Texas Low-Level Radioactive Waste Disposal Compact Commission

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May 25, 2016

Michael Otlowski, Health Physics Specialist Alaron Nuclear Services 2138 State Route 18 Wampum, PA 16157

Subject: Audit of Alaron Nuclear Services conducted on May 2, 2016

Dear Mr. Otlowski,

I am writing to thank you for hosting our audit team on May 2, 2016, and to provide you with the final audit report (Attachment A). Please note the three findings from the audit in Section 3, page 4 of the report. We acknowledge that all of the issues raised by the findings were addressed by the end of the audit, and that the process changes and continuous improvement steps that you proposed were satisfactory to the audit team.

We appreciate your willingness to be open and forthcoming with information during the audit. We would also like to emphasize that if the findings identified in this audit should persist, or new issues arise, the Commission may opt to take further actions including additional audits, or revocation, suspension, or amendment of present or future agreements between Alaron Nuclear Services and the Texas Low-Level Radioactive Waste Disposal Compact Commission. Please feel free to contact me if you should have any questions.

Very Truly Yours,

Executive Director, Vexas Low-Level Radioactive Waste Disposal Compact Commission

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Attachment: (A) Final Audit Report

Electronic Copies: Rich Janati, Executive Director, Appalachian States Low Level Radioactive Waste

Commission

Texas Low-Level Radioactive Waste Disposal Compact Commission

Audit report for: Alaron Nuclear Services

2138 State Route 18, Wampum, PA 16157

Conducted on May 2, 2016

Site Representative: Michael Otlowski, Health Physics Specialist

TLLRWDCC representatives: Leigh Ing, Andrew Tachovsky

Appalachian Compact representative: Rich Janati (PA DEP)

1. Introduction and background

Texas Low-Level Radioactive Waste Disposal Compact Commission (TLLRWDCC) was notified by Alaron Nuclear Services (Alaron) in January, 2016 that Alaron had sent a shipment of waste to Waste Control Specialists (WCS) under Import Agreement #2-0101-00. This shipment was sent prior to Alaron receiving a Condition Removal Letter (CRL) authorizing the shipment. It was clear based on previous Import Agreements (e.g., #2-0082-00) that Alaron was aware of the condition removal process. As such, an enforcement letter was sent to Alaron on April 6, 2016 indicating the intent of the TLLRWDCC to audit the facility under Article I.G. of the Agreement, which provides that the Commission may audit or cause to be audited for compliance with the Agreement.

TLLRWDCC staff conducted an audit at Alaron Nuclear Services located at 2138 State Route 18 in Wampum, PA (16157) on May 2, 2016 to determine compliance with all agreements between Alaron and TLLRWDCC. These agreements are: #2-0050-00, #2-0054-00 and amendment #2-0054-01, #2-0082-00, #2-0101-00, and #2-0109-00. The audit was led by Leigh Ing, Executive Director of the TLLRWDCC and attended by Andrew Tachovsky, Deputy Executive Director of the TLLRWDCC, and Rich Janati, Executive Director of the Appalachian Compact Commission. Mr. Janati attended both as a representative of the Appalachian Compact Commission (in which Pennsylvania is a member), and also as an employee of the Pennsylvania Department of Environmental Protection (PA DEP). Alaron was represented during the audit by Mr. Michael Otlowski, Operations Manager and Health Physics Specialist. The audit began at approximately 2:30 pm and lasted until approximately 6:30 pm.

2. Review of processes and documents

For the purposes of organization, the processes and documents reviewed are presented below by Agreement (rather than chronology). The audit team reviewed documents as they were made available by Mr. Otlowski, who provided everything that was asked of him in a timely and courteous manner.

2.1 Agreement #2-0050-00

The team inquired about the place of origin for the waste, listed in the Agreement as Pennsylvania. Mr. Otlowski explained that materials were shipped to Alaron and processed there, resulting in waste residuals. Control rod drive mechanisms (CRDMs) were shipped to Alaron from Columbia Nuclear Generating Station in Hanford, Washington and were refurbished by Scientech (owned by Curtiss Wright Nuclear) at Alaron. The process steps are: 1) disassembly, 2) decontamination, 3) removal of filters, 4) testing, and 5) replacement of filters that fail testing. Filters that fail testing are replaced and those failed filters become waste generated at the Alaron site. The materials sent from Columbia Generating Station were shipped as materials (not waste) from Hanford, WA.

Mr. Otlowski believed that he had documented the origin for the waste correctly, and had used similar procedures when shipping similar waste to the disposal facility in Clive, UT. The team understood Mr. Otlowski's rationale, and encouraged Mr. Otlowski to be more communicative with the TLLRWDCC when similar applications for disposal are prepared in the future.

2.2 Agreement #2-0054-00 and amendment #2-0054-01

The team asked whether waste was shipped under the Agreement and/or the Amendment. Mr. Otlowski attested that waste had only been shipped under agreement #2-0054-00, and the amendment

Attachment A

#2-0054-01 had not been utilized to ship waste. It should be noted that both the Agreement and the Amendment expired on 8/31/2014, so neither is currently eligible for shipping waste. The team requested a copy of the manifests (Form 542) and all generator authorization forms. Both were provided quickly. The team reviewed both sets of documents to ensure that there were no generators represented that were located in states requiring export authorization (and associated fees). There were no such generators, and as such, Alaron would not be required to provide export authorization for waste shipped under this Agreement.

The team aligned the manifests and generator authorizations. All waste generators were accounted for except for one: Alaron. In short, Alaron (as generator) needs to document that Alaron (as broker) was engaged to ship waste to WCS. Mr. Otlowski recognized that this was a finding, and produced a generator authorization form within the hour.

2.3 Agreement #2-0082-00

Waste was shipped to WCS under Agreement #2-0082-00, including waste from a state in a compact requiring export authorization (Kansas in the Central Interstate Low-Level Waste Compact). TLLRWDCC previously received generator authorizations as well as export authorization from Alaron, and provided authorization for Alaron to ship. All of these documents were confirmed.

The team requested new copies of waste manifests (Form 452) which Alaron provided quickly. The audit team aligned the manifests and the authorized generators listed on the TLLRWDCC CRL. All waste generators were accounted for except for one: Alaron. Mr. Otlowski recognized that this was a finding, and produced a generator authorization form within the hour.

2.4 Agreement #2-0101-00

Waste was shipped to WCS under Agreement #2-0101-00, including waste from a state in a compact requiring export authorization (Oklahoma). TLLRWDCC previously received generator authorizations, but had not received export authorization from Alaron. As such, TLLRWDCC had not provided Alaron with authorization to ship in violation of the Agreement. Mr. Otlowski recognized that these were both findings of the audit.

Mr. Otlowski was able to produce an authorization from the Central Interstate Low Level Waste Compact authorizing shipment of waste from Oklahoma to Alaron in Pennsylvania. The dates on this authorization were July 1, 2015 to June 31, 2015. Furthermore, Mr. Otlowski was able to demonstrate that the shipment from Oklahoma occurred in December 15, 2014 using the waste manifest (Form 452). Alaron did receive the appropriate authorization from the Central Interstate Compact and shipped within the specified window; however, the error Alaron committed was that this documentation was never provided to the TLLRWDCC for review. As such, the TLLRWDCC never provided Alaron with authorization to ship.

In addition to the waste manifests, the team requested a new copy of the generator authorizations, which Alaron provided quickly. The audit team aligned the manifests and generator authorizations. All waste generators were accounted for except for one: Alaron. Mr. Otlowski recognized that this was a finding, and produced a generator authorization form within the hour.

Attachment A

2.6 Agreement #2-0109-00

Agreement #2-0109-00 is still active, and Alaron has not shipped waste under this Agreement to date. As such, there were no waste manifests to review, and generator authorizations were not available at the time of the audit.

3. Findings and root causes

There were three findings of this audit. They are listed below, along with root cause

Finding	Description	Root Cause
1	Process failure to provide export authorization from the Central Interstate Compact Commission to the TLLRWDCC for review.	Providing export authorization is clearly required in under #1-0101-00. Alaron did not abide by the terms of the agreement, primarily because of a rush to ship.
2	Process failure to wait until authorization to ship waste had been received from the TLLRWDCC.	Obtaining authorization to ship from the TLLRWDCC was required before shipping under #1-0101-00. Alaron did not abide by the terms of the agreement, primarily because of a rush to ship.
3	Process failure to prepare and submit a generator authorization for Alaron to act as broker for waste generated at Alaron.	Mr. Otlowski was aware that Alaron needed to provide this generator authorization. This was a case of oversight and lack of internal review.

4. Corrective action and continuous improvement

Alaron corrected all of the discrepancies identified during the audit while the audit team was on-site. As mentioned above, three generator authorization forms were provided for waste generated at Alaron under #1-0054-00, #1-0082-00, and #1-0101-00, and an export authorization letter was provided from the Central Interstate Compact authorizing shipment of waste from Oklahoma to Pennsylvania. When asked how Alaron proposed to ensure that these findings would be corrected and would not reoccur for future shipments, he proposed three actions:

- Action 1 Update checklist: Alaron maintains a shipping checklist that all individuals at the site
 use to ship waste. This checklist would be updated to include steps to ensure: 1) export
 authorizations were sent to the TLLRWDCC when appropriate, and 2) approval to ship to WCS
 has been obtained from the TLLRWDCC prior to shipping.
- Action 2 Update Standard Operating Procedures (SOPs): Alaron maintains a set of SOPs that
 govern procedures around interaction with regulatory bodies (including the TLLRWDCC) and the
 shipping of waste. Alaron will update SOPs to ensure that: 1) export authorizations were sent
 to the TLLRWDCC when appropriate, and 2) approval to ship to WCS has been obtained from the
 TLLRWDCC prior to shipping, 3) Alaron prepares and provides generator authorizations to ship
 waste generated at Alaron.
- Action 3 Ensure that new procedures and checklists are put in place: While it is good to
 update SOPs and checklists, one must ensure that they are put in action and that the older/
 previous versions are taken out of circulation. This task will be given to the Quality Assurance
 officer, Jill Raiburn, at Alaron as point of accountability.