



REPLY TO  
ATTENTION OF:

**DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS  
441 G STREET NW  
WASHINGTON, D.C. 20314-1000**

SEP 24 2008

CECW-I

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Formerly Utilized Sites Remedial Action Program (FUSRAP) Environmental Liabilities Estimating and Reporting Procedures

1. Introduction: This document presents FUSRAP's procedures for estimating and reporting environmental liabilities for inclusion into the Civil Works financial statements.

2. Background:

2.1 Under Public Law 101-576, "Chief Financial Officers Act of 1990" (hereinafter "the CFO Act"), each executive agency shall prepare and submit to the Director of the Office of Management and Budget (OMB) a financial statement for the preceding fiscal year. The CFO Act requires financial statements prepared by an agency be audited by the Inspector General in accordance with applicable generally acceptable government auditing standards and further requires the Inspector General to submit a report to the head of the auditing agency.

2.2 Environmental liabilities are reported in Note 14, "Environmental Liabilities and Environmental Disposal Liabilities," of the Department of Defense (DoD)-wide and the individual Service-wide balance sheets. Contingent liabilities are reported as part of Note 16, "Commitments and Contingencies."

2.3 In 2004, during an Army Audit Agency (AAA) audit of the Civil Works financial statements, it was determined that FUSRAP liabilities should be reported in the USACE Civil Works financial statements because USACE has the responsibility to program, budget, and execute the cleanup of eligible FUSRAP sites even though these sites are subsequently returned to the Department of Energy (DOE) for long-term stewardship. The audit concluded that cost estimates for environmental remediation based on site-specific studies, such as an engineering evaluation/cost analysis (EE/CA) or a remedial investigation/feasibility study (RI/FS), should be included in the financial statement Note 14, while rough order of magnitude estimates that are not based on site-specific data should be included in Note 16. It was further observed, that site-specific data may not be available for all FUSRAP sites from which a reliable total programmatic cost estimate can be developed. Therefore, it may be proper to disclose the existence of the program, the number of sites, the potential range of costs and the cost for characterization efforts needed to develop site specific data in Note 16. As future costs become reasonably estimable, the reported liability should migrate from Note 16 to Note 14.

2.4 Starting in fiscal year 2005, the FUSRAP National Execution Manager began to develop procedures to consistently and accurately report environmental liabilities. As part of this effort, the program worked with personnel in the finance and accounting branch and carefully reviewed all applicable guidance, particularly the Federal Financial Accounting and Auditing Policy Committee's Technical Release 2 entitled: "*Determining Probable and Reasonably Estimable for Environmental Liabilities in the Federal Government.*" (Enclosure 1) This memorandum is the result of this review and lessons learned with the field in developing and reporting liabilities. The procedures documented in this memorandum will be the official process for developing and reporting liabilities for the FUSRAP.

3. Definition of Terms: Relevant definitions can be found in DoD 7000.14-R, Vol. 4, Chapter 13, “*ENVIRONMENTAL AND NONENVIRONMENTAL LIABILITIES.*” A summary of terms important to the FUSRAP environmental liability estimating and reporting process is included below.

3.1 Current Liabilities are liabilities for which the entity expects to outlay the resources within one year of the reporting date. For FUSRAP this is calculated by estimating the yearly expenditures for each project which will include as appropriate, expenditures of any carry-over funds plus the expenditures of current year dollars. It does not include any carry over of obligated or unobligated funds allocated to the project.

3.2 Environmental Liabilities include the estimated amounts for future cleanup of contamination resulting from waste disposal methods, leaks, spills, and other past activities that have created a public health or environmental risk. Neither budget activities nor the availability of funding is a determining factor in recognizing environmental liability. Environmental liability estimates and reporting are mandatory regardless of whether the liability appears in budgets or requires future funding.

3.3 A Measurable Liability is a liability that can be quantified in monetary units that is reasonably estimable with sufficient reliability. It exists when a dollar value can be estimated for the cleanup costs.

3.4 Noncurrent Liabilities are liabilities of an entity for which the outlay of resources (for FUSRAP this means expenditures) will occur beyond one year of the reporting date.

3.5 Recognition means the reporting of a dollar amount on the face of the basic financial statements.

#### 4. FUSRAP Environmental Liability Recognition, Estimating and Reporting Process:

4.1 Environmental Liability Recognition: FUSRAP recognizes an environmental liability for a site after it has been formally added to the Corps FUSRAP cleanup program. This occurs 30 days after the Assistant Secretary of the Army for Civil Works [ASA(CW)] has sent notification through the OMB to Congress that USACE intends to add the specific site to our program for budgeting and execution.

4.2 When a site is added to the program, the responsible district will provide the FUSRAP National Execution Manager and National Account Manager with the estimated cost of all studies (Remedial Investigation [RI] through the signing of the Record of Decision [ROD]). This estimate should include all costs, both in-house and contractual, to reach the ROD. These estimates will be developed based on professional judgment and use standard cost estimating practices, similar to developing an independent government estimate for contracting purposes, and will be reviewed by either the District’s FUSRAP program manager or cost estimator’s supervisor in accordance with standard district practice. This amount represents both the total estimated cost of the project to reach a ROD and the government’s total reasonably estimable environmental liability. Remaining liability will be calculated by subtracting expenditures from the estimate of total liability.

4.3 Should it become obvious to the district project manager that a time-critical or non-time critical removal is required; the district will provide the National FUSRAP Execution Manager and National FUSRAP Account Manager an estimate to prepare the EE/CA report and the Action Memorandum. The estimate will be based on professional judgment and use standard cost estimating practices, similar to developing an independent government estimate for contracting purposes, and will be reviewed by either the FUSRAP program manager or cost estimator’s supervisor in accordance with standard district practice. The estimated cost of the removal action will be based on engineering cost estimates developed by the district’s cost estimators and will be reported as an environmental liability when the draft EE/CA is released to the regulators for comment. Preparation, review and approval of the

removal action estimate needs to be documented. Any changes to the project's remaining cost to complete should be reported immediately to the National FUSRAP Execution Manager and the National FUSRAP Account Manager.

4.4 The estimated cost to perform any required remedial action will be developed by the district during the development of the Feasibility Study (FS). The FS evaluates different remedial scenarios and estimates the costs associated with each. The estimated cost of each scenario shall include both the contractual and in-house costs for the remedial design, remedial action, any required long-term management, and those costs required to return records to DOE and fiscally close out project. These estimates should be engineering estimates prepared by the district's cost estimators. Preparation, review and approval of the removal action estimate needs to be documented. Although the cost of the remedial action in the FS may include long-term management costs associated with the project until the remedy is complete, any long-term management costs that will be incurred after the site is returned to the Department of Energy, should be subtracted out of the total project cost estimate because these costs are not part of the Corps' environmental liability.

4.5 The Corps will recognize the liability for any potential remedial action when it becomes reasonably estimable. For FUSRAP this means the following:

- \* When the draft FS is released to regulators or public for comment - remedial action liability will be recognized as a range and the reported liability will be equal to the low end of the range since at this point no remedy is better than any other.

- \* When the Proposed Plan (PP) is released to the regulators or public for comment - remedial action liability will be recognized as a range and the reported liability will be equal to the preferred alternative minus any future DOE costs.

- \* When the ROD is signed by the Division Commander the remedial action liability will be recognized as the estimated cost of the selected remedy minus any future DOE costs.

4.6 Quarterly updates to remaining FUSRAP environmental liability will be prepared by the National FUSRAP Execution Manager by subtracting the expenditures to date from the district verified environmental liability estimate. The resulting remaining liability estimate will be forwarded to the district project managers by email who will verify the resulting number is correct, identify any new or updated estimates they have for the project based on current site conditions and prices, and send an email back to the National FUSRAP Execution Manager either concurring or providing revisions with comments. The National FUSRAP Execution Manager will then compile the resulting remaining environmental liabilities and submit them to the USACE Directorate of Resource Management point of contact. Enclosure 2 contains the typical spreadsheet used to report the environmental liabilities to the districts and the USACE Directorate of Resource Management point of contact.

4.7 Yearly updates will occur in the December to January timeframe concurrent with the preparation of the Civil Works Budget Justification Sheets. As a minimum, the yearly update must consist of a review of all cost estimates of remaining environmental liability. The cost estimate must be updated or indexed to yield an estimate in current year dollars. The review and update must be documented. The revised estimate should be verified to the National FUSRAP Execution Manager during the second quarter environmental liabilities submission, but in no case later than the third quarter submission.

4.8 Significant changes in the remaining environmental liability due to scope growth, changed field conditions, or prices shall be reported to the National FUSRAP Execution Manager and National FUSRAP Account Manager immediately. These changes will be verified by the district and submitted as part of the next quarterly report submission.

## 5. Roles & Responsibilities:

5.1 The district project manager is responsible for ensuring estimates are provided when required, proper approvals are obtained and documented, and documentation can be found. The district project manager will also be the primary spokesperson for audits and questions related to project specific environmental liability estimates.

5.2 The National FUSRAP Execution Manager is responsible for ensuring division and district FUSRAP personnel are familiar and comply with environmental liability estimating and reporting. The National FUSRAP Execution Manager will initiate the quarterly reporting, obtain responses back from all districts, compile the resulting information and provide the information to the USACE Directorate of Resource Management point of contact in a timely manner. The National Execution Manager will participate in any outside audits of a district's environmental liability estimating and reporting.

6. Recordkeeping: All estimates and reports of FUSRAP environmental liability will be kept for 6 years – 3 months. Project specific estimates and documentation of reviews and approvals will be kept at the district. Program submissions by the National FUSRAP Execution Manager will be kept at HQUSACE.

7. Questions or comments on this policy memorandum can be directed to the National FUSRAP Execution Manager, Ms. Suzanne Beauchamp at (202) 761-4998.

FOR THE COMMANDER:



Gary A. Loew  
Chief, Programs Integration Division  
Director of Civil Works

2 Encl

- 1 - Federal Financial Accounting and Auditing Technical Release 2
- 2 – USACE Future FUSRAP Contingent Environmental Liabilities Worksheet

### DISTRIBUTION:

CDR, USACE, ATTN: CECW-IN (DaCosta)  
 CDR, USACE, ATTN: CEMP-CE (Beauchamp/Hirata)  
 CDR, US ARMY ENGR DIV, GREAT LAKES & OHIO RIVER, ATTN: CELRD-PDM (Church)  
 CDR, US ARMY ENGR DIV, MISSISSIPPI VALLEY, ATTN: CEMVD-PD (Ragan)  
 CDR, US ARMY ENGR DIV, NORTH ATLANTIC, ATTN: CENAD-PD (Orgel)  
 CDR, US ARMY ENGR DIST, BUFFALO, ATTN: CELRB-PM (Karsten)  
 CDR, US ARMY ENGR DIST, PITTSBURGH, ATTN: CELRP-BR-P (Lenart)  
 CDR, US ARMY ENGR DIST, ST. LOUIS, ATTN: CEMVS-PM (Cotner)  
 CDR, US ARMY ENGR DIST, NEW YORK, ATTN: CENAN-PP (Roos/Moore)  
 CDR, US ARMY ENGR DIST, NEW ENGLAND, ATTN: CENAE-PP-E (Otis/Beauchemin)  
 CDR, US ARMY ENGR DIST, PHILADELPHIA, ATTN: CENAP-DP-CW (Bock)  
 CDR, US ARMY ENGR DIST, BALTIMORE, ATTN: CENAB-EN-HN (Fatherly)

CF: CENWO-HX-S (Coats/Clements/Hearty)

**ENCLOSURE 1**

**DETERMINING PROBABLE AND REASONABLY ESTIMABLE**

**FOR**

**ENVIRONMENTAL LIABILITIES IN THE**

**FEDERAL GOVERNMENT**

**FEDERAL FINANCIAL ACCOUNTING AND AUDITING**

**TECHNICAL RELEASE NUMBER 2**

The Accounting and Auditing Policy Committee (AAPC) was organized in May 1997 by the Office of Management and Budget (OMB), the General Accounting Office (GAO), Treasury, the Chief Financial Officers' Council (CFO), and the President's Council on Integrity and Efficiency (PCIE), as a new body to research accounting and auditing issues requiring guidance.

The AAPC serves as a permanent committee sponsored by the Federal Accounting Standards Advisory Board (FASAB). The mission of the FASAB is to recommend accounting standards to the FASAB principals after considering the financial and budgetary information needs of congressional oversight groups, executive agencies, and the needs of other users of Federal financial information.

The AAPC is intended to address issues which arise in implementation which are not specifically or fully discussed in FASAB standards, interpretations of FASAB standards, OMB's Form and Content Bulletin or OMB's Audit Bulletin. The AAPC's guidance on accounting will be cleared by FASAB before a recommendation is forwarded to OMB for publication. The AAPC's guidance on audit issues will be cleared by OMB and GAO before being published by OMB.

The mission of the AAPC is to assist the Federal government in improving financial reporting through the timely identification, discussion, and recommendation of solutions to accounting and auditing issues within the framework of existing authoritative literature.

## INTRODUCTION

Federal agencies are required to recognize a liability when a future outflow or other sacrifice of resources as a result of past transactions or events is "probable" and "reasonably estimable." This technical release is intended to assist federal agencies in determining probable and reasonably estimable liabilities related to their environmental cleanup responsibilities.

Agencies that must deal with environmental contamination should first refer to the hierarchy of accounting standards contained in the current Office of Management and Budget (OMB) Bulletin on "Form and Content of Agency Financial Statements" for guidance. Standards issued by General Accounting Office (GAO) and OMB have precedence over other authoritative guidance for federal entities. This technical release supplements the relevant federal standards, but is not a substitute for and does not take precedence over the standards.

This technical release includes two sections and an appendix. Section 1 will help an agency determine whether its environmental contamination meets the definition of probable (i.e., a future outflow of resources will be required to clean up the containment). Section 2 offers guidance in quantifying an agency's liability for cleanup. Appendix I lists key laws and regulations relating to environmental contamination.

### **SCOPE**

This technical release offers guidance based on *Statements of Federal Financial Accounting Standards* (SFFAS), and draws on information from other literature. The applicable federal standards are:

SFFAS No. 6, *Accounting for Property, Plant, and Equipment*

SFFAS No. 5, *Accounting for Liabilities of the Federal Government*

SFFAS No. 6<sup>1</sup> addresses cleanup costs from federal operations known to result in hazardous waste. SFFAS No. 6 provides guidance when cleanup occurs at the end of the useful life of the property, plant, and equipment (PP&E) or at regular intervals (scheduled phase cleanup) during that life.

SFFAS No. 5, *Accounting for Liabilities of the Federal Government*, applies to all environmental liabilities not specifically covered in SFFAS # 6, including cleanup resulting from accidents or where cleanup is an ongoing part of operations<sup>2</sup>.

---

<sup>1</sup>The recognition and measurement provided in SFFAS #6 are subject to the criteria for recognition of liabilities included in SFFAS #5. That is, liabilities shall be recognized when the following conditions are met:

- a past transaction or event has occurred,
- a future outflow or other sacrifice of resources is probable, and
- the future outflow or sacrifice of resources is measurable.

<sup>2</sup>In the case of cleanup as an ongoing part of operations [i.e., the operation or activity generates hazardous waste that is cleaned up as it is created (e.g., hospitals regularly dispose of hazardous materials)], a liability may not need to be recognized if the need to cleanup and the full cleanup occur in the same reporting period. However, the total cost of cleanup should be recognized in the period the cleanup need arises. Refer to footnote 15 for further information.

TABLE OF CONTENTS

PAGE

Introduction	i
Section 1. Determining "probable" environmental liabilities	1
Section 2. Determining "reasonably estimable" environmental liabilities	6
Appendix I - List of laws and regulations	15



## Section 1

### Determining "Probable" Environmental Liabilities

#### Description of Issue

An agency is required to recognize a liability for environmental cleanup costs as a result of past transactions or events when a future outflow or other sacrifice of resources is probable and reasonably estimable.<sup>3</sup> Concerns have been raised about *when* costs associated with environmental damage meet the probable and reasonably estimable criteria. Probable is related to whether a future outflow will be required.<sup>4</sup> This section addresses only the "probable" part of this requirement; reasonably estimable will be addressed in Section 2.

#### Key Determinants and Positions

Various key factors (tests) must be considered in determining whether a future outflow of resources from a federal agency for environmental cleanup is probable. The factors are:

1. Likely Contamination,
2. Government Related and Legally Liable,
3. Government Acknowledged Financial Responsibility,
- 3a. Monies Appropriated/Transaction Occurred, and
4. No Known Remediation Technology Exists.

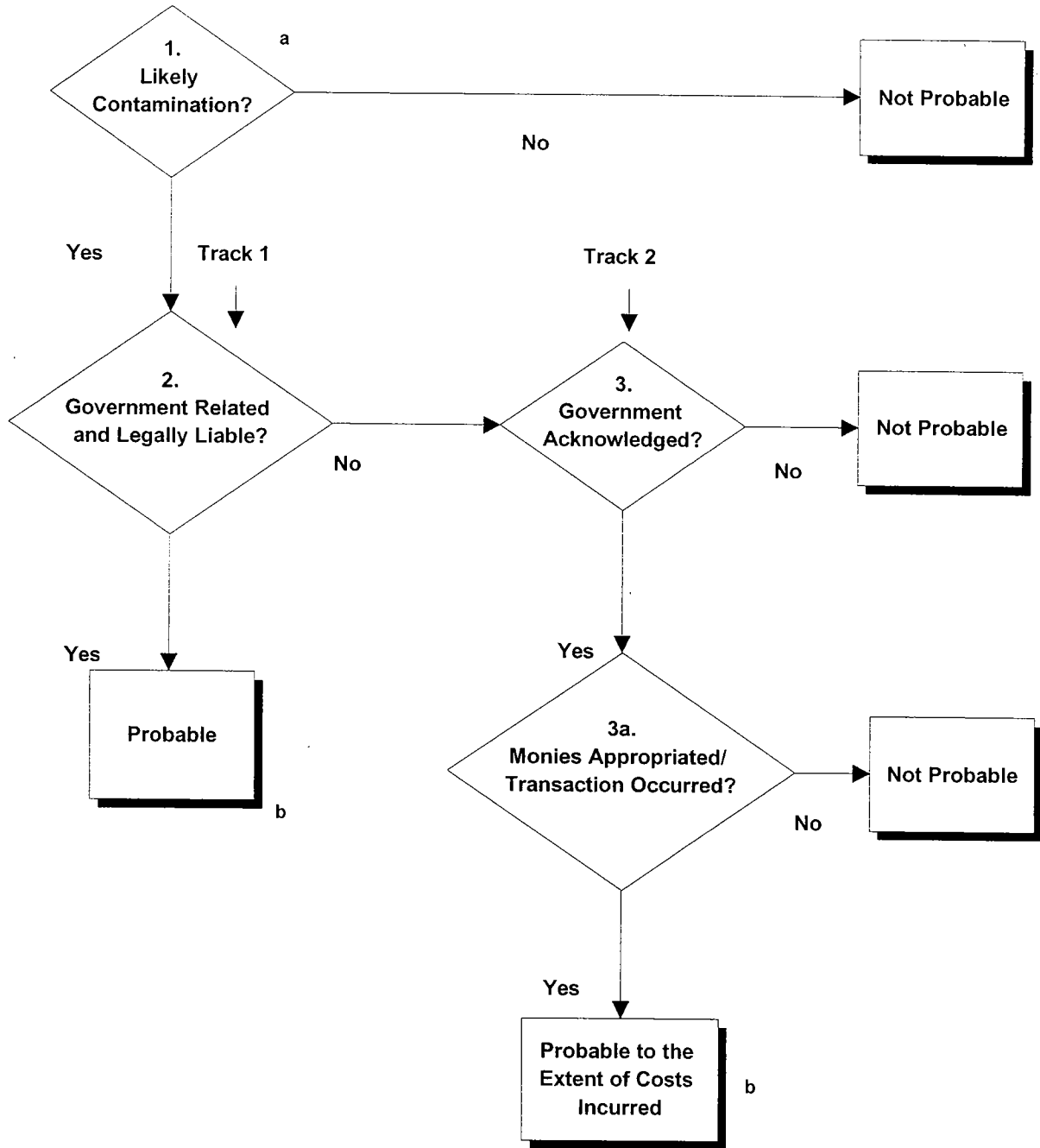
Diagram 1.1 illustrates the above tests. These tests for probability assume that a past transaction or event has occurred (i.e., past or present operation, contribution and/or transportation of waste), and apply to both active and closed sites. A narrative discussion of each of these tests for probability follows on Diagram 1.1.

---

<sup>3</sup>This Release generally discusses "sites" or "contamination" when referring to environmental contamination. However, property, plant and equipment that requires cleanup (because of damaging the environment when being used or at time of disposal) is included in the scope. A further discussion of issues related to PP&E, including recognizing a liability for PP&E already in service, is included in Section 2 under the heading "Guidance for Active Sites."

<sup>4</sup>This Release uses SFFAS No. 5's definition of "probable," which is "more-likely-than-not" (see par. 33 of SFFAS No. 5). This Release applies the contingent liability criteria (i.e., probable, reasonably possible, and remote) from SFFAS No. 5 to all environmental liability estimates, whether or not they meet the criteria (see par. 36 of SFFAS No. 5).

Diagram 1.1: Determination of Probable Environmental Liabilities



<sup>a</sup> See discussion on "due care".

<sup>b</sup> If *no known technology exists*, then it would be probable to the extent of any required study costs, costs associated with containment, or any other monies obligated or spent. However, given that the actual remediation is not feasible, the actual remediation costs would not meet the probable criteria.

Diagram 1.1 shows that there are two primary tracks for determining whether a federal agency's environmental responsibilities meet the probable criterion. The first track is when contamination is known, is related to federal government operations, and represents a legal liability. The second track is when the federal government knows of contamination, and although the contamination is not government related and the government is not legally liable, the government acknowledges financial responsibility for cleanup. For both tracks, if no known technology exists, then the probability criterion is met only to the extent of likely expenditures (e.g., for study costs and containment). A more detailed discussion of the various components of Diagram 1.1 follows.

1. **Likely Contamination:** If the agency has exercised due care in determining the presence of contamination and as a result, believes it is unlikely that contamination (for which it is responsible) exists, then the probability criterion is not met. However, if the relevant agency is aware of contamination, having used the due care criteria (see below), then the agency must determine whether the contamination is government related and the federal government (i.e., the agency) is legally liable.

**Due care** refers to a reasonable effort to identify the presence or likely presence of contamination. Due care is considered to be exercised if an agency has effective policies and procedures in place to routinely attempt to identify contamination and forward that information to the responsible agency official. Procedures that are evidence of the exercise of due care may include, but are not limited to, the following:

- review of recorded chain-of-title documents (including restrictions, covenants and any possible liens) and good faith inquiry and investigation into prior uses of the property;
- investigation of aerial photographs *that are available through government agencies* that may reflect prior uses;
- analyses to estimate the existence of uninvestigated sites based on information from known sites;
- inquiry into records *that are available* from federal, state, and/or local jurisdictions that show whether there has been a release or potential release of hazardous substances on the property (and adjacent property, if suspected contaminators exist);
- visual site inspection of any portions of the property where environmental contamination is likely or suspected, and
- investigation of complaints regarding abnormal health conditions.

2. **Government Related and Legally Liable**<sup>5</sup>: As it relates to environmental damage/contamination, government related events are those where a governmental entity either *caused* contamination (i.e., contribution of waste) or is otherwise related to it in such a way that it is legally liable to clean up the contamination. If the agency believes it is more likely than not that it will be legally liable, then the probability criterion is met.<sup>6</sup>
3. **Government Acknowledged Financial Responsibility**: If environmental contamination is not government related, then the agency, under its statutory programmatic authority, must determine whether it is authorized to formally accept financial responsibility for cleanup.<sup>7</sup> If the government does not accept financial responsibility, then the probability criterion is not met.
- 3a. **Monies Appropriated/Transaction Occurred**: If an agency accepts financial responsibility under No. 3 above,<sup>8</sup> then the agency determines the extent of probability based on appropriation or authorization legislation and whether a transaction has occurred causing another party to expect payment (e.g., contractor has performed cleanup of a site). For example, if the federal government has acknowledged responsibility for cleaning up a site, the cost of which is at \$10 million, and \$2 million has been appropriated but only \$1 million in services have been rendered, probable is only met to the extent of \$1 million. In the case of government acknowledged events, both conditions (i.e., appropriations or authorization and transaction executed) must exist for the probability criterion to be met.
4. **No Known Remediation Technology Exists**: In the case of a government related event, where there is no known technology to clean up a particular site, then known costs, for which the entity is responsible, such as a remedial investigation/feasibility study (RI/FS) and/or costs to contain the contamination, meet the probability test. With no known remediation technology, actual remediation is not feasible and therefore the outflow of resources for remediation is not probable.

---

<sup>5</sup> **Legally liable** is defined, generally, as any duty, obligation or responsibility established by a statute, regulation, or court decision, or where the agency has agreed, in an interagency agreement, settlement agreement, or similar legally binding document, to assume responsibility for cleanup costs. Legal liability should be determined in consultation with the entity's legal counsel. [See American Bar Association's (ABA) Statement of Policy Regarding Lawyers Responses to Auditors' Request for Information (December 1975). Also see American Institute of Certified Public Accountants (AICPA) Professional Standards, Auditing Standards (AU) Section 337C -- source SAS No. 12.]

<sup>6</sup> Federal entities should consider the Environmental Protection Agency's (EPA) National Priorities List [which identifies "potentially responsible parties" (PRP)] when determining probability.

<sup>7</sup> "The Federal government has broad responsibility to provide for the public's general welfare. The Federal government has established programs to fulfill many of the general needs of the public and often assumes responsibilities for which it has no prior legal obligation." Statement of Federal Financial Accounting Standards No. 5, ¶ 30.

<sup>8</sup> This Release does not propose a position regarding environmental contamination caused by natural disasters which may become the responsibility of the Federal Emergency Management Agency's (FEMA).

## SECTION 2

### Determining "Reasonably Estimable" Environmental Liabilities

#### Description of Issue

An agency is required to recognize a liability for environmental cleanup costs resulting from past transactions or events when a future outflow or other sacrifice of resources is probable and reasonably estimable. Concerns have been raised about *when* costs associated with environmental damage meets the probable and reasonably estimable criteria. Reasonably estimable relates to the ability to reliably quantify in monetary terms the outflow of resources that will be required. This section addresses only the "reasonably estimable" part of this requirement; probable was addressed in Section 1.<sup>9</sup>

#### Key Determinants and Positions

Various key factors (tests) should be considered in determining whether future outflows of resources can be reasonably estimated. The factors are:

1. Completion of a Remedial Investigation/Feasibility Study (RI/FS)<sup>10</sup> or other Study,
2. Experience with Similar Site and/or Conditions, and
3. Availability of Remediation Technology.

These tests for reasonably estimable are applied after a transaction or event has occurred that meets the definition of "probable" as discussed in Section 1; tests apply to both active and closed sites. The analysis should consider all significant sites, with the information rolled up into an entitywide estimate. Cost estimates should be based on current technology. Diagram 2.1 on page 7 illustrates the application of these tests. A discussion of each of the three tests follows Diagram 2.1. The discussion concludes with issues related to quantification of the estimate and guidance for active sites. Overall, it must be emphasized that every effort should be made to develop an estimate.

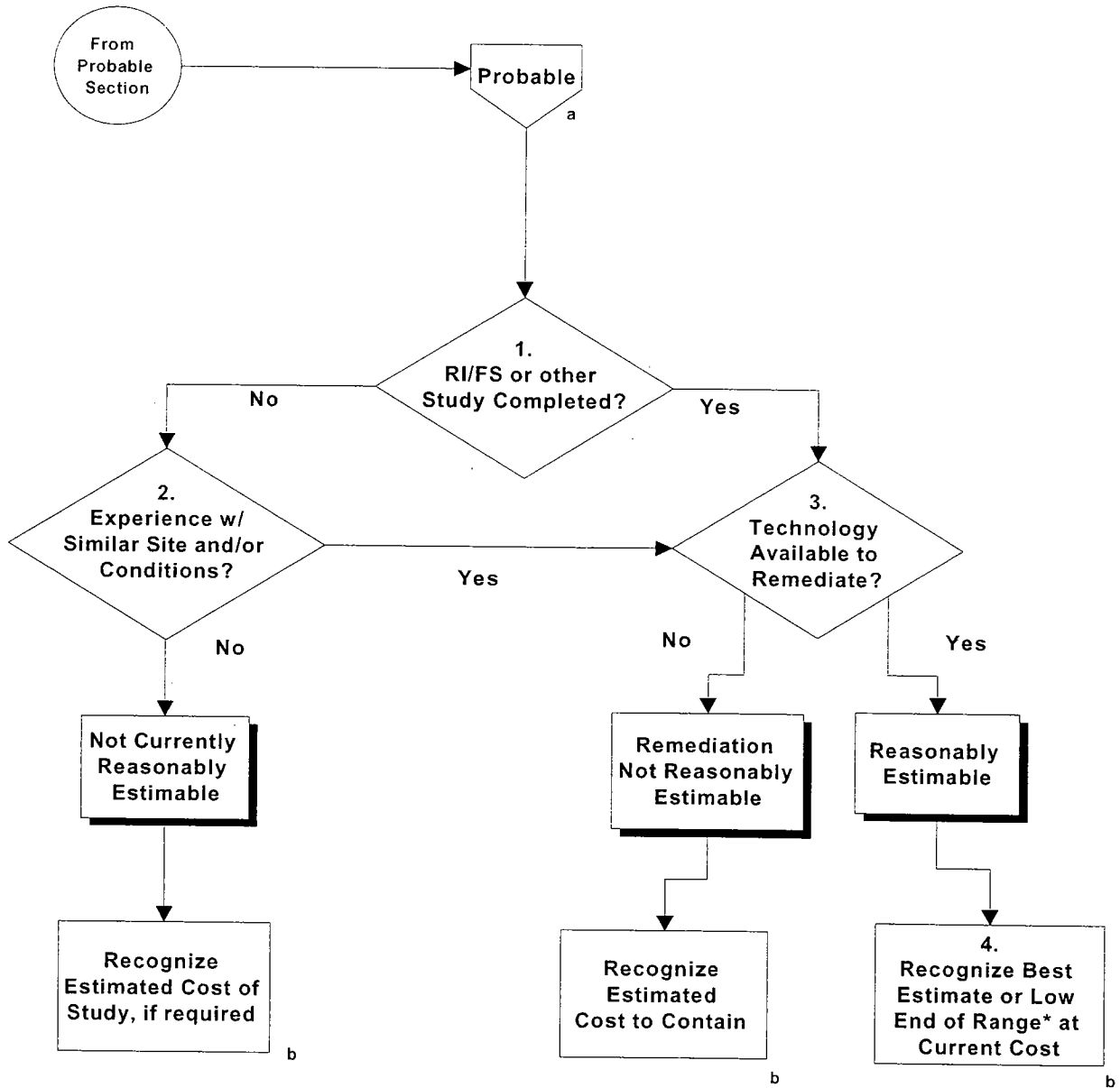
---

<sup>9</sup> Disclosure requirements when the criteria for reasonably estimable are not met are as follows:

- the nature of the environmental damage and
- an estimate of the possible liability, an estimate of the range of the possible liability, or a statement that such an estimate cannot be made.

<sup>10</sup> A remedial investigation/feasibility study (RI/FS) is a comprehensive environmental data collection and site characterization study (RI) that evaluates alternative cleanup actions and recommends one (FS).

Diagram 2.1: Determination and Quantification of Reasonably Estimable Environmental Liabilities



\*Low end of range could be containment, if containment is chosen as the option to be pursued.

a Probable refers to track 1 (government related) which is found in Section 1. Track 2 (government acknowledged) is not applicable.

b With all tracks, see SFFAS #6 par. 107-111 and SFFAS #5 par. 40-42 for disclosure requirements.

Diagram 2.1 begins with the assumption that costs associated with environmental damage has already met the test for probable. This is a direct continuation of the left-side track of Diagram 1.1 on the definition of probable (i.e., the agency has met probable under government related and is legally liable; see Section 1). As it relates to the "probable" second track (i.e., government acknowledged), probable is only met to the extent that monies have been appropriated or authorized (through authorization legislation) and costs have been incurred (e.g., services rendered). In these situations, a definitive dollar figure has already been determined and an estimate is not required. Therefore, the following discussion refers to determining whether something is "reasonably estimable" only as it relates to government related and legally liable.

1. **Completion of RI/FS or other Study:** The first test in determining whether costs are reasonably estimable is to ascertain whether there is a completed study upon which to base an estimate. For example, if a remedial investigation/ feasibility study (RI/FS) has been completed for a particular site, the RI/FS would form the basis upon which to begin estimating the liability.

The fact that an agency does not have a *departmentwide* comprehensive study completed does not exempt an agency from making its best effort to estimate a liability for financial statement purposes, or for recognizing a liability for that portion of its obligation that can be estimated.

If the results of the study indicate that no contamination exists, then probability is not met and the decision process of Diagram 2.1 should be considered complete.

2. **Experience With Similar Site and/or Conditions:** If no study has been completed, the next test is to determine whether a site appears to be similar to any other site or condition where experience has been gained through either a completed study or actual remediation. Similar sites or conditions could be related to other federal entities or private sector corporations. A "site" is defined as a physical place where contamination has occurred. A "location" can be composed of many sites; a site can contain many "conditions." It may be practical for an agency to combine similar conditions or sites into one large site or location.

If there is a similar site or condition with experience gained (through actual cleanup and/or a completed study to compare), the estimate for recognizing a liability for a site could be based on the similar experience or conditions. In addition, the estimated cost of a future study (if required) should be recognized. Future studies could result in improved estimates.

If there is no comparable site and/or condition, remediation costs for a site would not be considered reasonably estimable at that time, but the agency would recognize the anticipated cost of conducting a future study, if required, plus any other identifiable costs.

3. **Availability of Remediation Technology:** Assuming a study has been completed, or an agency or other entity has experience with a similar site and/or condition as noted above, the next test is whether there is technology available to remediate a site. If no remediation technology exists, then remediation costs would not be reasonably estimable, but the agency would be required to recognize the costs to contain the contamination and any other relevant costs, such as costs of future studies.

If technology is available, then remediation costs are reasonably estimable, and the agency would

recognize the best estimate at current cost. If no amount within a range of estimates is a better estimate than any other amount, the minimum amount in the range would be recognized. If the estimate is based on similar site criteria, the agency would also recognize the anticipated cost of its own RI/FS or other study, if required.

In certain instances, the RI/FS or other study may conclude that even though technology *does* exist to remediate, containment should be considered as one of the options by the agency. If the agency has yet to make a decision and they may in fact choose containment rather than remediation, and assuming containment is not precluded by other involved parties (i.e., by EPA, individual states and/or local jurisdictions), the agency would consider the estimated cost of containment when calculating the estimated costs to be recognized or disclosed. The agency would calculate an amount to be recognized based on the type and length of containment required.<sup>11</sup>

If management has not determined what remedial action should be taken for a contaminated *active* site, the cost of containment at the end of the facility's useful life, plus the cost of a study, if not yet done, should be considered as the low end of the range of future estimated cleanup costs.

4. **Quantification of the Estimate:** According to paragraph 39 of the SFFAS No. 5 on contingent liabilities, the estimated liability may be a specific amount or a range of amounts.<sup>12</sup> If some amount within the range is a better estimate than any other amount within the range, that amount is recognized. If no amount within the range is a better estimate than any other amount, the minimum amount in the range is recognized. According to SFFAS No. 6, ¶ 95, estimated costs should be based on the cleanup plan, assuming current technology and current cost.

Changes in environmental liability estimates related to PP&E should be accounted for in accordance with SFFAS No. 6. For general PP&E, SFFAS No. 6 requires that the portion of the re-estimate related to current and prior periods be recognized as an expense in the period of the change. For stewardship PP&E, SFFAS No. 6 requires that the change in estimate be expensed for the incremental costs identified in the reestimate and the liability adjusted in the period of the change.

Where an agency is one of several potentially responsible parties (PRP's) under CERCLA and management has determined that more likely than not the agency is legally liable, the agency should include an estimated liability for its:

- (1) allocable share of the liability for a specific site, and

---

<sup>11</sup>RCRA (Resource Conservation and Recovery Act) regulations require owners of hazardous waste disposal facilities to implement post-closure maintenance and monitoring activities for a minimum of 30 years. When developing estimates of these operation and maintenance (O&M) costs, EPA generally assumes that O&M activities will be required for 30 years. In most instances, containment costs should be determined on the basis of a minimum of 30 years. It would be expected that in the case of nuclear contamination, different tri-party agreements, technical problems, or other circumstances may lead to the use of a substantially longer time frame than for typical RCRA or CERCLA (Comprehensive Environmental Response Compensation and Liability Act of 1980) sites.

<sup>12</sup>This Release uses SFFAS No. 5's definition of "probable," which is "more-likely-than-not" (see par. 33 of SFFAS No. 5). This Release applies the contingent liability criteria (i.e., probable, reasonably possible, and remote) from SFFAS No. 5 to all environmental liability estimates, whether or not they meet the criteria (see par. 36 of SFFAS No. 5).



(2) share of amounts related to the site that will not be paid by other PRP's.<sup>13</sup>

If an agency shares responsibility with nongovernmental PRP's for a government related event, the agency should recognize the share that management believes it is more likely than not the agency is legally liable for.<sup>14</sup> Where the federal government shares responsibility with nongovernmental PRP's and agency management has decided to accept the nongovernmental PRP's share of the responsibility for the damage (i.e., a government acknowledged event), the agency would *also* recognize a liability for the PRP's share once the criteria of appropriation or authorization legislation and a transaction have occurred, causing another party to expect payment (e.g., contractor has performed site cleanup).

---

<sup>13</sup> AICPA Statement of Position (SOP) 96-1, *Environmental Remediation Liabilities*, page 43 par. 6.2.

<sup>14</sup> If management determines that an agency should assume responsibility for a portion of another PRP's share of the liability, the agency may recognize a receivable from the other PRP when the federal entity establishes a claim to cash or other assets against the other PRP based on the related legal provisions (i.e., a legal instrument, such as a settlement agreement, or other objective, verifiable information). Losses on receivables should be recognized when it is more likely than not that the receivables will not be collected in total.

## Guidance for Active Sites

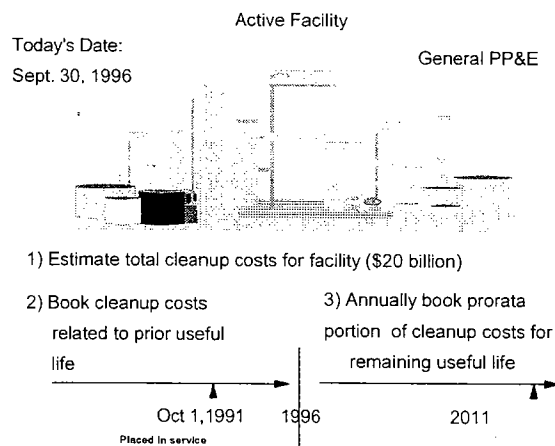
Thus far, this technical release has dealt with costs for *past* environmental contamination of property, plant, and equipment (PP&E) related to active and closed sites. In addition, SFFAS No. 6 outlines accounting treatment for *future* environmental contamination of PP&E at active sites. The following shows how environmental cleanup costs<sup>15</sup> for active sites should be recognized for general and stewardship PP&E under SFFAS No. 6.

### General PP&E

There are two implementation methods for general PP&E in service at the effective date of the standard. Under the first method, the agency would estimate the total cleanup costs (based on current cost to perform the cleanup<sup>16</sup>) that will be required at the end of the PP&E's useful life. The agency would recognize the estimated cost as a prior period adjustment for the portion of the total estimated cleanup costs related to that portion of the *PP&E's useful life that has already expired*.

To illustrate, assume implementation of SFFAS No. 6 on October 1, 1996. Using the illustration to the right, and assuming a facility was placed in service at the beginning of fiscal year 1992 with a 20-year useful life, the agency would first estimate the total costs (based on current cost) required to clean up the contaminated facility at the presumed plant closure at the end of fiscal year 2011 (\$20 billion). From that estimate (as of October 1, 1996), the amount that relates to that portion of the PP&E's useful life that has already expired (4/20 of \$20 billion, or \$4 billion) would be charged to net position and the fiscal year 1996 prorata portion would be charged to expense.

Beginning with fiscal year 1997, the agency would annually recognize a prorata portion of the estimated total cleanup costs based on the remaining useful life of the subject PP&E. In our example, for fiscal year 1997, for this plant (with an estimated remaining useful life of 15 years), the agency would recognize 1/15 of the total estimated remaining cleanup cost of \$15 billion, or \$1 billion. The probable criterion was met under Diagram 1.1 once the PP&E was placed in service. The reasonably estimable criterion was met with the agency's development of an overall estimate of total cleanup costs using the process indicated in Diagram 2.1. Consequently, each years' allocation of cleanup costs is both probable and reasonably estimable, thus requiring the agency to recognize a liability. The allocation method used for cleanup costs, as described above, is similar to depreciation of general PP&E.



<sup>15</sup> Costs referred to in this section are for decontamination and decommissioning (D&D) only, not operating costs. D&D costs are those incurred after plants or equipment become inactive and require cleanup. Operating costs are period costs that flow through the *Statement of Operations and Changes in Net Position*. A liability is not recognized for operating costs.

<sup>16</sup> Current cost should be based on existing laws, technology and management plans (SFFAS No.6, paragraph 188).

**ENCLOSURE 2 - EXAMPLE WORKSHEET**  
**Fiscal Year: 2008 -- 2nd Quarter**  
**USACE Future FUSRAP Contingent Environmental Liabilities**  
**Environmental Event Checklist Ledger**

Revision Date: 10-Apr-08

Classification		Project Site	State	Estimated Remaining Liability as of 1 Oct 2007 In 1,000	FY 2008 thru 31 Mar 2008 Expenditures In 1,000	Remaining Liability as of 31 Mar 2008 In 1,000	Estimated Current Liability as of 1 Oct 2007 In 1,000	Remaining Current Liability as of 31 Mar 2008 In 1,000	Completion Date	Remarks
*** Remote	** Probable									
	X	Ashtand 1 Site Remediation	NY	\$447.5	\$0.0	\$447.5	\$50.0	\$50.0		
	X	Colonie Interim Storage Site Groundwater Remediation	NY	TBD					NA	
	X	Colonie Interim Storage Site Groundwater Study	NY	\$7,287.2	\$44.9	\$7,242.3	\$500.0	\$455.1		
	X	Colonie Interim Storage Site Soils Remediation	NY	\$1,980.5	\$803.6	\$1,176.9	\$1,980.5	\$1,176.9		Unexpended carry-in
X		Combustion Engineering Site Remediation	CT	NA					NA	Site is now being remediated by landowner. No program costs anticipated.
	X	Combustion Engineering Site Study	CT	\$82.8	\$12.4	\$70.4	\$10.0	-\$2.4		Remaining estimate for project oversight and closeout after landowner's remediation was verified via email from M. Otis dated 9/27/07.
	X	Dupont Chambers Works Site Remediation	NJ	TBD					NA	
	X	Dupont Chambers Works Site Study	NJ	\$1,435.9	\$481.8	\$954.1	\$1,000.0	\$518.2		
	X	Gulert Specialty Steel Site Remediation	NY	TBD					NA	
	X	Gulert Specialty Steel Site Study	NY	\$7,425.3	\$1,688.6	\$5,736.7	\$3,125.0	\$1,436.4		
	X	Harshaw Chemical Co Site Remediation	OH	TBD					NA	
	X	Harshaw Chemical Co Site Study	OH	\$3,518.1	\$605.2	\$2,912.9	\$2,486.0	\$1,880.8		
	X	Iowa Army Ammunition Plant FUSRAP Site Remediation	MO	TBD					NA	
	X	Iowa Army Ammunition Plant FUSRAP Site Study	MO	\$2,213.3	\$356.6	\$1,856.7	\$700.0	\$343.4		
X		Joslyn Manufacturing	IN	NA					NA	
	X	Latty Avenue Properties Site Remediation	MO	\$103,716.7	\$7,534.3	\$96,182.4	\$15,000.0	\$7,465.7		
	X	Linde Air Products Site Ground Water Remediation	NY	\$0.0		\$0.0			Jan-07	No Action Required ROD Signed
	X	Linde Air Products Site Studies	NY	\$129.3	\$83.4	\$45.9	\$129.3	\$45.9		No Action PP for Tonawanda Landfill area. Costs for ROD contract closeout and records review/return Remaining liability verified by email J. Karsten 10/11/07
	X	Linde Air Products Site Soils Remediation	NY	\$66,100.0	\$10,647.2	\$45,452.8	\$31,024.0	\$20,376.8		
	X	Luckey Site Ground Water Remediation	OH	\$50.0		\$50.0			NA	Monitoring for two years. ROD is in draft.
	X	Luckey Site Ground Water Study	OH	\$549.3	\$125.5	\$423.8	\$400.0	\$274.5		
	X	Luckey Site Soils Remediation	OH	\$41,907.3		\$41,907.3				
	X	Maywood Site Groundwater Remediation	NJ	\$8,956.0		\$8,956.0			NA	From PP released to regulators dated Sep 2007
	X	Maywood Site Groundwater Study	NJ	\$750.0	\$59.5	\$690.5	\$400.0	\$340.5		Cost for remediation inadvertently placed on this line item previously.
	X	Maywood Site Soils Remediation	NJ	\$140,743.4	\$12,713.1	\$543,000.0	\$29,600.0	\$16,866.9		New estimate based upon current field
	X	Middlesex Sampling Plant Groundwater Remediation	NJ	TBD					NA	
	X	Middlesex Sampling Plant Groundwater Study	NJ	\$1,000.0	\$166.7	\$833.3	\$750.0	\$583.3		New estimate based on current field conditions and project status. From J. Moore dated 5 Nov 07
	X	Middlesex Sampling Plant Soils Remediation	NJ	\$10,000.0	\$5,738.5	\$4,261.5	\$10,000.0	\$4,261.5		New estimate based on current field conditions (increased soil volumes) and project status. From J. Moore 10/11/2007. Written estimate from A. Roos dated 5 Nov 07
	X	Niagara Falls Interim Storage Site Remediation	NY	TBD					NA	
	X	Niagara Falls Interim Storage Site Study	NY	\$10,385.5	\$515.3	\$9,870.2	\$3,669.0	\$3,153.7		

Classification		** Reasonably Estimable	Project Site	State	Estimated Remaining Liability as of Oct 2007 In 1,000	FY 2008 thru 31 Mar 2008 Expenditures In 1,000	Remaining Liability as of 31 Mar 2008 In 1,000	Estimated Remaining Liability as of 1 Oct 2007 In 1,000	Remaining Current Liability as of 31 Mar 2008 In 1,000	Completion Date	Remarks
*** Remote	* Probable										
	X	X	Painesville Site Remediation	OH	\$9,103.0	\$4,835.6	\$23,267.4	\$9,103.0	\$7,267.4		New estimate base on current field conditions. Increase is due to increased soil volumes to be cleaned up. In process of reprogramming monies for this year. Email from Karsten dated 4/8/08 and phone call 4/10/08.
X			Scioto Laboratory	OH	NA					NA	Paper work being prepared to exclude project from program. - 4/2/08
	X		Seaway Industrial Park Site Remediation	NY	\$30,000.0		\$30,000.0		\$0.0	NA	Updated amount based on draft FS responses. Email from Karsten dated 2 Nov 07
	X	X	Seaway Industrial Park Site Study	NY	\$642.9	\$1,496.6	\$493.3	\$400.0	\$250.4		
	X	X	Shallow Land Disposal Area (SLDA) Remediation	PA	\$50,820.0		\$50,820.0		\$0.0		
	X	X	Shallow Land Disposal Area (SLDA) Study	PA	\$1,260.0	\$32.8	\$87.2	\$1,250.0	\$87.2		NEW ESTIMATE IN DEC 2007
	X	X	Shpack Landfill Site Remediation	MA	\$25,824.0	\$4,275.3	\$21,548.7	\$10,000.0	\$5,724.7		NEW ESTIMATE IN DEC 2007
	X	X	SLAPS Vicinity Properties Site Remediation	MO	\$58,565.3	\$3,221.7	\$55,343.6	\$7,000.0	\$3,778.3		
	X	X	St. Louis Airport Site (SLAPS) Site Remediation	MO	\$8,946.1	\$296.1	\$8,650.0	\$500.0	\$203.9		
	X	X	St. Louis Downtown Site (SLDS) Accessible Soils Remediation	MO	\$59,499.4	\$6,765.7	\$52,733.7	\$17,690.6	\$10,924.9		
	X	X	St. Louis Downtown Site (SLDS) Inaccessible Soils Remediation	MO	TBD					NA	
	X	X	St. Louis Downtown Site (SLDS) Inaccessible Soils Study	MO	\$2,940.0	\$39.4	\$2,900.6	\$309.4	\$270.0		
	X	X	Superior Steel Site - Remediation	PA	NA					NA	
	X	X	Superior Steel Site - Study	PA	NA		\$7,225.0			NA	Site formally added to program in Feb 2008
	X	X	Sylvania Coming Plant Site Remediation	NY	TBD					NA	
	X	X	Sylvania Coming Plant Site Study	NY	\$14,825.6	\$866.2	\$13,959.4	\$1,500.0	\$633.8		New estimate to include estimated cost thru RCOD from A. Roos dated 5 Nov 07
	X	X	WR Grace Curtis Bay Building 23 Site Remediation	MD	\$3,330.0		\$3,330.0				
	X	X	WR Grace Curtis Bay Site Radioactive Waste Disposal Area Remediation	MD	TBD					NA	
	X	X	WR Grace Curtis Bay Site Radioactive Waste Disposal Area Study	MD	\$957.4	\$210.9	\$746.5	\$750.0	\$539.1		
			<b>Total</b>		\$637,872.1	\$62,919.9	\$1,043,866.6	\$149,326.8	\$89,706.9		

Classification	Defined	Tests	
		Probable	Remote
*	A future outflow of resources is required.	1. Likely Contamination. 2. Government Related and legally Liable. 3. Government Acknowledged Financial Responsibility. 4. Monies Appropriated / Transactions Occurred 5. No Known Remediation Technology Exists	
**	Ability to reliably quantify monetarily the outflow of resources required.	1. Completion of a Remedial Investigation / Feasibility Study or other study. 2. Experience with Similar Site and / or Conditions. 3. Availability of Remediation Technology	
***	Little or no chance of future outflow of resources.	Determined by Probable and Reasonable estimatable tests.	

Classification	Reasonably Estimable	Not Reasonably Estimable	
		Liability is measured and reported in Note 14	Contingency is disclosed in Note 16
Probable		Liability is measured and reported in Note 14	Contingency is disclosed in Note 16
Reasonably Estimable		Liability is measured and reported in Note 14	Contingency is disclosed in Note 16
Remote		Not Disclosed in Footnotes	Not Disclosed in Footnotes

Note: Further instruction can be found in the FASAB Technical Release Number 2 which can be found at the following website:  
<http://www.fasab.gov/aspc/aspcr2.pdf>