Tonawada 200-1d New York State Department of Environmental Conservation Division of Solid and Hazardous Materials Bureau of Radiation & Hazardous Site Management 50 Wolf Road, Albany, New York 12233-7255 Phone: (518) 457-2225 FAX: (518) 485-8390 Website: www.dec.state.ny.us



April 25, 2001

Project Manager, Ashland 1 U.S. Army Engineering District, Buffalo District 1776 Niagara Street Buffalo, NY 14207-3199

Dear

Re: Tonawanda Landfill FUSRAP site in Tonawanda New York Draft Sampling and Analysis Plan, Volumes 1, 2 and 3 (03/22/01) Draft Site Safety and Health Plan (03/19/01)

The New York State Department of Environmental Conservation (NYSDEC) has reviewed the above referenced documents. These were provided to **State State State**

Thank you for providing these documents for our review. If you have any questions or need additional information regarding our comments, please contact John Mitchell at (518) 457-2225.

Sincerely,

Chief, Radiation Section Bureau of Radiation & Hazardous Site Management

Enclosure , USACE cc: , NYSDOH , Erie Co. Town of Tonawanda

New York State Department of Environmental Conservation Division of Solid & Hazardous Materials Bureau of Radiation & Hazardous Site Management

Tonawanda Landfill FUSRAP Site Draft Sampling and Analysis Plan, Volumes 1, 2, and 3 (March 22, 2001)

April 25, 2001

- Comment 1: In section 2.1, *Overview*, the first sentence of the fourth paragraph states, "The Geoprobe® sampling will consist of the advancement of up to 275 boreholes to between 4 and 12 feet below grade...." In a subsequent sentence it is stated, "If radiological contamination is found within the first two 4 foot sampling intervals, additional samples will be collected to a depth necessary to effectively determine extent of MED related contamination." The first sentence should be rewritten to reflect the idea of the second referenced sentence, such that the sentence reads, "...of the advancement of up to 275 boreholes to between 4 feet and whatever depth is necessary to effectively determine the extent of" This will eliminate specifying an exact depth since contamination has been seen at 11.5 feet and the current text reference of 12 feet may not be deep enough.
- Comment 2: In section 2.1, *Overview*, the first sentence of the last paragraph on page 2-1 states, "Soil samples will be sent for laboratory analysis of isotopic Ra, Th, and U radionuclides." This section should also discuss analysis for americium-241, which is included in the data quality objectives (see item 6 of section 1.1.2 on page 1-4).
- Comment 3: In the table on the top of page 2-6, the Scan MDC for natural uranium is 80 pCi/g. As you may know, this Department's acceptable residual uranium concentration for the FUSRAP sites is 60 pCi/g. Since the concentration number is determined partially from the surveyor efficiency and the scan rate, we recommend surveying at a slower pace than the proposed 0.5 m/sec, to obtain a final scan MDC of 60 pCi/g.
- Comment 4: In section 2.4.3.1 it is stated, "Prior to the start of the GWS activities, surface specific background measurements will be made by averaging 10 one-minute counts, distributed within a 10-m by 10-m grid of each surface type likely to be encountered on the site. Surface types will include soil, asphalt, and concrete." While the count rate from local asphalt and concrete should be determined, only the soil count rates should be used to determine a background soil count rate. We recognized that in a later section, the table on page 2-11 indicates that samples

will be collected from this reference area background determination area. This should be at least mentioned in this section as well to inform the reader earlier.

Comment 5: In section 2.6.1.2 *Sample Interval*, it is presumed that the analysis identified in the second paragraph of this section will be performed on unfiltered samples. We recommend also filtering these samples through a 0.45 micron filter and analyzing both the filtrate and the filter paper to differentiate between dissolved and suspended radioactive materials.