



# Colorado Lagoon Restoration Project Update

Virtual Meeting – Lagoon Playgroup Meeting  
Friday, January 3, 2025 9:30 AM



# Colorado Lagoon Restoration Project Update

## Agenda

- Introductions
- Project Background
- What is Asbestos & Asbestos Containing Materials (ACM's)
- Regulatory Requirements
- ACMs at the Colorado Lagoon Project
- Abatement Activities
- Project Progress and Remaining Work
- Fire Station 14 update
- Additional Questions

# Colorado Lagoon Restoration Project Update

## Project Background

- Restores full tidal circulation to Colorado Lagoon
- Provides connectivity for wildlife from Alamitos Bay to Colorado Lagoon
- Improves the quality of Colorado Lagoon for plants and animals
- Provides a public view of natural coastal habitats
- Follows through on regulatory requirements to address degraded water quality conditions in Basin Plan and State Water Board documents



# Colorado Lagoon Restoration Project History



# Colorado Lagoon Restoration Project



# What is Asbestos?

- A naturally occurring mineral (rock) found throughout the world.
- A fibrous mineral composed of long, thin crystals.
- 6 main types of asbestos: crocidolite, tremolite, amosite, anthophyllite, chrysotile, and actinolite.
- California state rock is serpentine and is known to contain asbestos chrysotile.
- Chrysotile is the most commonly used form in building materials accounting for 95% of all asbestos-containing materials.



# What is an Asbestos Containing Material

- Asbestos-containing material (ACM), means any material containing more than one percent asbestos.
- Asbestos was commonly used in various building materials due to its strength, heat resistance, and insulating properties and therefore regularly arise during excavation and construction projects.
- Asbestos fibers are not released when materials remain undisturbed or are abated (stabilized, handled and disposed of appropriately).
- Asbestos is not water soluble and therefore is not considered a groundwater contaminant and additionally does not present an exposure risk to recreational swimming.

# Common Asbestos Containing Materials

- Wallboard and joint compounds
- Vinyl flooring and mastics
- Thermal system insulation
- HVAC insulation and sealants
- Ceiling tiles and mastics
- Plaster
- Stucco
- Concrete
- Asphalt pavement
- Fireproofing
- Wall and ceiling insulation
- Cement pipes
- Caulking and or putties
- Roofing materials
- Wall and ceiling textures
- Fire doors & curtains
- Gaskets
- Electrical insulators
- Laboratory equipment such as lab counter tops, panels, chemistry equipment
- Fire resistant materials such as protective suits, gloves, blankets
- Lamp wicks

# Pre-construction Testing and Soil Characterization

- Confirmed and known ACMs were associated with restroom building and water pipeline.
- Numerous soil boring samples were conducted prior to construction across the site and in Marina Vista Park.
- None of the samples indicated the presence of ACMs.



## AQMD Rule 1403 Asbestos Emissions From Demolition and Renovation Activities

- Survey
- Notification to Agency
  - Asbestos Removal Schedule
  - Removal Procedures
  - Handling Operations
- On Site Representative
- Disposal
- Chain of Custody Recordkeeping

# Unanticipated ACMs Encountered During Construction

- Most ACMs discovered on-site are associated with unmapped, abandoned utility lines.
- Most of the ACMs were located beneath Colorado and Eliot Streets.
- Some ACMs appear to be fragments of building materials remnant from historic fill activities.

# Unanticipated ACMs Encountered During Construction

- Upon the discovery of suspicious material, the Contractor notifies the City.
- The City dispatches an environmental consultant for material testing and development of cleanup plan, as required.
- Any abatement is required to be done by a licensed abatement contractor (subcontractor).
- Work is monitored by the environmental consultant to ensure the material is appropriately handled and disposed of in accordance with Federal, State, and local regulations.
- The City pays the contractor, subcontractor and consultant for the unanticipated work.

# Unanticipated ACMs Encountered During Construction

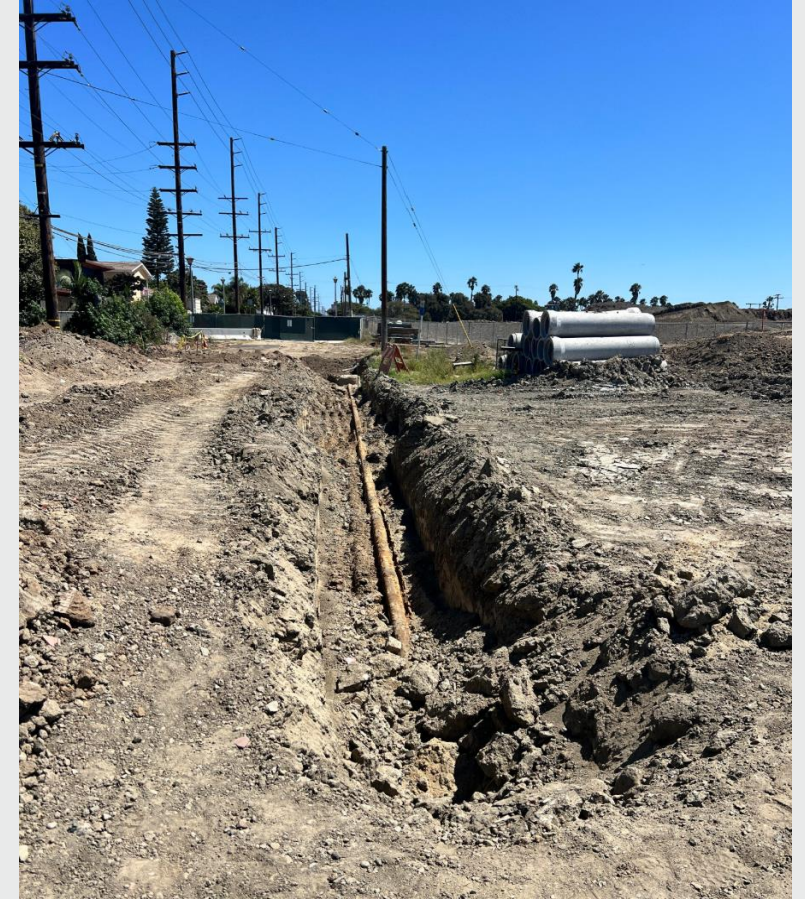
- Map of ACM pipes abated during construction
- Example: 14" abandoned pipe, installed in 1952 and retired 1984. Tar coating contained asbestos, common at the time of installation.



# Unanticipated ACMs Encountered During Construction

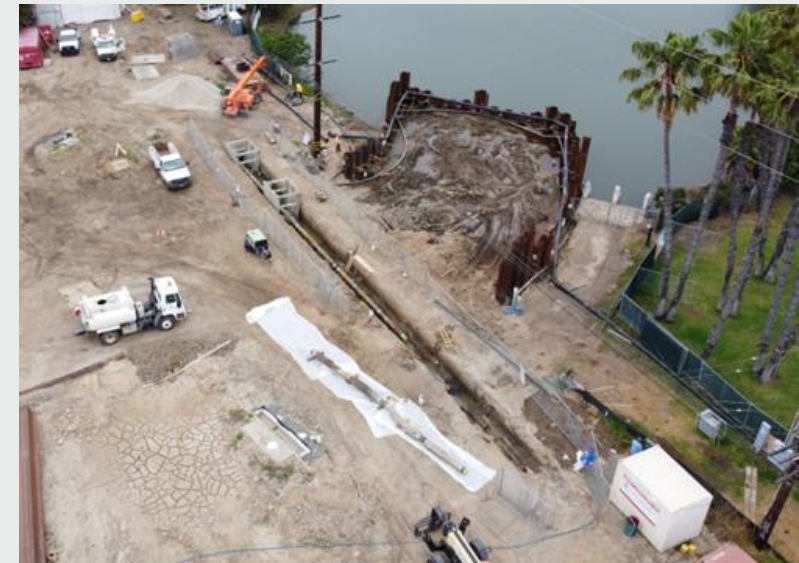
## 17 Unmapped Utilities Located and Abated in 2023

- 12" Sewer
- 12" Gas Line (Steel)
- 8" Gas Line (Steel)
- Multiple Sewer (VCP)
- Electrical Ductbank(s)
- Electrical Line(s)
- 6" Water
- 3" Water (ACP)



# Unanticipated ACMs Encountered During Construction

- Abatement is done in-place
- Materials are stabilized to prevent release of asbestos fibers
- Large sections of pipe are cut into more manageable pieces
- Each piece, small to large, was wrapped/bagged and disposed of at an approved landfill



# Unanticipated ACMs Encountered During Construction

## “Intermingled” Soil Stockpile(s)

- Some excavated soil was observed to contain pieces of material that upon testing was confirmed to be ACM.
- The soil was screened to remove the asbestos-containing pieces.
- Those materials were bagged or wrapped and sent to an approved landfill.
- Continuous air monitoring was utilized to ensure safety. All samples were below the personal exposure limit of 0.1 fibers per cubic centimeter.
- A majority of soil debris were not ACMs.



# Unanticipated ACMs Encountered During Construction

## Abating the Stockpile with Intermingled Debris

- After the screening process, the soils were retested for asbestos per CA Code of Regulations.
- Soils with less than 1% asbestos content may remain onsite.
- Samples to date had less than <0.10% asbestos content (well below the allowed threshold and screening threshold).
- The abated soils were beneficially reused on site and will be covered with topsoil.

# Clarification of Bulk Testing Data

## September / October 2023

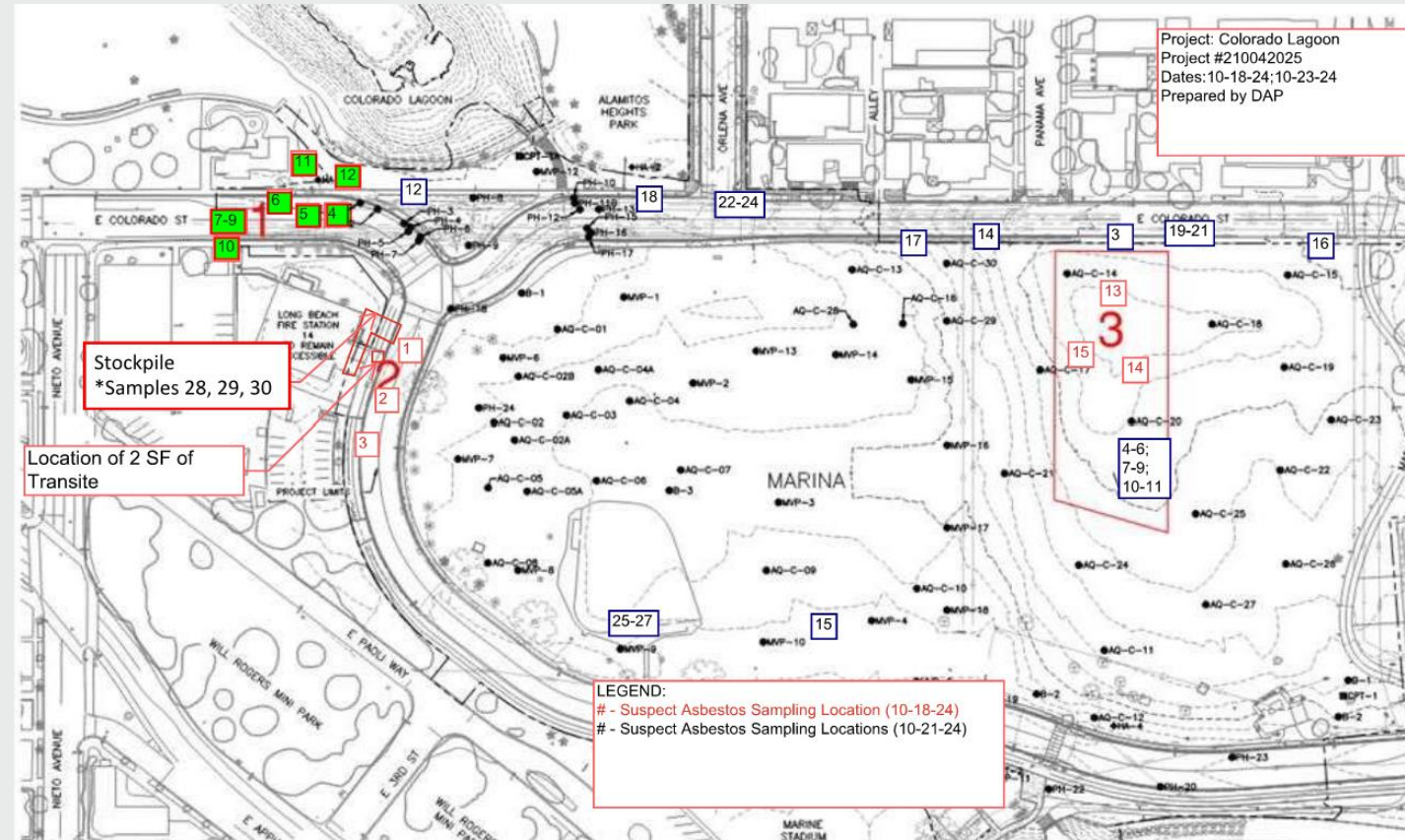
- Excavated soil was observed to contain pieces of potential ACM.
- 6 (bulk) samples were tested and confirmed to contain asbestos.
- Subsequently of same intermingled materials, 39 soil samples were taken from 3,840 cubic yards of soil.
  - 37 soil samples were found to be non-detect for asbestos
  - 2 soil samples (each roughly 1-ft below the surface) were found to contain <0.10% asbestos (nearly non-detect and reusable by all standards)
  - Soils with asbestos content below 1.0% may remain onsite.

## March/ April 2024

- The entire stockpile was screened and ACM pieces bagged/disposed of
- The abated soil was placed in prism 3 with a 2.5ft cap of clean backfill

# Recent ACM Testing – October 2024 Samples

- Examples of Samples that were most recently tested: pipe, concrete, pipe wrap, brick, mortar, etc.
- 42 samples were taken.
- Pipe and debris discovered near the Playschool were NOT found to be ACM.
- Intermingled debris near FS14 was found to be ACM and stockpiled for abatement.



\*Map updated to include reference to samples locations 28, 29, 30

# Remaining Abatement Work

## Abatement Adjacent to Fire Station 14

- Screening of soils to remove ACM's is underway (process outlined on a previous slide).
- Abatement is anticipated to be complete next week.
- Samples from the abated soil were found to be non-detect for asbestos.
- Samples from the remaining soil will be taken after the abatement is complete.



# Ongoing ACM and Abatement Monitoring

- Contractor requirements for handling ACMs and abatement remain in place since the project began.
- Abatement work is completed by a licensed abatement subcontractor.
- Contractor is required to notify the City immediately if suspicious material is discovered on-site.
- There is a full time onsite Public Works inspector monitoring progress.
- Construction activities are monitored by a Construction Management Team, Engineers, and Scientists.
- Abatement is monitored by a licensed Certified Asbestos Consultant (CAC).
- Given the progress of the project, additional ACMs are not anticipated.

# Project Progress & Remaining Work

- Eliot Street - Initial asphalt paving anticipated this month.
- Marina Vista Park – Finalizing subgrade and starting irrigation.
- Open Channel – Most of the channel has been over excavated to allow fill be placed.
- Colorado Street – Most of the excavation has been completed but some earthwork remains to construct the new sewer.

# Remaining Work

## Colorado Street

- Excavation and installation of sewer siphon.
- Construction of reinforced concrete box bridge.
- Open tidal flow through the open channel.
- Complete utilities and roadway.
- Landscaping and plant establishment.



# Fire Station 14 Workforce Privacy Project

- Construction is approaching completion
- Fire Station 14 is planned to reopen February 2025
- Similar to the start of the project, there will be a detour for the fire trucks in lieu of traveling on Colorado and Eliot Streets



# Additional Questions

Previously issued FAQ's can be found on the project website:

<https://www.longbeach.gov/pw/projects/colorado-lagoon-project/>

**Q: Can the school be notified if an area next to the school has tested positive for asbestos (or other toxic materials)**

- Considering overall progress to date, we don't anticipate encountering additional ACMs on-site. However, if additional materials test positive for ACM's, the Executive Director can be notified when appropriate notification to regulators has been provided.

**Q: Is Ninyo & Moore's mandate limited to asbestos? What is the scope of the toxic materials they are managing and testing for?**

- Ninyo & Moore is the City's Environmental Consultant and Certified Asbestos Consultant and provides monitoring and reporting for environmental services including asbestos and abatement work.
- The Contract Documents and regulatory requirements require soil, water, and other environmental testing for a wide range of constituents by the environmental consultant and others to ensure construction work does not impact the environment and that the work is completed in accordance with project requirements to achieve restoration goals.

# Additional Questions

## **Q: Has the water at Colorado Lagoon been tested? Can asbestos contaminate the swimming water?**

- Asbestos is not reactive, does not dissolve in water, and does not present an exposure risk for recreational swimming.
- The Colorado Lagoon is tested frequently
  - The Health Department tests for recreational water quality.
  - Additional water quality monitoring and testing is conducted during construction in accordance with contract document and regulatory requirements.
- The lagoon is regularly tested and monitored for various water quality parameters as part of State Water Board Requirements for the Colorado Lagoon issued in 2011.

# Colorado Lagoon Restoration Project Update

**For more information and to stay connected:**

**Email:**

[TidelandsCIP@longbeach.gov](mailto:TidelandsCIP@longbeach.gov)

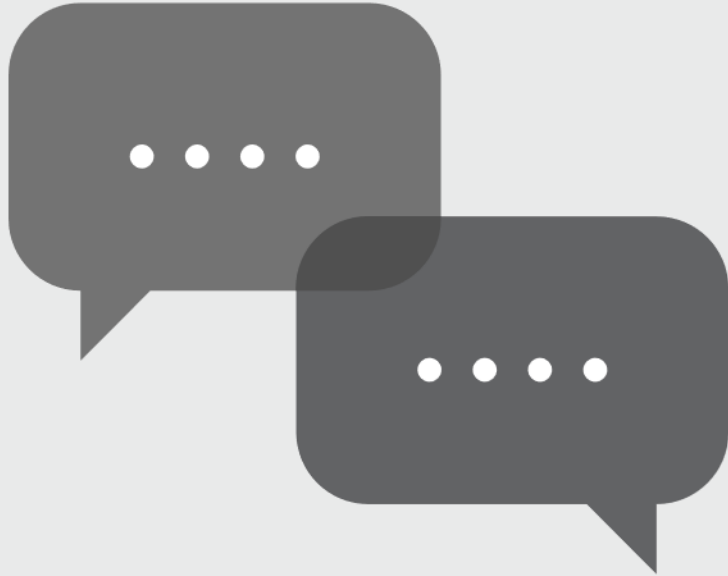
**Project Web Page:**

<https://www.longbeach.gov/pw/projects/colorado-lagoon-project/>

**Social Media:**

@LBPublicWorks on Facebook, Twitter, and Instagram

# Colorado Lagoon Restoration Project Update



## QUESTIONS & ANSWERS

**For more information**

<https://www.longbeach.gov/pw/projects/colorado-lagoon-project/>



Thank you