

082.1
OCT 22 1943

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MOUNT HOPE, WEST VIRGINIA

October 20, 1943.

Mr. M. C. McCall
Supervising Engineer
U. S. Bureau of Mines
Mount Hope, West Virginia

Subject: Fatal Accidents Occurring in Sewage
Disposal Plant at General Chemical
Defense Corporation, Point Pleasant,
West Virginia.

Dear Mr. McCall:

On the 12:00 to 8:00 a.m. shift, August 14, 1943, Charles R. Miller, Water Treating Operator, reported for work, relieving Thomas Grinstead who was a Water Treating Operator on the previous shift. The duties of Charles Miller were operating the waste water plant and the sewage disposal plant. The specific duties were operating pumps in both stations, checking various gauges every two hours during the shift.

At approximately 2:00 a.m., on the night of August 14, 1943, a thunder storm approached and Miller went to the sewage disposal plant and closed the doors and windows in order to keep the rain from entering the building. At about 4:00 a.m., G. E. Hatten, Shift Foreman of the Power Department, personally contacted Miller who informed him that all was in order. At 7:00 a.m., Hatten telephoned Miller at the waste water pumping station and was again told that all was in order and that he was leaving immediately for the sewage disposal plant to finish the work there.

At 7:38 a.m., on the morning of August 14, 1943, M. V. Donohoo, a Water Treating Operator who was relief man for Miller, reported for work. It has been the custom that the relief operator meet the operator on the preceeding shift at shift change time at the clock alley. On this particular morning Miller did not appear at the usual time. A few minutes after 8:00 a.m., Donohoo contacted O. L. Easley, Automotive Supervisor, who, upon request provided a station wagon driven by Delmar W. Oldaker, to take Donohoo to look for Miller. They first



MC

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MOUNT HOPE, WEST VIRGINIA

Page #2

drove to the waste water pumping station and not seeing Miller's pick up truck, proceeded to the sewage disposal plant. Upon arriving at the sewage disposal plant they immediately noted the pick up truck parked there. Donohoo looked into the truck, and not seeing Miller, went directly into the sewage disposal building, leaving Oldaker in the station wagon.

Upon entering the building he was first attracted by sludge foot prints leading to the toilet. He looked in the toilet for Miller and not finding him came back to the top of the stairs and called for him. Receiving no answer, he descended the stairs two or three steps and stooping, he saw Miller on the opposite side of the basement in a kneeling position, with his arms over a pipe which is approximately 16" above the floor level. Donohoo ran to the outside of the building and called to Oldaker that Miller was in trouble and that he was going to call the ambulance. Then Donohoo returned to the building and called the Plant Protection Department from the telephone located just inside the door at the top of the stairs, telling them to dispatch an ambulance immediately to the sewage disposal plant.

While he was making this call, Oldaker rushed by him and ran down into the basement to rescue Miller. Donohoo completed this call and looked down the stairs just in time to see Oldaker slump and pitch forward over Miller whom he had moved to the foot of the stairs, a distance of approximately eight feet. Donohoo immediately became suspicious of the presence of gas and telephoned the Fire Department requesting them to come at once to the sewage disposal plant equipped with gas masks, as two men had been overcome. Then he went outside to await the arrival of the ambulance and fire truck.

A guard patrol car driven by Sgt. K. W. Lands and the ambulance arrived at the scene almost simultaneously. Donohoo told the guards to put on gas masks before attempting the rescue of the two men in the building. Sgt. Lands and Guard Colwell, helper on the ambulance, secured M.S.A. All Service gas masks from the ambulance and put them on. Guard Colwell experienced difficulty in breathing after he had adjusted the mask to his face as he had neglected to remove the seal from the bottom



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MOUNT HOPE, WEST VIRGINIA

Page #3

of the All Service type canister. He therefore loosened the head straps of the face piece in order to get air. His difficulty was noticed by Sgt. Lands who removed the seal for him. Guard Colwell was seen to be readjusting the straps as he ran toward the building with Sgt. Lands.

Sgt. Lands and Guard Colwell rushed into the building and down the stairs to the landing which is two risers from the basement floor. They stood shoulder to shoulder and seized Oldaker under the arms, lifting him to a kneeling position. At this instant Colwell let go his hold on Oldaker, throwing the entire weight on Sgt. Lands. Sgt. Lands saw Colwell place both hands to the head straps of his mask in a desperate attempt to remove or loosen the face piece. At the same time Sgt. Lands, too, felt difficulty in his breathing and realized that he must get out of the building. He released his hold on Oldaker and grabbed Colwell by the arm, just as Colwell began falling to the floor. Sgt. Lands left the building at once, and removed his mask, feeling completely exhausted.

By this time, the Fire Department and other members of the Plant Protection Rescue Squad had arrived at the scene and immediately removed the three men from the basement of the sewage disposal plant.

Upon the removal of the men the plant physician administered medical treatment. The rescue of the three men was effected without any undue delay being completed at approximately 8:30 a.m., and artificial respiration was applied continuously until the victims were pronounced dead at 10:30 a.m., by the two attending physicians.

Investigation reveals that the death of the three employees was the result of inhalation of toxic fumes, notably hydrogen sulphide.

Miller's death was apparently caused by his neglect to follow definite operating instructions, specifically: leaving the discharge valve of the closed digestion sludge tank open while removing the cap of the ball check valve located on the discharge side of the pump, thereby allowing the sludge and gas in the digestion tank to flow back through the ball check valve into the basement. His second error was in failing to open the windows to allow proper ventilation when he left the basement and went to



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
MOUNT HOPE, WEST VIRGINIA

Page #4

the top level, presumably to wash the sludge from his hands. The third error was his returning to the basement knowing that the condition that existed was not normal. He had been instructed to call his superior in the event of any unusual occurrences.

Oldaker's death was caused by his eagerness to rescue Miller without considering any possibility of danger to himself.

Colwell's death apparently was caused by his loosening of the head straps of the face piece of his mask in the presence of toxic fumes.

Very truly yours,



T. J. Liddle,
SENIOR SAFETY
INSTRUCTOR

