

Lehigh Southwest Cement Company Update

August 26, 2015

Summary

Since the adoption of Regulation 9, Rule 13 (Nitrogen Oxides, Particulate Matter, and Toxic Air Contaminants from Portland Cement Manufacturing) emissions from Lehigh Southwest Cement Company in Cupertino have been significantly reduced. Improvements include construction of a new Kiln and Clinker Cooler exhaust system to improve dispersion, installation of advanced continuous emissions monitoring systems to ensure compliance, and implementation of a dust control plan to reduce fugitive emissions. The Air District presently finds Lehigh to be in compliance with all applicable requirements.

Compliance Milestones

Lehigh must comply with all Federal, State, and Local requirements.

September 19, 2012: The Air District Board Adopted Regulation 9, Rule 13.

- Emission limits on nitrogen oxides (NO_x), particulate matter (PM), ammonia (NH₃), dioxins and furans (D/F), mercury (Hg), total hydrocarbon (THC) including organic hazardous air pollutants (HAPs), and hydrogen chloride (HCl)
- Opacity limits from the kiln and clinker cooler
- New kiln stack requirement to reduce health risk below the Air Toxics “Hot Spots” public notification thresholds
- Fugitive dust mitigation measures
- Continuous Emissions/Parametric monitoring for NO_x, sulfur dioxide (SO₂), THC, HCl, NH₃, Hg, and PM
- Production monitoring
- Comprehensive health risk assessment (HRA) requirement

September 9, 2013: Regulation 9, Rule 13 key requirements became effective.

September 16, 2013: Lehigh and the Air District entered into a limited term Compliance Agreement to allow the facility to complete upgrades required by Regulation 9, Rule 13. This agreement was in response to legal action brought against the Air District by Lehigh, challenging the rule’s effective date. The Agreement:

- Limited facility clinker production to 1.1275 million short tons per rolling 12-month period while providing relief from monitoring requirements under Section 501 of the Rule until the stack could be installed
- Had a term beginning September 9, 2013 and ending February 28, 2015

June 18, 2014: The Air District issued an Authority to Construct to Lehigh for the kiln and clinker cooler stack modifications.

February 3, 2015: The Air District approved Lehigh’s HRA results. The findings of the HRA showed that the facility can operate up to its maximum production capacity of 1,600,000 tons per year of cement clinker without exceeding notification thresholds.

February 13, 2015: Lehigh started up new kiln and clinker cooler exhaust systems and was in compliance with all requirements of Regulation 9, Rule 13.

Facility Improvements

- Taller stacks to improve dispersion
- Dry lime injection system to meet the HCl standard
- Selective non-catalytic reduction system to meet the NOx standard
- Activated carbon injection system to meet Hg and HAPs standards
- Baghouse improvements to meet the PM standard
- Continuous emissions monitoring systems: NOx, SO2, THC, HCl, NH3, Hg, PM, Opacity

Non-Compliance

Notices of violation between 9/9/2013 and present:

- Exceeded opacity limit for visible emissions by fugitive dust – Three (3) violations
- Exceeded rolling 30 day limit for mercury emissions – One violation
- Failed to follow Dust Collector Dye Testing Schedule – One violation
- All violations were corrected expeditiously

Exceedance of Production Rate Limit in the Compliance Agreement:

In September and October of 2014, Lehigh exceeded the production rate associated with the temporary Compliance Agreement outlined above. The details of the non-complying period are as follows:

- A production limit of 1.1275 million short tons per rolling 12-month period was allowed in the Agreement. Lehigh exceeded this production limit during two rolling 12-month periods ending September 8, 2014 and October 8, 2014. Lehigh has paid a fine for the exceedance as stipulated in the Agreement.
- Based on findings included in the October 29, 2014 Health Risk Assessment (HRA) Addendum, the Air District concluded that Lehigh satisfied the terms of the Compliance Agreement.
- This agreement is no longer in force and Lehigh is now subject to the clinker production rate limit specified in their permit conditions, 1,600,000 tons per rolling 12-month period. Lehigh is presently in compliance with this limit.