

T&E COMMITTEE #1
July 20, 2009

Discussion

MEMORANDUM

July 16, 2009

TO: Transportation, Infrastructure, Energy & Environment Committee
FROM: *KL* Keith Levchenko, Senior Legislative Analyst
SUBJECT: **Discussion: Report on the Hilton Garden Inn Construction Site in Bethesda**

Those expected for this worksession:

Department of Environmental Protection (DEP)
Director Robert Hoyt
Stan Edwards, Chief of Environmental Policy and Compliance

Department of Permitting Services (DPS)
Director Carla Reid
Hadi Mansouri, Chief, Division of Building Construction

Representatives from Donohoe Construction have also been invited to attend this discussion.

Background

On March 30, 2009, upon referral from the Maryland Department of the Environment (MDE), DEP opened a case regarding a report of a large amount of airborne polystyrene particles emanating from the Hilton Garden Inn construction site at 4550 Montgomery Avenue in downtown Bethesda. Based on a report by the Department of Environmental Protection (DEP) and Department of Permitting Services (DPS) (see ©A) provided to Councilmembers Berliner and Leventhal on June 1, some background information is provided below.

The problem resulted from the use of an exterior insulation and finish system (EIFS) and the hand rasping of the surface (which is needed to facilitate adhesion of a cover material) which led to particles becoming airborne.

On March 31, DEP met with representatives from Donohoe Construction and directed them to clean up the site and take measures to control the airborne particulates. On April 1, the particulates were found in the ditch running along the Capital Crescent Trail and brought to the attention of Donohoe Construction.

On April 2, DEP staff determined there had been little to no cleanup effort and a Notice of Violation was issued. DEP staff met with Donohoe representatives on April 3. Donohoe Construction agreed to put in place measures (such as using hard rasps vacuum attachments and covering scaffolding) to capture the foam particles. However, based on additional complaints received by DEP, the problem persisted.

DEP issued a \$500 citation on April 23 for failure to take reasonable precautions to prevent the problem. Additional complaints were received on April 30 and DEP issued two more \$500 citations (one related to the particulates continuing to migrate into the ditch and one related to continuing to fail to take precautions to prevent the particulate matter from becoming airborne. DEP staff also informed Donohoe Construction that if the situation persisted a Stop Work Order (SWO) would be issued. After further meetings, and additional practices put in place by Donohoe Construction, the situation was noted as “greatly improved” by mid-May.

Issues

Report Recommendations

In the June 1 report, DEP and DPS recommend that for future projects that utilize the EIFS construction method, the EIFS construction method be reviewed by DPS at the time of the preconstruction meeting with the contractor. Such a meeting is already a requirement for commercial projects such as the Hilton Garden Inn project prior to issuance of a building permit. Protective measures required to prevent problems such as those experienced on the Hilton Garden Inn project would be required to be detailed prior to the issuance of a building permit. DPS would also notify DEP to ensure compliance.

Council Staff believes the above strategies should greatly reduce the likelihood of similar future issues involving the airborne particles resulting from the EIFS construction method.

Enforcement Sticks

While the above recommendations focus on a particular problem associated with one building construction method, a broader issue raised by this incident is DEP’s enforcement regime in general and whether changes should be considered.

Depending on the particular environmental violation, DEP has several enforcement sticks it can utilize. These range from notices of violation, civil fines, and stop work orders. DEP can also refer an issue to MDE, which can pursue additional actions of its own. In addition, with construction work, the Department of Permitting Services can get involved with regard to the issuance and potential revocation of building permits.

In deciding whether to move from one enforcement stick to another, for instance from a civil citation to a stop work order, DEP must use its judgment to assess whether the violator is making a sufficient effort to remedy the situation. This is a subjective determination that is dependent on the specifics of the case. DEP staff will be available at the meeting to discuss the enforcement steps taken (and the pace of escalation) in the Hilton Garden Inn case.

With regard to the dollar amount of civil citations, State law sets a maximum fine at \$1,000 per incident. County law further delineates a fine for a first offense of \$500 and a fine for a repeat offense of \$750. Excerpts of County Code and State law language regarding civil fines are attached on ©9. DEP can assess a new civil citation each day the same issue is not addressed. These repeat citations are generally not issued if the violator appears to be taking efforts to resolve the problem, since the purpose of the enforcement action is to achieve compliance and DEP would prefer that the contractor use its resources to solve the problem rather than to pay or contest fines. In the Hilton Garden Inn case, Donohoe Construction was issued two initial offense civil citations for separate violations (illegal discharge of a pollutant to waters of the state, and failure to take reasonable precautions to prevent particulate matter from becoming airborne). No follow-up citations were issued. Donohoe Construction was also made aware that a stop work order would be issued if the problem continued.

Council Staff suggests that an increase in the State fine ceiling would provide additional flexibility for DEP (and other County departments that issue citations). However, even without this change (which would require a change in State law), DEP still has the flexibility to issue repeat citations in cases where violators are not sufficiently working to comply.

In cases where violators fail to act in a timely manner to address the situation, a stop work order may be the most effective tool, since it likely carries far greater economic consequences than a citation.

attachments

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett
County Executive

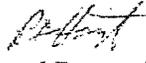
Robert Hoyt
Director

MEMORANDUM

June 1, 2009

TO: Roger Berliner, Councilmember
County Council

George Leventhal, Councilmember
County Council

FROM: Robert G. Hoyt, Director 
Department of Environmental Protection

Carla Reid, Director 
Department of Permitting Services

SUBJECT: Hilton Garden Inn Construction Site

Attached please find a report prepared by the Departments of Environmental Protection (DEP) and Permitting Services (DPS) in response to your May 14, 2009, letter regarding the Hilton Garden Inn construction site in Bethesda. This report provides:

- A description of the Exterior Insulation and Finish System (EIFS) that is being used on the structure, which was the source of the polystyrene material that was dispersed uncontrolled from the site;
- A timeline showing the involvement of DEP and DPS in addressing the issue; and
- Recommendations regarding controls that should be put in place on future projects utilizing EIFS.

Please contact us if you have any questions regarding this document or if you need additional information.

cc: Timothy Firestine, Chief Administrative Officer
Stan Edwards, Department of Environmental Protection
Hadi Mansouri, Department of Permitting Services
Steven Van Dorpe, Donohoe Development Company

Office of the Director

(A)

Report on the Hilton Garden Inn Construction Site in Bethesda

Prepared by:

Department of Environmental Protection

Department of Permitting Services

May 27, 2009

This report provides:

- A description of the Exterior Insulation and Finish System (EIFS) used on the Hilton Garden Inn in Bethesda, including a description of the process which resulted in the uncontrolled dispersion of polystyrene material from the site.
- A timeline showing the involvement of personnel from the Department of Environmental Protection and the Department of Permitting Services in addressing the issue.
- Recommendations regarding controls that should be put in place on future projects utilizing EIFS.



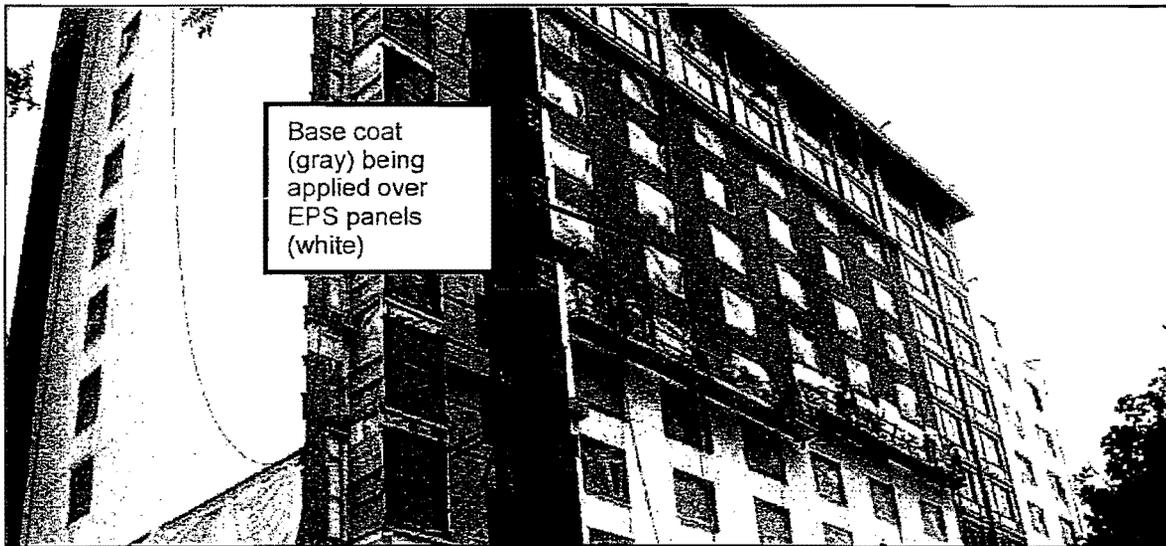
A. Description of Exterior Insulation and Finish Systems

An exterior insulation and finish system (EIFS) is an exterior wall cladding that utilizes rigid insulation boards covered with a plaster type exterior skin. The most basic EIFS consists of 3 layers:

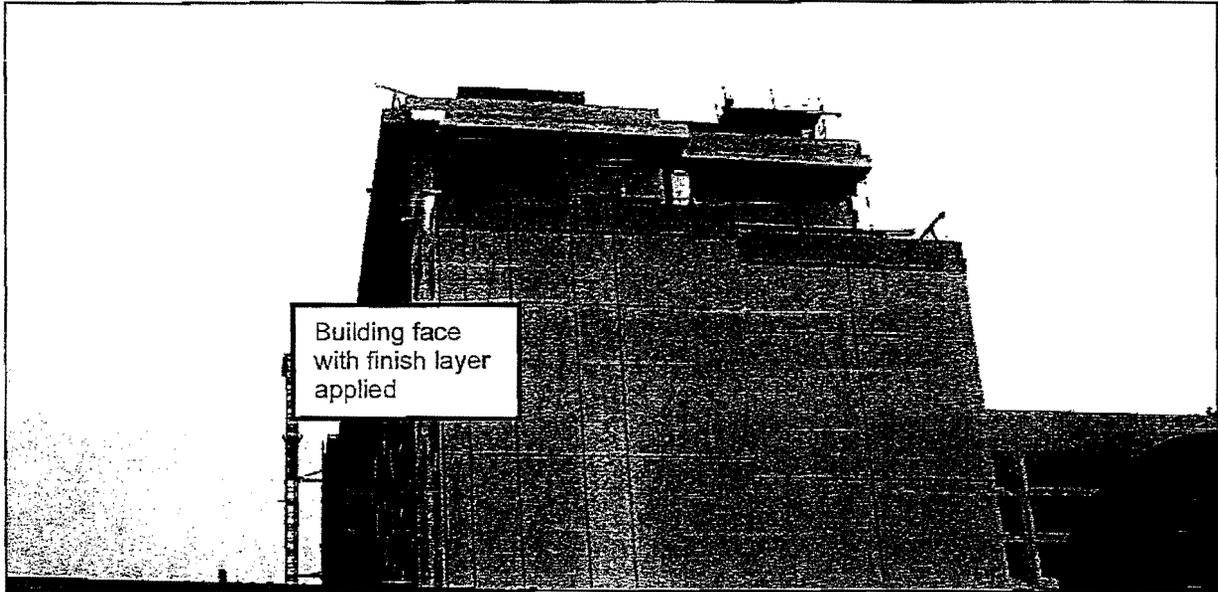
- A layer of foam plastic insulation panels most commonly made from expanded polystyrene (EPS). The EPS panels may range from 3/4" to 4" thick, although thicker pieces are sometimes used for decoration accents. The panels can be either adhesively or mechanically attached to the exterior walls of the building.



- A reinforced layer that is applied onto the face of the insulation with a trowel, consisting of a fiberglass reinforcing mesh embedded in a cementitious adhesive. This 2-part layer is called the base coat.



- A final topcoat, or finish layer, which is a colored, textured paint-like material that is applied with a trowel or by spraying. Available textures include smooth surfaces, rough "stucco-like" textures, embedded stone chips, multi-color (granite-like mixtures), even brick-like treatments.



Prior to the application of the base coat to the EPS, the surface of the material must be roughed up to promote adhesion of the base coat and all joints must be smoothed to eliminate visible seams in the finish layer. This is accomplished by the use of a coarse hand rasp. The rasping process is what creates the particles of EPS which are subject to airborne dispersion.



B. DEP/DPS Response to EPS Particulate Emissions

The following is a summary of actions by Department of Environmental Protection (DEP) and Department of Permitting Services (DPS) personnel as a result of the uncontrolled dispersion of EPS particles from the site. Accompanying the descriptions are pictures representative of the conditions found on the days noted.

4/11/08 Building permit issued.

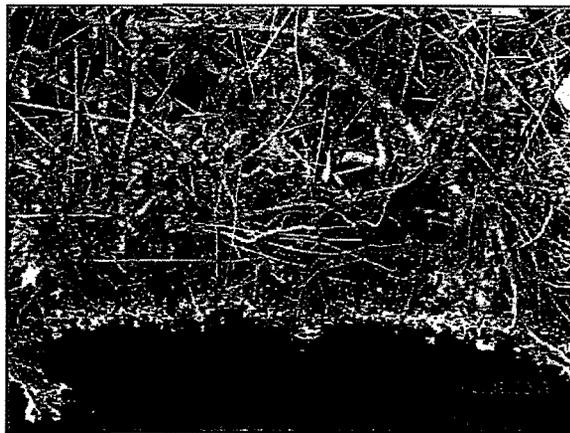
3/30/09 DEP receives a referral from MDE and opens a case regarding a report of large amount of foam particles (which look like small white "pebbles") that are flying through the air and are being carried up to several blocks away from the Hilton construction site at 4550 Montgomery Avenue. According to the report, the contractor does not appear to be cleaning up the particles.

3/30/09 DEP makes a site visit confirming and documenting the problem. Activity had ceased for the day and the construction office was closed, but a contact name and number was obtained.



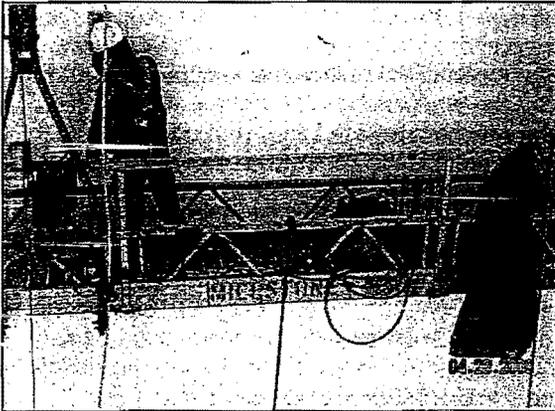
3/31/09 DEP returned to the site and spoke with the Senior Superintendent for Donohoe Construction. Donohoe was directed to get a crew on site to clean up the EPS particles accumulated on the ground and take reasonable precautions to control airborne particulate.

4/1/09 DEP visited the site in response to a separate water quality complaint. EPS particulate was found in the ditch running along the Capital Crescent Trail, which was brought to the attention of the Donohoe Senior Superintendent.



May 27, 2009

- 4/2/09 DEP visited the site to check progress on the clean up. The amount of EPS particulate on the ground indicated there had been little or no cleanup effort. A Notice of Violation (NOV) was issued to Donohoe Construction for failure to clean up the EPS particulate accumulated on the ground. DEP escorted Donohoe personnel around the area to show them the extent of EPS particulate dispersion. The Donohoe Senior Superintendent advised they had attempted to contain the EPS particulate by using plastic sheeting around the scaffolding, but it was affected by the wind and made it dangerous for the workers. He pledged to get more vacuums on site to ensure the cleanup was completed.
- 4/3/09 The Donohoe Senior Superintendent informed DEP that 14 men were assigned to site cleanup today. DEP advised Donohoe to place a containment boom in the ditch along the bike trail to capture any EPS particulate getting into the ditch, and to avoid rasping on windy days. The Donohoe Senior Superintendent told DEP he would contact his office regarding the request to not rasp on windy days. DEP contacted Donohoe's Project Manager regarding the EPS particulate issue, who stated he would contact the EIFS contractor and the Donohoe Senior Superintendent to make sure their cleanup effort was adequate. He was not receptive to DEP's request not rasp on windy days.
- 4/6/09 DEP made a site visit to check the progress of the EPS particulate cleanup in the ditch along the Capital Crescent Trail. The ditch area looked better, but there was no containment boom.
- 4/7/09 DEP provided and installed a containment boom in the ditch along the bike path near the outfall pipe, and instructed the Donohoe Senior Superintendent to have a crew check the boom daily to remove accumulations of EPS particulate. DEP was told the EIFS were now covering their scaffolding and using hand rasps with vacuum attachments, which make the job go much slower. DEP agreed the site looked better.
- 4/10/09 DEP received a call from a tenant at 4630 Montgomery Avenue who reports that EPS particles are falling again, and particles had accumulated on their cars and in their parking lot. DEP informed Donohoe regarding the complaints. The Donohoe Senior Superintendent confirmed they were currently rasping, but claimed they were using vacuum rasps. DEP directed Donohoe to send a cleanup crew to the parking lot at 4630 Montgomery Avenue.
- 4/13/09 DEP observed the parking lot at 4630 Montgomery Avenue had been cleaned up.
- 4/16/09 DEP received a message from a tenant in the Air Rights Building stating things have not improved at all at the Hilton site and the use of the containment boom and vacuum cleanup crews were not enough.
- 4/17/09 DEP observed no major accumulation of EPS particulate in the ditch along the Capital Crescent Trail, but did observe EPS particulate in the mulch areas around some of the trees and in the parking lot at 4630 Montgomery Avenue which needed to be addressed.
- 4/22/09 DEP spoke with a tenant of the Air Rights Building who complained that Donohoe stopped rasping whenever someone from DEP would show up on site. He agreed to allow DEP personnel to observe the rasping operation from his office on the 10th floor of the Air Rights Building.
- 4/23/09 DEP observed the rasping operation from the 10th floor of the Air Rights Building, and documented an excessive amount of EPS particulate becoming airborne during the rasping. A vacuum was observed on the scaffolding, but it was not being used. One man was noted on the ground vacuuming an area of the active work site. DEP issued a citation for \$500 to Donohoe Construction for failure to take reasonable precautions to prevent particulate matter from becoming airborne.



4/27/09 DEP instructed the Donohoe Senior Superintendent to replace the containment boom in the ditch along the bike path and informed him that Donohoe could be cited for water quality violations if they did not keep EPS particulate out of the ditch. In addition, Donohoe was instructed to vacuum the sidewalks in the area and the parking lot at 4630 Montgomery Avenue.

4/30/09 DEP received telephone complaints from two persons regarding airborne EPS particulate covering the ground and their vehicles. They equated the conditions as it appeared to be snowing. During a subsequent site visit, DEP observed and documented accumulations of EPS particulate along Montgomery Avenue, Waverly Street and in the ditch along the Capital Crescent Trail. At times, you could clearly see EPS particulate swirling about in the air giving the appearance of a light snowfall and vehicles parked along Montgomery Avenue were coated with EPS. DEP observed a worker on the west side of the building who was rasping EPS panels. The rasp he was using was not a vacuum rasp as the employee was not wearing a backpack vacuum and there was no hose coming off the rasp. A small containment boom was observed in the ditch along the bike path, but a large accumulation of EPS particulate was observed in the ditch downstream of the boom. DEP issued two citations for \$500 each to Donohoe for discharge of a pollutant to waters of the state and failure to take reasonable precautions to prevent particulate matter from becoming airborne. In addition, DEP provided the Donohoe Senior Superintendent a copy of the Montgomery County Air Quality Ordinance and directed him to the section referring to Stop Work Orders. DEP verbally informed him if they did not get this site under control that DEP would be forced to issue a Stop Work Order.



- 5/1/09 DEP received a call from a tenant in 4630 Montgomery Avenue complaining that it was "still snowing" in Bethesda. The tenant offered to allow DEP personnel to observe the rasping operation from his office. From this location, DEP personnel observed three different crews cleaning up the area with vacuums, but there was no rasping taking place. No particulate matter was observed in the ditch along the Capital Crescent Trail (which was in the process of being lined with concrete). In addition, DEP contacted MDE to request their help in bringing this site into compliance. Copies of the citations and a case report were forwarded to MDE for their review.

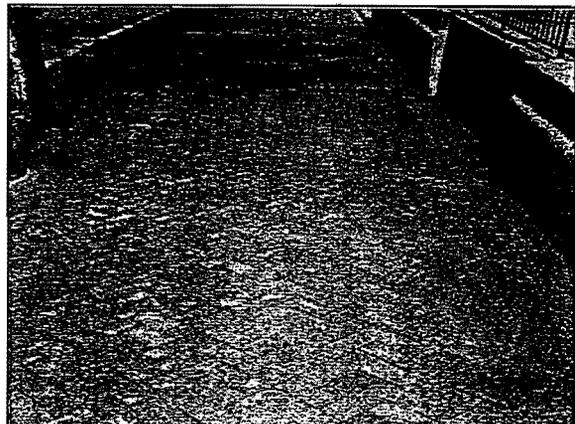
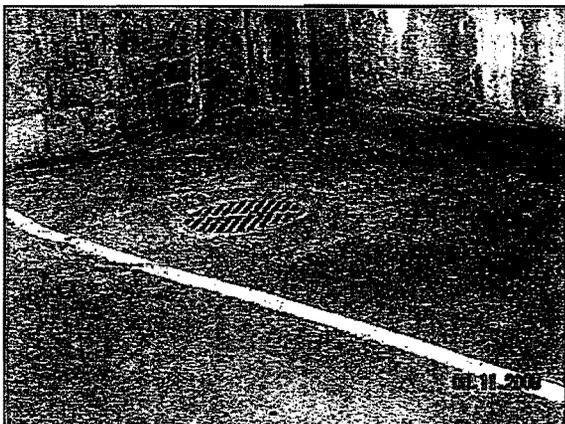
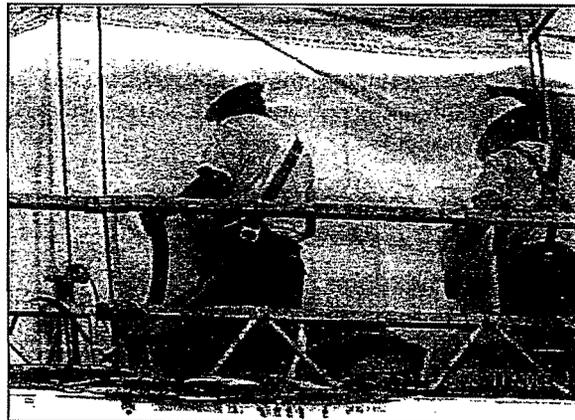
- 5/4/09 Rasping was not occurring due to the weather, but DEP observed accumulated EPS particulate in the mulched areas surrounding some of the street tree plantings.

- 5/5/09 Senior DEP and DPS personnel met with representatives of Donohoe Construction and the developer at the site regarding continued issues with EPS particulate emissions. DEP reiterated the option of issuing a Stop Work Order and DPS noted the building permit could be revoked if problems continue. Donohoe pledged to do more regarding cleanup around the site. In addition, they pledged to install containment netting around the scaffolding, verify and enforce the usage of vacuum attachments on the EIFS rasping tools, utilize "hot knife" installation techniques where applicable to eliminate the rasping, and increase the cleaning crew working hours to include weekends.

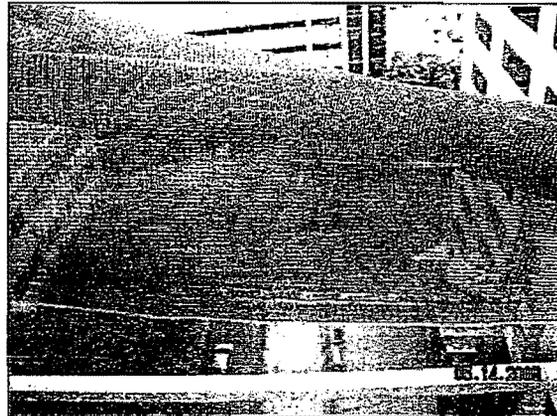
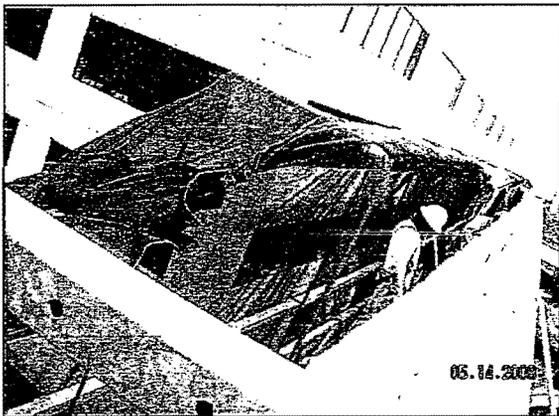
- 5/7/09 DEP instructed Donohoe to clean up an observed accumulation of EPS particulate in the corner of the parking lot at 4630 Montgomery Avenue.

- 5/8/09 DEP met with Donohoe to confirm the installation of netting on the scaffolding.

- 5/11/09 DEP observed two individuals rasping using vacuum hoses to capture the particulate. Containment of the EPS particulate was greatly improved as a result of the netting on the scaffolding and material that was escaping was being cleaned up by three vacuums being operated on the ground.



- 5/13/09 DEP received complaints, regarding "another snowstorm" of white particles at the site. A subsequent site visit revealed a few airborne particles, but conditions were much improved over previous observations. A representative of the MDE Water Management Administration was on-site to assess any potential water quality impacts. DEP, MDE and the Donohoe Senior Superintendent walked along the Capital Crescent Trail and observed very minimal EPS particulate.
- 5/14/09 In response to concerns expressed by Councilmembers Leventhal and Berliner, senior DEP and DPS personnel visited the site to ensure the measures discussed at the 5/5/09 meeting were in place and that the EPS particulate was controlled to the maximum extent practical. Two additional control measures were identified: (1) Close the gaps between the containment netting and the building face at the top and bottom of the scaffolding, and (2) cover the trash dumpster at the base of the debris chute. DEP and DPS personnel also met with Council staff at the site to address any questions about the enforcement steps taken. DEP committed to having someone check the site daily for the duration of the remaining rasping activity.



- 5/15/09 DEP identified the need to address the accumulation of EPS in the utility vaults along Montgomery Avenue and Waverly Street. DPS subsequently requested that Donohoe address this issue.
- 5/18/09 DEP observed no discernable emission of EPS particulate associated with rasping occurring on the north end of the building.

C. Recommendations

In order to minimize the potential for this situation to reoccur, DEP and DPS propose the following actions. For future projects that utilize EIFS, DPS will review the general contractor's proposed method of the EIFS construction at the time of preconstruction meeting. For commercial projects, such as the Hilton Garden Inn project, a preconstruction meeting is mandatory prior to issuance of building permit. At the preconstruction meeting, the general contractor and the design team will have the opportunity to submit their method of construction for EIFS. DPS staff will make certain that the proposed EIFS construction method does not result in the violation of any State or County environmental laws or regulations. Failure to submit a plan for approval outlining detailed protective measures, including the use of vacuum rasps, containment netting, and clean-up crews, will result in delay of permit issuance. In addition, DPS will notify DEP of any projects utilizing EIFS so that DEP can ensure compliance with the protective measures outlined in the developer's control plan.

Montgomery County Code

Sec. 1-19. Fines and penalties.

Any violation of County law that is identified as a Class A, B, or C violation may be punished as a misdemeanor by a fine of not more than the amount shown below, or by confinement in the County jail for not longer than the time shown below, or by both the fine and confinement, in the discretion of the court, in which the violator is convicted. Any violation may, in the alternative and at the discretion of the enforcing agency, be punishable as a civil violation under Section 1-18. The civil penalty must be in the amount shown below, unless a lower amount for a specific violation is set by an executive regulation adopted under method (1).

	Criminal Violation	Civil Violation Maximum Penalty
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Class	Maximum Fine	Maximum Jail Term	Initial Offense	Repeat Offense
A	\$1000	6 months	\$500	\$750
B	\$200	30 days	\$100	\$150
C	\$50	None if fine is paid; 10 days otherwise	\$50	\$75

If no penalty is specified for taking any action prohibited by County law or failing to take any action required by County law, that action or failure to act is a Class A violation. (1983 L.M.C., ch. 22, § 2; 1984 L.M.C., ch. 24, § 1A; 1984 L.M.C., ch. 27, § 3; FY 1991 L.M.C., ch. 10, § 2; CY 1991, ch. 18, § 1.)

State Law Article 25A

§ 5. Enumeration.

The following enumerated express powers are granted to and conferred upon any county or counties which hereafter form a charter under the provisions of Article XI-A of the Constitution, that is to say:

(A) Local Legislation

(1) To enact local laws for the county, including the power to repeal or amend local laws of the county enacted by the General Assembly upon the matters covered by the express powers in this article.

(2) To provide for the enforcement of all ordinances, resolutions, bylaws and regulations adopted under the authority of this article by fines, penalties and imprisonment, enforceable according to law as may be prescribed. **A penalty may not exceed \$1,000 for any offense**, unless otherwise authorized in this subsection, or provide for imprisonment for more than six months.