Department of Energy
Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

August 3, 1987

Mr. W. J. Miner
New York State Department of
Environmental Conservation
Bureau of Spill Prevention and Response
50 Wolf Road, 326
Albany, New York 12233-3510

Dear Mr. Miner:

U.S. DEPARTMENT OF ENERGY NIAGARA FALLS STORAGE SITE - SARA TITLE III, SECTION 302(c), EMERGENCY PLANNING NOTIFICATION REQUIREMENTS

References: 1. Letter, H. G. Williams, NYSDEC, to Facility Owners and Operations, SARA Title III, Section 302(c), "Emergency Planning Notification," April 29, 1987

2. Telecon, W. J. Miner, NYSDEC, and R. W. Evers, BNI on June 23, 1987

The U.S. Department of Energy (DOE) has reviewed Section 302(c) of SARA Title III and implementing regulations 40 CFR 355 to determine if DOE's Niagara Falls Storage Site (NFSS) is subject to 302(c) notification requirements.

NFSS has an Interim Waste Containment Facility (IWCF) where about 11,000 m^3 of radioactive residues from processing various grades of African pitchblend ore for removal of uranium are stored. In addition, about 180,000 m^3 of other radiologically contaminated materials (primarily soils) are stored in the IWCF. The residues account for less than 6 percent of the total volume of contaminated materials at NFSS, but almost 99 percent of the radioactivity. The primary radioactive component of the residues is radium-226.

The residues are a sandy/clayey mixture that contains small amounts of other radionuclides as well as non-radioactive metals. Among the metals present is nickel which is on the list of extremely hazardous substances. It is present in the residues at a concentration 1.4 percent. Under Section 355.30(e) (1), DOE is required to calculate the total mass of nickel which is estimated to be 400,000 pounds. This exceeds the threshold planning quantity of 10,000 pounds; however, there is no credible means for dispersal of this material.

The residues are stored in three buildings that were part of the original processing facilities at the site. The roofs were removed from these buildings to facilitate placement of the residues. Other contaminated soils and material were placed on top of and around the residues and buildings to construct the IWCF. The entire waste pile is contained by a clay dike cut off wall that connects with the gray clay layer underlying the site, and is covered with a clay cap. Due to the construction of the IWCF, which meets requirements of 40 CFR 192, "Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings," an accidential exposure of the public to materials in the IWCF is effectively precluded.

In addition, 32 drums of radioactively contaminated material temporarily stored on the NFSS contains an estimated 1700 pounds of pyrene. The threshold planning quantity for pyrene is 1000 pounds. DOE is currently developing plans for additional testing and eventual disposal of this material.

Technically, NFSS is subject to 302(c) notification requirements. However, given the low concentration of nickel in the waste residue, the unlikely event of an accidental release of nickel from the NFSS waste containment facility, and the relatively short holding time of the material that contains pyrene, it is our interpretation that NFSS does not need to participate in emergency planning efforts.

Sincerely,

S. Ahrends

S. W. Ahrends, Director
Technical Services Division

cc: J.D. Slack, SE-33
J.A. Arenson, BNI