

**U.S. Army Corps of Engineers
Fort Worth District
Safety & Occupational Health Office**

Lessons Learned

ACCIDENT: Strained back.

Date: 3 August 1999

WHAT HAPPENED: Worker reached over hydraulic arm of a backhoe and lifted an 86-pound battery from the machine. He then placed the battery on his truck, drove into town, bought a new battery, and returned. Upon returning, he repeated the process of lifting the battery out of his truck, lifting the battery over the hydraulic arm, and placing the battery in the battery compartment. This was all done without any assistance.

CONTRIBUTING FACTORS:

- Did not follow proper lifting techniques.
- Weight of battery requires two people to lift.

RESULTS: Upper and lower back injuries. Hospitalized three days, lost work four days and restricted duties fourteen days.

LESSONS LEARNED:

Reference-EM 385-1-1 USACE Safety and Health Requirements Manual

- **Use proper lifting techniques when lifting heavy objects.**
 - 14.A.01 Employees shall be trained in and shall use safe lifting techniques.
- **Request assistance for lifting loads over 50 pounds.**
- **Lifting in combination with other motions (twisting, reaching over or around, etc.) increases the possibility of a back injury.**
- **Supervisors ensure that Activity Hazard Analysis covers all actions required to safely complete the work**
- 14.A.04 Whenever heavy or bulky material is to be moved, the material handling needs shall be evaluated in terms of weight, size, distance, and path of movement. The following hierarchy shall be followed in selecting a means for material handling:
 - a. elimination of material handling needs by engineering,
 - b. movement by mechanical device (e.g., lift truck, overhead crane, or conveyor),

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- c. movement by manual means with handling aid (e.g., dollie or cart), or
- d. movement using safe lifting techniques.