

number of utilities in the area then hand auguring or excavation must be done careful to avoid these types of problems.



# Northern Division, Naval Facilities Engineering Command

## Abstract of an Accident

ACCIDENT TYPE: EXPLOSION (ELECTRICAL)  
INJURY: NONE  
TYPE OF WORK: DRILLING  
EQUIPMENT: DRILLING RIG

### **DESCRIPTION OF THE ACCIDENT:**

On 15 May 1995, a drilling accident occurred at the Brooklyn Naval Station in the course of the Phase II Environmental Baseline Survey (EBS) field effort being conducted by EA Engineering, Science and Technology (EA) and Hardin-Huber (drilling subcontractor to EA).

On 9 May 1995, the EA field team mobilized at Brooklyn Naval Station to commence the site investigation. The EA field team obtained a site plan showing utility locations in the vicinity of Site 2 at the Brooklyn Naval Station from Jack Mahoney with CSO. Using this site plan together with information gathered from a previous site walk-through, soil boring locations were selected.

On 15 May 1995, the drill rig was set up at Site 2 to begin drilling at the pre-selected location. Drilling than proceeded with caution. A hand auger was advanced to 3.5 ft at which point hand auguring was not possible due to the coarse gravel. At that point the 4.25 inch ID hollow stem auger was advanced to a depth of approximately 5 ft. The drillers were about to add another flight of augers when the incident occurred at approximately 1100 hours. The auger slowing to a stop when a "hissing sound" was heard coming from the hole. Within seconds a flame erupted the hole, at which point the drillers and EA personnel fled the area. Smoke was subsequently observed coming from Building 2 and Building 7 in the vicinity of electrical equipment, and from a manhole near Building 7. Site security personnel were immediately notified and requested to call emergency services. The drilling rig became engulfed in flame and burned until extinguished the NYC Fire Department. The following lessons learned apply:

a. Contractors must not only acquire utility maps but carefully study the maps, survey the area, and using experience select a drilling site. If there are a