May 8, 2003

Dr. Inés Triay, Manager  
Carlsbad Field Office  
Department of Energy  
P.O. Box 3090  
Carlsbad, New Mexico 88221-3090

Dr. Steven Warren, President  
Washington TRU Solutions, LLC  
P.O. Box 2078  
Carlsbad, New Mexico 88221-5608

RE: NMED COMMENTS ON WASTE STREAM PROFILE FORM LA-OS-00-01 (WIPP ELIGIBLE OSR SEALED SOURCES)  
WIPP HAZARDOUS WASTE FACILITY PERMIT  
EPA I.D. NUMBER NM4890139088

Dear Drs. Triay and Warren:

On April 25, 2003, NMED received the transmittal of an approved waste stream profile for Los Alamos National Laboratory (LANL), Waste Stream Profile Form Number LA-OS-00-01 (WIPP Eligible OSR Sealed Sources) from Mr. Kerry Watson of the Department of Energy’s Carlsbad Field Office (CBFO). The Waste Stream Profile Form (WSPF) is reviewed by the Permittees as part of the Phase 1 waste stream screening and verification process, approved by the Permittees, and subsequently submitted to NMED as required by Permit Attachment B, Sections B-4(b)(1) and B-4(b)(1)(ii) of the WIPP Hazardous Waste Facility Permit.

NMED seeks clarification of the following sentence from the acceptable knowledge (AK) summary on page 14 of the WSPF under the heading “Delineation of the Waste Stream”:

“All sealed sources currently identified for WIPP disposal contain varying combinations of plutonium, americium, or other transuranic elements, may or may not contain berillium or other light elements to create neutron emission, and have similar physical construction.”

Specifically, NMED must have a more detailed description of the term “other light elements” to ensure that water reactive, light elements such as lithium are specifically addressed. The WSPF
states that nonradioactive pyrophoric materials are recognized as prohibited items, and that there are no prohibited items in the waste stream. It also states, “sealed sources constitute a closed system (manufactured, solid isotopic sources sealed in metal jackets or casings) that preclude the introduction of extraneous materials that would be ignitable, reactive, or corrosive.” However, lithium is an excellent neutron emitter and is found in many radioactive sources. Lithium is also water reactive and has the potential to exhibit the RCRA characteristic of reactivity, which is prohibited under the WIPP Permit. Therefore, the WSPF must address the presence or absence of lithium in LANL’s sealed sources.

It is the generator’s responsibility to make a hazardous waste determination under 40 CFR §262.11. NMED encourages the generator to consult EPA guidance on assessing all potential hazards posed by lithium-bearing wastes and evaluate them against the reactivity characteristic identified in 40 CFR §261.23 as well as the other hazardous waste characteristics to determine if this waste stream should be managed as a mixed waste.

Please submit an appropriate hazardous waste determination and a revised WSPF for LA-OS-00-01 (WIPP Eligible OSR Sealed Sources) within fourteen (14) days of receipt of this letter. If you have any questions regarding this matter, please contact me at (505) 428-2512.

Sincerely,

James P. Bearzi
Chief
Hazardous Waste Bureau

cc: Steve Zappe, NMED HWB
    Tracy Hughes, NMED OGC
    Laurie King, EPA Region 6
    Connie Walker, Trinity Engineering
    Matthew Silva, EEG