



## Safety Alert

Not a GREF Incident

### Dangers in Loading & Unloading Heavy Equipment

#### What Happened?

##### **Incident Details – Near Loss: Excavator Tipped Over While Loading**

While an excavator was being driven onto a trailer it slid off of the ramp onto its side. There were no injuries. During the initial attempt to access the ramp the excavator began to slip. After adjusting the ramps, a second attempt was made. The operator drove the equipment onto the trailer with the boom/bucket positioned forward. As the excavator center of gravity shifted onto the trailer the treads started to slip. The right rear of the excavator slid off the trailer ramp and fell over onto its side.



#### What Could Have Happened?

Without effective controls such as the restricted work area or effective cab design & protection, a fatality or serious injury could have resulted.  
*[excavator weight ~40 tons]*

#### Incident Learning

- Utilize your stop work authority when needed.
- The equipment operator should be trained to safely load and unload the equipment.
- Workers should be alert to the movement equipment being loaded or unloaded. **The area should be cleared of personnel prior to loading or unloading.**
- Have a spotter provide directions to the operator in positioning the equipment from a safe distance.
- Flatbed truck should have brakes set and motor off.
- Flatbed trailer must be parked on level ground.
- Verify the trailer ramp is wide enough for equipment.
- Make sure the trailer ramp is long enough to avoid steep angles when loading or unloading the equipment.

#### **Barriers & Layers of Protection**

- ✓ **Engineering Design**  
Excavator cab was equipped with roll protection and seat belt
- ✓ **Working Near Heavy Equipment**  
Unauthorized entry & traffic control were well managed
- ✗ **Failure to “STOP WORK”**  
Operator continued to move forward
- ✗ **Work Authorization**  
Incomplete JSA; not specific to winter conditions