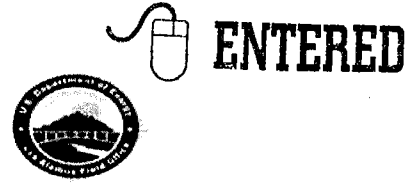


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**Environmental Protection & Compliance Division
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Date: **FEB 15 2017**
Symbol: EPC-DO: 17-088
LA-UR: 17-20789
Locates Action No.: N/A

Ms. Michelle Hunter, Bureau Chief
Ground Water Quality Bureau
New Mexico Environment Department
Harold Runnels Building, Room N2261
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502

Subject: Filing of 100% Design Drawings, Radioactive Liquid Waste Treatment Facility, Sodium Hydroxide Chemical Feed System, DP-1132

Dear Ms. Hunter:

In accordance with Section 20.6.2.1202 of the New Mexico Administrative Code, the U.S. Department of Energy and Los Alamos National Security, LLC (DOE/LANS) are submitting the 100% design drawings (Enclosure 1) for installation of a Sodium Hydroxide (NaOH) chemical feed system at the Radioactive Liquid Waste Treatment Facility's Waste Management/Risk Mitigation (WMRM) facility. Additional information on the NaOH chemical feed system is provided below.

DOE/LANS are proposing to install a NaOH chemical feed system within the WMRM facility for pH adjustment of radioactive liquid waste influent. The NaOH storage tank will have a total capacity of 1,000 gallons. This system was part of the initial WMRM design but was de-scoped during construction.

The chemical feed system will add NaOH (25%) to two existing 50,000-gal influent storage tanks, RLW-TK-005 and RLW-TK-006. The feed system will allow for pH adjustment of stored influent using NaOH prior to transfer of its contents to the new Low-Level Waste Facility for treatment. Influent pH will be raised to between 8.0 and 8.5.



Room 2 of the WMRM facility will be used to house the chemical addition system's storage tank and associated pumps. The room currently contains two chemical storage tanks that were part of the original NaOH design. The tanks sit on grating and there is a low point in the NE corner for the Rm 2 for a sump pump. The scope of activities for the chemical feed design includes:

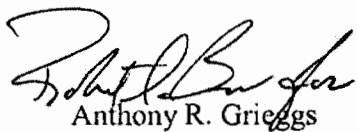
1. Seismic calculation for anchorage of storage tank.
2. Install a new chemical tank TK-002 for NaOH storage (NCR-032).
3. Installation of system fill, vent and distribution piping.
4. Associated instrumentation: storage tank level, overflow alarm, influent pH analysis, and chemical feed.
5. Chemical feed pumps.
6. Installation of sump pump and associated piping (chemical storage room has sump).
7. Electrical power for pumps and instrumentation.
8. Influent pH analysis of 2-ea influent storage tanks (RLW-TK-005 & 006)

The new NaOH chemical feed system will be placed into service before the new Low Level Treatment Facility begins operations in CY2018.

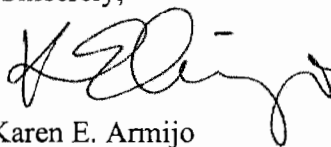
Please contact Karen E. Armijo by telephone at (505) 665-7314 or by email at Karen.Armijo@nnsa.doe.gov, or Robert S. Beers by telephone at (505) 667-7969 or by email at bbeers@lanl.gov if you have questions regarding this information.

Sincerely,

Sincerely,



Anthony R. Grieggs
Group Leader
Environmental Compliance Programs
Los Alamos National Security, LLC
Los Alamos National Laboratory



Karen E. Armijo
Permitting and Compliance Program Manager
National Nuclear Security Administration
Los Alamos Field Office
U.S. Department of Energy

ARG/KEA/MTS/RSB:eim: am

Enclosures: (1) NaOH chemical feed system design drawings

Ms. Michelle Hunter
EPC-DO: 17-088

- 3 -

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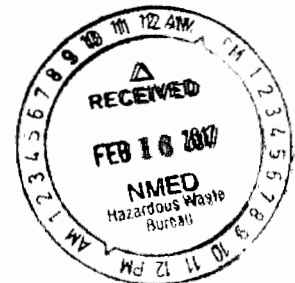
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