



STATE OF NEW YORK DEPARTMENT OF HEALTH

Flanigan Square, 547 River Street, Troy, New York 12180-2216

██████████ M.D., M.P.H., Dr.P.H.

Commissioner

██████████
Executive Deputy Commissioner

April 12, 2001

██████████
Project Manager
Department of the Army
Buffalo District, Corps of Engineers
1776 Niagara Street
Buffalo, New York 14207-3199

Re: Town of Tonawanda Landfill

Dear ██████████:

This is in response to your letter dated February 27, 2001 concerning the Americium-241 currently at the Town of Tonawanda Landfill. This letter will briefly address your questions. The enclosed draft report provides additional details that I hope you find useful.

The decision made by the Task Force in 1989 to cap the landfill without removing the Americium was based on a number of factors. These include:

- Closure was not considered an acceptable remediation for unrestricted release, but required continued control of the use of the site; thus, there was a requirement for stabilization of the material on site; cover with clean soil to a minimum of three feet and a clay cap; and, in addition to any deed restriction imposed by the landfill closure, a notation indicating the estimated ash volume and Am-241 activity in the deed;
- Criteria for residual contamination used were those provided by NRC's Branch Technical Position on "Disposal or on-site Storage of Thorium and Uranium Wastes from Past Operations"; This was prior to the development of the RESRAD computer program (and others) that allows calculation of residual contamination of other isotopes under various scenarios;
- Americium in the landfill came from the ash that was produced by incinerating the sludge at the Sewage Treatment Plant (STP). Americium oxide is highly insoluble.
- Samples taken at the site showed no evidence of mobility of the contaminant to the surrounding environment:
- The Americium at the landfill did not pose an immediate health threat.
- At the time the decision was made, New York State low-level radioactive waste (LLRW) generator access to out-of-state commercial LLRW disposal facilities was very tenuous, and about to be terminated. In addition, no in-state commercial LLRW disposal facility was operating.

We believe it is not appropriate to use the 1989 Task Force position on Americium in the Town Landfill as a model for evaluating the alternatives for addressing the FUSRAP material currently disposed of at the landfill. This is based on the differences in the material characteristics, such as solubility and mobility in the environment; different program objectives; variation of applicable criteria over time; and availability of more advanced modeling techniques.

If you have any questions please contact [REDACTED] or [REDACTED] of my staff at (518) 402-7550.

Sincerely,

[REDACTED]

Director
Center for Environmental Health

Enclosure

cc:

[REDACTED]
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