

## M. Hazardous Materials

### 1. Summary of Additional Technical Studies

No further technical studies related to hazardous materials were necessary for the FEIS.

### 2. Plan Changes and Impact Summary

The modified FEIS plan would not result in impacts related to hazardous materials any further than the original conceptual plan presented in the DEIS.

### 3. Comments and Responses

#### *Comment M.1*

Asbestos is a very dangerous material and it is very hazardous should it become airborne. It can cause a laundry list of problems if people are exposed. This is why asbestos removal is a highly regulated industry. You can expect on a project this size, that the project site will be inspected to assure that the contractors are properly licensed and that the proper measures are being taken on site. This will be one of the biggest remediation projects in New York State, second only to the demolition that took place in Kodak Park in Rochester, New York. New York State is one of the most highly regulated for asbestos abatement in the country, and illegal remediation is taken seriously.

I deal with many developers throughout the country who are unaware, or worse yet, turn a blind eye to the dangers and regulations of not only asbestos, but lead and other hazardous materials. In my conversations with the Benjamin's, this will not be an issue on this site.

(Chad Parks, ERSI, Public Hearing Transcript, 5/30/09, Pg. 37-39)

#### *Response M.1*

***The Applicant is aware of the presence of suspect ACM throughout many of the buildings. Prior to demolition or renovation activities, the Applicant intends to conduct an asbestos survey to determine if ACM is present in strict accordance with 12 NYCRR Part 56. Where ACM is present, the Applicant will retain a New York State licensed contractor to remove the asbestos in accordance with State and Federal regulations, including New York Labor Law and the Federal Occupational Health and Safety Act ("OSHA").***

#### *Comment M.2*

The state burned coal for decades and dumped the ash. This project will not. The state abandoned two million square feet of space and dumped over the grounds. This project will clean that up.

(Linda French, Citizens for a Better Dover, Public Hearing Transcript, 6/3/09, Pg. 75-76)

#### *Response M.2*

***Reports indicate that pursuant to an Order on Consent between the New York State DEC and New York State Office of Mental Health, approximately 20,000 cubic yards of ash was removed from the area of the site, which was formerly used for ash disposal. If there is***

*residual ash on the site, it will be excavated, characterized and disposed of in accordance with a Soil Management Plan, Health and Safety Plan, and in compliance with applicable laws and regulations. The Applicant will submit a Soil Management Plan (“SMP”) to the Town prior to construction as part of its building permit application. The SMP will include procedures and protocols for the proper testing, handling and disposal of soil during development, including, procedures for identifying soil, which may have been impacted by prior operations at the site. Where the Applicant is required to provide documentation to governmental agencies relating to the handling, transport and disposal of hazardous materials, which may be identified on the site, such documentation would also be provided to the Town.*

*Comment M.3*

The Dutchess County Water and Wastewater Report by Gray, Railing, and Heinsman, dated 1993, references the disposal of PCB containing transformers from the old power plant are buried in one of the landfills. The DEIS does not mention the transformers.

The transformers must be removed and the area cleaned up. By the time any proposed monitoring would detect groundwater pollution, it will be too late to effect remedial action. We recommend that the locations of the transformers be identified and remedial work undertaken.

(Christopher Wood, Chair, Oblong Land Conservancy, Letter, Pg. 3; Alan Surman, Letter, 6/30/09, Pg. 2-4; Evelyn and Joseph Chiarito, Letter, 6/30/09, Pg. 2)

*Response M.3*

*The source of the statement in the Gray, Railing and Heinsman Report that PCB-containing transformers were disposed onsite is unknown, and conflicts with information provided in subsequent environmental reports. There is nothing in any of the numerous environmental reports reviewed by the Applicant’s environmental consultant, which indicate that PCB-containing transformers were disposed on the site. To the contrary, manifests indicate that PCB-containing transformers were shipped off-site. In addition, five groundwater monitoring wells installed in the area of Dump No. 2 and recent sampling of wells south of Dump No. 2 did not indicate the presence of PCBs in the groundwater.*

*Groundwater at the site is also not intended for potable use. There are also no plans to develop the area, which includes Dump No. 2. The suggestion that this large area should be excavated in order to remove transformers, which may or may not be present, is not recommended or warranted. There is no risk of direct or indirect exposure to PCBs. If, in fact, PCBs are discovered to be present in the groundwater in the future, appropriate remedial action would be conducted.*

*Comment M.4*

The Applicant should investigate the validity of information raised during the public comment period regarding the potential for dumping of transformers that contain PCBs on the property.

(Graham Trelstad, AKRF, Letter to the Town Board, 7/30/09, Pg. 12)

*Response M.4*

*See Response to M.3 above.*

*Comment M.5*

The DEIS suggests monitoring particulate matter from a sampling station in Newburgh, but winds blow from west to east as often (unless there is an inversion in which case the particulates will stay in the valley). In fact, during the "Stop the Cement Plant" campaign, concerns about emissions were voiced as far away as Maine, to the northeast. During the construction of the World Trade Center, it is reported that asbestos was found in the air as far north as Boston. More monitoring stations must be set up to test the air during the asbestos removal to the north and east of the site, after the developer submits data on the prevailing wind patterns.

(Constance I. DuHamel, Deuel Hollow Conservation Association, Letter, 6/30/09, Pg. 3)

*Response M.5*

*Demolition of existing buildings and structures containing asbestos will be managed per the U.S. Environmental Protection Agency's (USEPA) 40 CFR Part 61 Subpart M – National Emissions Standards for Asbestos Section 61.145 Standard for Demolition and Renovation. These standards include:*

- 1. wetting all regulated asbestos-containing material (RACM) to prevent fiber exposure to the air;*
- 2. use of local exhaust ventilation and collection system designed and operated to capture particulate asbestos material produced by the stripping and removal of RACM; and*
- 3. leak-tight wrapping to contain all RACM.*

*Further, both USEPA and OSHA have established regulations for job safety and health standards. Section 5(a)(1) of the OSH Act requires employers to "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees". Section 5(a)(2) requires employers to "comply with occupational safety and health standards promulgated under this Act".*

*The proposed demolition for the Knolls of Dover Project will not increase asbestos in the air. Unlike the construction of the World Trade Center, the construction is an internal, controlled circumstance, and will comply with Federal asbestos rules and regulations as stated above. As such, all demolition areas with RACM will be placed in leak-tight enclosures, subjected to negative (containment) air pressures and vented through a collection system, which will filter out any stray fibers prior to any potential release to the open environment.*

*Comment M.6*

The Planning Board recommends more detailed information on the area near the store house and power house be provided. In particular, what is the classification of this site? Could it be considered a brownfield? Is the applicant or NYSDEC going to clean it up?

(Town of Dover Planning Board, Letter, 7/20/09, Pg. 4)

*Response M.6*

*The comment makes reference to the Storehouse and Power Plant, which are located in the vicinity of the former ash fill area. The Federal Environmental Protection Agency (“EPA”) determined that the former ash fill area was not appropriate for listing on the National Priorities List. In addition, the former ash fill area was remediated pursuant to a Consent Order between the DEC and the Office of Mental Health, and is not classified by the DEC. In order to qualify as a brownfield, evidence of contamination would have to be submitted to DEC, as part of a brownfield application. There is no evidence of contamination, which would provide the basis for DEC to accept the ash fill area into the brownfield program.*

*If there is evidence of contamination discovered during construction, the Applicant would comply with appropriate procedures set forth in a Soil Management Plan and Health and Safety Plan. These procedures would include, among other things, proper testing, handling and disposal of any fill material, ash, and/or petroleum, which is encountered during site development. The Applicant will submit a Soil Management Plan and Health and Safety Plan to the Town prior to construction as part of its building permit application.*

*Comment M.7*

The term “irreversibly degraded” should be more fully described.

(Town of Dover Planning Board, Letter, 7/20/09, Pg. 8)

*Response M.7*

*Since the wetland area behind the Storehouse is part of a DEC Class 1 wetland, the modified FEIS plan has been revised to eliminate filling of this wetland as requested by the DEC; however, the wetland area does have some areas as fill as a result of past activities. The wetland area will be part of the proposed wetland mitigation program with the disturbed area restored.*

*Comment M.8*

All such irreversibly degraded sites mentioned in the DEIS should be inspected and or investigated per federal EPA and/or NYSDEC regulations and/or guidance to determine if they should be classified as brownfields, hazardous waste sites, etc. If this is the determination, then full remediation should be performed prior to the construction of an approved site plan.

(Town of Dover Planning Board, Letter, 7/20/09, Pg. 8)

*Response M.8*

*See Response M.7.*

*Comment M.9*

Exhibit III.M-1 (REC and AOC Location Map) should be amended to identify that status of each landfill/dumping area (e.g., capped, abandoned, etc.).

(Town of Dover Planning Board, Letter, 7/20/09, Pg. 8)

*Response M.9*

***Dump No. 2 was removed from the DEC SHWS list. The former ash fill area was remediated pursuant to a Consent Order between the DEC and the Office of Mental Health. Each of the landfill/dumping areas shown on Exhibit III.M-1 are inactive landfills, which do not require remediation at this time.***

*Comment M.10*

In relation to the ash fill area, the Phase 1 Environmental Site Assessment (ESA) report states: “Groundwater analytical data collected as part of a prior site investigation identified the presence of tetrachloroethylene (PCE) and heavy metals. Although, no investigation reports were provided for review, the detected groundwater concentrations were considered insignificant enough to warrant removal of the dump from the NYS SHWS list. As no development is currently proposed for this area, no mitigation is warranted at this time.” Although the site was removed from the SHWS list, additional investigation and/or remediation may be required by NYSDEC Division of Solid Waste in accordance with NYSDEC Part 375. Although no development is currently proposed for this area, documentation of the nature and extent of groundwater and/or methane contamination may identify potential impacts for nearby development areas.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 11)

*Response M.10*

***With regard to the ash fill area, the NYSDEC Part 375 Regulations apply to remediation of inactive hazardous waste sites, sites in the brownfield program, and sites in the environmental restoration program after the effective date of the Regulations (12/06). The ash fill area is not classified under any of these programs. In addition, the DEC has not classified the ash fill area as an inactive hazardous waste site. As noted above (Response M.6), the ash fill area was remediated pursuant to a Consent Order. Accordingly, Part 375 does not mandate investigation or further remediation of this site.***

***With regard to Dump No. 2, Dump No. 2 is not part of the development area. The NYSDEC removed Dump No. 2 from the Solid and Hazardous Waste Site List, which indicates DEC is not concerned with the levels of PCE and metals in groundwater. DEC has not, moreover, asserted its jurisdiction under 6 NYCRR Part 360 or required any type of capping scenario. If, during development, evidence of contamination is observed, proper procedures would be followed. (See Responses to M. 6 and M.13).***

*Comment M.11*

In relation to former underground storage tanks (USTs), the Phase 1 ESA report indicates that requests were made to NYSDEC and DCDOH for missing UST closure reports to confirm if releases contaminated the subsurface, and further states: “In the event that information becomes available to F&E indicating that a release was associated with a removed UST, which was not adequately resolved, then a targeted Phase II ESA may be recommended as an addendum to its report.” In the absence of UST closure data, or if a spill is confirmed for a closed UST, a Phase II investigation would be necessary to confirm that there is no residual contamination that would affect future development.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 11-12)

*Response M.11*

***There is no information indicating a release from the former USTs. The Applicant will permanently close all out-of-service USTs at the appropriate time in accordance with applicable requirements, including prior notification to the NYSDEC of closure. Should any impacted soils be discovered during tank closure activities or during construction, the Applicant will follow a Soil Management Plan, and comply with applicable laws and regulations.***

***The Phase I Environmental Site Assessment includes documents from the NYSDEC Petroleum Bulk Storage database, which indicates that twelve (12) USTs were removed, and six USTs were closed. The Phase I Environmental Site Assessment also includes a letter from EarthTech to NYSDEC, Region 3, stating that a closure report was submitted to NYSDEC for the closure of tanks on the site. As stated in the Phase I Environmental Site Assessment, if there were evidence of a release from the removed and closed USTs, such information would have been indicated by NYSDEC in the Petroleum Bulk Storage Tank database for the removed and closed USTs.***

***Finally, the investigation plan for the closure of any out-of-service USTs, which are present on the site, will include an evaluation of whether there is evidence of residual contamination as a result of a release (if any) from the USTs, or associated piping, as required by NYSDEC regulations.***

*Comment M.12*

Further, the Phase I ESA states: “As 20 of the 22 documented NYSDEC spills associated with the subject property have been closed by the NYSDEC, F&E does not recommend a Phase II ESA in association with the removed USTs. However, F&E does acknowledge that residual subsurface petroleum-related impacts may be present at multiple locations throughout the site.” A Phase II would be necessary to determine if future structures would require protective measures (i.e., vapor barrier, etc.) due to the potential of residual petroleum contamination.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 12)

*Response M.12*

***The Applicant will have a Soil Management Plan in place, which will address this situation. For example, if evidence of petroleum impact to soil is observed, the SMP would require appropriate sampling, handling and disposal. The Applicant will also conduct soil vapor surveys, as appropriate and necessary.***

*Comment M.13*

The Phase 1 ESA states: “Characterization and removal of soil during construction would be pursuant to a Site Management Plan and Health and Safety Plan. If necessary, vapor barriers and/or a sub-slab depressurization system would be included as part of construction activities.” The SMP should present measures for proper handling and disposal of excavated soil and fill material, and contingency plans for addressing any unknown storage tanks or contaminated soil encountered during development. As stated in the Phase 1 ESA, residual soil and groundwater impacts may remain present beneath the site following NYSDECs approval for spill closure. In the absence of any remediation, tank closure, soil, groundwater, or vapor sampling data, a Phase II subsurface investigation should be completed at proposed development areas where residential

or occupied commercial buildings are close to AOCs with potential or existing residual contamination.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 12)

*Response M.13*

***The Applicant agrees that a Soil Management Plan should present measures for proper handling and disposal of excavated soil and fill material, and contingency plans for addressing any unknown storage tanks or contaminated soil encountered during development. The Applicant will submit a comprehensive Soil Management Plan with its building permit application, which, as noted above, will include adequate measures for addressing residual contamination, if any.***

***Moreover, the Applicant has already committed to contacting the NYSDEC to determine what action, if any, is required to close the two open spills numbers. These spills, however, involved fuel oil, and do not pose a threat with respect to soil vapors. The remaining spill numbers have been closed by NYSDEC, and do not warrant further investigation.***

*Comment M.14*

The DEIS should discuss the potential impacts related to the production of methane gas from the ash landfill and wetland areas, and how methane production could interact with the proposed development plans for the site.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 12)

*Response M.14*

***The DEIS states that there is a potential that methane has accumulated in areas of the site formerly used for disposal/landfilling activities. The FEIS has been revised to further explain that methane gas, if present, could pose a fire or explosion hazard either during construction or if the gas accumulates within enclosed areas above the location where methane may be located. The FEIS also explains that mitigation measures in the form of a construction worker Health and Safety Plan, will require special care to minimize human exposure and potential hazards. The Health & Safety Plan would include measures for monitoring of ambient air during earth moving activities in areas where elevated levels of methane are detected. Soil aeration techniques will be applied where levels over 1 percent of the lower exposure limit are measured. In addition, if development will occur in areas of former landfill areas, a sub-slab ventilation system may be included in the design to remove any potential methane accumulation. The Health & Safety Plan will be submitted to the Town, together with the Soil Management Plan, as part of the Building Permit application.***

*Comment M.15*

The discussion about an extensive groundwater sampling program does not indicate if bedrock or overburden water is being tested. It is not sufficient to rely on bedrock water quality to determine if soil sampling would be required. The DEIS should discuss the water sampling program, including areas/wells to be tested, testing parameters, and identify any impacts to the proposed development.

(Graham Trelstad, AKRF, Memorandum to the Town Board, 7/30/09, Pg. 12)

*Response M.15*

*As part of the groundwater development portion of the Knolls of Dover project it was necessary, as per New York State Department of Health subpart 5.1 requirements, to collect groundwater samples from wells that were tested for yield. In addition to the wells that were tested for yield, a test well that was not included in the pumping test program, well 13a, was sampled for water quality parameters. Well 13a is a well that was completed next to well 13, an 800 foot deep bedrock well completed in the marble bedrock. Well 13 produced about 25 gallons per minute and was not included in the pumping test program.*

*Well 13a was completed in the surficial material overlying the bedrock. This material was composed of layers of silt and clay and sand and gravel lenses. The reason well 13a was drilled was that when well 13 was completed a ten foot gravel zone was discovered from the top of the bedrock surface at 65 feet below the ground surface. The gravel appeared to be suitable for groundwater development and, consequently, well 13a was drilled to attempt to try to develop this water zone. However well 13a, about 15 feet east of well 13, was drilled to the top of the bedrock which was found at 55 feet and the searched for gravel zone was not found. Given that the gravel did not exist 15 feet away, it was decided not to try to develop that particular gravel zone because of its obviously limited extent.*

*As part of the exploratory program for developing the gravel well in the area of well 13, well 13a was sampled for water quality parameter to determine if the overburden in the area had been impacted by the disposal of ash in the area. Since the focus of the groundwater development program was the bedrock aquifer, well 13a was the only overburden well that was completed as part of the work leading up to the DEIS. The water quality testing did not show any parameters that would indicate that the water quality had been impacted. The water quality results are attached. Under the guidance and direction of NYSDEC, groundwater may be sampled during tank closure activities.*