



Department of Energy

Washington, DC 20585

March 4, 2020

Mr. Sean Dunagan
Project Manager
Nuclear Waste Partnership, LLC
4021 National Parks Highway
Carlsbad, New Mexico 88220

WEL-2020-02

Dear Mr. Dunagan:

The Office of Enterprise Assessments' Office of Enforcement has completed an evaluation into an incident at the Waste Isolation Pilot Plant (WIPP) during which a Nuclear Waste Partnership, LLC (NWP) subcontractor, Granite Construction, rolled a Case 580 M Backhoe onto its side while transporting a 2,100 pound roll of Geo-fabric that was rigged to the bucket of the backhoe. The incident occurred on July 17, 2019, as reported into the Department of Energy's (DOE) Occurrence Reporting and Processing System under EM-CBFO-NWP-WIPP-2019-0013 - *Near Miss - Backhoe transporting a suspended load tips over*. Neither NWP nor Granite Construction reported noncompliances revealed by the event into the Department of Energy's Noncompliance Tracking System.

The Office of Enforcement's evaluation considered information gathered from the fact finding document entitled: *Equipment Accident*, dated July 17, 2019, as well as other documents, including: *NWP Capital and Infrastructure Construction Restart*, dated July 18, 2019; *Granite Construction Company Front-end Loader Rollover Incident Initial Summary of Rollover Incident*, dated July 18, 2019; *Granite Construction Corrective Action Plan*, dated July 19, 2019; and statements from workers close to the event. Based on this evaluation, the Office of Enforcement identified concerns that warrant management attention regarding NWP's oversight of subcontractors and implementation of 10 C.F.R. Part 851, *Worker Safety and Health Program* requirements.

The Office of Enforcement's review of the documents noted that NWP's fact finding focused on Granite Construction's actions and deficiencies specific to the event and did not look at broader NWP systemic safety management issues that the Office of Enforcement believes contributed to the event. Documents provided to the Office of Enforcement revealed that:

1. NWP did not perform an adequate review of Granite Construction's Job Hazard Analysis (JHA). Granite Construction's JHA did not adequately identify hazards associated with lifting and moving the Geo fabric roll. Consequently, Granite Construction did not develop and implement effective controls. NWP WP 10-WC3011, *Work Control Process*, requires that NWP's Subcontractor Technical Representative and NWP's Environment, Safety and Health Office review and approve subcontractor work packages and JHA documents.



2. The backhoe used for moving the Geo-fabric roll was not on the list of equipment in the JHA. The JHA, dated June 20, 2019, specified that a telehandler be used to place the Geo-fabric roll. Nonetheless, Granite Construction used the backhoe to move the Geo-fabric roll.
3. NWP did not ensure that Granite Construction used sling protection on the slings to prevent damage from the sharp edges of the backhoe loader bucket. Industry standard practice and nationally recognized consensus standard American Society of Mechanical Engineers (ASME) B30.9-2018 *Slings* requires hitching slings in a manner that provides control of the load and protecting slings in contact with edges, corners, protrusions, or abrasive surfaces with a material of sufficient strength, thickness, and construction to prevent damage.
4. Granite Construction conducted the lift, without a lift plan, as required by their daily work plan form #S-F-086, dated July 17, 2019, which identified moving the Geo-fabric roll as a critical lift. A lift plan should include additional considerations, such as load capacity, load stability, and ground conditions. These factors contributed to the backhoe rolling over on its side.

NWP did not identify the deficiencies above during their review and approval of Granite Construction's work package, work planning and control documents, and during NWP's oversight and monitoring of the North Access Road Bypass (NARB) project. These performance deficiencies demonstrate weaknesses in NWP's implementation of 10 C.F.R. Part 851 requirements and NWP's Worker Safety and Health Program requirements.

The Office of Enforcement acknowledges that NWP took actions after the incident including stopping all Capital and Infrastructure Construction Projects, conducting a fact finding identifying deficiencies that led to the incident, and reviewing the work package and JHAs for Granite Construction's NARB project. However, NWP's oversight of subcontractor work activities pertaining to the review of subcontractor work packages and JHAs to identify and assess hazards, and implement appropriate control measures must be sufficiently rigorous to prevent recurrence and to ensure that future subcontractor work activities are conducted in accordance with 10 C.F.R. Part 851 requirements.

The Office of Enforcement has elected to issue this Enforcement Letter based on the potential for serious injuries from this type of event and to convey concerns with NWP's communication of 10 C.F.R. Part 851 requirements to subcontractors and weaknesses in NWP's implementation of its Worker Safety and Health Program. Issuance of this Enforcement Letter reflects DOE's decision to not pursue further enforcement activity against NWP at this time. In coordination with the Office of Environmental Management and the Carlsbad Field Office, the Office of Enforcement will continue to monitor NWP's efforts to maintain a safe workplace.

This letter imposes no requirements on NWP and no response is required. If you have any questions, please contact me at (301) 903-7707.

Sincerely,

A handwritten signature in black ink that reads "Kevin L. Dressman". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Kevin L. Dressman

Director

Office of Enforcement

Office of Enterprise Assessments

cc: Gregory Sosson, CBFO
Shane Hendrickson, NWP