Fall Prevention on High Walls

Instruction note: Try to relate each slide to your location and your conditions. Involve the miners. Let them identify hazards and solutions at your mine. This presentation is not copyrighted. Please feel free to modify the program to meet the safety needs of your mine.

Slide 1. Title Page

Slide 2. 15005. Discuss: 1) broadness of standard; 2) company obligation to determine when fall protection is needed; 3) what miners can do to help comply with the standard.

In this presentation, we use the following terms. Fall Hazard Zone: the area that begins at 6 feet from a stable crest which has no physical barriers. Fall Prevention: the use of any device that prevents a person from reaching the crest. Fall Arrest: The Last Resort. Utilizes Personal Protection Equipment to stop the fall before injury occurs.

Slide 3. Other Standards. Discuss: 1) company's past compliance with these standards; 2) have there been violations?; 3) are there violations now?; 4) how do they apply to highwall safety?

Slide 4. Objectives.

Slide 5. Hazards. The primary safety concerns when working near highwalls. Discuss: past events or conditions at your mine related to these hazards.

Slide 6. Slips/Trips. Discuss the listed hazards and how they can lead to an accident.

Slide 7. Close to Crest. Discuss the safe distance: there is a high potential for injury for an unprotected employee in the Fall Hazard Zone. Do your employees tie off when working near the highwall?

Slide 8. Working Close to the Edge. Discuss the safety measures shown. What is used at your mine? Would something else work better?

Slide 9. Bad Weather Problems. Discuss: what times of year and types of weather create the greatest slip/trip/fall hazards at your mine?

Slide 10. Weather Solutions. Discuss how these solutions can help you deal with hazards from weather.

Slide 11. Clutter. Discuss: what kinds of clutter are on the highwalls at your mine? Can it be made orderly? Discuss how a workplace can be kept orderly.

Slide 12. Borehole. Discuss: awareness issues. Watch your step. Discuss how these solutions can help you work safely around boreholes.

Slide 13. Cracks. Cracks are an awareness issue. Were they found in the daily workplace examination? How can they be made safer?

Slide 14. Unstable Ground. Discuss the listed hazards and how they can lead to an accident.

Slide 15. **Solutions.** Unstable ground needs knowledge, experience, and awareness. Discuss who has access to the highwall area at your operation? Do those with access have the knowledge, experience, and awareness to be there?

Slide 16. Overhang. Discuss possibility of ground falling. Has it happened at your mine?

Slide 17. Backbreak. Is this common at your mine?

Slide 18. Cavities. Do they exist here?

Slide 19. Sloping Crest. Is it a problem at your mine?

Slide 20. Slips and Faults. Do they exist here?

Slide 21. Equipment Hazards. Discuss equipment hazards.

Equipment Solutions: 1) Are too many people working on the bench? 2) Is the equipment being positioned away from the crest and operated safely? 3) Is it secured against movement? 4) Are the brakes working?

Slide 22. People Hazards. Are only competent persons allowed on the highwall? Discuss how the listed elements can lead to injury.

Slide 23. People Solutions. Discuss solutions.

Slide 24. Prevention Priorities. Fall Hazard Zone: the area that begins at 6 feet from a stable crest which has no physical barriers. Fall Prevention: the use of any device that prevents a person from reaching the crest. Fall Arrest: The Last Resort. Utilizes Personal Protection Equipment to stop the fall before injury occurs.

Slide 25. Fall Prevention. Discuss the Fall Prevention methods at your mine.

Slide 26. Fall Arrest. If Fall Prevention methods cannot be used and Fall Arrest systems are the only alternative, discuss those systems in use at your mine.

Slide 27. Anchorage. Discuss the different strength requirements for anchorage used for Fall Prevention versus Fall Arrest.

Slide 28. T-Bars. Shop-fabricated T-Bars should only be used for Fall Prevention. The strength factor is unknown.

T-Bar Guidelines. T-Bars must be the proper size for the hole. (Snug fit). If used for Fall Arrest, T-Bars should be certified to withstand 5000 pounds of pull.

Slide 29. Tie-Off Procedures. Discuss 1) the hazards associated with the failure to follow each procedure; 2) the benefits of following the procedures.

Slide 30. Lockout. Discuss the steps for locking out mobile equipment. (Making sure it doesn't move.)

Slide 31. Anchoring for Drillers.

Slide 32. PPE. Discuss: 1) selecting the right PPE (personal protective equipment); 2) training and use of PPE; 3) maintenance of PPE; 4) inspecting PPE.

Slide 33. Summary.

Slide 34. Disclaimer.

Slide 35. Acknowledgment of Contributors