This presentation is for illustrative and general educational purposes only and is not intended to substitute for the official MSHA Investigation Report analysis nor is it intended to provide the sole foundation, if any, for any related enforcement actions.

Coal Mine Fatal Accident 2005-13





Operator: Thomas J. Smith Inc.

Mine: Smith No. 1 Mine

Accident Date: August 18, 2005

Classification: Machinery

Location: Dist. 2, Armstrong County, PA

Mine Type: Surface Coal Mine

Employment: 24



At ~12:00 p.m. on Thursday, August 18, 2005, a 50-year old Pit Foreman/Machine Operator, with 26 years of mining experience was fatally injured while operating a Caterpillar D5M-LGP bulldozer to construct a haul road to a pit. The victim was pushing trees over the top of a 24' high embankment adjacent to the haul road construction site. As the trees fell, the failing root systems loosened the soil near the crest and the dozer traveled over the embankment and came to rest on its left side. The victim was not wearing a seat belt and was thrown from the cab of the dozer.

ROOT CAUSE ANALYSIS

<u>Causal Factor</u>: Regulations for using seat belts were not being followed. There was no written company policy on the use of seat belts. The pit foreman (victim) was not wearing the seat belt provided.

<u>Corrective Action</u>: Management adopted safety policy to ensure compliance with safe work procedures. Management should monitor and strictly enforce the established policy regarding the use of seat belts.

<u>Causal Factor</u>: The machine used to complete the task of pushing over the large trees was inappropriate for the task being conducted near the top edge of an embankment.

<u>Corrective Action</u>: Management should evaluate the current safety, work and operational procedures in use at the mine. Management should encourage all employees to do a risk analysis any time a task is started.

CONCLUSION

The accident occurred because the machine used to complete the task of pushing over the large trees was inappropriate for the task being conducted near the top edge of an embankment. The severity of the accident was increased due to the fact that the victim was not wearing a seat belt.



ENFORCEMENT ACTIONS

§104(d)(1) Citation was issued to Thomas J. Smith Inc. for a violation of §77.1710(i)

The operator of a Caterpillar D5M-LGP bulldozer failed to wear a seat belt where there is a danger of overturning and where roll protection is provided. The operator was pushing trees off the top of a 24 foot embankment when the bulldozer over traveled the embankment and overturned ejecting the operator from the cab. The bulldozer was equipped with ROPS protection.

§104(a) Citation was issued to Thomas J. Smith Inc. for a violation of §77.1708

The operator did not establish and maintain a program of instruction with respect to the safety regulations and procedures to be followed at the mine and he did not publish or distribute these procedures to the employees.

BEST PRACTICES

- Stop, Look, Analyze, and Manage (SLAM) each task.
- Ensure that miners wear seatbelts when operating mobile equipment.
- Prior to working near embankments, check the crest and face of the slope for brows, rutting, cracking, slumping, or other indications that the material near the edge may be too weak to support the equipment.
- Conduct clearing and grubbing above highwalls, pits, or slopes at a safe distance from the crest. The crest should not be advanced into an area which has not been cleared. Large roots can extend several feet from a stump, which can remove or soften ground during extraction.
- Perform additional checks during the work shift to ensure ground conditions have not changed when the edge of a slope is not viewable from the operator's position.
- Inspect ground conditions from above and at the toe of the slope.