



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

OCT 22 1984

MEMORANDUM FOR: Paul Lohaus  
State Liaison Officer  
Region I

FROM: W. T. Crow, Section Leader  
Uranium Process Licensing Section  
Uranium Fuel Licensing Branch  
Division of Fuel Cycle and Material Safety, NMSS

SUBJECT: AMERICIUM-241 CONTAMINATION AT TONAWANDA, NEW YORK

This is in response to the September 19, 1984 memorandum from J. M. Allan regarding technical assistance to the State of New York. As you know, Mr. R. G. Page met with the New York State people in King of Prussia on October 2, 1984 and agreed to provide a list of the type of information we would need if we were evaluating the impact of the Americium-241 contamination at the Tonawanda Landfill. As we agreed in our recent telephone conversation, I am sending this information to you for transmittal to the State of New York.

Enclosure 1 is the list of information. Also enclosed are copies of the Kerr-McGee West Chicago Final Environmental Statement, the Amax Environmental Impact Statement and a radiological survey of a landfill in the St. Louis, Missouri, area.

If further information is needed, please do not hesitate to call.

A handwritten signature in cursive script, appearing to read "W. T. Crow".

W. T. Crow, Section Leader  
Uranium Process Licensing Section  
Uranium Fuel Licensing Branch  
Division of Fuel Cycle and  
Material Safety, NMSS

Enclosures: As stated

8506180318 850417  
PDR FOIA  
WELDON85-210 PDR

OCT 22 1984

ENCLOSURE I

MINIMAL DATA REQUIREMENTS FOR POTENTIAL  
RADIOLOGICAL IMPACT ASSESSMENT FOR LANDFILL DISPOSAL

A. Information needed to characterize wastes

1. Total volume and density of waste
2. Total activity (Am-241) in waste
3. Depth of burial

If contamination can be at the surface of landfill, what level of air concentrations are in the area around the site?

4. Solubility of radioactive wastes or its chemical forms

B. Information needed to determine the environmental impact.

1. Current and future land use and water use in the area.
2. Population and nearest residence up to 5 mile radius from site.
3. Meteorological data joint wind frequency - speed-direction-stability data representative of the site
4. Air monitoring data (if any) around the site
5. Ground-water monitoring data (if any) around the site

C. Hydrogeological Data Needed

1. Available Information - history, characteristics, performance.
2. Topographic Maps (USGS) - area maps showing disposal location, disposal boundaries, land use, residences, and surface water bodies.
3. Site Map - details of site; topography and facilities.
4. Water Resources Map (USGS) - if available.
5. Geologic Map - if available.
6. Precipitation Data - peaks and area monthly averages.
7. Stream Flow Data - area peaks, averages, drainage flow.
8. Soil Type and Thickness - sandy, clay, silt, gravel, etc., classification (if available).
9. Hydrogeologic Data - area data, e.g., depth of water, hydraulic conductivity, and hydraulic head data.
10. Wells - locations, descriptions, pumping rates, depth, water levels, type of construction.
11. Disposal Details - depth, mixing, construction details.