

Case 48. 22-year-old male foundry worker died after being struck by a piece of an unpurged/uncleaned empty metal 55-gallon drum that exploded while he was cutting it with a cutting torch.

On September 13, 2003, a 22-year-old male foundry worker was cutting an empty metal 55-gallon drum that previously contained isopropyl alcohol with a cutting torch. The employee was part of a cleanup crew that was being paid overtime. Part of the clean up duties included cutting up the 55-gallon barrels that were piled up near a recycling container for removal. The barrel the victim was attempting to cut was located among barrels in an outside storage area that were being cut into pieces for recycling. The drum was marked with a red placard on the side as flammable and with a white hazardous material information label with the words isopropyl alcohol. The barrel was sealed on both ends, had a non-removable head and had both bung plugs in place. The barrel had not been cleaned and purged of residual flammable material before being placed outside. As the victim was cutting the top end of the drum, the isopropyl alcohol vapors exploded. The top of the barrel came off and struck the victim's head.

MIOSHA issued the following “Serious” citations to the employer:

1. The employer did not prohibit welding or cutting on containers until they had been cleared of all flammable, combustible or toxic materials and fumes. (Welding and Cutting, Part 12, Rule 1262(1))
2. The employer did not provide employees with effective information and training on hazardous chemicals in the work area at the time of their initial assignment and whenever a new physical or health hazard was introduced into their work area. Employees were not trained on reading Material Safety Data Sheets or flammable labels on containers. (Hazard Communication, Part 92, Rule 1910.1200(h))
3. The employer did not give each employee training or a test before allowing him or her to use equipment for arc and gas welding and cutting. (Welding and Cutting, Part 12, Rule 1211(1)(a))