

HISTORICAL CONDITIONS OF DISTRICT FACILITIES

- The School District of Philadelphia (SDP) is composed of more than 300 buildings.
- Some of the District's oldest buildings are 120 years old. More than 200 were built before 1978, with the average age of a building being seventy-three (73) years old.
- Most of these buildings were constructed using lead-based paint and contained asbestos before the health implications were widely understood.



ASBESTOS MANAGEMENT PROGRAM

- There is no simple fix to get rid of all asbestos. Asbestos is prevalent in many materials, and management is the solution.
- There are 295 buildings in the District's asbestos management program
- According to the EPA, managing asbestos in place and maintaining it in good condition is often the best approach.
- We are seeing more damage as our cadence of inspections and record-keeping improve

REGULATIONS FOR ASBESTOS MANAGEMENT PROGRAM

- Asbestos Hazard and Emergency Response Act ("AHERA") —
 Federal law governing identification and management of
 asbestos in every U.S. school district
- Clean Air Act ("CAA") Federal law governing identification and handling of asbestos prior to and during construction, demolition, and renovation
- Asbestos Control Regulations ("ACR") Philadelphia rules governing identification and handling of asbestos



REGULAR INSPECTIONS

- Buildings age and conditions change, which can affect asbestos materials.
- AHERA inspections monitor conditions so we can find and repair damage.
- Buildings with asbestos materials are never given an "all clear." Regular, ongoing inspections monitor for any new damage.

AHERA INSPECTION FREQUENCY

- AHERA requires 3-Year Re-Inspections of all student occupied facilities (293) as well as 6-month periodic surveillance in between.
- A 3-year inspection is of all functional spaces within a structure while a periodic surveillance is an inspection of known or assumed asbestos materials, and may not include all spaces within a structure.
- District must conduct a total of <u>50</u> inspections/surveillances per month in perpetuity to maintain compliance with AHERA. Historically this frequency has not been met due to resource constraints, but the District is increasing its capacity now with Tetra Tech and DeLuca Consulting.



ASBESTOS MANAGEMENT





- Tetra Tech, a consulting and engineering firm, manages AHERA inspections and related data. They took over AHERA inspection process in August 2022.
 - \$24 million contract over three (3) years.
- Current technology platform Donesafe requiring substantial support and customization.
- DeLuca Advisory Services provides oversight and process improvements with environmental programs.
 - \$9 million contract for three (3) years.





UNDERSTANDING INSPECTION PROCESS

- 3-year inspections take several days, at minimum.
 - One large school can have more than 3,000 building materials that require assessment and documentation.
- Tetra Tech inspectors check each of these materials and record damage in relation to materials that are known or assumed to contain asbestos.
- District is seeking to hire additional management planners and staff.
- City is immediately notified of fiber release events and notified prior to abatement and is able to inspect abatement process.

UNDERSTANDING INSPECTION PROCESS



Qualifications

The City requires that the inspections be conducted by a Philadelphia Building Investigator

Plan School Spaces

Consider Homogonous Areas per element, per floor, per room, per functional space.

Room

Enter and assess functional space.

Floor Tile

Is there damage?

Damage

Record any damaged components and measurements

Q

Determine Samples

Check number of samples per homogonous component set (reference total areas)

Document

Observe the components and the areas/linear ft. New Materials? Removed?

Component

Check current Log

Collect'

Samples for Bulk Analysis

Submit Samples

Under COC procedures submit bulk samples to accredited lab

Results

Receive and review sampling results for ACM status



Update

Update component status to No Asbestos Detected or Confirmed.



Reporting Process

Remediation Process

CURRENT AHERA INSPECTION PROGRESS

- Total # of Buildings Under AHERA Inspection Program: 293
 - Re-Inspections conducted to date by School District: 87
 - Re-Inspections conducted to date by Tetra Tech: 181
 - Tetra Tech Contract started August 2022.
- All inspections are anticipated to have 3-year re-inspections completed by August 31, 2023.
- The District aims to have all 3-year re-inspection reports completed by December 31, 2023.
 - o **82** Tetra Tech have been completed
 - o 99 Tetra Tech reports are undergoing QA/QC

AHERA LIBRARY INITIAL MANAGEMENT PLANS



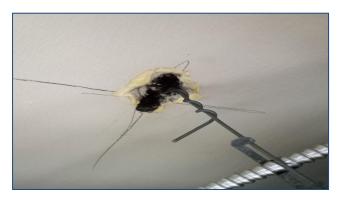
RECORD KEEPING

- Technology changes have led to different record keeping systems, all managed by limited personnel.
- Hard Copy documents are voluminous and in various locations. These require significant
 effort to pull, review, and confirm that data is being recorded appropriately.
- The District acquired Donesafe as a technology solution to resolve data collection and access issues. However, Donesafe as a software has been slow to develop, and has unforeseen issues with data bandwidth capabilities, as well as some user interface issues.
- Additional needs assessments are being conducted to find and develop a more appropriate technology solution for the District. The goal is to have a technology solution that helps close the gap for many of the compliance issues, including number of samples, keeping track of abatement records, inspection quality, etc.

PLASTER REVIEW

- Recent reviews of data in relation to Building 21 uncovered that historical plaster data within the District is incomplete, and in some instances, was inaccurately recorded.
- Currently the District is running a plaster assessment program to identify data gaps and places where the data was not recorded correctly.
- Unfortunately, there are instances where due to lack of data, or incorrectly recorded data, the
 District had plaster that was identified as Not Containing Asbestos, when in fact, it is a material
 does contains asbestos (more than 1% per AHERA regulations).
- This process is underway, with approximately 60 schools with a complete desk audit for plaster samples numbers, and over 100 where additional samples have been collected. There are over 100+ more to assess.

WHAT DOES DAMAGED ASBESTOS LOOK LIKE?





- Building materials such as plaster and paint look alike, whether they have asbestos or not.
- The existence of asbestos must be confirmed through sampling.
- Most common areas of damage are on pipe wrap, chipped or punctured plaster walls or ceilings and in floor tiles.



MOVING FORWARD

- This improved inspection process while revealing environmental hazards is working throughout the District.
- In the coming weeks and months, we anticipate more damaged asbestos will be identified.
- This is not an indication of a program failure, but the contrary - a program that is working to protect health and safety through the identification and management of environmental concerns.



Q&A Thank you!