

Bay Area Air Quality Management District Regulation of Lehigh Southwest Cement Plant

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California Air Pollution Control Agencies

> Air Districts

- Primary regulatory jurisdiction over stationary sources of air pollution
 - Industrial, commercial, and public facilities such as various manufacturing facilities, landfills, gas stations, dry cleaners, auto body shops, printers
- Each air district adopts, implements and enforces its own stationary source rules and regulations
- Both CARB and U.S. EPA also adopt stationary source rules that are implemented and enforced by the air districts
 - State Airborne Toxic Control Measures (ATCM)
 - National Emission Standards for Hazardous Air Pollutants (NESHAP)
 - New Source Performance Standards (NSPS)
- California Air Resources Board (CARB)
 - Primary regulatory jurisdiction over mobile sources of air pollution
 - On- and off-road sources such as passenger cars, trucks, buses, construction equipment, marine vessels, small utility engines



Sources of Air Emissions at Lehigh Facility

- Quarry operations
 - Emit dust and diesel particulate matter (PM)
- > Cement manufacturing operations
 - Prepare kiln feed material (i,e., crushing, grinding, blending, drying, conveying of raw materials)
 - Emit dust
 - Fire raw mix in kiln to produce clinker
 - Emit criteria air pollutants (e.g., nitrogen oxides, sulfur dioxide), toxic air contaminants (e.g., benzene, mercury, hydrogen chloride), and greenhouse gases (e.g., carbon dioxide)
 - Grind clinker, blend with gypsum, store and load cement
 - Emit dust
- Transportation of materials to/from site (rail and trucks)
 - Emit dust and diesel PM





Air Pollution Regulatory Requirements for the Lehigh Facility

- Approximately 100 stationary sources of air pollution, and 95 emission control devices, have Air District permits at the facility
 - Most control devices are baghouses (fabric filters)
- Applicable regulatory requirements
 - Include:
 - District Regulation 6: PM and Visible Emissions, District Regulation
 9, Rule 1: Sulfur Dioxide, District New Source Review rules
 - NESHAP
 - NSPS
 - Facility is subject to approximately 1500 source-specific air pollution limits or standards
 - Each applicable limit or standard has compliance requirements (e.g., monitoring, recordkeeping, and reporting)
 - Title V Permit lists all applicable requirements
 - Air Toxics Hot Spots Program Health Risk Assessment (HRA)



Upcoming Regulatory Requirements for the Lehigh Facility

- ➤ Title V permit renewal
- > Amendments to the NESHAP
 - Focus on mercury, hydrogen chloride, etc.
- Air District Clean Air Plan control measure
 - Focus on nitrogen and sulfur oxides
- ➤ AB-32 Greenhouse Gas Cap-and-Trade program
 - Carbon dioxide



Concerns Expressed by Members of the Public

- Health risks from toxic air contaminants
 - Mercury
 - Hexavalent chromium
- Arsenic in soil
- Dust emissions/fallout
- Kiln visible emissions
- Nitrogen and sulfur oxide emissions
- Multiple stack issue
- Truck emissions
- Moving the quarry
- Need for more air monitoring



For Additional Information...

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