

September 25, 2009

Bay Area Air Quality Management District
Attention: Thu Bui, Permitting
939 Ellis Street
San Francisco, CA 94109

RECEIVED
09 SEP 29 AM 10:20
BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

Dear Ms. Bui:

The single largest stationary source of hazardous air contaminants in Santa Clara County is the large Lehigh Southwest Cement Plant in Cupertino. The plant's permit to continue operations is up for review by the Bay Area Air Quality Management District.

We the undersigned physicians of the Santa Clara County Medical Association are concerned about the local and global health impacts of the cement plant as noted below.

1. Hazardous Air Pollutants

The Lehigh plant is among the largest emitters in the county of criteria air pollutants, such as sulfur and nitrous oxides, which increases the risk of respiratory illness. The Lehigh plant also emits large quantities of very fine particulate matter, which has been linked to increased rates of cancer and respiratory and cardiovascular diseases. Santa Clara County has some of the worst air quality in California, according to the American Lung Association <http://www.stateoftheair.org/2009/states/california/>.

In addition to criteria pollutants and particulate matter, a number of highly toxic and carcinogenic substances have been identified in cement kiln emissions, such as hexavalent chromium, PCBs, dioxins, lead, arsenic, benzene, and 1,3 butadiene. <http://www.arb.ca.gov/app/emsinv/facinfo/facinfo.php>.

2. Mercury Toxicity

The San Francisco Bay Area Air District (BAAD) is estimated by the Air Resources Board (ARB) to have, by far, the highest estimated mercury emissions out of all the air districts in California, over two times the amount of the next highest air district, the South Coast Air District. <http://www.arb.ca.gov/app/emsinv/facinfo/facinfo.php>.

The California Air Resources Board (ARB) has determined that the Lehigh Southwest Cement Plant in Cupertino CA, by itself, produces around 35% of the total estimated mercury emissions.

Mercury is highly toxic

Mercury is a known neurotoxin at very low levels, and is particularly hazardous to the nervous systems of developing children and developing fetuses. In utero exposure to mercury has been linked to developmental abnormalities, such as autism and mental retardation.

Schools nearby

In light of this, particular attention must be paid to mercury exposure in the residential areas close to the plant, as well as a variety of sensitive receptors. These schools are very close to the Lehigh cement plant: City of Cupertino Preschool at Monte Vista Park, Monarch Christian Preschool, Lincoln Elementary School, Stevens Creek Elementary School, Kennedy Jr. High School, and Monte Vista High School.

3. Inadequate Monitoring: No Single Stack

The Lehigh plant is one of three cement facilities remaining in the United States which have no central stack to monitor all of the waste gases emitted from the kiln. Instead, there are 32 vents coming from each of the baghouses attached to the kiln. Historically, emissions have been measured from a representative sample of vents and total emissions extrapolated to the facility as a whole. We feel this is an inadequate and inaccurate way to monitor this facility and determine true health risks.

4. Inadequate Health Risks Assessments

It is best if risk assessments are based on real data. This is especially needed of a grandfathered plant that is one of the top five worst polluting cement kilns in the United States. Although criteria pollutants such as Sox and NOx are measured there has not been adequate real data that has been seen on many other hazardous pollutants, such as hydrochloric acid. Most of the data collection regarding emissions for heavy metals is done through modeling and are estimates. While you may feel this is adequate, we feel that more diligent analysis is needed. In fact, the BAAQMD found that regarding chromium, their assessment of one-half pound per year was incorrect and may actually be much higher. (They recently began testing chromium levels in the air adjacent to Stevens Creek Elementary School.) Federal regulations specify the limit at less than one pound per year or the site is considered a toxic "Hot Spot." The data is not yet in.

Conclusions

Considering that this permit will be for five years, the SCCMA supports a deferral of consideration of the granting of any further permits for the Lehigh plant until the following conditions are met.

1. The requirement of a central stack to continuously monitor 100 percent of the emissions from the cement kiln. In addition, documentation of data from the continuous emissions monitor should be readily accessible to the public to ensure compliance and enforcement of rules.
2. The preparation of rigorous health risk assessments based on local epidemiological data, rather than those extrapolated from emissions data. We again support delay of the granting of the permit until such studies have been completed and it is shown that the Lehigh plant poses no significant health risk to the community.
3. This facility be required to comply with the long awaited and significant new USEPA regulations regarding mercury emissions as soon as they take effect, and are stipulated as part of the permit. This is expected as early as March 2010.

We appreciate your interest and continuous commitment to adherence to the best regulatory standards in effect for the health and well being of our community.

Sincerely,

Cindy Russell, MD

Cindy Russell, MD
VP/Community Health

CR/sf