



3.9 SITE INVESTIGATION REPORTS

Accurate and thorough documentation of the sample plan design, sample collection and handling procedures, laboratory analyses, data assessment and a summary of the data collected are crucial to the site investigation. The laboratory selected should adhere to a comprehensive Quality Assurance Plan and SOPs for sample analyses. The HEER Office strongly encourages active communication, including draft report reviews and subsequent meetings or conference calls, to prevent costly remobilizations to collect additional data. The following reports (and major elements) are typically prepared and submitted to the HEER Office for review.

- Sampling and Analysis Plan
 - Sampling design
 - Preliminary conceptual site model
 - Preliminary Site investigation objectives and DQO
 - QAPP
 - Safety and Health Plan
- Site Investigation Report
 - Site History
 - Site Investigation Objectives (including DQO)
 - Selection of Decision Units
 - Identification of information needs
 - Sample collection and analysis methods
 - Summary of analytical results
 - Data assessment
 - Summary of extent and magnitude of contamination
 - Preliminary Environmental Hazard Evaluation
 - Conclusions and recommendations.

Additional guidance on report formats and content is presented in detail in Section 18. The HEER Office requires that the lateral and, as needed, vertical extent of soil and groundwater (and in some cases soil gas) contamination be clearly depicted on to-scale maps and cross sections of the site. Isoconcentration contours tied to Tier 1 EALs should be included where feasible. Where this is not



practical, shading, etc., can be used to depict areas suspected to be contaminated above levels of potential concern. This information is then used in the Environmental Hazard Evaluation to identify specific environmental hazards posed by the identified contamination as well as the specific areas of the site where these hazards are present (see Section 13). The results of the preliminary Environmental Hazard Evaluation may require that additional data be collected at the site (e.g., soil gas data to evaluate potential vapor intrusion concerns) or that additional tests be carried out on existing samples. After all environmental hazards are adequately identified, delineated and evaluated, the final Site Investigation and Environmental Hazard Evaluation reports are used to support and assist in the development of appropriate response actions.

Not all projects will require that formal sampling plans and related reports be submitted prior to initiating site investigation activities; this will vary from site to site and should be discussed with the overseeing project manager in the HEER Office.