

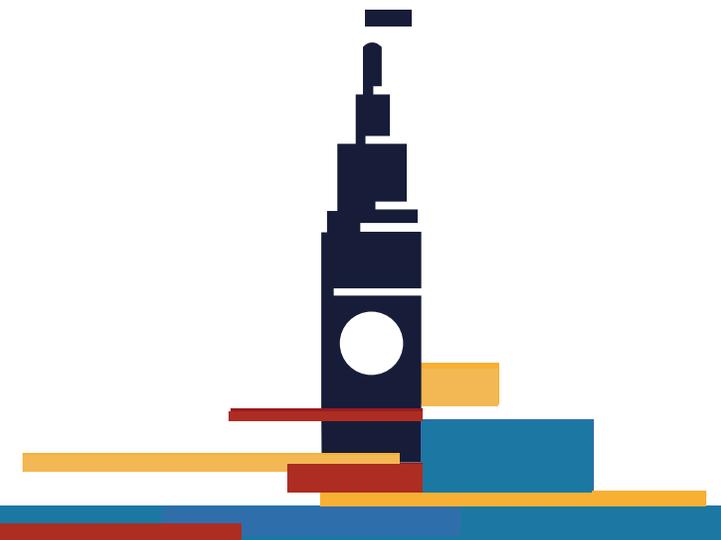
Follow-up Discussion on Piers 39 to 43½ Offshore Remediation Project and Pier 96 Marine Construction Staging and Sediment Material Handling Facility

**Port Southern Advisory Committee
December 8, 2021**

Kathryn Purcell, Port of San Francisco

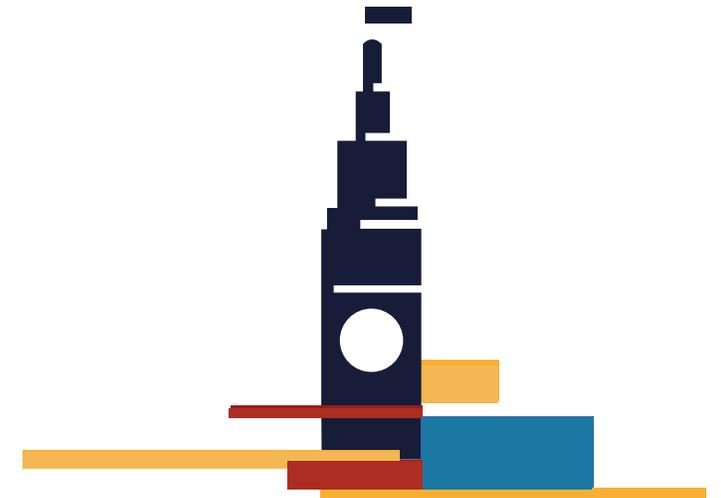
Maggie Trumbly, Pacific Gas & Electric

Ross Steenson, SF Bay Regional Water Quality Control Board



Pier 96 Interim Maritime Use

- Marine construction equipment staging, loading, unloading and sediment rehandling
 - Project uses are consistent with the Port's cargo and maritime uses
 - Availability of berth, wharf and terminal areas
 - Provides deep water berths maintained to -40 ft MLLW
 - Structural condition of wharf, seawall, terminal area
 - Terminal access to power, lighting, water
 - Terminal proximity and access to highways through nonresidential areas
- Project will design and implement site plans, controls, and avoidance minimization measures to ensure no adverse impact to neighboring facilities, environment and southern waterfront community



PG&E Follow-up Discussion on Piers 39 to 43½ Offshore Remediation Project and Pier 96 Marine Construction Staging and Sediment Material Handling Facility

Maggie Trumbly, PG&E - Remediation Sr. Manager

Luke Vernagallo, PG&E - Remediation Project Manager

Helder Costa, Haley Aldrich - Principal Scientist

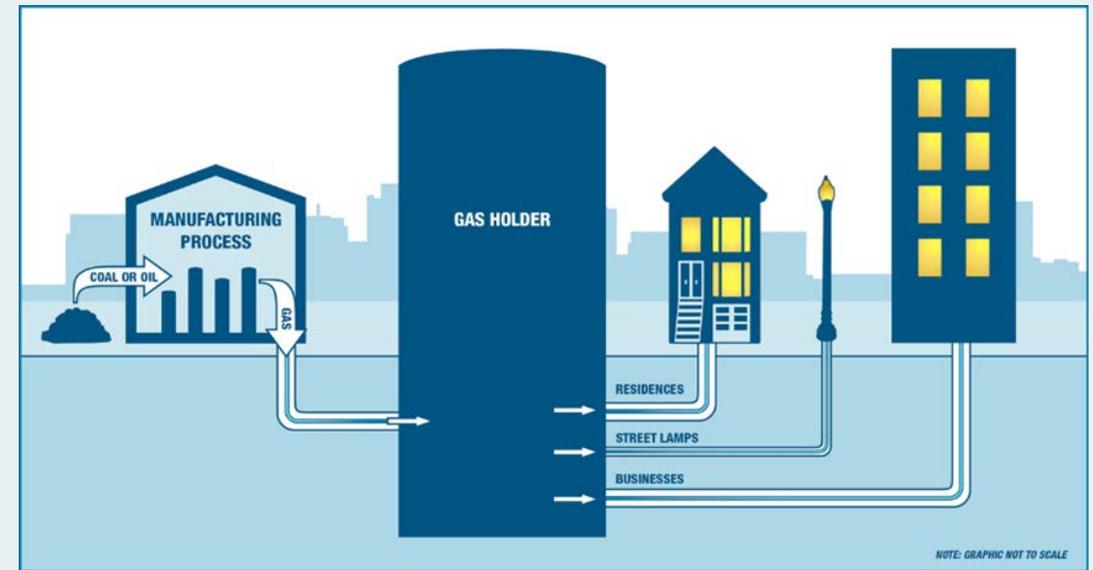
Nathan Lee, Haley Aldrich - Project Manager

Tom Holden, Haley Aldrich - Engineer of Record



What is a Manufactured Gas Plant (MGP)?

- Before natural gas was an energy source (mid-1800s to early 1900s), more than 1,500 MGPs existed across the country
- Coal and oil were used to produce gas for lighting, heating, and cooking
- Revolutionary technology at the time:
 - New means of street lighting
 - Enhanced public safety
 - Enabled businesses to work into the night
- PG&E and predecessors operated the Beach Street MGP near Pier 39 between 1900 and 1931; facility sold in 1950s and dismantled



What chemicals are associated with MGP residues?

- Polycyclic aromatic hydrocarbons (PAHs) are naturally occurring in:
 - Coal
 - Crude Oil
 - Gasoline
- PAHs are produced when coal, gas, wood, garbage, tobacco are burned
- PAH residues, such as coal tar and lampblack, are similar to materials created by fireplaces, asphalt roads and coatings
- Other MGP compounds are common ingredients found in some commercial products (e.g., disinfectants, moth repellents)



What do MGP PAH residues look and smell like?

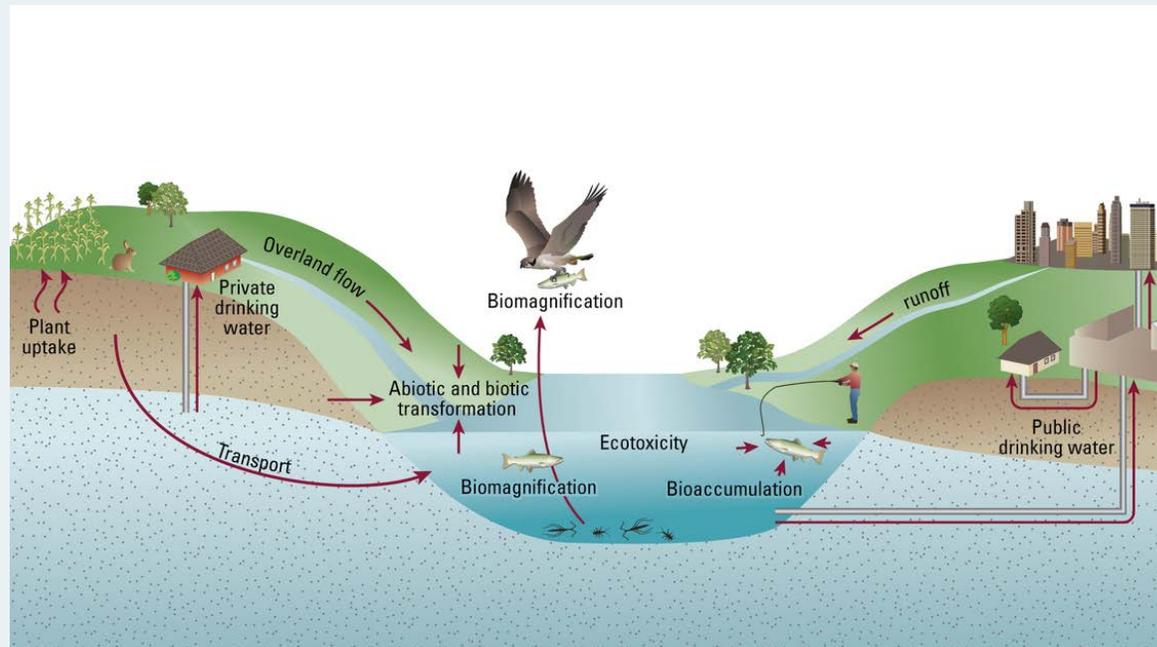
- Common PAH residuals:
 - Coal tar is black and looks similar to roofing tar
 - Lampblack looks like sooty black material (charcoal briquettes)
- PAH odors are similar to:
 - Roofing tar
 - Fresh asphalt
 - Moth balls



San Francisco Potrero MGP remediation project conducted in 2019

Why do Piers 39 to 43½ sediments need to be remediated?

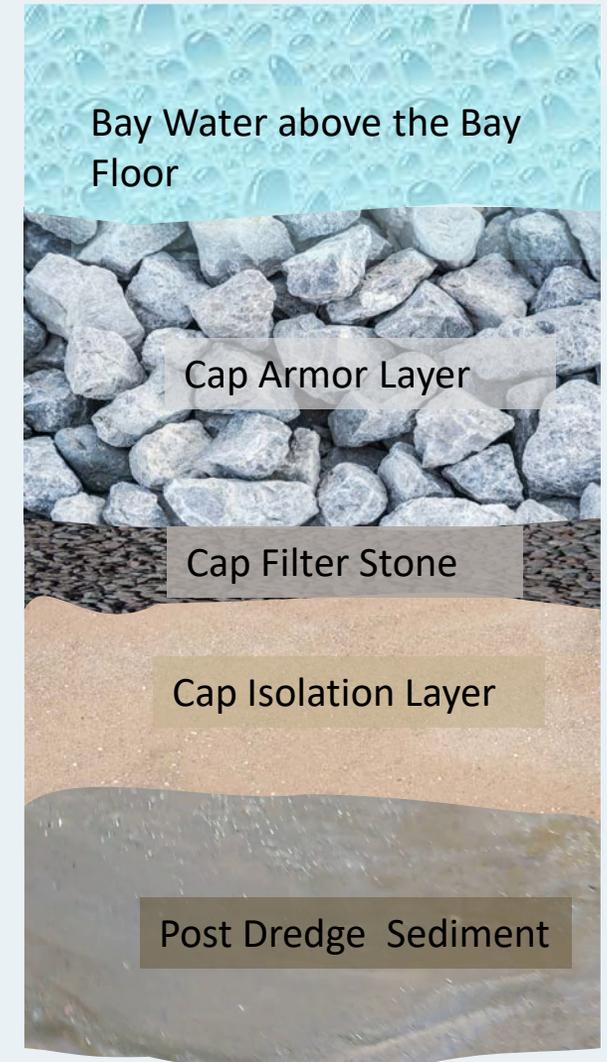
- Ecological receptors (e.g., birds, fish, sediment-dwellers) and humans could be exposed to residual PAHs in sediments by:
 - Direct contact with PAH impacted sediments
 - Ingesting food (e.g., mussels, clams, crabs) contaminated with high levels of PAHs



Are there human health risks for PAH impacted sediments?

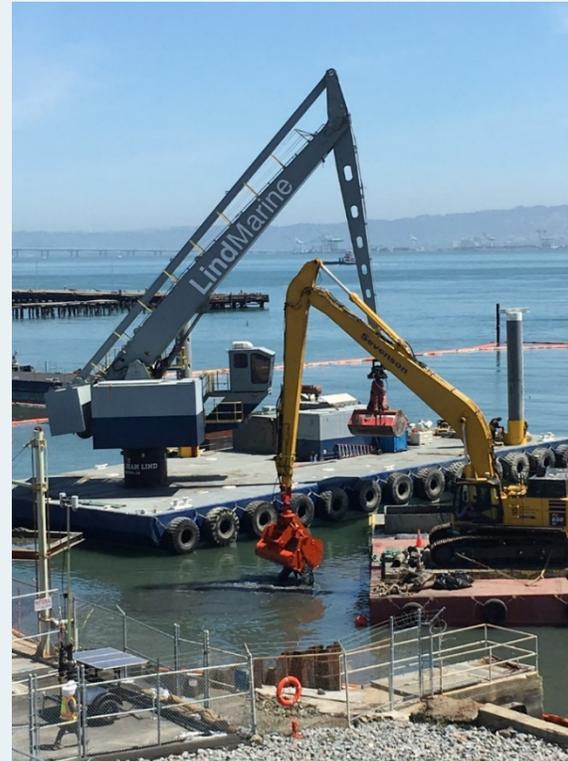
- MGP residues would present a human health risk **only** if there is **direct** and **regular long-term** (20-30 years) exposure to PAH contaminated sediment or regular ingestion of PAH contaminated food
- For humans, currently, risks are very low in the Pier 39 – 43½ area:
 - People don't wade in the sediments in this area, and
 - Shellfish are not commercially harvested from this area
- Remediation will prevent future exposure to sediment containing MGP residues by:
 - Eliminating pathways for exposure through dredging and capping
 - Protecting the cap from erosion by armoring
 - Reducing overall concentrations of PAHs in surface sediments in the area

- The Remedial Action Plan has been developed in coordination with the Port, its tenants, and under the oversight of the Regional Water Board
- The proposed remedial design **will accommodate current and future vessel operations**, maintenance dredge depths, and maritime uses within the site
- Once completed, remediation will achieve cleanup of the site and not interfere with maritime operations



What protections will be put in place during remedial activities?

- Sediment will be dredged and placed in barges for transport to Pier 96
- Turbidity curtains will be used to limit impacts to water quality
- Odor control suppressants will be used as needed, in transit
- Water quality monitoring will be performed to ensure compliance with Water Quality Objectives for the San Francisco Bay Basin



Dredging Equipment and Operations

How will sediment be handled at Pier 96?



San Francisco Potrero MGP remediation project – Sediment Offloading Operations

- Water is pumped from barges to water treatment system or containers
- Sediment is offloaded from barges to watertight trucks and moved to designated material handling area
- Drip pans and ramps will be used to minimize material loss during offloading

How will sediment be handled at Pier 96?

- Sediment will be:
 - Placed in lined cells
 - Processed to remove excess water
- Drying agents will be used to stabilize material for truck transport
- Sediment will remain damp, with minimal opportunities for dust and odor
- Sediment will be covered overnight and transported off-site within a week



SF Potrero MGP Remediation Project - Material Handling Operations

How will sediments be transported off-site?

- Processed sediment will be loaded into watertight trucks
- Non-toxic odor suppressants and/or water will be applied, if needed
- Sediment-containing trucks will be tarped prior to leaving the site
- Trucks, vehicles, and equipment will be inspected and decontaminated prior to leaving the site, including use of a pressurized wheel wash
- Average number of trucks per day: ~20 or less
- Hauling between 9 AM and 3 PM to avoid peak traffic hours



- In-water construction in the SF Bay is generally limited to the months between June and November.
- Following completion of each construction season, temporary items such as security and environmental controls, structure protection, wildlife protections, and navigation aids would be removed.
- No contaminated sediment will remain onsite between construction seasons.

What permits and plans will be in place for Pier 96 operations?

- All activities will comply with project-required local, state and federal permits
- Numerous control measures are built into the project design and plans
 - Health and Safety Plan
 - Sediment Processing and Construction Water Management Plan
 - Waste Management and Transportation Plan
 - Stormwater Pollution Prevention Plan
 - Dust, Vapor, and Odor Control Plan
 - Will include Ambient Perimeter Air Monitoring
 - Results provided to the Water Board and available to the public
- Port Building Permit includes review of project permits and compliant site plans

PG&E is committed to

- Robust local hiring program
- Working with contractors and the local community to utilize local hiring and truckers





San Francisco Bay Regional Water Quality Control Board

Ross Steenson, Regional Water Board, Senior Specialist, [Case Manager](#)

Bridgette DeShields, Integral Consulting Inc., Principal Scientist (Water Board's CEQA Consultant)

Regulatory History and Process

- **Project Origins** (2012-2015): Discovery of elevated PAH concentrations in sediment during permit renewal for the Port's Maintenance Dredging Program
- **Investigations** (2015-2020)
- **Cleanup Plan** (Feasibility Study and Remedial Action Plan or FS/RAP) (2021)
- **Initial Study/Mitigated Negative Declaration** (2021)
- **Board Resolution Adopting the Initial Study/Mitigated Negative Declaration** (2022)
 - Tentative Resolution available for public review through December 17, 2021:
https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/tentative_orders.html
 - Final Resolution to be presented to the Board
- **Site Cleanup Requirements Order** (2022)
 - Tentative Order available for public review through December 17, 2021:
https://www.waterboards.ca.gov/sanfranciscobay/board_decisions/tentative_orders.html
 - Final Order to be presented to the Board

Regulatory Oversight of Materials Handling Facility

- **Site Cleanup Requirements Order Task 3** requires plans to appropriately manage materials delivered and removed from the materials handling facility so that onsite workers, the community, and the environment are protected
 - Ambient Perimeter Air Monitoring Plan
 - Dust, Vapor and Odor Control Plan
 - Community Protection Plan
 - Stormwater Pollution Prevention Plan
 - Waste Management and Transportation Plan
 - Sediment Processing and Water Management Plan
 - Hazardous Materials Control Plan
- **Routine Inspections** by Water Board staff to ensure compliance

Benefits of Pier 96 Interim Project Use

- Provides space for marine staging and material handling necessary to complete cleanup of Port's Pier 39-43.5 site resulting in environmental protection of bay habitat and water quality.
- Enables barges to transit along SF shoreline and avoid crossing the Bay and active shipping lanes, reducing project risks.
- Lease revenue will contribute to the Port's economic needs.
- Tenant improvements will benefit the Port's post project use of the area for future maritime operations.
- The Port sets aside a portion of rent revenues from leases and uses of Port property in the southern waterfront to the Port's Southern Waterfront Community Benefits and Beautification Benefit Fund. Set-aside funds may be applied by the Port to the following southern waterfront beautification projects:
 - Open Spaces; Wetland Restoration; Removal of Deteriorated Piers, Sheds and Piles; Public Art Installation; Historic Preservation; Other Benefit Projects

PORT OF SAN FRANCISCO
POLICY FOR SOUTHERN WATERFRONT COMMUNITY BENEFITS
AND BEAUTIFICATION
NOVEMBER 2007

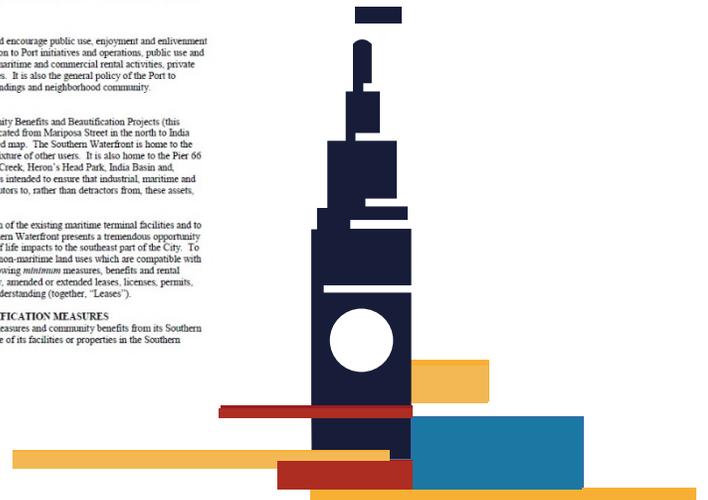
The Port of San Francisco ("Port") is a public enterprise dedicated to recreational and maritime use, transportation, public access and commercial and industrial activities on a self-supporting basis through appropriate management, use and development of the waterfront for the benefit of the People of California.

GENERAL PORTWIDE POLICY
It is the general policy of the Port to foster and encourage public use, enjoyment and enlightenment along the San Francisco waterfront. In addition to Port initiatives and operations, public use and enjoyment activities are augmented through maritime and commercial rental activities, private investment and development of Port properties. It is also the general policy of the Port to integrate such uses into our waterfront surroundings and neighborhood community.

OVERVIEW AND CONTENT
This Policy for Southern Waterfront Community Benefits and Beautification Projects (this "Policy") concerns the Port's real property located from Mariposa Street in the north to India Basin in the south as illustrated on the attached map. The Southern Waterfront is home to the Port's industrial maritime operations and a mixture of other users. It is also home to the Pier 66 public access area, Warm Water Cove, Islais Creek, Heron's Head Park, India Basin and, eventually, the Blue Greenway. This Policy is intended to ensure that industrial, maritime and commercial uses on Port property are contributors to, rather than detractors from, these assets, our neighbors, community and shoreline.

The Port is committed to maximum utilization of the existing maritime terminal facilities and to attracting visitors to the shoreline. The Southern Waterfront presents a tremendous opportunity to generate beneficial economic and quality of life impacts to the southeast part of the City. To that end, the Port is amenable to inclusion of non-maritime land uses which are compatible with the area. Thus, the Port requires that the following *minimum* measures, benefits and rental surcharge be included in the terms of any new, amended or extended leases, licenses, permits, operating agreements or memorandums of understanding (together, "Leases").

COMMUNITY BENEFITS AND BEAUTIFICATION MEASURES
The Port seeks the following beautification measures and community benefits from its Southern Waterfront tenants in consideration for the use of its facilities or properties in the Southern Waterfront.



Project Information and Contacts

- Port staff will continue to work with PG&E to provide future project updates as final project design plans and permits are available
- Contact the SF Regional Water Quality Control Board at:
Ross Steenson, ross.steenson@waterboards.ca.gov, (510) 622-2445
- Contact PG&E on their MGP information line at: (415) 973-0270

