Department of Energy
Washington, DC 20585

December 3, 2015

Mr. William Johnson
President
Mission Support Alliance, LLC
2490 Garlick Boulevard
P.O. Box 650
Richland, Washington 99352

WEL-2015-07

Dear Mr. Johnson:

The Office of Enterprise Assessments' Office of Enforcement has completed an evaluation of an incident involving a rigger injured during a crane re-spooling operation, as reported into the Department of Energy's (DOE) Occurrence Reporting and Processing System under EM-RL--MSC-FSS-2015-0002 on May 11, 2015. On May 1, 2015, a Mission Support Alliance (MSA) rigger was directed to perform an observation of a 135-ton Grove crane wire cable re-spooling evolution. Positioned on a platform facing the crane spool winch drum, the rigger placed one gloved hand on the crane's cable guard in alignment with the path of the wire cable anchor. The wire cable anchor caught the rigger's hand as the drum rotated, causing an injury requiring 25 stitches. Based on this evaluation, the Office of Enforcement identified concerns that warrant management attention by MSA associated with the hazard assessment and control requirements in 10 C.F.R. Part 851, *Worker Safety and Health Program*.

The Office of Enforcement determined that MSA did not appropriately institute hazard controls to protect the rigger during this work activity, plan and execute the re-spooling activity, and preserve the incident scene for subsequent investigation. Specifically:

- MSA relied solely on administrative controls to protect the rigger during the crane re-spooling operation, which exposed the rigger to the pinch point hazard created by the rotating wire cable anchor. Subsequent to the event, MSA identified feasible engineering controls that, if instituted prior to the work activity, would have prevented or significantly reduced the likelihood of the injury. Reliance on administrative controls in this situation is not consistent with the hierarchy of control requirement in Part 851.

- Although the automated job hazard analysis for mobile crane operations addresses general pinch point hazards, it was not specific to the re-spooling activities and did not address the specific pinch point hazard

associated with the external wire cable anchor on the 135-ton Grove crane. Of the 21 cranes in use by MSA, only two are configured with external wire cable anchors. Of these two, only the 135-ton Grove crane is designed with the drum in this position, presenting a unique hazard to riggers observing re-spooling operations on this specific piece of equipment. The injured rigger had general rigging experience, but he had performed this task only once previously and had observed the re-spooling from an aerial lift.

- MSA did not ensure that communications between the rigger, spotter, signalman, designated leader, and operator were adequate to perform the re-spooling task and enable a quick response to the injury event. Drum rotation continued until the injured rigger climbed down from the elevated work platform near the front of the crane and reported the injury to the designated leader positioned at the rear of the crane. Multiple exposed pinch points presented a potential for catching and trapping an extremity, loose clothing, or lanyard that would require quick action by the operator to prevent serious injury or fatality.

- MSA resumed re-spooling the crane approximately three hours after the injured worker was taken from the work site. Resuming work without identifying and addressing the underlying conditions subjected additional employees to the same recognized hazardous conditions. In addition, resuming work compromised evidence that could have aided in fully identifying causal factors and developing corrective actions.

Although MSA investigated the event, prepared a causal analysis, and developed corrective actions, DOE has concluded that the causal analysis report did not fully detail all issues necessary for preventing recurrence or mitigating potential severity. For example, the event revealed weaknesses in operational communications that MSA did not recognize as either a casual factor or other issue potentially affecting worker safety. In addition, MSA did not identify the Part 851 noncompliances revealed by the event described in this letter.

The Office of Enforcement has elected to issue this Enforcement Letter to convey concerns with MSA's management of the crane re-spooling activity, awareness of the safety requirements applicable to this work, overreliance on administrative controls to protect worker safety, and corrective actions that would prevent recurrence. Issuance of this Enforcement Letter reflects DOE's decision to not pursue further enforcement activity against MSA at this time. In coordination with the Office of Environmental Management, the Office of Enforcement will continue to monitor MSA's efforts to maintain a safe workplace.

This letter imposes no requirements on MSA and no response is required. If you have any questions, please contact me at (301) 903-7707, or your staff may contact Mr. Kevin Dressman, Director, Office of Worker Safety and Health Enforcement, at (301) 903-0100.

Sincerely,

Steven C. Simonson
Director
Office of Enforcement
Office of Enterprise Assessments

cc: Stacy Charboneau, DOE-RL
Wendy Robbins, MSA