

Date sent: Wed, 24 Jun 1998 10:05:42 -0500
From: Meredith Brown <racer@lanl.gov>
Subject: Yellow Alert: Modified Lift Equipment

Title: YELLOW - **Modified Slings Used in Improper Lift**

Identifier: INEEL Lessons Learned # 98305
Date: June 22,1998

Lessons Learned Statement:

Standards and procedures must be followed. Urgency does not take precedence over compliance or safety. Proper lift equipment should be available at facilities. Stop work authority must be used when appropriate. All facility receiving areas must be clearly marked. Clear communication should be emphasized between organizations.

Discussion of Activities:

Late one morning, LMITCO delivery personnel delivered a fume hood and two boxes to the high bay area of a building at the Idaho National Engineering and Environmental Laboratory. The delivery personnel had not notified facility personnel of the delivery and the freight blocked the egress routes of the individuals working in the area. Also, a group of important customers was expected for a facility tour at 12:30 p.m.

About noon, the project manager asked a project technician to move the two boxes from the high bay main floor to the lower level. The technician planned to use an overhead crane and for the lift. The slings were too short, however, and there were no other slings available in the facility.

The technician tripled a piece of nylon rope for extra strength and used it to tie the centers of the slings together. He tied a bowline knot to prevent the rope from slipping. The boxes weighed 346 and 416 pounds. Both boxes were moved into the pit area without incident.

An employee from another organization witnessed the improper lift, but did not stop the work and reported the incident to the safety supervisor.

Analysis:

There were four causes contributing to this event:

1. The technician perceived a sense of urgency to move the boxes and justified violating the DOE Hoisting and Rigging Standard by using rope to extend the length of the slings.
2. The proper slings were not available at the facility.
3. Delivery personnel did not contact anyone at the facility about the delivery and did not notice that egress routes were blocked.

4. The materials receiving area was not clearly marked.

Recommended Actions:

1. Management must give clear direction that standards and procedures must be followed. Urgency does not take precedence over compliance or safety.
2. Management must assess employee understanding of standards, procedures, and stop work authority and should emphasize all aspects of stop work authority.
3. Management should review the DOE Hoisting and Rigging Standard with incidental crane operators.
4. Management must ensure that proper lift equipment is available at facilities.
5. Employees must follow all standards and procedures.
6. Employees need to exercise their stop work authority when appropriate.
7. Management and facility personnel need to ensure clear communication between organizations.
8. The appropriate facility managers must ensure that all receiving areas are clearly marked.

Originator: Test Area North, Lockheed Martin Idaho Technologies Corporation

Contact: Jim Durrant, (208) 526-6562

Authorized Derivative Classifier: Dale Claflin, (208) 526-1199

Reviewing Official: Dale Claflin, (208) 526-1199

Functional Categories (DOE): Occupational Safety and Health, Packaging and Transportation, Safety, Training and Qualification

Functional Categories (User-Defined): Occupational Safety and Health, Packaging and Transportation, Training/Qualification/Education

Key Word(s): sling, modified, lift, urgent, stop work, receiving, communication, delivery

References: ORPS Report ID--LITC-TAN-1998-0001

Follow-up Action: Information in this report is accurate to the best of our knowledge. As a means of measuring the effectiveness of this report, please notify Terry Pierce at (208) 526-4288 (or by electronic mail at txp@inel.gov) or the INEEL Lessons Learned Program Office at (208) 526-1530 (e-mail at mae@inel.gov or limitll@inel.gov) of any action taken as a result of this report or of any technical inaccuracies you find. Your feedback is important and appreciated.

Meredith Brown

ESH Lessons Learned Program Manager

505 667 0604