Goals Common to BAAQMD & State Agencies

• Methane Reduction.
• Support state/regional policy/goal development under AB 617.
• Support statewide GHG reducing programs - AB 32/SB 32.

Impacts to & Opportunities at POTWs

• Receive organic waste.
• Boost biogas production/use.
• Potential interruptions to existing CIP.
• Require streamlined permit process to receive funding & prevent further CIP delays.
BACWA AIR Committee-BAAQMD Annual Meeting

- 10:30-11:30 Basin-Wide Methane Strategy
- 11:30 – Noon Lunch
- 12:00 – 12:30 Rule 11-18 Update
- 12:30 – 12:45 Technology Implementation Loan Program
- 12:45 – 1:15 AB 617 Implementation Update
- 1:15 – 1:45 Standard Permit Conditions & Temporary Pilot Test Projects
- 1:45 – 2:00 Closing/Adjourn
Air District’s Methane Strategy
Update on Rulemaking Efforts

Annual BACWA AIR Committee
August 6, 2018
San Francisco, CA

Idania Zamora, PhD
Office of Rules and Strategic Policy

Why Focus on Methane?
It’s A High Impact Strategy to Address Climate Change

- Methane is 86 times more potent than carbon dioxide (CO₂) [on a 20-year horizon]
- Methane is removed faster from the atmosphere
- Public health and further climate benefits may result from reduction of co-pollutants
- Economic benefits are expected from recovered energy and products
- Air Districts support State’s CH4 emissions reduction goal of 40% by 2030 (SB 1383)
- Air District has clear authority to regulate methane
Top down studies indicate Bay Area methane emissions may be 1.3 – 2.3 times higher [Fairley and Fischer 2015; Jeong et al., 2017].

2015 Estimated CH₄ Emissions
10 Million MT CO₂e [20 yr. GWP]

- Natural Gas, 15%
- Landfills, 51%
- Livestock, 15%
- Wastewater, 6%
- Refineries, 2%
- Others, 7%
- Wetlands, 3%
- On-road mobile, 2%

Air District’s Methane Strategy

METHANE QUANTIFICATION EFFORTS

- Air District Science Priorities
- GHG Monitoring & Measuring
- Methane Emissions Inventory

METHANE REDUCTION EFFORTS

- Engineering
  - Permits
  - Compliance and Enforcement
- Enforcement
  - Rules and Regulations
- Rule Development
  - Best practices
- Planning & Climate
  - Model Ordinances
  - Climate Action Plans
  - External Funding
  - CEQA Guidance
- Technology Implementation Office
  - Grants and Incentives
  - Loan Programs
  - Disruptive Technologies
Organics Recovery Strategy
Supporting the State’s diversion goals while protecting public health

CORE VALUES
- Support 50% organics diversion by 2020, and 75% by 2025
- Methane reduction without net greenhouse gas increase
- Robust local infrastructure and resilient supply chains
- Healthy regional and neighborhood air quality
- Partnership and ongoing learning

EVENTS AND NEXT STEPS
- Regional Convening – June 25, 2018
- Emerging Directions for the Organics Recovery Strategy
- Upcoming Methane Expert Panels – Fall 2018

Methane Rule Development
Map to systematically reduce methane emissions

**OIL & GAS**
- Significant Methane Releases [Reg. 13-1]
- Natural Gas Processing & Distribution [SB 1371]
- Crude Oil & Natural Gas Production [Reg. 8-37]
- Refineries

**BIOLOGICAL**
- Regulation 13: Climate Pollutants
- Organic Material Handling [Reg. 13-2]
- Composting [Reg. 13-3]
- Anaerobic Digestion
- Landfills [Reg. 8-34]
- Wastewater
Air District’s Methane Strategy
2018 Methane Rules

REGULATION 13 CLIMATE POLLUTANTS
PURPOSE: To establish uniform definitions, standards, administrative requirements, monitoring and recordkeeping requirements, and test methods that apply to regulating climate pollutants in the District.

SCHEDULE
WORKSHOPS 2018/early 2019
TO BOARD 2019

NEW RULES COMPOSTING & ORGANIC RECOVERY OPERATIONS
CONCEPT: Adopt a suite of rules that address emissions from storing, transferring and processing organic materials at composting, anaerobic digestion and other waste-related facilities such as landfills.

SCHEDULE (Rule 13-2)
WORKSHOPS 2018
TO BOARD early 2019

Air District’s Methane Strategy
2018 Methane Rules (cont’d)

SB 1371 NATURAL GAS LEAK ABATEMENT PROGRAM
PURPOSE: Prevent methane leaks from the natural gas distribution system

WORK WITH CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC) during Phase II to achieve quantifiable methane emissions reductions

SCHEDULE
PHASE I Completed 2017
PHASE II 2018 – 2020

RULE 8-37 CRUDE OIL AND NATURAL GAS PRODUCTION
PURPOSE: Address emissions from smaller oil and gas production facilities exempted by Air Resource Board’s Oil & Gas Rule

CONCEPT: Consider a lower leak threshold to achieve cost-effective methane and VOC emissions reductions and protect public health

SCHEDULE
OIL & GAS STUDY JAN-JULY 2018
WORKSHOPS 2018
TO BOARD 2018/early 2019
13-1: Significant Methane Releases

**PURPOSE** to compel facilities to mitigate major releases rapidly; will act as **backstop** while source-specific rules are adopted

**CONCEPT** Prohibits ongoing significant methane releases

**SCHEDULE**
- **WORKSHOPS** August 2018
- **TO BOARD** Late 2018

**STANDARDS**

*Methane releases shall be abated if*

- **EMISSIONS** > 10,000 PPM

**FIX TIMES**

*Releases*
- **MINIMIZE RELEASE** WITHIN 3 DAYS
- **ABATE RELEASE TO 500 PPM** WITHIN 14 DAYS

*Recurrent releases*
- **MINIMIZE RELEASE** WITHIN 3 DAYS
- **ABATE RELEASE TO 500 PPM** WITHIN 7 DAYS
LIMITED EXEMPTIONS

• **All sources:** if operator can show methane emissions < 10 lb/day for each of 5 consecutive days

• **Refinery flares:** if operator can show that each flare achieves 96.5% combustion efficiency (or 98% destruction efficiency)

• **Maintenance or repairs:** exempt if methane release is abated to < 500ppm within 3 days AND emissions < 100 lb/day for each of these days

• **Landfill working face:** exempt if methane release is abated to < 500ppm within 3 days AND emissions < 100 lb/day for each of these days

---

MONITORING

*May use a variety of portable methane gas detectors*

• **for release detection purposes**

  If able to detect a **10,000 ppm** concentration or greater, with a maximum error of ± 10 %

  **APCO-APPROVED ALTERNATIVE**

• **for compliance purposes**

  If able to detect a **100 ppm** concentration or greater, with a max error of ± 10 %

---

METHODS

*Operators can determine mass emissions with the following methods*

- EPA PROTOCOL FOR EQUIPMENT RELEASE EMISSION ESTIMATES (Ch. 4, mass emission sampling)
- **APCO-APPROVED ALTERNATIVE**
Draft Regulation 13, Rule 1

Next Steps

• Workshops and Comment Period
  * Early Fall 2018
  * Submit written comments to: wsaltz@baaqmd.gov

• Amend Draft Rule as Appropriate
• Publish Proposed Rule and Staff Report
• Public Hearing in late 2018

Draft Regulation 13, Rule 2

General concepts

13-2: Organic Material Handling

PURPOSE to limit methane and VOC emissions from the transfer and storage of organic material at all facilities

CONCEPT
  o Recordkeeping and Reporting
  o Registration and Permitting
  o Best Management Practices

SCHEDULE
  WORKSHOPS
  Fall 2018
  TO BOARD
  2019
Draft Regulation 13, Rule 3

General concepts

13-3: Composting Operations

PURPOSE to limit methane and VOC emissions from processes typically part of composting operations

CONCEPT
- Best Management Practices
- Mitigation Measures
- Control Requirements

SCHEDULE
- WORKSHOPS Fall 2018
- TO BOARD 2019

Thank you for your participation!

Methane Strategy
Dr. Idania Zamora
email: izamora@baaqmd.gov
phone: (415) 749 – 4683

Rule 13-1
William Saltz
email: wsaltz@baaqmd.gov
phone: (415) 749 – 4698

Rules 13-2 and 13-3
Robert Cave
email: rcave@baaqmd.gov
phone: (415) 749 – 5048
Bay Area Air Quality Management District

RULE 11-18 UPDATE
FOR BACWA AIR COMMITTEE

Carol Allen
Assistant Manager,
Engineering Division

OUTLINE

• Review Process for Existing Facilities
• Rule 11-18 Requirements
• Draft Implementation Schedule
• Example Information Request
TOXIC EMISSIONS REVIEW PROCESS FOR EXISTING FACILITIES

1. Annual TAC Inventory Review
2. Calculate Prioritization Score
   - Compare to Screening Thresholds
   - Conduct Health Risk Assessment
3. Compare to Risk Action Levels
4. Rule 11-18
   - Not Subject to Rule 11-18
   - Modify Facility

PRIORITIZATION SCORE SCREENING THRESHOLDS

<table>
<thead>
<tr>
<th>Prioritization Score Type</th>
<th>Screening Thresholds for Phase I Sites</th>
<th>Screening Thresholds for Phase II Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer Risk</td>
<td>250</td>
<td>10</td>
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<tr>
<td>Non-Cancer Hazard Index (Chronic HI or Acute HI)</td>
<td>10</td>
<td>1.0</td>
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<tr>
<td>District Review Begins:</td>
<td>2018</td>
<td>2020</td>
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</tbody>
</table>

District Review Begins:
- 2018
- 2020
RISK ACTION LEVELS FOR EXISTING FACILITIES

<table>
<thead>
<tr>
<th>Health Risk Type</th>
<th>Source Risk</th>
<th>Facility Risk</th>
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</thead>
<tbody>
<tr>
<td>Cancer Risk</td>
<td>1 per million</td>
<td>10 per million</td>
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<tr>
<td>Non-Cancer Hazard Index (Chronic HI or Acute HI)</td>
<td>0.2</td>
<td>1.0</td>
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* Effective January 1, 2020

REGULATION 11, RULE 18 — KEY REQUIREMENTS

Facilities above a risk action level must
- Develop a risk reduction plan for Air District approval
- Execute plan according to plan schedule
- 5-10 Years to Implement Plan

Risk reduction measures include
- Installation of Best Available Retrofit Control Technologies for Toxics (TBARCT) – considers control costs
- Modification of operating hours and activity levels
- Modification of emissions point characteristics
### DRAFT IMPLEMENTATION SCHEDULE

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<thead>
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<tbody>
<tr>
<td>Build active infrastructure</td>
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<tr>
<td>Review, Correct, Approve Permit and Pressure Test</td>
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<td>North Side School to Rule 1 (1-3)</td>
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<tr>
<td>Monitor and Improve Risk Reduction Rate</td>
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<td>Implement Risk Reduction Measures: Phase I (90% Complete)</td>
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<tr>
<td>Implement Risk Reduction Measures: Phase II (40% Complete)</td>
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**Key:**
- Phase I Initial - Prior to Rule 1-3 applicable
- Phase I Initial - Prior to Rule 1-3 becomes applicable
- Phase I Initial - Prior to Rule 1-3 phase applicable
- Other or Different Schedule

### INFORMATION REQUESTS

<table>
<thead>
<tr>
<th>Facility Information</th>
<th>Information</th>
<th>Facility Requested Corrections</th>
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<tbody>
<tr>
<td>Facility Number</td>
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<tr>
<td>Legacy Site Number</td>
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<tr>
<td>Facility Name</td>
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<tr>
<td>Facility Address</td>
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<tr>
<td>NAICS</td>
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<tr>
<td>Adjusted Prioritization Score</td>
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<tr>
<td>Proximity Adjustment Factor - Resident</td>
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<tr>
<td>Proximity Adjustment Factor - Workers</td>
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<tr>
<td>Facility Engineer</td>
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<tr>
<td>Facility Inspector</td>
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<tr>
<td>Facility Contact</td>
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<tr>
<td>Contact Title</td>
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<tr>
<td>Contact Company</td>
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<td>Contact Address</td>
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<td>Contact Phone</td>
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<td>Contact Email</td>
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<td>Additional Info</td>
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</table>
### INFORMATION REQUESTS

#### Facility Changes to Operating Schedule

<table>
<thead>
<tr>
<th>Plant#</th>
<th>Source#</th>
<th>Source Description</th>
<th>Continuous Operation</th>
<th>Hours/ Day</th>
<th>Days/ Week</th>
<th>Weeks/ Year</th>
<th>Air Pollutant Emission Train</th>
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</table>

#### 2017 Inventory Completed by Facility

<table>
<thead>
<tr>
<th>Pollutant Key</th>
<th>Toxic Compound</th>
<th>CAS#</th>
<th>Source Description</th>
<th>2017 Emissions lb/yr</th>
<th>2017 Emissions lb/hour (max)</th>
<th>Entry Date</th>
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<tbody>
<tr>
<td>7</td>
<td>ALLYL CHLORIDE</td>
<td>107-05-3</td>
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<td>8</td>
<td>2-AMINOANTHRACINONE</td>
<td>117-79-3</td>
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<tr>
<td>9</td>
<td>AMMONIA</td>
<td>7664-41-7</td>
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<td>10</td>
<td>ANILINE</td>
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<td>11</td>
<td>ARSENIC AND COMPOUNDS (INORG/</td>
<td>7440-38-2</td>
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<td>12</td>
<td>ARSENIC</td>
<td>7784-42-1</td>
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<td>13</td>
<td>ASBESTOS</td>
<td>1332-21-4</td>
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<td>14</td>
<td>BENZENE</td>
<td>71-43-2</td>
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Slide 9

Slide 10
### INFORMATION REQUESTS

<table>
<thead>
<tr>
<th>Facility#</th>
<th>Emission Point #</th>
<th>Facility Stack ID</th>
<th>UTM NAD 83 East, X (m)</th>
<th>UTM NAD 83 North, Y (m)</th>
<th>Root Dev#</th>
<th>% flow of Root Device to Emission Point</th>
<th>Root Device Trains</th>
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</table>

### Facility Proposed Revisions to Stack Parameters

<table>
<thead>
<tr>
<th>Direction</th>
<th>Outlet Type</th>
<th>Height (ft)</th>
<th>Exit Diameter (ft)</th>
<th>Cross Sectional Area (Use if not round, sq ft)</th>
<th>Typical Exhaust Gas Flow Rate (Actual, wet cfm)</th>
<th>Typical Exhaust Temperature (degrees F)</th>
<th>Maximum Exhaust Gas Flow (Actual, wet cfm)</th>
<th>Maximum Exhaust Temperature (degrees F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vertical or Horizontal</td>
<td>Rain Cap or Open (or Hinged Rain Flap)</td>
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Slide 11
Technology Loan Program for Bay Area Facilities

August 6, 2018
Derrick Tang, Manager
Technology Implementation Office
Mission Statement

Catalyze innovation to combat climate change by incentivizing disruptive, low-cost technologies that reduce greenhouse gas emissions for mobile and stationary sources.
Benefits to TIO Partners

Technology Developers and Companies

- Accelerated awareness and mainstreaming of new technologies

Stationary Facilities

- Information about technology and financing opportunities
- Access loans for technology upgrades
- Getting out in front of permitting and regulatory requirements

Financing Authorities

- Expanded customer base
- Co-funding to cover higher risk or newer technologies
- Increased confidence in project technical viability and payback periods to enable more investment
Facilities: Needs & Wants

**Awareness**
- A clearinghouse of emissions-reducing technologies
- Events and opportunities for **matchmaking**

**Technology Fit**
- Target facilities that have **current or planned** construction or rehabilitation
- New technologies should be **low-maintenance**

**Financing**
- Public facilities are interested in financing options
- Private facilities may have internal financing but are still interested in technology assessment and matchmaking
- Longer loan terms preferred (~30 years)
The TIO has developed a tool to evaluate technologies across several key metrics:

<table>
<thead>
<tr>
<th>Technology Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impact</strong></td>
</tr>
<tr>
<td>- GHG emissions reductions</td>
</tr>
<tr>
<td>- Economics</td>
</tr>
<tr>
<td><strong>Timing</strong></td>
</tr>
<tr>
<td>- Technology readiness</td>
</tr>
<tr>
<td>- Possible District action</td>
</tr>
<tr>
<td><strong>Risks</strong></td>
</tr>
<tr>
<td>- Market barriers</td>
</tr>
<tr>
<td>- Policy barriers</td>
</tr>
</tbody>
</table>
Technology Example: Shortcut Nitrogen Removal ("Anammox")

- Replaces nitrification and denitrification with a single-step process
- Eliminates the need to aerate and lowers sludge volumes
- Sharply reduces energy use
- Can result in a net consumption of CO$_2$
- Potential for quick return on investment
Loans for Public Sector (Municipalities, Universities, Schools, Hospitals)

- From $500k to $30M
- Up to 30-year terms
- Below-market interest rates and subsidized lender fees
- Engineering evaluation and technical assistance

Loan Guarantees for Small Businesses

- For loans up to $20M
- Up to 90% guarantee
- Subsidized fees
- Engineering evaluation and technical assistance
Climate Tech Marketplace 9/13

Climate Tech Marketplace
Thursday, September 13, 2018

Showcasing emerging technologies for process improvements, energy efficiency, and emissions reductions

Attendees:

• Technology developers: Showcasing technologies, identifying partners and customers
• Global Summit participants: Representatives from around the world
• Governments and businesses: Identifying new technologies that can help them improve operations and meet climate commitments

For more information, contact climatetech@baaqmd.gov
AB 617 Community Health Protection Program and Expedited BARCT Implementation Schedule

David Joe
Senior Air Quality Engineer, Rule Development
Bay Area Clean Water Agencies
August 6, 2018

1. AB 617 Overview
2. Community Health Protection Program
3. BARCT Implementation Schedule
4. What’s Next
1 AB 617 Overview

- Community Participation
- Eliminate Air Quality Disparities
- Reduce Health Burdens
- Continuous Evaluation and Improvement

- Community Health Protection Program
  - Community Emission Reduction Plans
  - Community-Level Air Monitoring
- Best Available Retrofit Control Technologies
  - Expedited BARCT Implementation Schedule

2 Community Health Protection Program

- Community Input
- Available Information
- Select All Communities
- Prioritize Communities
- Monitoring and/or Action Plan

AB 617 requires state to select additional communities for monitoring and/or action plans annually, beginning Oct 2019
Community Health Protection Program

- Community Air Risk Evaluation (CARE)
- Areas with large sources
- Areas with health and pollution impacts
- Areas with low life expectancy

Year 1
West Oakland – action plan
Richmond – monitoring plan
Community Air Protection Program

• West Oakland Community Action Plan Steering Committee
  • West Oakland Environmental Indicators Project (WOEIP) and Air District
  • Residents, health organizations, businesses, schools, government agencies
  • Steering Committee will inform the development of the plan, which may propose measures to address:
    • Mobile and stationary sources of air pollution
    • Land-use decisions
    • Targeted enforcement
    • Incentives
    • Other identified measures to reduce exposure to air pollution

BARCT Implementation Schedule

• AB 617 requires adoption of expedited schedule by 1/1/2019
• Implementation of BARCT by earliest feasible date, no later than 12/31/2023
• Schedule applies to sources at industrial Cap-and-Trade facilities
• Best Available Retrofit Control Technology
  • An emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source
• Does not apply to sources that have implemented BARCT since 2007
• Priority for sources that have not modified emissions limits for longest period of time
BARCT Implementation Schedule

- Developed draft BARCT Schedule
  - Identified the sources to evaluate
  - Determined preliminary BARCT levels for each pollutant and source
  - Prioritized potential rule development projects
- Released concept paper and project scopes in May 2018
- Conducted stakeholder meetings, received public comments, continued coordination with ARB, further technical assessment/research, review and analysis of AB 617 requirements
- Developed revised draft BARCT Schedule – Six potential rule development projects
- Upcoming Workshop Report and public outreach

### Rule Development Projects

<table>
<thead>
<tr>
<th>Rule Development Projects</th>
<th>PM</th>
<th>NOx</th>
<th>ROG</th>
<th>SO₂</th>
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<tbody>
<tr>
<td>Organic Liquid Storage Tanks</td>
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<tr>
<td>Petroleum Wastewater Treating</td>
<td></td>
<td>X</td>
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<tr>
<td>Portland Cement Manufacturing</td>
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<tr>
<td>Refinery Fluid Catalytic Crackers and CO Boilers</td>
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<td>X</td>
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<tr>
<td>Refinery Heavy Liquid Leaks</td>
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<tr>
<td>Petroleum Coke Calcining</td>
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</tbody>
</table>
What’s Next

- **Community Air Protection Program**
  - Work with communities to prepare for action and/or monitoring plans
  - West Oakland Community Action Plan Steering Committee
  - Selecting partners for Richmond monitoring plan
  - Coordination with CARB for on-going implementation

- **Expedited BARCT Implementation Schedule**
  - Upcoming workshop report and workshops
  - Rule development process for each individual rulemaking effort

Questions?
Central Contra Costa Sanitary District
Randy Schmidt
Senior Engineer

Rule 11-18 Implementation Schedule

<table>
<thead>
<tr>
<th>Phase</th>
<th>Criterion</th>
<th>Est. HRA Schedule</th>
<th>Est. Risk Reduction Plan Schedule</th>
<th>Est. Plan Implementation Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td>PS&gt;250 Cancer Risk; OR PS&gt;2.5 Noncancer</td>
<td>2017-2018</td>
<td>2018-2019</td>
<td>2019-2022</td>
</tr>
<tr>
<td>Phase 2</td>
<td>PS&gt;10 Cancer Risk; OR PS&gt;1.0 Noncancer</td>
<td>2019-2021</td>
<td>2021-2022</td>
<td>2022-2025</td>
</tr>
</tbody>
</table>
**CENTRAL SAN’S APPROACH**

- Determine Rule 11-18 applicability
- Be proactive - gather upfront intelligence to comply with Rule 11-18
- Internal HRA to determine if health risks exceed risk action levels
- Early identification of risk reduction strategies
- Planning of risk reduction improvement projects

**WHERE ARE WE IN THE PROCESS?**

- Site-specific meteorological data compiled
- Completed treatment plant survey to create a mathematical model for use in dispersion modeling
- Validated stack parameters
- Collecting site-specific emissions factors
- Validating emissions factors and influent data
- Working with BAAQMD to update:
  - BAAQMD’s emissions inventory
  - On-site meteorological data
  - Physical layout of treatment plant and stack characteristics for use in dispersion model
- Developing baseline HRA with consultant
**GENERAL PROCESS TO CALCULATE HEALTH RISK VALUES**

1. **EPA’s WATER 9 Model**
   - Liquid Phase Emission Rates

2. **Spreadsheet**
   - Point Source Emission Rates

3. **EPA’s AERMOD Model**
   - Dilution Factor

4. **HARP 2 Model**
   - Health Risk Assessment

   - Cancer Risk
   - Acute Hazard Index
   - Chronic Hazard Index

**FACILITY REPRESENTED IN AIR DISPERSION MODEL**

- 1. SCR OCU IW
- 2. SCR OCU EF
- 3. Cogen Stack
- 4. Furnace 1
- 5. Furnace 2
- 6. Acid boiler 1
- 7. Acid boiler 2
- 8. Standby Power Generator 1
- 9. Standby Power Generator 2
- 10. Headworks OCU Scrubber 28
- 11. Headworks OCU Scrubber 18
- 12. Gas dispensing facility
- 13. SCU Bascum
- 17. Pressurization basins
- 21. East clarifiers
- 29. East secondary aeration basins
- 32. South clarifiers
- 36. Pressurization basins
- 34. Pressurization OCU
INTERNAL HEALTH RISK ASSESSMENT

• Phase 1 - Baseline Health Risk Assessment
  • Estimate baseline cancer risk, acute hazard index, and chronic hazard index.
  • Identify the MEIR and MEIW receptors
  • Distinguish top-contributing sources and pollutants
  • Collect site-specific emissions factors

• Phase 2 – Risk Reduction Strategies
  • Develop risk reduction solutions (i.e. TBARCT, operational changes) before completing the Risk Reduction Plan
  • Ensure source's health risk is below significant risk thresholds (CR<1/M, AHI and CHI <0.2)
  • Quantify risk reduction by running additional HRA modeling runs
  • Identify and plan capital improvements

QUESTIONS
Temporary Operation Permit to Operate Overview

Bay Area Clean Water Agencies
Air Committee
August 6, 2018

Alfonso Borja
Air Quality Engineer
Engineering Division

OVERVIEW

• Purpose of Temporary Operation Permit
• Temporary Operation Permit Submittal
• Temporary Operation Permit Regulatory Requirements
• Offset Emission Credit Considerations
• Questions and Answers
**PURPOSE OF TEMPORARY OPERATION PERMIT**

- Allows an operator to test the following:
  - Equipment
  - Processes
  - Formulations
- Allows for the operation of a temporary source which replaces critical equipment during schedule maintenance
- 3-Month Duration

**TEMPORARY OPERATION PERMIT SUBMITTAL**

- Submit Application Forms
  - **P-101B Form**: Application for Authority to Construct/Permit to Operate
  - **Data Form G**: General air pollution source supplemental form (miscellaneous equipment)
  - **Data Form A**: Abatement device supplemental form
TEMPORARY OPERATION PERMIT SUBMITTAL (CONTINUED)

• Submit Application Forms (Continued)
  – **Data Form C**: Fuel combustion unit supplemental form (combustion source/abatement device)
  – **Data Form P**: Stack supplemental form (if source/abatement device has a stack)
  – **Form HRA**: Health risk assessment supplemental form (if project requires a health risk assessment)

TEMPORARY OPERATION PERMIT SUBMITTAL (CONTINUED)

• Provide Specifications/Informative Documentation
  – Project Description
  – Emission Factors
  – Equipment Specifications
  – Throughput Information
TEMPORARY OPERATION PERMIT SUBMITTAL (CONTINUED)

• Operator certify one of the following:
  – Equipment Testing
  – Process Testing
  – Temporary Replacement (Existing Source)

• Submit Application Fees (if known)

TEMPORARY OPERATION PERMIT REGULATORY REQUIREMENTS

• Compliance with:
  – BAAQMD Regulation 1
  – BAAQMD Regulations 5 through 12

• Offsets at 1.15 to 1 for all emission increases

• Best Available Control Technology (BACT)
  – Short Duration Cost-Effectiveness
OFFSET EMISSION CREDIT CONSIDERATIONS

• Contact Emission Reduction Credit Broker
  – Emission Reduction Credit Availability
  – Emission Reduction Credit Cost ($)
  – Processing Time

• Prior to issuing temporary operation permit:
  – Certificate In Facility’s Possession
  – Compliance with Certificate Conditions

QUESTIONS AND ANSWERS

For further information on your specific situation, please contact your assigned permit engineer.