

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

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Honorable Amy R. Paulin
New York State Assembly
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Albany, New York 12248

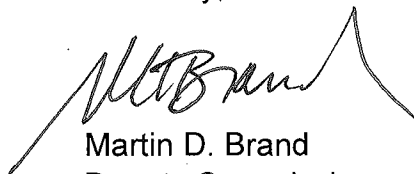
Honorable George Latimer
615 Legislative Office Building
New York State Senate
Albany, NY 12247

Dear Assemblywoman Paulin and Senator Latimer:

Thank you for bringing to our attention the questions and concerns raised by your constituent concerning the Former Marble Quarry Landfill. Staff from the Division of Environmental Remediation have provided the enclosed responses to these questions, along with explanations as to how the implementation of the site remedy will address the concerns. We are also working with the environmental consultants for the Village and School District to determine how best to implement their recommendations, which we support.

Thank you for your continued interest in this project. Please call me if you have any further questions about the project.

Sincerely,



Martin D. Brand
Deputy Commissioner of Remediation and
Materials Management

Enclosure



Department of
Environmental
Conservation

DEC Responses to Constituent Questions Concerning the Former Marble Quarry Landfill

1. How is the same plot of land deemed two different classifications? If the north and south ends of the quarry are deemed 'P' sites, how can they build on the Brownfield Cleanup without testing the entire quarry?

A) The Brownfield Cleanup Program (BCP) "site" is comprised of multiple tax parcels owned by the BCP Applicant. The balance of the tax parcels comprising the former quarry are not owned by the BCP applicant and have been designated a potential -- or "P" -- hazardous waste site, which will be initially investigated by New York State. The applicant, as a volunteer, is only responsible to address the BCP site. The remedy proposed for the BCP site will be protective of public health and the environment, and there is no technical reason to delay work on the BCP site until the "P" site is fully investigated. In fact, any postponement would delay the environmental benefits associated with the BCP site remedy. DEC has begun the process to characterize the remaining portion of the landfill using the State Superfund.

2. The DEC has acknowledged that there are chemical filled drums located within the dump. If they do not locate where they are before digging won't that cause exposure to the community if a piling or truck drives right into one causing leakage into the air and soil of chemicals that haven't been tested for?

A) The landfill is 85 feet deep, and the typical depth of regrading for the hotel construction is 2-3 feet with excavation to 10-15 feet only in small areas. Sampling performed to date indicates that much of the top 5 feet of the site is clean soil, and the planned excavation involves only 2.3% of the total waste in the landfill. DEC is requiring this disturbed material to be characterized before any excavation is performed. While there is currently no evidence, there is a possibility that the landfill may contain drums with hazardous materials. DEC's remediation programs include testing for hundreds of chemicals that are most commonly found in these types of sites. It is not possible to identify drums to depths of 85 feet below the surface without excavating the entire former quarry which would significantly increase the potential for public exposure to contaminants. DEC modified the developer's proposed remedy to require the addition of a vapor extraction system. In the unlikely event that a driven or drilled pile ruptures a drum, any vapors emanating from it will be extracted and treated to prevent migration from the site and the groundwater monitoring network will detect it and allow for a response by the volunteer. Monitoring of the site will be required into the future under a long-term site management plan.

3. The air monitoring system does not adequately test for individual chemicals but rather volume. How will the DEC be able to capture vapors during construction if they don't know what they are dealing with (e.g., what chemicals will interact with each other and how will foam and water insure that the vapors or dust won't be released into the air)? Also, how will a carbon air filter vent various chemicals? This solution seems fairly generalized if they don't know everything they are dealing with.

A) DEC has already required sampling of vapors beneath the site and adjacent properties, and knows what chemicals are present in soil vapor. Similarly, we have required sampling of the landfill waste and are requiring much more extensive sampling of material proposed for excavation to identify potentially airborne compounds in dust. This data will be used to develop action levels for monitoring with field instruments. The Community Air Monitoring Plan (CAMP) will be reviewed by the State Department of Health (DOH), and will establish very conservative vapor and dust levels to assess air quality. This data will be used to control the potential for emissions from the site. For example, not all chemicals are volatile and create odor problems. DEC's goal is to ensure that the community is not exposed to airborne contaminants during remediation by detecting and addressing the vapors before they leave the site. Activated carbon is a well-established and reliable treatment for co-mingled volatile chemicals in air. The pilot study required by DEC will measure the effectiveness of the carbon for the specific mixture of chemicals at this site before the full scale system is approved.

4. How is the DEC not testing offsite ground water when the groundwater at the site is highly contaminated? Marble and granite are a conduit for water flow and do not filter chemicals within the water. Pharmaceutical companies dumped at the Quarry and pharmaceuticals are not filtered by bedrock. Groundwater flow runs south into Bronxville (they are dealing with the water mitigation project currently at the HS) and right into Bronx River.

A) The selected remedy requires the volunteer to monitor and test groundwater migrating from the site before, during and after remediation. It is the volunteer's responsibility to ensure that contaminated groundwater does not migrate from the BCP site to off-site properties. Additional testing of off-site areas will be performed as part of the "P" site characterization. The "conduit" purported to exist is highly speculative and is inconsistent with observations of water levels in the landfill and historic information that water collected in the quarry during its operation.

5. With water monitoring wells at the south and north end of the quarry, if it finds the water contaminated during construction, how will the water be contained?

A) Groundwater at the site will not be brought to the surface during construction other than for testing purposes and installation of additional wells. If contamination is detected and determined to be migrating from the site, the BCP applicant would be required to control the migration.

6. Why hasn't the DEC tested for radioactivity when places like King's Electronics dumped at the site?

A) Based on the industries suspected of disposal at the site that may have handled radiological material (pharmaceutical and medical products), it is unlikely that radioactivity remains given the very short half-lives of the material in question. For instance, the nearby MediRay facility manufactured lead shielding for medical applications, and the only radiation materials used are isotope generators for testing their products. The isotopes associated with this application (technetium⁹⁹ and molybdenum⁹⁹ have half-lives of 6 hours and 2.75 days respectively. After 10

half-lives (60 hours and 28 days), radioactive materials are considered to be fully decayed. Nevertheless, DEC is requiring monitoring for radiation during both pre-characterization sampling and excavation activities. We are currently evaluating the proper instrumentation for this monitoring.

7. Why hasn't the DEC tested for dioxin? The precursors they are using for testing do not have to do with fires and ash. The community has witness testimony that there used to be spontaneous fires at the site and the village had garbage burning days at the dump. This is a strong indication that there would be dioxin present.

A) According to the USEPA, testing for precursor chemicals is an effective tool for assessing the potential for dioxin in ash. If the reported fires created dioxins they would have created precursors which would have been detected during site investigation. DEC is requiring these to be tested during the pre-construction sampling discussed in Question #3. Whether or not dioxins are present, DEC agrees that it is essential that dust migration be controlled during construction activities at the site as recommended by Dr. Hughes.

8. The air monitoring system is NOT real time for the community. Kevin Carpenter at the DEC stated that we can call to get results of the monitoring system. How are all of the residents going to call the DEC daily to request results? Shouldn't the community be alerted if work has to stop and the alarms on the monitoring system are going off? How will the surrounding community be protected? (By the way there is a playground at either end of the site that my children play at as well as many other preschool aged children.)

A) There will be real-time air monitoring at the site during any digging activities. Both DEC inspectors and the environmental consultant for the Village will be closely observing the air monitoring at the site, and we are working toward a real-time method of sharing the monitoring data with the community. It is important to recognize that the action levels to be used are based on long-term exposures; so if an action level is reached in the work area for a short period it does not indicate that there is exposure or risk to the community. The action levels are set such that work can be adjusted and emissions controlled before dusts and vapors leave the site and reach levels of concern in the community. It is also important to recognize that emission sources unrelated to the site, such as vehicle and truck traffic, windblown dust from off-site areas, etc., may trigger alarms on monitoring equipment. For this reason, baseline monitoring will be conducted before construction begins to establish typical levels of dust and vapor unrelated to the construction. It will be important to consider these baseline conditions, meteorological conditions such as wind direction, results from the entire monitoring system (upwind versus downwind), and observations of other activities in the neighborhood when interpreting the monitoring results. Various methods of making the data more readily available to the public, including establishing a website, are being evaluated.

9. The developer has stated that the hotel will be vented. The vents will blow right into the homes right above the ridge. How can this protect hotel guests but not residents?

A) The developer is not designing vents from the subsurface to be directed at the homes on the ridge. The Department and the DOH would not approve such a design. The discharge from the soil vapor extraction system will be treated and monitored to ensure compliance with applicable emission limits.

10. The DOH said (at the 8/8/16 Tuckahoe Village board meeting) that they haven't assessed levels of chemicals adequate for exposure for children. Are they going to estimate what is adequate for children or pregnant women to be exposed to as well as a 200 lb. male?

A) The soil cleanup objectives and action levels for vapor and dusts do consider the entire population that could be exposed to the contamination, the exposure scenarios and the associated risks.

11. Why hasn't an evacuation plan been put in place for residents? Waverly school had to hire a private environmental expert to put a plan in place for children at the school. Why would that be if there wasn't a risk?

A) There is no need for an evacuation plan; and the school's environmental consultant has confirmed that they are not preparing one. The environmental investigation of this site was completed and the data does not show the need for an evacuation plan. Hundreds of contaminated sites have been investigated and remediated in New York State, many in close proximity to schools, day care facilities, hospitals and nursing homes over the past three decades. Procedures used to detect and control contamination in advance and in real time provide confidence that this site can be investigated and remediated safely without the need for an evacuation plan.

12. Why are the environmental experts hired by the developer? It has only been until recently that the Village hired an environmental expert. This is a huge concern to me and other residents.

A) Under the BCP program, the volunteer conducts the work under the oversight of DEC and DOH. There are detailed work plans which must be approved by the Department which the volunteer or responsible party must follow and these are typically prepared and undertaken by environmental consultants.

13. These are some of the questions I have.... Unfortunately, this process has not been transparent to residents and the concern is real!

A) DEC has attended several public meetings and board meetings conducted by the Village during which the site was discussed at length. Additionally, there have been factsheets distributed to the public at several milestones during the project and opportunities for public comment.

14. The Village has not informed the community appropriately, and there is now panic due to lack of information and unanswered questions by the DEC and DOH.

A) There is, unfortunately, much misinformation being distributed concerning the environmental conditions at the site and DEC's approach to addressing them. DEC will continue to address these misrepresentations as the remediation project moves forward.