

REPORT OF MERITORIOUS ACT

Date

BOX 410 BOROUGH Brooklyn DATE 4-14-87 TIME 1002

PERFORMED BY: FF1 James F. Hay Haz-Mat 1  
Rank or Grade Name Unit Assigned Detailed

DID ANY OTHER MEMBER PARTICIPATE DIRECTLY IN THIS ACT? Yes  
(If Yes) FF1 Raymond M. Meisenheimer Haz-Mat 1  
Rank Name Unit

Is Meritorious Act Report being forwarded for participating member? Yes If not, how did member participate?

4. LOCATION OF MERITORIOUS ACT

a) If in building: Address \_\_\_\_\_  
Height \_\_\_\_\_ Area \_\_\_\_\_ Construction \_\_\_\_\_  
Occupancy \_\_\_\_\_ Number of apartments in building \_\_\_\_\_  
Floor where act took place \_\_\_\_\_ Room \_\_\_\_\_

b) If not in building: Give complete descriptive information so that physical setting can be recreated. Valve in Sewer Pipe 50' under ground ( see diagram)

5. PERSON(S) AIDED:

NAME		
ADDRESS		
AGE - SEX		
RESCUE BREATHING		
EXTERNAL CARDIAC MASSAGE		
RESUSCITATOR APPLIED		
HOSPITALIZED		
NAME OF HOSPITAL		
DIAGNOSIS		
LENGTH OF HOSPITALIZATION		

6. MEMBER PERFORMING ACT: Did he receive any emergency treatment? Checked by E M S  
Specify at scene and later in Qts By Med Officer Dr. Soren

Was medical leave granted? NO Diagnosis \_\_\_\_\_

7. WHAT SPECIFIC JOB WAS MEMBER PERFORMING AT TIME OF RESCUE? Close down valve

WAS MEMBER ALONE? NO (If not, indicate number of Fire Department personnel in immediate area, and describe their positions in # 11.)

WAS A MASK WORN BY MEMBER DURING RESCUE? Yes

WAS CHARGED HOSELINE IN POSITION TO PROTECT MEMBER MAKING RESCUE? NO

HOW WAS VICTIM REMOVED FROM PREMISES? Carried \_\_\_\_\_ Dragged \_\_\_\_\_ Assisted \_\_\_\_\_

WAS A LADDER USED IN THIS RESCUE? \_\_\_\_\_ If yes, indicate type, size and placement \_\_\_\_\_

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FF1 James F. Hay

Name of Member

4-14-87

Date of Act

8. NAME (S) OF TWO MEMBERS WHO ACTUALLY WITNESSED ACT (IF AVAILABLE)

RANK	NAME	UNIT

9. NAME (S) OF TWO CIVILIANS WHO ACTUALLY WITNESSED ACT (IF AVAILABLE)

NAME	ADDRESS

10. WAS VICTIM REMOVED FROM: Immediate fire area \_\_\_\_\_ Directly above fire \_\_\_\_\_  
Other area (specify in detail):

11. DESCRIPTION OF ACT: On the arrival of Haz-Mat 1 at this incident the following situation was found. A sewage valve 50' below ground was opened by Environmental Protection Agency (EPA) workers to remove raw sewage from a damaged section of pipe. After the valve was opened the EPA monitoring equipment registered extremely dangerous levels of HYDROGEN SULPHIDE (H<sub>2</sub>S) in the manhole and surrounding area. At which time the EPA workers abandoned the work site, leaving the valve in the open position with a continuous increasing flow of raw sewage and H<sub>2</sub>S into the manhole and surrounding area.

Research conducted by the Haz-Mat team reinforced EPA knowledge of the EXTREMELY toxic and FLAMMABLE characteristics of H<sub>2</sub>S. In addition to having an upper explosive limit of 46%, lower limit of 4.3%, Flash point 76%, Specific Gravity 1.54 it is also a severe eye, skin, and mucous membrane irritant, poison gas and neurotoxin and at concentrations of 300 ppm it is IMMEDIATE DANGEROUS TO LIFE AND HEALTH.

A primary survey was conducted by FF. Meisenheimer and FF Hay, Haz-Mat 1 entry team for this tour and confirmed readings well over 100ppm of H<sub>2</sub>S above the manhole. Due to the Specific Gravity of H<sub>2</sub>S we knew that the concentrations would be much higher further down the manhole.

At this time the EPA foreman notified Dep. Chief Hatton 10 Div. and Batt Chief Birello 31 Batt that if the VALVE is not closed in 15 min. the sewage level would rise above it, making it almost impossible to close the valve. This would continue to give off increasingly high concentrations of H<sub>2</sub>S to the surrounding area posing a severe Respiratory and Fire hazard to the workers and area residents. (when water is mixed with H<sub>2</sub>S Sulfuric Acid is formed)

Due to safety factors (descending 30" manhole with 9 in. rungs) recommended Level A" fully encapsulated protection had to be waived for a lower but more maneuverable level of protection. Fully aware of the wide flammable range of H<sub>2</sub>S, but unable to monitor the flammable levels due to time constraints etc. FF Meisenheimer and FF Hay knew that they would have little or no protection against a Flash fire and exposure to TOXIC H<sub>2</sub>S. Secured to Life Saving ropes FF Meisenheimer AND FF Hay started descending the manhole.

After descending 50' to bottom of manhole, both firefighters had to traverse a 8 inch wide plank for 30 ft to reach the valve. At this time the unknown depth of Raw Sewage was just below the 8 in plank. Due to the fact that the valve opening was fully submerged in Raw sewage both Firefighters had to clean out the gate first before fully closing the valve. After successfully closing the valve both

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\_\_\_\_\_  
Name of Member

\_\_\_\_\_  
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12. DIAGRAM OF APARTMENT OR AREA FROM WHICH VICTIM WAS REMOVED

Indicate location of victim by X.

Indicate path of entrance to apartment (or area) by solid line.

Indicate path of exit (if different than entrance) by broken line.

Indicate point of origin of fire (if known) by △ with floor # inside.

Indicate area of fire by ///////

Indicate locations of hose line by - - > - - > - - >.

Diagram shall include all means of access to area (doors, fire escapes).

