Construction & Utilities Division

Tool box Talk

ATMOSPHERIC CONDITIONS IN TRENCHING AND EXCAVATION

INTRODUCTION

1. Review any incidents or “near misses” from the past week.

2. Describe the hazards of the work as they relate to your project. Explain or show the SAFE way of doing the job.

3. Give the TOOL BOX SAFETY TALK

One hazard associated with excavation and trenching is the possible presence of hazardous atmosphere. A hazardous atmosphere is an atmosphere that by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen-deficient, toxic, or otherwise harmful may cause death, illness, or injury to persons exposed to it. In excavation work,hazardous atmospheres may be generated as toxic gasses and can be released by the digging or accumulate at the bottom of the trench. To help ensure exposure to hazardous atmospheres, take these steps:

- Ensure that the competent person tests the atmosphere in excavations over 4 feet deep if a hazardous atmosphere exists or could reasonably be expected to exist. A hazardous atmosphere could be expected, for example, in excavations in landfill areas, in excavations in areas where hazardous substances are stored nearby, or in excavations near or containing gas pipelines.

- The competent person will conduct testing for atmospheric contaminants before employees enter the trench and on a regular basis to ensure that the trench remains safe.

- If there is welding, cutting or burning done in the trench, testing must be done more frequently. These activities, as well as using fuel powered equipment, can create a toxic or hazardous atmosphere, and could cause fires.

- It may also be necessary to wear the proper respiratory protection in some areas where the oxygen supply is not enough to allow for workers to breathe normally.

- Workers who do use respiratory protection must be trained in its use and properly fit tested.