New York State Department of Environmental Conservation Division of Solid and Hazardous Materials. 9th Floor

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Honorable City of Tonawanda 200 Niagara Street Tonawanda, New York 14150

Dear

Re: Town of Tonawanda Landfill

This letter is in response to your recent letter to

Town of Tonawanda Landfill. Your letter conveyed the requests of certain city residents who live in the Riverview Heights area north of the Town of Tonawanda Landfill to have their sump water tested for radionuclides and additional chemical parameters due to the proximity of landfill waste to their homes. As you know, radioactive wastes from the processing of uranium ore have been found in the northwestern portion of the Landfill, 50 feet or more, inside the Landfill boundary. Additionally, previous investigations at the Landfill have identified waste materials buried up to the property line, (i.e., the fence line,) along certain areas of the northwestern site boundary.

When New York State Department of Environmental Conservation (Department) staff consider the request for sampling of homeowners' sumps. We have now completed our initial evaluation of this issue. Although we have not found a clear scientific basis, as discussed below, that would indicate the necessity to sample sump water in the vicinity of the Landfill, the Department has decided to undertake a limited sump sampling program in an effort to better address local resident concerns. An investigation plan is currently being developed by my staff. The plan will include the collection and analysis of sump water samples from a representative number of homes along Hackett Drive and Wadsworth Court. Only those homeowners who are willing to participate in this investigation will be considered for sampling, and due to the extensive nature of this work, the Department will not be able to test the sumps of every home bordering the Landfill.

As indicated above, our evaluation of the information and data collected to date does not lead to the conclusion that contaminants from the Landfill are migrating through the groundwater toward homes in the Riverview Heights area. There are a number of groundwater monitoring wells in and around the Landfill site. Groundwater samples collected in September 2001, July 2003, December 2003, March 2007, and October 2007 were analyzed for radionuclides, in

addition to metals and other non-radioactive contaminants. A total of 55 samples had been analyzed for radioactive materials. In addition to the monitoring well results, the Department considered the radioanalytical results from two leachate outbreaks, sampled on August 9, 2001 and May 22, 2007. Additionally, all of the analytical results that have been collected to date, as part of the Landfill's environmental monitoring program, have received a careful review by appropriate Department technical staff.

Uranium and radium are the primary contaminants in the uranium ore processing waste. They also occur naturally in groundwater, in concentrations that vary with the characteristics of the soil, rock, and the groundwater itself. In a Landfill some wastes, such as building materials, industrial waste products and ash, can also be a source of these radionuclides. Therefore, we expect to find some uranium and radium in most landfill leachate.

At the Town of Tonawanda Landfill, these radionuclides are detected in the leachate, but there is no pattern in the data to suggest that uranium or radium from the uranium ore processing waste is moving into the groundwater. If the radioactive waste were the source of this uranium, we would expect a higher concentration near the waste. This is not the case. Regarding the results of chemical analyses, there is also no strong evidence that contaminants are migrating to the north from the Landfill property. While there are levels of both inorganic and organic parameters present in some of the monitoring locations, both within the fill and to the south of the Landfill and in the leachate discharge to the sanitary sewer, these generally are not present at monitoring locations along the northwest boundary. The most recent sampling results from March 2007 reveals that the wells along the northwestern border of the Landfill did not contain elevated levels of parameters which are elevated in the Tonawanda Landfill leachate, such as ammonia, BOD, COD, bromide, TKN, TOC, and most metals. No volatile organics were detected in any of the monitoring wells. The recent data is consistent with past analytical data for the Landfill.

Therefore, from a radiological and chemical standpoint, the Department did not find a technical basis for recommending that the neighboring residential sumps be sampled. However, as indicated above, if homeowners living adjacent to the Landfill remain concerned, we are willing to test a representative number of their sumps in this area to help address their concerns. The Department is hoping for the cooperation and assistance of City of Tonawanda officials as we develop our plans to complete this investigation. At this point, the Department anticipates that we will soon be sending letters to those homeowners whose yards are located adjacent to the Landfill, soliciting interest in sampling. Based upon the responses received, we will then select a representative array of sampling locations and finalize the sampling plan.

Naturally, as the Town of Tonawanda continues to perform routine groundwater monitoring at the Landfill, the Department will continue to review this data concerning this matter. In addition, the Department collected split samples from the Town during the fall round of sampling for radiological parameters. Those samples are currently being analyzed. As is routine for all monitoring programs, Department staff will review the results and assess whether any additional sampling is needed.

Thank you for your interest in this issue. If you have any questions regarding radiological issues, please contact of our Bureau of Hazardous Waste & Radiation Management, at 518-402-8579. Questions concerning the chemical analyses at the Landfill can be directed to of the Region 9 Bureau of Solid Materials, at (716) 851-7220.

Sincerely,

Director
Division of Solid & Hazardous Materials

cc: Erie County Legislator Ianello
Town of Tonawanda Councilman Joe Emminger
City of Tonawanda Mayor Ron Pilozzi
State Assemblyman Schimminger
State Senator Antoine Thompson
State Senator Mary Lou Rath
Congress member Louise Slaughter
Town of Tonawanda Supervisor, Anthony Caruna
NYSDOH
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Senator Charles Schumer

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