medium runoff, and is typified by 4 to 6 feet of soil underlain by stratified Tertiary channel deposits.

Fault Activity

21. The Fault Activity Map of California and Adjacent Areas, California (CDMG, 1994) indicates that the Grass Valley Fault are located within approximately two miles east of the Facility. The Wolf Creek Fault Zone is located within approximately two miles northeast of the Facility. The faults are described as pre-Quaternary, having no recognized displacement within the last 1.6 million years. Historic displacement has been recorded along a segment of the Cleveland Hill Fault located approximately 18 miles northwest of the Facility. Other faults in the Facility vicinity within the Foothills Fault Zone are depicted as having evidence of Quaternary displacement.

Precipitation

22. The Facility is located 3 miles southeast of the *Dobbins Colgate Fore, Yuba County* weather station (reported latitude 39.33°N, longitude 121.20°W, elevation 1551 feet above MSL), at elevations ranging from approximately 1,550 to 1,750 feet above MSL. The reported annual average rainfall for the weather station is 40.8 inches from the period of 1931 to 1970, whereas the average annual rainfall for the Facility location is approximately 39 inches based on NCDOT Standard Drawing D-10.

Land Use

23. The Facility is currently idle. Low density residential and agricultural properties are located in the Facility vicinity. According to aerial photography on the Google Earth website, two residential structures are located within approximately 300 feet west of the Facility, and are accessed from Pleasant Valley Road. Crops do not appear to be grown within one mile of the perimeter of the

mine unit based on review of aerial photographs. Land in the Facility vicinity may be used for grazing, and grazing is a potential post-mining land use at the Facility.

MINING, PROCESSING, AND WASTE DISPOSAL OPERATIONS

24. The proposed mining operation includes excavation of the undisturbed Tertiary gravels and existing placer tailings by front-end loader, excavator, or other similar mining equipment, followed by transportation to the processing plant by truck or conveyor. Processing of the gold bearing material is performed by conventional washing, scrubbing, and gravity separation using water and screening. Trommels, vibrating screens, and gravity concentrators are used to separate and concentrate the gold ore. Gold is removed from the concentrates by a physical separation process. No use of chemicals such as cyanide or mercury is proposed.

25. Phase 1 mining operations will include the dewatering of Matthews Pond to facilitate mining activities. Water will be pumped from Matthews Pond to Detention Basin 1. Some water pumped from Matthews Pond may be land applied south of the process area and on adjacent property located southeast of the Facility. Specific criteria that eliminate the likelihood of runoff from the irrigated land to surface waters are described in the ROWD.

26. Phase 1 includes the excavation and processing of the native deposits in the Matthews Pond vicinity (Phase 1A and Phase 1B) as well as the excavation and reprocessing of the tailings located within the Pantle-Schmittel Tailings area, located south of Matthews Pond area (Phase 1C). Initially tailings will be transported by truck to Mining Unit-1 and then placed, compacted and graded as part of reclamation. Tailings or waste gravels may also be used to surface roads within the Facility.

27. Phase 1A includes the construction of a ramp extending north from the process area down into Phase 1, and excavation within the eastern portion of Phase 1 to bedrock. Based on exploration drilling and geophysical study, the Discharger estimated a Phase 1A excavation volume of 316,285 cubic yards.

28. Phase 1B of the mining operation includes excavation to bedrock within the western portion of the Phase 1 area. The estimated excavation volume for Phase 1B is 97,290 cubic yards.

29. Phase 1C excavation is to proceed from south to north within the Pantle-Schmittel Tailings area. This area comprises approximately 9 acres and extends approximately 1,200 feet north from the Facility entrance road to the processing area. Phase 1C contains approximately 250,000 cubic yards minable material, including tailings from the 1980s Pantle-Schmittel operations, and undisturbed gravel deposits underlying the tailings. This volume estimate includes the volume of materials to be excavated for Detention Basin 1.

30. Mining waste at the Facility will be generated by mining and processing the undisturbed tertiary gravels, previously processed (existing) placer tailings, processed sand (or black sand), and the solid residues, sludges, and liquids from the processing of ore. Gold recovered from the processing circuit will be shipped off-site for further refining.

31. Final non-gold bearing processed sand (black sand) potentially containing other marketable minerals may be temporarily stored on-site in covered rolloff containers. Temporary storage of the black sand in the covered rolloff containers will not exceed 120 days or 20 cubic yards. Black

sand concentrates are expected to be generated at a maximum rate of 400 pounds per day or 4.5 tons per month. Black sand concentrates may be shipped off-site to a licensed refiner for further refining.

32. Black sand concentrates may also be blended with placer tailings at a ratio no less than 1 part tailings to 1 part sand and placed as waste in the Mining Units as described in Finding No. 43 below.

33. Process water will be retained in unlined settling ponds. Washed gravels will be dewatered by stockpiling, and water flow is by gravity back into the process water ponds. No discharge of process water off-site is proposed. Reclamation is generally to be performed concurrently with mining.

34. The tailings placement area located on the southern end of the site (see Attachment B) is designed to contain up to one quarter of the volume excavated of Phase 1A, as well as the materials excavated from the detention basin and the ramp. Tailings generated from the remaining materials excavated from Phase 1A are to be placed back into the Phase 1A excavation in general accordance with the concurrent reclamation procedures described on page 39 of the Surface Mining and Reclamation Plan (Enviroanalysis, 1981). The active mining pit will generally migrate within Phase 1A (and subsequently within Phase 1B) using an approximate pit floor area of one acre and a surface area (including slopes) of approximately two acres. As the pit migrates, concurrent reclamation will include backfilling and revegetation of the previously mined area.

WASTE CHARACTERIZATION

35. Title 27, section 22480, classifies mining wastes in three Groups as follows:

> (b) Waste Group Classification -Mining wastes shall be classified as Group A, Group B, or Group C mining wastes based on an assessment of the potential risk of water quality degradation posed by each

waste. In setting requirements for each mining waste discharge under this article, the RWQCB shall assign the waste to Group A, Group B, or Group C according to the following criteria:

(1) Group A -mining wastes of Group A are wastes that must be managed as hazardous waste pursuant to Chapter 11 of Division 4.5, of Title 22 of this code, provided the RWQCB finds that such mining wastes pose a significant threat to water quality;

(2) Group B -mining waste of Group B are either:

(A) mining wastes that consist of or contain hazardous wastes, that qualify for a variance under Chapter 11 of Division 4.5, of Title 22 of this code, provided that the RWQCB finds that such mining wastes pose a low risk to water quality; or

(B) mining wastes that consist of or contain nonhazardous soluble pollutants of concentrations which exceed water quality objectives for, or could cause, degradation of waters of the state; or

(3) Group C -mining wastes from Group C are wastes from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity.

(c) Classification Considerations -In reaching decisions regarding classification of a mining waste as a Group B or Group C waste, the RWQCB can consider the following factors:

(1) whether the waste contains hazardous constituents only at low concentrations;

(2) whether the waste has no or low acid-generating potential; and

(3) whether, because of its intrinsic properties, the waste is readily containable by less stringent measures.

Soluble Waste

36. The undisturbed tertiary gravels are described as dense, partially-cemented, clayey, sandy gravel to gravely, silty sand. The existing placer tailings are described as sandy gravel, with lenses of relatively clean sand. A small remnant deposit of processed sand (black sand) from shaker tables of the former Pantel and Schimattel mining operations is located near the southern end of the Facility.

37. The Discharger submitted a 29 December 2011 *Report of Waste Characterization* (Characterization Report) to summarize field sample collection activities and to present results of laboratory analysis for the French Corral Mine. In the Characterization Report, the Discharger concluded that based on results of acid-base accounting, the proposed mining and processing of the placer deposits has a low potential for producing acid mine drainage. The acid neutralizing potential (ANP) to acid generating potential (AGP) ratio was well above the neutralizing potential ratio (NPR) of 3 for two of the three samples tested and neither acid generating potential nor acid neutralizing potential was detected in the third sample tested.

38. Based on results of acid-base accounting, deionized water was substituted for the citrate buffer in subsequent waste extraction tests (WET). This modification is described in Chapter 5 (Mining Wastes) of the California Regional Water Quality Control Board Central Valley Region *Staff Report Designated Level Methodology for Waste Classification and Cleanup Level Determinations* (DLM, June 1989). Hereafter, this procedure is referred to as State of California Modified Waste Extraction Test, or DI-WET.

39. Except for antimony, arsenic, mercury and thallium, no extractable (soluble) metals were detected by DI-WET at concentrations exceeding the water quality objectives listed in Tables 1 and 3 of the Characterization Report. Soluble antimony was detected in the undisturbed Tertiary gravel sample, but not in processed samples. Soluble arsenic was detected at concentrations exceeding the California Public Health Goal, but did not exceed the maximum contaminant levels (MCL) for drinking water. Soluble mercury was detected in sample FC-MW-2 (0.11 ug/L) at a concentration below the MCL for drinking water. Soluble thallium was detected in the undisturbed Tertiary gravel sample (2.1 ug/L) just above the MCL (2.0 ug/L), but not in processed samples.

40. In the Characterization Report, the Discharger incorporated an attenuation study based on the DLM, which outlines a process for evaluating site-specific conditions to determine whether a threat is posed to surface water or groundwater quality from soluble constituents identified at the Facility. The attenuation study looked at leachability and attenuation of the soluble constituents identified in Finding 39 above. Based on results of the attenuation study, all DI WET metal

concentrations were below their corresponding soluble designated levels for surface water and groundwater based on the MCL values.

41. The Discharger concluded that the physical and chemical characterization of the Tertiary gravels and existing placer tailings is adequate to demonstrate that the potential risk of water quality degradation is low, provided that the proposed mining operation and tailings management are performed in accordance with appropriate erosion and sediment control practices.

42. Based on results of the water quality evaluation of the Tertiary gravels and existing placer tailings, as represented by samples FC-TG-1 and FC-MW-1, the Discharger concluded that these materials may be classified as Group C mine waste as defined in Title 27, section 22480.

43. The Discharger also concluded that the black sand (FC-MW-2) may be characterized as Group C waste, provided that the black sand is blended with placer tailings at a ratio no less than 1 part tailings to 1 part sand. The black sands constitute less than 1 percent of the total volume of the placer tailings. As discussed in Finding 40, sufficient attenuation of soluble constituents exists for protection of the beneficial uses of groundwater.

44. In the Characterization Report, the Discharger classified existing mining waste and future mining waste at the Facility as Group C mining waste. In a 6 February 2012 letter, Central Valley Water Board staff concurred with the Group C classification of the French Corral mining waste.

45. To ensure that Group C Classification remains appropriate, the Monitoring and Reporting Program will require ongoing sampling and characterization of the mining waste in accordance with Water Code section 13260(k). Ongoing characterization of the mining waste shall be at the frequency of one sample for every 50,000 cubic yards of mining waste discharged or at least one sample per calendar year.

SURFACE WATER AND GROUND WATER CONDITIONS

46. The Facility is part of the French Corral diggings, within the ephemeral French Corral Creek drainage. The Matthews Pond area, an approximately 20-acre portion of the upper French Corral pit extends approximately 1,200 feet south from the main headwall and has an average east-west dimension of approximately 725 feet. Surface drainage from the Facility flows south into French Corral Diggings which forms the headwaters of French Corral Creek, tributary to the South Fork of the Yuba River. Wyatt Reservoir and McClain Ravine are located east of the Facility and drain to the South Fork of the Yuba River.

47. Results of surface water sampling and analysis performed as part of the Characterization Report did not identify significant water quality concerns for surface water in Matthews Pond. Matthews Pond represents upgradient background surface water conditions. When Matthews Pond is dewatered, there will be no upgradient surface water monitoring point.

48. The Central Valley Water Board has adopted the *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition, revised October 2011 (the "Basin Plan") that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives. The Basin Plan, at page II-2.00, states that 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 French Corral Creek or McClain Ravine, but does identify present and potential uses for the Yuba River, to which French Corral Creek and McClain Ravine are tributary. These beneficial uses are as follows: municipal and domestic supply; agricultural supply, including stock watering; hydropower generation; water contact recreation; non-contact water recreation, including aesthetic enjoyment; cold freshwater habitat; cold spawning, and wildlife habitat.

49. Pursuant to the conditions of the use permit, **no discharge to surface water other than the settling ponds is proposed**. Settling ponds are designed to contain gravel washing discharge. Operation during the rainy season will require the management of storm water runoff to avoid discharge of contact water.

50. The designated beneficial uses of the groundwater, as specified in the Basin Plan are: municipal and domestic water supply, agricultural supply, industrial service supply, and industrial process supply.

51. Groundwater generally occurs in bedrock fractures, and in the gravel deposits of the Tertiary channel. Because local surface water bodies are located at various elevations, the undisturbed channel materials are expected to have fairly low permeability. Disturbed materials (such as tailings) will have significantly higher permeability.

52. Five groundwater monitoring wells (MW-1 through MW-5) were installed as part of the current characterization work. The wells were advanced to the bedrock and then screened near the base of the gravels, above bedrock.

53. The first encountered groundwater elevations ranged from 1590 feet to1692 feet above mean sea level. Based on groundwater elevations, the gradient for shallow groundwater overlying bedrock was estimated to be 0.03 to the south-southeast.

54. Initial monitoring of total and dissolved metal constituents of concern (COCs) in the monitoring wells indicates that, only dissolved thallium in upgradient well MW-1 (4.1 ug/L) exceeds the Primary MCLs for drinking water (2 ug/L). Some COCs exceeded Secondary MCLs or public health goals (PHG).

WASTE MANAGEMENT UNIT DESIGN

55. The Characterization Report demonstrated that the mine waste may be characterized as Group C mining waste under Title 27, provided that the black sands (which comprise less than 1% of the washed gravel) are blended back into the tailings at a ratio no less than one part placer tailings to one part processed black sand concentrates.

56. Regulations set forth in Title 27, section 22490, which establish prescriptive standards for construction of Mining Units and containment are not applicable for Group C mining wastes. Group C mining wastes are wastes from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity.

57. The Group C mine waste disposal areas will consist of the Mining Units shown on Attachment B. Final slopes are graded at 3:1 horizontal to vertical (H:V) or flatter.

58. Because some of the tailings from Phase 1A are to be placed on the southern portion of the Facility, the reclaimed French Corral pit will be wider than its present configuration.

CLOSURE, POST-CLOSURE MAINTENANCE AND FINANCIAL ASSURANCE

59. The Discharger has a reclamation plan (RP-92-003) and related financial assurance approved by Nevada County, the lead agency for the project. These WDRs consider the French Corral Mine reclamation plan and related financial assurance as functionally equivalent to Closure and Post-Closure Maintenance of Mining Units and Closure and Post-Closure Funding required by Title 27, subsections 22510 (b), (c) and (f). Therefore, any amendments to the French Corral Mine reclamation plan should be submitted to Central Valley Water Board to determine if the reclamation plan is still consistent with Title 27, subsections 22510 (b), (c) and (f).

60. The approved financial assurance mechanism for the Discharger's mining and reclamation plan approved by Nevada County includes the Closure and Post-Closure Financial Assurances required by Title 27, subsection 22510(f), provided that the Central Valley Water Board is named as an alternate payee for the financial assurance mechanism.

CEQA CONSIDERATIONS

61. On 25 March 1993, the Nevada County Planning Commission adopted a negative declaration (EIS92-091) for proposed amendments to the existing Use Permit and Reclamation Plan (U74-29) for the French Corral Mine and approved the amended Use Permit (U92-070); and on 8 April 1993, the Nevada County Planning Commission later approved the amended Reclamation Plan (92-003). These documents are currently in use by the lead agency for administering the French Corral Mine facility.

OTHER LEGAL REFERENCES

62. Water Code section 13267(b) provides that:

> In conducting an investigation specified in subdivision (a), the Regional Board may require that any person who has discharged, discharges, or is suspected of discharging, or who proposed to discharge within its region, or any citizen or domiciliary, or political agency or entity of this state who had discharged, discharges, or is suspected of discharging, or who proposed to discharge waste outside of its region that could affect the quality of the waters of the state within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

The technical reports required by this Order and the attached MRP R5-2012-XXXX are necessary to assure compliance with these waste discharge requirements. The Discharger owns and operates the Facility.

PROCEDURAL REQUIREMENTS

63. The Central Valley Water Board notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for this discharge, and has provided them with an opportunity for public hearing and an opportunity to submit their written views and recommendations.

64. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Water Code sections 13263 and 13267, that California Natural Resources Corporation (facility owner and operator) and Maurice Altshuler and Bartlett Burnap (landowners), their agents, successors, and assigns, in order to meet the provisions of Division 7 of the California Water Code and the regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

1. The discharge of “hazardous waste” or “Group A” or “Group B” mining waste at the Facility prohibited. For the purposes of this Order, the terms “hazardous waste”, “Group A”, “Group B”, and “Group C” mining wastes are as defined in Title 27.

2. The discharge of any waste other than mining wastes into the Mining Units is prohibited. Prohibited wastes may include, but are not limited to, oil, grease, solvents, other petroleum products, and toxic and hazardous materials.

3. The discharge of mining waste at the Facility from sources other than the French Corral Mine is prohibited.

4. The discharge of mining wastes outside the Mining Units is prohibited except as otherwise permitted under additional Central Valley Water Board orders.

5. The discharge of process water to surface water or surface water drainage courses is prohibited.

6. The discharge of groundwater or mine water from Matthews Pond to surface water or surface water drainage courses is prohibited

B. DISCHARGE SPECIFICATIONS

General Specifications

1. Wastes shall only be discharged into the Mining Units or backfilled in accordance with the Reclamation Plan.

2. The Discharger shall promptly report slope changes such as movement caused by slumping or slipping, or unusual erosion.

3. The Discharger shall not cause a condition of pollution, contamination, or nuisance as defined by Water Code section 13050.

4. The Mining Units shall be constructed as described in the Discharger's ROWD and Findings 58 through 61.

Detention Basin Construction

5. Detention basins shall be designed and constructed under the direct supervision of a California Professional Civil Engineer or Certified Engineering Geologist.

6. Precipitation and drainage controls shall be designed and constructed to accommodate the anticipated volume and precipitation and peak flows from surface runoff for one 10-year, 24-hour storm event as required by Title 27, subsection 22490(h)(1)(C).

7. Wastes shall only be placed in the Mining Units as described in the Discharger's ROWD and Reclamation Plan and in a manner that reduces erosion and controls drainage to prevent the discharge of sediment to surface waters.

Protection from Storm Events

8. For the Mining Units, and related excavation and grading operations, all precipitation and drainage control systems shall be designed, constructed, and maintained to accommodate the anticipated volume of precipitation and peak flows from surface run-off for one 10-year, 24-hour precipitation.

9. The Discharger currently is covered by State Water Resources Control Board Order 97-03-DWQ, *General Permit for Discharges of Storm Water Associated with Industrial Activities*. The Discharger shall continue to maintain and comply with Order 97-03-DWQ, and any amendments thereto or any General Orders that may supersede 97-03-DWQ.

10. Annually, prior to the anticipated wet season but no later than **15 October** of each year, any necessary erosion control measured shall be implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage controls shall be completed to prevent flooding, erosion, or slope failure.

Reclamation

11. The Discharger shall submit any proposed amendment to the French Corral reclamation plan to the Central Valley Water Board to determine if the reclamation plan is still consistent with Title 27, subsections 22510 (b), (c) and (f).

12. Subsequent amendments to the reclamation plan and related financial assurance shall be incorporated herein and made part of this Order by reference provided that any proposed amendments to the reclamation plan are functionally equivalent to the Closure and Post-Closure Maintenance of Mining Units required by Title 27, subsections 22510 (b), (c) and (f) and are approved by Central Valley Water Board staff.

13. The Facility shall be closed in a manner that will minimize erosion and the threat of water quality degradation.

14. Following closure, the Discharger will continue to collect ground and surface water samples as described in the Closure and Post-Closure Maintenance section of the ROWD. The purpose of monitoring procedures is to document whether the mining and reclamation procedures prevent water quality degradation and ensure that there will be no significant increase in concentration of indicator parameters or waste constituents in ground or surface water.

15. The post-closure monitoring and maintenance period shall end when the Central Valley Water Board determines that water quality aspects of reclamation are complete and the wastes no longer pose a threat to water quality.

C. MONITORING SPECIFICATIONS

1. Neither the construction of the Facility, the discharge of waste at the Facility, the closure of the Facility, nor post-closure maintenance of the Facility shall cause or allow groundwater or surface water to be degraded.

2. The Discharger shall comply with the detection monitoring program provisions of Title 27 for groundwater, surface water, and the unsaturated zone, and in accordance with Monitoring and Reporting Program R5-2012-XXXX. The Discharger has installed five groundwater monitoring wells for the Facility. MW-1 is upgradient of the Facility. Two monitoring wells, MW-2 and MW-3 have been installed downgradient of the Phase 1 mining area. Two other monitoring wells, MW-4 and MW-5 have been installed downgradient of Mining Unit-1.

3. The Discharger shall provide Board staff a minimum of **one week** notification prior to commencing any field activities related to the installation, repair, or abandonment of monitoring devices.

4. The Discharger shall comply with the Water Quality Protection Standard as specified in this Order, Monitoring and Reporting Program R5-2012-XXXX, and the Standard Provisions and Reporting Requirements (SPRRs), Mining Wastes dated February 2009.

5. The Discharger shall submit a Water Quality Protection Standard Report within **one year** of adoption of this Order. The Water Quality Protection Standard Report shall include the information described in Section C 1 **Water Quality Protection Standard and Compliance Period, Water Quality Protection Standard Report** of the attached Monitoring and Reporting Program R5-2012-XXXX.

6. The Water Quality Protection Standard for organic compounds that are not naturally occurring and not detected in background groundwater samples shall be taken as the detection limit of the analytical method used (i.e., U.S. EPA methods 8260B and 8270). The detection of one or more non-naturally occurring organic compounds in samples above the Water Quality Protection Standard from detection monitoring wells is potential evidence of a release from the Facility.

7. The concentrations of the constituents of concern in waters passing the Point of Compliance shall not exceed the concentration limits established pursuant to Monitoring and Reporting Program R5-2012-XXXX.

8. For each monitoring event, the Discharger shall determine whether the Facility is in compliance with the Water Quality Protection Standard using procedures specified in Monitoring and Reporting Program R5-2012-XXXX and Title 27, subsection 20415(e).

9. The Discharger shall maintain an approved Sample Collection and Analysis Plan. The Sample Collection and Analysis Plan shall at a minimum include:

    - Sample collection procedures describing purging techniques, sampling equipment, and decontamination of sampling equipment;
    - Sample preservation information and shipment procedures;
    - Sample analytical methods and procedures;
    - Sample quality assurance/quality control (QA/QC) procedures; and
    - Chain of Custody control.

D. FINANCIAL ASSURANCE SPECIFICATIONS

1. The Discharger shall maintain an approved financial assurance instrument to guarantee the reclamation in accordance with the approved reclamation plan. The Discharger shall adjust the cost annually, as required under Public Resources Code section 2773.1, and the financial assurances shall be determined in accordance with California Code of Regulations, title 14, section 3804.

2. Excepting 2012, by **1 June of each year,** the Discharger shall submit to the Central Valley Water Board updated cost estimates and a demonstration of assurances of financial responsibility for closure, and post-closure maintenance (reclamation) of the Facility.

E. PROVISIONS

1. The Discharger shall comply with Standard Provisions and Reporting Requirements (SPRRs) Mining Wastes dated February 2009. The SPRRs contain important provisions and requirements with which the Discharger must comply.

2. The Discharger must comply with Monitoring and Reporting Requirements Order R5-2012-XXXX. Compliance includes, but is not limited to, monitoring of waste, surface water and groundwater throughout the active life of the Mining Units and post-closure maintenance period.

3. The Discharger shall notify Central Valley Water Board staff **within 24 hours** of any unpermitted discharge, flooding, equipment failure, slope failure, or other change in facility conditions or related precipitation and drainage controls or degradation of waters of the state.

4. The Discharger shall maintain legible records at the Facility of volume and type of waste discharged. The Discharger shall make such records available for review by representatives of the Central Valley Water Board and State Water Resources Control Board.

5. Within **six months of the adoption of this Order**, the Discharger shall submit for approval of the Executive Officer a Sampling and Analyses plan for on-going characterization of the waste rock to determine if the waste rock remains appropriately classified as Group C mining waste. Ongoing characterization of the mining waste shall be at the frequency of one sample for every 50,000 cubic yards of mining waste discharged or at least one sample per calendar year.

6. The Discharger shall complete the following tasks by the required dates:

TASK	DATE DUE
Submit ongoing characterizing of the mining waste (see Finding 47).	**By 1 August of each year.**
Submit Water Quality Protection	**By 7 June 2013.**

Standard Report (Monitoring Specification C-5).	
Submit updated cost estimates and financial assurances for reclamation (Financial Assurance Specification D.2)	**By 1 June of each year.**

7. The Discharger shall provide proof to the Central Valley Water Board **within sixty days after completing final closure** that appropriate documents on file at the County Recorder's Office will notify a potential land purchaser that the property contains mining wastes, land-use options are restricted in accordance with a post-closure maintenance plan, and in the event that the Discharger defaults on either the post-closure maintenance plan or any corrective actions, responsibility for carrying out such work would fall on the current property owner.

8. In the event of any change in control or ownership of the French Corral Mine facility, the Discharger must notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to the Central Valley Water Board's Rancho Cordova Office. To assume operation as a Discharger under this Order, the succeeding owner or operator must submit a written request requesting transfer of the Order to the Executive Officer. The request must contain the requesting entity's full legal name, the state of incorporation (if a corporation), the name, address, and telephone number of persons responsible for contact with the Central Valley Water Board, and a statement complying with the signatory paragraph of the Standard Provisions that states 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 Water Code. Transfer shall be approved or disapproved by the Executive Officer.

9. For the purposes of resolving any disputes arising from or related to the California Water Code, any regulations promulgated thereunder, these WDRs or any other orders governing the Facility, the Discharger, its parents and subsidiaries, and their respective past, present, and

future officers, directors, employees, agents, shareholders, predecessors, successors, assigns, and affiliated entities, consent to jurisdiction of the Courts of the State of California.

10. The Central Valley Water Board will review this Order periodically and revise requirements when necessary.

If, in the opinion of the Executive Officer, the Discharger fails to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement, may issue a complaint for administrative civil liability, or may take other enforcement actions. Failure to comply with this Order may result in the assessment of Administrative Civil Liability of up to $10,000 per violation, per day, depending on the violation, pursuant to the Water Code, including sections 13268, 13350 and 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

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

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

or will be provided upon request.

I, Pamela C. Creedon, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the Central Valley Regional Water Quality Control Board, on XX June 2012.

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PAMELA C. CREEDON, Executive Officer

JSH/VJI