

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2010- [REDACTED]

FOR
BALDWIN CONTRACTING COMPANY INCORPORATED and SPRINGER FAMILY TRUST
HALLWOOD AGGREGATE FACILITY
YUBA COUNTY

This monitoring and reporting program (MRP) incorporates requirements for monitoring settling/recycling ponds, excavation ponds, and groundwater; the MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer.

Prior to implementation of sampling activities, Central Valley Regional Water Quality Control Board (Central Valley Water Board) staff shall approve specific sample station locations. Sample collection stations shall be established such that samples collected are representative of the volume and nature of the discharge or matrix of material(s) sampled. The person collecting the sample shall be identified along with the time, date, and location of each sample on the sample chain of custody form.

Field test instruments (such as those used to measure temperature, pH, EC, and dissolved oxygen) may be used provided that:

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

SETTLING/RECYCLING POND MONITORING

The settling/recycling pond shall be sampled as described below. All samples shall be collected when the Discharger is actively discharging to the pond. Samples collected for mercury sediment analysis shall be collected at a location of maximum pond water turbidity.

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Flow Rate	Million gpd	Weekly	Monthly
Freeboard	0.1 feet	Weekly	Monthly
pH	Std. Units	Monthly	Monthly
Electrical Conductivity	umhos/cm	Monthly	Monthly
Mercury (aqueous) ^{1,2,3}	ng/L	Semi-Annual	Semi-Annual
Mercury (sediment) ⁴	ng/kg	Semi-Annual	Semi-Annual

¹ Aqueous (liquid) samples collected for mercury analysis shall be filtered using a 0.45-micron filter prior to digestion and analysis or equivalent.

² Mercury samples shall be collected using the methods described in *Sampling Ambient Water for Trace Metals* (EPA Method 1669) or equivalent.

- ³ Samples for mercury analysis in wastewater and sediment shall be collected semi-annually (every six months).
- ⁴ Mercury sediment samples shall be collected from the wastewater pond and the sediment separated from the liquid by settling, centrifuge, or other appropriate method.

EXCAVATION AREA POND MONITORING

The Discharger shall collect grab water samples from all excavation area ponds that have been subject to an activity (such as excavation, pumping water, adding sediment, etc.) during the previous calendar month. Excavation area pond monitoring shall include, at a minimum, the following:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Pond Status (list all ponds)	--	Monthly	Monthly
Freeboard	0.1 feet	Weekly	Monthly
pH	Std. Units	Monthly	Monthly
Electrical Conductivity	umhos/cm	Monthly	Monthly
Mercury (aqueous) ^{1,2,3}	ng/L	Semi-Annual	Semi-Annual
Mercury (sediment) ⁴	ng/kg	Semi-Annual	Semi-Annual

- ¹ Aqueous (liquid) samples collected for mercury analysis shall be filtered using a 0.45-micron filter prior to digestion and analysis or equivalent.
- ² Mercury samples shall be collected using the methods described in *Sampling Ambient Water for Trace Metals* (EPA Method 1669) or equivalent.
- ³ Samples for mercury analysis in wastewater and sediment shall be collected semi-annually (every six months).
- ⁴ Mercury sediment samples shall be collected from the wastewater pond and the sediment separated from the liquid by settling, centrifuge, or other appropriate method.

GROUNDWATER MONITORING

Prior to construction of any new groundwater monitoring wells, the Discharger shall submit a Groundwater Monitoring Well Installation Workplan to the Central Valley Water Board for review and approval. Groundwater monitoring shall occur in the first saturated zone with adequate groundwater to allow monitoring.

The groundwater monitoring well network shall be determined by an approved groundwater monitoring workplan and approved revisions thereafter. Any additional monitoring wells installed at the site shall be added to the monitoring well network unless the wells are required under another governmental order not related to the discharge of wastewater. Prior to sampling, the depth to groundwater shall be measured at each well to the nearest 0.01 foot, and each well shall be purged of at least three well volumes or until measurements of pH and electrical conductivity have stabilized. Samples shall be collected using standard EPA methods. Groundwater monitoring shall include, at a minimum, the following:

<u>Constituent/Parameter</u>	<u>Units</u>	<u>Sampling Frequency</u>	<u>Reporting Frequency</u>
Depth to Groundwater	0.01 foot	Semi-Annually	Semi-Annually
Groundwater Elevation	0.01 foot	Semi-Annually	Semi-Annually
Groundwater Gradient	Feet/Feet	Semi-Annually	Semi-Annually
Groundwater Flow Direction	Map Bearing	Semi-Annually	Semi-Annually
pH	Std. Units	Semi-Annually	Semi-Annually
Electrical Conductivity	umhos/cm	Semi-Annually	Semi-Annually
Mercury ^{1,2,3}	ng/L	Semi-Annually	Semi-Annually

¹ Groundwater samples collected for mercury analysis shall be filtered using a 0.45-micron filter prior to digestion and analysis or equivalent.

² Mercury groundwater samples shall be collected using the methods described in *Sampling Ambient Water for Trace Metals* (EPA Method 1669) or equivalent.

³ Semi-Annual samples shall be collected twice per year.

REPORTING

In reporting monitoring data, the Discharger shall arrange the data in tabular form so that the date, sample type (e.g., settling/recycling pond, groundwater, excavation pond), and reported analytical result for each sample are readily discernible. The data shall be summarized 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 to the Central Valley Water Board.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all groundwater monitoring reports shall be prepared under the supervision of a Registered Engineer or Professional Geologist and signed/stamped by the registered professional.

A. Monthly Reports

All sample data collected during the month shall be reported in the monthly monitoring report. Monthly Reports shall be submitted to the Central Valley Water Board **by the first day of the second month following the month of sampling** (e.g., the January monthly report is due by 1 March). At a minimum, the reports shall include the following:

1. The results of all settling/recycling pond and excavation area pond monitoring.
2. A scale map that identifies all excavation ponds with identifiers to allow determination of the activity status of the pond.
3. A comparison of the monitoring data to the discharge specifications, provisions, and groundwater limitations and an explanation of any violation of these requirements.
4. A calibration log of all hand-held monitoring instruments and devices used to comply with

the prescribed monitoring program.

5. Copies of the laboratory analytical report(s).

B. Semi-Annual Monitoring Report

In addition to the monthly report described above, the Discharger shall establish a semi-annual (twice per year) sampling schedule for groundwater monitoring such that samples are obtained approximately every six months. The data shall be included in semi-annual monitoring reports which shall be submitted to the Central Valley Water Board by the **1st day of the second month after the reporting period** (e.g. the January-June semi-annual report is due by August 1st). As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, groundwater monitoring reports shall be prepared under the supervision of a California licensed engineer or geologist. The Semi-Annual Report shall include the following:

1. Results of groundwater monitoring.
2. A scaled map showing relevant structures and features of the facility.
3. A narrative description of all preparatory, monitoring, sampling, and analytical testing activities. The narrative shall be sufficiently detailed to verify compliance with the WDR, this MRP, and the Standard Provisions and Reporting Requirements. The narrative shall be supported by field logs for each well documenting depth to groundwater; parameters measured before, during, and after purging; method of purging; calculation of casing volume; and total volume of water purged.
4. Calculation of groundwater elevations and discussion of seasonal trends.
5. A narrative discussion of the analytical results including spatial and temporal trends, with reference to summary data tables, graphs, and appended analytical reports (as applicable).
6. A comparison of the monitoring data to groundwater limitations, and an explanation of any violation of those requirements.
7. Summary data tables of historical and current water table elevations and all analytical results.
8. A scaled map showing the locations of groundwater monitoring wells and groundwater elevation contours referenced to mean sea level datum.
9. Copies of laboratory analytical report(s). This submittal may be made on electronic media, appropriately labeled to indicate the associated monitoring report. If this option is selected, include a copy of the complete report (in portable document format (pdf) or equivalent) in the submittal.

C. Annual Monitoring Report

In addition to the monthly and semi-annual reports described above, an Annual Monitoring Report shall be submitted by **1 February of each year**. At a minimum, the Annual Monitoring Report shall include the following:

1. A written summary of the all significant actions taken during the year.
2. A tabular summary of the all data reported in the Monthly Monitoring Reports.
3. Tabular summaries of all monitoring data obtained during the previous year. Data showing trends, such as groundwater elevation or quality, shall be presented in graphs.
4. A statement of the approximate volume of recycled materials, type of recycled material (broken asphalt pavement, concrete, etc.), and the storage location of the recycled materials.
5. A map showing the current location of the settling/recycling pond and active excavation pond locations.
6. 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.
7. A discussion of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.

A letter transmitting the self-monitoring reports shall accompany each report. The letter shall include a discussion of violations discovered during the reporting period, and actions taken or planned for correcting noted 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 and Reporting Program as of the date of this Order.

Ordered by: _____
PAMELA C. CREEDON, Executive Officer

(Date)