

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER R5-2015-0074

WASTE DISCHARGE REQUIREMENTS
FOR
SENECA GOLD, LLC,
LORRIE PREIM, AND DAVID PREIM
SENECA MINE
PLUMAS COUNTY

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

1. Seneca Gold, LLC submitted a Report of Waste Discharge (ROWD), dated 15 February 2013 for the operation of the Seneca Mine, a placer gold mine, in Plumas County. Central Valley Water Board staff determined the ROWD to be incomplete and the Discharger was notified on 5 April 2013. The Seneca Gold, LLC submitted additional information on 12 July 2013 and the ROWD was deemed complete on 16 July 2013. The approximately 60-acre property is owned by Lorrie Preim and David Preim and is identified as Plumas County Assessor's Parcel Number 002-080-002. Seneca Gold, LLC., Lorrie Preim and David Preim are referred to hereafter "Discharger." At the request of one of the property owners, adoption of this Order was postponed until 2015.
2. The mine is in the remote mountains of northern Plumas County, approximately 3 air miles south of the community of Canyon Dam, in Section 9, Township 26N, Range 8E, MDB&M, as shown in Attachment A, which is incorporated herein, and a part of this Order by reference. The latitude and longitude of the facility is 40° 07' 29" North and 121° 05' 21" West.
3. The Seneca Mine has been in intermittent operation since the late 1970s. Mining claims patented in the late 1890s and early 1900s are common in the vicinity. The area to be mined encompasses 19 acres of the 60 acre property. Mining operations include the phased excavation of 19 acres of river gravels, much of which has been previously worked, as well as undisturbed bench gravel deposits adjacent to the North Fork Feather River which transects the property.
4. The 19-acre mining area was identified by the U.S. Department of Interior, Bureau of Land Management (BLM) during a mineral investigation of the property in 1997, 1999 and 2004. A mineral report was accepted by the BLM in April 2006, confirming the discovery of a valuable gold deposit on the claims. BLM issued a mineral patent for the site identified as CACA 30606. The parcel includes the following claims: Ken (20 acres), Millie (20 acres), and Grand Finale Lot 11 (9.96 acres) and Lot 12 (9.96 acres).

5. A maximum half-acre mining pit will migrate through the gravel deposits, with reclamation being performed concurrently. The operations will be set back from the North Fork Feather River by establishing a streamside management zone. Storm water runoff is to be routed around the active mining and processing area. Mine waste, including tailings, process water and contact water are to be retained in the active mining and processing area and will not be discharged to the river.
6. The active mining operations will proceed in 3 phases and are expected to last 12 years. Mining will be confined to one phase at a time, with gravels sorted adjacent to the mining pit and tailings placed directly back into the pit as it migrates northward. The mining process is shown in Attachment B, which is incorporated herein, and a part of this Order by reference, and is as follows: Existing vegetation will be removed, chipped and stockpiled. Topsoil will then be stripped and stockpiled near the excavation. Excavation of overburden and ore will be completed using bucket type excavator to a maximum depth of 60 feet bgs, but varying per phase (maximum depth for Phases 1 and 2 is 25 feet bgs). Ore bearing material will be transported by end loader to the adjacent portable gold recovery plant. The plant will use mechanical means and process water to separate heavy gold bearing minerals from the placer deposits. The heavy gold bearing minerals will be collected and the gold concentrated with additional water and jigs, sluices, and vibratory tables. No chemicals will be used in the mineral recovery system. The base of the mining pit may be dredged. The resulting tailings comprised of clays, silts, sands, and gravels, will be stockpiled for reclamation or immediately placed in the open mine pit from the previous phase for reclamation. The Operations Plan estimates that a total of 480,000 cubic yards of material will be excavated and returned to the mine over the life of the project.
7. The process water pond and settling pond will be a compartment of the migrating mining pit. Process water will be pumped to the mineral recovery circuit. After use, the process water will be returned to the sediment trap where the entrained solids will be settled out. Water will be recycled back into the system via the settling pond. A maximum volume of 24,000 gallons per day will be recycled through the mineral recovery circuit. Makeup water will be obtained as necessary from an existing reserve pond located immediately south of the property.
8. The site is periodically inaccessible during the winter due to snow. The mine plans to operate from spring to late fall as the weather and access allows, commonly from April through October. At the end of the operating season, excess water, if any, remaining in the process water pond will be land applied to the surrounding gravel deposits or forest to gain adequate capacity for the winter storm season.
9. Excepting a 40-foot buffer along the North Fork Feather River, the proposed mining area comprises approximately 19 acres of Quaternary river gravels and bench gravels derived from the North Fork Feather River. Much of the river gravel deposits within the claim group have been previously mined and support a ruderal grassland on tailings from previous mining operations. Riparian vegetation occurs adjacent to the North Fork Feather River. Westside mixed conifer forest occurs in undisturbed areas of the parcel. A streamside management zone will be established to prevent disturbance to

riparian vegetation within the setback from the river to maintain an effective shade canopy, maintain slope stability in the river channel, and prevent the creation of sediment sources near the river channel.

WASTE CHARACTERIZATION

10. California Code of Regulations, title 27, section 22480, classifies mining wastes based on an assessment of the potential risk of water quality degradation and states:

The [Central Valley Water Board] 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 [Central Valley Water Board] 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 [Central Valley Water Board] 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.

11. The gravel deposits, as represented by samples obtained in 2012, are classified as Group C mine waste. Metals analyses did not show any metals exceeding the hazardous waste concentrations. Arsenic was detected above the California Human Health Screening Levels and ranged in concentrations from 7.3 to 18 mg/kg which is consistent with ambient soil arsenic concentrations in Northern California. Acid Neutralization Potential to Acid Generation Potential (ANP:AGP) is >55. A ratio greater than 3 is considered a non-acid generating material. Due to the lack of acid generation potential, metals which may have the potential to leach from the waste were evaluated using the Title 22 Waste Extraction Test using deionized water as the extracting agent. No metals were detected above the corresponding MCL. Further, based on the permeability and high transmissivity of the river gravels, and the management of the migrating pit to limit hydraulic head and seepage to the river, waste constituents will be attenuated by at least a factor of 10 and are not expected to impact water quality in the river or adjacent shallow ground water.

12. Fuel storage at the site is proposed in above ground storage tanks located at least 100 feet away from surface water and in compliance with requirements for spill prevention, control and countermeasure set forth in CFR 40 Part 112. Alternatively,

fueling will be accomplished by truck bed mounted tank with a capacity of approximately 200 gallons which is exempt from regulation under the Aboveground Petroleum Storage Act. The Discharger reports that, apart from the mobile fuel storage, only minor quantities of lubricants are stored on-site.

13. There is no discharge of domestic wastes at the site. Workers are provided with portable toilets. Sanitary facilities, if proposed, shall be constructed and maintained in conformance with the requirements of the Plumas County Environmental Health Division, and be used only for domestic waste.

SURFACE WATER AND GROUND WATER CONDITIONS

14. The North Fork Feather River flows from Lake Almanor, approximately 3½ air miles upstream of the mine, and flows generally southwest through the Sierra Nevada, receiving the East Branch North Fork Feather River near Belden before flowing southeast into the northern arm of Lake Oroville.
15. Flow of the North Fork Feather River below Lake Almanor is controlled by Canyon Dam, an earth-filled dam constructed in 1910 and modified in 1927 and 1962. USGS stream station No. 1399500 is located on the North Fork immediately downstream from the dam, at latitude 40°10'06" and longitude 121°05'31". The USGS National Water Information System reports annual peak stream flows recorded at the station, which range from 38 to 2,160 cubic feet per second since 1985 and are typically below 1,000 cfs.
16. As presented in the ROWD, surface water samples were obtained from the North Fork Feather River near the upstream and downstream site boundaries and were analyzed for total and dissolved metals. Metals concentrations detected in the samples did not exceed the corresponding Primary Maximum Contaminant Level (MCL) values for drinking water. Total manganese concentrations (86 µg/L in both upstream and downstream samples) exceeded the Secondary MCL (50 µg/L; a taste and odor threshold) for manganese in drinking water. Because the upstream and downstream values are equal, the site does not appear to contribute to manganese in the river. No process water will be discharged from the site to the river; however, the screening discussed above was done to ensure there are not indirect impacts to water quality in the river from the site.
17. Groundwater levels within the mining area are expected to be similar to surface water levels in the North Fork Feather River, although surface water runoff and groundwater seepage from the river canyon slopes may also affect groundwater depth within the gravels. The river and bench gravels are highly permeable, and rapid seepage was encountered in two exploratory trenches at depths of five to six feet below ground surface (bgs). Because of the high transmissivity of the river gravel deposits, shallow groundwater in the deposits is expected to have similar characteristics to those of surface water, which will be monitored pursuant to the attached Monitoring and

Reporting Program. Storm water discharges from the site will be monitored under the General Industrial Storm Water Permit.

18. The mine is located on the North Fork Feather River downstream of Lake Almanor in Hydrologic Area 518.40. The North Fork Feather River is tributary to Lake Oroville.

Basin Plan, Beneficial Uses and Regulatory Considerations

19. The Central Valley Water Board adopted the *Water Quality Control Plan for the Sacramento River and the San Joaquin River Basins*, Fourth Edition, revised October 2011 (hereafter Basin Plan), which designates beneficial uses, establishes water quality objectives, and contains implementation plans and policies for protecting waters of the basin, including plans and policies adopted by the State Water Board and incorporated by reference into the Basin Plan. These Waste Discharge Requirements implement the Basin Plan pursuant to Water Code 13263(a) of the California Water Code.
20. The Basin Plan includes a water quality objective for chemical constituents that, at a minimum, requires waters designated as domestic or municipal supply to meet the MCLs specified in Title 22 of the California Code of Regulations. The Basin Plan's incorporation of these provisions by reference is prospective, and includes future changes to the incorporated provisions as the changes take effect. The Basin Plan recognizes that the Central Valley Water Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.
21. The Basin Plan establishes numerical and narrative water quality objectives for surface water and groundwater within the basin. Numerical water quality objectives are maximum limits directly applicable to the protection of designated beneficial uses of the water. The Basin Plan requires that the Central Valley Water Board, on a case-by-case basis, follow specified procedures to determine maximum numerical limitations that apply the narrative objectives when it adopts waste discharge requirements.
22. The narrative toxicity objective contained within the Basin Plan requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental, physiological responses in human, animal, plant, or aquatic life associated with designated beneficial uses.
23. The beneficial uses cited in the Basin Plan for North Fork Feather River are municipal and domestic supply; power generation; water contact recreation; non-contact water recreation; cold freshwater habitat; spawning, reproduction and/or early development of fish; and wildlife habitat.
24. The beneficial uses of underlying groundwater are municipal and domestic supply,

agricultural supply, industrial service supply, and industrial process supply.

25. The average annual precipitation at the site is approximately 41 inches as measured at the Quincy, Plumas County, California weather station based on data from the National Climate Data Center (NCDC).
26. Average annual evapotranspiration is approximately 54 inches based on the Reference Evapotranspiration Map prepared by the California Irrigation Management Information System (CIMIS).
27. State Water Resources Control Board Resolution No. 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereafter Resolution 68-16) prohibits degradation of groundwater unless it has been shown that:
 - a. The degradation is consistent with the maximum benefit to the people of the State;
 - b. The degradation will not unreasonably affect present and anticipated beneficial uses;
 - c. The degradation does not result in water quality less than that prescribed in state and regional policies, including violation of one or more water quality objectives; and
 - d. The discharger employs best practicable treatment and control (BPTC) to minimize degradation.
28. The Discharger conducted a simple anti-degradation analysis in the ROWD that evaluated the potential impacts of the discharge on groundwater quality. The size of the active mining area is limited to two acres, and the active mining pit is limited to one-half acre. The process water pond and mining pit will capture storm water and snowmelt from the active mining area; other surface water runoff will be routed around the active mining area. The aerial extent of the process water pond in relation to the groundwater basin is minuscule. Salt buildup in the process water pond and mine pit from evaporation or dissolution of mineral deposits will be limited, as the evaporation rate is relatively low due to the high elevation of the facility (4,000 ft) and its location at the bottom of a canyon limiting direct exposure to sunlight, the well washed gravel deposits do not contain reactive mineral deposits, the mine pit will be constantly backfilled as the mining activity moves over the site, and excess water in the process pond will be used for dust control at the end of the year to assure the pond has the required capacity to contain the storm water expected over the inactive winter period. Further, no chemical reagents will be used in the gold recovery process.
29. Based on the above, the infiltration of water from the mining operation has a low potential to degrade groundwater due to physical and chemical nature of the mineral deposit and seasonal operations. Therefore, the discharge is consistent with the Anti-degradation Policy and the Basin Plan. However to confirm the mining operations are not impacting ground water or the surface waters into which the ground water flows, monitoring of surface waters upstream and downstream of the facility is required.

30. Water Code section 13267 states, in relevant part, that

“In conducting an investigation ... the Regional Board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge 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. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.”

The reports required by Monitoring and Reporting Program R5-2015-0074 are necessary to assure compliance with these waste discharge requirements. The Discharger operates facilities that discharge wastes subject to this Order.

31. Federal Regulations for storm water discharges were promulgated by USEPA on November 16, 1990 (40 CFR Parts 122, 123, and 124) which require specific categories of facilities discharging storm water associated with industrial activity to obtain NPDES permits and to implement Best Available Technology Economically Achievable and Best Conventional Pollution Control Technology to reduce or eliminate industrial storm water pollution.

The State Water Resource Control Board (SWRCB) adopted Order No. 97-03-DWQ (General Permit No. CAS000001), on April 17, 1997, specifying waste discharge requirements for discharge of storm water associated with industrial activities, excluding construction activities, and requiring submittal of a Notice of Intent (NOI) by industries to be covered by the permit. The operator has submitted the NOI and is currently covered by the General Permit. The General Permit was renewed on 1 April 2014 and the renewed permit will be effective 1 July 2015.

32. Title 27 of the California Code of Regulations (hereafter Title 27) contains regulatory requirements for the treatment, storage, processing, and disposal of solid waste. However, Title 27 exempts certain activities from its provisions. Discharges regulated by this Order are exempt from Title 27 pursuant to provisions that exempt regulated wastewater discharges. Title 27, section 20090 states, in part:

“(b) Wastewater - Discharges of wastewater to land, including but not limited to evaporation ponds, percolation ponds, or subsurface leachfields if the following conditions are met:

(1) the applicable [Regional Board] has issued WDRs, reclamation requirements, or waived such issuance;

(2) the discharge is in compliance with the applicable water quality control plan; and

(3) the wastewater does not need to be managed according to Chapter 11, Division 4.5, Title 22 of this code as a hazardous waste.”

The discharge authorized herein is exempt from the requirements of Title 27 because the Central Valley Water Board is issuing these waste discharge requirements, the discharge complies with the Basin Plan, and the wastewater does not need to be managed as a hazardous waste.

33. Based on the limited volume of the discharge, the seasonal nature of the discharge, the use of excess process water at the end of the year for dust control or land application to the surrounding gravel deposits or forest to regain pond capacity for the winter/spring inactive period (100-year annual precipitation plus the 25-year, 24-hour storm event), the character of the waste (Group C mining waste), and the site-specific soil and groundwater conditions, the discharge has a low potential to degrade groundwater quality. Therefore, shallow groundwater monitoring is not necessary unless the discharge changes significantly or new information regarding the threat to groundwater quality becomes available. To confirm the mining operations do not have an adverse impact on ground water or surface waters in the area, monitoring of the process water and surface water upstream and downstream of the mining operation is required.

CEQA

34. To fulfill requirements imposed by the California Environmental Quality Act (“CEQA”)(Pub. Resources Code, § 21000 et seq.), Plumas County prepared and circulated an Initial Study and Mitigated Negative Declaration that contained an analysis of the potential for the planned expansion to result in significant environmental effects. The Board, acting as a responsible agency, was consulted during the development of these documents. On 18 July 2014, Plumas County certified the Initial Study and Mitigated Negative Declaration.

THREAT AND COMPLEXITY DETERMINATION

35. 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 of 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.”

36. Assurances of financial responsibility to cleanup foreseeable releases from this facility are required based on:

- a. The facility is inaccessible during the winter and early spring when rain-on-snow events and high surface water runoff are expected and surface water control structures are vulnerable to damage,
- b. The financial assets available to the property owners and the mine operator (a Limited Liability Company), to respond to large scale discharges of sediment or other pollutants into the pristine surface waters are unknown.

37. Pursuant to Water Code section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge

PUBLIC NOTICE

38. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated herein by reference, were considered in establishing the following conditions of discharge.

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

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

IT IS HEREBY ORDERED that Seneca Gold, LLC, Lorrie Preim and David Preim, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the Water Code and regulations adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of wastes, including earthen material and process water to surface waters or surface water drainage courses is prohibited.
2. The discharge of wastes and process water in a manner different than specified in Findings numbers 5 through 8 is prohibited.
3. The use of flocculating agents or other chemical additives in any part of the process is prohibited.
4. The discharge of waste classified as "designated" as defined in California Water Code 13173, in a manner that causes a violation of groundwater limitations is prohibited
5. The discharge or deposit of waste other than process water and settled solids to the mining pit and process water pond is prohibited.
6. The discharge of process water except to the process water pond and to land application as allowed for in Discharge Specifications No. 7 & 8 is prohibited.
7. The discharge of wash water or accumulated surface water to the process water pond when freeboard is less than two feet is prohibited, except if lesser freeboard does not threaten the integrity of the pond, no overflow of the pond occurs, and the lesser freeboard is due to direct precipitation or storm water runoff occurring as a result of annual precipitation with greater than a 100-year recurrence interval, or a storm event with an intensity greater than a 25-year, 24-hour storm event.
8. Discharge of hazardous wastes, as that term is defined in California Code of Regulations, Title 22, section 66261.1 et seq. is prohibited.
9. All areas not identified on the site plan as areas designated for extraction, stockpiles, processing equipment, structures, settling ponds, parking, roads, etc. shall be designated as non-disturbance areas. No vegetation removal, grading, stockpiles, equipment storage, building of structures, or other disturbance shall take place in the designated non-disturbance areas.
10. There shall be no side casting of any soil, overburden and/or rock, and no vegetation removal or other disturbance in non-disturbance areas.

B. Discharge Specifications

1. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the activity area.
2. All stockpiled products, wastes, and overburden materials shall be managed to

prevent erosion of sediment to surface water drainage courses.

3. Dams, levees, and other earthworks intended to hold or convey water shall be designed and constructed under the direct supervision of and certified by a California Registered Civil Engineer or Certified Engineering Geologist having expertise in the design of such earthworks.
4. The mining pit and associated settling pond shall be designed, constructed, operated and maintained to prevent inundation or washout due to floods with return period of 100 years.
5. Waste water treatment, storage and disposal shall not cause pollution or a nuisance as defined by California Water Code Section 13050.
6. The mining pit and associated settling pond shall have sufficient capacity to accommodate allowable process water flow and design seasonal precipitation and ancillary inflow to prevent inundation or washout during winter months and not encroaching into the required two feet freeboard. Design seasonal precipitation shall be based on total annual precipitation using a return period of 100 years, distributed monthly in accordance with historical rainfall patterns plus the 25-year, 24-hour storm event.
7. The discharger shall install and maintain a pond water and mine pit freeboard gauge so freeboard can be readily assessed.
8. Excess process water present the mining pit and associated settling pond at the end of the seasonal operations may be land applied to the surrounding forest at agronomic rates (Specific Conductivity not greater than 700 $\mu\text{mhos/cm}$) to gain capacity to meet the Discharge Specification 5.
9. The land application of excess process water shall not result in the discharge of water or the transport of sediment to surface water drainage courses. The excess water shall not be applied to barren slopes or bedrock, but to areas of sufficient permeability to absorb the discharge and not result in visible erosion or runoff.
10. On or about October 15 of each year, the Discharger shall provide documentation that the mining pit and settling pond have available storage capacity at least equal the volume necessary to comply with Discharge Specifications B.5. The documentation shall consist of a statement by a Licensed Civil Engineer attesting to the pond's capacity and bear the signature and the professional stamp of the Licensed Civil Engineer.
11. Within one month of the conclusion of annual mining operations, the Discharger shall submit a report describing what actions have been taken to stabilize earthen materials from erosion and transport into surface waters over the winter period and a

statement stating that all fuels, lubricants, petroleum products, and other materials deleterious to water quality have been removed from the site for the winter period.

12. Except for recycled process water and solids removed from the process water pond and used to backfill the mined excavation, the discharge shall remain within the process water pond and mining pit at all times.
13. Fines removed from the process water pond or settling ponds shall be stored or placed in a manner that prevents erosion and migration of the material.

C. Groundwater Limitations

1. The discharge, in combination with other sources, shall not cause underlying groundwater to contain waste constituents in concentrations statistically greater than background water quality.

D. Financial Assurances

1. The Discharger shall obtain and maintain assurances of financial responsibility for initiating and completing corrective action for all known and reasonable foreseeable releases from the mine in an amount approved by the Executive Officer, and shall submit the financial assurance mechanism to the Executive Officer for approval prior to commencing mining operations.

E. Provisions

1. **By 1 October 2015**, the Discharger shall submit a copy of its most recent Site Reclamation Plan if it differs from the June 2013 Surface Mining and Reclamation Plan. As the reclamation plans are updated or revised, the Discharger shall immediately forward such plans to this office.
2. The Discharger shall maintain continuous coverage under the Water Quality Order No. 97-03-DWQ, the *General Permit for Dischargers of Storm Water Associated with Industrial Activities*, or, if Order No. 97-03-DWQ is renewed, the most current version.
3. The Discharger shall comply with Monitoring and Reporting Program R5-2015-0074, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
4. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office. To assume operation under this Order, the succeeding owner or operator must apply in writing to the Executive Officer requesting transfer of

the Order. The request must contain the requesting entity's full legal name, the state of incorporation if a corporation, the name and address and telephone number of the persons responsible for contact with the Regional Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the proposed owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the California Water Code. Transfer shall be approved or disapproved by the Executive Officer.

5. The Discharger shall immediately notify the Central Valley Water Board by telephone whenever a violation of these WDRs or an adverse condition that may impair water quality occurs as a result of the extraction operations or the discharge; written confirmation shall follow within two (2) weeks.
6. The Discharger shall report promptly to the Central Valley Water Board any material change or proposed change in the character, location, or volume of the discharge. The Discharger shall obtain confirmation from the Central Valley Water Board that such proposed modifications are acceptable under the terms of these WDRs. Confirmation or new WDRs shall be obtained before any modifications are implemented. If the Executive Officer does not disapprove the proposed change within 60 days of receiving a written report describing the proposed change, the discharger may proceed in accordance with the proposed modifications. Possible changes under these WDRs include, but are not limited to, the need to expand the settling basins and/or the need to use flocculating agent in the settling ponds.
7. The requirements of all concerned governmental agencies having jurisdiction by law including, but not limited to, the issuance of appropriate permits shall be met.
8. A copy of all reports required by this Order shall be forwarded to Plumas County Planning and Building Services.
9. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Central Valley Water Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
10. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
11. The Central Valley Water Board will review this Order periodically and will revise requirements when necessary.
12. 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 Regulation, title 23, section 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of the 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/peitions/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 California Regional Water Quality Control Board, Central Valley Region, on 5 June 2015.

Original signed by

PAMELA C. CREEDON, Executive Officer

GRL

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2015-0074

WASTE DISCHARGE REQUIREMENTS
FOR
SENECA GOLD, LLC,
LORRIE PREIM AND DAVID PREIM
SENECA MINE
PLUMAS COUNTY

The Discharger shall not implement any changes to this Monitoring and Reporting Program (MRP) unless and until the Central Valley Water Board or Executive Officer issues a revised MRP.

The time, date, and location of each sample shall be recorded on the sample chain of custody form. Field test instruments (such as electrical conductivity) may be used provided that:

1. The operator is trained in the proper use and maintenance of the instrument;
2. The instruments are field calibrated prior to each use;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are submitted as described in the "Reporting" section of the MRP

PROCESS WATER AND MINE PIT WATER MONITORING

The Discharger's process water system used to wash the placer deposits and separate the gold and heavy minerals includes recycling water from the mining pit through the mineral recovery circuit after which the separated fine grained material and wash water flow through a dewatering area before the process water returns to the pit as shown on Attachment B. Staff gages for freeboard monitoring shall be established in both the process water pond and the mine pit. Samples of the process water shall be representative of the contents of the pond and shall be collected at the frequency and analyzed for the constituents listed below.

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>
Freeboard	Feet, 0.1 Feet	Weekly ¹
pH	pH units	June 1 ² , September 1,

Electrical Conductivity	µmhos/cm	November 1 ³ June 1 ² , September 1, November 1 ³
Arsenic (dissolved)	µg/l	June 1 ² , September 1, November 1 ³

¹ Sampling of freeboard shall be required only when the mine is operational from the spring to fall.

² Samples designated for June shall be obtained at the beginning of the operating season, regardless of the date mining operations begin.

³ Samples designated for November shall be obtained at the end of the operating season, regardless of the date mining operations cease.

SURFACE WATER MONITORING

Surface water monitoring stations shall be established on the North Fork Feather River within 100 feet downstream and 100 feet upstream of the property boundaries. Surface water samples shall be representative of the North Fork Feather River and shall be collected at the frequency and analyzed for the constituents listed below:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>
Turbidity	NTUs	Monthly ¹
pH	pH units	Monthly ¹
Electrical Conductivity	µmhos/cm	Monthly ¹
Arsenic (dissolved)	µg/l	Monthly ¹

¹ Sampling and analyses of surface waters is required only during the months the mine is operational from spring to fall.

REPORTING

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

Monitoring reports shall be submitted to the Central Valley Water Board on a quarterly bases. Monitoring reports shall be submitted by the **1st day of the**

second month following data collection. At a minimum, the reports shall include:

1. Results of the process water pond, mine pit, and surface water monitoring if required for that period.
2. A comparison of monitoring data to the discharge specification and an explanation of any violation of those requirements
3. Copies of laboratory analytical report(s)
4. A calibration log verifying calibration of all hand held monitoring instruments and devices used to comply with the prescribed monitoring program.
5. A scaled map showing relevant structures and features (including the migrating pit and processing equipment), and the locations of the surface water and process water sampling stations.

The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported to the Central Valley Water Board in the next regularly scheduled report.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of WDRs violation during the reporting period, and actions taken or planned for correcting each violation. The transmittal letter shall contain a statement by the Discharger, or the Discharger's authorized agent, under the penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete pursuant to Section B.3 of the Standard provisions and Reporting Requirements.

ANNUAL REPORT

At the end of annual operations, the Discharger shall submit a report describing what actions have been taken to stabilize the site against erosion and prevent the discharge of sediment, turbidity, and process water to surface waters.

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

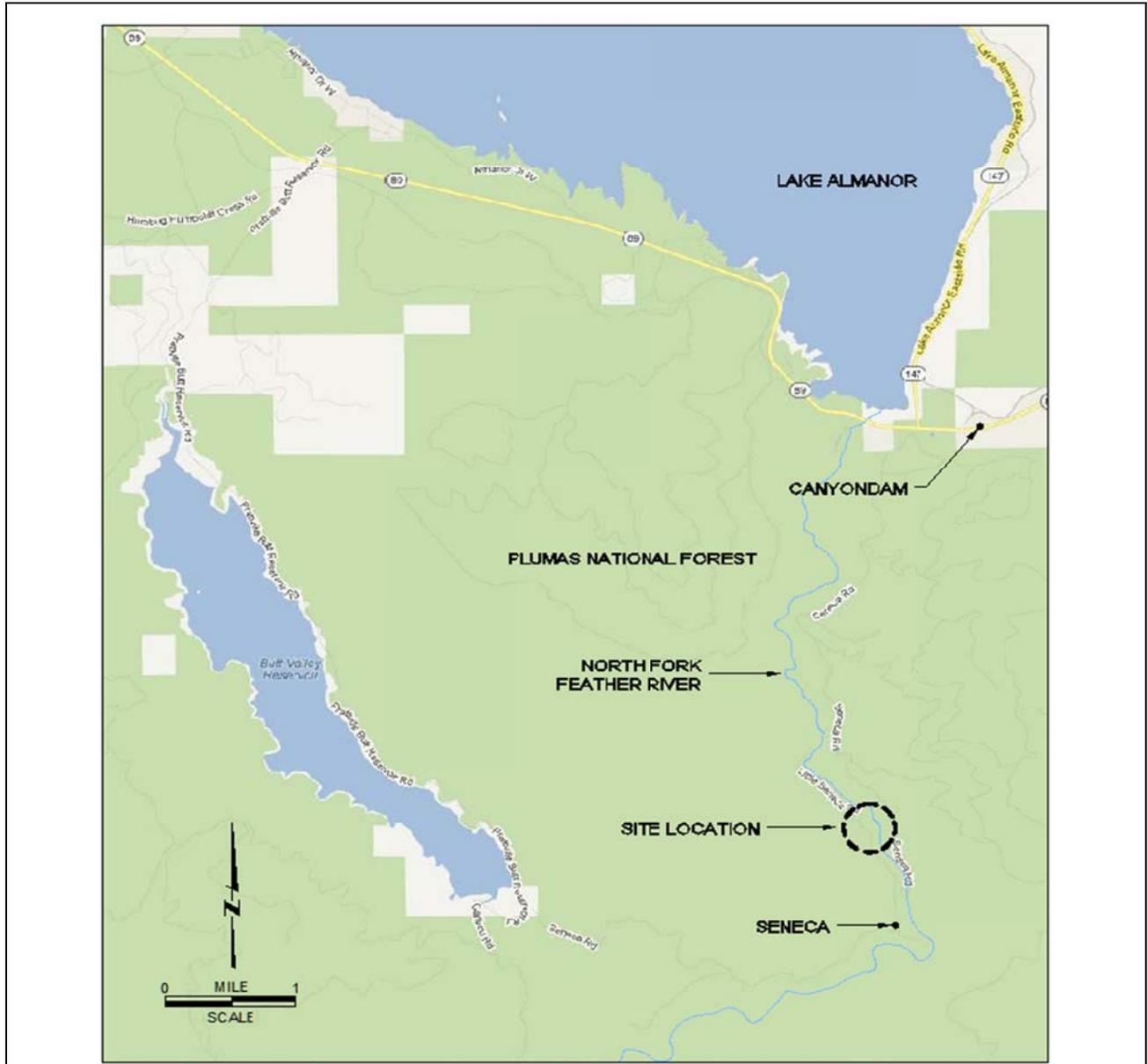
The Discharger shall implement the above monitoring program as of the date of this Order.

Original signed by

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

5 June 2015

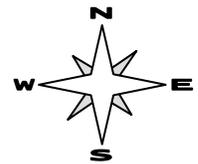
GRL

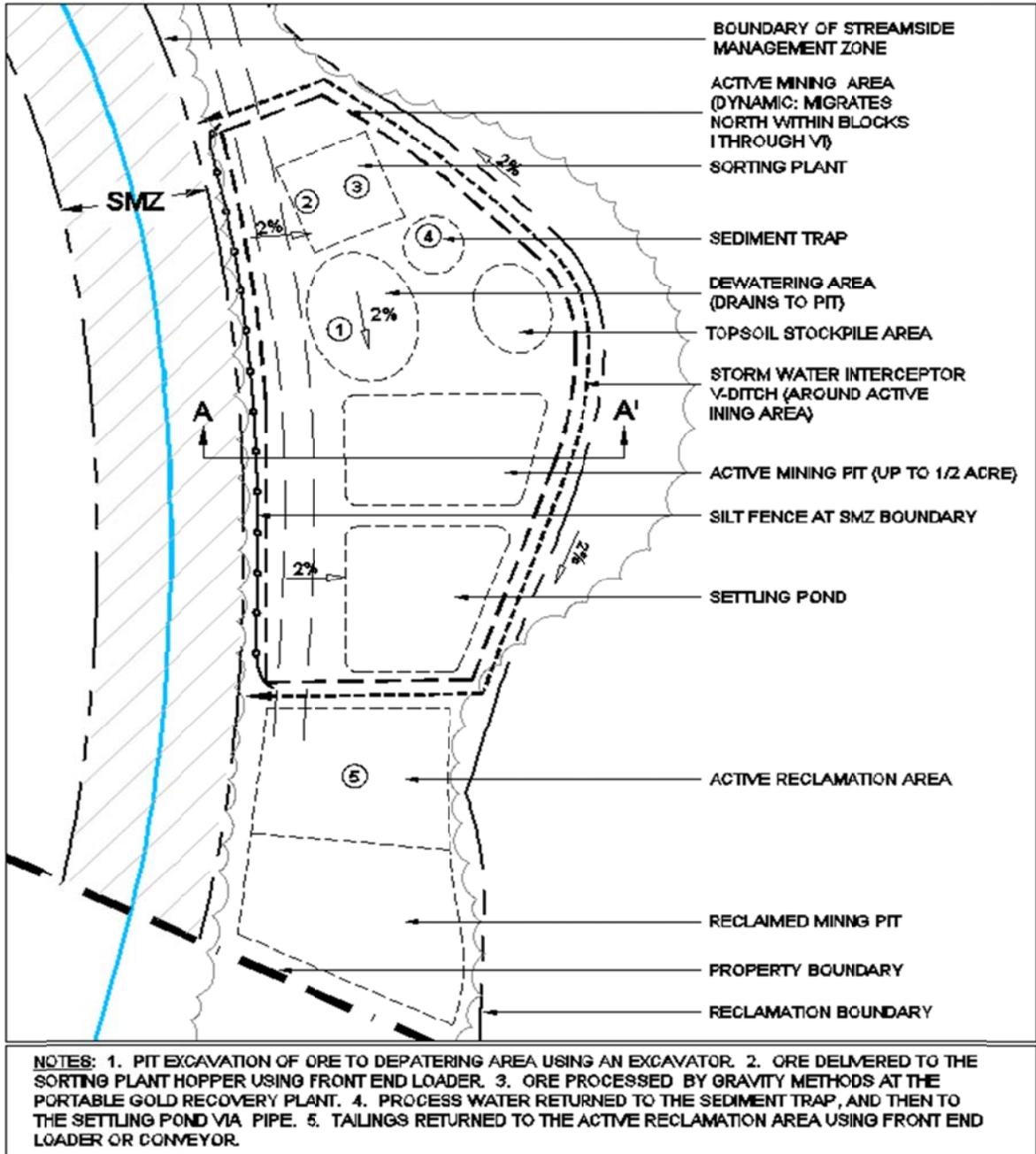


SITE LOCATION MAP

Seneca Gold, LLC,
Lorrie Preim And
David Preim
SENECA MINE

Plumas County





SCHEMATIC OF MINING PROCESS

Seneca Gold, LLC
 Lorrie Preim And
 David Preim
 SENECA MINE
 Plumas County

INFORMATION SHEET

WASTE DISCHARGE REQUIREMENTS ORDER R5-2015-0074
SENECA GOLD, LLC, LORRIE PREIM AND DAVID PREIM
SENECA MINE
PLUMAS COUNTY

Seneca Gold, LLC, Lorrie Preim and David Preim propose to re-open the Seneca Mine, an existing but abandoned placer gold mine in the remote mountains of northern Plumas County. The mine itself is on 30 acres of the 60 acre property. Mining operations include the phased excavation of 19 acres of river gravels, much of which has been previously worked, as well as undisturbed bench gravel deposits. Concurrent reclamation will proceed as the phased mining progresses. The mining pit will be backfilled, regraded and replanted as the pit migrates through the gravel deposits. Operations are set back from the North Fork Feather River to preserve riparian vegetation and protect water quality. Seneca Gold, LLC will operate the mine. The real property is owned by Lorrie Preim and David Preim.

The mining operation is separated into 3 phases and is expected to last 12 years. Mining will be confined to annual increments of two acres at a time, and the mining pit will be limited to one-half acre in size. Tailings will be used to backfill the southern portion of the pit as the pit is excavated northward. Excavation will be by bucket type excavator to a maximum depth of 25 feet bgs in Phase 1 and Phase 2, and to a maximum depth of 60 feet in Phase 3. Ore bearing material will be transported by end loader or conveyor to an adjacent portable gold recovery plant. The plant will use mechanical means and process water to separate heavy gold bearing minerals from the placer deposits. The heavy gold bearing minerals will be collected and further processed and the gold concentrated with additional water and jigs, sluices, and vibratory tables. No chemicals will be used in the mineral recovery system. The resulting tailings comprised of clays, silts, sands, and gravels, are stockpiled for reclamation or immediately placed in open mine pit for reclamation. The Operations Plan estimates that a total of 480,000 cubic yards of material will be excavated and returned to the mine over the life of the project.

Up to 24,000 gallons of water will be recycled through the gold recovery process to separate the clay, silt, sand, and gravel from the gold bearing minerals. The water and tailings, classified as a Group C mining waste, will be contained in a maximum one-half acre mining pit and settling pond with no discharge to surface waters. The source of the process water will be storm water, or will be pumped from a reserve pond. No water is to be diverted from the river. The pond is sized to hold the precipitation expected from the 100-year annual precipitation plus the 25-year, 24 hour storm event without overtopping.

The site is periodically inaccessible during the winter due to snow. The mine plans to operate from spring to late fall as the weather and access allows, commonly from April

through October. Excess water in the process water pond and mining pit remaining at the end of the annual operation period will be land applied to the surrounding gravel deposits below the agronomic rates for Specific Conductivity to gain pond capacity for the upcoming winter storm season.

Surface water drainage is to the North Fork Feather River and then to Lake Oroville. Storm water is to be routed around the active mining area, and no storm water discharge from the active mining area is proposed.

The process water pond will be monitored regularly for freeboard, electrical conductivity, and arsenic to assure compliance with pond freeboard requirements and evaluate the salinity of the pond.

The mine will also be regulated by the General Industrial Storm Water Permit and by a Special Use permit issued by Plumas County.

GRL