
San Francisco Bay Regional Water Quality Control Board

April 10, 2013
CIWQS Place ID: 273205(LW)
PCA Site ID: 2020435

Lehigh Southwest Cement Company
Attn: Axel Conrads (Axel.Conrads@LehighHanson.com)
24001 Stevens Creek Blvd.
Cupertino, CA 95014
Sent via email

Subject: Conditional Concurrence on the Workplan for Pond (Waste) Characterization, for the property located at 24001 Stevens Creek Boulevard, Cupertino, Santa Clara County

Dear Mr.Conrads:

This letter provides Water Board staff (Staff) concurrence with the *Workplan for Pond Characterization, Permanente Quarry* (Workplan), submitted February 22, 2013 in response to a letter requiring a Report of Waste Discharge (July 18, 2012) and subsequent Notice of Violation (January 22, 2013). The Workplan provides details for an investigation to characterize liquid and solid waste in nine on-site surface impoundments (Workplan refers to as ponds). Staff will use this information to determine if coverage under a Waste Discharge Requirements order, pursuant California Code of Regulation (CCR), title 27, is appropriate.

In general, Staff concurs with the approach outlined in the Workplan, which includes characterization of ponds 4A, 9, 22, 13A, 13B, 17, 30, 31A, and 31B according to the following methodology:

- A. Collecting solid waste (Workplan refers to as soil or sediment) samples from three cores, at random locations within the ponds. Two samples will be collected and analyzed from the top and bottom of each core. Additional samples will be collected for analysis of physical characteristics, including visually distinct wastes. (Please note that the Workplan refers to separately sampling different "lithology" rather than visually distinct waste. However, we do not concur with the use of this term to refer to layers of waste in a settling pond, as they are not geologic deposits resulting from natural sedimentation).

An attempt will be made to collect a sample of the native soils directly beneath the waste. This necessitates that the solid waste be distinguishable from native soils. If native soils cannot be differentiated from waste, the maximum depth will be three feet. If the horizon of native soils is distinguishable within the core, the maximum depth of the core sampled will extend below this horizon.

JOHN MULLER, CHAIR | BRUCE H. WOLFE, EXECUTIVE OFFICER

Lehigh Cement Company
Conditional Concurrence for
The Workplan to Characterize Waste in Site Ponds

- B. Collecting wastewater samples from the on-site ponds listed above, once per week to a maximum of three samples. Every attempt will be made to collect the sample after a storm event.
- C. Analyzing both solid and liquid wastes for CCR title 22 metals and total petroleum hydrocarbons in the gasoline, diesel, and motor oil ranges. Liquids will additionally be analyzed for pH and total dissolved solids.
- D. Comparing analytical results to relevant regulatory criteria in a technical report to be submitted by November 30, 2013, as required in our January 22, 2013 letter.

We concur with this approach on the stipulation that the following conditions are adhered to:

1. **Addendum to address all liquid waste storage areas:** Our January 22, 2013 letter specifically required the characterization of wastes in any solid or liquid mining waste storage area or management unit that should be evaluated by Staff for potential coverage under CCR title 27. Furthermore, our July 18, 2012, letter defined the definition of a surface impoundment that may require regulation under CCR title 27 as:

...a waste management unit which is a natural topographic depression, excavation, or diked area, which is designed to contain liquid wastes or wastes containing free liquids, and which is not an injection well.

Staff are aware of several ponds and basins on site that appear to meet this criteria that were not addressed in this report (e.g., the Dinky Shed Basin, Ponds 14 18, 19, 20, 21, and 22; and Basins A, B, and E). Please submit an addendum to this Workplan that addresses these, and any remaining surface impoundments on site, that should be characterized for regulation under CCR title 27. An adequate demonstration that the pond or basin does not meet this definition of a surface impoundment will be considered in lieu of a physical characterization, as appropriate. However, we will not accept an argument that any ponds collect only stormwater and therefore do not collect or store waste. Staff has yet to determine if runoff from mining waste storage areas (including roads constructed with overburden) or aggregate processing areas will be classified as stormwater, mining waste, or industrial process water. The results of these investigations will help Staff make that determination.

Addendum Submittal Compliance Date: June 15, 2013

2. **Sample solid waste beneath lined ponds:** It is our understanding that Pond 4A was historically unlined. Solid waste beneath the liner must be collected and analyzed. We recommend installing an angled boring and collecting several samples laterally, following the scheme developed for pond sediments.

3. **Evaluate all CCR title 22 metals against applicable regulatory water quality criteria:** Staff have reviewed pond wastewater data submitted to US EPA pursuant to its Clean Water Act Section 308 Request for Information. In addition to the metal and metalloid constituents of concern (COCs) documented in the Workplan, copper, vanadium, mercury, lead, and zinc have been identified at elevated concentrations in on-site ponds. The Workplan proposes to analyze these metals, given they are included in the list of CCR title 22 metals analytes. However, we note that they are not included in the proposed list of COCs. To clarify, all analytes listed in the analytical method, not simply the COCs identified in the Workplan, must be compared against water quality criteria.
4. **Applicable Water Quality Criteria:** The Workplan proposes to compare the results of the investigation to “relevant regulatory criteria”, but does not define which specific criteria will be used. Given the beneficial uses identified for receiving waters (both surface water and groundwater) include cold and warm freshwater habitat, fish spawning, preservation of rare and endangered species, and municipal supply, the appropriate criteria are those for the protection of aquatic habitat and drinking water (whichever is more stringent) for shallow soils and groundwater. The most up-to-date criteria can be found in the recently updated Environmental Screening Levels document at the following web page: (http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/esl.shtml)
5. **Analyze liquid samples for both total and dissolved metals and metalloids:** Staff understand that the turbidity and total suspended solids of discharge from these ponds is often elevated (personal communication with Staff overseeing Sand and Gravel permit). Therefore, we require that you analyze liquid samples for both total and dissolved metals.

If possible, Staff wish to be in attendance during sampling of pond solid waste. To facilitate this, please send Lindsay Whalin the sampling schedule in advance of the sampling events.

Lastly, we note that the Workplan relies on data and conclusions about the geochemistry of waste found on-site that were presented in the 2011 Golder report, *Hydrogeologic Investigation*, despite the January 22, 2013 comment letter attached to the Notice of Violation, in which Staff indicated that much of the data in this report are inadequate or have been inappropriately applied to describe the geochemistry of waste at the site. The Golder 2011 report was not officially submitted to this agency for review and would not be accepted due to these inadequacies. In the case of the Workplan for pond waste characterization, the conditions outlined in this letter for Staff concurrence compensate for those inadequacies. However, be aware that Staff will reject any future report that uses data or conclusions from the Golder 2011 report to describe the geochemistry of on-site waste. Reliance on the Golder 2011 report will be insufficient to comply with the terms of the Notice of Violation and the conditions contained herein,

Lehigh Cement Company
Conditional Concurrence for
The Workplan to Characterize Waste in Site Ponds

and could subject Lehigh to violations for failure to submit a complete and accurate report. This stipulation stands for all technical reports requiring an evaluation or investigation of site hydrogeology or geochemistry required or requested by Staff.

If you have any questions, please contact Lindsay Whalin at (510) 622-2363 or by email at LWhalin@waterboards.ca.gov.

Sincerely,

Keith E. Roberson
Senior Engineering Geologist

CC: Nicole Granquist – Downey Brand
NGranquist@DowneyBrand.com