June 26, 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 Certified Mail and email*

**Subject: Conditional Concurrence with the *Workplan for Characterization of the Eastern and Western Materials Storage Areas* and Requirement for Additional Technical Reports for WDR Development for the property located at 24001 Stevens Creek Boulevard, Cupertino, Santa Clara County**

Dear Mr. Conrads:

This letter provides Water Board staff (Staff) conditional concurrence with the *Workplan for Characterization of the Eastern and Western Materials Storage Areas* (Workplan) submitted November 30, 2012 and revised on February 22, 2013 in response to comments associated with a January 22, 2013 notice of violation (NOV) and requires additional technical reports. The Workplan provides details for an investigation to characterize waste in two on-site waste piles, the East Materials Storage Area (EMSA) and West Materials Storage Area (WMSA).

As detailed in the January 2013 NOV, the purpose of the required waste characterization was to obtain information needed to determine if the waste piles should be regulated as waste management units under California Code of Regulations, title 27. Inspections performed by Water Board staff (Staff) in February of 2013 as well as information reviewed by Staff since issuing the NOV confirms that the WMSA and EMSA meet the criteria for coverage (title 27 section 22480) [(1)] [(2)] [(3)]. However, waste characterization remains necessary to inform the development of waste discharge requirements (WDRs) and to classify the waste as Group A, B, or C mining waste [title 27, 22480(b)]. Information obtained from the investigation as proposed will be useful, but is not expected to be sufficient for WDR development and waste classification. This letter therefore provides conditional concurrence with the Workplan, but also requires additional investigations to meet the new objective, pursuant to section 13267 of the Water Code.

*Workplan Conditional Concurrence*
The Workplan proposes to collect soil samples from five borings, drilled to the depth of bedrock using a sonic drill rig, from both the EMSA and WMSA. Soil samples will be collected every five feet or more frequently when changes in the type of waste are visually

apparent. All samples that are visually similar will be composited for analysis of title 22 metals. A DI WET (waste extraction test using de-ionized water) will be completed if the solid waste concentration exceeds the STLC (soluble limit threshold concentration) by a factor of ten.

There are two categories of waste in the piles: mining wastes including overburden, and other wastes, including those from historic and current manufacturing processes on site. The proposed investigation will provide some information about the former type of waste, but is insufficient to characterize the latter wastes. However, given the size of the waste piles, Staff have determined that requiring an investigation of the necessary magnitude to be comprehensive may be overly burdensome and unnecessary at this juncture. Impacts to water quality (surface and groundwater) will need to be evaluated to determine if further waste characterization is necessary.

We therefore concur with the implementation of the proposed Workplan under the following conditions:

1. **Constituents of Concern**: Lehigh has not sufficiently demonstrated that the proposed list of constituents of concern (COCs) is sufficient to evaluate potential wastes on site. Based on a review of reports and historical data, the list of COCs to be monitored for this project must include the priority pollutants listed in Appendix 4 of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (http://www.waterboards.ca.gov/water_issues/programs/state_implementation_policy/docs/sip2005.pdf),.

   These include:
   a. Inorganics, including hexavalent chromium;
   b. Volatile organic compounds;
   c. Semi-volatile organic compounds;
   d. PCBs (surface water and solid waste only); and
   e. Pesticides (surface water and solid waste only).

   In addition, total petroleum hydrocarbons must be measured. Analytical methods used must be capable of quantifying results at concentrations no higher than the minimum levels set in this policy (in the case of total petroleum hydrocarbons use the Environmental Screening Levels for the protection of drinking water and terrestrial ecosystems of 100 µg/L).

2. **Leaching Tests:** Leaching tests must be performed not just for solid waste samples with concentrations of title 22 metals exceeding 10 times the STLC, but for all leachable constituents meeting this criteria.

*Additional Investigation Technical Reports*
Pursuant to section 13267 of the Water Code, the following technical reports are required for the development of WDRs:

1. **Groundwater Investigation Workplan, Implementation, and Reporting:** A characterization of site hydrogeology is necessary to inform the development of a detection monitoring program in accordance with title 27. In addition, it is necessary to evaluate potential impacts to groundwater from the waste piles, and identify if surface water or groundwater that discharges to drinking water aquifers have been or could be impacted from on-site sources.

   We require that you submit and implement a workplan to install a groundwater monitoring well network to achieve both objectives. The network must be sufficient to characterize the hydrogeology of the site, including the interaction between site groundwater and adjacent surface waters including Permanente Creek and creeks to the north and west of the site. Given the reversal of groundwater flow direction caused by pumping in the quarry (indicated by the disappearance of Permanente Creek flow in the stretch adjacent to the quarry), it is expected that the hydrogeology of the site is complicated, necessitating that a qualified and experienced team of hydrogeologists perform the investigation. In order to adequately evaluate potential groundwater contamination, the COCs listed above must be monitored quarterly for a minimum of 2 years to obtain a robust dataset for evaluating impacts.

   A technical report must be submitted that presents and analyzes the results of the hydrogeologic and contaminant investigation. Graphics depicting the potentiometric surface of groundwater on site, including adjacent to Permanente Creek and creeks to the north and west of the site to demonstrate where the creeks are gaining and losing, must be included. In addition, groundwater contaminant data must be compared to the applicable water quality objectives for the protection of drinking water and aquatic habitat.

   All reports must be acceptable to the Assistant Executive Officer and submitted by the following dates:

   WORKPLAN COMPLIANCE DATE: September 30, 2013

   IMPLEMENTATION COMPLIANCE DATE: Two months after workplan approval

   REPORTING COMPLIANCE DATE: Two years and six months after workplan approval

2. **Waste Pile Runoff Investigation Workplan, Implementation, and Reporting:** In accordance with title 27, runoff from the waste piles must be prevented from discharging to groundwater or surface water bodies (Permanente Creek and creeks to the north and west of the site). This runoff must be characterized so that it can be properly regulated under WDRs.

   We require that you submit and implement a workplan to monitor runoff and seeps from the EMSA and WMSA. In order to adequately evaluate the runoff, the COCs listed above must be monitored. This technical report must present and analyze the results of the investigation. Contaminant data must be compared to the applicable water quality objectives for the protection of drinking water and aquatic habitat.

   All reports must be acceptable to the Assistant Executive Officer and submitted by the following dates:

   WORKPLAN COMPLIANCE DATE: September 30, 2013

   IMPLEMENTATION COMPLIANCE DATE: June 30, 2014

   REPORTING COMPLIANCE DATE: August 30, 2014

The requirement for reports is made pursuant to Water Code Section 13267, which allows the Regional Water Board to require technical or monitoring program reports from any person who has discharged, discharges, proposes to discharge, or is suspected of discharging waste that could affect water quality. The attachment provides additional information about Section 13267 requirements. Any extension in the above deadline must be confirmed in writing by Regional Water Board staff. If you have any questions, please contact Lindsay Whalin at (510) 622-2363 or by email at LWhalin@waterboards.ca.gov.

Sincerely,

Terry Seward for

Digitally signed
by Terry Seward
Date: 2013.06.26
09:56:26 -07'00'

Dyan C. Whyte
Assistant Executive Officer

1. **US EPA Region IX.** *CERCLA Screening Site Inspection.* 1991.
2. **Associates, Environmental Science.** *Feasibility Assessment - Lehigh Permanente Quarry Selenium Treatment.* April 2012.
3. *Lab Data submitted to US EPA pursuant to its Clean Water Act Section 308 Request for Information.* 2012.

Lehigh Cement Company
Conditional Concurrence of the EMSA and WMSA
Waste Characterization Workplan and Requirement
for Additional Investigation Technical Reports for WDR Development

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

Attachments: Mailing List