

REPORT OF UNIT CITATION

05/22/2018
Date

Unit: Haz Mat Co. 1 Battalion: HM Division: SO

1. Box 9337 Borough Queens Date 05/17/2018 Time 15:42
Time of Act: 16:10-18:30 Date: 05/17/2018

2. MEMBERS RESPONDING:

Rank	Name	Unit	Assigned Unit
Lt.	John Berna	HM-1	HM-1
FF	Michael Monaco	HM-1	HM-1
FF	Robert Salvesen	HM-1	HM-1
FF	Kevin Chambers	HM-1	HM-1
FF	Anthony Palminteri	HM-1	Eng. 236
FF	Christopher Lindberg	HM-1	HM-1
FF	George Baade/Aldo Radovic	HM-1/HM-1	HM-1/HM-1

3. ARE ANY OF THESE MEMBERS BEING RECOMMENDED INDIVIDUALLY FOR MERITORIOUS ACT IN CONNECTION WITH THIS FIRE? (If Yes - list names)

Rank	Name	Unit	Assigned Unit
NO			

4. LOCATION OF UNIT OPERATIONS:

a) If in building: Address: 111-22 39th Avenue Location of operations C/O 112 St. and 39 Ave.
Height Area Construction Wood Frame
Occupancy Detached Garage Number of apartments in building
Floor(s) 1 Room

b) If not in building: Give complete descriptive information so that physical setting can be recreated.

The 10-75 fire was at the address 111-22 39th Ave. The location of burn off operations was at the intersection of 112 St. and 39th Ave. It was the closest location in which operations could be conducted in a safe manner. The center of the intersection contained no overhead objects and allowed easier control of bystanders. 3 corners of the intersection contained typical 2 story private dwellings the south west corner was a 3 story brick apartments.

5. PERSON(S) AIDED:

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

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6. DESCRIPTION OF UNIT OPERATION:

HM-1 was called to a 10-75 all-hands fire in a garage at the address 111-22 39th Ave. on May 17, 2018. Prior to HM-1's arrival, Squad 288 called the officer of HM-1, (Lt. John Berna) and informed him that numerous 20 lb. propane tanks were involved in a fire, were seriously damaged and three of the tanks were confirmed leaking. Upon arrival HM-1's officer spoke to Battalion 46 (BC Currid) who gave a rundown of the operation. HM-1 entry team (Michael Monaco) and (Robert Salvesen) confirmed that three cylinders were leaking with no way of stopping the leak and was producing flammable readings above the Lower Explosive Limit. Lt. Berna informed the battalion that the cylinders were full and needed to be moved from the rear yard and burned off immediately in a safe area. Due to numerous overhead wires and tree branches on 39th Ave. the only safe area to burn off the cylinders was at the intersection of 112th St. and 39th Ave.

Normal operations would include burning one cylinder at a time, and HM-1 has the ability to burn two cylinders simultaneously if necessary. However, with three full cylinders leaking in a residential neighborhood it was necessary to burn-off all three at the same time. With the department having only two burn-off kits, HM-1 had to get innovative. In consultation with, and under the direction of the HMB (BC Richard Schlueck), Decon FF's (Kevin Chambers) and (Anthony Palminteri) along with back-up FF's (Christopher Lindberg) and (George Baade) set up the two burn-off kits. HM-1 entry team carried the three leaking cylinders from the garage area to the burn-off site, while Squad 288 and Tech Engine 274 began carrying out the remaining cylinders (17 total) lining them up against the curb line. Once the burn-off kits were ready, the cylinders were attached and flaring operations began. Due to a third leaking cylinder HM-1 members decided the best option was to set up a burn drum (Photo). A 55 gallon drum was filled with water, since the leak originated at the valve it was agreed that a relief valve (carried by HM-1) would be attached to the propane valve outlet allowing for a faster burn-off (20-30 minutes compared to 3-4 hours). Once the valve was attached, Lt. Berna, FF Monaco and FF Salvesen donned SCBA, opened the relief valve and submerged the leaking tank into the 55 gallon drum of water. A wooden plank (designed by HM-1) was placed into the drum preventing the cylinder from overturning or floating to the top of the drum. FF Monaco then lit the propane gas emanating from the drum with a road flare attached to a six foot hook. A 1 3/4" hand line had been stretched and charged prior to operations for protection of members.

It was quickly noticed that one of the three cylinders in the flaring operations was not propane. It started to burned with a pale blue flame quickly disappearing to an invisible flame. It was believed that it was probably butane. Butane is used in illegal drug labs which required HM-1's entry team to enter the garage and check for the presence of any precursors that may have been stored in the garage. Due to fire damage it was difficult to determine any illegal activity. FDNY Fire Marshals were notified of this fact.

see next page

7. RECOMMENDATION:

Deputy Chief

Division

Date

During the initial flaring operation it was noticed by FF Lindberg, FF Baade and Resource FF (Aldo Radovic) who were assessing the remaining cylinders; that a fourth and fifth cylinder were leaking and compromised from metal fatigue due to direct flame impingement from the fire. These cylinders were quickly cooled by a garden hose in an attempt to keep the cylinder pressure as low as possible. A sixth cylinder had a valve outlet blocked due to melted debris and upon removal of the debris it began to leak. It was determined that these cylinders would also have to be burned off due to being full with product. Using a scale and calculating the weight of propane they determined that the remaining nine cylinders were empty. They began the job of removing the valves from the empty cylinders so they could be discarded in accordance with local law. The additional three cylinders were burned off, one by a burn-off kit the other two using the burn drum. Though a dangerous operation, due to metal fatigue and a distinct possibility of cylinder failure, it assured constant cooling. A total of 17 cylinders were removed with all but two cylinders heavily damaged by fire. Six cylinders were flared off and nine were examined and deemed safe after the valves were removed.

The members of Hazardous Materials Company 1 who operated at this box displayed team work, advanced knowledge and innovative thinking, under dangerous condition while bringing the incident to a safe and successful conclusion. Due to the training and unique equipment carried by HM-1 it was the only FDNY unit that could have mitigated this incident so seamlessly. It is for these reasons that I respectfully request they be considered for a Unit Citation.

Respectfully,

Lt. John C. Berna
Hazardous Materials Co. 1

