

NATURAL GAS SYSTEM AND LEAK ASSESSMENT

23APR2021

ISSUED BY: CAPT Snell, USPHS

FINDING:

- This is an update to the report submitted on 4/22/21.
- Leaks were in Rooms 110A and 210A.
- COR was working with PIA to coordinate with a local contractor to leak test all units in A&B Wings of the facility.
- RABE Mechanical showed up on Site a 1100.
- DCR Bollinger accompanied RABE mechanical while they did their assessment.
- Two additional leaks were found in fittings in rooms A211 and A212.
- Evaluation for the mechanical rooms of wings C&D revealed that they were once plumbed with gas and the piping still remains. Valve for each wing was turned off and handle removed.
- Evaluation of A wing revealed leaks in rooms A110, A210, A211 and A212.
- Evaluation in Wing B1 revealed 12 leaks in multiple rooms.
- Evaluation of Wing B2 revealed 10 leaks in multiple rooms.
- Roughly 8 other leaks were found in other areas for approximately 30 leaks.
- Gas piping on the roof was evaluated and it consists of a main header pipe that has two tees feeding a PVC drop conduit to serve two rooms one on each floor. Example would be one PVC drop conduit would provide gas to rooms A110 and A210. Supports for the piping are mostly disconnected and laying down.
- Inspection on the roof revealed gas supports were falling off and not supporting the pipe properly. PVC conduits were also found not to be sealed leaving a conduit for rodents or other vectors to enter the living areas.
- Many of these are associate with the way connections were made using flared copper pipe and fittings.
- 1445 RABE informed USPHS staff they were calling in more Staff to assist with fixing the gas system and reported that they had completed leak testing the system.

CORRECTIVE ACTION:

1. At 1445 RABE Mechanical has sent for more staff to join them in correcting leaks found.
2. It is also recommended that the gas piping to Wings C & D be disconnected on the roof and capped to eliminate any possibility of turning the gas back on to those wings.
3. RABE also planned on sealing all roof conduits as these created a direct connection from the roof to the room for rodents or vectors.
4. During RABE Mechanicals evaluation it was noted gas fired furnaces were removed from Wings C&D. Electric units were recommended to be installed as replacement of the space heaters currently being used to make the rooms safer for the occupants.

5. Each unit in Wings A & B has 208 Volt electric service to each gas fired unit so switching to an electric unit in Wings A & B would only entail switching the units out and abandoning the gas system. This would be the recommendation moving forward is this facility is going to be used moving forward. Do to the age and issues with the system this seems like the most logical solution to eliminate the gas fired heating units. RABE Mechanical also stated that more leaks may be crated when modifying system to correct the identified leaks due to the age and condition of the system.
6. The COR was informed of the findings from the leak survey and any recommendations we had.



Gas header piping on the roof and unsealed conduits leading to each room.



Gas valve shut off in Second Floor Mechanical Rooms but still connected to individual rooms.



Gas header pipe on roof with support falling off



Wing C Header Piping



Unsealed Header Pipes