
4 TIER 1: EVALUATION/SITE HISTORY

Tier I is a comprehensive analysis of all readily available existing information on the proposed dredging project, including a site history and all previously collected physical, chemical and biological data. The type and amount of information required for a Tier I evaluation will vary according to the size and complexity of the project and the history of the dredging site.

A Tier 1 evaluation is necessary to inform the entire sediment evaluation process. It's not necessarily a long or complex process, but it is vital to determining all further steps for a given sediment evaluation. **Providing the Tier 1 information is the responsibility of the project proponent and needs to be included in the project Sampling and Analysis Plan (SAP).**

4.1 SITE HISTORIES

The history of a project area plays a pivotal role in project evaluation and sampling plan development. The purpose of the site history is to document potential past and present sources of contamination to dredged material proposed for open-water disposal. A site history characterizes known activity at the dredging site, in near-shore areas, and on adjacent properties. It identifies past activities and describes the type of contamination that may have resulted from those activities.

The following outline identifies the type of information that may be necessary in a site history for a large, complicated site. Smaller projects in areas of lower concern will require less information. For most projects, site histories do not need to extend beyond two to three pages. A reasonable effort should be made to obtain relevant data. It is recognized that certain types of data may not be readily available but the effort to obtain it should be documented. Previous characterization and dredging in the area should be referenced and summarized to the extent possible. Emphasis should be placed on activities that have occurred since the last dredging cycle. Identify whether the proposed dredging project is within, or adjacent to, an EPA or Ecology-listed CERCLA, RCRA or MTCA site, and the appropriate site manager (if known). This should include upland sites in parcels adjacent to the in-water work area.

The site history should include all the following information that is applicable to the specific project:

1. A map showing the site's location, layout, storm drainage, outfalls, and special aquatic sites such as eelgrass or wetlands.
2. Current site use.
3. Industrial processes at or near the site (and hazardous substances used/generated).
4. Outfall information, such as type, volume, NPDES data.
5. MTCA-, CERCLA- or site information (including site manager if known), including those on adjacent upland areas (e.g., location of caps, sheet pile containment, use restrictions, etc.).
6. Spill events.
7. History of site ownership and land uses.
8. Adjacent property use, especially those up-gradient or up-current/upstream.
9. Site characteristics that could affect movement of contaminants (e.g. prop wash, ferry traffic).
10. Results of any previous sampling and testing on and around the project site.

4.2 SOURCES OF INFORMATION

There are a wide variety of information sources for site histories. Potential sources include:

1. current and previous property owners
2. aerial photographs (past and present)
3. real estate and Sanborn fire insurance maps
4. zoning, topographic, water resource, and soil maps
5. agency records, such as NPDES permit files, contaminated site lists (state and federal), CERCLA construction completion and long-term monitoring reports, aquatic leases, previous permits, databases, etc.
6. land use records
7. knowledgeable persons at or near the site (managers, employees, adjacent property owners)
8. city atlases (Kroll and Metsker)
9. cleanup databases (<http://www.ecy.wa.gov/cleanup.html>, <http://www.ecy.wa.gov/fs/index.html>, <http://www2.epa.gov/cleanups/cleanups-my-community>).
10. spills databases (<http://www.ecy.wa.gov/programs/spills/incidents/main.html>)

Not all sources are needed for all projects, and the type and extent of sources consulted will vary. Smaller projects and those with less complicated source histories will generally require less documentation but should always include enough information to enable the agencies to adequately address sampling and testing issues. Dredging proponents can contact the Dredged Material Management Office to determine the level of effort required for their specific project. The DMMO will coordinate with the other agencies as necessary to determine project-specific requirements.

4.3 TESTING EXCLUSIONS BASED ON TIER 1 ANALYSIS

Section 404 of the Clean Water Act (CWA) includes provisions for exclusion from testing based on Tier 1 evaluations, as does the Inland Testing Manual guidance document. Exclusions can be made if a Tier 1 evaluation indicates that the dredged material is not considered to be a “carrier of contaminants” (40 CFR 230.60 (b)). Potential exclusion situations occur most commonly “if the dredged material is composed primarily of sand, gravel and/or inert materials; the sediments are from locations far removed from sources of contaminants, or if the sediments are from depths deposited in preindustrial times and have not been exposed to modern sources of pollution” (ITM 1998). Testing may also not be necessary “where the discharge site is adjacent to the excavation site and subject to the same sources of contaminants, and materials at the two sites are substantially similar” (40 CFR 230.60(c)). **All testing exclusions are project –specific and may be subject to other regulatory authorities and guidelines.**

4.4 TIER 1 SUITABILITY DETERMINATIONS

Given the provisions in Section 4.3, the DMMP may issue suitability determinations based on a Tier 1 evaluation alone, or on limited additional testing (see [DMMP 2004b](#)). In these situations enough information is available to make a suitability determination call based on Tier 1 (sections 4.1 and 4.2 above) alone, and no additional testing is required.