Bath Township Fire Department			Standard Operating Guideline	
Section **Operations**	**Referral No.** **O-36**	**Subject:** **Explosion Incidents**	**Date Issued** **3/08**	**Date Revised** **3/08**

Purpose:

- To provide guidelines for the proper response and mitigation of explosion incidents.

Scope:

- This standard operating guideline shall apply to all personnel.

Responsibilities:

- Incident Commander
  - Ensure that personnel respond properly.
  - Provide direction based on the Incident Management System.
  - Ensure the safety of all personnel.
- Personnel
  - All personnel have the responsibility of following the direction of Incident Command at an emergency scene.
  - All personnel have the responsibility to wear the proper safety equipment and to operate in a safe manner.

General:

- **Safety is always our first priority**
- Units arriving at the scene of a structural explosion must consider natural gas as a possible cause.
  - Explosions have occurred in structures, which were not served by natural gas.
- Underground leaks may permit gas to travel considerable distances before entering a structure through the foundation, around pipes or through void spaces.
  - In these circumstances, the cause of the explosion may be difficult to determine.
- Until it can be determined that the area is safe from the danger of further explosions, evacuate all civilians and keep the number of fire department and/or other emergency personnel (i.e., gas company personnel) in the area, to the minimum number necessary to stabilize the situation.
  - Take a pessimistic point of view.
- Do not rely on gas odor.
- Use combustible gas indicators to check all suspected areas.
- Both gas company personnel and the Allen County HAZMAT Team have combustible gas indicators for this purpose.
- Check areas systematically using combustible gas indicators.
  - Start outside of the area of the explosion, and move into the area until readings indicate detectable concentration.
  - Map the readings for the affected area.

- If a gas concentration is encountered inside, adjacent to, or underneath any building, secure all possible sources of ignition in the affected area.
- If safe to do so, disconnect electricity from outside the affected area to avoid arcing.
- Ventilate buildings where gas is found with explosion proof equipment only.
  - Natural ventilation is preferred.
- The use of ground probes is essential to evaluate potential underground leaks.
- When gas company personnel are on the scene, ground probe readings and locations must be coordinated.
- Time, location, and concentration should be recorded for each probe--subsequent readings should be taken from same holes when possible.
- Command shall provide for effective interaction between gas company personnel and the fire department.
- Gas company personnel are responsible for locating and eliminating leaks in the gas system.
  - As industry specialists, they can provide Command with valuable assistance in the effective handling of these incidents.
  - In most cases, a company officer with a portable radio will be required to supervise during on-site operations.
- Command must ensure the safety and stability of the structure.
  - If further collapse is possible, the Trench Rescue Team/Heavy Rescue Team should be called to provide shoring, cribbing or other means of stabilizing the structure.