



AIR ISSUES & REGULATIONS COMMITTEE

A Committee of the Bay Area Clean Water Agencies

Executive Board Update

September 15, 2017

Key BAAQMD and State Rules

- Current Priorities:
 - Proposed Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities
 - SB 1383 Regulation: Statewide Methane Reduction, Organic Waste Diversion, & Biogas Production
 - Regulation 2, Rule 2: Permits – New Source Review (GHGs)
 - Regulation 9, Rule 2: Inorganic Gaseous Pollutants – Hydrogen Sulfide
- Future Planning:
 - 2017 Clean Air Plan: Control Strategies



Draft Rule 11-18: Risk Reduction from Air Toxic Emissions at Existing Facilities

- Purpose:
Protect public from toxic air contaminants at existing facilities
- Sources at POTWs:
 - Process emissions
 - Engines and incineration
 - Standby generators (Generator only facilities exempt if RAL<250)
- Requires:
 - BAAQMD conduct Health Risk Assessments (30-day review)
 - Risk Reduction Plan development
 - Implementation of Risk Reduction Measures (5 years to implement)
 - Phased Implementation based on cancer prioritization number

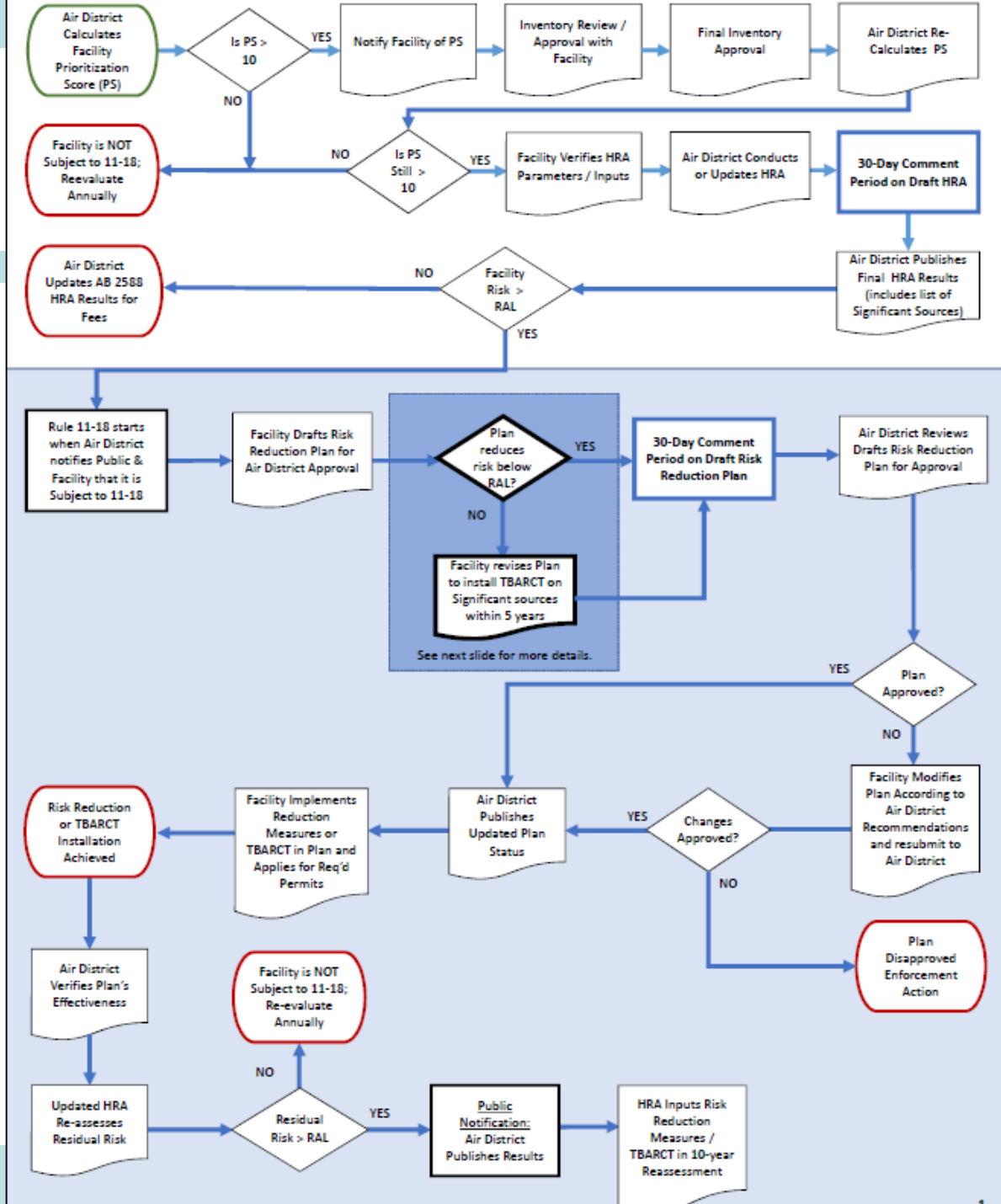


Draft Rule 11-18: Health Risk Assessment

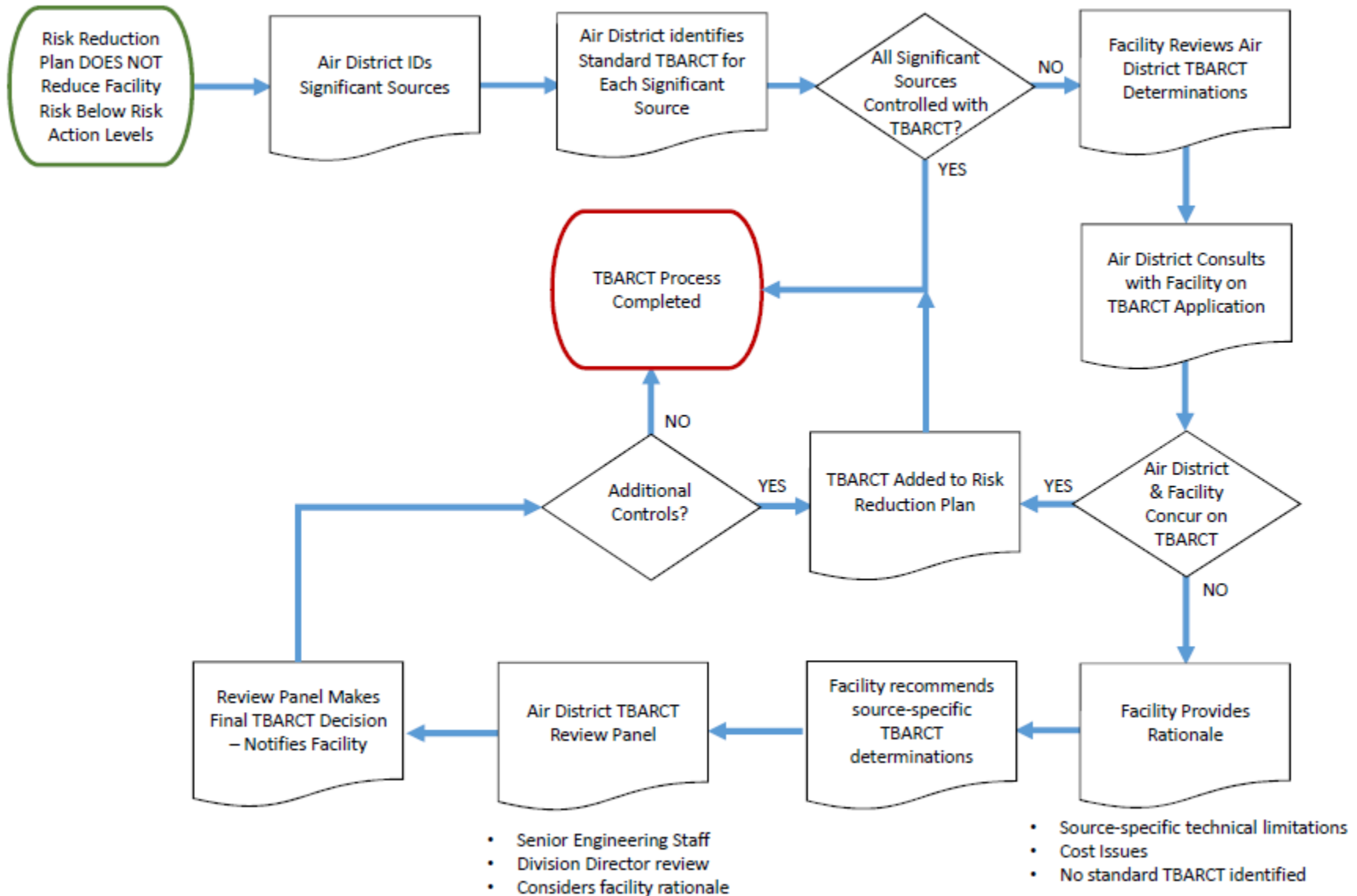
- Office of Environmental Health Hazard Assessment (OEHHA) Protocols and Health Risk values
 - Updated March 2015
- California Air Pollution Control Officers Association (CAPCOA) Risk Management Guidance for Stationary Sources of Air Toxics
 - Adopted by ARB and CAPCOA
 - July 2015
- BAAQMD HRA Guidelines
 - Based on OEHHA/ARB/CAPCOA
 - Also used in New Source Review



Rule 11-18 Process Flowchart



TBARCT Process Flowchart



Draft Rule 11-18: Risk Reduction from Air Toxic Emissions at Existing Facilities

- Currently working to update Prioritization Scores:

- Collecting influent flow and concentration data
- Collecting Proximity Adjustment Factor data

*Collect by
September 22nd*

*Deliver to BAAQMD
By September 29th*

- Potential remaining actions/issues:

- Updating emissions factors through source tests (if needed)
- TBARCT determinations
- Potential barrier to POTW projects that increase biogas production

- Rule adoption expected November



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BAAQMD Data Collection Pilot Study

- BAAQMD requested data from 11 POTWs
 - Emission source data – point vs area source, abatement device, etc.
 - Stack characteristics – exhaust flows, direction, temperature, etc.
- Data can be used for preliminary HRA:
 - Intended to help BAAQMD identify best data management
 - Can be updated by facility
- Ongoing:
 - Original submittal request by August 31



Draft Rule 11-18: Comment Letter due October 16

- Appreciate working with BAAQMD
- Reiterate concerns about:
 - Cross media impacts - potential discouragement of biogas production (in conflict with State legislation and BAAQMD goals)
 - Cost effectiveness
 - Planning horizons



SB 1383: SLCP Reduction Strategy Implementation

- Methane Reduction:
 - 40% by 2030 (relative to 2013)
- Organics Diversion from Landfills:
 - 50% by 2020 (relative to 2014)
 - 75% by 2025 (relative to 2014)
- Increase in Production/Use of Biogas:
 - State agencies to consider/adopt policies and incentives
 - CEC to incorporate in the 2017 Integrated Energy Policy Report
 - CPUC to consider policies in support of in-State biogas production/use
- Formal rule development begins Oct 30th
- Rule becomes effective in 2022



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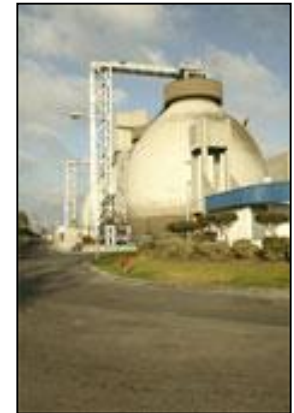
Proposed Revisions to Rule 2-2: New Source Review

- Proposed Decrease in GHG Emissions Threshold Preempted by AB 398 (75,000 mt CO₂e/year)
- Regulation is silent on biogenic sources (i.e., biogas)
 - Biogenic vs. Anthropogenic CO₂ Emissions
 - EPA - large, fossil-fueled combustion units were found to be the principle cause for “anyway sources”
 - GHG Emissions Reduction vs Exposure to Toxics
 - If GHG emissions from combustion of digester gas count toward the threshold, likely to trigger BACT
 - Cost of BACT & generation of formaldehyde threaten feasibility of diverting organics to POTWs as a methane reducing strategy



Rule 9-2: Inorganic Gaseous Pollutants - Hydrogen Sulfide

- Prohibits H₂S emissions that result in ground level concentrations > 0.06 ppm averaged over 3 minutes OR 0.03 ppm averaged over 60 minutes
- Including source emission concentrations in permit conditions, based on modeling results
- Currently impacting Authority to Construct (ATC) permits for new projects



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BAAQMD 2017 Clean Air Plan (future planning)

- Key Priorities:
 - Reduce Criteria Air Pollutants and Toxic Air Contaminants
 - Reduce Emission of Super-GHGs
 - Reduce Demand for Fossil Fuels
 - Decarbonize the Energy System
- Control Strategies
 - Stationary Sources: Rule 11-18, Biogas Flares
 - Waste & Super-GHGs: Organics Diversion
 - Natural & Working Lands: Carbon Sequestration
 - Water: Promoting biogas recovery
 - Further Studies: Lower ICE NO_x, Investigate POTWs



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BAAQMD 2017 Clean Air Plan – Opportunities/Challenges Facing POTWs

- Opportunities

- Limiting Fossil Fuel Combustion
- Promoting Clean Fuels
- Stopping Methane Leaks

*Invited as member of
BAAQMD Methane
Expert Panel*

- Challenges

- Reducing Exposure to Toxics (Rule 11-18)
- Limiting Greenhouse Gases from POTWs

(See handout)



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Summary of Action Items for Approval

- Rule 11-18 Proximity Factor data due September 22nd
- Rule 2-2 comments due September 25th
- Submit Rule 11-18 data to BAAQMD September 29th
- Rule 11-18 comments due October 16th

- Next AIR Committee meeting...



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Next AIR Committee Meeting

- September 27, 2017
- Silicon Valley Clean Water
- 10 am to 12:30 pm – Committee Meeting
- Noon to 12:30 pm – Lunch served
- 12:30 to 1:30 pm – Tour:
 - New co-gen facilities
 - BioForceTech biodryers and pyrolysis unit



- **JOIN US!**



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EXTRA SLIDES



Amendments to Regulation 3 - Fees

- Increasing fee revenue to recover BAAQMD costs for implementing and enforcing regulatory programs for stationary sources (~7% increase in fees on average)
- New risk assessment fee for health risk assessment (HRA) under Rule 11-18 (up to \$100,000 per facility)
- For more than 3 HRA scenarios, applicants to pay additional fees
- New fees for Risk Reduction Plan (under Rule 11-18) to range between \$1,500 - \$32,000 depending on number of sources



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