

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

RESOLUTION NO.

WAIVING WASTE DISCHARGE REQUIREMENTS
FOR
FCI CONSTRUCTORS, INC.
NYACK TEMPORARY CONCRETE BATCH PLANT

PLACER COUNTY

WHEREAS, Water Code Section 13260(a) requires that any person discharging wastes or proposing to discharge wastes within the region that could affect the quality of waters of the State shall file a Report of Waste Discharge; and

WHEREAS, FCI Constructors, Inc. (hereafter Discharger) submitted a Report of Waste Discharge on 14 April 2008 for the Nyack Temporary Concrete Batch Plant on Nyack Road, Placer County. The site is in Assessors Parcel Number 066-260-016 as depicted on Attachment A, which is part of this Resolution by reference; and

WHEREAS, the temporary batch plant and recycling sites will be used to produce materials to complete the I-80 surface improvements from the Nyack overcrossing to Emigrant Gap overcrossing. Wastewater will be generated from the production of cement concrete and the cleaning of trucks used to transport the concrete; and

WHEREAS, California Water Code (CWC) Section 13173(b) defines designated waste as:

“Nonhazardous waste that consists of, or contains, pollutants that, under ambient environmental conditions at a waste management unit, could be released in concentrations exceeding applicable water quality objectives or that could reasonably be expected to affect beneficial uses of the waters of the state as contained in the appropriate state water quality control plan;” and

WHEREAS, Title 27 of the California Code of Regulations (Title 27) sets forth regulations for management of designated waste. Unless the facility or activity that generates designated waste is exempt from those regulations, any waste management unit used to treat, store, or dispose of designated waste must:

- a. Be sited, designed, and constructed in accordance with the applicable performance and minimum prescriptive standards contained therein;
- b. Be monitored to detect any releases to soil or groundwater (e.g., groundwater monitoring is required);
- c. Have an approved closure and post-closure maintenance plan that includes groundwater monitoring for at least thirty years after final closure;

- d. Provide financial assurance that funds will be available to finance closure and post-closure maintenance and monitoring; and

WHEREAS, ready-mix concrete facilities blend aggregates, cement, water, and chemical admixtures to create Portland cement concrete. Based on analytical testing of concrete wastewater samples obtained in late 2002 by Regional Water Board staff from ten ready-mix plants, concrete wastewater exhibits the characteristics listed below. This waste is properly classified as designated waste; and

Parameter	Units	Concentration Range	Applicable Water Quality Limit ¹
pH	--	7.7 to 12.6	6.5 to 8.4
Total Dissolved Solids	mg/L	160 to 2,600	450
Aluminum	ug/L	76 to 310 ²	200
Boron	ug/L	2,900 ²	700
Chromium, total	ug/L	53 to 280 ²	50
Chromium, hexavalent	ug/L	1.4 to 260 ²	21 ³
Molybdenum	ug/L	10 to 300 ²	10
Sodium	mg/L	1.3 to 180	69
Vanadium	ug/L	26 to 160 ²	50

¹ The water quality limits cited herein are numeric limits selected to apply the narrative water quality objectives for groundwater set forth in the Water Quality Control (Basin Plan) for the Sacramento River and San Joaquin River Basins for protection of the beneficial uses of groundwater. These limits have been selected in accordance with the procedures set forth in that Basin Plan.

² Analytical data are for filtered samples and represent dissolved concentrations.

³ This limit assumes a 20% relative source contribution, which may not be valid. The California Office of Environmental Health Hazard Assessment is currently developing a Public Health Goal for Chromium VI. Discussions with OEHHA staff indicate that the future PHG is likely to be lower than this value.

WHEREAS, Title 27 exempts certain activities from its provisions under Section 20090 which 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:

...(i) Fully Enclosed Units--Waste treatment in fully enclosed facilities, such as tanks, or in concrete-lined facilities of limited areal extent, such as oil-water separators designed, constructed, and operated according to American Petroleum Institute specifications.”; and;

WHEREAS, this waiver is applicable to all discharges of designated waste liquid to the washout basin and a synthetic lined secondary waste containment area for the purpose of temporary storage and/or recycling provided that the system is designed, constructed, and

operated in accordance with certain standards so that the activity can be deemed exempt pursuant to Title 27 Section 20090(i); and

WHEREAS, on 22 May 2008, Placer County acting as the lead agency determined that the project was categorically exempt from the California Environmental Quality Act; and

WHEREAS, the Temporary Conditional Use Permit No. PCPA T20080222 issued by Placer County Planning Department is valid through 5 June 2009, when the Discharger will apply for a one year time extension; and

WHEREAS, the temporary facility will consist of a portable concrete batch plant, an aggregate materials delivery system, a materials storage area, and a concrete washout and wastewater recycling area situated on approximately 2.2 acres of the 3 acre lot adjacent to the Nyack off ramp. A site plan is included as Attachment B, which is part of this Resolution by reference; and

WHEREAS, all of the material used for the production of concrete will be hauled to the site in bulk transfer trucks. The cement and admixtures will be transferred into individual self-contained units where the material will be stored onsite. The sand and aggregate materials will be stockpiled near the batch plant; and

WHEREAS, the concrete batch plant will produce concrete from the date of adoption of this Waiver until October 2008 and from May 2009 to October 2009; and

WHEREAS, the Discharger proposes to temporarily store and recycle wastewater generated from the concrete batch plant using a prefabricated steel washout basin or similar basin providing complete containment, measuring about 30 feet long, 20 feet wide and 5 feet high with an estimated volume of 18,000 gallons at one-foot freeboard. The washout basin will be divided into two sections with a notched weir between the sections. The first section will contain the solid material and the second section will contain the decanted water. The decanted water will be recycled or pumped out on an as needed basis by an approved wastewater hauler. The solid material collected in the washout basin will be temporarily placed in the solids disposal area and hauled in a dry state off-site or to an on-site concrete recycler; and

WHEREAS, the washout basin will contain a ramp for which trucks and equipment can access the basin. The top of the ramp will consist of a level pad constructed from a compacted layer of asphalt. A secondary containment area will be located under and around the washout basin and ramp. The secondary containment area will consist of a 60-mil polyvinyl chloride (PVC) liner covered with a one-foot layer of rounded drainage gravel and a K-rail/sand bag system designed to contain any concrete wastewater onsite. A new PVC liner will be used for each operational season. The secondary containment area will measure 50-foot by 50-foot (2,500 square feet) and provide approximately 11,000 gallons of temporary and emergency storage; and

WHEREAS, high pressure, low volume equipment will be used to washout the concrete haul trucks and equipment; and

WHEREAS, a designated area within the secondary containment area will be used for the temporary storage of waste material that is removed from the washout basin. The solid concrete and aggregate material will be allowed to dry on the drainage gravel prior to being removed on an as needed basis to a designated recycling or disposal facility. The wastewater that is collected on the drainage gravel will be pumped back into the washout basin; and

WHEREAS, the solids that collect in the washout basin will be removed on a weekly or an as needed basis. The solid washout materials will be hauled off site to an approved disposal facility or placed in the solid material (rock, sand, and cement) area for recycling; and

WHEREAS, decanted wastewater will be reused for concrete truck wash water and tool washing water only. Surplus wastewater will be hauled away on an as needed basis.

WHEREAS, the Discharger states that the batch plant, the pumps and recycling system is planned to be run on metered power provided by Pacific Gas and Power Company. Otherwise, the facility will be powered by generators. Backup generators and standby portable pumps will also be available on an as needed basis; and

WHEREAS, the temporary concrete batch plant will produce approximately 1,000 cubic yards of cement per day. Peak productions are not expected to exceed 1,000 cubic yards per 10 to 12 hour shift; and

WHEREAS, source water is supplied by on site groundwater well. Approximately 30,000 gallons per day of water are required for operations. Approximately 3,500 gallons per day of water will be used for concrete truck and equipment washing; and

WHEREAS, the Discharger has submitted a Stormwater Pollution Prevention Plan (SWPPP). The State Water Board adopted Order No. 97-03-DWQ (General Permit No. 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. On 21 May 2008, the Discharger obtained coverage under General Permit No. CAS000001 with a Waste Discharger Identification (WDID) of 5S31I021568; and

WHEREAS, the Regional Water Quality Control Board, Central Valley Region (hereafter Regional Water Board) has a statutory obligation to prescribe waste discharge requirements except where a waiver is not against the public interest; and

WHEREAS, the Regional Water Board has determined that due to the limited nature and duration of the discharge, the discharge poses little or no threat to water quality; and

WHEREAS, this waiver does not require the installation and monitoring of groundwater monitoring wells due to the limited duration of the operation and the fact that the concrete washwater will be contained in a steel washout basin underlain by a secondary containment area designed to collect and contain the concrete washwater for proper reuse or off-site disposal; and

WHEREAS, Section 13267(b) of the 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 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"; and

WHEREAS, the Regional Water Board held a hearing on _____ and considered all evidence concerning this matter:

RESOLVED, that the California Regional Water Quality Control Board, Central Valley Region, waives waste discharge requirements for the FCI Constructors, Inc. Nyack Temporary Batch Plant, subject to the following conditions:

Discharge Prohibitions

1. Discharge of wastes to surface waters or surface water drainage courses is prohibited.
2. Discharge of wastes for land application (e.g. dust control) is prohibited.
3. Discharge of wastes between 2 November 2008 and 30 April 2009 is prohibited.
4. Discharge of waste classified as "hazardous" as defined in Title 27 Section 20164 is prohibited.
5. Bypass or overflow of waste from the washout basin and the secondary containment area is prohibited.
6. Discharge of designated waste other than to the designated storage and/or recycling system is prohibited.

7. Discharge of domestic wastewater to the designated waste storage and/or recycling system is prohibited.

Liquid Waste Discharge Specification

1. All wastewater must be contained in the washout basin, and the secondary containment area in such a manner that the wastewater does not contact the ground.
2. Wastewater shall be removed from washout basin, and the secondary containment area before capacity is reached, and may be removed by either a contracted waste hauler or by the Discharger.
3. Any wastewater removed from the facility for disposal shall be discharged to an appropriately permitted treatment/disposal facility. The Discharger shall obtain receipts for the transported waste from the licensed hauler and the receiving facility.
4. The discharge of waste shall not cause a condition of nuisance or pollution as defined by CWC Section 13050.
5. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of this waiver.
6. Objectionable odors originating at the facility shall not be perceivable beyond the limits of the property owned/leased by the Discharger.
7. As a means of discerning compliance with the above item, the dissolved oxygen content in the upper one-foot of the washout basin shall not be less than 1.0 mg/L.
8. All storage and disposal facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.
9. The washout basin and the secondary containment area shall be managed to prevent breeding of mosquitoes. In particular, algae, vegetation, scum, and debris shall not accumulate on the water surface.
10. The waste management unit shall have sufficient storage and disposal capacity to accommodate allowable wastewater flow and the applicable design seasonal precipitation in accordance with the criteria set forth in this waiver.

11. Freeboard in any washout basin and secondary containment area shall never be less than one foot as measured from the water surface to the lowest point of overflow.

Residual Solid Waste Handling and Storage

1. The handling, storage, and off-site disposal of residual solids removed from designated waste liquids shall be conducted in a manner consistent to that, which was provided in the RWD.
2. Solids removed from designated waste liquids may be dried and stored in the location and manner as described in the RWD.
3. Solids drying and/or storage areas shall be designed, constructed, operated, and maintained to prevent the washout or inundation due to floods with a 100-year return frequency.
4. Neither the storage nor the disposal of residual solid waste shall result in nuisance odors, storm water impacts, or groundwater impacts.
5. Any residual solids removed from the waste management unit for disposal shall be recycled or discharged at an appropriately permitted disposal facility. If solids are disposed of off-site, the Discharger shall obtain receipts for the transported waste from the licensed hauler and the receiving facility.

Groundwater Limitations

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

Design and Construction Standards

1. The washout basin and secondary containment area shall be engineered and constructed to completely contain all liquids and shall be designed to provide at least one foot of freeboard at all times.
2. The washout basin and secondary containment area shall be designed to provide sufficient storage and disposal capacity to accommodate allowable wastewater flow, direct precipitation, and runoff during the following design precipitation events:

- a. The total annual precipitation using a return period of 100 years (i.e., the 365-day, 100 year event), distributed monthly in accordance with historical rainfall patterns; and
 - b. The 100-year, 24-hour storm event.
3. Watertight liners that create the secondary containment area shall consist of flexible membrane liner or geomembrane manufactured, selected, designed, and installed to be
 - a. Functionally impervious to the waste to be contained
 - b. Resistant to puncture, tearing, abrasion, or seaming melt-through damage during construction activities and expected service conditions; and
 - c. Resistant to deterioration to due expected environmental conditions (e.g., oxidation, UV radiation, temperature extremes).
 4. Sealants used to fill or caulk cracks, gaps, and expansion joints shall be manufactured, selected, designed, and installed to form an impervious seal.
 5. Construction of the secondary waste containment area covered under this waiver shall be inspected and tested in accordance with an approved Construction Quality Assurance (CQA) Plan. The CQA Plan shall conform to the guidance set forth in *Technical Guidance Document: Construction Quality Assurance For Hazardous Waste Land Disposal Facilities* (EPA Publication No. 530SW86031) and Attachment C of this waiver. The CQA Plan shall set forth in detail a program of inspection and testing designed to ensure that the applicable design and construction standards are fully achieved. The design professional that prepares the CQA Plan shall be a registered civil engineer or certified engineering geologist and the construction quality assurance program shall be supervised by a registered civil engineer or certified engineering geologist who shall be designated the CQA Office.

Provisions:

All of the following reports shall be submitted pursuant to Section 13267 of the California Water Code:

1. At least **14 days** prior to construction activities, the Discharger shall submit a CQA plan as described above.
2. At least **14 days** prior to proposed operation, the Discharger shall submit a technical report certifying that the waste containment area covered in this waiver has been constructed, inspected, and tested in accordance with the CQA plan and with the waiver requirements.

3. Within **14 days** following completion of each operation season, but no later than **14 November**, the Discharger shall submit a report showing that the concrete washout basin and secondary containment area have been entirely cleaned prior to onsite storage or completely removed from the site. The report also needs to show that the site is free of residual wastewater and solids.
4. The Discharger shall comply with the monitoring and reporting requirements as described in Monitoring and Reporting Program No. ____ shown in Attachment D.

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.

RESOLVED, upon submittal of the CQA plan and technical report described in the Provisions and upon written approval by the Executive Officer, the Discharger may begin discharging and recycling wastewater into the concrete washout basin.

RESOLVED, this waiver expires on **1 November 2009**.

RESOLVED, that this action waving waste discharge requirements is conditional and may be terminated at any time.

I, PAMELA C. CREEDON, Executive Officer, do hereby certify the foregoing is a true, full, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, Central Valley Region, on _____.

PAMELA C. CREEDON, Executive Officer

Attachments: A - Site Location Map
B - Site Plan
C - Construction Quality Assurance Plan
D - Monitoring and Reporting Program