



June 20, 2014

Via: Email and FedEx

Mr. Larry Camper, Director
Division of Waste Management and
Environmental Protection
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
Rockville, MD 20852

- References: (1) Texas Commission on Environmental Quality, Radioactive
Material License No. R04100, Amendment 25, CN600616890,
CN101702439
- (2) NRC Docket No. 70-7005
- (3) Email Message, Rod Baltzer (WCS) to Larry Camper (NRC), re:
WCS Enforcement Discretion, w/attachments, Sent Thursday,
June 19, 2014

**Subject: Plan for Retrieval of Los Alamos National Lab Waste Placed in
Temporary Storage in the WCS Federal Waste Disposal Facility**

Dear Mr. Camper:

In April 2014, Waste Control Specialists LLC (WCS) began receiving transuranic waste, mixed with hazardous constituents regulated under the Resource Conservation and Recovery Act (RCRA), from the Los Alamos National Laboratory (LANL). The waste was sent to WCS for temporary storage resulting from an unplanned release of radioactivity inside the Waste Isolation Pilot Plant (WIPP) near Carlsbad, New Mexico. This waste was originally placed in temporary storage at the WCS Treatment, Storage and Disposal Facility (TSDF) in Andrews County, Texas. Storage of this waste was performed under a contract with the U.S. Department of Energy (DOE). The storage of this waste is also governed by the Federal Agency Agreement between the DOE and the State of Texas.

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WCS was recently informed by the DOE that some of the waste sent from LANL could, under certain conditions, react and potentially result in a release of transuranic radionuclides to the environment at WCS. Accordingly, WCS placed the waste containers (Standard Waste Boxes (SWBs)) into Modular Concrete Canisters (MCCs) and moved them from the TSDF to the Federal Waste Disposal Facility (FWF). WCS placed the waste containers in the FWF in a manner that is readily retrievable. WCS plans to retrieve this waste at such time that it may be treated in a manner that is compliant with the requirements under RCRA and subsequently transported to WIPP, LANL or some other facility.

WCS notified the Texas Commission on Environmental Quality (TCEQ), and the U.S. Nuclear Regulatory Commission (NRC) that the SWBs will be moved and emplaced for temporary storage in the FWF on June 12, 2014. WCS is currently in the process of placing all of the affected MCCs in the FWF for interim storage.

WCS currently has the technology, equipment, and capabilities to retrieve the waste from the FWF. Prior to placement in the MCCs, the SWBs were placed on a pallet and two sets of slings were used per pallet/SWB combination and a crane was employed for placement inside of the MCC. A majority of the SWBs were placed into cylindrical MCCs in a double stacked array. Two of the cylindrical MCCs contain only a single SWB containing the LANL waste most similar to that suspected of causing the reaction at WIPP. However, a total of 16 SWBs were placed into rectangular MCCs using the same pallet/SWB combination (four in each rectangular MCC). In all cases the slings were placed on top of the containers for retrievability purposes. Washed river rock (approximately 5/8" nominal diameter) was used for void fill and for added protection of the MCC in the case of a thermal event. Normal protocol of utilizing a flow able grout fill was not feasible for various reasons related to the properties of the waste and to ensure the containers could be retrieved when necessary.

WCS is currently in the process of placing all of the affected MCCs in the FWF for interim storage. Once placement activities are completed, a one foot, flowable sand layer is placed around and over the top of the MCC. This activity is being conducted to stabilize temperatures of the interior of the MCCs and as an added measure of protection and containment in the event of thermal reaction.

All of the MCCs are being placed in a single array to aid in the continuation of temperature monitoring of each MCC which is conducted daily. Also, the MCCs are being placed in a separate section of the FWF landfill for accessibility.

All methods employed by WCS in regards to the current strategy for storage were carefully evaluated to ensure the retrievability of the waste. When the containers are retrieved, the sand layer will be removed to gain access to the lids of the stored MCCs. After removal of the sand layer, a vacuum truck will be used to remove the

washed river rock to gain access to the rigging/slings placed on top of the containers. A crane would then be used to remove the container from each MCC in storage. The same equipment utilized to move the affected MCCs to the landfill would be used to remove the containers. The only additional piece of equipment needed would be a vacuum truck capable of removing the washed river rock. This piece of equipment is readily available in this area and frequently used for this purpose in the oilfield industry. WCS currently uses this piece of equipment on a quarterly basis for removing dirt/debris from its lined ditches with proven effectiveness.

The length of time that the waste containers will remain in storage is unknown. Shipments of additional TRU waste to WCS has been suspended by the TCEQ. Approvals from TCEQ will be required before any shipments may resume.

The DOE is actively investigating the cause of the release of radioactivity inside the WIPP and to determine appropriate corrective actions needed to prevent a recurrence. The DOE is also evaluating suitable treatment technologies that would be appropriate to ensure that the waste is non-reactive. WCS does not currently have the treatment capabilities or technologies to treat the waste at its TSDF. Treatment of the waste may be needed to ensure compliance with the packaging and transportation requirements established by the U.S. Department of Transportation and the NRC. Once the waste is treated and can be readily transported in commerce, this waste will be properly disposed of in a licensed facility in compliance with applicable regulations.

WCS requests that all correspondences regarding this matter be emailed directly to my attention (skirk@valhi.net) as soon as possible after issuance. If you have any questions or need additional information, please contact me at 972-450-4284.

Sincerely,



J. Scott Kirk, CHP
Vice President of Licensing, Corporate Compliance and Corporate RSO

cc: Aby Mosheni, NRC
Harry Felsher, NRC
Charles McGuire, TCEQ
Bobby Janecka, TCEQ
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