

Drum Site (Matthews, NC)

Michael Taylor, On-Scene Coordinator / Region IV:Originally we became aware of this site by the Removal Assessment Team. We came out to do an investigation. We found that the warehouse held approximately 3,000 drums, ethylene glycol waste in steel bottoms. We noted that the drums had been drastically leaking. There was an explosion threat determined so we deemed it removal eligible and time critical removal and begin our actions once we reported back to the removal assessment team.

Narrator: The drums found at the Summit Resource Management site were so closely packed together that they first needed to be moved outside of the warehouse so that sampling and characterization of the waste could begin. The 2 acres available on site offered little room for the drums and the equipment necessary to safely handle them. But meticulously the work began. And although the agency was aware of the type of materials used by the North Carolina firm, the contents of the drums could not be taken for granted.

Michael Taylor, On-Scene Coordinator / Region IV:Originally, we were told 3,000 drums. Once we got into the warehouse we estimated close to 5,000 drums and we have varied waste. Not only ethylene glycol, we have acids and bases, cyanides have been identified. Flammable liquids and solids, peroxides, a variety of wastes. If the sample is multi-layered, which most of these samples are, each layer will be handle as a specific sample and it will be tested as such and run through the same parameters.

Narrator: Each drum on site is marked with 2 adjacent squares. The square on the left indicates the drum's number, with the square with on the right designating the waste compatibility group. On a drum site of this scale, wastes, which are compatible and pose no problem when added together are combined or bulked so that they may be more effectively removed from the site. To group the drums in a timely manner a portable on site laboratory was brought in to identify and categorize each sample collected.

Jim Wild, Chemist: Processing some 100 samples per day, the purpose of this lab is to perform hazcat analysis on the samples coming in, performing such tests as pH, water solubility, water reactivity, screening for PCBs, glycol tests, oxidizer tests, cyanide tests, and the field services group uses this data to form compatibility groups with the drums on site. If the lab wasn't here the people here on site would have to send all these samples to an off site lab and it could take anywhere from 3 to 4 days for them to get their results back, whereas having the lab here, they can get their results back in a day.

Narrator: Like or compatible wastes are processed together. Those liquids and solids are carefully removed from each drum and are transferred to separate bulk chambers where they will be stored until such time as the waste can be transported off site for safe disposal. Field technicians are careful to check that each drum is properly identified and is electrically grounded before beginning any activity. An accident, which could result in a fire or explosion, could be catastrophic at a drum site, especially one this confined.

Drums, which have been safely emptied of their contents, are staged for decontamination. Here each drum is inverted so that a pressurized wash can remove any contaminants that may remain. The wastewater mix is collected in a pool and will be disposed of in the same way as the other bulk liquids. To complete the process the decontaminated drums are crushed and will be transported off site as non-hazardous waste thus making much needed space available for those drums, which have not yet been removed from the warehouse.

Once all the drums are removed there may still be a problem. At the time of the initial investigation, it was discovered that some of the drums had leaked outside the confines of the building and on to the surface soils.

Michael Taylor, On-Scene Coordinator / Region IV: Once we take care of the problem, the immediate threats through removal, we will refer it to remedial project and they will deem further if there is any groundwater contamination and they'll, the state as well will do their assessment. So once we're finished on the removal program, it doesn't mean the site work is completely finished. There may be ongoing operations later through other divisions.