AB 2588 AIR TOXICS “HOT SPOTS” UPDATE

Sanjeev Kamboj
Engineering Manager
BAAQMD
November 8, 2017
AGENDA

• Background
• Toxics NSR Rule 2-5 Amendments
• Proposed Rule 11-18
TAC STATIONARY SOURCE CONTROL PROGRAMS

- California Environmental Quality Act (CEQA)
- Community Air Risk Evaluation (CARE)
- Air Toxics Hot Spots Program (AB 2588)
- Rule 2-5 Toxics New Source Review
- Stationary Source Control Measures
- Rule 11-18 (Existing Facilities)
Cancer risk is based on average ambient air monitoring data and the population wide risk assessment methodology presented in OEHHA’s 2015 HRA Guidelines.

* Bay Area Lifetime Residential Cancer Risk* from Toxic Air Contaminant (TAC) Exposure

* Cancer risk is based on average ambient air monitoring data and the population wide risk assessment methodology presented in OEHHA’s 2015 HRA Guidelines.
Impacts of OEHHA’s HRA Guideline Changes on Cancer Risk

- **NO CHANGE**
  - Cancer Potency Factors

- **DECREASE**
  - Exposure Duration, Time at Home, Spatial Averaging

- **INCREASE**
  - Age Sensitivity Factors*, Breathing Rates

**OVERALL INCREASE IN CANCER RISK**
TOXICS NSR RULE 2-5 CHANGES

• **Conformance with State Guidance Updates**
  - Updated the Air District’s HRA Guidelines to Incorporate the State’s Guideline Changes
  - Updated Health Effects Values and TAC Trigger Levels
  - Updated Regulation Language to Conform with State Guidelines

• **Adopted in December 2016**
IMPACTS OF RULE 2-5 REVISIONS

• Increase the Stringency of this Rule
  ▪ For most projects, cancer risk will increase by about 40% compared to current procedures
  ▪ For projects involving multi-pathway TACs, cancer risk may increase by 2-5 times
  ▪ Less toxic emission increases will be allowed for new projects than allowed by current rule
  ▪ Increase the Number of Projects Triggering HRAs
  ▪ Increase the Number of Projects Required to Implement Risk Reduction Measures
REGULATION 11, RULE 18 OVERVIEW

- The most comprehensive and health protective regulation in the Nation to address community health impacts risks from toxics air contaminants emitted by stationary sources

- Utilizes air toxics modeling and incorporates latest science from the Office of Environmental Health Hazard Assessment (OEHHA) to establish health risks to nearby communities

- Requires facilities to reduce their risk below the most stringent threshold (10/Million) in the Nation or implement the best available control technologies
NEW RISK ACTION THRESHOLDS

Lifetime Cancer Risk (chances per million)

Now: 100
2018: 25
2020: 10

BAAQMD Rule 11-18

Lowers Non-Cancer Acute/Chronic Hazard Index Thresholds to
2.5 in 2018
1.0 in 2020
REGULATION SCOPE

~400 Facilities

Refineries • Power Plants • Hospitals • Foundries
Military Facilities • Landfills • Chemical Plants • Data Centers
Schools/Universities • Crematoria • Sewage Treatment

Exemptions*
Retail Gas Stations (Prioritization score < 250)
Facilities with only Diesel Backup Generators (Prioritization score < 250)

* Will be addressed by targeted rule making and implementation of industry-wide guidance in coordination with the California Air Pollution Control Officers Association (CAPCOA) and California Air Resources Board (CARB)
REGULATION 11, RULE 18 OVERVIEW

• Facilities above risk action level must:
  ▪ Develop a risk reduction plan for Air District approval
  ▪ Execute plan according to plan schedule

• Potential Risk Reduction Measures
  ▪ Installation of Best Available Retrofit Control Technologies for Toxics (TBARCT)
  ▪ Modification of operating hours and activity levels
  ▪ Modification of emissions points
PHASES

• Phase 1: ~100 Facilities (Prioritization Score > 250)
  Conduct Health Risk Assessments (2018-2019)

• Phase 2: ~300 Facilities (Prioritization Score > 10)
  Conduct Health Risk Assessments (2019-2021)
TBARCT PROCESS

Start → Air District Identifies Significant Sources → Air District Identifies Standard TBARCT for Each Significant Source → All Significant Sources Controlled? → Process Complete

All Significant Sources Controlled? → Yes → Add TBARCT to Risk Reduction Plan → Concurrence on TBARCT

Yes → Air District TBARCT Review Panel

No → Facility Reviews TBARCT Determinations

Add TBARCT to Risk Reduction Plan → Yes → Concurrence on TBARCT → No → Facility Provides Rationale & Recommends Alternatives

Process Complete → Additional Controls Required? → Review Panel Makes Final Decision → Air District TBARCT Review Panel

No → Facility Provides Rationale & Recommends Alternatives
QUESTIONS