

PROCEDURES

PURGING BAR HOLES

8.0 PURPOSE

Purging is an efficient method of centering. The 2 methods used to purge bar holes of the leak centering patterns are by suction, or venting.

8.1 SCOPE

- A. Bar hole suction method
- B. Venting

8.2 SUCTION METHOD

- A. The suction method should be used on each bar hole for a minimum of 30 seconds. The maximum time will depend on the amount of gas concentration and soil conditions.
- B. The aerators have a 9/64" hole drilled in the gate of the 1/2" valve.
- C. With the valve closed, this 9/64" orifice allows the proper amount of air to pass for maximum vacuum with direct pressure from the compressor.
- D. After the aerator is installed in the bar hole, it may be necessary to clear the 1/4" pipe inlet.
- E. On high-pressure mains, this may be done by simply plugging the outlet of the aerator and turning on the air for an instant.
- F. On Low-pressure mains, the soil sampling device may be used to clear the bar hole before inserting the aerator to prevent clogging.

8.3 Venting

- A. The amount of time the bar holes are left open is dependent on
 - Location of the bar holes,
 - Gas concentration
 - Work routine of the crew
- B. Air Mover

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This practice covers the use of the venturi-type air mover when used for aerating gas concentrations from the ground.

- When a gas leak occurs, it will migrate away from the leakage area in the path of least resistance. Therefore, the placement of the air mover is very important to reverse this migration of gas back to the point of origin and to release gas concentration into the atmosphere.
- Before starting air mover, plug all bar holes in the ground and around the buildings with soil or cold-mix asphalt (where required).

NOTE: The only hole in the ground or escape route for the gas should be at the excavation where the repair was made.

C. 0% Gas Read

- Aerate with the air mover on, with all the bar holes plugged, until 0% gas reads are obtained with a combustible gas indicator adjacent to any structures.
- When a 0% read is achieved, continue aerating, open the bar holes and take reads with a CGI. If the reads are 0% gas, stop aerating and wait approximately one hour and recheck bar holes to determine if additional aeration is required. If additional aeration is required, re-plug the bar holes and continue running the air mover.
- When it has been determined that all leakage is controlled, and hazardous concentrations adjacent to structures have been eliminated, the area can be declared safe. Recheck the next day for buildup of gas concentrations. If buildup is found, repeat aeration procedure.