REMEDIATION MANAGEMENT
HSSE SHARED LEARNING
Fractured Shoulder Blade from Compactor Rollover

Shared Learning: **Fractured Shoulder Blade**
Business Unit: **US Mining, Decommissioning & Alaska Operations**
Location: **Rico-Argentine Mine Site, Colorado, USA**

Brief Account of Incident: On September 24, 2013, a subcontractor was compacting a newly constructed oval-shaped berm (approximately 12 feet wide by 4 feet high) with a HAMM 3205 Vibratory Compactor equipped with a smooth roller as part of the Rico Wetlands Demonstration Project. As the subcontractor backed up the compactor around a curve, the rear left tire reached the edge of the berm. While trying to correct, the roller portion of the compactor became extended over the edge resulting in the compactor sliding off of the berm and down the slope. When the compactor contacted the bottom of the berm it rolled over onto its side. The impact caused the IP to sustain a hairline fracture to left shoulder blade.

What Went Wrong:
At the start of the day, the IP was assigned work duties as a spotter. The duty assignment changed to operating the compactor (either by supervisor direction or IP's personal decision) without a discussion of the risks or mitigation measures for the task being performed.

Instead of waiting for fill soil to be placed over the entire length of the constructed berm area before starting compaction, the IP started compacting when only half of the berm length was covered with backfill material. This required the IP to operate the compactor in a back and forth motion instead of a forward only motion.

The IP was not aware that only the center part of the berm required compaction, so the compactor was operated too close to the edge of the berm. While operating in reverse, a spotter was not utilized, the IP did not swivel the driver's seat to be facing backwards per the manufacture specifications and the compactor did not have rear view mirrors.

When the IP operated too close to the edge of the berm while moving in reverse, the compactor slid off the berm and rolled on its side at the bottom of the slope. Neither the IP's co-workers, supervisor nor project oversight stopped work when they observed the IP operating the compactor or when the IP was driving in reverse on the berm without a spotter.

What Went Well:
The IP was wearing the appropriate PPE and seat belt which prevented a more severe injury.

The IP received immediate first aid at the site and was then transported to a local medical facility for further evaluation and treatment.

A site wide stop work was instituted until the entire workforce could be retrained on hazard identification/mitigation measures, stop work authority and clarification of individual accountabilities.

Lessons Learned:
Construction activities should be thoroughly risk assessed, mitigations cascaded to the work force through effective TSEAs or other field task work assessments.

Confirm Competency of Subcontractor Equipment Operators.

Confirm Oversight personnel are competent and understand project risks. Also, ensure oversight personnel accountabilities are clear and understood by the workforce.

Reaffirm Stop Work authority and expectations with entire work force (especially for subcontractors) prior to work execution and continuously reinforce throughout project.