THE SCHOOL DISTRICT OF PHILADELPHIA

Paint and Plaster Stabilization Project Plan and Procedures

The School District of Philadelphia (District) has developed a Paint and Plaster Stabilization Project Plan and Procedures. The plan and procedures were jointly developed with the District's Office of Environmental Management and Services and the Philadelphia Federation of Teachers' Health and Welfare Fund and Union's Director of Environmental Science & Occupational Safety & Health.

Paint and Plaster Stabilization is a term that describes the process of a qualified group of trained professionals performing the removal of loose, peeling, flaking and damaged paint and plaster under controlled conditions. The work is performed in accordance with the US Environmental Protection Agency (EPA) Lead Renovation, Repair and Painting rule. The purpose of the work is to minimize the risk of children's exposure to lead-based paint while at school.

Contents:

I. Communication & Collaboration

Initial communication by the Operations Division with parents, principals, teachers and staff will take place at a minimum of 10-days prior to work commencement at a school. The Operations Division will coordinate and collaborate with the Philadelphia Federation of Teachers' Health and Welfare Fund and Union's Director of Environmental Science & Occupational Safety & Health on all communication activities and all work scopes, FAQs, notifications and other materials will be shared. The following communication will take place at every school in the program.

1. *Email to Principal*

   An email to principals will be sent by the Operations Division at least two weeks in advance of work starting to announce that the project will commence at their school. The email will share coordination information including:

   - Determining relevant school calendar issues such as testing and holidays.
   - Providing the initial work schedule.
   - Explaining the need for logistical support and help with storage, relocations and replacement of belongings in classrooms and closets.
   - Requesting a point of contact for School Advisory Council and/or Home and School Association.

2. *Letter to Families and Questions and Answers Sheet*
   A backpack letter will be sent home with students to announce the project and a second letter will be sent home to notify families that the project will commence within 10 days and giving the date for the kick-off meeting. A Questions and Answers sheet will be provided to parents. The EPA Lead RRP pamphlet will be sent home with students in grades Pre-K to 1 via backpack. The pamphlet will also be made available in the Main Office and an electronic version provided to the School Advisory Council and/or Home and School. Documentation of the date that the EPA pamphlet was sent home with students will be recorded in the final report for the school.

3. *Kick Off Meeting*
   A kick off meeting will be conducted, prior to the work commencing, by the Operations Division. The meeting will be scheduled through the school's principal. The purpose of the meeting is to share information with teachers, staff and families about the project's work plan and procedures. A presentation will be provided by the Operations Division. The meeting will provide the opportunity for questions and answers.

4. *Teacher Notification*
   Teachers will be notified directly by the Operations Division through an email and a postcard will be placed in each teacher's mailbox 10-days in advance of the project start.

5. *Detailed Work Scope Determination*
   A school-specific scope determination report (i.e., the location and quantity of paint and plaster to be stabilized) will be made available in the school's main office and will also be emailed to a designated representative of the School Advisory Council and/or Home and School. An email from the school providing the name of the designated point of contact should be emailed to: capitalprograms@philasd.org.

6. *Weekly Email to Principal and SAC/HSA*
   A weekly email will be sent to the Principal and a designated point of contact for the school's SAC/HSA to share the stabilization schedule. The Paint and Plaster Stabilization Plan and Procedures will also be emailed to the Principal and HSA/SAC.

II. Preliminary Steps

1. *Decluttering*
   Classrooms, closets and other storage areas will need to be decluttered prior to commencing stabilization work. Coordination will be required for decluttering activities between teachers and facilities staff to ensure that outdated and unneeded academic materials can be discarded, and that resources are provided to assist in the decluttering tasks such as support staff for heavy lifting and/or moving large furniture and additional recycling dumpsters.

2. *Wall Hangings*

Posters, bulletin boards, framed art and other wall hangings will have to be removed in order for the paint stabilization project to commence. This will be coordinated with teachers by the Operations Division at the kick off meeting and during the phasing of the project through the principal.

3. *Pre-Cleaning - Environmental Services*
   On an as-needed basis for areas such as cluttered storage closets that require extensive movement of materials and HEPA vacuuming and wet wiping prior to paint and plaster stabilization, the Maintenance Environmental staff will perform a pre-cleaning in advance of stabilization work. The intent of this task is to provide a clean work area prior to decluttering and stabilization.

4. *Post-Cleaning*
   Post-cleaning will be conducted by facilities staff after paint and plaster stabilization is completed. This will include the HEPA vacuuming and wet-wiping of all horizontal surfaces and polishing floors.

5. *Swing Space*
   The identification of swing space will be required to ensure that classrooms are available during the school year. A plan will be created on a school by school basis to relocate students and teachers from classrooms during the course of this work. All work areas will be scheduled for a cleaning by facilities staff after the paint stabilization work is completed by Maintenance. This will require an additional day to complete, therefore, swing space is essential.

6. *Cleaning Staff Training*
   Cleaning staff will be provided with information about this project and expectations for post-cleaning.

III. Stabilization Procedures

Paint and plaster stabilization work will comply with the EPA's Lead RRP rule. All staff conducting this work will be trained and/or certified as Lead RRP workers.

The following procedures should be followed:

1. *Work Practices*

- Isolate work areas to restrict dust from impacting adjacent areas.
- Post signs/notifications as per EPA Lead RRP.
- Place "walk-off" pads at all access points into/out of work area.
- Seal all openings [windows, doors and HVAC system registers/grilles] inside work areas as per direction from on-site environmental monitors and consisted with the EPA Lead RRP rules & guidelines.

- **Workers should wear disposable clothing and foot coverings while inside work areas – <u>do not leave work areas wearing disposable clothing.</u>**
- Move/cover all remaining objects in work area to protect them. Including all open bins, shelves and boxes in the classroom.
- Employ/Erect "portable" dust containment barrier systems to limit the size of work areas requiring post-cleaning and limit testing and exposure.
- Place plastic floor coverings to extend at least 6 feet out from vertical surfaces being stabilized unless utilizing vertical barriers/containment systems.
- Perform all paint stabilization work in compliance with the EPA Lead RRP rules & guidelines and as per the directions of on-site environmental monitors to minimize dust contamination.
- Take all steps necessary to ensure that no dust or debris leaves the work area while the work is being performed.
- Use precautions to ensure that all employees, tools, and other items, including the exteriors of waste containers, are free of dust and debris before leaving the work area.
- Collect all paint chips & debris, fold up plastic floor coverings and any other plastic sheeting used on horizontal surfaces, without dispersing dust or debris and dispose of the material in heavy duty plastic waste bags.
- Do not use power tools.
- Do not use dry sweeping with brooms.
- Do use water/misting during stabilization to minimize dust.
- Do use HEPA vacuums and wet wiping/cleaning techniques.

2. *Clean-Up & Completion of Stabilization Work*

- There should be no signs of loose, peeling, flaking, bubbling or crumbling paint or plaster visible on walls or ceilings or on any other painted surfaces.
- There should be no visible signs of paint chips, debris or dust of any kind on surfaces within "contained" and isolated work areas NOR outside of the contained and isolated work areas.
- Window sills, floors, baseboards, shelving units, tops of cabinets, desks, chairs, tables and all other horizontal surfaces must be free of any visible signs of paint and plaster dust and/or debris.
- There must be absolutely no visible signs of paint chips, and/or paint/plaster dust or debris on academic/educational materials, including books, bins, toys, desks, chairs, carpets, papers, etc., after each work shift and to allow for re-occupancy the next day,
- Any remaining paint and plaster must be tightly adhered to wall and ceiling surfaces such that it can not be further damaged, pried off of disturbed by "simple fingernail pressure" otherwise work will not be considered to be successfully completed.
- Newly painted surfaces should match the aesthetics of the area in total and should cover the entirety of the wall or ceiling area that was addressed through this work. No visible "patches" of paint should be observed.

IV. Oversight

The environmental technician will oversee paint and plaster stabilization work to ensure compliance with lead safe work practices. An oversight report will be completed at the end of every shift to record the work areas that were stabilized. The following tasks will be verified and recorded:

- Pre-cleaning
- Contents moved
- Work area prepped
- Surfaces stabilized
- Contents back in place
- Final inspection approval and photos

V. Testing

The District and the PFT worked closely to develop an agreed upon approach to verify that stabilization work was performed in accordance with lead safe work practices, and that classrooms will be safe for re-occupancy by children and staff. This approach exceeds the EPA Lead RRP rule requirements in terms of the types of and amounts of testing performed.

Testing will take place in work areas. The areas will be cleaned by general cleaners after the stabilization work is completed and the clearance testing is performed.

Qualitative testing methods, i.e., EPA RRP verification wipe testing and colorimetric wipe testing, will be compared with the quantitative testing method of Atomic Absorption Spectrophotometry (AAS) as indicated in the testing protocol below. If the comparison testing is consistently correlated, only qualitative testing will continue for the duration of the project.

Testing Protocol

Testing Protocol

Step 1 -- EPA RRP Verification Wipes and Colorimetric Wipes

The environmental consultant and painter foreman will coordinate the EPA RRP Verification Test Wipe in rooms/areas that have been stabilized and cleaned, and where plastic work area coverings have been removed and visual inspection conducted. After EPA RRP verification wipes pass the cleanliness standard for any surface and/or a 40 square feet (SF) section, the colorimetric testing will be conducted by the environmental consultant.

The colorimetric wipe tests will occur in “child-occupied areas” on approximately 10% of surfaces considered “clean” following the use of the verification wipes. These surfaces may include floors, window sills, or the tops of any other immovable objects that were covered and cleaned in each work area (e.g. CUVs, immovable bookshelves). Additional colorimetric wipes

may be collected on surfaces that had been moved and covered and placed outside of the work area. These surfaces may include desks, chairs, bookshelves, etc.

"Child-occupied areas" will include: classrooms, restrooms, cafeterias, gymnasiums, and auditoriums that are routinely used by children in PK-1st grade classrooms. Common areas that children in PK-1st grade classrooms only pass through, such as hallways, stairways, and garages are not included.

"Child-occupied areas" will be identified by the Principal of the each school.

Step 2 -- Response to Failed Tests
If colorimetric testing "fails," then the 40 SF area will be re-wiped by EPA RRP Wipes. The process will continue until both testing methods confirm a "pass."

Step 3 -- Flame Atomic Absorption Spectrophotometry (FAAS)
Flame Atomic Absorption Spectrophotometry (FAAS) will be used to verify and confirm the results of the colorimetric testing. FAAS will be used as a quality assurance/quality control for the colorimetric samples. Approximately 10% of the colorimetric samples should be submitted for FAAS analysis.

Step 4 -- Release Spaces Back to School/Operations
If EPA RRP wipes and colorimetric wipes are both acceptable, as determined on site, and if work was completed in accordance with this procedure, the room will be turned over to the District's Operations team for "deep cleaning" and for re-occupancy.

Step 5 — Ongoing Review
All sampling and testing data, information and results will be readily available and accessible for review by school staff, parents and members of the Oversight Advisory Committee and will be reviewed on a regular basis. Any suggested modifications, changes or other revisions will be considered by the School District of Philadelphia.

Three testing methods will be conducted as follows:

Type of Clearance Tests	Building Component	Number of Sample Locations within Work Area	Type of Testing	Testing Specifications/Limitations
EPA RRP Cleaning Verification Wipe	Floors, Countertops, Desks, Tables, Window Sills	One (1) wipe every 40 square feet (ft^2) or entire surface of component if surface area is less than $40ft^2$ One (1) wipe for every window sill	Qualitative	• Qualitative testing based on cleanliness (white glove test) • According to RRP, the areas pass after the 3rd cleaning, regardless of verification
Colorimetric Wipe SKC, Inc. Full Disclosure® Instant Wipes	Floors, Countertops, Desks, Tables, Etc Window Sills	10% of surfaces considered "clean" following the use of EPA RRP Cleaning Verification Wipes	Qualitative	• Qualitative testing based on colorimetric visual comparison • Lower Limit of Visual Detection is 18µg of lead • False positive and false negative interferences from silver, cadmium, barium, mercury, and titanium (percentages unknown).[2] • Involves field preparation of sampling media using reagents
Flame Atomic Absorption Spectrophoto-metry (AAS)	Analyze Colorimetric Wipes from locations listed above	A minimum of one and a maximum of 10% of colorimetric wipes will also be subjected to laboratory analysis by FAAS for verification. This testing method will be used on a periodic basis to validate the the accuracy of qualitative methods above.	Quantitative	• Interior Floors and Desks: < 20 µg/ ft.2 This is based upon a District and PFT agreement. This is half the current HUD and EPA standard. This is tied to the detection level for the colorimetric wipe which is 18µg per wipe. • Window Sills: < 100 µg/ ft.2 per HUD

5. *Optional Stakeholder Involvement with Testing and Verification*

The opportunity for parent and teacher involvement in verifying that areas are safe for re-occupancy after stabilization work is completed will be provided in the form of a small stakeholder team on an as requested basis. This will be offered at kick off meetings and scheduled through the Environmental Office.

The process will include:

In the morning between 7:00 and 7:30 a.m., a small stakeholder team including parent, teacher and other designated representatives will meet at the school. Information about areas in which stabilization work was completed the night before will be provided.

Following a visual inspection by the stakeholder team, both supplemental testing methodologies will be demonstrated.

VI. Close Out

1. Letter to parents *
2. Post card placed in teachers' classrooms after area is completed
3. Final report in Main Office - to include documentation of when the EPA Lead RRP Pamphlet was sent home with students