

4. BACWA/BAAQMD Workgroup  
BAAQMD Stationary Source Committee  
July 17, 2024

Bay Area Clean Water Agencies  
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**B A C W A**  
**B A Y A R E A**  
**C L E A N W A T E R**  
**A G E N C I E S**

Who is  
BACWA?



BACWA is a joint powers authority formed by the five largest Bay Area Publicly Owned Treatment Works (POTWs).

Members include 40+ wastewater agencies and collection systems



**AIR ISSUES & REGULATIONS COMMITTEE**

A Committee of the Bay Area Clean Water Agencies

# BACWA's mission and vision

## MISSION

- To provide an effective regional voice for clean water agencies' stewardship of the San Francisco Bay's ecological, community, and economic resources.

## VISION

- To demonstrate leadership in the protection and enhancement of the San Francisco Bay ecosystem.



# Advent of BACWA/ BAAQMD Workgroup

## **BAAQMD Approved Resolution 2021-23 on 12/15/21:**

BE IT FURTHER RESOLVED that the Board of Directors of the Bay Area Air Quality Management District directs Air District staff to form a working group comprised of regional operators of publicly owned treatment works to help facilitate the implementation of the Proposed Amendments and address other concerns related to toxic air contaminant reduction at these facilities and future rule development; the working group will provide updates to this Board of Directors on a regular basis;

# BACWA and BAAQMD goals addressed by workgroup

1. Efficiency in permit issuance and source testing to maximize community protection
2. Discussion of rule development
3. Coordination with other ongoing efforts statewide
4. Information sharing on what's happening at BAAQMD and the wastewater community

- **8 meetings beginning 2022**

# Notable Outcomes

Item	Outcome
Permit Backlog	<ul style="list-style-type: none"><li>• Edits to standard permitting conditions to streamline permitting.</li><li>• Workgroup acknowledged need for additional permitting staff to help manage the backlog.</li></ul>
Statewide Wastewater Sector Air Toxics Study	<ul style="list-style-type: none"><li>• Agreement by BAAQMD staff to engage in the statewide Air Toxics Study and reference updated/new emission factors in BAAQMD Rule 11-18 data analysis.</li></ul>
Source Test Requirements & Reporting	<ul style="list-style-type: none"><li>• Workgroup agreement that a standard report format and standardized source testing requirements would be beneficial.</li><li>• Conducted first source-testing workshop</li></ul>
Ongoing & Future Collaboration	<ul style="list-style-type: none"><li>• Agreement by BAAQMD staff to inform BACWA of upcoming rule development to collaborate ahead of rule adoption on issues that may impact operations at POTWs.</li></ul>
Strategic Planning	<ul style="list-style-type: none"><li>• BAAQMD staff recommended involving BACWA in strategic planning efforts with the new Executive Officer.</li></ul>

# Future Work

Item	Outcome
Permit Backlog	<ul style="list-style-type: none"><li>• Continue to work to update standard permit conditions</li><li>• BACWA to advocate for increased permit staffing</li></ul>
Statewide Wastewater Sector Air Toxics Study	<ul style="list-style-type: none"><li>• Begin meeting with CASA/CARB/other Air districts</li></ul>
Source Test Requirements & Reporting	<ul style="list-style-type: none"><li>• BAAQMD to provide feedback on next steps on standard report format</li><li>• BAAQMD to convene a second POTW-focused workshop on source test requirements and reporting.</li></ul>
Ongoing & Future Collaboration	<ul style="list-style-type: none"><li>• BACWA to inform BAAQMD of POTW issues relating to climate pollutants</li></ul>
Strategic Planning	<ul style="list-style-type: none"><li>• BACWA to engage in District level planning as external stakeholders, as appropriate.</li></ul>



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**AGENDA: 5**

# **Mid-Year Review of the 2024 Regulatory Agenda**

**Stationary Source Committee Meeting  
July 17, 2024**

**David Joe  
Manager of Rules and Strategic Policy Division  
[djoe@baaqmd.gov](mailto:djoe@baaqmd.gov)**



# Presentation Outcome



- Provide a mid-year update on the 2024 Objectives for the Rules and Strategic Policy Division

# Presentation Outline



- Rules Status Update
  - Community Partnerships
  - White Papers
  - Rulemaking
  - Rule Implementation
- Regulatory Commitments
- Updating our Prioritization Process
- Next Steps

# Rules Status Update



COMMUNITY  
PARTNERSHIPS

Assembly Bill (AB)617 Community	Status	Next Steps
<b>West Oakland</b>	West Oakland Community Action Plan (WOCAP) Implementation (Year 5)	Continue to support implementation through rule development (white papers, rules)
<b>Richmond-North Richmond-San Pablo</b>	Path to Clean Air (PTCA) Implementation Planning	Support implementation through rule development (white papers, rules)
<b>East Oakland</b>	Strategy Development	Support Draft Plan Development – Quarter (Q) 1 2025
<b>Bayview Hunters Point</b>	Challenge Identification	Support Strategy Development – Q4 2024

# Rules Status Update (cont.)



WHITE PAPERS



## Metal Shredding and Recycling (Rule 6-4)

*WOCAP Strategy 68; PTCA Measure C&I 4.5*

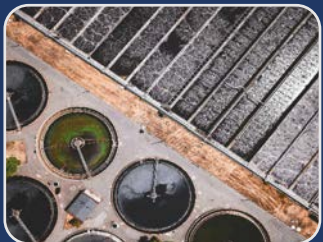
- Update to Stationary Source Committee – February 2024
- White Paper published – July 2024



## Wood Burning Devices (Rule 6-3)

*WOCAP Further Study Measure 5; PTCA Measure Public Health (PH) 2.5*

- Update to Stationary Source Committee – May 2024
- White Paper expected – Q4 2024



## Wastewater Treatment and Anaerobic Digestion

*WOCAP Strategy 72*

- White Paper expected – Q4 2024

# Rules Status Update (cont.)



RULEMAKING



## Rule 8-18: Equipment Leaks

*AB 617 Best Available Retrofit Control Technology (BARCT) Implementation Schedule*

- Proposed Rule Package published – May 2024
- Board Hearing expected – September 2024



## Rules 6-1 and 6-6: Fugitive Dust

*WOCAP Further Study Measure 3; PTCA Measure C&1 1.1*

- White Paper published – May 2023
- Draft Rule and Workshop expected – Q4 2024



## Rule 11-18: Risk from Air Toxics at Existing Facilities

*PTCA Measure Fuel Refining (FR) 4.1*

- Concept Paper published – December 2023
- Draft Rule and Workshop expected – Q4 2024

# Rules Status Update (cont.)



RULE IMPLEMENTATION



*Photo by Scott Webb*

## Rules 9-4 and 9-6: Building Appliance Rules

- Implementation Working Group
  - Engaging multiple stakeholders through 6 Public Plenaries, 4 Steering Committee, and 10 Subcommittee Meetings
  - Public Plenary – August 2024
  - Public Learning Session – October 2024
- Community Advisory Council Engagement
  - Presentation – November 2023
  - Participation in Equity Subcommittee
- Rule 9-6 Board Report – December 2024

# Regulatory Commitments



Rule	Type of Effort	Impetus
<i>In Progress Rules</i>		
Rule 6-4: Metal Shredding and Recycling	Rule Development	WOCAP Strategy 68; PTCA Measure Commercial & Industrial (C&I) 4.5
Rule 6-3: Wood Burning Devices	Rule Development	WOCAP Further Study Measure 5; PTCA Measure Public Health (PH) 2.5
Rules 9-4 and 9-6: Zero Nitrogen Oxides (NOx) Building Appliance Rules	Implementation	Health Protection; Particulate Matter Attainment

# Regulatory Commitments (cont.)



Rule	Type of Effort	Impetus
<i>Not Started</i>		
Flaring	White Paper	Draft Strategic Plan Strategy 1.3; PTCA Measure FR 2.6
Nitrogen Oxide (NOx) Sources at Refineries	White Paper / Regulatory Evaluation	PTCA Measure FR 5.5
Autobody	White Paper	WOCAP Stationary Sources 71; PTCA Measure C&I 5.2
Commercial Cooking	White Paper	WOCAP Stationary Sources 87
Indirect Source Rule	Regulatory Evaluation	WOCAP Mobile Sources 67; PTCA Measure Mobile 1.4; Board Direction
Sulfur Oxide (SOx) Sources at Refineries	White Paper / Regulatory Evaluation	PTCA Measure FR 5.6
Backup Generators	White Paper	PTCA Measure C&I 5.1



# Regulatory Commitments (cont.)



Rule	Type of Effort	Impetus
Rules Based On Particulate Matter (PM) Health Risk Methodology	New Rule(s)	PTCA Measure FR 5.3
Rule 11-18 (Stringency Improvements)	Rule Development	PTCA Measure FR 4.1
Source-specific Toxic Rules	New Rule(s)	Draft Strategic Plan Strategy 1.2; PTCA Measure FR 4.5
Rule 2-5 Efficiencies	Rule Development	Engineering Audit Corrective Action Plan
Rule 12-15 Efficiencies	Rule Development	Engineering Audit Corrective Action Plan
Backup Generators (Permitting Efficiencies)	New Rule	Engineering Audit Corrective Action Plan
Best Available Control Technology (BACT) (Permitting Efficiencies)	New Rule	Engineering Audit Corrective Action Plan

# Updating our Prioritization Process



## Why update our prioritization process?

- Increase in committed and potential regulatory efforts



- Strategic Plan calls for regulatory efforts to
  - Protect the health of communities impacted by air pollution
  - Free up agency resources to focus on these communities



## Updating our prioritization process to

- Consult with key stakeholders and communities
- Align with Strategic Plan and agency budget
- Ensure adequate resourcing

# Next Steps



Update prioritization process with an Environmental Justice lens

Incorporate regulatory commitments from final Strategic Plan into prioritization process

Review and update rule development processes to align with Strategic Plan focus





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**AGENDA: 6**

# **Toxic Air Contaminant (TAC) Control Programs Annual Report - 2024**

**Stationary Source Committee Meeting  
July 17, 2024**

**Carol Allen, Manager  
[callen@baaqmd.gov](mailto:callen@baaqmd.gov)**

# Presentation Outcome



- Present and discuss the draft *Toxic Air Contaminant Control Program Annual Report - 2024*

# Presentation Outline



- Background on Annual Report
- Description of Air District Toxic Control Programs
- Coordination of Assembly Bill (AB) 2588 Air Toxic Hot Spots (ATHS) Program and Regulation 11, Rule 18 Facility Risk Reduction Program
- Discussion and Status of Facility Assessments
- Highlights of Next Steps for Toxic Control Programs

# Presentation Requested Action



- No action required; informational item only.

# Background on Annual Report



## Public has Raised Concerns About Toxic Emissions Information and Potential Health Impacts

- Timeliness of Annual Reports required for the AB2588 Air Toxic Hot Spots Program
- Accessibility of Toxic Emission Inventory Data for Permitted Facilities
- Pace of Health Risk Assessments and Risk Reductions for Existing Facilities Under Regulation 11, Rule 18



# Background on Annual Report (cont.)



## Air District Responses to Public Concerns:

- December 2023 – Published Facility Rankings and Explanation of Facility Assessment Priorities
- April 2024 – Posted Facility Toxic Inventories for Data Collection Years 2020, 2021, and 2022
- Now – Prepared draft *Toxic Air Contaminant Control Program Annual Report – 2024*
- Planned Soon – Amendments to Regulation 11, Rule 18 to Increase Pace of Facility Health Risk Assessments
- Planned Soon – Facility Toxic Inventory Mapping Tool

# Background on Annual Report (cont.)



## Toxic Air Contaminant Control Program Annual Report – 2024:

- Includes Elements Required for AB2588 Air Toxics Hot Spots Program Annual Reports [CA Health & Safety (H&S) Code 44363]
- Consolidates and Updates the Description of Air District TAC Control Programs
- Improves Accessibility to Information about Toxic Emissions, Health Risk Assessments, and Risk Reduction Measures

# Description of Toxic Control Programs



## Goals:

### Identify and Reduce Health Impacts from Air Pollution

- In local areas, or “hot spots” with unhealthy risk levels
- From source categories with a potential to cause elevated health risks
- From new projects to prevent new elevated health risks
- To address historical community toxic concerns



# Description of Toxic Control Programs (cont.)

## TAC Control Programs:

- **Air Toxics New Source Review (NSR)** – Preconstruction review for new or modified sources that emit TACs
- **Facility Risk Reduction** – Identification, assessment and reduction of health risks from existing facilities
- **TAC Control Measures** – Control regulations for source categories that emit TACs
- **TAC Emissions Inventory** – Identification and reporting of TAC emissions from permitted facilities



# Description of Toxic Control Programs (cont.)

## TAC Control Programs (continued):

- **Air Toxics Ambient Air Monitoring** – Identification and assessment of TAC concentrations in ambient air at long-term air monitoring stations and through short duration studies, including mobile monitoring
- **Community Health Protection** – Reduction of air quality disparities and improvement of community health in vulnerable communities

# Facility Risk Reduction Programs



## California AB2588 Air Toxic Hot Spots Program

- Requires that Districts set Risk Management Thresholds
- Requires that Facilities Report Toxic Emissions – Guidelines Amended in 2020 and in 2022
  - Vastly Expands List of Compounds for Reporting
  - Phases in Annual Reporting and Smaller Facilities
- Requires Public Notification and Risk Reduction, if Facility Health Risks Exceed Air District's Thresholds
- Requires Annual Reports

# Facility Risk Reduction Programs (cont.)



## Air District Regulation 11, Rule 18: Reduction of Risk from Air Toxic Emissions at Existing Facilities

- Requires an Assessment of Facility Health Risks for:
  - High Priority Facilities, excluding “industry-wide” facility categories
  - Intermediate Priority with Potential for Non-Cancer Impacts
- Establishes More Stringent Risk Management Thresholds
- Requires Public Comment Periods & Air Pollution Control Officer (APCO) Approval for:
  - Health Risk Assessments and
  - Risk Reduction Plans (if required)

# Risk Management Thresholds and Actions



Program	Cancer Risk (in a million)	Non-Cancer (hazard index)	Actions
Toxic NSR Source Risk	1.0	0.2	Best Available Control Technology for Toxics (TBACT) – Applies to New or Modified Sources
Rule 11-18 Source Risk	1.0	0.2	Best Available Retrofit Control Technology for Toxics (TBARCT) – May Apply to Existing Sources at Subject Facilities
Toxics NSR Project Risk	6 (OBC), 10 (non-OBC)	1.0	Project Risk Limits – Public Noticing for Projects in Overburdened Communities (OBC) that Require Risk Assessments & Deny Permit if Project Risk Exceeds Thresholds
Rule 11-18 Facility Risk	10	1.0	Risk Reduction Plan – Must Either Reduce Risk Below Thresholds or Install TBARCT
ATHS Facility Risk	10	1.0	Public Notification – Letters to Households & 1 Public Meeting
ATHS Facility Risk	100	10	Public Notification – Longer Letters to High-Risk Households, Regular Public Meetings & Mandatory Risk Reduction



# Facility Health Risk Assessments (HRAs)



<b>HRAs Completed</b>	<b>751 Facilities</b>
<b>- Under Air Toxics NSR and ATHS Program</b>	
<b>HRAs In Progress</b>	
<b>- Under Rule 11-18 (Phase I of Planned Review)</b>	
• <b>Preparing Final HRA</b>	<b>1 Facility</b>
• <b>Preparing Preliminary HRA</b>	<b>12 Facilities</b>
• <b>Reviewing TAC Inventory</b>	<b>17 Facilities</b>
• <b>Inventory Work Beginning Soon</b>	<b>3 Facilities</b>
• <b>Discontinued HRA Work</b>	<b>9 Facilities</b>
• <b>Deferred to Phase II</b>	<b>3 Facilities</b>

# Status - Facility Health Risk Assessments (cont.)



## Rule 11-18 Facility Risk Reduction Program

- No Facilities With Final APCO-Approved HRAs Currently Showing Risks Greater than Rule 11-18 Risk Action Thresholds
- No Facilities Are Currently Required to Submit Risk Reduction Plans

## Air Toxic Hot Spots Program

- No Facilities Are Currently Subject to Public Notification
- No Facilities Are Currently Subject to Mandatory Risk Reduction

# Highlights of Next Steps

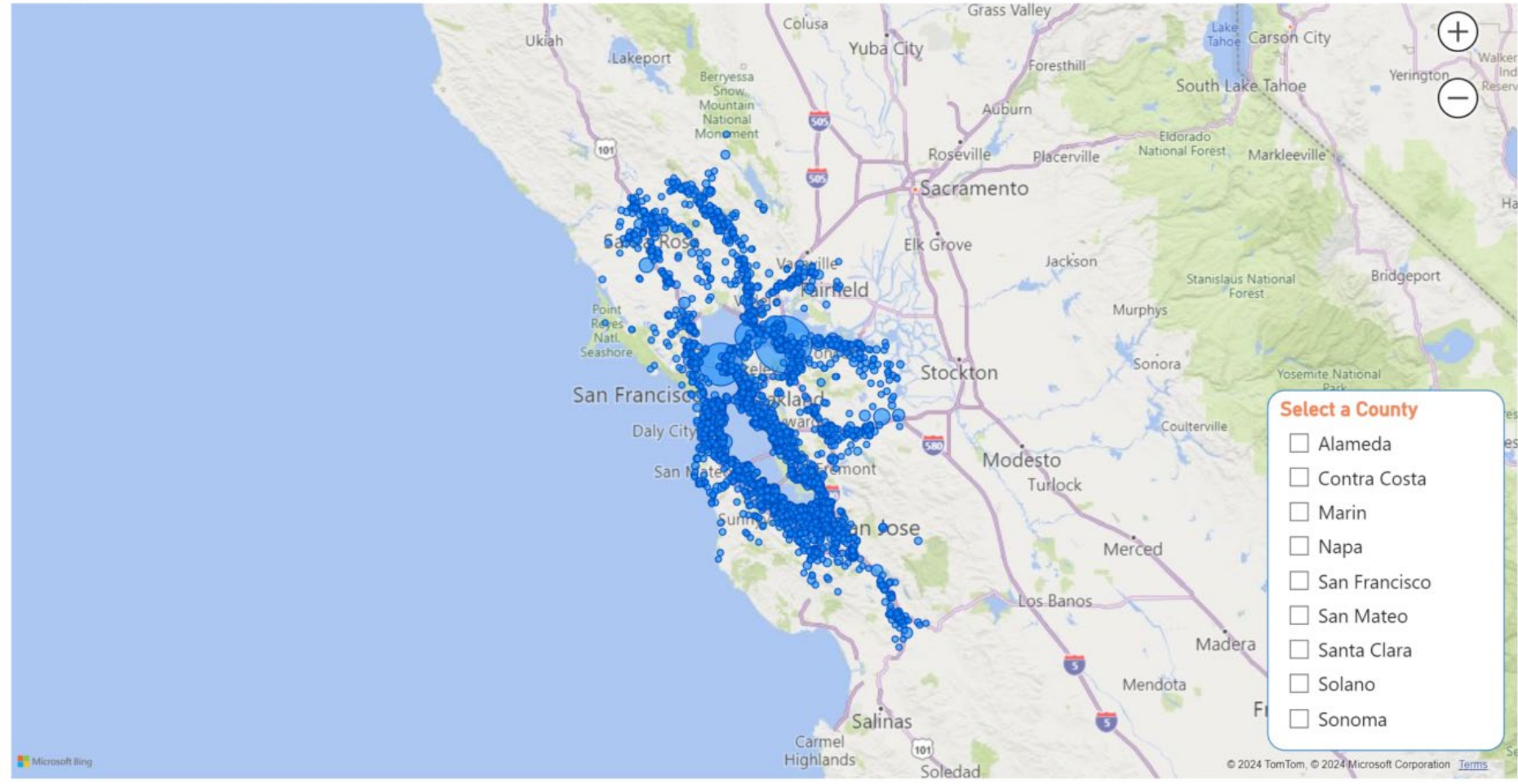


- **Toxic Inventory Mapping Tool**
- **Future Amendments to Rule 11-18**
  - Increase Pace of Health Risk Assessments and Risk Reductions
- **White Paper for Metal Shredding and Recycling Facilities**
  - Reduce Fires and Fugitive Emissions – Co-Benefits of Toxic Reductions
- **Future Work on Particulate Matter (PM) 2.5 Health-Based Evaluation**
- **Community Emission Reduction Plans (CERPs)**
  - 5-year Review of West Oakland Community Action Plan
  - Implementation of Path to Clean Air for Richmond-N. Richmond-San Pablo
  - Development of CERPs for East Oakland and Bay View Hunters Point (BVHP)/South East (SE) San Francisco

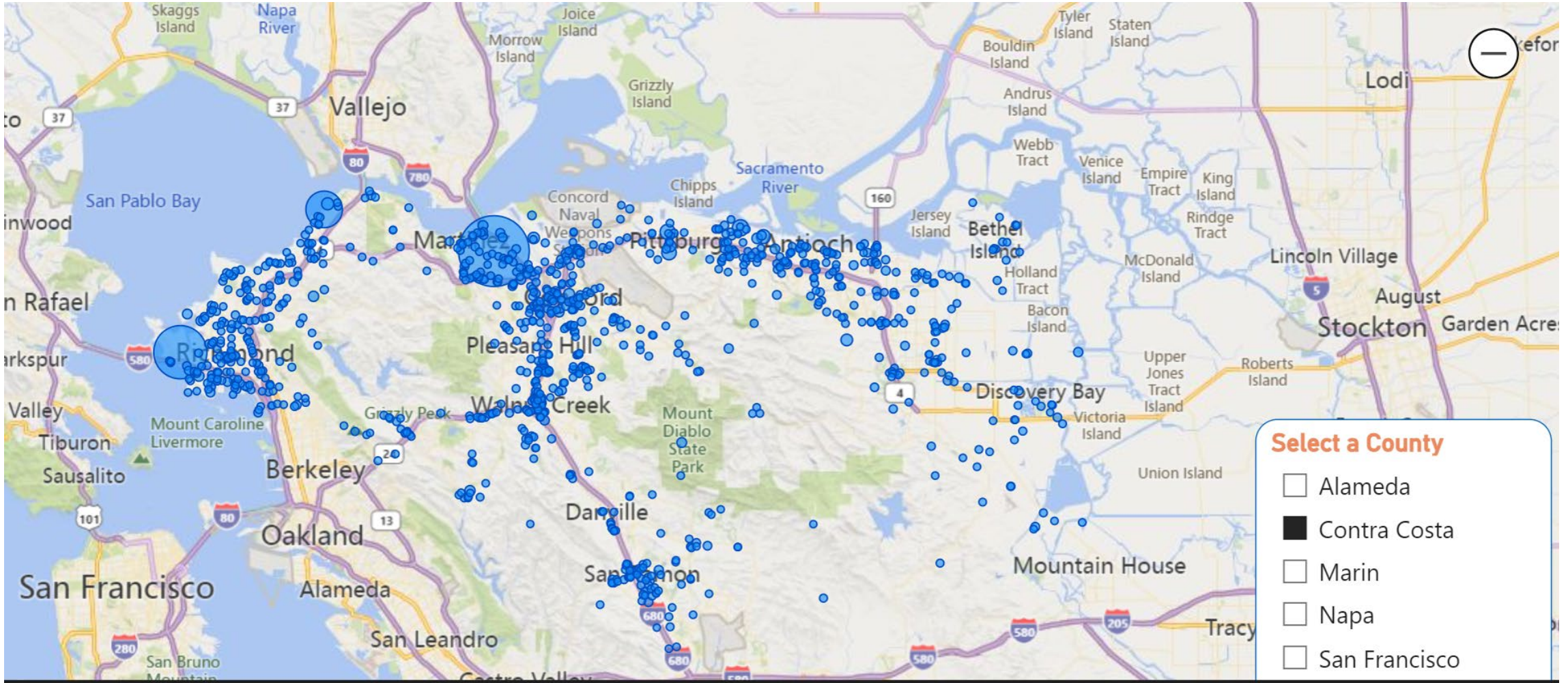
# Toxic Inventory Mapping Tool



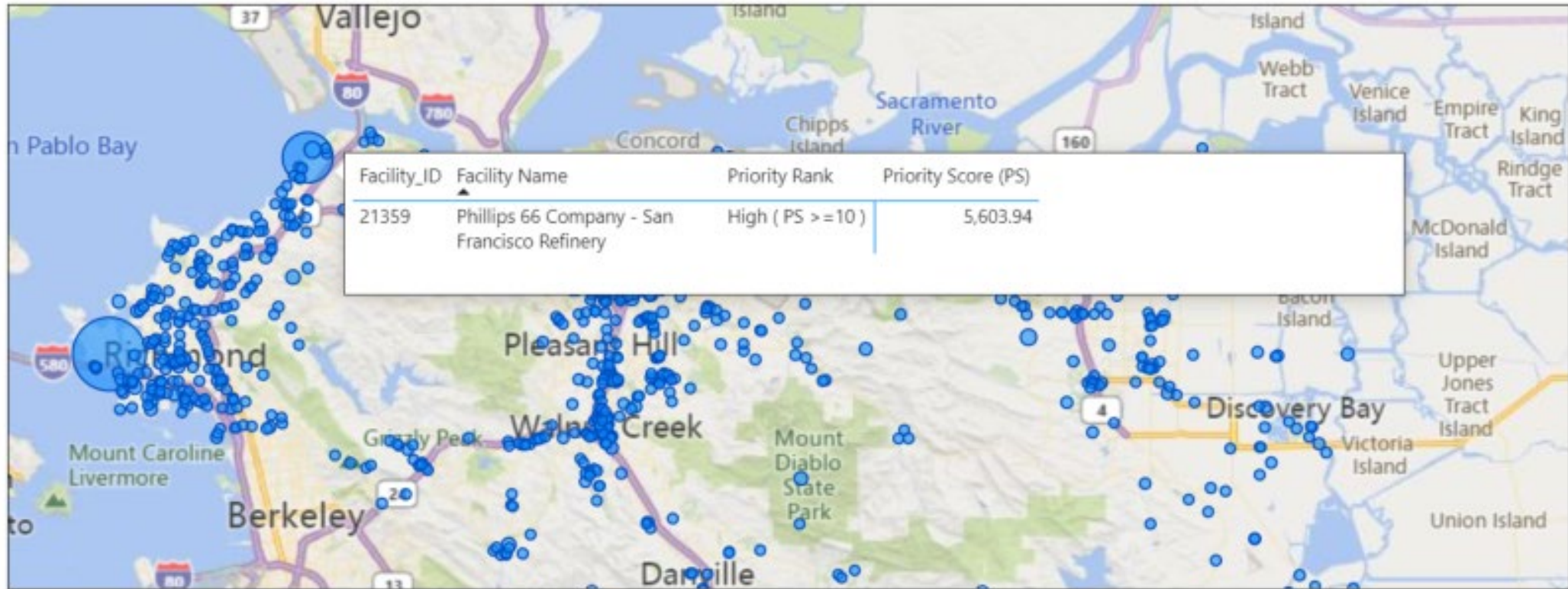
Facility Toxic Emissions and Prioritization Tool (Year 2022)



# Toxic Inventory Mapping Tool (cont.)



# Toxic Inventory Mapping Tool (cont)



# Toxic Inventory Mapping Tool (cont.)



## Toxic Pollutant Emissions Year 2022

Facility_ID	Facility Name	Priority Rank	Priority Score	Pollutant	Emissions (lb/yr)
<input type="checkbox"/> 21359	<input type="checkbox"/> Phillips 66 Company - San Francisco Refinery	<input type="checkbox"/> High ( PS >=10 )	<input type="checkbox"/> 5,603.94	1,3-butadiene	6.7E+000
				Acetaldehyde	8.3E+002
				Ammonia (NH3) pollutant	5.8E+003
				Arsenic (all)	1.5E+001
				Benzene	1.0E+003
				Benzo(a)pyrene	7.2E-001
				Beryllium (all) pollutant	2.5E-001
				Cadmium	9.3E+000
				Carbon disulfide	2.5E+003
				Carbonyl Sulfide (COS)	1.2E+004
				Chlorinated dioxins & furans (Calif TCDD equiv)	2.9E-009
				Chlorine pollutant	4.6E+000
				Chloroform	2.0E-010
				Chromium (hexavalent)	3.6E+000
				Cobalt	2.7E+000
				Copper (all) pollutant	9.0E+001
				Cresol	2.5E+001
				Cyanide and compounds (inorganic)	4.1E+001
				Diesel Engine Exhaust Particulate Matter	1.0E+001
				Ethylbenzene	4.1E+002
				Formaldehyde	1.7E+003
				Hexane	3.7E+004
				Hydrochloric acid mist pollutant	1.3E+004
				Hydrogen Cyanide (HCN)	2.3E+001

# Questions or Feedback



## QUESTIONS?