



San Francisco
Water Power Sewer

Services of the San Francisco Public Utilities Commission

Biosolids Digesters Facilities Project (BDFP) Biogas Utilization System Update

Presentation for: Southeast Community Center Facility Commission Meeting

07.24.2024

Agenda

- Construction updates
- Biogas utilization system changes
- Environmental Impact Report addendum
- Environmental justice and Southeast Community Center air quality monitoring update
- Q&A

CONSTRUCTION UPDATES

Construction Progress



New Headworks Facility:

- New Headworks Facility will reach substantial completion by early 2025 (we are at 90% completion)
- SFPUC Power expected to begin first week of August 2024
- Evans Avenue Permanent Art Wall installation complete
- Evans Avenue restoration to begin this fall (expected completion early 2025)

Construction Progress



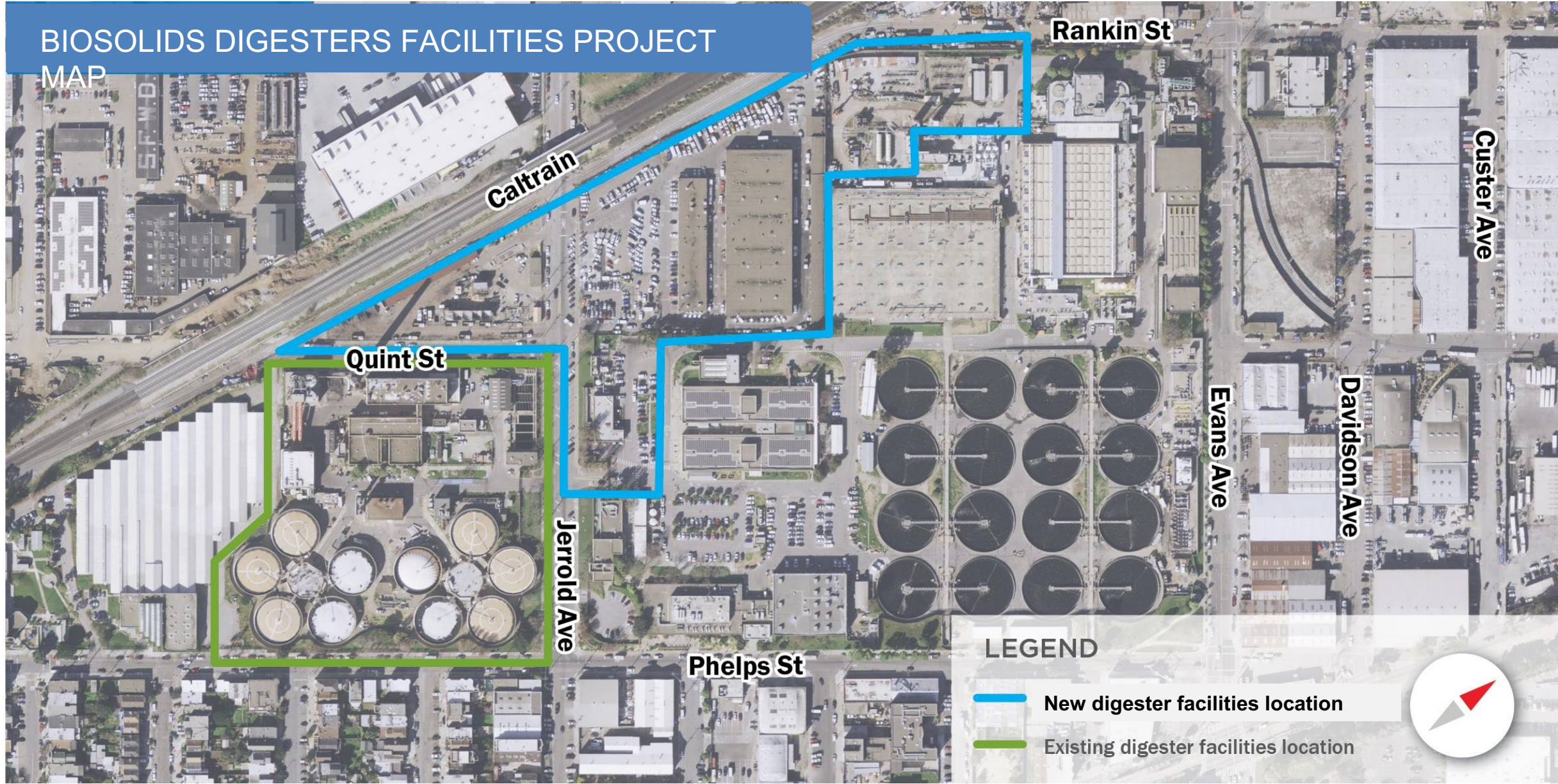
Biosolids Digester Facilities Project:

- BDFP will reach substantial completion by 2028 (we are at 52% completion)
- All five biodigester lids (approx. 60,000 lbs each) have been installed
- All structural work (concrete and steel) will be complete for the Solids Pretreatment building by the end of July 2024.
- Award-winning safety program (National Safety Council)

PROJECT MODIFICATION – BIOGAS UTILIZATION SYSTEM

Daniela Brandao, Biogas Project Manager

BIOSOLIDS DIGESTERS FACILITIES PROJECT MAP



LEGEND

-  New digester facilities location
-  Existing digester facilities location



Biosolids Digester Facilities Project: Objectives



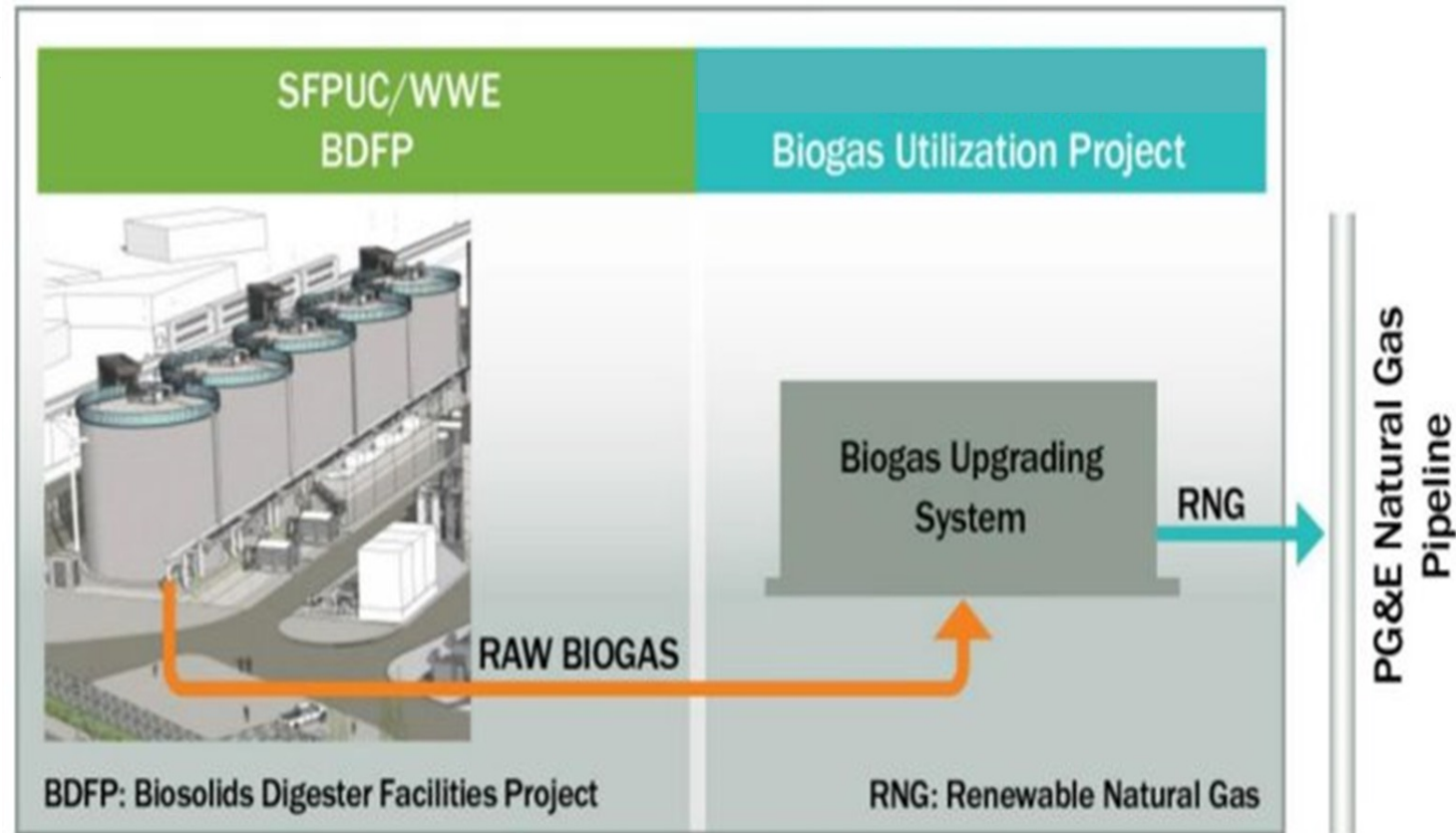
The Biogas Utilization system is a component of the Biosolids Project

- Address aging infrastructure with proven and efficient treatment technologies
- Maintain regulatory compliance
- Build critical processes with redundant infrastructure for reliability and operational flexibility
- Improve seismic reliability
- Improve odor, noise and visual quality
- **Beneficially use 100% of Biosolids and Biogas produced**

Biogas Utilization Project: Update

The BDFP originally included an energy recovery facility

- SFPUC identified high cost of the energy recovery system and explored other beneficial uses for the biogas.
- New end-use reduces cost of construction and operations.
- Biogas has a high economic value as renewable natural gas (RNG) for vehicular fuel & replaces fossil fuel, which is bad for the environment.
- The new biogas system will inject the RNG into PG&E's existing gas pipeline for distribution to end users.



How we provide updates

- Biosolids Project updates are shared on a regular basis through monthly e-blast updates, online news features, community newsletters.
- SFPUC presented the biogas utilization system at joint meeting of Southeast Community Center and SFPUC Citizens Advisory Committees on May 24, 2023.
- SFPUC recently updated information on Biogas online.
- For future updates, we encourage signing up for our regular eNewsletter at sfpuc.gov/sepconstruction.

FAQ



eNewsletter



Biogas System Construction Schedule*

Contract Award: November 2024

Start of Construction: Feb 2025

Expected Substantial Completion: August 2027

**subject to change*

ENVIRONMENTAL ANALYSIS

Kim Stern, Environmental Construction Compliance Manager

Environmental Impact Report Addendum

- San Francisco Planning Department reviewed impacts to air quality, noise, traffic, and biological and cultural resources.
- Modified project will require less construction and have lower air quality emissions.
- Modified project operations will decrease NOx, but increase ROG, PM10 and PM2.5 emissions.

EIR Addendum



Report: sfplanning.org/environmental-review-documents

Net Operational Criteria Air Pollutant Emissions with the Modified Project

Approach	Annual Emissions (Tons/Year)			
	ROG	NO _x	PM ₁₀	PM _{2.5}
Existing (2014) Total	5.0	22	1.7	1.7
FEIR Approved Project - Full Operation (2045) (Net Change to Existing) ³⁴	- 4.3	2.6	2.9	2.9
Proposed Modified Project - Full Operation (2045) (Net Change to Existing) ³⁵	-2.9	-3.2	3.8	3.8
CEQA Significance Threshold (Tons/Year)	10	10	15	10
Modified Project Emissions Above Threshold?	No	No	No	No

Source: EIR Addendum Table 6

Environmental Impact Report Addendum

- Future operational ROG emissions will still decrease when compared to the plant's current emissions.
- NOx emissions will decrease compared to the original project and the plant's current emissions.
- PM10 and PM2.5 operational emissions will still be below regulatory thresholds.
- As a result, Planning determined no new significant impacts, substantially more severe impacts, or new mitigation measures are required.

ENVIRONMENTAL JUSTICE COMMITMENTS and SOUTHEAST COMMUNITY CENTER AIR QUALITY MONITORING UPDATE

Rickie Cleere, Environmental Justice and Land Use Analyst

2017 Biosolids Project Environmental Justice Report

SFPUC is committed to the environmental justice (EJ) commitments established in the EJ report:

- SFPUC will monitor operational PM 2.5 emissions
- If operational PM2.5 emissions exceed no-project levels (3.0 tons/year), an offsets program will be enacted to reduce these emissions

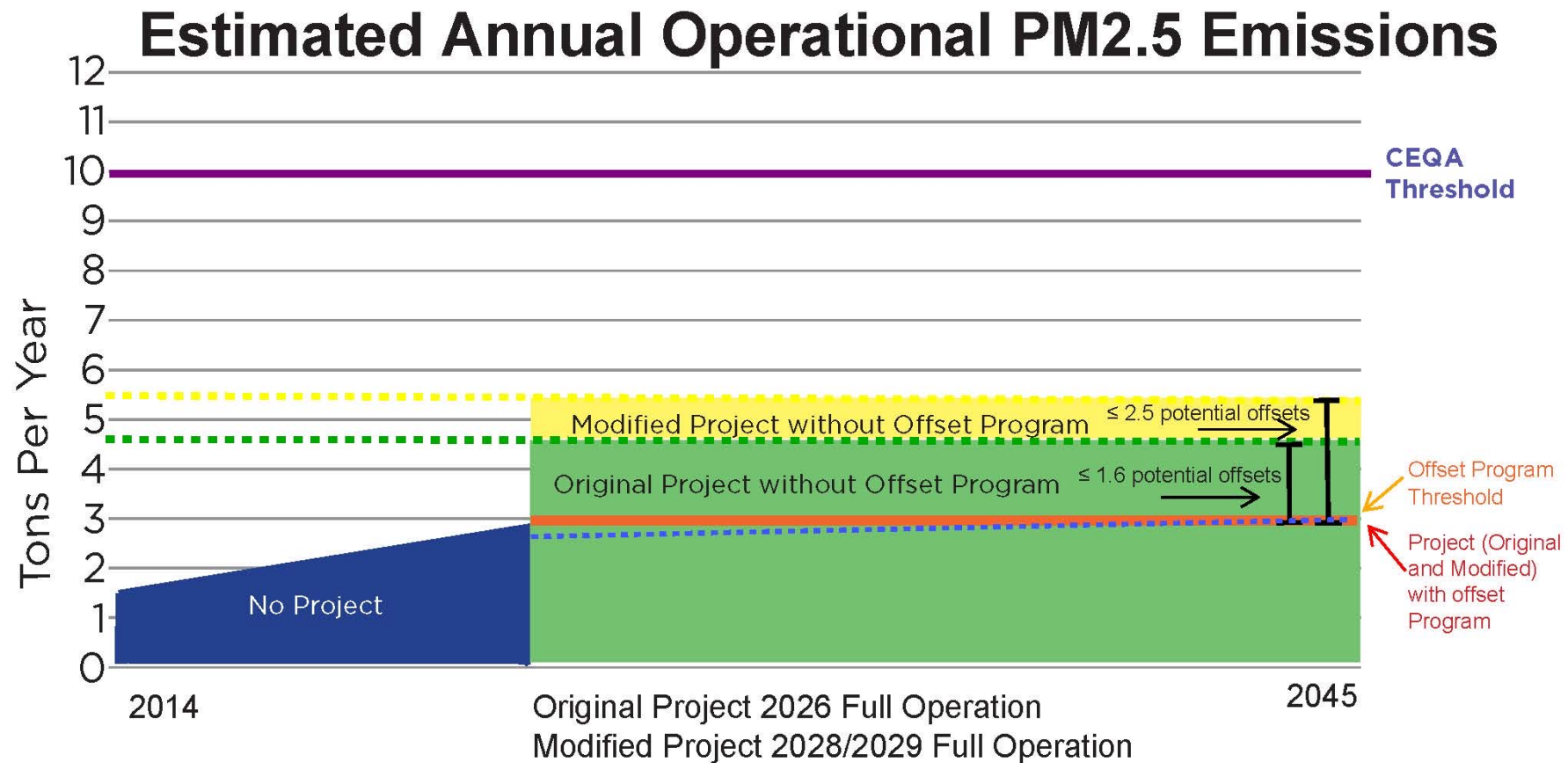
EJ Report available on BDFP project website:

sfpuc.gov/construction-contracts/construction-projects/biosolids-digesters-facilities

EJ Report



SFPUC's Environmental Justice Commitment



Environmental Justice Outreach and Engagement

We have had initial conversations about PM2.5 reduction and offset strategies with the following organizations thus far:

- Greenaction for Health and Environmental Justice
- Manylabs
- Bayview Hunters Point and Southeast San Francisco AB 617 Steering Committee

We welcome conversations with other relevant organizations.

Please reach out to Rickie Cleere at rcleere@sfgwater.org

Community-informed PM2.5 Emissions Reduction and Offset Strategies

These are initial ideas for local PM2.5 emissions reduction and offset strategies informed by community conversations to date:

- Plant PM2.5-reducing trees and vegetation
- Expand the electric vehicle charging station network and support electrification of surrounding industry
- Provide indoor air quality filters for homes and businesses
- Support replacement and maintenance of HEPA filters in schools
- Expand community air quality monitoring

*Ideas above are initial explorations and pending analysis of feasibility and operational emissions.

Community Air Quality Monitoring

We are partnering with organizations that maintain air quality monitors on the Southeast Community Center roof:

- **Manylabs:** data on Purple Air & **UC Berkeley:** data on BEACO2N
- **Greenaction for Health and Environmental Justice:** data to be available on IVAN (bvhp-ivan.org/air/map)

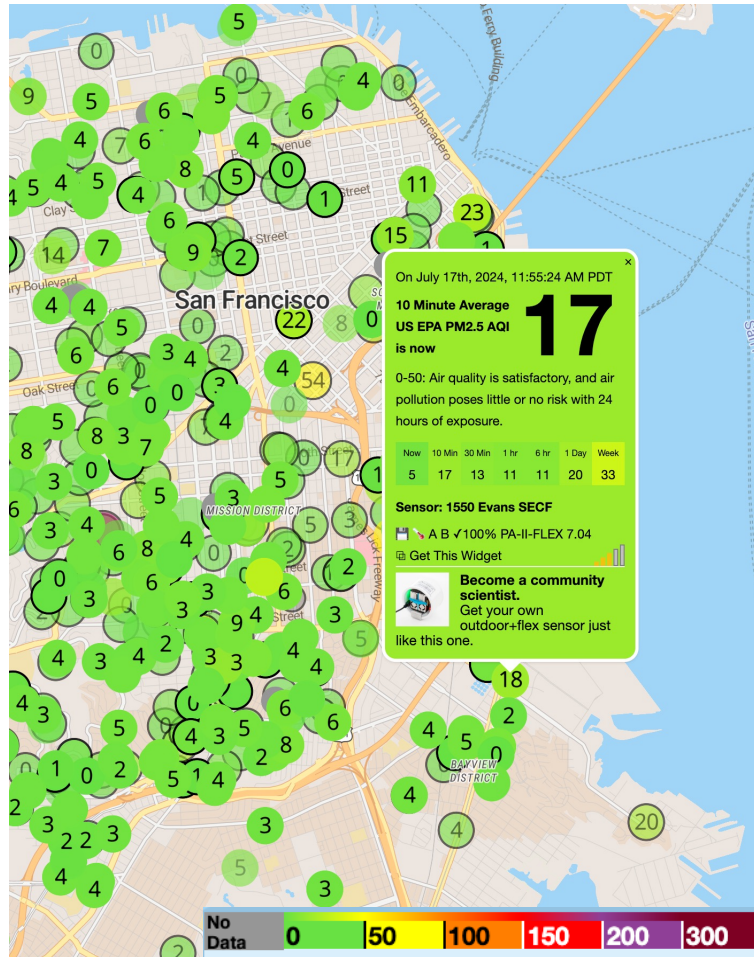
Purple Air



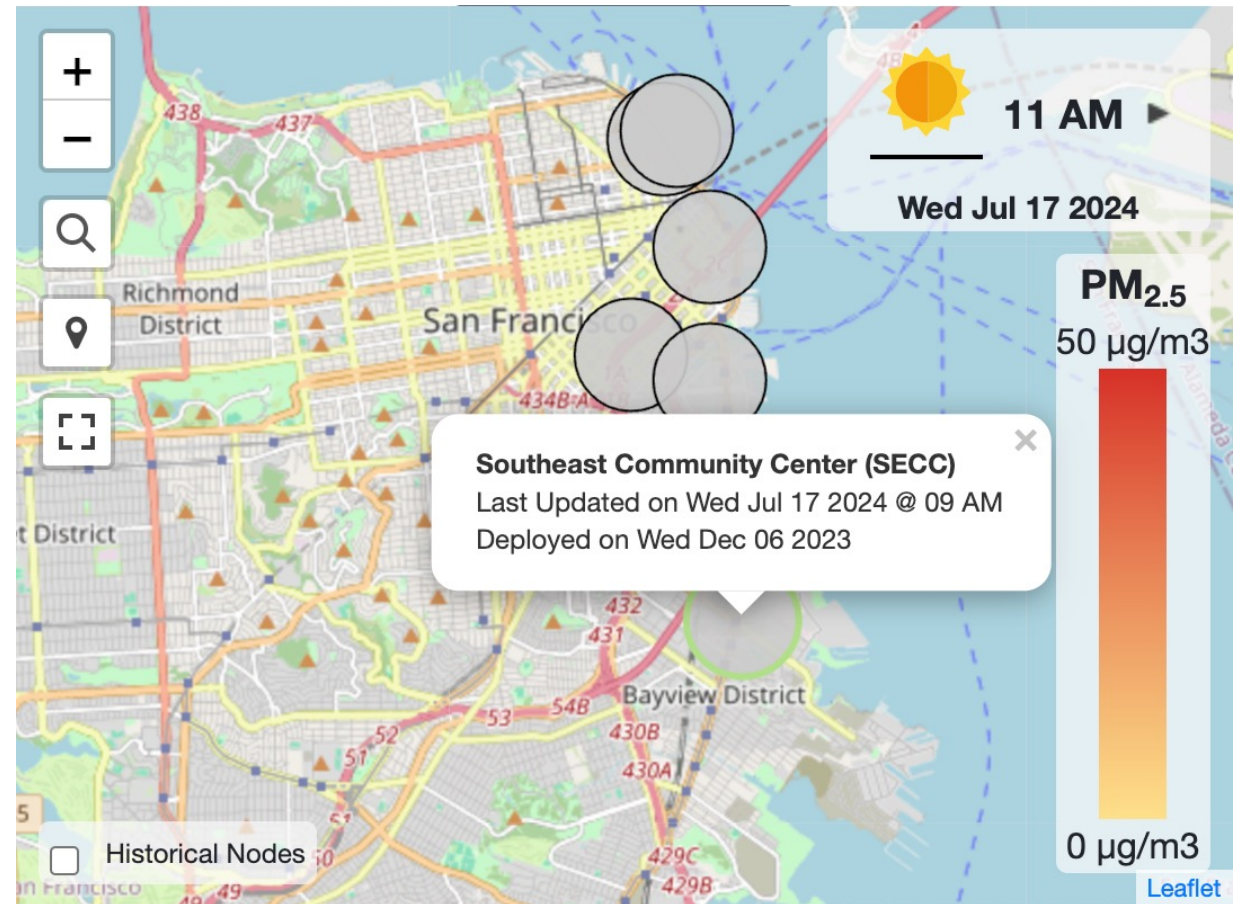
UC Berkeley



Community Air Quality Monitoring



Purple Air Map



BEACO2N Network Map

THANK YOU!

QUESTIONS?

Jobs & Contracts Resources

- **CityBuild Jobs Hotline**
415-701-4817
citybuild@sfgov.org
- **Jobs Information Hotline**
(non-SFPUC/non-City Jobs): 415-934-5777
- **Contractors Assistance Center**
open M-F 9am-5pm (415) 467-1040
or acp@sfwater.org

Contractors Assistance Center



For More Information

Construction: sfpuc.gov/construction-contracts/construction-projects/sepconstruction

Interested bidders: [Bids On Line \(sfpuc.gov\)](https://sfpuc.gov/bids)

Email: ssip@sfwater.org

Construction Hotline: (415) 551-4737