*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.*

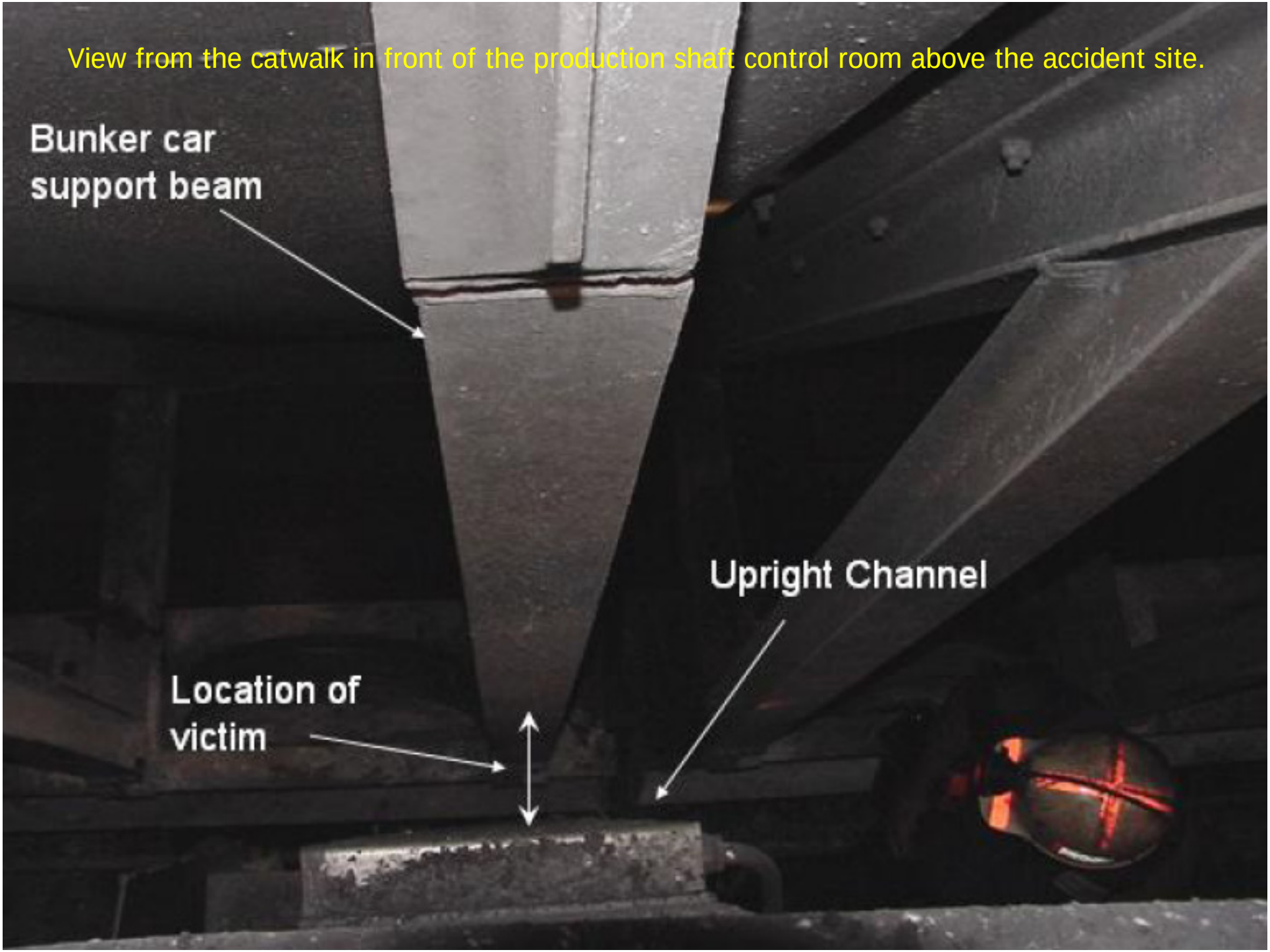
GENERAL INFORMATION

Coal Mine Fatal Accident 2004-12

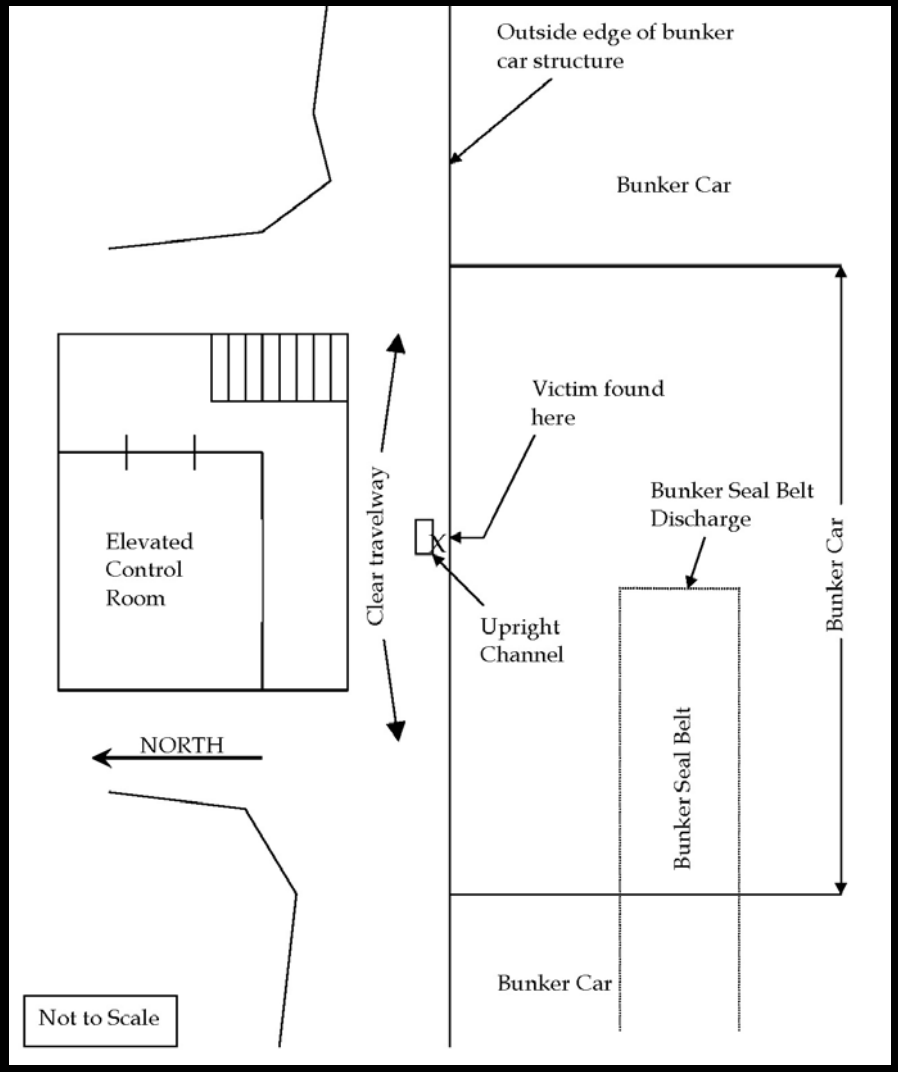
Operator:	Jim Walter Resources, Inc.
Mine:	No. 7 Mine
Accident Date:	June 16, 2004
Classification:	Powered Haulage
Location:	District 11, Tuscaloosa County, AL
Mine Type:	Underground
Employment:	415
Production	17,600 Tons/Day

ACCIDENT DESCRIPTION

A 45-year old general inside laborer with over 23 years mining experience at the mine was fatally injured in a powered haulage accident at the underground raw coal storage bunker area. The accident occurred while the victim was washing loose raw coal material away from the discharge end of the bunker system seal belt into the production shaft pocket, which was part of his normal job duties. The victim became entrapped between a vertical support beam on the frame of the moving number 15 bunker car and a stationary upright steel "C" channel. There were no eye-witnesses to the accident .


View from the catwalk in front of the production shaft control room above the accident site.
Bunker car support beam
Upright Channel
Location of victim

CONCLUSION



The victim sustained fatal injuries while performing his normal job duties from a position in which a pinch-point between a stationary upright steel channel and a bunker car support beam was created by movement of the bunker cars.

Contributing causes to the accident include leaving the upright sensor channel in place after removing the automatic system from service, inadequate warning devices, and lack of an emergency stop system accessible to miners working around the bunker.

ROOT CAUSE ANALYSIS

Causal Factor: The upright channel on which the automatic car location/position sensors were installed was not removed from the area though the system had been inoperative since shortly after installation.

Corrective Actions: The mine operator removed the upright channel.

ROOT CAUSE ANALYSIS

Causal Factor: The number of strobe lights installed to act as a visual warning to miners that the bunker cars were about to move were not adequate.

Corrective Actions: The operator installed additional strobe lights and an audible warning system that sounds once the bunker movement control lever is activated and before the bunker cars move. In addition, a radio-linked pull-cord system was installed along both sides of the bunker. This pull-cord system stops movement of the bunker cars if the cord is pulled or if a receiver fails to detect the radio signal. The operator has also implemented new procedures for personnel working in the bunker area. These procedures include making initial contact with the control room operator to let the operator know the location of work, the number of people performing the work, and the type of work to be performed. These work crews will have radio communication with the control room operator. The procedures also require that the strobe lights, audible alarm, and pull-cord systems be checked for proper operation by the control room operator at the beginning of the operator's shift.

ENFORCEMENT ACTIONS

A Notice to Provide Safeguards was issued pursuant to Section 314(b) of the Mine Act and 30 CFR 75.1403, requiring:

1) Warning lights that are visible from all areas around the bunker car system shall be provided and maintained. These lights are to activate prior to movement of the bunker cars.

2) An audible warning system that can be heard above the normal operating noise level of the bunker car system in all areas around the bunker car system shall be installed and maintained.

This audible warning system shall activate prior to movement of the bunker cars. 3) A system that can be manually activated to stop the moving bunker cars shall be installed and maintained along each side of the bunker car system. This system shall be installed to provide a latching circuit that must be manually re-set after activation.

4) The operator shall develop and initiate safe work procedures for working and traveling around the bunker car system. Miners must be trained in the warning systems and in the bunker car movement de-activation system prior to working and/or traveling in the bunker car area.

BEST PRACTICES

- Never enter a location where unexpected or unanticipated motion could trap you unless the equipment has been secured against motion.
- Ensure that equipment operators are aware of your presence and intentions before attempting to perform any work.
- Operators of moving equipment should have knowledge of all miners' locations prior to placing the equipment in motion.
- Remain aware of any movement or activity in or near your work area.
- Never take unnecessary chances or shortcuts to save time or effort.