

Questionnaire on Field Screening Tools for Sediment Characterization

As a contractor with the Navy Comprehensive Long-Term Environmental Action Navy (CLEAN) and/or Remedial Action Contract (RAC) programs, this questionnaire is being sent to you in order to survey your knowledge or experience (past or current) with tools used for rapid sediment characterization. More specifically, the questionnaire is designed to determine the extent to which field screening tools currently are being used, identify impediments to their use, and identify methods to encourage deployment of these tools.

To complete the questionnaire, please read the brief summary on screening tools on the next page, and then proceed to the questions that follow. Responses may be hand-written or typed. The completed questionnaire form should be returned to NFESC, by mail or FAX:

*Naval Facilities Engineering Service Center
1100 23rd Avenue (Code 413RO)
Port Hueneme, CA 93043
FAX: (805) 982-4304*

The information collected by this survey then will be forwarded to the Naval Facilities Engineering Service Center (NFESC) for evaluation. For more information, please contact NFESC by phone at (805) 982- 4798.

Thank you in advance for your participation--your knowledge and experience will help to ensure that information on cost-saving technologies developed by the Navy is reaching the widest-possible audience.

Background on Rapid Sediment Characterization Tools

Field transportable analytical instruments can help streamline many aspects of an Ecological Risk Assessment (ERA). These tools have been tested and demonstrated at Navy marine sediment sites to identify potential contaminant sources, delineate areas of contamination, fill in information gaps, and assure that samples chosen for certified analyses have the greatest possible impact. The uses of these tools include measuring chemical concentrations, physical characteristics, and biological effects, as shown in the table below.

To determine if field screening tools are appropriate to assess contamination at a given site, several questions should be asked. For example: What are the goals of the investigation? What are the contaminants of concern? What are the action limits? What are the strengths and weaknesses of the analytical methods being considered? Do instrument detection limits meet action limit requirements? What kind of training is available for operating these instruments?

By asking these questions before sampling is started and considering the advantages and disadvantages of different techniques, appropriate decisions can be made on how best to implement an rapid screening technology or suite of technologies to facilitate the ERA process.

Examples of Field Screening Tools Used to Test Marine Sediments

Measurement	Screening Tool	Analytes
<i>Chemical</i>	X-Ray Fluorescence Spectrometry (XRF)	Metals
	UV Fluorescence Spectroscopy (UVF)	PAHs
	Immunoassay	PCBs, pesticides, PAHs
<i>Physical</i>	Laser Particle Scattering	Grain size (% fines)
	IR Moisture Analyzer	Moisture content (%)
<i>Biological</i>	QwikLite/QwikSed Bioassay	Organics (e.g., PAHs), inorganics (e.g., metals)

PAH = polycyclic aromatic hydrocarbons; PCB = polychlorinated biphenyl.

Questionnaire on Field Screening Tools

Name of Respondent:

Organization:

Position:

Phone Number:

E-mail Address:

Part 1: Familiarity with Field Screening Tools

1. Prior to reading this questionnaire, were you familiar with the terms “*field screening*” or “*rapid sediment characterization*?” If no, please indicate your answer, stop here, and return questionnaire. If yes, please indicate your answer, and go onto the next question.

2. Have you ever used any of the field screening tools listed in the background table?
 - a) If you have used field screening tools, please list them here and complete Part 2.

 - b) If you have heard of field screening tools or technologies but have not used them to date, please indicate, and proceed to Part 3.

Part 2: Past and/or Present Use of Field Screening Tools

1. Please describe the field site or type of application you were involved in.

2. Were the field screening instruments bought or leased?

3. To what degree was the application of field screening tools successful? Please describe how well (or how poorly) the field screening tools performed.

4. Would you use the field screening technologies again? Why or why not?

5. Would you recommend the field screening technologies to others? Why or why not?

6. Please add any comments or suggestions that you feel are appropriate.

Part 3: Future Use of Field Screening Tools

1. If you have heard of particular field screening tools or technologies but have not used them to date, please list which the ones you have heard of, and (if applicable) briefly explain the reason(s) why field screening tools were not selected or used (e.g., not applicable to site, attended conference presentation/read the literature, budget restrictions, uncertain whether they would work, regulatory concerns, etc.)

2. Do you have any plans to use field screening technologies in the future? If so, which tools do you plan to use?

3. If you might someday use field screening tools, would you be more likely to buy or rent the equipment? Why?

4. Please add any comments/suggestions:

Thank you again for your time and participation!
