MEMORANDUM FOR ASSISTANT SECRETARY OF DEFENSE (LOGISTICS AND MATERIEL READINESS)
ASSISTANT SECRETARIES OF THE MILITARY DEPARTMENTS (FINANCIAL MANAGEMENT AND COMPTROLLER)
ASSISTANT SECRETARY OF THE ARMY (INSTALLATIONS, ENERGY AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE NAVY (ENERGY, INSTALLATIONS AND ENVIRONMENT)
ASSISTANT SECRETARY OF THE AIR FORCE (INSTALLATIONS, ENVIRONMENT AND ENERGY)
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES
DIRECTOR, ACQUISITION RESOURCES AND ANALYSIS
DIRECTOR, DEFENSE PROCUREMENT AND ACQUISITION POLICY

SUBJECT: Strategy for Environmental & Disposal Liabilities Audit Readiness

Effective immediately, this memorandum establishes a Department-wide strategy for achieving audit readiness for Environmental and Disposal Liabilities, developed through the combined efforts of DoD’s environmental and financial communities. Appendices to the attached strategy contain frequently asked questions, definitions, a decision tree, and relevant provisions of the policy that will be incorporated into the next update of the Department of Defense Financial Management Regulation, Volume 4, Chapter 13, “Environmental Liabilities.”

Our points of contact for this subject are Mr. Brian A. Sykes of the Office of the Under Secretary of Defense (Comptroller) and Ms. Patricia Huheey of the Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics. Reach Mr. Sykes at 703-695-5902 or brian.a.sykes4.civ@mail.mil and Ms. Huheey at 571-372-7548 or patricia.e.huheey.civ@mail.mil.

Mark E. Easton
Deputy Chief Financial Officer
Office of the Under Secretary of Defense (Comptroller)

John Conger
Performing the Duties of the Assistant Secretary of Defense (Energy, Installations and Environment)
Office of the Under Secretary of Defense for Acquisition, Technology and Logistics

Attachment:
As stated

cc:
Deputy Chief Management Officer
Deputy Inspector General for Auditing, DoD Office of Inspector General
I. INTRODUCTION

Objective

The objective of this document is to provide a Department of Defense (DoD)-wide Environmental and Disposal Liabilities (E&DL) audit readiness strategy that meets the following three criteria in descending order of importance:

1) Is compliant with Generally Accepted Accounting Principles (GAAP);
2) Is cost and time effective; and
3) Can be implemented consistently across the DoD.

Selected sections of the document will be incorporated into a revision of Department of Defense Financial Management Regulation (DoD FMR) Volume 4, Chapter 13. Please refer to Appendix D for the sections that will be updated in a future release of DoD FMR Volume 4, Chapter 13.

Background

E&DL that meet the criteria for financial reporting in accordance with GAAP shall be recorded on the DoD financial statements within the E&DL line on the Balance Sheet and as E&DL within Note 14 of the financial statements. The April 2015 Financial Improvement and Audit Readiness (FIAR) Guidance establishes E&DL as a key component of Wave 4 – Full Financial Statements Audit.

The Office of the Under Secretary of Defense (Comptroller) (OUSD(C)) FIAR Directorate and the Office of the Assistant Secretary of Defense (Energy, Installations and Environment) (OASD(EI&E)) have collaborated with DoD Components to establish the E&DL audit readiness strategy outlined below.

Applicable Accounting and Reporting Requirements/Guidance

- Statement of Federal Financial Accounting Standards (SFFAS) No. 1, Accounting for Selected Assets and Liabilities
- SFFAS No. 5, Accounting for Liabilities of the Federal Government
- SFFAS No. 6, Accounting for Property, Plant, and Equipment
- SFFAS No. 23, Eliminating the Category National Defense Property, Plant, and Equipment
• Office of Management and Budget (OMB) Circular No. A-123, *Management’s Responsibility for Internal Control*
• OMB Circular No. A-136, *Financial Reporting Requirements*
• DoD 7000.14-R, also known as the DoD Financial Management Regulation (FMR), Volume 4, Chapter 13, *Environmental Liabilities*
• DoD FMR, Volume 6B, Chapter 10, *Notes to the Financial Statements*
• DoD Directive 5015.2, *DoD Records Management Program*
• DoD Directive 5530.3, *International Agreements*
• DoD Instruction (DoDI) 4165.14, *Real Property Inventory (RPI) and Forecasting*
• DoDI 4715.05, *Environmental Compliance at Installations Outside the United States*
• DoDI 4715.07, *Defense Environmental Restoration Program (DERP)*
• DoDI 4715.08, *Remediation of Environmental Contamination Outside the United States*
• DoDI 5000.61, *DoD Modeling and Simulation (M&S) Verification, Validation, and Accreditation (VV&A)*
• DoDI 5000.64, *Accountability and Management of DoD Equipment and Other Accountable Property*
• DoD Manual (DoDM) 4715.20, *Defense Environmental Restoration Program (DERP) Management*
• *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)*
• *Solid Waste Disposal Act*, also known as the *Resource Conservation and Recovery Act (RCRA)*

**Scope**

DoD E&DL are future outflows or expenditures of resources that exist as of the financial reporting date for environmental cleanup, closure, and/or disposal costs resulting from past transactions or events. A DoD environmental liability exists when: 1) contamination is present or likely to be present; 2) environmental cleanup, closure, and/or disposal is required by applicable federal, state, interstate, or local requirements or an authorized legal agreement such
as a lease, contract, or international agreement; and 3) DoD activities created the liability and/or an authorized legal agreement establishes DoD as the responsible entity. There are two basic types of environmental liabilities: 1) event-driven liabilities are caused by release of contamination to the environmental that will require future cleanup; and 2) asset-driven liabilities are the environmental costs associated with disposal of an asset. DoD E&DL is reported under five primary categories:

1) Accrued Environmental Restoration Liabilities;
2) Other Accrued Environmental Liabilities - Non-BRAC;
3) Base Realignment and Closure;
4) Environmental Disposal for Military Equipment/Weapons Programs*; and
5) Chemical Weapons Disposal Program*.

*Note: The categories referenced, including Environmental Disposal for Military Equipment/Weapons Programs (ME/WP) and Chemical Weapons Disposal Program, are derived from the current descriptions included in DoD FMR Volume 6B, Chapter 10, which outlines details currently reported under Note 14 of DoD Component financial statements. Changes are currently being proposed for the next FMR update.

II. E&DL FINANCIAL STATEMENT ASSERTIONS

Financial statement assertions are management representations embodied in financial statement components. The Government Accountability Office (GAO) Financial Audit Manual (FAM) classifies assertions in the following five broad categories: 1) Existence or Occurrence; 2) Completeness; 3) Rights and Obligations; 4) Accuracy/Valuation or Allocation; and 5) Presentation and Disclosure. Much of the auditor’s work in forming an opinion on the financial statements consists of obtaining and evaluating sufficient evidence supporting the assertions in the financial statements. There are five management assertions that must be addressed in the DoD’s audit readiness efforts with respect to the E&DL balance. Each of the five financial statement assertions are discussed in the following sections of this document along with the course of action to be followed to bring DoD’s E&DL balance to an auditable state. Further discussion of each financial statement assertion, as well as relevant risks, financial reporting objectives, and outcomes can be found in the April 2015 FIAR Guidance.

1. Existence

2015 FIAR Guidance 5.D.1.9: Recorded Environmental and Disposal Liabilities are valid, pertain to the reporting entity, and represent legal costs incurred by the reporting entity.

For E&DL balances, DoD Components must be able to provide evidence that all E&DL balances reported within their general ledger and on their financial statements exist and represent a probable future liability. Evidence of existence for E&DL could include notice by a regulatory authority, confirmation of a new Defense Environmental Restoration Program (DERP) cleanup
site, contracts, authorized legal agreements with host nations or between DoD Components combined with decision by appropriate authorities, interpretation and implementation of an existing policy or regulation, General Property, Plant, and Equipment (GPP&E) asset records for General Equipment (GE) containing future E&DL along with survey results of hazardous waste considered to be ‘non-routine’ in accordance with Technical Release 11. DoD Components must ensure that they have sufficient evidence to support the existence of E&DL included in their financial statements.

2. Completeness

April 2015 FIAR Guidance 5.D.1.9: All valid Environmental and Disposal Liabilities are recorded, are properly allocated across reporting periods and are properly summarized in the financial statements.

Establishing a complete and current site universe of E&DL is the recommended first step for ensuring completeness (i.e., baseline), and will be required for long term sustainment. Establishing a baseline, if done correctly, could be a one-time event. Once established, DoD Components shall rely upon established procedures to maintain their E&DL universe. An initial approach to establishing and maintaining a current E&DL universe is described in the current version of DoD FMR Volume 4, Chapter 13. The current approach requires reconciliation of GPP&E assets to E&DL records. However, the current DoD FMR policy does not include all the steps and activities that may be necessary to establish and maintain completeness over all types of E&DL records. Therefore, to establish their baseline, DoD Components shall follow at least one (or some combination) of the approaches outlined below (as applicable for the E&DL considered):

1) Reconcile GPP&E asset records maintained in Accountable Property Systems of Record (APSRs) with E&DL records in environmental databases of record.

2) Produce evidence of the performance of a historical fence-to-fence survey focused on identifying and recording E&DL and recent efforts to maintain currency over initial survey findings.

3) Reconcile E&DL records with other appropriate source lists.

After an initial baseline has been established, DoD Components shall maintain site universes by using the techniques outlined below:

1) For asset-driven and event-driven liabilities, leverage GPP&E asset acquisition and disposal processes/systems to routinely update the established baseline.

2) For event-driven liabilities, document and adhere to standard operating procedures for responding to typical site addition processes (e.g. spill programs, environmental surveys).
3) For event-driven liabilities, document and adhere to standard operating procedures for removing future cost estimates when remediation requirements have been met and no additional future liability exists.

When implementing this guidance, DoD Components shall:

- Establish E&DL universe baselines for event-driven environmental liabilities. In these instances, it is important that DoD Components define the history, timeline, and activities employed in the surveys to demonstrate that a due care approach was taken, in accordance with Technical Release 2, to establish an initial baseline and that there are sufficient procedures in place to maintain currency over the baseline. Documentation shall be readily available to support the baseline, allowing auditors to verify the completeness of established cleanup site universes.

- Establish E&DL universe baselines for asset-driven environmental disposal liabilities. DoD Components could rely more heavily upon GPP&E asset universes to identify relevant E&DL. If only a subset of the GPP&E asset universe is applicable to a given E&DL subcategory, DoD Components could begin by considering the entire GPP&E asset universe and demonstrate why individual subcategories are not applicable in accordance with the requirements and guidelines referenced in this memorandum.

3. Rights and Obligations

**April 2015 FIAR Guidance 5.D.1.9:** Recorded Environmental and Disposal Liabilities are the reporting entity’s obligations at a given date.

The DoD entity having responsibility (by law, authorized legal agreement, or DoD policy) for funding the environmental and disposal liability shall report the associated costs and liability in its financial statements. The determination of the liability amount shall be in accordance with applicable Federal Accounting Standards Advisory Board (FASAB) pronouncements. The DoD entity recording the E&DL liability must have sufficient supporting documentation to establish the probable existence of contamination requiring an environmental response and the entity’s responsibility for the obligation. Such documentation may include copies of pertinent law with legal interpretations from cognizant legal counsel or other external sources. In addition, such documentation may include copies of executed agreements or DoD policies establishing the obligation of the DoD entity.

The DoD entity responsible for the physical cleanup and disposal shall be the entity that estimates, tracks, revises, and monitors the liability. In most instances this will be the same entity as the entity with the responsibility for funding the environmental and disposal liability. If

---

1 Applicable FASAB pronouncements include: SFFAS 1, 5, 6, and 23; Technical Release 2, 10, 11, and 14; and Technical Bulletin 2006-1 and 2011-2.
that is not the case, then this “non-funding” entity shall provide the cost and liability information to the funding entity for recording in the funding entity’s financial statements.

4. Presentation and Disclosure

April 2015 FIAR Guidance 5.D.1.9/Wave 4, FRO #35: *Recorded Environmental and Disposal Liabilities exist at a given date, and are properly classified and described in the financial statements.*

E&DL is described in Note 14 of the DoD financial statements. Note 14 currently includes several categories that are either event-driven or asset-driven in nature. When contemplating future asset-driven liabilities, it is important to note that hazardous materials present while the asset is in operation become hazardous waste at the time of asset disposal. E&DL can include cleanup activities resulting from releases of hazardous substances or pollutants or contaminants, and future disposal liabilities associated with non-routine hazardous waste removal at the time of asset disposal. Please note that not all disposal liabilities are environmental in nature as outlined in Technical Release 11.

In accordance with a memorandum released by Office of the Secretary of Defense (OSD) on September 20, 2013, titled “Elimination of Military Equipment Definition and Increase to Capitalization Thresholds for General Property, Plant and Equipment,” the structure of Note 14 will be revised to remove the designation of ME/WP in Fiscal Year 2016. Additional changes will be made to the subcategories currently listed in Note 14. These structural changes to Note 14 govern how E&DL shall be presented and disclosed on financial statements. DoD Components are still responsible for identifying and appropriately estimating E&DL that meets requirements set forth in applicable guidelines.

5. Valuation

April 2015 FIAR Guidance 5.D.1.9: *Environmental and Disposal Liabilities are valued using appropriate estimation methodologies and are recorded at the best possible estimated cost in the financial statements.*

Assuming completeness has been achieved and procedures are in place to maintain E&DL baselines, a GAAP compliant valuation methodology must be applied to the population of E&DL sites. Below are several valuation topics relevant to estimating E&DL.

**Interpretation of “Probable” and “Reasonably Estimable” Guidance**

Technical Release 2 guidance outlines the criteria for when an environmental liability shall be recognized. The guidance requires that, in order for an environmental liability to be recognized, the reporting entity must establish that the environmental liability is both “probable” and “reasonably estimable.”

Page 6 of 27
When applying this methodology, DoD Components shall:

- Consider whether an environmental liability is “probable,” DoD Components shall be able to support that DoD caused the contamination, DoD is more-likely-than-not liable to address the contamination, or DoD has properly accepted the financial responsibility for cleanup in accordance with DoD and/or DoD Component statutory authority.
  - For asset-driven liabilities, when all Technical Release 2 and Technical Release 11 criteria are met for an asset with E&DL that are non-routine at the time of disposal, the “probable” and “reasonably estimable” criteria is established when the associated asset is placed into service.
  - For event-driven liabilities, based on the Department’s history with addressing event-driven liabilities, it is expected that DoD Components will most likely have experience with similar sites or conditions that meet the “probable” and “reasonably estimable” criteria outlined in Technical Release 2. Completion of a Remedial Investigation/Feasibility Study, Site Inspection, or other site level study performed for the site in question or completed for a site similar to the site in question shall provide the basis for estimating future clean-up requirements.
- If both the “probable” and “reasonably estimable” criteria have been met, an estimate based upon current information shall be developed. In some instances, a range or several cost estimates may exist for DoD Components to consider. If no single site cost estimate is more likely than any other in the population considered, the minimum cost estimate in the range shall be recorded in the financial statements. While the future cleanup estimate will be refined over time as cleanup is performed, DoD Components shall develop an estimate based on the most recent information available for E&DL that meet both the “probable” and “reasonably estimable” criteria outlined above.

**Recognizing Program Management Costs for DERP**

DERP is a statutorily defined program with a limited universe of sites on active and Base Realignment and Closure (BRAC) installations and FUDS properties. Program management associated with DERP exists solely to support the remediation of sites specifically eligible for DERP. Since these program management costs will cease upon the conclusion of the DERP program, these costs shall be reported as part of E&DL. These costs are necessary to effectively manage and execute the site cleanup requirements for DERP sites; however, they cannot be directly attributed to an individual cleanup site. Per the DoDM 4715.20, the DoD Components shall report these costs as rolled-up Cost-to-Complete (CTC) estimates at the appropriate program level. Estimated program management costs shall be included for the Future Years Defense Program (FYDP) and beyond. DoD Components shall estimate program management costs beyond the FYDP by applying the average percentage of program management costs through the FYDP to the site-level requirements remaining past the FYDP. As with other E&DL, these estimates must be supported with appropriate documentation.
Supporting Cost-to-Complete (CTC), Unliquidated Obligation (ULO), and Transferred Funds Calculations for Event-Driven Liabilities

E&DL balances for event-driven liabilities described in Note 14 of DoD financial statements are calculated by annually updating and combining three subbalances:

- **CTC**: Represents the total estimated future costs for site-level cleanup not currently funded as of the end of a given fiscal year. CTC estimates assume that approved funding in the year of execution will be received and obligated in full. CTC estimates also include Program Management costs developed in accordance with guidelines provided in this document.
- **ULO**: Represents the total amount of obligated funding associated with environmental liability cleanup not yet expensed as of the end of a given fiscal year.
- **Transferred Funds**: Represents the total amount of funding that a DoD Component did not obligate in the year of execution and returned to the OSD for re-distribution in the next year of execution. Transferred funds only apply to DERP.

![Figure 1: E&DL Balance Valuation for Event-Driven Liabilities](image)

*Note: All amounts are notional.*

When using this methodology, DoD Components shall consider:

- **Level 1** items outlined in Figure 1 represent the summary values used to report annual E&DL financial statement values.
- **Level 2** items outlined in Figure 1 represent the transaction level detail reports for CTC, ULO, and Transferred Funds that are used to produce Level 1 values. Based on the nature of the information, these reports could be developed by the functional or the financial community. Regardless, each report shall be used to report annual Note 14.
balances and shall be retained to support future audit requirements. For CTC, DoD Components shall be able to demonstrate that Level 2 individual site-level CTCs (Site A + Site B + Site C + etc.) equal the overall CTC site-level summary number (Level 1).

- Level 3 items outlined in Figure 1 represent Key Supporting Documents (KSDs) required to justify CTC, ULO, and Transferred Funds values. KSDs shall be developed and retained to support transactions included in Level 2 detail reports. This documentation shall be available for both site-level and program management-level CTC estimates and ULO.

  - DoD Components shall maintain files to support their CTC estimates to include any assumptions, results from cost models, engineering estimates, etc.

  - Understanding that DoD Components often include multiple cleanup sites on an individual contract, supporting documentation required to justify individual ULO transaction level details do not need to be at the cleanup site level. However, contracts and invoices supporting the ULO transaction level details shall be retained to support future audit requirements.

- Level 4 items outlined in Figure 1 represent Existence and Completeness considerations relevant to establishing and reporting CTC and ULO values annually. Risk of material misstatement exists if reported values do not reflect the universe of E&DL clean-up sites (CTC) and the universe of E&DL clean-up contracts (ULO). DoD Components shall establish procedures, internal controls, and supporting documentation to demonstrate to an auditor that this risk has been mitigated.

**Accounting Treatment for Environmental & Disposal Liabilities**

In accordance with SFFAS 6 and Technical Release 2, DoD Components are required to record and report future E&DL in their Financial Statement that meets both criteria of “probable” and “reasonably estimable” noted in the section above. Additionally, specific guidance was issued by FASAB to record and report future asbestos abatement cost, which is found in Technical Release 10 and Technical Bulletin 2006-1 (timelines amended in subsequent Technical Bulletin releases). Cost estimates for asbestos shall include both friable and non-friable, however, itemization of the two types of asbestos is not required in the estimate.
Specific treatment options for both E&DL and asbestos are outlined below:

<table>
<thead>
<tr>
<th>Effective Date</th>
<th>Assets Placed in Service After Effective Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E&amp;DL After September 30, 1997</td>
<td>Estimate the total cleanup costs related to the PP&amp;E and recognize annually a portion of the costs over the useful life of the asset. Recognition of the expense and accumulation of the liability shall begin on the date that the PP&amp;E is placed into service, continue in each period that operation continues, and be completed when the PP&amp;E ceases operation.</td>
</tr>
<tr>
<td>Asbestos After September 30, 2012</td>
<td>Estimate the total cleanup costs related to the PP&amp;E and recognize annually a portion of the costs over the useful life of the asset. Recognition of the expense and accumulation of the liability shall begin on the date that the PP&amp;E is placed into service, continue in each period that operation continues, and be completed when the PP&amp;E ceases operation.</td>
</tr>
</tbody>
</table>

There are multiple implementation approaches for recording the initial liability for assets placed in service prior to the effective date. If a balance for E&DL or Asbestos clean-up cost associated with an asset placed in service prior to the effective date has not yet been recorded in the DoD Component Financial Statements, follow the implementation approaches described in the section below.

<table>
<thead>
<tr>
<th>E&amp;DL</th>
<th>Accounting Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>Liability shall be recognized for the portion of the estimated total cleanup cost that is attributable to that portion of the physical capacity used or that portion of the estimated useful life that has passed since the PP&amp;E was placed in service. In each subsequent year of the assets useful life recognize a proportionate amount of the remaining costs.</td>
</tr>
<tr>
<td>Option 2</td>
<td>If costs are not intended to be recovered primarily through user charges, management may elect to recognize the estimated total (ultimate) cleanup cost as a liability upon implementation of the standard (SFFAS 6, Paragraph 104).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Asbestos</th>
<th>Accounting Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>Record a liability for estimated cleanup costs equal to the portion of the estimated useful life of the asset that has passed since the PP&amp;E was placed in service. In each subsequent year of the assets useful life recognize a proportionate amount of the remaining costs.</td>
</tr>
</tbody>
</table>
Option 2

If the asset has been in service for a substantial portion (greater than 50% of the useful life) of its estimated used life, management can elect to recognize the entire amount of the estimated cleanup cost.

This option can only be used if costs are not intended to be recovered primarily through user charges.

When using this methodology, DoD Components shall:

- As re-estimates of cleanup costs are made, the cumulative effect of changes in total estimated cleanup costs related to current and past operations shall be recognized as an expense and the liability shall be adjusted in a corresponding amount in the period of the change in estimate.

- As cleanup costs are paid, payment shall be recognized as a reduction in the liability for cleanup costs. These include the cost of PP&E or other assets acquired for use in cleanup activities.

**Supporting Estimates Produced by Leveraging Cost Models**

E&DL financial statement balances are estimated costs for future E&DL prepared in accordance with relevant guidelines. To develop future estimates, DoD Components may rely upon cost modeling tools to project future E&DL using information known at the time the estimate is developed. Inputs to cost models include key data elements from appropriate property and/or E&DL systems of record and cost factors from industry standards, similar E&DL, and/or E&DL conditions. Justifying the outputs of individual cost models during a financial statement audit requires DoD Components to establish consistent, repeatable procedures while also maintaining sufficient supporting documentation to justify the reasonableness of the estimate developed. When auditing cost estimates, an auditor would likely review and test the process used by management to develop the estimate, request management to assist to develop an independent expectation of the estimate to corroborate the reasonableness of management’s estimate, and review subsequent events or transactions occurring prior to the date of the auditor’s report.

As cost estimates, by definition, are subjective and have an element of uncertainty, documentation to support cost estimates must be substantial and robust. To assist DoD Components in preparing for auditor inquiries over cost estimates developed when leveraging cost models, best practices for DoD Components to consider have been outlined in Figure 2.
<table>
<thead>
<tr>
<th>Best Practice</th>
<th>Example(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document Reviews</td>
<td>Develop, document, and perform formal review procedures, to include evidence of the review and approval process annually.</td>
</tr>
<tr>
<td></td>
<td>Consider review levels based on the significance of the transaction, leveraging peer reviews performed by multiple individuals with similar background and experience as necessary</td>
</tr>
<tr>
<td>Checklists</td>
<td>Incorporate checklists to document performance of standard review criteria (e.g., supporting documentation, estimate type, approver and/or estimator qualifications, regulations and/or policy).</td>
</tr>
<tr>
<td>Qualifications</td>
<td>Be prepared to support cost estimate developer and approver qualifications (e.g., resumes, certifications, professional registrations, system / process training).</td>
</tr>
<tr>
<td>Maintain Supporting Documentation</td>
<td>Maintain documentation that shows data sources, estimating methods, assumptions, and rational used to develop the estimate (e.g., cost estimates and underlying assumptions, permits and approvals, historical contracts, work orders, estimating model detail, adjustment justification to include approvals).</td>
</tr>
<tr>
<td></td>
<td>Cost Estimates could include (as applicable): background information, cleanup methodology, assumptions, physical aspects, quantity, cost factors, adjustments, and/or reviews.</td>
</tr>
</tbody>
</table>

**Figure 2: Examples of Best Practices to Support Cost Models**

When leveraging cost models to develop cost estimates, DoD Components shall:

- Accumulate relevant, sufficient, and reliable data on which accounting estimates for a given E&DL concern were based.

- Ensure estimates are prepared by qualified personnel (See Figure 2 for examples of qualifications) and adequately reviewed and approved by the appropriate levels of authority before being finalized.

- In order to sustain the use of a cost model methodology, compile and/or collect and maintain documentation from appropriate service providers (as applicable) supporting review of cost factors on a regular basis, and implement a data collection process. For purposes of implementing this approach, DoD considers “performed on a regular basis”
to mean at least annually. At a minimum, DoD Components shall ensure that appropriate reviews have been performed and subsequent supporting documentation is available to provide to an auditor. Decisions on when to update cost factors shall be driven by the impact that new information has on existing estimates.

- Compile documentation and/or collect documentation from appropriate service providers (as applicable) supporting the reasonableness of cost factors used by cost estimation software (e.g., Remedial Action Cost Engineering Requirements (RACER), Navy Normalization of Data System (NORM)).

- Compile documentation and/or collect assurance from appropriate service providers (as applicable) that cost estimation software (e.g., RACER, NORM) has been validated or otherwise ensure that the functions performed by the software are executed as intended.

- Compare a representative sample of prior accounting estimates with subsequent results to assess the reliability of the process used to develop estimates and the reasonableness of estimates developed.

Establishing and Performing Roll Forward Procedures

In accordance with GAAP, E&DL reported in the financial statements must reflect the liability balance as of the balance sheet date (i.e., September 30 for federal agencies). GAAP requires that all transactions and events that should have been recorded are recorded in the period (Completeness Assertion) and further that liabilities are included in the financial statements at appropriate amounts (Valuation Assertion).

When the E&DL valuation is performed as of a date earlier than September 30 for event-driven liabilities, roll forward procedures must be performed and documented to determine if any changes that meet the “probable and “reasonably estimable” criteria occurring during the roll forward period will have a significant impact on the values reported as of September 30. Roll forward for asset-driven liabilities is addressed at the bottom of this section.

To limit the period of time that DoD Components need to perform roll forward procedures, a robust cost estimation process shall be completed at least as recently as June 30. Aligning cost estimate timelines for all DoD Components will ensure that roll forward procedures only apply to the months of July, August, and September. While the cost estimation process may begin earlier than June 30, the final resulting estimates shall consider all information known at least as recently as June 30.

Significant changes that have occurred between June 30 and September 30 must be reflected in E&DL through an adjustment to the E&DL as of September 30. To assist DoD Components with segmenting their cleanup site universe to identify subsets of E&DL cleanup sites that may
not require a reassessment during the roll-forward period, a decision tree has been developed and included in Appendix C. DoD Components shall leverage Appendix C or a method consistent with Appendix C. The intent of Appendix C is to assist DoD Components with segmenting their cleanup site universe to identify high risk subsets, subsequently reducing the overall effort required to implement roll-forward procedures. For purposes of performing E&DL roll forward procedures each DoD Component shall develop, document, and execute a process for performing roll-forward procedures. Subsequently, DoD Components shall assess qualifying events to determine significance to reported financial statement balances. Additional detail on the approach to be used by DoD Components to calculate their Significant Amount Threshold is included below.

Environmental & Disposal Liability Balance\(^2\) $XXXXX  
Multiply by 1% \(x .01\)  
Materiality\(^3\) $XXXXX  
Multiply by no more than 3%\(^4\) \(x .03\)  
Significant Amount Threshold $XXXXX

*Note: DoD Components shall use the calculated Significant Amount Threshold or $1 million, whichever is greater.*

Significant Amount Threshold calculation has been developed to compensate for the possible aggregation of misstatements within a DoD Component (i.e., misstatements for multiple E&DL sites) and among DoD Components at the consolidated DoD financial statement level. While individual misstatements may not be material to the financial statements, when aggregated with other misstatements they could result in a material misstatement.

When using this methodology, DoD Components shall consider:

- The process for developing supporting justification to determine the materiality of a roll forward event may not be as robust as the process for developing supporting justification produced to support initial estimates. Sufficient evidence shall be available to support materiality assessments (e.g., established industry standard or practice, approval signatures).

- Establishing liabilities based on prior experience with similar sites and/or conditions for the total cost of cleanup. If several similar sites and/or conditions are considered with no single scenario more likely than any other, the scenario with the minimum associated amount in the range shall be used.

---

\(^2\) Total Environmental and Disposal Liabilities recorded balance on the DoD Component’s individual financial statements as of the most recently reported period.  
\(^3\) This materiality amount is equivalent to Design Materiality as described in the GAO FAM §230.12.  
\(^4\) The no more than 3% of Materiality is based on OUSD’s judgment to compensate for the potential aggregation of amounts at the DoD Component level.
• Macroeconomic factors (e.g., raw materials, regulatory standards, technology) that change during the roll-forward period to determine if they have a significant impact to overall cost estimates.

• Management efficiencies or inefficiencies experienced during the roll-forward period to determine if they have a significant impact to overall cost estimates.

• Establishing, documenting, and performing roll forward procedures that can sufficiently support the determination of whether any significant changes occurred or alternatively that changes are insignificant. Even if the result of those procedures determines that very few or no events are significant to the financial statements and/or Note 14 balances as of September 30, the process for arriving at that determination will need to be available for auditors to review.

While the details described above and Appendix C are specific to event-driven liabilities, similar roll forward procedures shall be applied to asset-driven liabilities. If the process for estimating future costs for asset-driven liabilities is initiated earlier than September 30, DoD Components shall consider:

• Initial estimates, in accordance with the guidance above, no earlier than June 30.

• Roll forward procedures over activity in July, August, and September focused primarily on adjustments to asset inventories and significant events impacting established cost factors developed to predict disposition of non-routine, environmentally hazardous waste at the point of GPP&E asset disposal.

**Developing Cost Estimates for General Equipment (GE) E&DL**

Technical Release 11 establishes guidance on identifying and accounting for environmental disposal liabilities that are non-routine at the time of GE disposal. When using the methodology described in Technical Release 11, DoD Components shall:

• Leverage APSRs to define and categorize General Equipment assets that shall be assessed using Technical Release 11 guidelines.

• Focus on establishing documentation consistent with guidelines set forth in Technical Release 11 to establish an audit trail for reported GE E&DL. An audit trail shall be produced even if the resulting value of GE E&DL is deemed to be immaterial.

• Coordinate with the following communities (as applicable): Acquisition, Financial Management, Program Management, Maintenance, and Environmental.
• Review applicable contractual agreements to better understand the responsibilities and obligations during disposal of GE assets being considered. In some instances, other contractual parties may assume all or part of a liability at the point of disposal and which could impact DoD financial reporting requirements.

• When using a cost model to calculate E&DL associated with non-routine items, leverage the guidance provided in this memorandum to establish appropriate procedures and supporting documentation.

III. TIMELINE

The E&DL audit readiness strategy consists of two phases: Phase 1 is related to establishing completeness for E&DL; and Phase 2 is related to developing valuations for the E&DL balance using the methodologies presented in this document.

Completeness

Develop a complete universe for E&DL in accordance with established audit readiness plans using the methodologies described in this document. Developing a complete site universe includes the establishment of processes and controls to maintain and update E&DL universes.

Valuation

Concurrent with establishing completeness for E&DL, DoD Components shall establish processes and controls to value E&DL in accordance with established audit readiness plans using the methodologies described in this document. Both event- and asset-driven E&DL values shall be updated annually as of September 30 using the methodologies described in this document.
APPENDIX A: FREQUENTLY ASKED QUESTIONS

This appendix contains frequently asked questions related to DoD E&DL.

Question 1: What documentation is required to support the use of an alternative completeness approach when establishing the E&DL baseline (e.g., fence-to-fence surveys, baseline studies)?

Response 1: When a baseline of E&DL sites relies upon an approach that is outside of reconciling GPP&E asset records to E&DL site records, DoD Components should be able to produce the original documentation from performance of fence-to-fence surveys or baseline studies that identifies the scope and objective of the effort (e.g., installations reviewed, assets inspected, hazardous wastes tested) and subsequent results that can be traced to E&DL site records maintained today to develop future cleanup estimates. Additionally, if a particular survey was conducted in the past, DoD Components should be able to substantiate processes performed since the completion of the effort that ensures the results are current and have considered new installations, assets, and/or hazardous wastes identified between the time the report was finalized and the current time period.

Question 2: Is an alternative completeness approach always required for establishing a baseline E&DL universe?

Response 2: DoD Components should consider the specific type of E&DL (e.g., BRAC, Restoration cleanup, environmental disposal liabilities for GE or real property assets) when selecting the appropriate method for establishing a completeness baseline, along with the documentation available to support the chosen approach. In instances where a cost model is used to predict future environmental disposal liabilities, a baseline for completeness could be supported by leveraging asset universe data maintained in DoD Component APSRs. Even if an alternate approach (e.g., baseline study, fence-to-fence survey) is selected, DoD Components shall also incorporate appropriate property and/or E&DL systems of record reconciliations to maintain initially established baselines.

Question 3: What are the common pitfalls related to accounting estimates (such as E&DL)?

Response 3: DoD Components could consider the following:

- Failure to identify all likely sources of potential misstatement within management’s estimation process;
- Failure to identify all models, underlying data and assumptions used by management;
- Failure to understand how management developed assumptions, including understanding of models, underlying data and assumptions used by management in the estimation process;
- Failure to determine whether the method of measurement was appropriate for the circumstances;
• Failure to perform sufficient substantive procedures to test models, underlying data and assumptions; and
• Failure to evaluate significant underlying data and assumptions beyond inquiry of management.

**Question 4: What does the term 'regular basis' mean in relation to updating cost factors?**

**Response 4:** “Regular basis” is considered to be at least annually in the context of reviewing cost factors associated with E&DL cost models. While cost factors may not need to change on an annual basis, variance from year-to-year should be considered when making the decision to update them accordingly.
APPENDIX B: DEFINITIONS AND EXAMPLES

As used in this memorandum, the following definitions apply:

<table>
<thead>
<tr>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asset-Driven Liability</strong></td>
<td>E&amp;DL resulting from future environmental disposal liability associated with a DoD GPP&amp;E asset closure or disposal that involves non-routine removal of hazardous waste at the point of disposal or closure and/or environmental response explicitly required (by permit or other policy, or law).</td>
</tr>
<tr>
<td><strong>Baseline</strong></td>
<td>A study or survey used to establish the initial site universe of E&amp;DL sites. The baseline provides a starting point from which sites that contribute to financial statement reporting balances will be adjusted over time.</td>
</tr>
<tr>
<td><strong>Cost Model</strong></td>
<td>A framework upon which an estimating methodology is developed. The model may use mathematical equations to convert resource data into cost data and require users to enter a minimal amount of information to generate cleanup cost estimates.</td>
</tr>
<tr>
<td><strong>Cost-to-Complete (CTC)</strong></td>
<td>Represents the total estimated future costs for site-level cleanup not currently funded as of the end of a given fiscal year. CTC estimates assume that approved funding in the year of execution will be received and obligated in full. CTC estimates also include Program Management costs developed in accordance with guidelines provided in this document.</td>
</tr>
<tr>
<td><strong>DoD Component(s)</strong></td>
<td>The Office of the Secretary of Defense, the Military Departments (including their Reserve components), the Office of the Chairman of the Joint Chiefs of Staff and the Joint Staff, the Combatant Commands, the Office of the Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities in the Department of Defense (hereafter referred to collectively as the ‘DoD Components’).</td>
</tr>
<tr>
<td><strong>Due Care</strong></td>
<td>As defined in Technical Release 2, Due Care in the context of E&amp;DL refers to the following: “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.”</td>
</tr>
<tr>
<td><strong>Environmental &amp; Disposal Liability (E&amp;DL)</strong></td>
<td>A future outflow or expenditure of resources that exists as of the financial reporting date for environmental cleanup, closure, and/or disposal costs resulting from past transactions or events. A DoD environmental liability exists when: 1) contamination is present or likely to be present; 2) environmental cleanup, closure, and/or disposal is required by law or federal, state, interstate, or local requirements or an authorized legal agreement such as a lease,</td>
</tr>
</tbody>
</table>
contract, or international agreement; and 3) DoD activities created the liability and/or an authorized legal agreement establishes DoD as the responsible entity.

<table>
<thead>
<tr>
<th>Event-Driven Environmental Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>E&amp;DL resulting from a government acknowledged event that results in a release requiring cleanup action to be taken.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Plant, Property, and Equipment (GPP&amp;E)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP&amp;E used to provide general government services or goods. The general PP&amp;E category consists of items that: 1) could be used for alternative purposes (e.g., by other Federal programs, state or local governments, or non-governmental entities) but are used by the Federal entity to produce goods or services, or to support the mission of the entity; or 2) are used in business-type activities; or 3) are used by entities in activities whose costs can be compared to other entities (e.g., Federal hospitals compared with other hospitals). GPP&amp;E includes land acquired for or in connection with other GPP&amp;E.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous Waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>In accordance with SFFAS 6, Paragraph 86, hazardous waste is a solid, liquid, or confined gaseous waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or in an increase in serious irreversible, or incapacitating irreversible, illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. DoD Components will use the hazardous waste definition from RCRA and any materials FASAB specifically identifies as hazardous waste such as the hazardous air pollutant asbestos. Hazardous substances as defined under CERCLA are generally also hazardous wastes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-routine Environmental Disposal Liability</th>
</tr>
</thead>
<tbody>
<tr>
<td>A unique cleanup cost of hazardous waste associated with the closure (either temporarily or permanently), disposal, or decommissioning of equipment that meets the “probable” and “reasonably estimable” criteria outlined in Technical Release 2. Additional guidance on non-routine is included in Technical Release 11.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materiality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Represents the magnitude of an omission or misstatement of an item in a financial report that in light of surrounding circumstances makes it probable that the judgment of a reasonable person relying on the information would have been changed or influenced by the inclusion or correction of the item.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>More-likely-than-not</th>
</tr>
</thead>
<tbody>
<tr>
<td>A greater than 50% chance that the DoD Component has a responsibility to address the contamination.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Probable</th>
</tr>
</thead>
<tbody>
<tr>
<td>That which can reasonably be expected or is believed to be more-likely-than-not on the basis of available evidence or logic. The probability of a future outflow or other sacrifice of resources is assessed on the basis of current facts and circumstances. These current facts and circumstances include the law that provides general authority for federal entity operations and</td>
</tr>
</tbody>
</table>
specific budget authority to fund programs.

**Open Phase Site**
A site that has one or more phases underway, as reported in the database of record.

**Reasonably Estimable**
The ability to reliably quantify, in monetary terms, the outflow of resources that will be required. The process for determining if an E&DL is “reasonably estimable” are applied after a transaction or event has occurred that meets the definition of “probable”. Additional guidance on is included in Technical Release 2.

**Reporting Entity**
The DoD entity having responsibility (by law, authorized legal agreement, or DoD policy) for funding the environmental and disposal liability. The DoD entity responsible for the physical cleanup and disposal shall be the entity that estimates, tracks, revises, and monitors the liability.

**Roll Forward Procedures**
A documented process bridging the timing gap between June 30 and September 30 to determine if any significant changes have occurred between June 30 and September 30. Any significant changes that have occurred between June 30 and September 30 must be reflected in E&DL through an adjustment to the E&DL as of September 30.

**Site Universe**
All sites identified after performing a due care approach to determine if “probable” and “reasonably estimable” criteria outlined in Technical Release 2 have been met. Some example site types could include, but are not limited to: 1) disposal liabilities associated with non-routine environmental activity performed during disposition of an equipment asset; 2) environmental cleanup response required as a result of a DoD-acknowledged event (e.g., fuel tank spill, post-closure cleanup on a munitions range); and 3) environmental closure requirements associated with real property or GE assets in accordance with established policy, guidance, or regulations.

**Transaction Level Detail Reports**
Represent system automated reports that identify details supporting summary values reported on Component financial statements. For event-driven liabilities, transaction level detail reports could include, but are not limited to: E&DL system summary reports outlining individual site level and PM level CTC transactions, accounting system summary reports outlining ULO as of September 30 across open contracts. For asset-driven liabilities, transaction level detail reports could include, but are not limited to cost model outputs at the asset level.

**Transferred Funds**
Represents the total amount of funding that a DoD Component did not obligate in the year of execution and returned to the OSD for re-distribution in the next year of execution. Transferred funds only apply to DERP.

**Unliquidated Obligation (ULO)**
Represents the total amount of obligated funding associated with environmental liability cleanup not yet expensed as of the end of a given fiscal year.
APPENDIX C: ROLL FORWARD DECISION TREE

Start

Open phase site?*

Yes

Long Term Management only?

Yes

Maintain previously developed estimate

No

New activity** between Jul 1 and Sep 30?

Yes

Perform Roll-Forward Procedures

No

Above Significant Amount Threshold?

Yes

Revise Cost to Complete estimate

No

End

*Please refer to Appendix B for a definition of "open phase site."

**New activities could include: change in project scope, change in standards or regulations, new technology, new obligation, change in DoD policy, new or additional contamination discovered, etc.
APPENDIX D: FMR VOLUME 4, CHAPTER 13 UPDATES:

The following are relevant provisions of this document that will be incorporated into the next update of the DoD FMR Volume 4, Chapter 13, “Environmental Liabilities.”

Completeness

To establish their baseline, DoD Components shall follow at least one (or some combination) of the approaches outlined below (as applicable for the E&DL considered):

1) Reconcile GPP&E asset records maintained in Accountable Property Systems of Record (APSRs) with E&DL records in environmental databases of record.
2) Produce evidence of the performance of a historical fence-to-fence survey focused on identifying and recording E&DL and recent efforts to maintain currency over initial survey findings.
3) Reconcile E&DL records with other appropriate source lists.

After an initial baseline has been established, DoD Components shall maintain site universes by using the techniques outlined below:

1) For asset-driven and event-driven liabilities, leverage GPP&E asset acquisition and disposal processes/systems to routinely update the established baseline.
2) For event-driven liabilities, document and adhere to standard operating procedures for responding to typical site addition processes (e.g. spill programs, environmental surveys).
3) For event-driven liabilities, document and adhere to standard operating procedures for removing future cost estimates when remediation requirements have been met and no additional future liability exists.

When implementing this guidance, DoD Components shall:

- Establish E&DL universe baselines for event-driven environmental liabilities. In these instances, it is important that DoD Components define the history, timeline, and activities employed in the surveys to demonstrate that a due care approach was taken, in accordance with Technical Release 2, to establish an initial baseline and that there are sufficient procedures in place to maintain currency over the baseline. Documentation shall be readily available to support the baseline, allowing auditors to verify the completeness of established cleanup site universes.
- Establish E&DL universe baselines for asset-driven environmental disposal liabilities. DoD Components could rely more heavily upon GPP&E asset universes to identify relevant E&DL. If only a subset of the GPP&E asset universe is applicable to a given E&DL subcategory, DoD Components could begin by considering the entire GPP&E asset universe and demonstrate why individual subcategories are not applicable in accordance with the requirements and guidelines referenced in this memorandum.
**Valuation: Program Management Costs for DERP**

DERP is a statutorily defined program with a limited universe of sites on active and Base Realignment and Closure (BRAC) installations and FUDS properties. Program management associated with DERP exists solely to support the remediation of sites specifically eligible for DERP. Since these program management costs will cease upon the conclusion of the DERP program, these costs shall be reported as part of E&DL. These costs are necessary to effectively manage and execute the site cleanup requirements for DERP sites; however, they cannot be directly attributed to an individual cleanup site. Per the DoDM 4715.20, the DoD Components shall report these costs as rolled-up Cost-to-Complete (CTC) estimates at the appropriate program level. Estimated program management costs shall be included for the Future Years Defense Program (FYDP) and beyond. DoD Components shall estimate program management costs beyond the FYDP by applying the average percentage of program management costs through the FYDP to the site-level requirements remaining past the FYDP. As with other E&DL, these estimates must be supported with appropriate documentation.

**Valuation: Supporting Cost-to-Complete (CTC), Unliquidated Obligation (ULO), and Transferred Funds Calculations for Event-Driven Liabilities**

Understanding that DoD Components often include multiple cleanup sites on an individual contract, supporting documentation required to justify individual ULO transaction level details do not need to be at the cleanup site level. However, contracts and invoices supporting the ULO transaction level details shall be retained to support future audit requirements.

**Valuation: Accounting Treatment for Environmental & Disposal Liabilities**

Cost estimates for asbestos shall include both friable and non-friable, however, itemization of the two types of asbestos is not required in the estimate.

**Valuation: Supporting Estimates Produced by Leveraging Cost Models**

Justifying the outputs of individual cost models during a financial statement audit requires DoD Components to establish consistent, repeatable procedures while also maintaining sufficient supporting documentation to justify the reasonableness of the estimate developed.

As cost estimates, by definition, are subjective and have an element of uncertainty, documentation to support cost estimates must be substantial and robust.

- Accumulate relevant, sufficient, and reliable data on which accounting estimates for a given E&DL concern were based.
• Ensure estimates are prepared by qualified personnel (See Figure 2 for examples of qualifications) and adequately reviewed and approved by the appropriate levels of authority before being finalized.

• In order to sustain the use of a cost model methodology, compile and/or collect and maintain documentation from appropriate service providers (as applicable) supporting review of cost factors on a regular basis, and implement a data collection process. For purposes of implementing this approach, DoD considers “performed on a regular basis” to mean at least annually. At a minimum, DoD Components shall ensure that appropriate reviews have been performed and subsequent supporting documentation is available to provide to an auditor. Decisions on when to update cost factors shall be driven by the impact that new information has on existing estimates.

• Compile documentation and/or collect documentation from appropriate service providers (as applicable) supporting the reasonableness of cost factors used by cost estimation software (e.g., Remedial Action Cost Engineering Requirements (RACER), Navy Normalization of Data System (NORM)).

• Compile documentation and/or collect assurance from appropriate service providers (as applicable) that cost estimation software (e.g., RACER, NORM) has been validated or otherwise ensure that the functions performed by the software are executed as intended.

• Compare a representative sample of prior accounting estimates with subsequent results to assess the reliability of the process used to develop estimates and the reasonableness of estimates developed.

Valuation: Establishing and Performing Roll-Forward Procedures

In accordance with GAAP, E&DL reported in the financial statements must reflect the liability balance as of the balance sheet date (i.e., September 30 for federal agencies).

When the E&DL valuation is performed as of a date earlier than September 30 for event-driven liabilities, roll forward procedures must be performed and documented to determine if any changes that meet the “probable and “reasonably estimable” criteria occurring during the roll forward period will have a significant impact on the values reported as of September 30.

To limit the period of time that DoD Components need to perform roll forward procedures, a robust cost estimation process shall be completed at least as recently as June 30.

Significant changes that have occurred between June 30 and September 30 must be reflected in E&DL through an adjustment to the E&DL as of September 30. To assist DoD Components with segmenting their site universe to identify subsets of E&DL cleanup sites that may not require a reassessment during the roll-forward period, a decision tree has been developed and included in Appendix C. DoD Components shall leverage Appendix C or a method consistent with Appendix C. The intent of Appendix C is to assist DoD Components with segmenting their site universe to identify high risk subsets, subsequently reducing the overall effort required to
implement roll-forward procedures. For purposes of performing E&DL roll forward procedures each DoD Component shall develop, document, and execute a process for performing roll-forward procedures. Subsequently, DoD Components shall assess qualifying events to determine significance to reported financial statement balances.

- The process for developing supporting justification to determine the materiality of a roll forward event may not be as robust as the process for developing supporting justification produced to support initial estimates. Sufficient evidence shall be available to support materiality assessments (e.g., established industry standard or practice, approval signatures).
- Establishing liabilities based on prior experience with similar sites and/or conditions for the total cost of cleanup. If several similar sites and/or conditions are considered with no single scenario more likely than any other, the scenario with the minimum associated amount in the range shall be used.
- Macroeconomic factors (e.g., raw materials, regulatory standards, technology) that change during the roll-forward period to determine if they have a significant impact to overall cost estimates.
- Management efficiencies or inefficiencies experienced during the roll-forward period to determine if they have a significant impact to overall cost estimates.
- Establishing, documenting, and performing roll forward procedures that can sufficiently support the determination of whether any significant changes occurred or alternatively that changes are insignificant. Even if the result of those procedures determines that very few or no events are significant to the financial statements and/or Note 14 balances as of September 30, the process for arriving at that determination will need to be available for auditors to review.

While the details described above and in Appendix C are specific to event-driven liabilities, similar roll forward procedures shall be applied to asset-driven liabilities. If the process for estimating future costs for asset-driven liabilities is initiated earlier than September 30, DoD Components shall consider:

- Initial estimates, in accordance with the guidance above, no earlier than June 30.
- Roll forward procedures over activity in July, August, and September focused primarily on adjustments to asset inventories and significant events impacting established cost factors developed to predict disposition of non-routine, environmentally hazardous waste at the point of GPP&E asset disposal.

**Valuation: Developing Cost Estimates for General Equipment (GE) E&DL**

Technical Release 11 establishes guidance on identifying and accounting for environmental disposal liabilities that are non-routine at the time of GE disposal. When using the methodology described in Technical Release 11, DoD Components shall:
• Leverage APSRs to define and categorize General Equipment assets that shall be assessed using Technical Release 11 guidelines.

• Focus on establishing documentation consistent with guidelines set forth in Technical Release 11 to establish an audit trail for reported GE E&DL. An audit trail shall be produced even if the resulting value of GE E&DL is deemed to be immaterial.

• Coordinate with the following communities (as applicable): Acquisition, Financial Management, Program Management, Maintenance, and Environmental.

• Review applicable contractual agreements to better understand the responsibilities and obligations during disposal of GE assets being considered. In some instances, other contractual parties may assume all or part of a liability at the point of disposal and which could impact DoD financial reporting requirements.

• When using a cost model to calculate E&DL associated with non-routine items, leverage the guidance provided in this memorandum to establish appropriate procedures and supporting documentation.