

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER __

WASTE DISCHARGE REQUIREMENTS

FOR
DAVID KUBICH
IOWA HILL GRAVEL OPERATION
PLACER COUNTY

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

1. On 9 October 2012, David Kubich (hereafter "Discharger") submitted a Report of Waste Discharge (RWD) that describes an existing surface gravel mine operation (the "Facility").
2. The Discharger owns and operates the Facility and is responsible for compliance with these Waste Discharge Requirements (WDRs).
3. The Facility does not have a street address but is east of Colfax and about one mile southwest of Big Dipper Road (Sections 4, 5, and 6, T14N, R10E MDB&M, and Section 33, T15N, R10E MDB&M) as shown on Attachment A, which is attached hereto and made part of this Order by reference. The Facility occupies Assessor's Parcel Numbers (APN) 064-050-003 and 064-210-015.

Facility and Discharge

4. The Facility is located within the Indian Creek canyon and operates to mine aggregate alluvial gravel deposits in the canyon base. The Facility consists of a sorting plant and seven ponds. A site plan of the Facility is provided on Attachment B, which is attached hereto and made part of this Order by reference.
5. Excavated gravels are transported by a loader or truck to the sorting plant, which consists of a trommel and sluice. Process wastewater is generated from washing and sorting the excavated gravel. The Discharger states that approximately 100 cubic yards of material is excavated each week during operation. Of the excavated material, approximately 75 percent is collected gravel and 25 percent is tailings (sand and fines). The Facility operates year round during dry periods.
6. Source water for washing and sorting is obtained from groundwater that seeps from the canyon side. Typically, the seeping groundwater is directed to a storm water diversion ditch and pumped to the settling ponds as needed. The Discharger has not characterized the source water.

7. Washed and sorted gravel is collected and stockpiled adjacent to the sorting plant. The stockpile is allowed to dry and the runoff drains to Pond 2. The gravel is used to surface service roads at the site for timber harvest operations.
8. Wash water containing sand and fines from the gravel mining operation is settled in a series of 6 unlined ponds, which are constructed below grade and located downstream of the sorting plant. Pond 1 receives wash water from the sorting plant. Outflow from Pond 1 travels to Pond 2 through Pond 6 in series, to settle sand and fines. Water from Pond 5 or 6 is recycled back to the sorting plant. Pond 7 acts as an emergency pond and reserve water storage to replenish the water level in Pond 6 after loss by evaporation and infiltration. Water from the settling ponds is occasionally used on the timber harvest service roads for dust control. No wash water is discharged to the creek.
9. The Discharger will deepen Ponds 1 through 5 to increase capacity required for accommodating the 100-year return period total annual precipitation event. The following table summarizes the function and size of each pond.

Pond Name	Purpose	Current Depth (feet)	Planned Depth (feet)	Area (square feet)
Pond 1	Sorting Plant Outfall	6	12	450
Pond 2	Settling (sand)	6	10	840
Pond 3	Settling	6	10	760
Pond 4	Settling	6	8	2,200
Pond 5	Settling	6	12	7,200
Pond 6	Settling, Recycling	11	13	6,400
Pond 7	Emergency, Water Reserve	10	10	1,200

10. The ponds are periodically dredged to remove accumulated sand and fines, which are dewatered in a shallow pit called the Sediment Trap. After dewatering the tailings are transported by truck and used to backfill the active excavation area. Water from the Sediment Trap primarily evaporates or infiltrates, but is also able to drain to Pond 2. The Discharger estimates that the ponds have a percolation rate of approximately 0.012 feet per day.
11. On 3 July 2012, samples of sediment from Pond 1, water from Pond 6 (the pond closest to Indian Creek), and water from Indian Creek upstream and downstream of the facility were obtained for analytical testing. Based on the site elevation, local geology and the fact that the creek contains water during the summer, the high quality water in the creek is likely representative of shallow groundwater quality. The following table summarizes the results.

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Constituent	Units	Pond 1 (sediment) ¹	Wash Water Pond 6	Surface Water Upstream ²	Surface Water Downstream ²	Potential Water Quality Objective
pH	standard	—	6.8	6.8	6.8	6.5 - 8.5 ⁴
Specific conductance	µmhos/ cm	—	120	90	91	900 - 2,200 ⁴
Total dissolved solids	mg/L	—	90	68	62	—
Total suspended solids	mg/L	—	6	<5	<5	—
Total Alkalinity	mg/L	—	57	29	30	—
Hardness	mg/L	—	51	34	35	—
Bicarbonate	mg/L	—	57	29	30	—
Carbonate	mg/L	—	<1	<1	<1	—
Calcium	mg/L	—	11	7.7	7.7	—
Chloride	mg/L	—	1.8	1.2	1.2	250 - 600 ⁴
Magnesium	mg/L	—	5.9	3.7	3.8	—
Nitrate as N	mg/L	—	<1	<1	<1	10 ³
Potassium	mg/L	—	0.61	0.55	0.59	—
Sodium	mg/L	—	4.1	2.7	2.7	69 ⁵
Sulfate	mg/L	—	5.2	12	12	250 - 600 ⁴
Aluminum	µg/L	4,600	50*	23*	29*	200 ⁴
Antimony	µg/L	<2.9	<1.1	<1.1	<1.1	6 ⁴
Arsenic	µg/L	2.2*	<1.3	<1.1	<1.3	10 ³
Barium	µg/L	29	22	22	22	1,000 ³
Cadmium	µg/L	<0.38	<0.48	<0.48	<0.48	5 ³
Chromium	µg/L	7.1	<0.63	<0.63	<0.63	50 ³
Cobalt	µg/L	1.3	<0.78	<0.78	<0.78	—
Copper	µg/L	8.7	<1.6	<1.6	<1.6	1,000 ⁴
Iron	µg/L	3,600	53*	<17	<17	300 ⁴
Lead	µg/L	4.0*	<1.6	<1.6	<1.6	15 ³
Manganese	µg/L	32	8.6	1.4*	6.2	50 ⁴
Mercury	µg/L	0.08*	<0.02	<0.02	<0.02	2 ³
Nickel	µg/L	6.4	1.4*	1.8*	1.9*	100 ³
Silver	µg/L	<1.1	<1.3	<1.3	<1.3	100 ⁴
Thallium	µg/L	<1.6	<1.6	<1.6	<1.6	2 ³
Vanadium	µg/L	11	0.83*	<0.71	<0.71	--

Constituent	Units	Pond 1 (sediment) ¹	Wash Water Pond 6	Surface Water Upstream ²	Surface Water Downstream ²	Potential Water Quality Objective
Zinc	µg/L	8.6*	<2.3	<2.3	<2.3	5,000 ⁴

¹ Soluble metals extracted from sediment using the Title 22 Waste Extraction Test with deionized water (DI-WET).

² Indian Creek water quality from upstream and downstream of the Facility.

³ Primary Maximum Contaminant Level

⁴ Secondary Maximum Contaminant Level

⁵ Lowest agriculture water quality goal

* Estimated values that are less than the laboratory reporting limit and greater than the maximum detection limit.

These data indicate that constituent concentrations in Pond 6 are similar to Indian Creek upgradient of the ponds and do not exceed potential water quality objectives. Because Indian Creek is a gaining stream, based on site topography and groundwater seeping from the canyon side, it is likely representative of groundwater quality during summer months. The elevated constituent concentrations in Pond 6 can be attributed to evapoconcentration, which is typical for a gravel mining operation.

Sediment samples from Pond 1 show high concentrations of soluble aluminum and iron. However, these elevated concentrations are not evident in the wash water of Pond 6.

12. Storm water flows onto the site from the northern slopes of Indian Creek Canyon and an ephemeral drainage course. Based on the maps provided in the Discharger's 17 July 2012 grading plan and drainage study report, the site has been graded to prevent storm water from entering the gravel mining operational area. Additionally, a storm water diversion ditch has been engineered to divert inflowing storm water from the northern canyon slopes and ephemeral drainage course around the Facility and directly to Indian Creek. The Placer County Department of Engineering and Surveying reviewed the report and issued a grading permit (DGPT5060) for the gravel mining operation on 24 August 2012.
13. Because the Facility reuses the wash water and only draws new source water as needed to maintain the operating level, requiring a minimum freeboard of one foot on all ponds will be sufficient to prevent an overflow, and flow limitations are not necessary. The water balance shows that a storage volume of 4.28 acre-feet is required to contain the 100-year return period total annual precipitation event. Once the ponds are deepened, the storage volume of 4.38 acre-feet will be available with one foot of freeboard. Because the ponds are entirely below grade, one foot of freeboard is sufficient to prevent spills.
14. Ponds 1 through 6 are hydraulically connected by gravity flow to prevent overflow and maintain adequate freeboard. During emergency conditions water can also be pumped into reserve Pond 7.

Site-Specific Conditions

15. The Facility is located adjacent to Indian Creek at the base of a canyon. The creek flows in the southwest direction and has a gradient of approximately 3.5 percent. Side slopes of Indian Creek Canyon typically have an overall gradient of 2 to 1 (horizontal to vertical) and can be as steep as 1 to 1 at some parts. The site is relatively level at an elevation of approximately 2,200 feet above mean sea level (MSL).
16. The native soil underlying the Facility consists of approximately three feet of well-drained gravelly loam weathered in residuum from metasedimentary rock, which consists primarily of Mariposa-Rock outcrop complex and Maymen-Rock outcrop complex. The base of the canyon contains approximately ten feet of alluvial gravel deposits, which are described as sandy, subrounded to rounded gravel up to twelve inches in diameter with variable fines content.
17. The average annual precipitation is estimated to be 46.9 inches per year and the 100-year return annual total is 85.7 inches. The normal-year evapotranspiration is estimated to be 54.3 inches and the pan evaporation is estimated to be 67.9 inches.
18. The Facility is located in an area where the Federal Emergency Management Agency (FEMA) Map Service Center has not yet conducted a flood hazard analysis. Therefore, it is not possible to determine if the Facility is within the 100-year flood plain.
19. Surrounding land primarily consists of forest and the nearest residence is approximately 800 feet southwest from the Facility and 425 feet higher in elevation.

Groundwater Conditions

20. The Discharger has not completed a site-specific groundwater evaluation to determine background groundwater quality and potential impacts from the discharge. The Discharger states that groundwater is expected to be encountered in fractured bedrock and the depth to shallow groundwater is expected to be within ten feet of the ground surface during the rainy season. Based on the site elevation, local geology and the fact that the creek contains water during the summer, the high quality water in the creek is likely representative of shallow groundwater quality.

Basin Plan, Beneficial Uses, and Regulatory Considerations

21. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins*, Fourth Edition (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Water Board. Pursuant to Water Code section 13263(a), waste discharge requirements must implement the Basin Plan.

22. Local drainage is to Indian Creek, which flows into the North Fork American River. The beneficial uses of the North Fork American River, as stated in the Basin Plan, are municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; wildlife habitat; and spawning, reproduction, and/or early development.
23. The beneficial uses of underlying groundwater as set forth in the Basin Plan are municipal and domestic supply, agricultural supply, industrial service supply and industrial process supply.
24. The Basin Plan establishes narrative water quality objectives for chemical constituents, tastes and odors, and toxicity in groundwater. It also sets forth a numeric objective for total coliform organisms.
25. The Basin Plan's numeric water quality objective for bacteria requires that the most probable number (MPN) of coliform organisms over any seven-day period shall be less than 2.2 per 100 mL in MUN groundwater.
26. The Basin Plan's narrative water quality objectives for chemical constituents, at a minimum, require waters designated as domestic or municipal supply to meet the MCLs specified in Title 22 of the California Code of Regulations (hereafter Title 22). 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.
27. The narrative toxicity objective 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.
28. Quantifying a narrative water quality objective requires a site-specific evaluation of those constituents that have the potential to impact water quality and beneficial uses. The Basin Plan states that when compliance with a narrative objective is required to protect specific beneficial uses, the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in order to implement the narrative objective.
29. In the absence of specific numerical water quality limits, the Basin Plan methodology is to consider any relevant published criteria. General salt tolerance guidelines, such as *Water Quality for Agriculture* by Ayers and Westcot and similar references indicate that yield reductions in nearly all crops are not evident when irrigation water has an EC less than 700 $\mu\text{mhos/cm}$. There is, however, an eight- to ten-fold range in salt tolerance for agricultural crops and the appropriate salinity values to protect agriculture in the Central Valley are considered on a case-by-case basis. It is possible to achieve full yield potential with waters having EC up to 3,000 $\mu\text{mhos/cm}$ if the proper leaching fraction is provided to maintain soil salinity within the tolerance of the crop.

Antidegradation Analysis

30. State Water Resources Control Board Resolution 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 future 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 or control (BPTC) to minimize degradation.
31. Degradation of groundwater by some of the typical waste constituents associated with discharges from an aggregate mine, after effective source control, treatment, and control measures are implemented is consistent with the maximum benefit to the people of the state. The Facility is family operated and supports the Discharger's timber harvesting operation, which in turn helps support the lumber industry. The economic prosperity of valley communities and associated industry is of maximum benefit to the people of the State, and provides sufficient justification for allowing the limited groundwater degradation that may occur pursuant to this Order.
32. The materials used by the Facility are natural earth materials subjected to a washing and separation process using recycled wash water and onsite groundwater. The Discharger does not add any chemicals to the process operation. Because the Discharger recycles wash water, which is discharged to the unlined settling ponds, there is a potential for evapoconcentration of naturally occurring dissolved minerals and salts, and percolation from the settling ponds may cause limited degradation of groundwater quality.
33. Based on data included in the RWD, the constituents of concern that have the potential to degrade groundwater are aluminum and iron, which were found in high concentrations in the deionized water extract from sediment of Pond 1. Because the discharger does not add any chemicals to the water, these metals are naturally occurring. As indicated by the water quality data from Pond 6, the concentrations of aluminum and iron in solution are significantly less than that solubilized from the sediment of Pond 1. This suggests that any solubilized aluminum or iron during the washing and sorting operation are readily reabsorbed to the sediment or diluted with addition of fresh water from the seeps and precipitation that falls onto the ponds.

34. The Discharger evaluated whether infiltration from Pond 6 would impact Indian Creek water quality. The Discharger made a conservative analysis by assuming wastewater quality did not change from what was sampled in Pond 6 and utilized dry season flow rates for Indian Creek. The Discharger did not find any potential for Indian Creek water quality degradation associated with the sampled constituents identified in Finding 10.

Additionally, based on site topography and the fact that groundwater seeps from the canyon side, it is reasonable to conclude that Indian Creek primarily contains groundwater during the summer months. Therefore, the upstream surface water samples from Indian Creek are representative of groundwater at the site and the data from wash water in Pond 6 do not show a significant threat to groundwater quality.

35. This Order establishes effluent and groundwater limitations for the Facility that will not unreasonably threaten present and anticipated beneficial uses or result in groundwater quality that exceeds water quality objectives set forth in the Basin Plan.

For aluminum and iron, the nature of the waste and site-specific conditions indicate that the discharge may cause some limited degradation, but will not cause exceedance of a water quality objective. Naturally occurring salts and minerals may cause very limited degradation due to evapoconcentration. Therefore, groundwater monitoring is not required at this time.

The Board finds that there are no economically feasible treatment or control measures, and none are typically employed by similarly-situated dischargers. This Order establishes operational requirements, limitations, and prohibitions that will ensure that the discharge will not unreasonably affect present and anticipated beneficial uses of groundwater or result in groundwater quality less than that prescribed in state and regional policies and requires that the Discharger conduct monitoring to verify that dissolved aluminum and iron from wash water fines will not cause exceedance of a water quality objective. The limited degradation authorized by this Order is consistent with the maximum benefit of the people of the state, as explained in Finding 30. Therefore, the degradation authorized by this Order is consistent with the Antidegradation Policy.

Other Regulatory Considerations

36. In compliance with Water Code section 106.3, it is the policy of the State of California that every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes. This order promotes that policy by requiring discharges to meet maximum contaminant levels designed to protect human health and ensure that water is safe for domestic use.
37. Based on the threat and complexity of the discharge, the facility is determined to be classified as 3C as defined below:

- a. Category 3 threat to water quality: "Those discharges of waste that could degrade water quality without violating water quality objectives, or could cause a minor impairment of designated beneficial uses as compared with Category 1 and Category 2."
- 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."

38. 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 domestic sewage, wastewater, and reuse. Title 27, section 20090 states in part:

The following activities shall be exempt from the SWRCB-promulgated provisions of this subdivision, so long as the activity meets, and continues to meet, all preconditions listed:

(...) (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 RWQCB 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. (...)

39. The discharge authorized herein, and the treatment and storage facilities associated with the discharge, are exempt from the requirements of Title 27 as follows:
- a. Discharges to Ponds 1 through Pond 7 and the Sediment Trap are exempt pursuant to Title 27, section 20090(b) because they are discharge of wastewater to land and:
 - i. The Central Valley Water Board is issuing WDRs.
 - ii. The discharge is in compliance with the Basin Plan, and;
 - iii. The treated effluent discharged to the ponds does not need to be managed as hazardous waste.

40. Although the discharge is exempt from Title 27, the statistical data analysis methods of Title 27, section 20415(e) are appropriate for determining whether the discharge complies with Groundwater Limitations specified in this Order.
41. The State Water Board adopted Order 97-03-DWQ (NPDES General Permit CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers. The Discharger submitted a Notice of Non-Applicability dated 8 October 2012 and states that storm water is retained on site.
42. Water Code section 13267(b) states:
 - 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 proposes to discharge within its region ... shall furnish, under penalty of perjury, technical or monitoring program reports which the board requires. The burden, including costs of these reports, shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. 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 technical reports required by this Order and the attached Monitoring and Reporting Program ___ are necessary to ensure compliance with these waste discharge requirements. The Discharger owns and operates the facility that discharges the waste subject to this Order.

43. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells (hereafter DWR Well Standards), as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981). These standards, and any more stringent standards adopted by the state or county pursuant to Water Code section 13801, apply to all monitoring wells used to monitor the impacts of wastewater storage or disposal governed by this Order.
44. The following outlines the California Environmental Quality Act (Pub. Resources Code, § 21000 et seq.) ("CEQA") history for the operations at the site:
 - a. In May 1980, Placer County filed a Notice of Determination after certifying a Mitigated Negative Declaration for a gold mining and gravel and sand washing operation operated by Seneca Gold Mining Company and owned by Armin Speckert. The Central Valley Water Board commented on the draft Negative Declaration as a responsible agency. The California Department of Fish and Game (now California Department of Fish and Wildlife) recommended mitigation measures to prevent impacts to Indian Creek.

- b. In January 2005, Placer County filed a Notice of Determination after certifying a Mitigated Negative Declaration for the rezoning of the property from “residential forest combining mineral reserve” to “timberland production” for David Kubich, who had purchased the site. No comments were received on the project.
 - c. In 2010, Placer County filed a Notice of Exemption after determining that the resumption of gravel mining operations was categorically exempt from CEQA under Categorical Exemption Class 2, “replacement or reconstruction of existing structures or facilities on the same site having substantially the same purpose and capacity.” (Cal. Code Regs., tit. 14, § 15302.) The Discharger states that the gravel mining operation was started to comply with the county’s requirements to use gravel rather than straw on the timber harvest service roads.
 - d. In June 2012, Placer County issued a ministerial grading permit for “grading activity and gravel processing solely for stabilization and erosion control of on-site roads necessary for permitted logging operations”.
45. The action of prescribing these WDRs, which impose regulatory requirements on the existing discharge in order to ensure the protection of groundwater resources, is exempt from the provisions of the 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.
46. Compliance with this Order will mitigate or avoid significant impacts to water quality.
47. 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

48. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.
49. The Discharger and interested agencies and persons have been notified of the Central Valley Water Board’s intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity to submit written comments and an opportunity for a public hearing.
50. All comments pertaining to the discharge were heard and considered in a public hearing.

IT IS HEREBY ORDERED that pursuant to Water Code sections 13263 and 13267, David Kubich, his agents, successors, and assigns, in order to meet the provisions contained in

Division 7 of the Water Code and regulations adopted hereunder, shall comply with the following:

A. Discharge Prohibitions

1. Discharge of wastes, including aggregate wash water and separated solids to surface waters or surface water drainage courses is prohibited.
2. Discharge of hazardous wastes, as that term is defined in California Code of Regulations, title 22, section 66261.1 *et seq.*, is prohibited.
3. Discharge of waste classified as 'designated', as defined in Water Code section 13173, in a manner that causes violation of groundwater limitations, is prohibited.
4. Bypass around, or overflow from, the settling/recycling ponds is prohibited.
5. Discharge of waste at a location or in a manner different from that described in the Findings is prohibited.
6. Discharge of toxic substances into the sorting and washing plant or the settling ponds is prohibited.
7. Discharge of domestic wastewater to the settling ponds is prohibited.
8. Use of chemical gold recovery methods including amalgamation, cyanide leaching, or any other chemical method is prohibited. Gold recovery using gravimetric methods is permissible.
9. Discharge of any industrial waste (including aggregate wastewater, assay wastes, laboratory wastes, and vehicle maintenance wastes) to the septic system is prohibited.
10. Discharge or deposit of waste at this site from sources other than from the aggregate operations is prohibited.

B. Discharge Specifications

1. No waste constituent shall be released, discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations of this Order.
2. The discharge shall not cause degradation of any water supply.
3. Wastewater treatment, storage, and disposal shall not cause pollution or a nuisance as defined by Water Code section 13050.

4. The discharge shall remain within the permitted waste treatment/containment structures at all times.
5. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
6. All conveyance, treatment, storage, and disposal systems shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
7. The Discharger shall operate and maintain all ponds sufficiently to protect the integrity of containment dams and berms and prevent overtopping and/or structural failure. Unless a California-registered civil engineer certifies (based on design, construction, and conditions of operation and maintenance) that less freeboard is adequate, the operating freeboard in any pond shall never be less than one foot (measured vertically from the lowest possible point of overflow). As a means of management and to discern compliance with this requirement, the Discharger shall install and maintain in each pond a permanent staff gauge with calibration marks that clearly show the water level at design capacity and enable determination of available operational freeboard.
8. Wastewater treatment, storage, and disposal ponds or structures shall have sufficient capacity to accommodate allowable wastewater flow, design seasonal precipitation, and ancillary inflow and infiltration during the winter while ensuring continuous compliance with all requirements of this Order. 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.
9. On or about **1 October** of each year, available capacity shall at least equal the volume necessary to comply with Discharge Specifications B.7 and B.8.
10. All ponds and open containment structures shall be managed to prevent breeding of mosquitoes. Specifically:
 - a. An erosion control program shall be implemented to ensure that small coves and irregularities are not created around the perimeter of the water surface.
 - b. Weeds shall be minimized through control of water depth, harvesting, or herbicides.
 - c. Dead algae, vegetation, and debris shall not accumulate on the water surface.
 - d. The Discharger shall consult and coordinate with the local Mosquito Abatement District to minimize the potential for mosquito breeding as needed to supplement the above measures.

11. Newly constructed or rehabilitated berms or levees (excluding internal berms that separate ponds or control the flow of water within a pond) shall be designed and constructed under the supervision of a California Registered Civil Engineer.
12. Wastewater contained in any unlined pond shall not have a pH less than 6.0 or greater than 8.4.
13. Additional settling ponds and fines deposition areas may be constructed as needed within the confines of the facility site as defined on Attachment B, and as allowed by Placer County.
14. All stockpiled products shall be managed to prevent erosion that causes discharge of sediment to surface water drainage courses.
15. Any waste derived from non-gravimetric gold recovery or quantification operations (such as laboratory assay) shall be contained and disposed of off-site at an appropriate facility.
16. Process wash water used for on-site dust control or landscape irrigation shall be used in a manner that will not cause discharge of eroded sediment in storm water runoff to areas not controlled by the Discharger.

C. Groundwater Limitations

Effective immediately, the discharge, in combination with other sources, shall not cause underlying groundwater to:

1. Exhibit a pH of less than 6.5 or greater than 8.4 pH units.
2. For constituents identified in Title 22, contain constituents in concentrations that exceed either the Primary or Secondary MCLs established therein.
3. Contain taste or odor-producing constituents, toxic substances, or any other constituents in concentrations that cause nuisance or adversely affect beneficial uses.

D. Provisions

1. The following reports shall be submitted pursuant to Water Code section 13267 and shall be prepared as described in Provision H.5:
 - a. By **1 October 2013**, the Discharger shall submit a letter that certifies staff gauges are in place for each pond.
 - b. By **1 September 2014**, the Discharger shall submit a *Storage Capacity Improvements Completion Report* that documents and certifies completion of pond improvements as described in Finding 8 to ensure compliance with

Discharge Specification B.8. The report shall include scaled as-built plans and typical sections/details that illustrate the final geometry of the settling ponds and a water balance that demonstrates that the capacity of the pond system meets the requirements of this Order.

2. If the wastewater or water supply monitoring results show that the discharge of waste causes groundwater to contain any waste constituents in concentrations statistically greater than the Groundwater Limitations of this Order, within 120 days of the request of the Executive Officer, the Discharger shall submit a Best Practicable Treatment and Control (BPTC) Evaluation Workplan that sets forth the scope and schedule for a systematic and comprehensive technical evaluation of each component of the facility's waste treatment and disposal system to determine best practicable treatment and control for each waste constituent that exceeds a Groundwater Limitation. The workplan shall contain a preliminary evaluation of each component of the facility and effluent disposal system and propose a time schedule for completing the comprehensive technical evaluation. The schedule to complete the evaluation shall be as short as practicable, and shall not exceed one year.
3. A discharger whose waste flow has been increasing, or is projected to increase, shall estimate when flows will reach hydraulic and treatment capacities of its treatment, collection, and disposal facilities. The projections shall be made in January, based on the last three years' average dry weather flows, peak wet weather flows and total annual flows, as appropriate. When any projection shows that capacity of any part of the facilities may be exceeded in four years, the discharger shall notify the Central Valley Water Board by **31 January**.
4. In accordance with California Business and Professions Code sections 6735, 7835, and 7835.1, engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. All technical reports specified herein that contain workplans for investigations and studies, that describe the conduct of investigations and studies, or that contain technical conclusions and recommendations concerning engineering and geology shall be prepared by or under the direction of appropriately qualified professional(s), even if not explicitly stated. Each technical report submitted by the Discharger shall bear the professional's signature and stamp.
5. The Discharger shall submit the technical reports and work plans required by this Order for consideration by the Executive Officer, and incorporate comments the Executive Officer may have in a timely manner, as appropriate. Unless expressly stated otherwise in this Order, the Discharger shall proceed with all work required by the foregoing provisions by the due dates specified.
6. The Discharger shall comply with Monitoring and Reporting Program ___, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.

The submittal dates of Discharger self-monitoring reports shall be no later than the submittal date specified in the MRP.

7. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
8. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports. On or before each report due date, the Discharger shall submit the specified document to the Central Valley Water Board or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharger will be in compliance. The Discharger shall notify the Central Valley Water Board in writing when it returns to compliance with the time schedule. 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.
9. The Discharger shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the Discharger when the operation is necessary to achieve compliance with the conditions of this Order.
10. The Discharger shall use the best practicable cost-effective control technique(s) including proper operation and maintenance, to comply with this Order.
11. As described in the Standard Provisions, 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.
12. The Discharger shall report to the Central Valley Water Board any toxic chemical release data it reports to the State Emergency Response Commission within 15 days of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986."
13. At least **90 days** prior to termination or expiration of any lease, contract, or agreement involving disposal or recycling areas or off-site reuse of effluent, used to justify the capacity authorized herein and assure compliance with this Order, the Discharger shall notify the Central Valley Water Board in writing of the situation and

of what measures have been taken or are being taken to assure full compliance with this Order.

14. In the event of any change in control or ownership of the 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.
15. To assume operation as Discharger 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 Central Valley Water Board, and a statement. The statement shall comply with the signatory paragraph of Standard Provision B.3 and state that the new owner or operator assumes full responsibility for compliance with this Order. Failure to submit the request shall be considered a discharge without requirements, a violation of the CWC. If approved by the Executive Officer, the transfer request will be submitted to the Central Valley Water Board for its consideration of transferring the ownership of this Order at one of its regularly scheduled meetings.
16. A copy of this Order including the MRP, Information Sheet, Attachments, and Standard Provisions, shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
17. The Central Valley Water Board will review this Order periodically and will 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:

WASTE DISCHARGE REQUIREMENTS ORDER ___
DAVID KUBICH
IOWA HILL GRAVEL OPERATION
PLACER COUNTY

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

or will be provided upon request.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that the foregoing is a full true and correct copy of an Order adopted by the California Regional Water Quality Control Board on ___

PAMELA C. CREEDON, Executive Officer