

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER R5-2014-XXXX

WASTE DISCHARGE REQUIREMENTS  
FOR

LAMPLIGHT, INC.  
MAYBELLE TIMM ELEY  
TIMM M TESTAMENTARY TRUST  
UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE  
UNITED STATES DEPARTMENT OF INTERIOR, BUREAU OF LAND MANAGEMENT

TIMM MINE

EL DORADO COUNTY

The California Regional Water Control Board, Central Valley Region ("Central Valley Water Board" or "Board") under the authority of the California Water Code and Title 27 of the California Code of Regulations ("Title 27") finds that:

1. Maybelle Timm Eley is the owner of the Timm Mine and Lamplight, Inc. is the current operator. The facility is a mining claim in El Dorado County located on private land owned jointly by Maybelle Timm Eley and the Timm M Testamentary Trust, and also on public lands owned by the United States Government.
2. The facility is located approximately 1.5 miles east of Spanish Flat along Traverse Creek (latitude 38.81942°N, longitude 120.78294°W) in Township 11 North, Range 11 East, Sections 7 and 8, Mount Diablo Base and Meridian (see Attachment A, which is incorporated herein and made part of this Order by reference). The facility covers approximately 3 acres of surface area and the elevation at the facility ranges from about 1,450 to 2,550 feet above mean sea level.
3. The landowners upon which the facility is located are Maybelle Timm Eley and Timm M Testamentary Trust, jointly named on county Assessor Parcel Numbers (APNs) 084-011-24-100 and 084-011-25-100, and the United States Department of Agriculture, Forest Service (Forest Service) on APN 084-011-60-100 and United States Department of Interior, Bureau of Land Management (BLM) on APN 084-011-05-100. Attachment B, which is incorporated herein and made part of this Order by reference, includes a listing of APNs and ownership.
4. The operator, the mine owner, and the land owners are legally responsible as the Dischargers at the Timm Mine. However, Maybelle Timm Eley and Lamplight, Inc. are the active mine claimants and operators and therefore have primary responsibility for compliance with these waste discharge requirements (WDRs), including day-to-day operations, monitoring, closure and post closure maintenance, and associated financial assurances. The Forest Service and the BLM are the administrators of the public lands where discharge of waste occurs or has occurred, and as passive participants are ultimately responsible for ensuring compliance with these WDRs for waste discharged upon their property and therefore are also named as co-Dischargers. Enforcement actions will be taken against the Forest Service and BLM (landowners) only in the event that enforcement actions against Maybelle Timm Eley (mine owner) and Lamplight, Inc (mine operator) are ineffective or would be futile, or that enforcement is necessary to protect public health or the

environment. In addition, since the Forest Service and the BLM are public agencies, enforcement actions will be taken against them only after they are given the opportunity to use their governmental powers promptly to remedy the waste discharge. Therefore, for the purposes of these WDRs for the activities permitted, unless otherwise noted, the term "Discharger" refers to Maybelle Timm Eley and Lamplight, Inc.

5. The Timm Mine consists of a series of interconnected mining claims that have intermittently operated since the 1880's. The Timm Mine consolidates mining claims previously known individually as the Atlanta, Round Hill#1 and #2, and Yellow Jacket claims.
6. The Central Valley Water Board initially issued WDRs Order 76-193 on 27 August 1976 regulating the discharge of waste from the Alhambra-Atlanta Gold Mine (hereafter included as part of the facility or Site). WDRs prohibited the direct discharge of wastes to surface waters and specified amongst other requirements that the discharge of waste to land shall remain in designated areas such as a tailings pond and not cause degradation of any water supply.
7. Mining operations under WDR Order 76-193 ceased in 1980. On 19 October 1990, the Discharger submitted a report of waste discharge (ROWD) notifying Board staff of its intention to reactivate the existing mines and mill facilities.
8. On 22 February 1991, Central Valley Water Board issued WDRs Order 91-065 revising previous WDRs Order 76-193 to include amongst other requirements additional prohibitions and discharge specifications. These revisions included the prohibition of use of chemicals in the gold extraction process as well as specified a limitation to the amount of tailings that could accumulate in the tailings settling/holding ponds prior to incorporation back into the mine workings.
9. Monitoring reports submitted under WDRs Order 91-065 indicate that Timm Mine was operational from 1991 through 1995 and the mining was performed by the Thompson Yellow Jacket Mining Company (Thompson Mining Company). During that period approximately 6,800 tons of waste rock was produced, 140 tons of gold bearing ore was produced, and 130 tons of tailings were disposed of in a tailings pond on Forest Service land.
10. Findings in WDRs Order 91-065 identified that approximately 20,000 tons of tailings material was deposited on Forest Service land by previous operators of the mine in a tailings pond. This tailings pond is located directly across Traverse Creek from the mill and was stable during flood events in 1986. In a copy of the 4 October 2011 State Mining and Geology Board SMARA Inspection Report, the tailings pond was identified as being covered with extensive vegetation and no mention of erosion or instability was identified.
11. In 1996, a letter from the mine owner indicated that the mine suspended operations due to a legal dispute between a lessee AKT Mining Corporation and its lessor Timm Trusts. Monitoring reports submitted under WDRs Order 91-065 indicate that Timm Mine was non-operational from 1996 through October 2011.
12. On 13 March 1997, due to inactivity at Timm Mine, the Central Valley Water Board revised the Monitoring and Reporting Program (MRP) No. 91-065 to reduce the monitoring and reporting frequency. The revision stipulated that once the mine anticipated commencement of mining activities, the MRP would be revisited to reestablish an appropriate MRP that would continue to

protect water quality. These revised WDRs incorporate changes to the MRP appropriate for active mining operations at Timm Mine.

13. In February 2007, the State Mining and Geology Board notified Timm Mine (CA Mine ID# 91-09-0006) that it approved the renewal of its current Interim Management Plan (IMP) for idle mine status for a period of five years. The IMP for Timm Mine would expire on 15 November 2011.
14. On 30 October 2011, Timm Mine notified the State Mining and Geology Board that it would begin active operation by 15 November 2011. On 1 November 2011 Board staff requested that the Discharger submit a ROWD if it were considering initiating operations. The ROWD was required to revise the WDRs to reflect current conditions at the facility and to establish revised discharge and monitoring specifications based on planned operations.
15. On 15 February 2012, Central Valley Water Board staff conducted a facility inspection where samples were taken from waste rock and mine portal discharge in order to characterize mining waste and establish potential threats to water quality. The results of waste characterization found arsenic above the Department of Public Health (DPH) primary Maximum Contaminant Level (MCL) of 10 µg/L in the mine portal discharge as well as in the leaching potential of the waste rock. The results of the inspection were conveyed to the Discharger in an inspection report dated 11 June 2012. The results are further discussed in Findings 41 through 44.
16. On 9 August 2012, a meeting was held with the Discharger and Forest Service at the Board's offices to discuss the WDRs permitting process and the Discharger's responsibility to protect water resources from Constituents of Concern (COCs) such as arsenic. The Discharger was reminded of its obligation to submit a ROWD with associated attachments, reports, etc.
17. On 30 January 2013, the Discharger submitted a ROWD for the Site. However, the ROWD was incomplete because it failed to include the items listed in Provisions E.5. These WDRs in Provisions E.5 require the Discharger to submit the necessary attachments, reports, etc. to ensure that the Discharger's operations are in compliance with the Water Code and Title 27 regulations associated with mining operations and final disposition of mining waste.
18. On 2 December 2013, the Discharger was issued a Notice of Violation (NOV) for failure to submit six quarterly monitoring reports required by the MRP for the period beginning 2<sup>nd</sup> quarter 2012 through the 3<sup>rd</sup> quarter 2013.
19. The purpose of issuing these WDRs is to revise WDRs 91-065 which do not reflect current conditions at the facility as well as establish revised discharge and monitoring specifications that will ensure that the Discharger is in compliance with all applicable laws and regulations related to the protection of beneficial uses of waters of the state.

#### **SITE DESCRIPTION**

20. The facility contains an existing hard rock gold mining operation regulated by the Central Valley Water Board under the authority of the Water Code and Title 27. WDRs have been previously issued for the facility on 27 August 1976 (WDR Order No. 76-193) and more recently on 22 February 1991 (WDR Order No. 91-065).

### FOREST SERVICE REQUIREMENTS

21. Portions of the facility are on public lands open to mineral acquisition under the General Mining Law of 1872. Locatable metallic minerals include gold, lead, zinc, nickel, etc. Historical documents indicate that mining operations have occurred in the area since at least the early 1880's. The primary commodity being mined is gold. No use of chemicals including cyanide or mercury is proposed for gold extraction.
22. Authorization to enter National Forests for mineral development is provided by 16 U.S.C. 478. Mining at the facility has been authorized under the Mining Laws governing locatable minerals on the Georgetown Ranger District, El Dorado National Forest, under 36 CFR 228A.
23. The Forest Service requires a Plan of Operations (Ops Plan) from mining operators when mining activity is likely to cause a significant disturbance of surface resources, including surface waters. An Ops Plan must be approved prior to the start of any work and must incorporate applicable best management practices (BMPs) for the protection of water-related beneficial uses and the control of discharges associated with mining activities.
24. The Forest Service also requires that all new Ops Plans for mining operations on National Forest System lands comply with the Federal Water Pollution Control Act of 1972 (Clean Water Act or CWA), 33 U.S.C §§ 1251-1387 and the Porter-Cologne Water Quality Control Act, Chapter 4, Article 4 section 13260 (a)(1). Where prospecting or mining related actions discharge, or have the potential to discharge waste(s) into waters of the state, the operator is required by state law to file a ROWD with the appropriate Regional Board. Such filing can result in the issuance of waste discharge requirements (WDRs) to the operator by the Board. The WDRs become a mandatory provision of the Ops Plan for mining activity, which is approved and administered by the Forest Service.
25. A copy of the most recent Forest Service Ops Plan dated 11 December 2009 was provided to Board staff on 9 August 2013. The current Ops Plan describes the use of settling pond(s) which are in violation of Prohibition A.4 of this Order. This Order requires the Discharger in Provisions E.5.a to provide the Central Valley Water Board with a copy of a revised Forest Service Ops Plan that is consistent with these WDRs as the Ops Plan pertains to the protection of ground and surface water quality.
26. The Forest Service also requires a Reclamation Plan under the requirements of the California Surface Mining and Reclamation Act of 1972 (SMARA). SMARA applies to any mining or exploration proposal that equals or exceeds 1,000 cubic yards of material removed, or creates more than 1 acre of surface disturbance, over the expected life of the mine.
27. Through a Memorandum of Understanding between the Forest Service and the California Department of Conservation, SMARA plans are developed through the State Mining and Geology Board (SMGB). California Environmental Quality Act (CEQA) compliance is met by El Dorado County, the lead agency completing an environmental review of the project and approving the Reclamation Plan. Since the county approved the Reclamation Plan in 1998 the SMGB has assumed the role of lead agency for the purposes of SMARA.

28. Title 27 section 22510 requires that WDRs incorporate the relevant provisions of an approved Mining and Reclamation Plan (see California Surface Mining and Reclamation Act, Pub. Resources Code, § 2770, et seq.), and prescribe additional conditions as necessary to prevent water quality degradation, and ensure that there will be no significant increase in the concentration of indicator parameters or waste constituents in ground or surface water. These WDRs include additional requirements in Discharge Specifications B.13 through B.23 to the SMARA Reclamation Plan that the Discharger must comply with during closure and post closure activities and financial assurances associated with treating/controlling discharges of Group B mining waste COCs such as but limited to mine portal discharges.

### **GEOLOGY**

29. Based on the Geologic Map of the Georgetown Quadrangle, California (Department of Conservation, Division of Mines and Geology (DMG) 1983), the facility is located along the eastern branch of the Melones Fault Zone. Site geology is mapped as being Paleozoic metasedimentary rocks of the Calaveras Complex, and Mesozoic metamorphic rocks, which are identified locally as slate and schist.
30. The Timm Mine is located in the Mother Lode gold belt, a 120-mile-long system of linked or en echelon gold-quartz veins and mineralized schist and greenstone that extends from the town of Mariposa, north and northwest to northern El Dorado County along the Melones Fault Zone. The rocks of this belt are typically metavolcanic, metasedimentary, and ultramafic, some of which have been hydrothermally altered.
31. The Fault Activity Map of California and Adjacent Areas, California (CDMG, 1994) indicates that the Timm Mine is adjacent to the eastern branch of the Melones Fault Zone. This fault is described as pre-Quaternary, having no recognized displacement within the last 1.6 million years.

### **LAND USE**

32. Land within one mile of the perimeter of the facility is both publicly (BLM and Forest Service) and privately held. The Discharger did not provide sufficient information on domestic water supply wells, private residences, crops, or livestock that are present within one mile of the perimeter of the facility. The Discharger did not provide any information on land use in their ROWD as required by Title 27 section 21750(h). Therefore, information not provided by the Discharger on land use with one mile of the perimeter of the facility that is necessary to ensure protection of beneficial uses of water resources is requested in Provisions E.5.b.

### **PRECIPITATION**

33. Mean annual rainfall for the period of record was from 1913 to 2012 was interpolated at the mine portal location to be 38.7 inches based on calculations made by Oregon State University's PRISM Climate Group interactive software program. The minimum and maximum annual rainfall over the past 100 years was determined to be approximately 13.3 to 73.8 inches respectively.
34. The anticipated 100-year, 24-hour precipitation for the facility is 7.37 inches, and the 100-year precipitation intensity is 1.23 inches per hour based on estimates by the National Oceanic and

Atmospheric Administration (NOAA) Atlas 14, Precipitation-Frequency Atlas of the United States, Volume 6, Version 2.3, Silver Spring, Maryland, 2011, Revised 2014.

### WASTE CHARACTERIZATION

35. Title 27 section 20164 defines mining waste as “*all waste materials (solid, semi solid, and liquid) from the mining and processing of ores and minerals including soil, waste rock, and other forms of overburden as well as tailings, slag, and other processed mining wastes.*”
36. Board staff sampled existing mining waste at the facility on 14 February 2012 to determine if the facility was susceptible to acid mine drainage. Based on the results of acid base accounting of the solid mining waste, the mining waste was determined to have an acid neutralizing potential (pH of 8.62 and ratio of acid neutralizing potential (ANP) to acid generating potential (AGP) of 7.88). An ANP/AGP ratio of greater than 3 is considered as classifying a facility as having a low potential for acid mine drainage. The results determined that precipitation (rainwater simulated by de-ionized water) should be considered as the extraction solvent to be used in any Waste Extraction Test (WET) for determining the mobilization of COCs from the facility to receiving waters (ground and surface waters).
37. The mining waste characterization conducted by the Discharger identified two main types of mining waste that will be generated from the operation. The two sources of waste bear distinct differences in laboratory test results; visual identification and where it was mined underground.
38. The first type of mining waste generated from mining operations is development rock (non-mineralized material) and accounts for approximately 90% of the waste generation. The Discharger characterized the development rock through a modified Waste Extraction Test (WET) e.g. using de-ionized water as the extraction solvent. The modified WET identified concentrations of dissolved zinc at 110 micrograms per liter ( $\mu\text{g/L}$ ) and dissolved arsenic at 8.1  $\mu\text{g/L}$  as COCs. The Water Quality Criteria (WQC) for zinc for protection of aquatic life in surface waters is dependent on receiving water hardness. This Order requires the Discharger to monitor for arsenic, zinc and other COCs in Traverse Creek to ensure that the Discharger has complied with Prohibitions A.1 of this Order (e.g., the direct or indirect discharge of mining waste to surface water or surface water drainage courses is prohibited).
39. The development rock is transported in 1-ton side dump ore cars to an elevated dump station. Development material will average 8-10 tons per day, 2-3 times a week, with an estimated 1,000 tons/year. The Discharger proposes that development rock mining waste will be reclaimed and utilized as road base and pad material.
40. Based on the results of the waste characterization of the development rock performed by the Discharger, the development waste rock is classified as Group C mine waste as defined in Title 27, section 22480. This Order requires the Discharger to continue to monitor and characterize the development rock to ensure that it remains Group C mining waste for the purposes of reclamation as road base and pad material at the facility.
41. The second type of material generated, approximately 10%, is mineralized rock and contains COCs based on previous tests conducted. Board staff also sampled the mineralized rock on 25 April 2012 and performed a WET analysis using de-ionized water as the extraction solvent. The

results showed the mineralized rock containing COCs of dissolved arsenic of 277 µg/L which exceeds the primary MCL of 10 µg/L for drinking water standards.

Furthermore, leachate from a mineralized rock waste pile was sampled on 14 February 2012 and analyzed for CAM-17 metals. The analytical results shown below exceed the water quality objectives/water quality criteria (WQO/WQC) for protection of the designated beneficial uses for the receiving water (Traverse Creek):

<b>COC</b>	<b>Analytical Results</b>	<b>WQO/WQC</b>	<b>Beneficial Use</b>
Arsenic, total	183 µg/L	10 µg/L	Drinking Water Standard- primary MCL
Copper <sup>1</sup> , total	17.7 µg/L	4.3 µg/L	continuous protection of freshwater habitat for aquatic life
Lead <sup>1</sup> , total	35 µg/L	1 µg/L	continuous protection of freshwater habitat for aquatic life
Nickel <sup>1</sup> , total	89 µg/L	24 µg/L	continuous protection of freshwater habitat for aquatic life
Zinc <sup>1</sup> , total	254 µg/L	55 µg/L	continuous protection of freshwater habitat for aquatic life

Therefore, mineralized rock will be stored in a Waste Management Unit (WMU) or underground in a dry environment. Mineralized rock that was previously placed outside of a WMU or underground will be mitigated as required in Provisions E.5.c of this Order.

42. Furthermore, the analytical results of waste characterization performed by the Discharger on the mineralized rock classified the mineralized rock as Group B mine waste as defined in Title 27 section 22480. This Order requires the Discharger to fully contain Group B mining waste in a WMU or underground within the mine in dry designated areas.
43. The Discharger will also produce mining waste in the form of mill tailings and process water from the milling operations as described in Finding 55. The Discharger proposes to handle the tailings and process water as Group B mining waste as defined in Title 27 section 22480. Tailings will be stored in a WMU and will be mixed with cement slurry and pumped back into an abandoned underground designated work area within the mine.
44. On 14 February 2012 and 25 April 2012, Board staff sampled the portal discharge and the laboratory results reported total arsenic of 15.4 µg/L and 17.8 µg/L respectively. Both samples exceeded the primary MCL of 10 µg/L for drinking water standards. Furthermore, concentrations of total lead<sup>1</sup> in one of the samples was 5.3 µg/L which exceeded 1 µg/L, the WQO/WQC for

<sup>1</sup> Water Quality Criteria for copper, lead, nickel, and zinc are based on receiving water hardness. A receiving water hardness of 40 mg/L as CaCO<sub>3</sub> was used based on receiving water quality documented at Placerville WWTP. This Order requires the Discharger to establish site specific receiving water hardness in Traverse Creek as specified in Provisions E.5.d of this Order.

protection of the beneficial use of freshwater habitat for aquatic life. Based on results of waste characterization of the portal discharge, the portal discharge is classified as Group B mine waste as defined in Title 27, section 22480.

### POTENTIAL IMPAIRMENT OF GROUND AND SURFACE WATER

45. 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, beginning 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 Traverse Creek, a tributary of Rock Creek, but does identify present and potential uses for the South Fork American River (Hydrologic Unit Number 514.3), to which Traverse Creek and Rock Creek are tributary. These beneficial uses of surface waters are as follows: municipal and domestic supply; hydropower generation; water contact recreation; non-contact water recreation, including aesthetic enjoyment; cold freshwater habitat; cold spawning, and wildlife habitat. For ground waters the Basin Plan states that "*Unless otherwise designated by the Regional Water Board, all ground waters in the Region are considered as suitable or potentially suitable, at a minimum, for municipal and domestic water supply (MUN), agricultural supply (AGR), industrial service supply (IND), and industrial process supply (PRO).*"
46. The Timm Mine discharges an annual average of 1 to 4 gpm from its portal into a 500 gallon holding tank/pump system, which is designed to pump mine effluent to an above ground 6,000 gallon water storage tank. Based on reported storage capacity the Discharger is capable of storing approximately two days of mine effluent. The Discharger currently recycles mine effluent back underground for use in its mining operation. The Discharger also uses the mine effluent for dust control and facility irrigation.
47. WDRs 91-065 required annual monitoring of the Timm Mine portal discharge for California Administrative Manual (CAM) 17 metals. Historical monitoring from 1994 through 2011 of the portal discharge consistently reported non-detection of most metals. However, based on Board staff sampling of the portal discharge (See Finding 44), the portal discharge was characterized as Group B mining waste which if not treated or controlled has the potential to cause degradation/impairment of ground and/or surface waters.
48. Further investigation by Board staff of annual monitoring reports for CAM-17 metals reporting of the portal discharge determined that the Discharger used inappropriate method detection limits (MDLs) and reporting limits (RLs) for determining whether a COC was present in the portal discharge. The Discharger did not use appropriate MDLs and RLs that could establish whether the portal discharge was a potential threat to the existing beneficial use of freshwater habitat for aquatic life in Traverse Creek. This revised Order requires the Discharger to use appropriate MDLs and RLs in its Monitoring and Reporting Program (MRP) R5-2014-XXXX that are protective of existing beneficial uses for ground and surface waters.
49. WDRs 91-065 prohibited the direct discharge of wastes to surface waters or surface water drainage courses. Since 1997, the Discharger has monitored upstream and downstream water quality in Traverse Creek annually in the month of December or January for total lead and total

arsenic. The results predominantly have been reported as non-detect of COCs. Furthermore, the Discharger used the appropriate MDLs and RLs that are protective of the beneficial use of freshwater habitat for aquatic life in Traverse Creek. However, in order to protect the existing beneficial use of cold water spawning for aquatic life (trout-*Oncorhynchus mykiss*) which typically occurs from spring to early summer this Order requires the Discharger to sample for COCs during that period. The surface water monitoring is required ensure that any indirect discharges of leachate from mining waste to Traverse Creek has not occurred during the period when early life stages of trout exists where they are most susceptible to COCs from mining waste.

50. WDRs 91-065 did not require ground water monitoring due to geological analysis performed at the time which designated the waste as Group C mining waste. Furthermore, due to the geology consisting typically of metavolcanic, metasedimentary, and ultramafic rock, ground water monitoring through installation of monitoring wells is found to be extremely difficult to certify as an effective detection monitoring system. This Order currently does not require a ground water monitoring system through installation of monitoring wells since this Order does not authorize the use of in-ground surface impoundments to contain Group B mining waste such as but not limited to, mining leachate, mine tailings, and mineralized ore as described in Findings 41 through 44. Such mining waste shall be contained as described under the Waste Management Unit Design section of this Order.
51. Pursuant to the conditions of the Order, no direct or indirect discharge of mining waste to surface water is permitted. During the rainy season, Group B mining waste must be contained in the designated waste management units. Operation during the rainy season requires the management of storm water runoff to avoid contact with Group B mining waste. Such avoidance includes but is not limited to diversion of runoff, installation of a cover system, and returning the Group B mining waste to dry areas in the underground mine workings, etc.
52. Title 27, section 22480(b)(3) defines Group C mining waste as "*wastes from which any discharge would be in compliance with the applicable water quality control plan, including water quality objectives other than turbidity.*" Therefore, erosion and sediment controls (such as straw mulch and fiber rolls) must be installed in and around the waste disposal area of Group "C" mining waste prior to storm events, and must be maintained throughout the rainy season to prevent exceedences of storm water quality objectives regulated under separate WDRs 97-03-DWQ Order, *Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities* (NPDES General Permit CAS000001).

### **PROPOSED MINING OPERATION**

53. Information in the ROWD dated 30 January 2013 and subsequent information provided by the Discharger as well as supporting documents has been used to develop these WDRs. The ROWD and supporting documents contain information related to facility characteristics, design, construction, operations, and closure of the facility. Missing information not provided by the Discharger necessary to ensure protection of water quality is requested in Provisions E.5.
54. All mining (development and production) is underground with access to the mine workings through the main portal. Except for an electric rail tramcar, all other mining equipment is powered by compressed air. Milling equipment, underground ventilation fan and tramcar charger is electrically powered from a dedicated 3-phase power line running to the mill building. All underground material

hauling utilizes a 24" gauge rail system powered by a 48 volt D.C. electric tramcar. Blast holes are drilled with a pneumatic percussion rotary drill using compressed air and water. Blast holes are drilled, loaded with explosives and shot. The explosives used in the bore holes are a combination of dynamite/emulsion and ANFO. This Order requires the Discharger to monitor surface receiving waters for COCs such as ammonium, nitrate, and fuel oil associated with explosives used at the facility.

55. The Discharger anticipates that milling will occur intermittently, one to two non-consecutive days per month, and less than 100 tons/year of material will be processed through the mill. The existing mill will be used on an intermitted basis. The milling process is a gravity separation system that does not use chemicals or reagent; target metals are recovered by material density differential using water and mechanical action. The mill system entails: ore storage and conveyance; crushing and grinding of ore; and, recovery of precious metals and metallic sulfides. The mill is electrically powered and housed in two buildings, the coarse ore/crusher building and the mill building. Mill ore is dumped into the coarse ore bin and fed into a jaw crusher at the bottom of the bin. A conveyor belt brings the crushed ore (3/4" minus) to the fine ore bin located at the top of the mill building. The ore is fed from the bottom of the fine ore bin by a feed belt that supplies a ball mill where water is added and grinds the material to 1/4 inch. The ground ore slurry flows across a Denver jig where gold is separated from the lighter materials by specific gravity. Material coarser than 60-mesh is augured back into the ball mill by a screw auger for further grinding. The minus-60 mesh material flows over a weir classifier to a 6 foot by 15 foot Wifley concentrating table where remaining gold/sulfides are collected off the end of the table. The lighter material is pumped through a cyclone to separate tailing materials and the process water is pumped back to the ball mill for reuse in the milling operation. Excess water from the mill circuit will be pumped to a separate, fully contained water storage area and recycled back to the mill circuit. All process water in the milling operation will be fully contained with zero potential for discharge to ground or surface water without prior treatment as described in Findings 61 through 64 and Discharge Specifications B.3 through B.5 of this Order. All tailings will be mixed with cement slurry and pumped back into dry abandoned underground work areas for solidification within the mine such that leaching potential from the solidified waste is eliminated.

#### **ENGINEERED ALTERNATIVES TO PRESCRIPTIVE STANDARDS**

56. Title 27, section 20080(b) allows the Central Valley Water Board to consider the approval of an engineered alternative to the prescriptive standard. In order to approve an engineered alternative in accordance with Title 27, section 20080(c)(1) and (2), the Discharger must demonstrate that the prescriptive design is unreasonably and unnecessarily burdensome and will cost substantially more than an alternative which will meet the criteria contained in Title 27, section 20080(b), or would be impractical and would not promote attainment of applicable performance standards. The Discharger must also demonstrate that the proposed engineered alternative is consistent with the performance goal addressed by the particular prescriptive standard, and provides protection against water quality impairment equivalent to the prescriptive standard in accordance with Title 27 section 20080(b)(2).
57. Title 27, section 22500(a) requires that Group B WMUs comply with monitoring provisions contained in sections 20385 through 20430 which amongst other things requires a detection monitoring system which typically includes ground water monitoring around in-ground WMUs for earliest detection of a release from the WMU.

58. Title 27, section 20380(e) allows for an engineered alternative for any of the prescriptive standards such as the requirement for a ground water monitoring system used for detection monitoring for a WMU so long as the engineered alternative meets the goals of the detection monitoring program articulated in Title 27, section 20420(b).
59. Board staff have considered the engineered alternative to installation of ground water monitoring wells as an effective detection monitoring system due to the Board's inability to certify that the use of ground water monitoring wells at the facility will comply with Title 27, section 20420(b) performance standards (See Finding 50), and therefore the Central Valley Water Board finds that the engineered alternative described below meets the goals of the detection monitoring program articulated in Title 27, section 20420(b):
1. Group B mining waste in the form of liquid or in a solid form where moisture exists that exceeds the moisture holding capacity of the solid waste causing leachate formation shall be contained in above ground containment structures with a surrounding air gap such that a visual inspection can be conducted of the containment structure in order to determine if a release has occurred; and
  2. Group B mining waste in solid form where its moisture content does not exceed the holding capacity of the mining waste (no leachate production) shall be placed on pads that are designed, constructed, and maintained such that if the moisture holding capacity of the mining waste is exceeded by any means the WMU would provide the earliest detection and indication of a release.

#### **WASTE MANAGEMENT UNIT DESIGN**

60. Regulations set forth in Title 27, section 22490, which establish prescriptive standards for construction of Waste Management Units (WMU) 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. Therefore, the placement and disposal of development rock as described in Findings 38 through 40 is not subject to confinement as prescribed in Title 27 regulations except as those prescriptive and performance standards attributed to Group C mining waste. The reclamation of Group C mining waste shall occur in the areas shown on Attachment B. The specifications for storage, management, and reclamation of Group C mining waste are found in Discharge Specifications Section B of this Order.
61. The term WMU is preserved and is applicable for Group B mining wastes, of which as described in Findings 41 through 44, the mineralized rock, mill tailings, process water from milling operations, and portal discharge are classified as Group B mining waste and must be discharged accordingly.
62. Since these WDRs do not require ground water monitoring at this time any WMUs used to contain Group B mining waste in liquid form such as but not limited to process water from milling operations and portal discharge, or where the moisture holding capacity of the Group B mining waste has the potential to be exceeded such that free liquid may form at the base of the WMU, the WMU shall be designed, operated, and maintained such that it's containment structure can be readily inspected to determine if leakage has occurred from the containment structure. One

example of such provisions being met is by providing an air gap around the WMU such that the WMU can be visually inspected to determine if a leak has occurred.

63. Discharge of Group B mining waste in liquid form to land application areas is permitted provided this form of mining waste is treated such that any COCs present will not exceed water quality objectives nor create unauthorized degradation of receiving waters (both surface and ground waters). This Order requires the Discharger to develop and submit Water Quality Protection Standards (WQPS) for mining waste in liquid form prior to their discharge to land application areas as specified in Discharge Specifications B.5 that are protective of surface and groundwater beneficial uses.
64. WMUs used to contain Group B mining waste that will not contain moisture exceeding its moisture holding capacity shall be placed on pads designed, constructed, and maintained such that if the moisture holding capacity of the mining waste was exceeded by any means, precipitation or otherwise, the WMU would provide the earliest detection and indication of a release. Furthermore, the WMU shall be designed such that no additional moisture can be added to mining waste once it is placed in the WMU.

#### **CLOSURE AND POST CLOSURE PERIOD FINANCIAL ASSURANCES**

65. In providing financial assurances for WMUs per Title 27, section 22510(g) the Discharger may propose Alternative Financial Assurances and the Central Valley Water Board may accepted the proposal if the following applies:

*“If a lead agency acting under the authority of §2774(a) of the Public Resources Code requires assurances of financial responsibility, these assurances can be used to fulfill all comparable requirements under Title 27 section 22510(f), provided that:*

- (1) the RWQCB approves the assurance; and*
- (2) the RWQCB is named as alternate payee.”*

66. As of 30 April 2011, the Discharger has financial assurances for reclamation activities in the amount of \$12,874.00 for closure and post closure maintenance for a period of three (3) years of in the form of a Certificate of Deposit with the payees as the State Mining and Geology Board, the Department of Conservation, the BLM, and the U.S. Forest Service. The financial assurances primarily cover the costs of removing structures and equipment, re-grading the facility for slope stability and erosion control, re-vegetation, and three years of monitoring to ensure facility stabilization.
67. Central Valley Water Board staff shall periodically review the financial assurance and the Discharger shall update the financial assurance upon request by the Board. Board staff has reviewed the financial assurance with the payees listed in Finding 66 and finds that though it satisfies SMARA reclamation requirements required by other agencies, it does not address long term water quality impacts for continued portal discharge of Class B mining waste as well as disposal of up to 100 tons of Class B mining waste in the form of mineralized rock and mill tailings. This Order in Provisions E.5.e requires the Discharger to provide a closure and post closure maintenance plan and financial assurances that address these concerns.

### CEQA AND OTHER CONSIDERATIONS

68. In connection with the approval of a SMARA reclamation plan in 1998, El Dorado County conducted a review of the mining activities pursuant to the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Discharger has not proposed any expansion of uses beyond those evaluated in the prior CEQA review. This Order places additional requirements on the continued operation of the facility in order to ensure the protection of waters of the state. The issuance of this Order is therefore exempt from the provisions of CEQA in accordance with California Code of Regulations, title 14, section 15301, which exempts the “operation, repair, maintenance, [and] permitting ... of existing public or private structures, facilities, mechanical equipment, or topographical features” from environmental review. This action may also be considered exempt because it is an action by a regulatory agency for the protection of natural resources (Cal. Code Regs., tit. 14, § 15307.) and an action by a regulatory agency for the protection of the environment (Cal. Code Regs., tit. 14, § 15308.).
69. This order implements:
- a. The Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition; and
  - b. The prescriptive standards and performance goals of California Code of Regulations, title 27, section 20005 et seq.
70. Based on the threat and complexity of the discharge, the facility is determined to be classified, 2-C as defined below:
- a. Category 2 threat to water quality, defined as, “*Those discharges of waste that could impair the designated beneficial uses of the receiving water, cause short-term violations of water quality objectives, cause secondary drinking water standards to be violated, or cause a nuisance.*”
  - b. Category C complexity, defined as, “*Any discharger for which waste discharge requirements have been prescribed pursuant to Section 13263 or the Water Code not included in Category A or Category B as described above. Included are dischargers having no waste treatment systems or that must comply with best management practices, dischargers having passive treatment and disposal systems, or dischargers having waste storage systems with land disposal.*”
71. 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 Regional 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 Monitoring and Reporting Program (MRP) R5-2014-XXXX are necessary to assure compliance with these WDRs, and to assure that the discharges will comply with the Basin Plan. The Discharger owns and operates the facility, and is responsible for the discharges of waste at the facility subject to this Order and is, subject to requirements imposed pursuant to Water Code 13267.

### **PROCEDURAL REQUIREMENTS**

72. All local agencies with jurisdiction to regulate land use, solid waste disposal, air pollution, and to protect public health have approved the use of this facility for the discharges of waste to land stated herein.
73. The Central Valley Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for this discharge, and has provided them with an opportunity for public hearing and an opportunity to submit their written views and recommendations.
74. 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 WDR Order 91-065 is rescinded except for purposes of enforcement, and that Maybelle Timm Eley (facility owner) and Lamplight Inc. (operator) and Maybelle Timm Eley, Timm M Testamentary Trust, U.S. Department of Agriculture, Forest Service, and U. S. Department of Interior, Bureau of Land Management (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 direct or indirect discharge of mining waste to surface water or surface water drainage courses is prohibited except as otherwise permitted in the Discharge Specifications of this Order.
2. The discharge of "hazardous waste" or "Group A" mining waste at the facility is prohibited. For the purposes of this Order, the terms "Group A", "Group B", and "Group C" mining wastes are as defined in Title 27, section 22480. The term "hazardous wastes" is defined in California Code of Regulations, title 22, section 66261.1 et seq.
3. The discharge of any waste other than mining wastes into a WMU is prohibited. Prohibited wastes may include, but are not limited to, oil, grease, solvents, other petroleum products, and toxic and hazardous materials.
4. The discharge of any mining waste classified as Group B mining waste to in-ground surface impoundments such as but not limited to storage tanks, tailings ponds, settling ponds, retention basins, and storage ponds is prohibited.
5. The accumulation of more than 100 tons of Group B mining waste in WMU(s) at the facility is prohibited.
6. The discharge of mining waste at the facility from sources other than the Timm Mine is prohibited.

7. The discharge of mining wastes outside a WMU is prohibited except as otherwise permitted under additional Central Valley Water Board orders.
8. The discharge of treated Group B mining waste in liquid form e.g. portal discharge or mill process water to land application areas is prohibited within 100 feet of the boundary of Traverse Creek's 100-year floodplain.
9. The Discharger shall comply with all General Provisions listed in Section III of the Standard Provisions and Reporting Requirements (SPRRs) dated February 2009 which are attached hereto and made part of this Order by reference.

## **B. DISCHARGE SPECIFICATIONS**

### **GENERAL SPECIFICATIONS**

1. All Group C mining waste placed as part of the proposed mining operation are to be placed in the areas shown in Attachment B and configured with slopes no steeper than 3:1, horizontal to vertical. The reclamation of Group C mining waste shall be performed in accordance with appropriate erosion and sediment control practices to reduce the chance of water quality impact associated with the mining operation. At closure, permanent erosion control measures, including vegetation and drainage routing, are to be established at all areas disturbed by the mining operation.
2. Developmental rock classified as Group C mining waste shall be periodically sampled per the Monitoring and Reporting Program (MRP) R5-2014-XXXX schedule and analyzed for leaching potential to ensure that its characteristics continue to classify the developmental rock as Group C mining waste. If analysis indicates that the nature of the development rock has changed towards Group B mining waste classification, the development rock shall be reclassified and shall be subject to waste discharge requirements attributed to Group B mining waste specified in these WDRs. Any developmental rock previously placed as Group C mining waste but due to laboratory analysis is determined to be Group B mining waste shall be mitigated in accordance with Provisions 5.c.
3. Group B mining wastes shall only be discharged into a WMU as described in Findings 61 through 64.
4. A maximum of 100 tons of Group B mining waste will be allowed to accumulate in WMU(s). Disposal of Group B mining waste in the form of solid waste in order to comply with the 100 ton limit shall be performed by either offsite disposal at a regulated facility authorized to accept Group B mining waste or by mixing it with a cement slurry and pumping back into dry, abandoned underground work areas within Timm Mine for solidification. The Discharger shall provide necessary documentation to ensure that the placement of the mining waste within the mine will not cause a condition during the closure and post closure period of the mine where it will cause degradation of ground and surface waters.
5. Discharge of Group B mining waste in liquid form to land application areas is permitted provided this form of mining waste is treated such that any COCs present will not exceed water quality objectives nor create unauthorized degradation of receiving waters. Provisions E.5.h of this

Order requires the Discharger to develop and submit Water Quality Protection Standards (WQPS) for mining waste in liquid form prior to its discharge to land application areas that is protective of surface and groundwater beneficial uses. Interim WQPS are included in attached Monitoring and Reporting Program R5-2014-XXXX.

6. The Discharger shall promptly report slope changes such as movement caused by slumping or slipping, or unusual erosion.
7. The Discharger shall not cause a condition of pollution, contamination, or nuisance as defined by Water Code section 13050.
8. 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).
9. The Discharger shall, in a timely manner, remove and relocate any wastes discharged at this facility in violation of this Order. If the Discharger is unable to remove and relocate the waste, the Discharger shall submit a report to the Central Valley Water Board explaining how the discharge occurred, why the waste cannot be removed, and any updates to the waste acceptance program necessary to prevent re-occurrence. If the waste is a hazardous waste, the Discharger shall immediately notify the Department of Toxic Substances Control.

#### **PROTECTION FROM STORM EVENTS**

10. For the WMU, and related excavation and grading operations, all precipitation and drainage control systems shall be designed, constructed, and maintained to protect the WMU from anticipated volume of precipitation and peak flows from surface run-off for a 10-year, 24-hour precipitation event.
11. Any storm water discharges from industrial activities such as gold mining to waters of the U.S. must obtain coverage under the State Water Resources Control Board Order 97-03-DWQ, *General Permit for Discharges of Storm Water Associated with Industrial Activities* (General Order). The Discharger was issued a notice of termination of coverage under the General Order on 12 November 2003. Therefore, the Discharger must again obtain coverage under the General Order. This Order in Provisions E.5.j requires the Discharger to provide Board staff proof of coverage under the General Order. Furthermore, 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.
12. Annually, prior to the anticipated wet season but no later than 15 October of each year, any necessary erosion control measures 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.

#### **CLOSURE AND POST CLOSURE MAINTENANCE PLAN**

13. The Discharger has a Reclamation Plan (RP-98-02) approved by the county and related financial assurance approved by the SMGB, which currently has assumed the role of lead agency for the

purposes of SMARA. The Reclamation Plan addresses removal of structures and equipment, re-grading for slope stability, erosion control, re-vegetation, and three years of monitoring.

14. Although the Reclamation Plan addresses minimizing water quality impacts typically associated with Group C mining wastes these WDRs do not find the Reclamation Plan and related financial assurance as functionally equivalent to Closure and Post Closure Maintenance of WMUs and Closure and Post Closure Funding required by Title 27, subsections 22510 (b), (c) and (f). Reclamation Plan (RP-98-02) does not address final disposition of Group B mining waste during closure and post closure period as described in Finding 67.
15. The Discharger shall provide a separate Closure and Post Closure Maintenance Plan as required in Provisions E.5.e that complies with Title 27, subsections 22510 (b), (c) and (f) which amongst other issues addresses long term costs associated with continued portal discharges, , and final disposition of all Group B mining waste present at the facility at the time of closure.
16. Any amendments to the Timm Mine Reclamation Plan or Closure and Post Closure Maintenance Plan shall be submitted to Central Valley Water Board to determine if they are still consistent with Title 27, subsections 22510 (b), (c) and (f).
17. The approved financial assurance mechanism for the Discharger's Mining and Reclamation Plan approved by the State Mining and Geology Board, does not include all costs required in the Closure and Post Closure Financial Assurances required by Title 27, subsection 22510(f). The Discharger shall name the Central Valley Water Board as an alternate payee for the financial assurance mechanism associated with threats to water quality due to Group C mining waste and provide separate financial assurances due to threats to water quality from the presence of Group B mining waste at the facility as required by Provisions E.5.e.
18. Subsequent amendments to the Reclamation Plan, Closure and Post Closure Maintenance Plan and related financial assurances shall be incorporated herein and made part of this Order by reference provided that any proposed amendments are functionally equivalent to the Closure and Post Closure Maintenance of WMUs required by Title 27, section 22510 and are approved by Central Valley Water Board's Executive Officer.
19. The facility shall be closed in a manner that will minimize erosion and the threat of water quality degradation.
20. Following closure, the Discharger shall continue to collect surface water samples as described in the Reclamation Plan and Closure and Post Closure Maintenance Plan.
21. The Reclamation Plan submitted to the SMGB does not include a Post Closure Sampling and Analysis Plan (Post Closure SAP), which describes monitoring procedures during the closure and post closure period. The purpose of the Post Closure SAP is to document whether the mining and reclamation procedures, as employed by the Discharger, prevent water quality degradation and ensure that there will be no significant increase in the concentration of indicator parameters or waste constituents in waters of the state. This Order in Provisions E.5.f requires the Discharger to submit a Post Closure SAP for the closure and post closure period.

22. The post closure monitoring and maintenance period shall end<sup>2</sup> when the Central Valley Water Board determines that water quality aspects of closure and post closure maintenance are complete and the wastes no longer pose a threat to water quality (Title 27, section 22510(h)).
23. The Discharger shall comply with all applicable Standard Closure and Post Closure Specifications listed in Section XI D and E and all Standard Construction Specifications that are applicable to closure in Section VI of the SPRRs dated February 2009 which are attached hereto and made part of this Order by reference.

### **C. MONITORING SPECIFICATIONS**

1. Neither mining nor processing activities at 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 ground or surface water to be degraded.
2. The Discharger shall conduct surface water monitoring in accordance with an approved Sampling and Analysis Plan per Title 27, section 20415(e)4-5. This Order in Provisions E.5.g requires the Discharger to submit a Sampling and Analysis Plan for approval.
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 establish and submit a Water Quality Protection Standard (WQPS) Report within one year of the adoption of this Order (See Provision E.5.h.). The Water Quality Protection Standard Report shall include the information described in Section C.1. Water Quality Protection Standard and Compliance Period of the attached Monitoring and Reporting Program R5-2014-XXXX. During the one year after adoption of this Order the Discharger shall comply with interim Water Quality Protection Standards that are provided in the attached Monitoring and Reporting Program R5-2014-XXXX.
5. The concentrations of the constituents of concern in waters passing the Monitoring Point shall not exceed the concentration limits established pursuant to Monitoring and Reporting Program R5-2014-XXXX.
6. 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 R5-2014-XXXX.
7. The Discharger shall maintain an approved Sampling and Analysis Plan (SAP) per Title 27, section 20415(e)4 and (e)5. The Sampling 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;

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<sup>2</sup> The post-closure monitoring and maintenance period typically ends when the Unit has been in compliance with the water quality protection standard for a period of three consecutive years.

- 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 obtain and maintain assurances of financial responsibility with Central Valley Water Board for closure and post closure maintenance of the Timm Mine as described in Findings 65 through 67, adjusted for inflation annually. A report regarding financial assurances for closure and post closure maintenance shall be submitted to the Central Valley Water Board by 1 June of each year. If the Executive Officer determines that either the amount of coverage or the mechanism is inadequate, then within 90 days of notification, the Discharger shall submit an acceptable mechanism to the Central Valley Water Board for at least the amount of the approved cost estimate.
2. The Discharger shall update the Closure and Post Closure Maintenance plan any time there is a change that will increase the amount of the closure and/or post closure maintenance cost estimate. The updated Closure and Post Closure Maintenance Plan shall be submitted to the Central Valley Water Board. The Closure and Post Closure Maintenance Plan shall meet the requirements of Title 27, section 22510(f), and include a lump sum estimate of the cost of carrying out all actions necessary to close each Waste Management Unit, to maintain any post closure waste treatment systems, to prepare detailed design specifications, to develop the final Closure and Post Closure Maintenance Plan. Reports regarding financial assurance required in D.1 above shall reflect the updated cost estimate.

#### **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 R5-2014-XXXX. Compliance includes, but is not limited to, monitoring of waste, waste discharges, and surface water monitoring throughout the active life of the WMU and post closure maintenance period.
3. The Discharger shall notify 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. The Discharger shall complete the following tasks by the required dates:

Item	TASK	DATE DUE
a.	Provide copy of updated Forest Service Ops Plan that is consistent with these WDRs that is protective of water quality. (Finding 25)	<b>31 August 2015</b>
b.	Submit a Land Use Report that provides sufficient information on domestic water supply wells, private residences, crops, or livestock that are present within one mile of the perimeter of the facility. (Finding 32)	<b>31 August 2015</b>
c.	Submit a Work Plan that describes how Group B mining waste previously placed outside of a WMU will be mitigated to nullify its potential threat to water quality. (Finding 41)	<b>9 February 2015</b>
d.	Submit a Water Hardness Study to determine lowest background water hardness as CaCO <sub>3</sub> in Traverse Creek that is most protective of beneficial uses in receiving waters. (Finding 41 Note# 1)	<b>31 August 2015</b>
e.	Submit a preliminary Closure and Post Closure Maintenance Plan and financial assurances that address long term water quality impacts from abandoned tailings pond adjacent to Traverse Creek, post closure portal discharge of Class B mining waste as well as disposal of up to 100 tons of Class B mining waste in the form of mineralized rock and mill tailings. (Finding 41 and Discharge Specifications B.17)	<b>31 August 2015</b>
f.	Submit a Post Closure Sampling and Analysis Plan (Post Closure SAP), which describes monitoring procedures for water during the closure and post closure period that will prevent water quality degradation and ensure that there will be no significant increase in the concentration of indicator parameters or waste constituents in waters of the state. (Discharge Specifications B.21)	<b>31 August 2015</b>
g.	Submit a Sampling and Analysis Plan (SAP), which describes Quality Assurance and Quality Control (QA/QC) procedures that will be used to ensure integrity of the water quality Monitoring and Reporting Program R5-2014-XXXX . (Monitoring Specifications C.2)	<b>31 August 2015</b>
h.	Submit Water Quality Protection Standard Report. (Monitoring Specification C.4)	<b>31 August 2015</b>
i.	Submit updated cost estimates and financial assurances for closure and post closure maintenance. (Financial Assurance Specification D.1)	<b>By 1 June of each year</b>
j.	Submit proof of coverage under the State Water Resources Control Board Order 97-03-DWQ, <i>General Permit for Discharges of Storm Water Associated with Industrial Activities.</i>	<b>31 August 2015</b>

6. Provisional tasks E.5.b through E.5.i above shall be prepared by a registered professional licensed in the State of California to perform such work. Upon approval in writing by the Executive Officer of the submittals in response to the provisional tasks mentioned above the approved submittals are incorporated herein and made part of this Order by reference for the purpose of compliance and enforcement.
7. In the event of any change in control or ownership of the Timm 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.
8. For the purposes of resolving any disputes arising from or related to the 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.
9. 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 or with the WDRs 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](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or will be provided upon request.

WASTE DISCHARGE REQUIREMENTS ORDER R5-2014-XXXX  
LAMPLIGHT, INC. AND MAYBELLE TIMM ELEY  
U.S. FOREST SERVICE AND BLM  
TIMM MINE  
EL DORADO COUNTY

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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 \_\_\_\_\_.

\_\_\_\_\_  
PAMELA C. CREEDON, Executive Officer

WMH/vkj