Update on Amendments to Air Toxics New Source Review (NSR) Rule

Cumulative Impacts Working Group
CARE Task Force
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BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Existing BAAQMD Air Toxics NSR Program

- Applies to new/modified stationary source projects
- Health Risk Screening Analysis (HRSA)
  - Based on OEHHA Health Risk Assessment methodology adopted for the Air Toxics Hot Spots Program
  1. Determine air concentrations by dispersion modeling
  2. Evaluate surrounding land use
  3. Calculate exposures for nearby residents, off-site workers, and other members of the public
  4. Use toxicity values to calculate health risks
- Cancer risk
  - Exposure x Potency Factor = Cancer risk (expressed as a probability)
- Non-cancer risk
  - Exposure / Reference Exposure Level (REL) = Hazard Index
- Additive approach is used to address pollutant mixtures

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Existing BAAQMD Air Toxics NSR Program

- Current standards
  - Best Available Control Technology for Toxics (T-BACT)
    - Cancer risk = 1.0 in a million
    - Chronic HI = 0.2
  - Project Risk Limits
    - Cancer risk = 10.0 in a million
    - Chronic and Acute HI = 1.0

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Draft Air Toxics NSR Amendments

- Establish more stringent standards for new/modified sources located in Priority Communities under the CARE Program
  - Increase stringency of chronic health risk standards by a factor of two
  - T-BACT
    - Cancer risk = 0.5 in a million
    - Chronic HI = 0.1
  - Project Risk Limits
    - Cancer risk = 5.0 in a million
    - Chronic HI = 0.5
- On-site contemporaneous risk reduction provision
  - Reduce toxicity-weighted emissions by at least a factor of 1.2
  - No increase in risk at any receptor above T-BACT thresholds
- Add cumulative health risk tracking provision in Priority Communities
- More stringent risk standards would also apply to "student receptors" for sources located within 500 feet of a K-12 school

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Rule Development Schedule

- Draft regulatory concept issued in March 2009
- Public workshop held on July 30, 2009
- Four sets of written comments received to date
- Consideration of adoption expected late in 2009 or early in 2010

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Comments on Draft Air Toxics NSR Rule Amendments

- Opposed to different standards for different communities due to lost development potential, job opportunities, etc. Indicate that the Priority Communities are good for incentives but not regulatory actions.
- Proposal does not address the largest source of health impacts which is diesel PM from mobile sources. Stationary sources contribute just a small amount of the risk in the Priority Communities, so the proposed changes would not be effective.
- Proposal needs a better process for defining Priority Communities. This should include a full public process that is clearly defined. The District should also evaluate the benefits of adopted diesel PM rules in establishing and updating the Priority Communities.
- Tracking provision should include risk reductions (from source shutdown or emission reduction projects) in addition to new sources.
- A preferred approach would be an "action plan" by cities in lieu of this proposed change.
- OEHHA's methodological changes obviate the need for the proposed changes.

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OEHHA Risk Assessment Guideline Revisions

- OEHHA is revising risk assessment procedures
  - Technical Support Document (TSD) for derivation of non-cancer RELs (adopted Dec. 2008)
    - Revised based on advances in scientific understanding and greater susceptibility of children
    - Seven compounds re-assessed to date
    - New 8-hr RELs adopted
  - TSD for derivation of cancer potency factors (adopted Jun. 2009)
    - Age-dependent adjustment factors
    - All cancer potency factors to be revised following adoption of revisions to exposure assessment methodology (mid-2010 timeframe)
    - OEHHA estimates overall effect will be an increase of 2 to 3 in calculated cancer risks