

Industrial Sludge Characterization and Lagoon Closure

Container Manufacturing and Printing Facility, Spartanburg, SC

Site Description

What is currently an undeveloped property had contained industrial wastewater lagoons. The lagoons received wastewater from a container manufacturing and printing facility on the adjoining parcel. The exact number, location and content of the lagoons were unknown. In an effort to develop the site, it was necessary to characterize and properly close out the lagoons.



Rogers & Callcott Services and Results

Review of Historical Information and Field Reconnaissance - Historical aerial photographs and topographic maps were reviewed to identify the approximate location of the lagoons. The information was compared with the location of un-natural topographic features. A Geoprobe® was then used to confirm the nature and limits of the lagoons. The result was a series of maps and 3-D renditions showing the location and dimension of each of the three lagoons identified.

Field Investigation - A detailed level of investigation was necessary to characterize the nature and extent of sludge and any impact it may have had on the underlying soil and groundwater. This rendered conventional investigative techniques unsuitable given the unknown. Therefore, Geoprobe sampling technology was employed, which allowed for maximizing the amount and quality of data obtained with minimum site disturbance. All samples were screened in the field and/or analyzed locally at our fully-certified laboratory.

Results - The project goals were achieved with our client realizing several benefits as a result of the approach taken:

- Complete characterization of sludge, soil and groundwater in one phase resulting in quick project completion and significant cost savings,
- No site disturbance and no sampling waste,
- No monitoring wells installed,
- The presence of our local laboratory and its flexible schedule provided the project with the convenience of a mobile laboratory without sacrificing any of the quality control measures exercised by a fixed-base laboratory.
- The use of publicly available information and our in-house mapping software allowed for generating accurate drawings that can be easily interpreted.