



State of Ohio Environmental Protection Agency

## STREET ADDRESS:

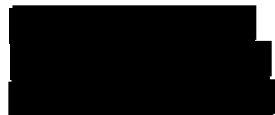
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## MAILING ADDRESS:

P.O. Box 1049  
Columbus, OH 43216-1049

May 15, 2008



**Re: Industrial Excess Landfill**

Dear :

I have spent considerable time in recent weeks personally reviewing much of the abundant correspondence between you, representing Concerned Citizens of Lake Township (CCLT), and Ohio EPA regarding the Industrial Excess Landfill (IEL) in Uniontown, Ohio. I have also reviewed correspondence between CCLT and other parties, including US EPA, and have also reviewed past media stories, the US EPA/OIG 2004 report, and Judge Manos' November 28, 2001 decision regarding the U.S. Department of Justice investigation into alleged plutonium dumping at IEL.

Based on a review of your correspondence and discussions with my staff, I understand that your primary concerns relate to:

- alleged radiological contamination and military disposal of nuclear material at the landfill;
- ground water flow; and
- landfill gas migration.

I have asked my staff to brief me on each of these issues, and it is my intent to advise you of my thoughts on these matters. Given your deep and long-standing interest in IEL, I thought it fair to provide you with my candid assessment of this matter, and I intend to address each of these concerns thoroughly in this letter. That said, I feel I must tell you "up front" that I do not believe that further investigation is needed at this site, and that I have directed my staff to refrain from any extensive time-consuming debates with you on this matter. We will, of course, provide any public documents you may request, but given the limited resources at my disposition and the number of sites which I believe do currently require attention, I cannot justify expending staff time arguing over issues on which it appears you and my staff will never agree.

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

By way of background, Ohio EPA functions as a support agency to U.S. EPA at IEL, which is (as you know) a federal Superfund site. Ohio EPA's primary responsibility with this site is to ensure that Ohio laws are met throughout the remediation process. U.S. EPA and Ohio EPA have conducted exhaustive efforts to review and investigate your claims and, based on site data, Ohio EPA continues to concur with and support the selected remedy implemented by the Potentially Responsible Parties (PRPs) in 2004. IEL is currently in Operation and Maintenance (O&M) status and subject to regular monitoring of ground water and landfill gas.

### **Radiation Investigations:**

CCLT has for many years expressed concerns regarding alleged radiological contamination and military disposal of nuclear material at the landfill. I respond as follows:

First, the Science Advisory Board (SAB) formed an ad hoc committee to investigate potential radiological contamination at IEL and to review radiation data collected at the site in the early 1990s. The SAB issued a final report in September 1994 and concluded that radiological testing performed at the site was adequate and appropriate.

The SAB also concluded that "the current weight of evidence argues that the issue of radioactive contamination should not be pursued further, and the confirmed issue of chemical hazards and remediation thereof should proceed expeditiously". (*Page 4, cover letter to the SAB Report from Matanoski and Stolwijk to Administrator Browner, September 30, 1994*).

Second, a more recent independent review of site radiation data was conducted by US EPA's Office of the Inspector General (OIG). The OIG report was released in September 2004, and was titled "*Review of Actions at Industrial Excess Landfill Superfund Site, Uniontown, Ohio, September 29, 2004*." One of OIG's stated purposes was to expressly review CCLT's allegations that the landfill was contaminated with radioactive waste. OIG reviewed data collected by U.S. EPA in the early 1990s and radiation data collected by the PRPs in 2000 and 2001.

Based on the available data for radiation at the site, the OIG report declared that U.S. EPA properly evaluated radiation through several rounds of ground water monitoring. OIG's radiation expert, Dr. Melvyn Gascoyne, reviewed all of the available information and concluded that the site does not pose a risk to human health and does not require additional remediation pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). It was also concluded that levels detected are consistent with normal distributions in nature and meet drinking water standards for the various parameters.

CCLT also expressed concern that radiation samples at the site had not been properly collected or analyzed. In the OIG report, Dr. Gascoyne concluded that sampling

conducted at the site demonstrates that ground water at IEL meets the requirements of drinking water standards with respect to radiation. Specific conclusions stated in the OIG final report include:

- Site monitoring wells are properly located to characterize ground water;
- Sampling methods used were consistent with conventional and acceptable techniques;
- Sample volumes collected were sufficient for the analytical methods performed;
- Appropriate containers were used for sample collection;
- Samples were properly stored and held within an acceptable timeframe to U.S. EPA methods;
- Filtration performed in the laboratory on sample portions and the evaluation of suspended material in ground water were acceptable procedures; and
- Methods used to analyze ground water for determining radiological concentrations were standard and acceptable.

No discussion of this issue would be complete without reference to allegations and statements made by Charles Kittinger concerning military disposal of plutonium-238 (Pu-238) at the site sometime between 1968 and 1970. On February 21, 2001 a federal court order was issued to the United States Department of Justice (DOJ) to fully investigate the assertions brought forth by Mr. Kittinger. The DOJ's investigation covered review of disposal records and tickets for corroboration of the deliveries; interviews with personnel and review of records of government agencies that could have handled or dumped such materials (i.e., DOE, NASA, RVAAP, National Guard); interviews with individuals who may have witnessed or have credible information about the deliveries; aerial photographic analysis for evidence of excavation in the alleged disposal area; remote sensing and geophysical techniques to identify such objects in the subsurface; and a general review and analysis of the credibility of the statements made by Mr. Kittinger.

Upon completion of the eight-month investigation by the U.S. DOJ, on November 28, 2001, the federal court issued an Order and a Memorandum of Opinion which concurred with DOJ and concluded that Mr. Kittinger's allegations were not credible. (Copy of November 28, 2001 Order and Memorandum of Opinion, enclosed.) There were inconsistencies in Mr. Kittinger's testimony regarding location, depth and the time frame that the acceptance and burial of Pu-238 allegedly occurred. Technical issues regarding the properties of Pu-238, as well as the alleged storage vessels for the substance created additional doubt as to the credibility of testimony given by Charles Kittinger. Additionally, there were no individuals who witnessed such an event, including the former landfill co-owner.

Based on the information submitted as part of the DOJ investigation, the federal court concluded that the allegations brought forth by Mr. Kittinger regarding the disposal of Pu-238 in large stainless steel containers were not credible. DOJ further recommended that no further investigation or proceedings were warranted regarding the allegations.

U.S. EPA and Ohio EPA believe the radiation issue has been thoroughly investigated, a finding fully supported by data. The testing methodologies and data analysis are sufficient to rule out radionuclide contamination at IEL. Ohio EPA does not believe there is reason to further investigate the issue.

### **Ground Water Flow:**

CCLT expressed concerns regarding ground water flow at the site and whether site-related contaminants could have migrated to North Canton. CCLT also challenged whether the current ground water monitoring well network at the site is sufficient for detection monitoring.

The wells at IEL were historically designated as “shallow”, “intermediate” and “deep”. Reliance on these historical designations lead to interpretations of a ground water mound in the south-central portion of the site. We believe that the United States Geological Survey (USGS) use of approximate water levels for potentiometric interpretations caused errors in data interpretation.

In 2000, Sharp and Associates (SHARP) conducted a detailed analysis and assessment of individual ground water monitoring wells at the site and developed an updated interpretation of the regional and site-specific hydrogeology. SHARP's evaluation of individual wells demonstrated that the historical well designations were indeed arbitrary. SHARP focused on wells where elevations represent the uppermost continuous ground water unit at the site and examined each well's completion data, then related the data to the regional hydrogeologic setting to better define a more accurate potentiometric surface of the uppermost continuous ground water unit. The extensive ground water elevation sampling conducted by SHARP does not show the impact one would expect from an inferred radial flow pattern. Instead, this more accurate data shows that ground water contamination coincides with an east-to-west flow pattern across the site – a flow pattern that does not demonstrate any risk to North Canton's well fields.

As you know, Ohio EPA's Division of Drinking and Ground Waters (DDGAW) has specifically responded to a question raised by CCLT to Ohio EPA's Division of Emergency and Remedial Response (DERR) regarding whether it is possible for ground water to flow from IEL to North Canton. The DDGAW has addressed this issue in several detailed responses to you which assert that there is no hydrogeologic connection between the two sites. DERR supports this conclusion, and so do I.

With respect to current ground water quality conditions at the site, the latest samples collected in May 2006 continue to show that ground water quality is improving. Those results were provided to you in March 2008. There have been no site-related constituents detected in any off-site wells. Recent detections of landfill-related constituents in ground water are identified only in monitoring wells on landfill property. Currently, six wells are drilled within the 40-acre landfill. The majority of the wells in the

monitoring network are placed around the perimeter of the landfill to detect any off-site migration. The PRPs continue to monitor environmental conditions at the site and report those findings to U.S. EPA and Ohio EPA, and we continue to see decreases in the numbers and concentrations of site-related constituents.

CCLT has also expressed concern that the current monitoring well network is insufficient to detect both on-site and off-site contamination. Ohio EPA finds the existing well network to be satisfactory for evaluating background, on-site and downgradient water quality at the site. A number of wells have been decommissioned at the site and replaced by newly-installed wells that better represent site conditions. These wells were abandoned because of compromised structural integrity, because they showed no contamination for more than 10 years or because they were not screened in the correct water bearing zone. More accurate information about ground water hydrology in SHARP's report allowed U.S. EPA and Ohio EPA to make informed decisions regarding ground water monitoring efforts at the site. U.S. EPA and Ohio EPA believe there is adequate spatial coverage and an adequate number of wells at the site to collect representative data. The technical rationale and justification for well abandonment and the installation of new wells has been provided to you numerous times by U.S. EPA and Ohio EPA since 2004.

#### **Landfill Gas:**

You have also expressed concerns regarding the sampling and characterization of landfill and soil gas. During the Remedial Investigation (RI), U.S. EPA installed an active methane extraction system in 1986 after explosive levels of methane were detected along the landfill boundaries and at nearby residences. The system consisted of 12 gas extraction wells along the western, northern and southern boundaries of the landfill. Once the system was installed and in operation, it effectively controlled migration of landfill gasses. In 1994, Ohio EPA assumed responsibility for the operation and maintenance of the methane venting system (MVS). In 2004, the PRP assumed responsibility for the system after the 2002 Record of Decision (ROD) Amendment was finalized.

As part of additional design studies required by U.S. EPA and Ohio EPA with respect to landfill gasses, the PRP implemented a landfill gas monitoring program and investigation. The purpose of the monitoring program was to evaluate ambient air quality to further support the need for continued operation of the MVS. Results from the 2004-2005 landfill gas monitoring investigation showed:

- The concentrations of Volatile Organic Compounds (VOCs) detected in on-site ambient air were all below risk-based levels under reasonable worst-case future site use assumptions; and
- The concentrations of methane detected with the MVS off and the extraction wells converted to passive vents are comparable to concentrations found in the same wells during previous periods when the MVS was operating.

Landfill gas monitoring continues at IEL as part of overall site monitoring. Landfill gasses are vented passively; the effectiveness of this system is supported by the data generated during the design investigation conducted by the PRP's.

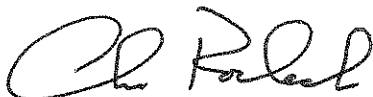
**Conclusion:**

In sum, I believe that the efforts and investigations conducted by US EPA, Ohio EPA, OIG, NAREL, the United States Department of Justice, the Federal District Court for the Northern District of Ohio and ATSDR are sufficient to support and uphold the final remedy described in the 2002 ROD amendment. Further, I must emphasize that Ohio EPA has thoroughly considered your concerns and comments, and still affirms that the remedial action conducted at IEL is protective of human health and the environment. Finally, I have discussed this issue in some detail with representatives from the Governor's office, and they concur with my assessment.

Ohio EPA places a great emphasis on public participation. Public involvement efforts are designed to enable Ohioans to be a part of environmental decisions that affect their lives. I do respect the effort that you and CCLT have persistently put into this matter over many years, and I believe Ohio EPA has, over many years, been extremely responsive to your questions and requests for information. However, it is obvious that you have not accepted and will not accept Ohio EPA's conclusions. That is certainly your right, but I must take into consideration the fact that this agency has attempted to address the same issues with you for many years. Given our limited resources, and given my desire that we focus staff resources on sites that Ohio EPA believes currently present threats to the environment or public health, I have directed my staff to refrain from engaging in extensive written or verbal exchanges with you on IEL, as I have concluded that such exchanges are unlikely to be productive and will only serve to divert limited staff time from other sites needing greater attention.

If you have new concerns or questions for Ohio EPA, I encourage you to contact Caroline Markworth in our Public Interest Center at (614) 644-2160 or [caroline.markworth@epa.state.oh.us](mailto:caroline.markworth@epa.state.oh.us).

Sincerely,



Chris Korleski  
Director

Cc: Steven Meeks, Governor's Office  
Jennifer Lynch, Governor's Office  
Wade Rakes, Governor's Office  
The Honorable John Hagan

The Honorable Kirk Schuring  
The Honorable Scott Oelslager  
The Honorable Todd Bosley  
The Honorable Tom Harmon  
The Honorable Jane Vignos  
The Honorable William J. Healy II  
Bill Skowronski, Ohio EPA (NEDO)  
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