A **53 year old male** employee was over exposed to chemicals (possibly a mixture of muratic acid and lime) during routine household garbage collection. The employee's department handles the collection of household garbage. The victim supervised approximately 9 to 12 pieces of equipment (trucks). He would drive around and monitor work in a two to three mile area. He was called to an address by the truck operators because the hopper of their truck was smoking.

Three employees were working on a 2015 HEIL sanitation truck (number S3163). They had just started another route and were picking up the first trash can on Peabody Street when one employee noticed two 2-gallon cans of Muriatic Acid in a trash can that had just been picked up. The cans were removed from the trash can and a picture was taken, and then the cans were put into the hopper for disposal. When the compactor was cycled, the employees noticed smoke or possible a chemical cloud coming from the hopper. The employees decided to call the victim, who was their supervisor.

The sanitation truck was not moved after the call was made to the supervisor. He arrived approximately 30 minutes later and the truck was still smoking and/or a cloud was still present. A liquid started leaking onto the ground and was running away from the truck. The liquid was bubbling as it moved away from the hopper. The witnesses stated that there was a strong chemical odor.

A neighbor came over to the truck and stated that he had lime to throw on the smoke. According to interviews, the neighbor and the victim threw it into the back of the hopper where it was smoking. After a while, the smoke seemed to go away due to the wind blowing. The victim told an operator to cycle the compactor again. According to interviews, the victim told the operators that it was safe to finish the route and that he was going to follow the sanitation truck in his vehicle while they finished the route.

Afterwards, the truck was taken back to the shop area to dump the material in the truck so that it could be evaluated as to what was in the garbage. The victim followed the truck back to the shop where he collapsed while standing at the water fountain. He died shortly afterwards. There was no inventory taken of the contents of the truck to determine what actually caused the smoke/chemical cloud.

Citation(s) as Originally Issued

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

<u>Violation 1 Item 1</u> Type of Violation: **Serious**

TCA 50-3-105(1): The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees:

In that employees were exposed to hazardous chemicals and possible overexposures due to unknown chemicals being put into trash cans or on the curb by residents.

<u>Violation 1 Item 2</u> Type of Violation: **Serious**

29 CFR 1910.132(d)(1): The employer did not assess the workplace to determine if hazards were present, or likely to be present, which necessitate the use of personal protective equipment:

On March 13, 2020, the employer failed to conduct a personal protective equipment hazard assessment for the employees working on sanitation trucks.

<u>Violation 1 Item 3</u> Type of Violation: Serious

29 CFR 1910.138(a): The employer did not select and require employee(s) to use appropriate hand protection when employees' hands were exposed to hazards such as those from skin absorption of harmful substances, severe cuts or lacerations, severe abrasions, punctures, chemical burns, thermal burns, and harmful temperature extremes:

On March 13, 2020, the employee was not using gloves provided by the employer when exposed to Muriatic Acid when emptying a resident's trash can.

<u>Violation 1 Item 4</u> Type of Violation: Serious

29 CFR 1910.1200(e)(1): The employer did not develop, implement, and/or maintain at the workplace a written hazard communication program which describes how the criteria specified in 29 CFR 1910.1200(f), (g), and (h) will be met:

On March 14, 2020, the employer had not developed, implemented, or maintained a Hazard Communication Program according to the standard. The employees are exposed to gasoline, oils, diesel fuel, carbon monoxide, oxygen, acetylene, and other chemicals.

Violation 1 Item 5 Type of Violation: Serious

29 CFR 1910.1200(h)(1): Employees were not provided information and training on hazardous chemicals in their work area at the time of their initial assignment and whenever a new hazard was introduced into their work area:

On March 14, 2020, the employer had not provided initial Hazard Communication training to the employee exposed to gasoline, oils, diesel fuel, carbon monoxide, oxygen, acetylene, and other chemicals. Employees are also exposed to hazardous chemicals while picking up resident's trash cans.

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