MO FACE INVESTIGATION #96MO061

SUBJECT:

Special Road District Foreman Struck By Oil Distributor Truck

SUMMARY:

On July 25, 1996, a 60-year-old male, special road district foreman (victim), died from multiple trauma after he was struck by an oil distributor truck at a rural county road chip-and-seal project. The victim was the job-site foreman of a four-man crew. They arrived at the incident site at the of intersection of two rural county roads. The victim led the crew to the work site. He was followed by the rock spreader machine and a dump truck loaded with the aggregate rock. Upon arrival at the work site the victim stopped his truck on the roadway and exited the driver's side door. He began walking behind the truck and toward the rock spreader. He was instructing the rock spreader operator that he wanted to begin the chip seal work in the area where he was standing. At that time the rock spreader operator saw the oil distributor truck rolling backwards and about to strike the victim. He attempted to warn the victim and began backing his rock spreader machine out of the path of the truck. The oil distributor truck struck and pinned the victim against the front of the rock spreader. The dump truck operator was then able to stop the truck and radioed in the emergency on the truck's two-way radio. Local Emergency Medical Services were was notified and responded. They transported the victim to the local trauma center where he was pronounced dead. The MO FACE investigator concluded that in order to prevent similar occurrences all employers should:

- ensure that all machine operators are trained and routinely briefed on the importance of setting the parking brakes any time the vehicle is left unattended;
- develop, implement, and enforce a comprehensive safety program that includes, but is not limited to, training in hazard recognition and

avoidance.

INTRODUCTION:

On July 25, 1996, a 60-year-old male, special road district foreman (victim), died from multiple trauma after he was struck by an oil distributor truck at a rural county road chip-and-seal project. Approximately two hours after the incident the MO FACE investigator was notified by the county medical examiner's office. On July 26, 1996, the MO FACE investigator responded to the incident. He met with special road district commissioners, interviewed witnesses to the incident, and surveyed the incident site.

The employer is the county special road district commission administered by the county commissioners. Due to their county government affiliation, they do not fall under the jurisdiction of the Occupational Safety and Health Administration(OSHA). The special road district had been established for many years prior to the incident. The victim had been employed for 14 years with the district and had been the district crew foreman for 8 years. The victim had been working on chip-and-seal projects in the western half of the county most of the summer. This was the first day at this work site though they had worked other area roadways prior to the incident.

The employer did not have written safety rules and procedures in place at the time of the incident. The workers are trained on-the-job and this training emphasized safe work practices and proper machine operation.

INVESTIGATION:

The incident occurred at the intersection of two rural county roads. The incident site was an area where they had previously chipped-and-sealed the other three

roads leading away from the incident site. There was a slight down grade through the intersection. The project consisted of blading the road smooth and then applying a primer oil coating. Then, up to a week later the crew would set up for the chip-and-seal processes. They would first lay down a width of adhesive oil or tar-like substance. The rock spreader machine would then follow behind and lay down a layer of aggregate rock. An asphalt roller was not utilized in the project.

The crew assembled the morning of the incident at the road district headquarters. There they filled the oil distributor truck with the heated oil mix and loaded the dump truck and rock spreader with aggregate rock. They then proceeded to the site where they had worked a chip-and-seal project the previous day and completed it. After completing this project they returned to the district headquarters and loaded up more aggregate and topped off the oil distributor tank. The crew then proceeded to the incident site to start the next section of county road to be chipped and sealed. The victim drove the oil distributor truck and two three co-workers followed behind in the rock spreader, dump truck and a tractor equipped with a bushhog mower. The victim pulled the his truck through the intersection where the project was to begin. The co-workers stopped their vehicles short of the intersection. The victim stepped out of the oil distributor truck and began walking behind the truck and toward the rock spreader. The victim was instructing the rock spreader operator where he wanted the chip-and-seal to begin. At this time the operator saw the distributor truck rolling backward toward the victim. The operator tried to warn the victim and back his machine out of the rolling truck's path to give more room for the victim to escape. The oil distributor truck struck and pinned the victim against the front of the rock spreader. The dump truck operator was then able to enter and stop the truck and radioed in the emergency on the truck two-way radio. Local Emergency Medical Services were notified and responded. They transported the victim to the local trauma center where he was pronounced dead.

CAUSE OF DEATH:

The cause of death was exsanguination due to a crushing injury.

RECOMMENDATIONS/DISCUSSION

RECOMMENDATION #1: Employers should ensure that all machine operators are trained and routinely briefed on the importance of setting the parking brakes any time a vehicle is left unattended.

Discussion: The oil distributor truck was stopped on a slight downward grade to the rear of the truck. The victim exited the truck, maybe thinking the truck was on flat ground and would not roll. The truck was left running in neutral and the parking brake or the brake lock was not set. In order to prevent uncontrolled movement of mobile equipment and machinery, brakes should be set on all equipment equipped with brake locks or parking brakes when the machinery is left unattended. In addition to brake locks, or where brake locks are not available, wheel chocks should be utilized to prevent the unexpected movement of the vehicle and are an important safe guard in the event of bake lock failure.

RECOMMENDATION #2: **Develop, implement, and enforce a comprehensive safety program that includes, but is not limited to, training in hazard recognition and avoidance.**

Discussion: All employers should emphasize the safety of their employees by

developing, implementing, and enforcing a comprehensive safety program. The safety program should include, but not be limited to, training workers in the proper selection and use of personal protection equipment, along with the recognition and avoidance of hazards in the work environment.

The Missouri Department of Health, in co-operation with the National Institute for Occupational Safety and Health (NIOSH), is conducting a research project on work-related fatalities in Missouri. The goal of this project, known as the Missouri Occupational Fatality Assessment and Control Evaluation **(MO FACE)**, is to show a measurable reduction in traumatic occupational fatalities in the State of Missouri. This goal is being met by identifying causal and risk factors that contribute to work-related fatalities. Identifying these factors will enable more effective intervention strategies to be developed and implemented by employers and employees. This project does not determine fault or legal liability associated with a fatal incident or with current regulations. All **MO FACE** data will be reported to **NIOSH** for trend analysis on a national basis. This will help **NIOSH** provide employers with effective recommendations for injury prevention. All personal/company identifiers are removed from all reports sent to **NIOSH** to protect the confidentiality of those who voluntarily participate with the program.

SIGNATURES:

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Chief Investigator

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DISSEMINATION LIST

National Institute for Occupational Safety and Health NIOSH
Alaska State Department of Health and Social Services AK FACE Program
California State Public Health Foundation CA FACE Program
Colorado State Department of Health CO FACE Program
Georgia State Department of Health GA FACE Program
Iowa State Department of Public Health IA FACE Program
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Minnesota State Department of Health MN FACE Program
Nebraska State Department of Health NE FACE Program
New Jersey State Department of Health NJ FACE Program
Wisconsin State Division of Health WI FACE Program
Wyoming State Department of Health WY FACE Program
Jackson County Missouri Office of the Medical Examiner
Mine Safety and Health Administration
Missouri Department of Agriculture
Missouri Department of Elementary & Secondary Education
Missouri Department of Health, Office of Injury Control
Missouri Department of Labor and Industrial Relations
Missouri Department of Public Safety
Missouri Department of Social Services
Missouri Farm Bureau
Missouri Head Injury Advisory Council
Missouri Hospital Association
Missouri Injury Control Advisory Council
Missouri Police Chiefs Association
Missouri Safety Council
Missouri Sheriff's Association
Missouri Southern State College
Central Missouri State University
Missouri State Labor Council, AFL-CIO
North Central Missouri Safety Council
OSHA Area Office, Kansas City, MO
OSHA Area Office, St. Louis, MO
Safety and Health Council of Western Missouri & Kansas
Safety Council of Greater St. Louis
Safety Council of the Ozarks
Shelter Insurance Companies
St. Joseph Safety Council
St. Louis City Medical Examiner Office
St. Louis County Department of Community Health
St. Louis County Medical Examiner Office
The Educational Center on Family Violence
University of Missouri, Agricultural Engineering