

Environmental Protection Agency (EPA) Role in Regulating Lehigh Southwest Cement

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Regulatory Mechanisms

- Air Permits
- National Rules
- Compliance/Enforcement
- Other (includes non-regulatory)



Air Permits – Title V

- Applies to operation of existing (already built) facilities
- BAAQMD is the lead permitting authority
- Program approved in 2001
- EPA oversees program implementation (permit reviews and program evaluations)



Air Permits – Title V Permit Review

- Public participation
 - Comment period for the draft permit at least 30 days
 - BAAQMD may schedule a public hearing
 - EPA may submit comments during the comment period
- EPA objection period
 - EPA has 45 days to object to the proposed permit
 - Anyone can petition EPA to object to the permit 60 days after the 45-day period ends if EPA has not objected to the permit
 - Petitions must be based issues raised during the public comment period
- Lehigh title V permit
 - Review process will restart when BAAQMD re-proposes the permit



Air Permits – NSR/PSD

- New Source Review (NSR) and Prevention of Significant Deterioration (PSD) construction permits
- Applies to construction of new and modified major sources
- BAAQMD is the lead permitting authority
- EPA is currently reviewing an applicability determination for Lehigh



EPA's National Rules

- New Source Performance Standard (NSPS) for Portland Cement Plants
- National Emission Standard for Hazardous Air Pollutants (NESHAP) for Portland Cement Plants
- Greenhouse Gas (GHG) Regulations



NSPS for Cement Plants

- 40 CFR Part 60, Subpart F
- Current rule establishes emission standards for particulate matter (PM) from cement kilns and associated systems (applies to Lehigh)
- EPA is revising the current rule NSPS to regulate additional pollutants from affected units (e.g., cement kilns) constructed, modified, or reconstructed after June 16, 2008
- Comment period on proposed rule ended in Sept 2008
- The rule is expected to be finalized around the same time as the NESHAP



NESHAP for Cement Plants

- 40 CFR Part 63, Subpart LLL
- EPA is revising the current rule
- Comment period on proposed rule ended in Sept 2009
- Final rule expected in June 2010



NESHAP – Proposed Limits

- Set nation's first limits on mercury emissions from existing kilns and strengthens limits for new kilns
- Set emission limits for hydrocarbons, particulate matter, and sulfur dioxide for kilns of all sizes, and reduces hydrochloric acid emissions from large kilns
- Require continuous emissions monitoring for mercury from kiln stack



NESHAP – Projected Reductions

- When fully implemented in 2013, EPA estimates this rule would reduce annual emissions nationwide by at least:

Mercury	11,600 - 16,250 pounds	81%-93% reduction
Total Hydrocarbons	11,700 tons	75% reduction
Hydrochloric Acid	2,800 tons	94% reduction
Sulfur Dioxide	160,000 tons	90% reduction
Particulate Matter	10,500 tons	96% reduction

NESHAP – Potential Requirements for Lehigh

- Mercury reductions
- Installation of controls for mercury reductions
- Monitoring
- Compliance may be required in 3 years after the final rule becomes effective



GHG Rules

- GHG Mandatory Reporting Rule
 - EPA published final rule on Oct 30, 2009
 - Requires reporting of GHG emissions from facilities emitting over 25,000 tons of greenhouse gases a year
 - Cement plants are subject to this rule
- NSR/Title V GHG Permitting Rule
 - EPA proposed rule on Sept 30, 2009
 - Focused on six GHG pollutants at large facilities emitting over 25,000 tons of GHGs a year
 - Final rule expected in March 2010
- More information can be found at:
<http://www.epa.gov/climatechange/initiatives/>



Compliance/Enforcement

- EPA currently has a national enforcement initiative for cement plants
- Initiative is focused on NSR/PSD
- More information can be found at:
<http://www.epa.gov/oecaerth/civil/caa/cement/>
- EPA has an ongoing investigation at Lehigh



Federal Clean Water Act

- Standards
 - States must adopt and implement water quality standards for priority toxic pollutants
 - EPA must approve any proposed standard
- Permits
 - NPDES permits required for sources that discharge into waters of the U.S.
 - States issue; EPA can object
- TMDL (Total Maximum Daily Load) for Impaired Waters
 - States adopt, EPA must approve
 - TMDL for mercury:
 - San Francisco Bay: State has adopted and EPA has approved
 - Guadalupe River Watershed:
 - Regional Board has adopted, State is reviewing
 - Once State has adopted, EPA will review and act



Air Toxics Monitoring Stevens Creek Elementary School



- EPA Initiative to monitor air toxics at select schools across the country
- Monitored hexavalent chromium
- 13 samples taken over 3 month period last summer
- Hexavalent chromium in samples were well below levels of concern
- EPA is analyzing results, wind data, and source operations
- Report will be issued later this year
- BAAQMD is continuing monitoring for a year