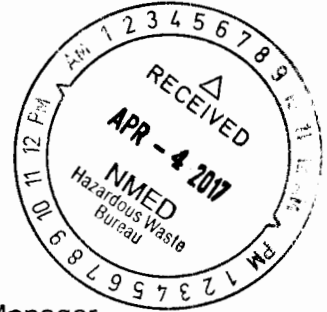




**ENTERED**  
**Department of Energy**  
 Carlsbad Field Office  
 P. O. Box 3090  
 Carlsbad, New Mexico 88221  
 APR 04 2017



Mr. Doug Hintze, Manager  
 Environmental Management  
 Los Alamos Field Office  
 1900 Diamond Drive  
 Los Alamos, NM 87544

Ms. Kim Davis-Lebak, Manager  
 National Nuclear Security Administration  
 Los Alamos Field Office  
 3747 West Jemez Road  
 Los Alamos, NM 87544

Subject: GSTR Notification

Dear Mr. Hintze and Ms. Davis-Lebak:

Due to a new key element in Chapter 18 of the Waste Isolation Pilot Plant (WIPP) Documented Safety Analysis (DSA), which has been included in the latest revision of the WIPP Waste Acceptance Criteria (WAC), Nuclear Waste Partnership LLC (NWP), the operating contractor at WIPP, and the Carlsbad Field Office (CBFO) are now required to conduct Generator Site Technical Reviews (GSTR) at each generator site. In keeping with Memorandum of Agreement (MOA) between the Department of Energy offices at Los Alamos National Laboratory (LANL) and CBFO, my staff has coordinated with members of your staff and contractors to prepare for this effort. The GSTR for LANL has been scheduled to begin the onsite portion on Monday, April 17, 2017, and will be conducted within the confines of the attached site specific scope and the CBFO GSTR Plan and Procedure which has been previously provided to your staff. Lines of Inquiry (LOI) have been provided to your staff.

Questions regarding the specifics of the GSTR may be directed to Courtland Fesmire at (575) 234-7548.

Sincerely,

*Todd Shrader*  
 for Todd Shrader, Manager Deputy Mgr  
 Carlsbad Field Office

Enclosure

cc: w/enclosure  
 J. Hutton, EM-HQ \*ED  
 J. Carswell, CBFO ED  
 J.R. Stroble, CBFO ED  
 C. Fesmire, CBFO ED  
 M. Brown, CBFO ED  
 P. Rodriguez, NWP ED  
 CBFO M&RC  
 \*ED denotes electronic distribution



**DOE-CBFO AND NUCLEAR WASTE PARTNERSHIP LLC  
GENERATOR SITE TECHNICAL REVIEW (GSTR) PLAN  
GSTR-LA-1-17-01**

**Organization to be Reviewed:**

Los Alamos National Security Limited Liability Corporation (LANS), the Management and Operating (M&O) contractor responsible for transuranic waste processing activities at the Los Alamos National Laboratory (LANL), will be evaluated at two specific areas associated with handling and packaging of transuranic waste. The first will be the operations for newly generated waste at Technical Area (TA) 55. The second will be the repackaging of the legacy nitrate salt waste, both remediated and un-remediated, at the Waste Characterization, Reduction, and Repackaging Facility (WCRRF).

**Background:**

TA-54, the Waste Disposal Site, began operations in 1957, and has served as the primary on-site waste disposal area for all of LANL, accepting low-level waste, low-level mixed waste, transuranic waste, PCB contaminated waste, tritiated waste, hazardous waste, and non-regulated chemical waste. All radioactive waste was buried in shallow landfills called Material Disposition Areas (MDAs) until 1970, when transuranic wastes were segregated and stored for ultimate disposal at the WIPP.

MDA G (Area G) within TA-54 contains all such stored transuranic waste (with the exception of waste stored at TA-55), both above ground in buildings and fabric dome structures, and below ground in trenches, pits, and shafts. The transuranic inventory at TA-54 is mostly comprised of legacy waste, meaning it was generated prior to the beginning of FY1999, with the remainder being newly generated waste, meaning it was generated after the beginning of FY1999 in support of continuing defense mission work, primarily conducted at TA-55.

DOE's intent is to complete the remediation of the transuranic waste inventory at Area G, and then perform the actions necessary to cap and close this area in accordance with RCRA requirements, removing and/or isolating a significant environmental liability. As such, DOE-EM has responsibility for the remediation of the legacy waste. The waste generated as part of the continuing defense mission is to be packaged, characterized, and certified at or near the point of generation, using the new Transuranic Waste Facility (TWF) at TA-63, eliminating the need to send any such waste to Area G. As such, this newly generated waste is the responsibility of DOE-NNSA. Although this delineation of responsibility has been in place for many years, the contractor responsible for performing all work has been the M&O contractor for the site.

The LANL drum involved in the WIPP radiological release was repackaged as part of the TA-54 legacy waste repackaging operations. As part of the corrective actions associated with that event, DOE took actions to strengthen the legacy program. Specifically, DOE established an Environmental Management Field Office (EM-LA) at Los Alamos, removed the EM-funded environmental cleanup work scope from the M&O contract, negotiated and awarded a Legacy Cleanup Bridge Contract (LCBC) to the current M&O that took effect on October 1, 2015, and issued a Request for Proposal to perform the Legacy Cleanup Completion Project (LCCP). When this contract is awarded, expected sometime in mid FY2017, the legacy and cleanup work scope will no longer be performed by the M&O, but instead by a separate contractor reporting directly to EM.

LANL has requested the GSTR be performed as soon as possible to allow resumption of waste shipments. As such, the GSTR will be performed in two separate visits. The first, scheduled for April 17<sup>th</sup> through 21<sup>st</sup> 2017, will evaluate the newly generated waste packaged at TA-55, and the legacy repackaging work

performed under the bridge contract at the WCRRF, which is limited to the nitrate salt waste (both remediated and un-remediated) involved in the WIPP release. The second GSTR, as yet unscheduled, will be performed on the legacy program, following the award of the new contract and the establishment of the program.

### **Purpose of the Review:**

The Accident Investigation Board Report on the radiological release event at WIPP identified numerous programmatic deficiencies with the generator site waste management and control systems (see attachment to this document).

The GSTR is designed to assess the sufficiency of generator site activities applicable to treatment, packaging, and management of transuranic waste, before such waste is presented to the CBFO-approved waste certification program, with the intent of identifying and mitigating similar deficiencies at every generator site.

Successful completion of this review is required by the WIPP Documented Safety Analysis (DSA) prior to CBFO granting the approval to dispose of the subject waste at WIPP.

### **Scope of the Review:**

The scope of this review will include TRU waste management and handling operations at both TA-55 and WCRRF, and consist of the following elements:

- Quality assurance program, including procurement processes, and training and qualification of personnel involved with waste processing activities
- Performance Assurance program, generator site assessment program and issues management system
- Conduct of operations, including verification that changes to existing procedures and processes related to TRU waste management are incorporated into AK
- Federal oversight at the ORNL
- TRU waste management programs at the ORNL that result in the following:
  - Waste generation, treatment, and packaging processes
  - RCRA permitting and implementation
  - Hazardous waste determinations
- Deferred maintenance (i.e., potential impacts to TRU waste processes)

### **Applicable Requirements Documents:**

- DOE/CBFO 16-3563, *Waste Isolation Pilot Plant Generator Site Technical Review Plan*
- DOE/WIPP-16-3564, *Generator Site Technical Review Procedure*
- DOE/WIPP 07-3372, *Waste Isolation Pilot Plant Documented Safety Analysis*; Chapter 18, Key Element 18-4
- DOE/WIPP-02-3122, *Transuranic Waste Acceptance Criteria for the Waste Isolation Pilot Plant*
- DOE O 226.1B, *Department of Energy Oversight Policy*

- DOE O 227.1A, *Independent Oversight*
- DOE O 414.1D, *Quality Assurance*
- DOE O 422.2, *Conduct of Operations*
- DOE O 435.1, *Radioactive Waste Management*

**Review Team:**

Gary Birge, DOE/CBFO, GSTR Team Member  
Court Fesmire, DOE/CBFO, GSTR Coordinator –or–  
J.R. Stroble, DOE/CBFO, GSTR Coordinator  
Mark Doherty, Technical Specialists, LLP, GSTR Team Member  
Dave Haar, Haar Engineering, PLLC, GSTR Team Member  
Steve Pye, AECOM/URS Professional Solutions, LLC, GSTR Team Member  
Pete Rodriguez, NWP, GSTR Team Lead

**Schedule:**

**Pre-Review Meeting(s):**

April 17 2017, at 9:00 a.m., in the Conference Room/Bldg. selected by LANL.

**On Site GSTR Activities:**


April 17<sup>th</sup> through April 21<sup>st</sup>, 2017

**Post-Review Meeting(s):**

April 21<sup>st</sup> 2017, at 3:00 p.m., in the Conference Room/Bldg. selected by LANL

**Signatures:**

Establish/  
Review/  
Approve:

  
\_\_\_\_\_  
Pete V. Rodriguez,  
GSTR Team Lead

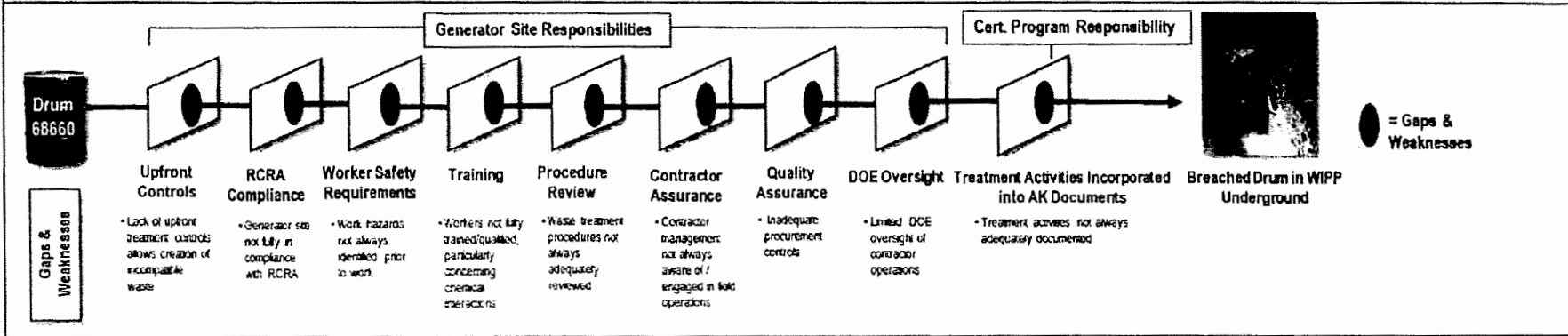
3/9/17  
\_\_\_\_\_  
Date

Establish/  
Review/  
Approve:

  
\_\_\_\_\_  
Courtland Fesmire, DOE/CBFO  
GSTR Coordinator

4/4/17  
\_\_\_\_\_  
Date

**TRU Waste controls at time of WIPP radiological event . . .**



**Strengthened TRU Waste controls designed to prevent event recurrence**

