CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGIONAL

ORDER NO. R5-2003-0176

WASTE DISCHARGE REQUIREMENTS FOR CHEVREAUX FAMILY TRUST, 1973 CHEVREAUX AGGREGATES, INC. CHEVREAUX CONCRETE, INC. ARP RANCH, INC. CHEVREAUX AGGREGATE FACILITY PLACER AND NEVADA COUNTIES

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

- 1. Chevreaux Family Trust, 1973 submitted a Report of Waste Discharge (RWD) on 19 June 2001, and supplemental information on 16 August 2001, 26 February 2002, 23 July 2002, and 25 October 2002 concerning a concrete batch plant at its existing aggregate and dredging operation.
- 2. Order No. 88-025, which prescribed requirements for land discharge of aggregate processing wastewater and sediment dredging, was adopted by the Regional Board on 29 January 1988. This Order is neither adequate nor consistent with the current plans and policies of the Board, and is being revised to reflect not just the addition of the concrete batch plant but the current operation of the entire facility.
- 3. The properties mined, proposing to be mined, and containing the waste disposal ponds, are owned by Chevreaux Family Trust, 1973 and ARP Ranch, Inc. Cheveraux Family Trust, 1973 owns and operates both Cheveraux Aggregates, Inc., and Cheveraux Concrete, Inc.
- 4. Cheveraux Family Trust, 1973, Chevreaux Concrete, Inc., Chevreaux Aggregates, Inc., and ARP Ranch, Inc. are hereafter jointly named as Discharger.
- 5. The Discharger operates a 40-acre rock quarry in Section 30, T14N, R9E, MDB&M and Section 31, T14N, R8E, MDB&M, and an aggregate processing plant and concrete batch plant in Section 25, T14N, R8E, MDB&M, in Placer County. The facilities are shown in Attachment A, which is attached hereto and made part of this Order by reference.
- 6. The Discharger also uses dredging methods to extract sand and gravel in Lake Combie and the Bear River covering portions of Sections 25 and 36, T14N, R8E, MDB&M, in Placer and Nevada Counties. This Order does not regulate the removal of sand and gravel using dredging methods or the discharge of return flows from the dredge settling pond to Lake Combie and the Bear River. These activities will be regulated under a separate 401 Water Quality Certification.

Sand and Gravel Operations

7. Approximately 450,000 tons of metavolcanic rock is mined each year. Rock is mined in the quarry by drilling and blasting. Primary size reduction of the rock takes place at the quarry site

and further processing is done at the plant. The maximum depth of the quarry as limited by the Reclamation Plan is 1605 feet elevation. Mine overburden is stripped and stockpiled for respreading over the mined area. On average, the drilling and blasting operations occur once each month. The Discharger states that water from seeps in the quarry is discharged to the stormwater ditch.

- 8. The mined rock is loaded into 35-ton trucks and transported to a rock crusher where it is initially crushed. Approximately 100 loads of rock are crushed per day. Recycled process water is used to control the dust at the rock crusher.
- 9. The Discharger operates a processing plant for size reduction (crushing), washing, classification, and stockpiling of rocks, sand, gravel, and silt. The gravel processing facility is at the end of Lake Combie Road, and is shown on Attachment B, which is hereby attached hereto and made part of this Order by reference.
- 10. The Discharger generates approximately 1.0 million gallons per day (mgd) of wash water from the aggregate processing plant. The wash water is discharged into a series of three settling ponds and a return ditch where it is recycled back to the plant.
- 11. Wash water from the aggregate processing plant discharges onto the ground surface and follows the topography into settling pond No. 1. In order to enhance the settling of the fines (silts), the Discharger injects a chemical coagulant into the wastewater. The coagulant contains petroleum hydrocarbons. The wash water is then pumped to settling pond No. 2 and allowed to gravity flow into settling pond No. 3. After settling, the effluent is recycled and used for the process water.
- 12. The fines (silts) which accumulate in each of the settling ponds are removed with a backhoe and stockpiled adjacent to the settling ponds. A dewatering basin adjacent to settling pond No. 1 is used to dry out the sediments prior to stockpiling.
- 13. Process water for the plant is obtained from two wet wells located adjacent to Lake Combie. Recycled process water is pumped from one well, while lake water is pumped from the other wet well. These wells are not equipped with a flow meter and/or run time meters.
- 14. Regional Board staff obtained a sample of the wastewater in settling pond No. 2 in November 2002. Selected analytical results are presented below, and are contrasted with limits used to implement the applicable water quality objectives for protection of the beneficial uses of the underlying groundwater.

	Aggregate			
		Settling	Water Quality	
<u>Constituent</u>	<u>Units</u>	Pond No. 2	Limit ¹	
Aluminum	µg/L	<50	200	
Barium	μg/L	76	490	
Aluminum	$\mu g/L$	<50	200	

		Aggregate	
		Settling	Water Quality
<u>Constituent</u>	<u>Units</u>	Pond No. 2	Limit ¹
Boron	μg/L	<1h00	700
Cadmium	μg/L	<5	0.07
Chromium, hexavalent	μg/L	<1.0	21
Chromium, total	μg/L	<20	50
Copper	μg/L	<20	170
Iron	μg/L	<50	300
Manganese	μg/L	160	50
Nickel	μg/L	<20	12
Silver	μg/L	<10	35
Sodium	μg/L	3,400	20,000
Zinc	μg/L	<20	2,000
Total dissolved solids (mg/L)	mg/L	110	450
pH (std. units)	std. units	11.37	6.5 to 8.4

A a ana a ata

NA - Not available

¹Or the natural background concentration in groundwater, whichever is higher.

- 15. With the exception of manganese and pH, these data indicate that the aggregate processing wastewater does not contain constituents at concentrations exceeding water quality objectives. The Chemical Constituents objective in the Basin Plan prohibits the concentration of chemicals that could impair beneficial uses or exceed California drinking water Maximum Contaminant Levels (MCLs) for waters designated as municipal and domestic supply. Groundwater beneath the facility is designated as a municipal and drinking water supply. The manganese concentration exceeds the California Secondary MCL. The pH exceeds the federal drinking water secondary MCL range for pH of 6.5 to 8.5 units and the range for pH that is protective of unimpaired agricultural use of 6.5 to 8.4 units. Groundwater beneath the facility is also designated as agricultural water supply. However, the above analysis is based on only one sampling event, and it is appropriate to require that the Discharger regularly monitor the aggregate wash water pond to determine whether there is the potential for groundwater degradation. If the results are verified, the Discharger will be required to improve the quality of the discharge, provide groundwater protection, or other similar actions.
- 16. The settling ponds and aggregate processing plant are on the east side of the Lake Combie within the 100-year floodplain and may be in hydraulic connection with the lake. In order to protect surface water quality, it is appropriate to require that the ponds be protected from a 100-year flood.
- 17. The current location of the settling ponds is shown on Attachment B. In order to comply with these WDRs, the Discharger is authorized to move the ponds to any location within its facility (as defined on Attachments A and B).

Dredging Operations

- 18. The Discharger operates an eight-inch hydraulic suction dredge in Lake Combie in order to remove the accumulated sediments and restore approximately 300 acre-feet of the lake's original capacity.
- 19. A 32-foot suction tube is used to remove sediment from the lake bottom and the dredge material is then pumped as slurry of 15 to 30 percent solids via a pipeline to a settling pond. The settling pond is on the eastern shore of the lake and is within the 100-year floodplain. The Discharger uses a backhoe to remove sediment from the settling pond and stockpiles the sediment along the boundary of the settling pond.
- 20. The previous Order, No. 88-025, prohibited the stockpiling of sediment during the wet season. During an inspection, staff observed that the Discharger was stockpiling sediment in violation of this Order. In order to prevent stockpiled sediments from being discharged to the lake during the wet season, it is appropriate to limit the time period when sediment may be stockpiled to 1 May to 30 September each year. In addition, it is appropriate to require the Discharger to report the size of the sediment stockpile on a monthly basis, and to require that the dredge pond be moved out of the 100 year floodplain.
- 21. This Order does not regulate the discharge of return flows from the settling pond to Lake Combie and the Bear River or the act of dredging itself. Those discharges will be regulated by a 401 Water Quality Certification, which the Discharger must obtain prior to any further dredging activities. However, this Order does regulate the drying and storage of sediment within the dredge settling pond.

Concrete Batch Plant

- 22. The Discharger also manufactures concrete. Aggregate blends are stored in concrete bunkers and conveyed to a weighing hopper. The aggregate, Portland cement, and fly ash are placed into the mixer trucks along with water and any admixtures. The mixer trucks are loaded on a concrete pad and any excess concrete on the exterior of the vehicle is washed to remove cement and aggregate dust particles.
- 23. The concrete batch plant is operating under a conditional use permit issued by Placer County Planning Department. The plant produces approximately 10,000 cubic yards of concrete per year and does not operate from November through April due the weather conditions.
- 24. Approximately 35 gallons of recycled water is used for one yard of concrete. The maximum daily production rate of 60 cubic yards of concrete per day requires approximately 2,100 gallons of recycled water and results in approximately 400 gallons of wash water.

- 25. Currently, the wash water from the concrete batch plant's wash pad gravity flows in an unlined depression to settling pond No. 1. The Discharger states that this waste stream typically infiltrates into the ground prior to reaching the settling pond.
- 26. Minor fugitive dust from the Portland cement and fly ash settles on the ground near the hopper area; a bag house collects most fines associated with the concrete plant.
- 27. In September 2002, the Discharger collected samples of washwater from the batch plant, and washout water associated with cleaning out the concrete trucks. In addition, samples were collected of the washwater in November 2002 by Regional Board staff. The analytical results are presented below, and are contrasted with limits used to implement the applicable water quality objectives for protection of the beneficial uses of the underlying groundwater.

	Concrete			Water
	Truck	Batch Plant	Batch Plant	Quality
<u>Constituent</u>	Washwater ¹	Washwater ¹	Washwater ²	Limit ³
Aluminum	<50	<50	16,000	200
Barium	390	160	500	490
Boron			<100	700
Cadmium			<5	0.07
Chromium, hexavalent	100	22	<1.0	21
Chromium, total	94	21	42	50
Copper			140	170
Iron	<100	<100	14,000	300
Manganese	<20	<20	1,900	50
Molybdenum	<20	<20		10
Nickel	<20	<20	72	12
Silver			<10	35
Sodium			11,000	20,000
Vanadium	<20	<20	270	50
Zinc			170	2,000
Total dissolved solids (mg/L)			360	450
pH (std. units)			8.2	6.5 to 8.4

Units - $\mu g/L$ unless noted

-- Not analyzed

NA - Not available

¹ Samples collected by the Discharger in September 2002.

² Samples collected by Regional Board staff in November 2002.

³ Or the natural background concentration in groundwater, whichever is higher.

- As indicated by the analytical results in Finding No. 27, aluminum, barium, hexavalent chromium, 28. total chromium, iron, manganese, nickel, and vanadium are present at concentrations exceeding water quality objectives. The Chemical Constituents objective in the Basin Plan prohibits the concentration of chemicals that could impair beneficial uses or exceed California drinking water Maximum Contaminant Levels (MCLs) for waters designated as municipal and domestic supply. Groundwater beneath the facility is designated as a municipal and drinking water supply. Total chromium concentrations exceed the primary MCL; aluminum, iron and manganese concentrations exceed their respective secondary MCLs. The Toxicity objective in the Basin Plan prohibits toxic substances in concentrations that produce detrimental physiological responses in humans or other organisms associated with designated beneficial uses. Barium and hexavalent chromium exceed their respective USEPA IRIS reference doses for the protection of human health; nickel exceeds the California Public Health Goal for drinking water; and vanadium exceeds the DHS State Action Level for drinking water. Based on these data, concrete wash water released to the subsurface has the potential to impair beneficial uses of groundwater beneath the facility. Therefore, it is appropriate to require that the Discharger provide complete containment of the concrete wash water to protect groundwater quality.
- 29. The Discharger proposes to construct three holding ponds to receive the concrete truck wash water for subsequent recycling. Following appropriate settling in the primary and secondary ponds, the wash water would then be transferred to a third settling pond and discharged to land. However, this Order does not allow a discharge to land because the aluminum, barium, hexavalent chromium, total chromium, iron, manganese, nickel, and vanadium concentrations reported in the wash water exceed water quality objectives. It is appropriate to require the Discharger to prepare and implement a plan to appropriately manage the concrete wash water.

Other Waste Streams

30. Domestic wastewater is discharged to a septic system permitted by Placer County Environmental Health Department.

Site-Specific Conditions

- 31. No groundwater monitoring wells are located on the site.
- 32. Historical gold mining has occurred upstream of the facility within the Bear River and its tributaries. Mercury deposits typically occur as a result of historical gold mining, and studies show that the Bear River watershed contains elevated mercury concentrations in the sediment. Therefore, it is appropriate to require that the Discharger characterize mercury concentrations in its discharge.
- 33. Surface water drainage is to the Bear River and Lake Combie.

- 34. The Federal Emergency Management Agency's Flood Insurance Rate Map No. 060610300F shows that the settling ponds are located within the 100 year floodplain.
- 35. The facility is in the Lake Combie Hydrologic Basin (No. 516.33), as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.

Basin Plan, Beneficial Uses, and Regulatory Considerations

- 36. 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 Resources Control Board (State Board). Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.
- 37. The beneficial uses of Bear River and Lake Combie are municipal and domestic supply; agricultural supply; power generation; water contact recreation; noncontact water recreation; warm freshwater habitat; cold freshwater habitat; migration of warm and cold freshwater aquatic organisms; spawning, reproduction and/or early development of warm and cold freshwater aquatic organisms; and wildlife habitat.
- 38. The beneficial uses of underlying groundwater are municipal, industrial, and agricultural supply.
- 39. State Board Resolution No. 68-16 (the Antidegradation Policy) does not allow degradation of groundwater quality unless it has been demonstrated 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 cause exceedance of one or more water quality objectives; and
 - d. The discharger employs best practicable treatment or control of the discharge to minimize degradation.
- 40. The Regional Board has considered antidegradation pursuant to State Board Resolution No. 68-16 and finds that the Discharger has not provided the required demonstration to be allowed to cause groundwater degradation. Therefore, none is authorized by this Order.
- 41. Based on the limited effluent monitoring data provided by the Discharger, the land disposal of aggregate wash water as proposed should not degrade groundwater quality, and therefore groundwater monitoring wells are not required at this time. However, the Discharger is required to

continue monitoring the aggregate plant effluent, and if concentrations exceed water quality objectives, then staff will reevaluate the need for groundwater monitoring. Additionally, the concrete plant washwater must be collected and disposed of properly. Therefore, it is not necessary to require groundwater monitoring at the concrete plant. However, if effluent monitoring shows that the discharge has the potential to cause groundwater degradation, then the Discharger will be required to monitor groundwater quality, cease the discharge, change the method of disposal, and/or take other actions as necessary to comply with Resolution No. 68-16.

- 42. The Placer County Board of Supervisors approved the *Reclamation Plans for the Sand and Gravel Recovery at Lake Combie and the Bear River, and the Chevreaux Quarry in Placer County* on 20 January 1986. The Nevada County Board of Supervisors approved the *Reclamation Plan for the Sand and Gravel Recovery at Lake Combie and the Bear River in Nevada County* and adopted a Mitigated Negative Declaration on 24 November 1987, in accordance with the California Environmental Quality Act (CEQA), Public Resources Code Sections 21000, et seq. The mitigated negative declaration was completed for approval of the reclamation plan only as no County permit was required for the mining activity, but the negative declaration states that "the mining of the stream is also the reclamation", and thus, it covered both the mining and the reclamation. The Regional Board has reviewed the Mitigated Negative Declaration and concurs that there is no substantial evidence that the project, as revised, will have a significant impact on water quality.
- 43. There are no significant changes in the discharger's operations at the quarry; therefore, the action to adopt waste discharge requirements for this mining facility is exempt from the provisions of the California Environmental Quality Act (Public Resources Code Section 21000, et seq.), in accordance with Section 15301, Title 14, California Code of Regulations.
- 44. The Discharger has filed a Notice of Intent to obtain coverage under the State Board's Water Quality Order No. 97-03-DWQ National Pollutant Discharge Elimination System (NPDES), General Permit No. CAS 000001, Waste Discharge Requirements (WDRs) for Discharges of Storm Water Associated with Industrial Activities.
- 45. This discharge is exempt from the requirements of *Consolidated Regulations for Treatment, Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq., (hereinafter Title 27). The exemption, pursuant to Section 20090(b), is based on the following:
 - a. The Board is issuing waste discharge requirements,
 - b. The discharge complies with the Basin Plan, and
 - c. The waste material does not need to be managed according to Chapter 11, Division 4.5, Title 22, of the CCR as a designated or hazardous waste.

46. Section 13267(b) of California Water Code 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 having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters 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 report 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 No. R5-2003-0176" are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges waste subject to this Order.

47. Pursuant to California 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 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 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 views and recommendations.
- 50. The Regional Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Order No. 88-025 is rescinded and that, pursuant to Sections 13263 and 13267 of the California Water Code, Chevreaux Family Trust, 1973; Chevreaux Aggregates, Inc.; Chevreaux Concrete, Inc.; and ARP Ranch Inc., their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, shall comply with the following:

[Note: Other prohibitions, conditions, definitions, and methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991.]

A. Discharge Prohibitions:

- 1. The discharge of wastes to surface waters or surface water drainage courses is prohibited.
- 2. The discharge of domestic waste, asphaltic concrete waste, concrete waste, or concrete wash water to any process wastewater settling pond is prohibited.
- 3. Discharge of waste classified as hazardous, as defined in Sections 2521(a) of Title 23, CCR, Division 3, Chapter 15, Section 2510, et seq., (hereafter Chapter 15), or 'designated', as defined in Section 13173 of the California Water Code, is prohibited.
- 4. Use of chemical gold recovery techniques (including amalgamation, cyanide leaching, or any other chemical method) is prohibited.
- 5. Surfacing of wastewater from the septic tank or leaching system is prohibited.
- 6. The discharge of industrial waste to septic systems is prohibited.
- 7. Operation of an asphalt plant shall not begin without written approval from the Executive Officer. At least **180 days** prior to placement of the plant, the Discharger shall submit the information described in Provision G.2.n.
- 8. The discharge of concrete wash water to ground after **1 October 2004** is prohibited.
- 9. The use of a dredge within Lake Combie and/or the discharge of return flows from the dredge settling pond to Lake Combie and the Bear River is prohibited unless the Discharger obtains a 401 Water Quality Certification.

B. Discharge Specifications:

- 1. The 30-day average daily dry weather discharge flow of aggregate wash water shall not exceed 1.0 million gallons.
- 2. The discharge shall remain within the designated storage and disposal areas at all times. Additional or replacement ponds may be constructed as needed within the confines of the facility site as defined on Attachment B; however, the discharge must comply with all Discharge Specifications.

- 3. The Discharger shall operate all systems and equipment to optimize the quality of the discharge.
- 4. The ponds shall be managed to prevent breeding of mosquitoes. In particular:
 - a. An erosion control program should assure 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.
- 5. If the Discharger does not move the facility, then by **1 November 2005**, the wastewater ponds shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency. If the Discharger does move the facility, then by **1 November 2006**, the wastewater ponds shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
- 6. All stockpiled sediments, wastes and products shall be managed to prevent erosion of sediment to surface water drainage courses.
- 7. Objectionable odors originating at this facility shall not be perceivable beyond the limits of the wastewater treatment and disposal areas.
- 8. As a means of discerning compliance with Discharge Specification No. 7, the dissolved oxygen content in the upper zone (1 foot) of the wastewater settling ponds shall not be less than 1.0 mg/L.
- 9. Newly constructed or rehabilitated levees or berms that hold backwater shall be designed and constructed under the direct supervision of a California Registered Civil Engineer or Engineering Geologist.
- 10. The freeboard in each wastewater pond shall never be less than two feet as measured vertically from the water surface to the lowest point of overflow along the pond berm.
- 11. The wastewater ponds shall have sufficient capacity to accommodate allowable wastewater flow and design seasonal precipitation and ancillary inflow and infiltration during the wet season. 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.

- 12. Before **1 October** of each year, available pond storage capacity shall at least equal the volume necessary to comply with Discharge Specifications No. 10 and No. 11.
- 13. All storm water runoff within the sediment storage area shall be contained and prevented from entering the Bear River and Lake Combie.
- 14. Before **15 October** of each year, all necessary runoff diversion channels and culverts shall be conditioned to transport waters originating outside the quarry.
- 15. Surface runoff from the quarry area shall not be discharged directly into surface waters or surface water drainage courses.
- 16. Neither the treatment nor the discharge shall cause a condition of pollution or nuisance as defined by the California Water Code, Section 13050.

C. Dredge Settling Pond Specifications:

- 1. Materials stockpiled in areas below the 1,600 foot elevation shall be removed by **1 October** of each year.
- 2. The discharge of dredged material shall be confined to the settling pond or designated area shown on Attachment B. The Discharger may relocate or replace the settling pond as needed within the confines of the facility as defined on Attachment B; however, the discharge must comply with all Discharge and Dredge Settling Pond Specifications.

D. Effluent Limitations:

Discharge of wash water or any process wastewater to the aggregate washwater ponds in excess of the following limits is prohibited:

Constituent or Parameter	<u>Limit</u>
pH	6.5-8.4 Standard Units
Manganese	50 µg/L

E. Septic Tank Solids Disposal Requirements:

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

- 2. Any proposed change in sludge use or disposal practice from a previously approved practice shall be reported to the Executive Officer in the next monthly monitoring report.
- 3. Septage generated in septic tanks shall be discharged to a permitted municipal wastewater treatment or equivalent facility. All transportation of septage or other wastewater shall be performed by a duly authorized service.

F. Groundwater Limitations:

The discharge shall not cause underlying groundwater to contain waste constituents in concentrations statistically greater than natural background water quality.

G. Provisions:

- 1. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1. To demonstrate compliance with sections 415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.
- 2. The following reports shall be submitted pursuant to Section 13267 of the California Water Code and shall be prepared as described in Provision G.1:
 - a. By **15 February 2004**, the Discharger shall submit a report and map defining all sampling locations and freeboard measuring points required by Monitoring and Reporting Program No. R5-2003-0176.
 - b. By **15 February 2004**, the Discharger shall submit a Flow Measurement Verification Report. If the Discharger elects to report flows based on pump run times, then the report shall completely document the calibration of effluent and recycling system pumps, correlate actual flows to pump run time estimates generated from the manufacturer's pump curves, and provide a calculation correction (as appropriate) to be applied to convert from pump run time to gallons for each system. Calibration test data, manufacturer's pump curves, and calculations shall be included in the report. Alternatively, the report may document the installation of flow meter(s).

- c. By **15 February 2004**, the Discharger shall submit a workplan showing the modifications at the concrete batch plant necessary to contain and treat/dispose/recycle all wastewater to the extent necessary to comply with all Discharge Prohibitions, Specifications, and Limitations of this Order, including the prohibition against the discharge of designated waste.
- d. By **1 May 2004**, the Discharger shall submit a workplan describing the interim measures that will be taken to protect the existing washwater settling ponds and the dredge settling pond from washout from floods with a 100-year frequency.
- e. By **1 October 2004**, the Discharger shall submit a report showing that the washwater system at the concrete batch plant has been modified to comply with this Order.
- f. By **1 November 2004**, the Discharger shall submit a report documenting that interim flood protection measures have been completed according to the approved workplan.
- g. By **1 November 2004**, the Discharger shall submit an Operations and Maintenance Plan, including (a) notification procedures and actions to be taken when the wastewater in the ponds fail to meet specified requirements for freeboard, pH, or create a condition of pollution or nuisance, (b) weed abatement measures and vector control practices, (c) a berm inspection and maintenance program, and (d) sampling locations and freeboard measurement locations. This plan shall also describe the procedures that will be implemented during the event of an unauthorized discharge to surface water or surface water drainage courses.
- h. By **1 December 2004**, the Discharger shall submit a report that describes whether or not the facility, including the ponds, will be moved to an entirely new location.
- i. If the Discharger does not move the facility, by **1 May 2005**, the Discharger shall submit a workplan describing how the existing washwater settling ponds and the dredge settling pond will be re-constructed or moved to prevent washout from floods with a 100 year frequency.
- j. If the Discharger does not move the facility, by **1 November 2005**, the Discharger shall submit a report in accordance with the approved workplan documenting that the washwater settling ponds and the dredge settling pond are designed and constructed to prevent washout from floods with a 100 year frequency.
- k. If the Discharger plans to move the facility, by **1 May 2006**, the Discharger shall submit a workplan describing the steps to be taken to move the washwater settling ponds and the dredge settling pond outside the 100 year flood plain.

- 1. If the Discharger moves the facility, by **1 November 2006**, the Discharger shall submit a report in accordance with the approved workplan documenting that the washwater settling ponds and the dredge settling pond are designed and constructed to prevent washout from floods with a 100 year frequency.
- m. If, as a result of the monitoring conducted by MRP No. R5-2003-0176, mercury is detected at concentrations equal to or greater than 50 nanograms per liter (ng/l) in any settling pond water, then within **90 days** the Discharger shall submit a workplan to characterize mercury in the water and sediment within the designated areas. Within **120 days** of approval by the Executive Officer of the workplan the Discharger shall submit a report describing the results. If such report demonstrates the presence of mercury at concentrations that may adversely affect the Bear River or may cause bioaccumulation as a result of the final reclamation of the site, then within 120 days, the Discharger shall submit a report evaluating alternatives to reduce mercury to acceptable levels.

If a water quality objective different than 50 ng/L is promulgated, then this permit may be reopened and staff may reevaluate the need for characterization of mercury concentrations in the water and sediment within the designated areas.

- n. At least **180 days** prior to operation of an asphalt plant, the Discharger shall a workplan showing the facility modifications necessary to contain and treat/dispose/recycle all wastewater in a manner such that groundwater or surface water is not adversely impacted. The workplan shall clearly demonstrate how the facility modifications will meet compliance with all Discharge Prohibitions, Specifications, and Limitations of this Order.
- 3. The Discharger shall comply with the Monitoring and Reporting Program No. R5-2003-0176, which is a part of this Order, and any revisions thereto as ordered by the Executive Officer.
- 4. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and by reference a part of this Order. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
- 5. The Discharger shall submit to the Regional Board on or before each compliance report due date the specified document, or if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is reported, then the Discharger shall state the reasons for noncompliance and shall provide a schedule of work needed to come into compliance.

- 6. The Discharger shall report promptly to the Regional Board any material change or proposed change in the character, location, or volume of the discharge.
- 7. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the Discharger, then the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this office.
- 8. The Discharger shall comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or rescission of this Order.
- 9. 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.
- 10. The Regional Board will review this Order periodically and may revise requirements when necessary.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Central Valley Region, on 5 December 2003.

THOMAS R. PINKOS, Executive Officer

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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2003-0176

FOR

CHEVREAUX FAMILY TRUST, 1973 CHEVREAUX AGGREGATES, INC. CHEVREAUX CONCRETE, INC. ARP RANCH, INC. CHEVREAUX AGGREGATE FACILITY PLACER AND NEVADA COUNTIES

This monitoring and reporting program (MRP) incorporates requirements for monitoring the aggregate wash water settling ponds, dredge settling pond, and the concrete batch plant wash water. This MRP is issued pursuant to Water Code 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

All samples shall be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each grab sample shall be recorded on the sample chain of custody form. Field test instruments (such as those used to measure pH and dissolved oxygen) may be used provided that:

- 1. The operator is trained in the proper use and maintenance of the instruments;
- 2. The instruments are field calibrated prior to each monitoring event;
- 3. The 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 this MRP.

POND MONITORING

Each aggregate wash water settling pond and the dredge settling pond shall be inspected weekly and monitored as follows:

Constituent/Parameter	<u>Units</u>	Type of Sample	Sampling <u>Frequency</u>	Reporting Frequency
Freeboard ¹	0.1 Feet	Measurement	Weekly	Monthly
Berm Condition ²	N/A	Observation	Weekly	Monthly

¹Freeboard shall be measured from the lowest point of overflow.

²Evidence of leakage or overflow shall be noted.

EFFLUENT MONITORING

Samples shall be collected from the first (primary) aggregate settling pond and from the dredge settling pond. At a minimum, the Discharger shall monitor the wastewater as follows:

Constituent/Parameter	<u>Units</u>	Type of Sample	Sampling <u>Frequency</u>	Reporting Frequency
Inflow to Pond No. 1	gpd	Meter Observation	Daily	Monthly
PH	pH units	Grab	Monthly	Monthly
Total Dissolved Solids	mg/L	Grab	Monthly	Monthly
Dissolved Metals ^{1,2}	μ g/L	Grab	Semi-Annual	Semi-Annual ⁵
Total Mercury ³	ng/L	Grab	Semi-Annual	Semi-Annual ⁵
Total Petroleum	mg/L	Grab	Semi-Annual	Semi-Annual ⁵
Hydrocarbons ⁴				

1 At a minimum, the following metals shall be included: aluminum, antimony, arsenic, total chromium, hexavalent chromium, copper, iron, lead, manganese, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc. Analytical methods shall be selected to provide detection limits below the limiting Water Quality Goal for each constituent.

2 Samples shall be filtered through a 0.45 micron filter prior to preservation.

3 The total mercury detection limit shall be no more than 10 ng/L

4 TPH shall be performed by EPA Method 8015M for gasoline range and diesel range hydrocarbons.

5 Include in the January and July monthly reports.

CONCRETE BATCH PLANT WASH WATER MONITORING

Samples shall be collected from the discharge of the concrete batch plant. At a minimum, the Discharger shall monitor the wastewater as follows:

<u>Constituent</u>	<u>Units</u>	Type of Sample	Sampling <u>Frequency</u>	Reporting <u>Frequency</u>
Flow	gpd	Meter Observation	Daily	Monthly
PH	pH units	Grab	Monthly	Monthly
Total Dissolved Solids	Mg/L	Grab	Monthly	Monthly
Dissolved Metals ^{1, 2}	μg/L	Grab	Monthly	Monthly

¹ At a minimum, the following metals shall be included: aluminum, antimony, arsenic, barium, total chromium, hexavalent chromium, copper, iron, lead, mercury, manganese, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc. Analytical methods shall be selected to provide detection limits below the limiting Water Quality Goal for each constituent.

² Samples shall be preserved without filtration.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., effluent, pond, etc.), and reported analytical result for each sample are readily discernible. The data shall be summarized in such a manner to clearly illustrate compliance with waste discharge requirements and spatial or temporal trends, as applicable. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall be reported in the next scheduled monitoring report.

A. Monthly Monitoring Reports

Monthly Monitoring Reports shall be submitted to the Regional Board on the **1**st day of the second **month following sampling** (i.e. the January Report is due by 1 March). At a minimum, the Monthly Monitoring Report shall include:

- 1. Results of the pond monitoring, effluent monitoring, and concrete batch plant wash water effluent monitoring.
- 2. A map depicting the locations of active all wash water ponds, dredge settling ponds, storm water ponds, slurry deposition areas, and the locations where freeboard is measured.
- 3. A comparison of monitoring data to the discharge specifications and an explanation of any violation of those requirements. Data shall be presented in tabular format.
- 4. If requested by staff, copies of laboratory analytical report(s).
- 5. A calibration log verifying calibration of all monitoring instruments and devices used to comply with the prescribed monitoring program.
- 6. A description of the type and amount of chemical coagulants used in the wastewater to enhance the settling of the fines.
- 7. The January and July monthly reports shall include the semi-annual monitoring results for aggregate washwater pond.
- 8. A description of the approximate volume and location of sediment stockpiled along the dredging pond and whether any sediment has been moved from the dredging pond area during that month.

B. Annual Monitoring Report

An Annual Monitoring Report shall be prepared as the fourth quarter monitoring report. The Annual Monitoring Report shall include all monitoring data required in the monthly schedule and shall be

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submitted to the Regional Board by **1 February** each year. In addition to the data normally presented in the Monthly Monitoring Reports, the Annual Monitoring Report shall include the following:

- 1. If requested by staff, tabular and graphical summaries of all monitoring data collected during the year;
- 2. A discussion of compliance and the corrective action taken, as well as any planned or proposed actions needed to bring the discharge into full compliance with the waste discharge requirements.
- 3. A Water Balance and Capacity Calculation Report that presents calculation of the current capacity of the wastewater pond system and evaluation of the wastewater storage system's ability to adequately contain all rainfall and industrial wastewater discharged to the pond. Rainfall amounts shall be based on the total annual precipitation based on a return period of 100 years, distributed monthly in accordance with historical rainfall patterns.

A transmittal letter shall accompany each self-monitoring report. The letter shall discuss any violations during the reporting period and all actions taken or planned for correcting violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain a statement by the Discharger or the Discharger's authorized agent, under penalty of perjury, that to the best of the signer's knowledge the report is true, accurate, and complete.

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

THOMAS R. PINKOS, Executive Officer

5 December 2003

Date

GJC:5-Dec-03

INFORMATION SHEET

ORDER NO. R5-2003-0176

CHEVREAUX FAMILY TRUST, 1973 CHEVREAUX AGGREGATES, INC. CHEVREAUX CONCRETE, INC. ARP RANCH, INCORPORATED CHEVREAUX AGGREGATE FACILITY PLACER AND NEVADA COUNTIES

Chevreaux Family Trust, 1973 owns Cheveraux Aggregates, Inc and Chevreaux Concretes, Inc. Chevreaux Aggregates, Inc. operates a 40-acre rock quarry near Meadow Vista, Placer County on land that is owned by ARP Ranch. In addition, Chevreaux Aggregates operates an aggregate processing plant and a dredging operation in a portion of Lake Combie, Placer and Nevada Counties. Chevreaux Concrete, Inc. operates a concrete batch plant which began operating in 1996. Cheveraux Family Trust, 1973, Chevreaux Concrete, Inc., Chevreaux Aggregates, and ARP Ranch, Inc. are jointly named as Discharger in this Order.

Sand and Gravel Operation

Rock mined from the quarry is removed via drilling and blasting, and then is crushed, washed, classified, and stockpiled according to size. Approximately 450,000 tons of metavolcanic rock is mined each year from the quarry.

Approximately 1.0 million gallons per day (mgd) of wash water from the aggregate processing plant is discharged into a series of three settling ponds and a return ditch from which it is recycled to the processing plant. The settling ponds are adjacent to the Bear River and within the 100-year flood plain. This Order requires the Discharger to provide a workplan to move the wash water settling ponds and dredge settling pond out of the 100-year flood plain.

Process water for the plant is obtained from two wet wells located adjacent to Lake Combie. Recycled process water is pumped from one well, while lake water is pumped from the other wet well. These wells are not equipped with a flow meter and/or run time meters. This Order requires the Discharger to submit a Flow Measurement Verification Report.

Dredging Operation

The Discharger operates an eight-inch hydraulic suction dredge in Lake Combie in order to remove the accumulated sediments and restore approximately 300 acre-feet of the lake's original capacity. This activity is conducted the northern portion of Lake Combie, which the Discharger has isolated from the southern portion by installing earthen dikes. While this Order regulates the drying and storage of sediment within the dredge settling pond, it does not regulate the removal of sand and gravel using dredging methods nor the discharge of return flows from the settling pond to Lake Combie and the Bear River. In order to continue the dredging operation, the Discharger must obtain a 401 Water Quality Certification from the Regional Board.

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Residual Mercury

Historical gold mining has occurred upstream of the facility within the Bear River and its tributaries. Mercury deposits typically occur as a result of historical gold mining, and studies show that the Bear River watershed contains elevated mercury concentrations in the sediment. Therefore, this Order requires the Discharger to monitor mercury concentrations in its discharge. If mercury is detected at concentrations equal to or greater than 50 nanograms per liter (ng/l) in any settling pond water, then the Discharger shall submit a workplan to further characterize mercury in the water and sediment within the designated disposal areas and the dredging area. The 50 ng/L limit is the California Toxics Rule criterion to protect human health from consumption of water and aquatic organisms from inland surface waters.

Concrete Batch Plant

The Discharger also operates a concrete batch plant that is permitted by the Placer County Planning Department. The concrete trucks are loaded on a concrete wash pad and any excess concrete on the exterior of the trucks is washed to remove cement and aggregate dust particles. The concrete truck wash water currently gravity flows along the ground surface in a depression to the first settling pond. The Discharger indicated that the waste stream typically infiltrates into the ground prior to reaching the settling pond.

The plant produces approximately 10,000 cubic yards of concrete per year and does not operate from November through April due the weather conditions. Approximately 35 gallons of recycled water is used for one yard of concrete. The maximum daily production rate of 60 cubic yards per day requires approximately 2,100 gallons of water and results in approximately 400 gallons of wash water.

The Discharger proposes to construct a concrete truck cleanout area that will consist of three concrete lined holding ponds and apply the wash water to a land application area. However, analytical results submitted by the Discharger to characterize the concrete truck washout water indicate that aluminum, barium, iron, manganese, nickel, vanadium, hexavalent chromium and total chromium concentrations reported in the wash water exceed water quality objectives. This Order requires the Discharger to submit a workplan showing the concrete truck cleanout station facility modifications necessary to contain and treat/dispose/recycle all wastewater to the extent necessary to comply with all Discharge Prohibitions, Specifications, and Limitations of the Order, including the prohibition against the discharge of designated waste.

Surface water drainage from the surrounding area is to Lake Combie and the Bear River.

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GJC: 6-Jan-04

ORDER NO. R5-2003-0176

ATTACHMENT A



