

School District of Philadelphia Facilities Crisis

SCOPE AND SOLUTIONS: AN UPDATED REPORT

MAY 2021

PHILADELPHIA FEDERATION OF TEACHERS

JERRY T. JORDAN, PRESIDENT



SECTION 1: SCOPE OF THE PROBLEM

The toxic schools crisis in Philadelphia and across the commonwealth is emblematic of just how profoundly the deep seated, systemically racist underfunding of our schools has impacted our students.

Our young people, the majority of whom are Black and brown and experiencing poverty, have had to endure conditions that would never, ever be tolerated in wealthier, whiter school districts.

The school facilities crisis is a searing example of this atrocious inequity, and it's exactly why we formed the [Fund Our Facilities Coalition](#) to identify real, workable solutions to the **decades of neglect that have left toxic conditions plaguing our schools.**

- Decades of neglect that led SEIU worker Chris Trakimas to lose his life after a boiler explosion at FS Edmonds.
- Decades of neglect that lead then first grader Dean Pagan to suffer lead poisoning after eating lead paint chips from his desk.
- Decades of neglect that led to a devastating mesothelioma diagnosis for PFT member Lea DiRusso, who spent her career teaching in buildings with known, damaged asbestos.
- Decades of neglect that led Chelsea Mungo, then a fourth grader at Cassidy Elementary, to write to her State Senator and ask why the color of her skin impacted how her school is funded, and shared with him that she feels like she is in prison or a junkyard when she is in what is supposed to be a sacred place of learning.

In addition to systemic disinvestment and severe underfunding, pervasive and significant failures in District oversight, governance and management of buildings has resulted in the erosion of public trust and confidence in District leadership and management.

What follows are a number of critical facilities issues, process-based concerns, and a number of needed action items:

Section 2: Urgent Facilities Issues

- 2a. Overall Conditions
- 2b. Lead in Water
- 2c. Lead in Paint
- 2d. Asbestos
- 2e. Ventilation
- 2f. Moisture & Mold
- 2g. Roofing Issues

Section 3: Process Based Problems

Section 4: Action Items

Section 5: Conclusion

Appendices 1-3: Examples of recent asbestos, moisture/mold, and roofing problems.

Appendix 4: Photos of recent facilities conditions.

SECTION 2: URGENT FACILITIES ISSUES

2A. OVERALL CONDITIONS

In 2015, the SDP contracted with Parsons Environmental & Infrastructure Group to have them conduct a Facility Condition Assessment (FCA) of all Philadelphia schools. The Parsons FCA report for the District, along with individual school reports, was publicly released in January 2017 and identified the following problems and issues:

- District buildings (school inventory) had a “cost of replacement value” (CRV) of > \$14 B.
- District buildings had an average age of 66 yrs (compared to a national average of 42 yrs.)
- Current average age = 70+ years old (80% of buildings are >70 y.o.)
- There was a documented 25-year deferred maintenance backlog of needed work.
- There was a documented \$4.5 B Maintenance & Operations (M&O) need associated with the backlog.
- There was a capital infrastructure need of more than \$3.3 B (in addition to the M&O need)
- The “current” financial needs/cost at the time was pegged at almost \$8 B -- nothing even remotely close to that number was ever devoted to either necessary capital improvement or M&O so continued deterioration is, and was predictable.

According to the 2015-2017 FCA (referring to the FCI values in the Parsons report) the overall District FCI rating was > 32%, reflecting an exceptionally advanced state of deterioration.

- The schools in poorest condition were elementary schools and closed schools (FCI > 37%)
- 85 schools had FCIs of between 40% & 60%
- 20 schools had an FCI of > 60%
- \$3.5 B was recommended to be spent within the 5-year period (2015 – 2020) to address priority needs
- \$3.1 B was needed for O&M & Health & Safety

FCI % Range	Recommended Action
<15 %	Minimal Capital Funding Required
15 to 25%	Refurbish Systems
25 to 45%	Replace Systems
45 to 60%	Building should be considered for major renovation
> 60%	Building should be considered for closing/replacement

In 2020, the District again contracted with Parsons to re-inspect all schools and to update the FCA assessments from six (6) years ago.

The District has refused to disclose or provide any information related to updates to the FCA since 2017 or how/if they used the data for planning purposes over the past 4-6 years. Finally, they are now “updating” the FCA survey work but without providing any information, data, or collaboration.

2B. LEAD IN SCHOOL DRINKING WATER

In 2016, PFT and others pushed for lead testing of water in all drinking water outlets in all Philadelphia schools and for remediation work to be performed. We also conducted a nationwide survey of what other Districts had been able to accomplish around the country and made recommendations to the District and offered to work in collaboration with them. At the time, our participation and recommendations were ignored.

After a push from City Council and subsequent hearings, the District was required to engage in another round of testing, to share the information obtained openly, to afford stakeholders the opportunity to observe testing, and to ensure proper remediation work was done. Those activities were required and the District’s testing of water outlets was done and remediation work as well as the installation of 1,000 + “hydration stations” in all schools was a result of this effort.

A contractor, ANDalyze/Terra Phase was involved in those testing activities starting in 2016 and Keating Environmental Management (KEM) was responsible for coordination and oversight. Data was collected (supposedly) for all outlets in all schools.

District stopped cooperating with PFT and other stakeholders in 2019 and has failed to provide access to data and information from that time forward.

2C. LEAD IN PAINT: P&P ADVISORY COMMITTEE AND EXPANSION

Following the documentation (as a result of joint assessment by PFT & District) of the lead poisoning of a 1st grade student (Dean Pagan) at Comly ES in November 2017 and subsequent and continued public reporting, PFT advocacy, and collective action, the District was forced to take specific recommended remediation actions and to establish a lead “Paint & Plaster Advisory Committee.” It was this committee that District leaders promised would be expanded to include all environmental hazards and related facility condition deficiencies.

The P&P Advisory Committee had representatives from PFT, SEIU-32BJ, and CASA, as well as parent representatives from various communities. State Senator Vincent Hughes also participated on this committee.

The Committee operated in a closely collaborative manner with the District’s C.O.O., and directors of OEMS and other facility departments to review all data and information as it was collected, to participate in site assessment activities, to jointly develop testing and inspection protocols and procedures, and to review and help create and edit communication materials and approaches.

The committee played an active review, oversight, and advisory role and was *not* simply another “rubber stamp” mechanism for the District to “check the box” of public engagement without substantive engagement with stakeholders.

Throughout 2019 and early 2020, discussions were held with District leaders (Danielle Floyd and Jim Creedon) who agreed to expand the P&P Advisory Committee (as structured and operating) into a District wide Facility Environmental Advisory Committee (FEAC). The PFT, parent, and other stakeholders were asked to identify parent representatives for consideration and there was a promise to engage in a joint effort to broaden participation but to implement the FEAC with the same scope and substantive oversight, review and advisory role being played by the P&P Advisory Committee that had been in place for about 2-3 years.

Without notice or further discussion, the District simply decided to break their promises and established an EAC that has neither the access to comprehensive information nor the scope or charge to play an active oversight, review, and advisory role.

2D. ASBESTOS: 10 BUILDING CLOSURES, HUNDREDS OF THOUSANDS OF SF OF ASBESTOS CONTAINING MATERIAL

Problems related to the assessment, evaluation, inspection, remediation, and testing of asbestos containing materials (ACMs) in our schools presents one of the most significant potential hazards to our staff and students for several specific reasons:

- With an average age of more than 70 years most of our buildings have accessible and large amounts of ACM
- There are hundreds of thousands of square and linear feet of ACM in classrooms, hallways, gymnasiums, cafeterias, air handling/fan rooms, special needs rooms, and many other areas that need attention
- Deteriorated physical conditions of facilities such as roofing, exterior walls, heating/cooling/plumbing piping, heating, ventilation, and air conditioning (HVAC) systems, all contribute to ongoing asbestos damage to existing in-place ACM

Several recent examples can help illustrate the scale and scope of the asbestos problems faced.

1. Issues related to the major construction at BFHS/SLA with failures leading to exposures that sickened multiple students and staff. In following up on these complaints and issues in the summer of 2019, PFT identified serious asbestos concerns that had been previously gone unrecognized resulting in the need to delay opening of school to address asbestos and other issues (eventually a highly critical Inspector's General Report).
2. Ten (10) schools had to close because of asbestos concerns and issues (between 9/2019 and 3/2020 when the District shut down because of the pandemic) – in each case the District claimed the schools were safe before being forced to acknowledge the actual

situation. These were schools across the District including: BFHS, SLA, McClure, T.M. Pierce, Pratt, Hopkinson, Sullivan, Barton, Carnell, and Richmond.

3. Data collected by District Maintenance & Operations Department Facility Area Coordinators with school principals in November and December of 2019 documented thousands of specific facility condition and environmental problems that, in many cases required follow-up by environmental monitoring consultants.
4. District mandated inspections as per the EPA, "AHERA" (Asbestos Hazard Emergency Act) regulation were performed in 23 schools in late 2019 and early 2020 but were so poorly done – based on our review which was brought to the attention of the District's Office of Environmental Management Services – that the process was stopped and a full review and new effort had to be restarted at considerable expense.
5. A draft "Asbestos Best Practices" plan was jointly developed by the PFT, SEIU-32BJ, and District representatives, at the direction of the Mayor's Office (12/2019- 6/2020) that, while not perfect, including many important protections but the District has still not agreed to implement many of the agreed-upon measures.
6. Asbestos abatement work performed during the past twelve (12) months – from 4/2020 – 4/2021 – has been extensive and, based on our reviews and on-site work, has resulted in several incidents where significant asbestos contamination was documented. These situations are of serious concern (some examples provided in Appendix 1).

2E. VENTILATION

Upgraded, and maintained Heating, Cooling, and Air Conditioning (HVAC) systems are critically necessary components for healthy, safe, and comfortable schools. The lack of adequate HVAC is a major, recognized contributor to increased illnesses and respiratory symptoms, including asthma that adversely impacts student and staff health and safety, contributes to absenteeism and lost time for both students and staff from school, and compromises educational achievement and opportunity. Considerable established and peer-reviewed research and studies have documented that in PK-12 settings with inadequate levels of fresh air (resulting in build-ups of Carbon Dioxide), educational achievement is decreased by 7% - 12% or more when accounting for other variables.

District HVAC systems and components - in most schools - are deteriorated and beyond their useful life and require major upgrades and replacement. Many of the interior system components are corroded and failing, and the controls used to provide fresh air, heating, and cooling have, in many cases, not been working for many years. The system condition - on a District-wide basis - results in significant impacts on students, staff, and building operation and also involves excessive costs for reactive and emergency maintenance in many locations.

When we talk about “ventilation” we are not typically including heating systems that do not provide air such as radiators and convectors that use hot, water, steam or even electricity to heat coils — however, for the purposes of this report, we have included heating systems (even those without “air”) in this summary. The major HVAC systems found in Philadelphia schools includes:

- Whole House Fan Systems - old original ventilation and heating systems present in many dozens of our schools built between about 1900 - 1940
- Classroom Unit Ventilator (CUV) systems that look like covered radiators placed along exterior classroom walls beneath windows and that are designed to use a mixture of fresh and recirculated air to provide a mixture of fresh and recirculated, heated, and/or cooled filtered air. Thousands of CUVs are present in dozens of schools built between about 1945 - current time
- Central Air Handling systems - more modern HVAC systems with ceiling and wall mounted registers for air supply and air return. Designed to provide a mixture of fresh and recirculated, heated and/or cooled filtered air.
- Radiators - Wall (and sometimes ceiling) mounted heating components that provide heat from steam or hot water.

A range of urgent **short, medium, and long term HVAC system needs with repair and upgrades** as well as capital improvement totaling many tens of millions of dollars (for short term) to the hundreds of millions of dollars (for medium and long term) fixes is required and falls into the following categories:

1. Ensuring existing system operation and function specifically to ensure provision of adequate levels of fresh, outside air — a gross lack of fresh air currently exists in the majority of school locations for most of the school year.
2. Ensuring adequate and effective heating and cooling is provided on a routine and ongoing basis - hundreds of complaints are received each year due to failing heating and cooling systems and components at the room and school levels.
3. Ensuring that system components are maintained to prevent failures leading to major water leaks and the build-up of mold and microbial growth.
4. Ensuring effective and basic operation of thermostatic controls.
5. Ensuring that units are properly and routinely cleaned and that filters are adequately maintained and changed.
6. Ensuring that increased airborne contamination by environmental hazards, such as asbestos, mold and other agents is not facilitated by the condition and operation of the HVAC system.

2F. MOISTURE AND MOLD

Moisture, dampness, humidity, and mold are consequential impacts and exposures related to problems with HVAC systems, as well as from problems related to the “building envelope” - the walls, windows, and roof of the school that serve the function of protecting interior building surfaces from exterior water penetration.

As with many of the District's mechanical and building systems, HVAC, roofing, exterior walls, and windows are seriously deteriorated and have aged beyond their useful life. The lack of necessary capital improvements results in these systems becoming more and more damaged, and thereby requiring more and more repair and response time and attention from the District's Maintenance and Operations (M&O) Departments; however, instead of receiving additional funding, the M&O department itself has been significantly underfunded and has seen personnel reduced by about 200-300 trades workers (roofers, plumbers, HVAC mechanics, etc.) over the past 10 years making it even more challenging to maintain aging buildings and infrastructure. Additionally, the lack of experienced and properly trained building engineering and custodial workers and an insufficient number of maintenance trades workers, has caused extremely significant problems, with excessively elevated costs, in multiple locations on an every-year basis.

There continue to be a very large number of major problems with significant mold growth throughout many occupied areas across many schools. Mold growth, and other microbial contamination from uncontrolled water intrusion, dampness, and moisture has been repeatedly documented with multiple recommendations made to more effectively fund and prioritize prevention and response activities, although very little of a systemic nature has been done by the District.

Failures to address the moisture, dampness, and humidity issues in a timely and effective manner have resulted in hundreds of thousands of dollars in emergency response costs (which could have been avoided) and major impacts on occupant health and safety as well as on educational achievement and programming.

Some relatively recent and notable examples of large scale mold damage and impacts are provided in Appendix 2.

2G. ROOFING ISSUES

The roofing system which includes gutters, downspouts, flashing, and other components is obviously a critical system necessary to maintaining interior condition integrity in our school buildings and for protecting the health, safety, and welfare of all staff and students as well as preventing loss and damage to books and supplies, destruction of walls, ceilings and floors, and consequential damage including to asbestos and lead paint in addition to the development of mold growth.

Although it is very difficult to determine the exact number of roofs that have gone beyond their useful life span (because of District data-related limitations) or the number of roofs that are significantly damaged and experiencing frequent leaks, what is clear is that being able to

maintain roofs in a stable and intact condition is crucial. Unfortunately, available resources, combined with planning and systemic and accountable response deficiencies, have resulted in dozens of locations where impacts associated with cracking, crumbling, and failing roof systems caused major interior damage.

It should also be noted that in buildings where the average age is at least 70 years, it is expected - and has now been documented - that "legacy hazards" (asbestos and lead) are widespread throughout our schools. The reason to mention this here is that leaking roofs that allow water to penetrate into building interiors, often causes significant cascading and consequential damage and elevated remediation costs, when the water damages existing asbestos or lead. Increased remediation costs also result from the growth of mold and bacterial contamination that typically occurs, subsequent to roof leaks.

Serious and repetitive problems have been seen during past few years at many schools - a few examples are provided in Appendix 3.

SECTION 3: PROCESS-BASED PROBLEMS

In addition to the specific facilities concerns outlined, there are a number of critical process-based concerns that largely inhibit wholesale forward progress in tackling the urgent facilities crisis facing Philadelphia's public schools.

Some of these concerns include the following:

1. Lack of meaningful public **stakeholder engagement** in planning, priority setting, solution development, and effective and accountable implementation
 - a. This is especially highlighted by the details related to the District's currently in place "Environmental Advisory Council" structure instead of the promised Facility Environmental Advisory Committee (FEAC) structure (and functionality) that was supposed to be implemented instead.
2. Gross **failures related to substantive and broad-based District practices** related to providing real transparency and data sharing and access continue to be a central element of the District's unwillingness to be open and honest about school conditions
3. The lack of the development, with direct and near-direct stakeholder engagement, in the creation of a "**Comprehensive Educational Facilities Master Plan**" is a major problem that must now be fixed.
 - a. Comprehensive Education Facilities Master Plans are critically needed element in ensuring equitable, efficient, high quality, and sustainable infrastructure improvement. The District, despite numerous recommendations, still has no such plan.

4. There is an ongoing lack of **specific and granular collaboration**, coordination, and cooperation with independent expert stakeholders (e.g. PFT H&WF/U Environmental Science representatives) that has only worsened over the past 12 months.
 - a. District representatives, managers, and leaders have become less and less willing to work with PFT and others in a coordinated and collaborative manner to identify and remediate environmental hazards and related facility condition problems, further eroding school staff confidence in the health and safety of schools.
5. The **lack of adequate and accountable stewardship and efficient governance** of resources and programs re: construction, capital improvement, M&O, and environmental remediation activities in general has increasingly compromised public trust, and issues of social justice and equity as well as resulting in permitting potentially hazardous conditions to exist and pose risk to students and staff.
6. There has been a broad-based **failure to implement and follow specific and documented “Best Practices”** – and data-driven, evidence-based - approaches and efforts related to construction work in occupied buildings, asbestos remediation and testing activities, lead stabilization and remediation work, and multiple problems relating to HVAC system operation results in hazardous exposure conditions to occur.
 - a. These conditions, while presenting serious potential risk to all building occupants, place our most vulnerable students at heightened risk.
7. The District has **neglected to respond to pressing issues reported** through the PFT Healthy School Tracker App.
 - a. The **District has not responded to a problem submitted since 11/30/2020**, despite problems that have been submitted as immediate, urgent, or important.
 - b. The District gave no notice of their intent to neglect to respond to reported facilities concerns and is in fact obligated to respond to issues of health and safety.
 - c. Of the **281 problems** reported in the past two months since school buildings reopened, 0% have been responded to by District officials. **5% of those are listed as “immediate” (response within 24 hours), 22% as “urgent” (response within 72 hours) and 16% as “important” (response within 14 days).** The remaining reports are uncategorized.
 - d. **In total, there are 1,475 outstanding problems on the app that need response.**
 - e. The District has publicly stated that they intend to put “eyes on” suspected damaged asbestos within 24 hours of a report, but this is clearly not taking place, and potentially exposing students and staff to damaged asbestos for longer periods of time due to the District's refusal to respond.

Without open and transparent sharing of data and information related to environmental issues, programs and initiatives, and related facility condition data (from Operations, Maintenance, Capital Programs, & Environmental Management) it is exceedingly challenging to effectively evaluate, assess, and analyze District priorities, plans, and the funding decisions that directly impact and affect the health, safety, welfare, of occupants, and that matter from the standpoint of ensuring socially just and equitable academic opportunities and learning and teaching conditions for all students and staff.

SECTION 4: ACTION ITEMS

The PFT is ready, willing, and able to engage in the ongoing work to ensure that substantive, meaningful progress is made in order to mitigate the facilities crisis in our schools. We have been, and remain, deeply committed to ensuring safe, healthy schools for all of our students and staff. As such, we offer the following recommendations to address the ongoing concerns:

1. Immediate funding

- The time is now to address these untenable conditions. For a mere \$200 Million, we could remediate the most pressing environmental concerns within more than 225 School District of Philadelphia buildings.
- That includes, but is not limited to, electrical upgrades, lead and asbestos remediation and stabilization, ventilation upgrades, and COVID related safety protocol.
- **\$200 Million should be a floor—not a ceiling.** This is the bare minimum, and really will only begin to scratch the surface of what our students need.
- The \$200 M figure is in addition to already planned upon facilities funding, which have already been committed to the budget.
- We should think further than that, and think about how and what a real plan to not only remove the hazards but also to really modernize spaces and ensure that our students are afforded access to the education facilities they so richly deserve. To do this will require significant investment beyond \$200 Million.

2. Establish the FEAC (Facility Environmental Advisory Committee)

- This committee must include expert, experienced, and independent (e.g. the PFT's Environmental Science Director) as well as public stakeholders consistent with promises and representations from the District and that the committee's scope be defined to include the following:
 - A substantive role in planning, priority setting, solution implementation development, and oversight and advice for all environmental issues throughout the District.
 - The FEAC to be provided with all facility construction related environmental hazard data, documents, records, and materials needed to perform an effective oversight and advisory role.
 - The FEAC to work in a joint and collaborative fashion with District leadership and management to develop a Comprehensive Educational Facilities Master Plan to form the basis for priorities and implementable solutions for sustainable school infrastructure improvement.

- The District should immediately implement agreed upon Best Practice approaches for asbestos, and should work in a joint and collaborative fashion with the FEAC to develop sets of best practices for lead, mold, and other hazardous condition evaluation, assessment, testing, and accountable solution implementation.
- The FEAC should be appointed and assigned to develop and publish public reports and information updating all stakeholders about facility condition and environmental hazard issues, approaches, and initiatives in an updated and ongoing manner and should provide presentations, written summary reports, and other status update information directly to the City Council, Mayor's Office representatives and Board of Education Members for their review, consideration, and action.

3. Data Access, Sharing, & Transparency

- The District should immediately live up to its statements about data access, sharing, and transparency by providing specific details, reports, records, contract/work scopes, and similar documentation about all ongoing facility condition evaluation and planning work, related to capital improvement projects and maintenance and operations activities as well as all environmental assessment and related project activities to include access to underlying data and information for all work related:
 - The current FCA efforts by Parsons
 - The Environmental Data Management efforts being undertaken by Done Safe, Inc
 - All Asbestos evaluation, assessment, remediation, and testing work – planned and ongoing
 - All Lead-in-Paint evaluation, assessment, remediation, and testing work – planned and ongoing
 - All Lead-in-Water evaluation, assessment, remediation, and testing work – planned and ongoing
 - All HVAC-IAQ related mold, moisture and dampness evaluation, assessment, remediation, and testing work – planned and ongoing
 - Other materials still TBD

4. Response to Concerns

The District should immediately resume responding to issues submitted to the Healthy Schools App, and to issues reported in other manners. These reports from people in the buildings are key to identifying concerns. The District must respond to items marked "Immediate" within 24 hours, items marked "Urgent" within 72 hours, and items marked "Important" within 14 days.

SECTION 5: CONCLUSION

The work ahead is crucial, and it is incumbent upon the District to work in partnership with the PFT and other stakeholders to ensure that facilities remediation and modernization are done in an efficient, effective, and safe manner. The health and safety of our students and staff depend on the District's willingness and ability to do this essential work quickly and correctly.

The urgency of addressing the facilities crisis cannot be overstated. This work can be done and it can be done well. We urge the District to adopt our recommended action items, and we urge lawmakers at every level of government to ensure that significant funding is appropriated to address the critical infrastructure needs that impact Philadelphia's young people and school staff each day.

In the **attached appendices**, you will find examples of serious concerns regarding many of the topics addressed in this report.

Additionally, in appendix 4, you will find a sampling of photos illustrating the severity of the facilities crisis in our schools. In fact, photos 14-20 are all from a single high school and submitted within the past week.

APPENDIX 1: ASBESTOS

SAMPLING OF SCHOOLS WHERE SERIOUS ASBESTOS CONTAMINATION PROBLEMS WERE DOCUMENTED:

1. Bethune ES – April 2020

Major asbestos remediation work in several areas including the cafeteria, gymnasium, boiler room, and classrooms with more than 25,000 SF of ACM and asbestos-contaminated materials removed. During this work, significant contamination issues, outside of contained work areas was documented.

2. Pratt ES – April 2020

Issues with work practice controls and set up of abatement areas resulted in cross-contamination problems and elevated airborne asbestos levels that were avoidable and could have been addressed by a more collaborative and joint process being in-place and accountably implemented as part of the planning process for this project.

3. Woodrow Wilson MS (several month project, 2020)

Air samples collected in May, 2020, documented significant airborne asbestos fiber contamination outside of the contained work areas.

4. Mitchell ES – May 2020

Air samples collected in May, 2020, documented airborne asbestos fiber contamination outside of the contained work areas. This information was shared with District OEMS representatives and measures to clean up and respond to the situation and to perform additional follow-up testing to confirm acceptable safety were implemented.

5. Sharswood ES—June 2020

Air samples collected in June, 2020, documented airborne asbestos fiber contamination outside of the contained work areas (room 217) and highlighted systemic problems with work site set-up and failure to follow Best Practices.

6. Carnell ES –July 2020

Air samples collected in July 2020, documented airborne asbestos fiber contamination outside of the contained work areas (room 217) and highlighted systemic problems with work site set-up and failure to follow Best Practices.

7. Gompers ES – May 2020 – December 2020

Significant construction activities were performed at Gompers ES during 2020, that included significant asbestos removal activities and testing. On several occasions, and consistent with

problems and issues at other schools, Best Practices were determined to not being followed and, during testing in and around the school auditorium in October 2020 a significant contamination issue was brought to our attention by building trades workers on site.

On 10/23 we were notified about a problem on the 1st Floor of Gompers with asbestos work in/near the auditorium that had resulted in what all considered to be an airborne asbestos fiber release into the auditorium, nearby hallways and entrance areas and some other locations. Construction workers had refused to continue work and the environmental monitoring firm originally assigned to perform project oversight was replaced.

Extensive additional cleaning and testing was required as response to the failures that occurred in the auditorium.

The conditions documented above resulted, to a significant degree, from the direct work and involvement by the PFT only following notification that the work area had been "completed" and ready for final testing. The problems in these schools, obviously, are not "one-offs", rather they are systemic and pervasive problems. Our substantive participation at earlier points (during planning and job set-up) would likely have resulted in avoidance of the contamination issues, especially impacting "clean" outside the containment work areas.

APPENDIX 2: MOISTURE AND MOLD

SAMPLING OF SCHOOLS WHERE SERIOUS MOISTURE AND MOLD PROBLEMS WERE DOCUMENTED:

1. Cook-Wissahickon

Thousands of SF of mold growth throughout the library, destroying books, furniture and furnishings. If trained and experienced personnel were on site, this would have been easily preventable.

2. Lawton

Expensive HVAC system upgrades were improperly performed resulting in extensive mold growth in classrooms and other occupied spaces. Highlights problems with planning and oversight with respect to capital projects. A secondary, and significant problem was an issue with the system thermostatic controls.

3. OEC

Overbrook Education Center has a very vulnerable student population and the lack of adequate maintenance and operational control over new and older existing HVAC system components lead to a multi-month mold remediation project being required with many educational spaces being inaccessible to staff and students.

4. Muñoz Marín

In August of 2017, thousands of square feet of mold growth were documented in this schools in the air handling systems, on musical instruments, chairs, carpeting, curtains, and even staff "mail slots" in the main office. Similar conditions, although to a much lesser extent, were documented in 2015 & 2016 as well. PFT input about the potential "systemic" (in other schools with similar systems) nature of the problem and recommendations to identify and inspect other schools resulted in finding another 20 schools with mold growth. Total remediation costs likely exceeded \$1,000,000 and also the partial and temporary closure and loss of educational spaces.

5. Gompers

Uncontrolled and unrepaired (for several months) steam leaks in the newly renovated school library resulted in extensive mold growth and the damage and loss of books and other educational materials and supplies as well as furnishings and fixtures throughout the space.

6. Bethune

In October of 2018, more than 1200 square feet of mold growth was documented on ceilings and pipe insulation in at least 6 classrooms and other normally occupied educational ceilings. As reported by on site staff, and as obvious from the extent of the mold growth, these conditions had existed, even if to a lesser extent for several months.

APPENDIX 3: ROOFING ISSUES

SAMPLING OF SCHOOLS WHERE SERIOUS ROOFING PROBLEMS WERE DOCUMENTED:

1. Hill Freedman World Academy

Leak in roof above auditorium resulted in damage to the asbestos acoustical plaster ceiling with debris falling into the auditorium.

2. Lea ES

The “new” “L-Wing” of the school has had ongoing and repetitive roof leaks for many years resulting in damage to walls, ceilings and floors inside the hallway and classrooms of this wing. Additionally, newly modernized classrooms were damaged from the water intrusion that continued to occur from the documented and ongoing roof leaks.

3. Academy at Palumbo

A clogged and overflowing roof drain resulted in massive leak impacting several floors of the schools and causing significant damage to dozens of building areas. This situation caused the closure of large sections of the building and ended up with remediation costs in the \$100,000's of dollars for what was an easily preventable issue.

APPENDIX 4: PHOTOS**SAMPLING OF DOCUMENTED PROBLEMS IN SCHOOLS 2017-2021**

Photo 1– Elem. Classroom — Antiquated classroom unit ventilator, damaged/flaking lead paint, and obvious signs - and damage associated with - moisture and water intrusion.



Photo 2 – Elem. Classroom — Extreme water damage resulting in severe deterioration of lead paint, flaking with dust and debris on materials



Photo 3 – Occupied Gym/Lunchroom— Kids sitting and eating underneath severely damaged lead painted ceiling



Photos 4 & 5 – Mold Growth on Ceiling and Wall of Occupied Elem. Classroom - according to teacher, condition present for months — Associated with HVAC System Problems

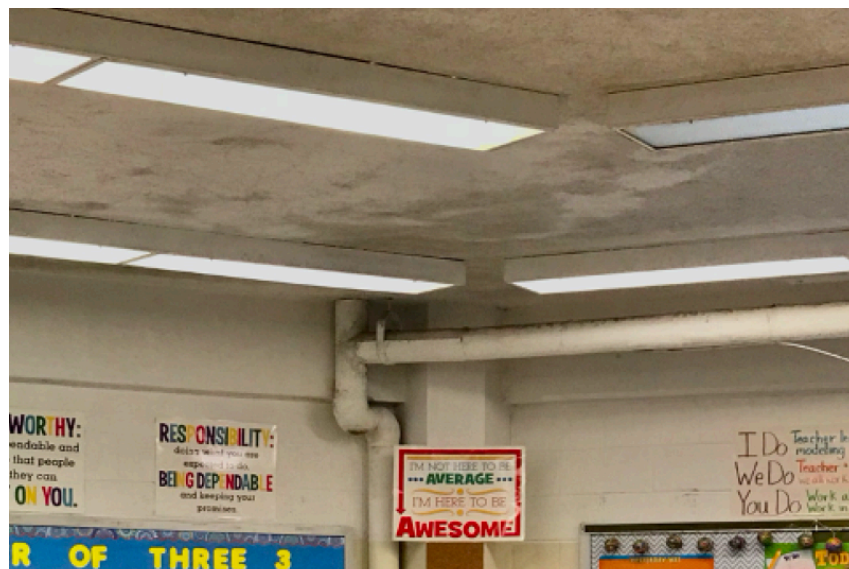


Photo 6 – Elem. Bathroom – Mold growing on ceiling and ductwork



Photo 7 – Elem. Classroom — Repeat flooding from malfunctioning classroom unit ventilator resulting in extensive damage and mold growth to newly installed flooring — the original flooring was replaced for the same reason just a few weeks earlier. An example of what happens if the “root causes” are not addressed and also issues related to inadequate governance, oversight, and management



Photo 8—High School—Teacher described the conditions as existing for several months. The floor tile is an asbestos-containing material.



Photo 9 – ES – Classroom Unit Ventilator - Typical inside condition of the CUVs [dirty, rusted, leaking, & deteriorated with mold & bacterial slime]



Photo 10 – Elem. Boys Bathroom— Filthy conditions, leaks on floor and ceiling deteriorated/damaged and missing insulation on piping presenting a burn hazard from very hot heating pipes.



Photos 11 & 12– Bathroom — Accessible, damaged asbestos insulation between urinal and sink — this condition is present in multiple locations.



Photos 14-20: A sampling of dozens of photos received from ONE high school in the past WEEK. The photos represent lead paint, physical damage, and possible asbestos.







