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Somers, NY 10589*

August 14, 2003

Alan Turnbull  
Coordinator  
Resident Action Group of Endicott  
117 Cleveland Avenue  
Endicott, New York 13760

Dear Mr. Turnbull,

Thank you for your letter of July 23, 2003, to Mr. Wayne Balta regarding the Groundwater Vapor Project. Mr. Balta asked me to reply to you since I serve as IBM's project manager for this work.

I have provided responses to each of your questions in the attachment. Please feel free to contact me on (888) 738-7968 if you have further questions.

Sincerely,

A handwritten signature in black ink that reads "M. E. Meyers".

Mitchell E. Meyers  
Project Manager  
Groundwater Vapor Project

Questions below are excerpted from A. Turnbull's July 23, 2003, letter to W. Balta.

**1. It has been observed some citizens have been denied testing even though their neighbors have been tested; some have been given ventilation systems without testing; and others have been refused ventilation systems even though VOCs have been found in their properties. What criteria is IBM using to make these determinations regarding which properties are to be tested and which will be given ventilation systems?**

I am not able to provide a specific response to a particular property owner since your question was more general in nature, but I am pleased to discuss our general approach as follows:

The sampling approach and criteria for offering ventilation systems are presented in detail in the Groundwater Vapor Project (Project) Action Plan which was approved by the New York State Department of Environmental Conservation (NYSDEC) in December 2002. NYSDEC approval followed a November 19, 2002 Public Information Availability Session in the Village hosted by NYSDEC and the NYS Department of Health to present the Action Plan, inform the public and seek public comments. A copy of the Action Plan resides in the Project information repository in the George F. Johnson Memorial Library.

By way of background, it is not technically necessary to sample every property for the purpose of identifying properties which may meet the Project ventilation criteria. As specified in the Project Action Plan, a representative number of structures were sampled across the Study Area, moving first from areas with a higher potential for vapor intrusion sequentially to areas with a lower potential. Properties were selected to provide representative geographic coverage across the area where VOCs had been found in soil gas at foundation depth and to account for the variety of foundation conditions and building use.

Using the Action Plan approach, a total of 233 properties were sampled from January through April 2003. This approach of sampling representative properties enabled the identification of the majority of the properties in one heating season where a property may meet ventilation criteria. Indeed, IBM estimates and NYSDEC agrees that the sampling conducted between January and April, 2003 has defined 85 to 95 percent of such properties.

Based on an analysis of sampling results and following NYSDEC's ventilation criteria for the Project, IBM has offered to design and install ventilation systems for about 480 properties with structures. These properties include sampled properties which met Project ventilation criteria as well as those additional properties which would be likely to meet the ventilation criteria, based on analysis of sampling results by IBM and its professional engineering consultants, and by independent review and concurrence by NYSDEC.

If the presence of VOCs in a property is caused by sources other than vapors in the groundwater, then a sub-slab ventilation system would not be provided since such a system is not designed to remove VOC vapors caused by ambient or indoor sources.

**2. When is IBM going to release a summary of the air data, showing relative locations of positive levels, and is there a pattern or trend in the data to-date?**

IBM has made publicly available the individual sampling results to-date for the entire Project in a spreadsheet format, without providing the specific addresses for the buildings sampled. IBM has not provided results permitting identification of the specific addresses sampled out of respect for the privacy of the property owners. Property owners are of course free to share their data as they see fit. A copy of the sampling data summary spreadsheet resides in the Project information repository in the George F. Johnson Memorial Library. IBM also provided copies of the spreadsheet to those who attended the July 21, 2003 public meeting with the Village and the Public Information Availability Session on July 22, 2003.

For your information, I am enclosing a copy of the sampling data summary spreadsheet.

**3. Some residents, whose air was tested in April, were told that IBM could be doing follow-up testing, but this has not happened. Will it and what are IBM's present plans for future testing?**

The next sampling activity will begin during the next heating season. Indoor air sampling is performed during the heating season because groundwater vapor migration potential is generally believed to be higher during the heating season when heating systems are in operation and windows and other openings are closed. During warmer months the vapor migration potential is reduced.

Consistent with the approach taken during the first four months of 2003, we will be selecting a representative number of structures where follow-up sampling may be appropriate and conduct indoor air sampling. IBM expects to contact property owners in October 2003 and running through the next heating season.

**4. Is the effectiveness of the ventilation systems ever going to be tested?**

The effectiveness of the ventilation systems has been tested at every property upon completion of installation and this will continue going forward. The effectiveness of each system is confirmed by performing engineering tests to verify that the ventilation system operation has developed and is maintaining a "negative pressure" beneath the building footprint. This reverses the typical air flow into a building from the subsurface, cutting off the pathway for groundwater vapors to enter the building. The engineering tests consist of a series of physical tests using sensitive pressure gauges as well as visual indications using smoke testing to confirm the negative pressure condition is present beneath the building footprint.

**5. With regard to the ventilation systems, what happens when they break down in the future and does IBM view itself as having an ongoing responsibility for maintenance or repair of these systems?**

Each ventilation system contains a small tube on the piping, called a manometer. The system installation team has educated each property owner who has received a ventilation system on its operation, showing how one can determine if it is operating properly simply by looking at the tube. A fact sheet describing normal system operation and who to contact in the event of a shutdown is provided when the system is installed.

IBM will provide necessary maintenance and repair of the ventilation systems for the purpose of addressing groundwater vapor intrusion at no cost to property owners.

**6. What should citizens tell prospective buyers of their properties, their tenants, or their employees about the ventilation systems and the air contaminants?**

IBM has provided property owners in each of the following circumstances a letter:

- a. where a property was sampled and offered a ventilation system;
- b. where a property was not sampled and offered a ventilation system; and
- c. where a property was sampled and not qualified for a ventilation system.

In addition, IBM has provided these property owners and others in the Study Area the Summer 2003 newsletter for the Groundwater Vapor Project in which IBM fully explains the facts and results of the Project.

Each citizen is free to use the information contained in these documents in their discussions.

**7. When does IBM believe that the vapor began entering citizens' properties?**

Under the Groundwater Vapor Project, IBM is offering certain properties a ventilation system. At the same time, please understand that nearly all of the indoor air samples taken under the Project revealed the presence of chemicals in indoor air that were not attributable to groundwater vapor intrusion but were most likely associated with the presence of other sources within the buildings such as commercial and household cleaning products, stored solvents, paints, thinners, and building materials and textiles. In either case, for a given property, IBM does not know at which time VOCs within a building may have first been able to be detected.

**8. Does IBM have any plans to study possible health effects of the air contamination in the plume area?**

IBM believes the appropriate organizations for conducting studies on potential health effects in Endicott are government agencies such as the Department of Health. IBM does not presently have plans for conducting studies on possible health effects.

**9. Is IBM tracking the plume and does IBM anticipate the plume to move?**

Since IBM stepped forward unilaterally in 1980 to begin the remediation of groundwater in Endicott, more than 220 monitoring wells have been installed. IBM conducts regular sampling and monitoring of groundwater quality in a large number of these wells, and groundwater monitoring reports are submitted to NYSDEC on a semiannual basis. There are sufficient data that have enabled IBM and NYSDEC to understand the groundwater plumes IBM is remediating. IBM does not anticipate that the plumes it is remediating will “move”, assuming that means spread beyond their current limits.

**10. We keep hearing from IBM that there may be “other sources” of the contamination. On what basis does IBM make this assertion; in IBM’s opinion what are the other sources of contamination, and what is the “anomaly” in the data mentioned by DEC’s Mary Jane Peachey.**

On the subject of other sources, IBM provided a discussion in the Summer 2003 newsletter for the Groundwater Vapor Project.

For your question about what NYSDEC’s Mary Jane Peachey may have said, it is most appropriate for you to follow-up with her. We hope you understand that we simply cannot speak for her regarding your question.