



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

Priorities

Greg Nudd, Deputy Air Pollution Control Officer
Bay Area Clean Water Agencies Annual Meeting
May 6, 2022

Outline

Recent priorities

- Rule 11-18
- Permitting in overburdened communities
- Technical working group

New priorities

- PM health impacts methodology
- South Bay odor study

Rule 11-18: Health Risk Assessments

Health Risk Assessments for POTWS

- **High Priority Sites:** Of the 39 POTWs in Bay Area, 8 received high priority score of greater than 100.
- **Start Date:** High priority sites go forward first, with inventory requests beginning Fall 2024. Next group of sites to begin approximately one year, consecutively, after high priority sites begin.
- **Duration:** Entire process, from inventory request to final health risk assessment, will take about three years.

Rule 11-18: Health Risk Assessments

Draft Schedule for POTWS

	Number of POTW Sites	Initiate Inventory Requests	Approve Final Health Risk Assessments	Approve Final Risk Reduction Plans *
Prioritization Score > 100	8	Q3 2024	Q2 2026	Q4 2027
Prioritization Score > 50	13	Q3 2025	Q4 2027	Q2 2029
Prioritization Score > 25	8	Q1 2027	Q4 2028	Q2 2030
Prioritization Score > 10	10	Q1 2028	Q4 2029	Q2 2031

* If Applicable

Rule 11-18: Health Risk Assessments

High Priority Sites to Go First

- East Bay Municipal Utility District, Oakland
- Central Contra Costa Sanitary District, Martinez
- San Jose-Santa Clara Regional Wastewater Facility, San Jose
- Fairfield-Suisun Sewer District, Fairfield
- Silicon Valley Clean Water, Redwood City
- Pacific Union College, Angwin
- Dublin San Ramon Services District - Wastewater TP, Pleasanton
- Central Marin Sanitation Agency, San Rafael

Permitting in Overburdened Communities

Recent Changes to Rules 2-1 and 2-5

- 1 Defined “overburdened” community.
- 2 Set more stringent cancer risk limit in overburdened communities.
- 3 Enhanced public notifications.
- 4 Updated health risk guidelines for gasoline dispensing facilities.
- 5 Established permit review timelines.

Permitting in Overburdened Communities

Newly Proposed Fees

- **Permit Application Fees**
 - Public notice fees (based on actual costs): for projects located in overburdened community and subject to health risk assessment.
 - Additional application fee of \$1,000: if health risk assessment required in overburdened community.
- **Permit Renewal Fees**
 - Renewal fee of 15%: for each permitted facility located in overburdened community, capped at \$250,000.

Technical Working Group

BACWA & BAAQMD Working Together

- Purpose: Work closely with wastewater operators to address concerns and ensure continued partnership in achieving shared goals of protecting our communities from pollution
- Meeting Frequency: Quarterly; Kick-off March 30, 2022; Next meeting end of June 2022

PM_{2.5} Local Risk Methodology

Why a methodology?

- Need a tool to evaluate localized impacts of PM_{2.5}.
- Not adequately considered in permitting or CEQA guidance.
- OEHHA guidance doesn't address undifferentiated PM_{2.5}.
- NAAQS are poorly suited for evaluating localized impacts and have been found to be insufficiently health protective.

PM_{2.5} Local Risk Methodology

Use Cases

- Permit health impact assessments:
 - Include undifferentiated particulate matter
 - Evaluate impacts of permit exemptions
 - Consider impact thresholds
- CEQA significance thresholds

PM_{2.5} Local Risk Methodology

Developing Methodology

- Drawing from studies of PM_{2.5} health impacts.
- Working with experts from OEHHA, CARB, and US EPA
- Holding public discussions through Advisory Council
- Planning for completion this calendar year.

PM_{2.5} Local Risk Methodology

Developing a methodology

- Based on national and state-level studies on PM mortality impacts.
- Working with experts from OEHHA, CARB, and US EPA
- Public discussions through our Advisory Council
- On track to complete this calendar year.

South Bay Odor Study

Where is odor coming from on Newby Island?

- **Purpose:** Identify sources/operations causing odors at Newby Island.
- **Outcome:** Identified chemical “fingerprints” for various sources. Fingerprints likely to be consistent across similar sources.
- **Next Steps:** Determine course of action, i.e., voluntary compliance, abatement, regulatory changes; share study findings; apply method to other sources.

South Bay Odor Study

Study Goals

- Identify odor contributions from three facilities and specific processes
- Evaluate variability and seasonal changes, e.g., in nearby communities
- Inform future actions: best practices, enforcement, rules
- Establish methods to measure progress on facilities' future odor reduction actions
- Educate community

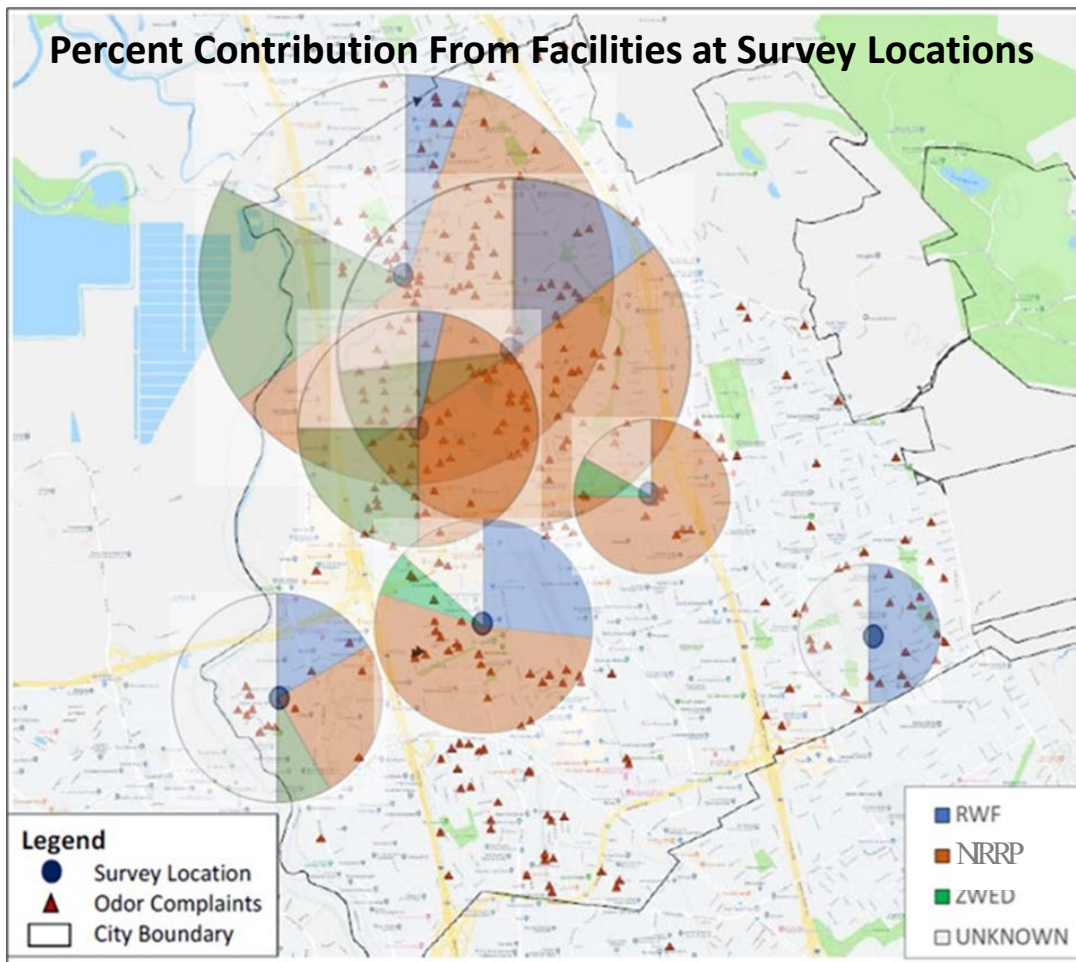
South Bay Odor Study

Study Methods

- Screening and targeted measurement through mobile platform: measure in parts per trillion (ppt) levels in real time (Montrose Environmental Group)
- Focused field sampling and data collection: over three seasons to identify odor compounds relative to facilities and processes (Jacobs Engineering Group, Inc)

South Bay Odor Study

Key Findings



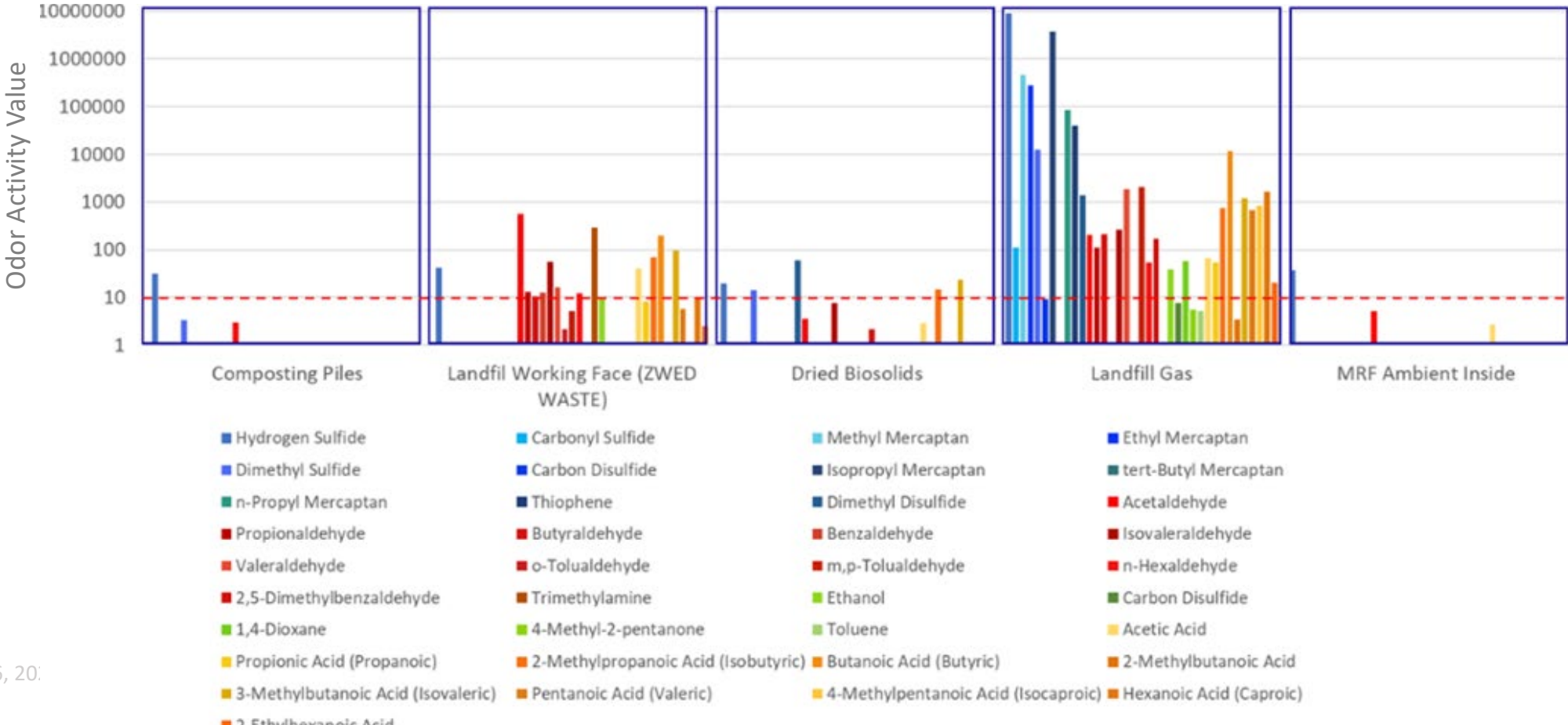
Potent odors can be attributed to:

- ZWED interior space
- RWF lagoons and turbulent streams
- NIRRP landfill gas and landfill working face
- Don Edwards San Francisco Bay Wildlife Refuge contributes to odors, but can be distinguished from facility odors
- Each facility and process has unique “fingerprint”

South Bay Odor Study

Fingerprints

Examples: Odor Compounds from NIRRP Processes



South Bay Odor Study

Actions a Regional Wastewater Facility Can Take

- Consider covering process areas with high odor emission rates.
- Extract and treat foul air in dedicated odor treatment facility.
- Install wastewater conveyance channel aeration.
- Minimize odor emitting activities when wind going toward community.
- Conduct routine maintenance to minimize leakage at PRVs.