## **Environmental Assessments**

Once an initial decision is made to investigate a site as a potential brownfields issue, an environmental assessment must be conducted. In general, the following process would be typical:

- 1. Determine site goals. This entails specifying what is intended to be accomplished at the site. For example, redevelopment as a commercial or public site, cleanup, etc. With the goals for the site specified, contaminants and contaminant levels acceptable at a site can be determined using existing regulations. It is then possible to identify data collection requirements that support that determination.
- 2. Phase I Environmental Assessment. Given the site goals and acceptable limits of contamination, an initial environmental assessment can be conducted. In this assessment, a records search is performed and the site is visited, but no sampling of soil or groundwater occurs:
  - a. Past owners and uses of the property are identified.
  - b. Available records of hazardous waste disposal at and near the site are investigated.
  - c. Federal and state lists of contaminated sites are searched, including lists of sites contaminated due to the production of controlled substances, (methamphetamine labs, etc).
  - d. Individuals familiar with the site are interviewed.
  - e. A physical or visual examination of the site is conducted, including a general environmental characterization of the site and its environs.
  - f. A determination is made of areas from which samples should be taken and the types of sampling that should be performed should a Phase II Environmental Assessment be required.

Depending on the results of the Phase I assessment, further environmental assessment of the site may not be required. For example, if no records of contamination are found and if the assessment process determines that contaminants at the site are either not likely to be present, or are at acceptable levels given the projected uses of the site, a No Further Action (NFA) document will be issued, giving official affirmation that the site protects human health and the environment for the intended use of the site. This satisfies one of the requirements for landowner liability protections under CERCLA requirements for "appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice", as defined by 42 USC 9601(35) (B).

2. Phase II Environmental Assessment. If, after a Phase I assessment, there is an indication of hazardous material not consistent with the planned use of the site, a Phase II Environmental Assessment should be completed. In this assessment, the purpose is to understand what contaminants are on the site, where they are located, and at what levels they exist. This is accomplished by a combination of field analytical technologies, which test for chemicals on site, and sampling of collected samples at certified laboratories. After completion of a Phase II Environmental Assessment the levels of contaminants are compared to cleanup standards. If the levels are below these standards, remediation (cleanup) may not be necessary and a NFA document may be issued. If contaminant levels at the site are above cleanup levels, remediation may be necessary. In the remediation phase the Phase I and II Environmental Assessments will assist in developing a cleanup plan. As cleanup of the site progresses, further sampling and assessment are required until acceptable contaminant levels are achieved and a NFA document can be issued.