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15 February 2012

Ms Kristina Chu
Public Information Officer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Reference: Proposed Regulation 9, Rule 13, posted 11/18/2011

Dear Ms Chu:

I am writing on behalf of the Sierra Club Loma Prieta Chapter's Air Quality Committee. With the extension of time to comment, we are submitting this letter, which supersedes the one of 3 January. We appreciate the opportunity to comment on the Rule and compliment your initiative in developing this Rule. We wish to provide you with the following comments:

The proposed rule by BAAQMD in their Workshop Report November 2011 does not adequately protect the public health. The Rule does not take into account the numerous modifications and scheduled modifications to the facility (which would classify the facility as a "modified" facility); it does not take into account the proximity of the facility to a large, dense metropolitan area with a constraining terrain and meteorology; and it does not take into account that the recently performed Health Risk Assessments, which revealed that many residences are only marginally below the toxic exposures levels. If these levels are exceeded, then BAAQMD is required to provide public notifications. As shown in BAAQMD's own report, the area is currently in non-attainment and must submit plans to obtain attainment. Adoption of these recommendations will go a long way toward achieving attainment. Specific comments:

1. At the very minimum, the BAAQMD should insist on the most protective and well-established regulations. These limits are achievable and cost effective at both new and existing cement plants. Regardless of whether Lehigh meets the *legal* definition of a modified existing plant, EPA's new source performance standards provide well-supported examples of emission limits that can be economically achieved. The emission limits in the new source performance standards should be required at Lehigh's facility because they are more protective of public health, and meet BAAQMD's achievability and cost-effect objectives.
2. The Lehigh Cement Plant is located in a non-attainment region for PM and ozone. Since SO₂ causes formation of particulates, and NO_x participates in the production of ozone; both of these emissions must be tightly regulated. Although the draft report states that SO₂ emissions should decline as a result of other

emission reductions, the proposed regulations do not specify a limit for SO2.

3. Because of the proximity of BAAQMD to a dense population center, BAAQMD should go beyond these emission limits. US Public Health Code 42 USC 7416 allows the state to impose stricter limits on emissions than EPA regulations. We think this is called for because the calculations in the Health Risk Assessment show levels that are close to public warning criteria. In fact, if the plant were operated at full licensed capacity, it might exceed these levels.
4. The proposed regulations do not address the heavy traffic of trucks either entering the facility with materials for processing or leaving the facility with cement and aggregate. These trucks pose an indirect source impact on residences that live along this street. No analysis was made of this indirect source.

In view of this situation, the Sierra Club respectfully requests that a broad set of measurements of pollution levels be taken at locales where the residences complain of chemically active dust, and health effects from the breathing the air from the plant. We recognize that measurements have been taken throughout the community and on a long-term basis at one location. But the multitude of complaints in combination with a very constraining meteorology and terrain leads us to believe that there are “hot spots” that have been overlooked. We recommend identifying those “hotspots” through community outreach and then making the measurements at those locals. Based on complaints from residents, the City of Cupertino has sent a letter to the BAAQMD requesting more protective emission regulations be imposed.

The Sierra Club respectfully requests the following specific revisions to the draft rules. These requests are based on existing and proven technologies.

Summary of BAAQMD Draft vs. NESHPAP Standards
For New and Modified Facilities

Pollutant	Current Emissions	Draft		Recommended (NESHPAP for New and Modified Facilities)	
		lb/ton	Reduction	lb/ton	Reduction
NOx	4	2.3	42.5%	1.5	62.5%
SO2	1.15	none	N/A	0.4	65.0%
PM	0.014	.04	none	0.01	28.6%
Mercury	305*	55*	82.0%	21*	93.1%

*lb/million tons of clinker

1. The rule for NOx emissions should be changed to 1.5 lb/ton of clinker (or lower) rather than the proposed 2.3 lb/ton of clinker (page 15 of the BAAQMD Workshop Report). In the workshop report BAAQMD (page 11) states: “EPA has based its NSPS NOx emission limit of 1.5 lbs. per ton of clinker on a well-

designed preheater/precalciner kiln (i.e. with stage combustion) and 50% control obtained by SNCR.” The discussion describes even greater reductions that have been obtained in Europe using SCR (Selective Catalytic Reduction). According to the workshop report, three plants use this technology in Europe and a plant in Illinois will be installing a SCR system. The workshop report does not provide a rationale for the proposed limit of only 2.3 lb/ton of clinker. Given the proximity of the Lehigh facility to a population center, a more thorough analysis of NO_x emission limits should be performed.

2. The rule for PM emissions should be changed to 0.01 lb/ton of clinker rather than the proposed 0.04 lb/ton of clinker (page 15 of the BAAQMD Workshop Report). This more protective requirement can be achieved by the use of the Best Available Fabric Filters. The EPA has determined that the 0.01 lb/ton of clinker is obtainable with the current technology and has stipulated that value in their regulations.
3. The draft levels for mercury were those from the regulations on existing plants. The workshop report provides no justification for not imposing the regulations for modified and new facilities. On page 19 of the report states: “Additional parametric monitors will be required for PM, ammonia, D/F, mercury, total organic hydrocarbons, and HCl, as well as the installation of continuous flow rate monitors and production monitoring systems.” While agreeing with this requirement, we would like to state that the chemical composition of “total organic hydrocarbons” and PM, and chemical form of mercury should be determined. The presence of such chemicals as methyl mercury (neurotoxin) and benzene (carcinogen) among other chemicals should be quantitatively measured.
4. The rules should be expanded to include SO₂ emissions. The NESHAP federal regulations require for new and modified cement plants 0.4 lb/ton of clinker. According to the table on page 6, Lehigh emitted 1.15 lb/ton of clinker of SO₂ in 2010. The report indicates in several places that measures to reduce the production of other pollutants should also lower SO₂ levels. We feel it is only reasonable to specify a limit in any case. It is noteworthy that Lehigh emitted 181 tons of SO₂ in 2008 (page 3) if production levels in 2008, which were not specified, were similar to 2010, then in 2008 the ratio of SO₂/ton of clinker would be 0.2 lb/ton of clinker.

Toxic Air Contaminants

The list of Toxic Air Contaminants (TACs) on page 16 of the Workshop Report primarily identifies categories (mercury without stating its chemical form, and Total Organic HAP) of contaminants and not the specific chemical. This is a serious oversight that does not distinguish between relatively benign chemicals and very toxic ones such as chromium VI, benzene, methyl mercury, and arsenic. Without this information, a credible Health Risk Assessment Report cannot be produced. The TACs must be controlled and monitored by chemical type, as they will vary depending on the particular materials mixed with the limestone to create the clinker and the fuel contaminants.

The goal of these recommendations to ensure and improve public health, a goal that the Sierra Club is confident that BAAQMD shares with us. By adopting the stricter standards (for modified and existing plants) and searching for “hot spots” by measurements, BAAQMD will achieve this common goal.

Thank you for the opportunity to comment on the proposed rules. Although the cement products produced at this facility are of value to the community, it is essential that they be produced in a fashion that does not cumulatively degrade our community health.

A handwritten signature in black ink, reading "Gary Latshaw". The signature is written in a cursive style with a large, sweeping initial "G".

Gary Latshaw, Ph.D.
Chairman of the Air Quality Committee
Loma Prieta Chapter of the Sierra Club
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