

**TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S  
PRELIMINARY DECISION  
License No. R04100 Amendment No. 40**

Description of Application

- Applicant: Waste Control Specialists LLC (WCS)  
License No. R04100  
Customer Number: CN600616890  
Regulated Entity Number: RN101702439
- Action: Minor Amendment No. 40 of License No. R04100 for low-level radioactive waste (LLRW) disposal and storage and processing of radioactive substances.
- Location: WCS is located at 9998 State Highway 176, 30 miles west of Andrews, in Andrews County, Texas 79714, near the Texas-New Mexico state line.
- General: WCS currently holds License No. R04100 for a LLRW land disposal facility and for a radioactive substance storage and processing facility.
- Request: WCS submitted a minor amendment application to the Texas Commission on Environmental Quality (TCEQ), received June 20, 2023, to incorporate the updated Nuclear Regulatory Commission (NRC) Order (Docket No. 70-7005) to relocate the transuranic (TRU) waste from Los Alamos National Laboratory (LANL) from the Federal Waste Facility (FWF) to the Bin Storage Area 1 (BSA-1), prepare the LANL waste in an enclosure at BSA-1 to make it transport ready, and extend the deadline for storing the LANL TRU waste, to December 31, 2024; increase the financial assurance (FA) of the disposal facility to cover the Phase 2a expansion of the Compact Waste Facility (CWF); revise procedure EV-1.0.0, *Consolidated Radiological Environmental Monitoring Program*, to account for changes in monitoring wells due to necessary relocations from the CWF Phase 2a expansion; authorize higher activity waste (beyond the currently authorized license condition (LC) 192 exempt waste) for processing in the GeoMelt In Container Vitrification (ICV); and revise procedure RS-5.0.0, Radiological Waste Process for the RCRA Landfill, to change the values in table 1, "Controlling Concentrations", used for determining if waste is eligible for the LC 192 exemption. WCS submitted additional information to support the amendment application on July 28, 2023, September 28, 2023, and October 5, 2023.
- Authority: A TCEQ radioactive material license for the receipt and disposal of LLRW and for the storage and processing of radioactive substances is required by Chapter 401 of the Texas Health and Safety Code. An amended license has been prepared in accordance with the applicable requirements of Title 30, Texas Administrative Code (TAC) Chapters 281, 305, and 336.

Administrative Information

At the time of this review, WCS did not have any delinquent fees.  
The regulated entity, WCS, has a compliance history classification of high, with a rating of 0.  
The WCS site has a compliance history classification of high, with a rating of 0.

Technical Information:

This minor amendment has been reviewed in accordance with applicable rules and statutes, including 30 TAC Chapter 336 (Radioactive Substance Rule) and Chapter 401 of the Texas Health and Safety Code. Review of the amendment included an assessment of the radiological

and non-radiological effects of the license changes on the public health and safety. LC 206(A)(8)(b)(iv) was not modified to extend the time that the Licensee can store transuranic waste that originated at LANL to December 31, 2024.

LC 185.A was changed to increase the FA amount to account for inflation and for the increased FA required due to the Phase 2a expansion of the CWF. The FA for decommissioning and closure changed from \$33,300,000 in 2012 dollars to \$47,273,708 in 2022 dollars, of which \$5,328,388 is increased FA due to the phase 2a expansion. The FA values for post-operational surveillance changed from \$9,220,000 in 2012 dollars to \$11,727,055 in 2022 dollars, of which \$113,365 is increased FA due to the phase 2a expansion. The FA for institutional control changed from \$22,790,000 in 2012 dollars to \$29,009,030 in 2022 dollars, of which \$302,308 is increased FA due to the phase 2a expansion.

LC 185.B was changed to update the FA requirement for corrective action for inflation. The FA amount changed from \$20,000,000 in 2012 dollars to \$25,192,385 in 2022 dollars.

LC 188.F was changed to remove the restriction that only waste that meets the criteria for conditional exemption in LC 192 can be processed in the GeoMelt ICV in the Stabilization Building, but the removal of this restriction is contingent on the Licensee modifying the Stabilization Building to comply with the minimum classification of Type II (111) in accordance with National Fire Protection Association 220 titled, "Standard Types of Building Construction" per 30 TAC §336.1211(4)(J)(i).

LC 191.C was changed to authorize the GeoMelt Waste Processing Facility, including the initial stage of waste receipt, sort, and segregation, in the Stabilization Building as an equivalent structure to the PERMACON if operated in accordance with approved procedures and the letter dated September 28, 2023. This authorization allows the Licensee to open, sample, inspect, and maintain/repair containers in the Stabilization Building for waste processing using the GeoMelt ICV if done in accordance with approved operating procedures for the GeoMelt ICV.

LC 197.A was changed to state that the GeoMelt Waste Processing Facility, including the initial stage of waste receipt, sort, and segregation, in the Stabilization Building is an equivalent structure to a PERMACON if operated in accordance with approved procedures and the letter dated September 28, 2023 and thus satisfies the restriction that specific waste be processed within the confines of a PERMACON, or equivalent structure.

LC 203.D was modified to add the application for minor amendment, dated June 8, 2023, and letter dated July 28, 2023 for authorization to modify the Stabilization Building.

LC 206 was modified to update the NRC Order (Docket No. 70-7005) date to the date of the May 22, 2023 superseding NRC Order and to remove all NRC letters changing the NRC Order dated before May 22, 2023 since they are incorporated into the superseding order.

LC 206.A(8)(c) was added to include the changes to the NRC Order which authorizes the Licensee to move the LANL waste from the FWF disposal cell to the BSA-1. The NRC modifications include the requirement that the Licensee follow the Final WCS Documented Safety Analysis and itemizes specific steps and verifications that the Licensee must take for these activities.

LC 206.A(8)(c)(iii) was added by decision of the Executive Director to state that the LANL waste cannot be moved from the FWF disposal cell until the DOE removes the RCRA Waste Code D001 and the Licensee submits the final work instruction for the activities authorized in LC 206.A(8)(c) and (d) to the Executive Director for approval. The Final Work Instruction is to include how the Licensee will dispose of any secondary waste.

LC 206.A(8)(d) was added to include the changes to the NRC Order to authorize the Licensee to prepare the LANL waste containers for shipment in the BSA-1 enclosure. The NRC modifications include the requirement that the Licensee follow the Final WCS Documented Safety Analysis and itemizes specific steps and verifications that the Licensee must take for these activities.

LC 207.A was modified to add the following tie-down documents for the disposal facility: Application for minor amendment dated June 8, 2023 (cover letter dated June 9, 2023) with subject *Request for Minor Amendment Application for Approval of Amendment 40 for LANL/SNM Storage Transfer and RS-5.0 Annual Volume Limit* and supporting letter, dated July 28, 2023, with subject *Response to Administrative Notice of Deficiency in support of Minor Amendment Application*.

LC 207.B was modified to add the following tie-down documents for the storage and processing facility: Application for minor amendment dated June 8, 2023 (cover letter dated June 9, 2023) with subject *Request for Minor Amendment Application for Approval of Amendment 40 for LANL/SNM Storage Transfer and RS-5.0 Annual Volume Limit* and supporting letters, dated July 28, 2023, with subject *Response to Administrative Notice of Deficiency in support of Minor Amendment Application* and dated September 28, 2023, with the subject *WCS response to TNOD for Minor Amendment Application for Approval of Amendment 40 LANL/SNM Storage Transfer and RS-5.0 Annual Volume Limit, dated June 9, 2023*.

#### Preliminary Decision

The executive director has made a preliminary decision that the proposed license, if issued, will meet all statutory and regulatory requirements.