Introduction to DOE Environmental Liabilities

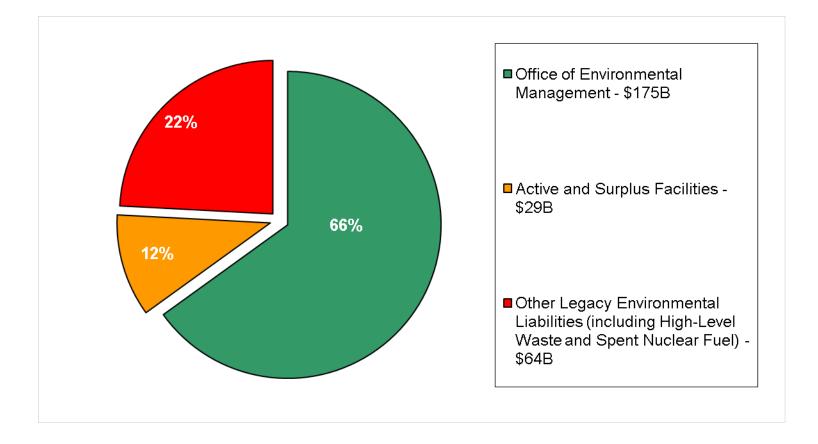
May 2013

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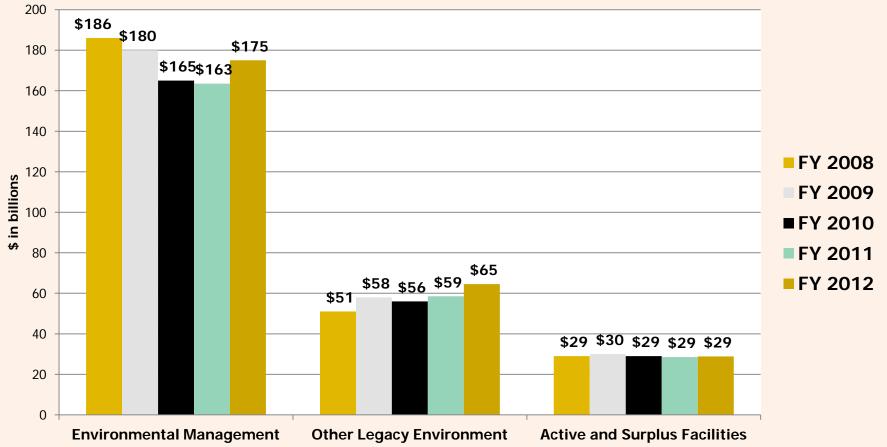
Introduction FY12 FL Overview **General Background** Section L Section II CFO Environmental Liability Guidance Overview **Environmental Management Environmental Liability** Section III Section IV Active and Surplus Facilities Environmental Liability Other Legacy Environmental Liabilities Section V **Regulatory Environment** Section VI Section VII Additional Yearend Reporting and Related Liabilities Section VIII Focus for FY 2013 Appendix A Liability Math Common Acronyms List Appendix B Appendix C FM SOPP Active Facilities Asbestos Estimation Appendix D Appendix E Newly Generated Waste Liability Guidance Appendix F ES&H Liability

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DOE Environmental Liability FY 2012 - \$268 billion



Environmental Liability FY08 – FY12



Section I General Background

Definition of a Liability FASAB Standards History

Definition of a Liability

A *Liability* is a probable future outflow or other sacrifice of resources as a result of past transactions or events.

- A liability must be probable and measurable:
 - Probable More Likely Than Not
 - Laws and Regulations
 - Compliance Agreements
 - System Plans
 - Measurable Virtually all DOE activities are estimable at this stage of the liability formulation process.

Applicable FASAB Standards

- Accounting standards associated with recognizing and measuring liabilities in federal financial reports:
 - Statement of Federal Financial Accounting Standards (SFFAS) No. 5, "Accounting for Liabilities of the Federal Government";
 - SFFAS No. 6, "Accounting for Property, Plant and Equipment";
 - SFFAS No. 12," Recognition of Contingent Liabilities Arising from Litigation" (amendment to SFFAS No. 5);
 - Federal Accounting Standards Advisory Board (FASAB) Technical Bulletin 2006-1, *Recognition and Measurement of Asbestos-Related Cleanup Costs;*
 - FASAB Technical Bulletin 2009-1 deferred the implementation date of Technical Bulletin 2006-1.

These standards and bulletins can be found at http://www.fasab.gov/accepted.html

History

- DOE's environmental liability (EL) has been estimated and audited for over 16 Years.
 - 75-Year liability reporting period established with the Office of Inspector General (OIG) in 1996 (unless longer period is stated in site-specific agreements with States, etc.—currently applicable to WIPP, SRS, and NV)
 - Reportable conditions and/or significant deficiencies were identified for three years over the life of the liability;
 - Qualification in 1998 due to lack of documentation for new EM clean-up approach and estimates;
 - No reportable conditions or significant deficiencies pertaining to environmental liabilities were identified during the FY 2012 audit cycle.

Section II CFO Environmental Liability Guidance Overview

CFO Guidance Overview

- Field Guidance
- Reconciliation 'Note 3'
- Checklist
- Forecasting

CFO Environmental Liability Guidance Overview

- Field sites should take all available current information into account when formulating/modifying EL estimates.
- Continuing in FY13, field sites are required to complete:
 - The "EL Checklist" to ensure that all applicable standards/information is being considered during EL formulation;
 - The "EL forecast" to ensure that all potential impacts to the EL are being considered.
- Continuing in FY13, field sites are required to put all forecasted items on the calendar located on the financial statement page on iPortal, EL tab, left hand side of the page.

EL Reconciliation – Note 3

Site 123						
	EMF 3rd Qtr	Comments	REL 3rd Qtr	Comments	AF 3rd Qtr	Comments
FY2010 IPABS						
Adjustments to IPABS Estimates (list						
increases/decreases individually)						
Adjustments to the liability for previous						
years actual costs versus workscope						*5
completed in IPABS: Is an adjustment						ser,
for workscope necessary? If so, has					1 cht	
the adjustment been made in IPABS					2021	
or does it need to be included on the				r	200	
Note 3?				SOV	~	
Duplicative Costs Reported		IPLE - Si Be Provi		76 012.		
Elsewhere (PRB)						
Costs (year to date)			cne			
Other AdjustmentsPlease describe			10 JY			
3rd Quarter EM Balance		CÌ	TE -			
Long-Term Stewardship - IPABS		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~				
Adjustment to IPABS LTS		alt	1 ad			
Other Liabilities outside of the EM	n (Aer			
scope and the AFDCS modeled		" - M	l V			
estimate for facilities and other	EXN.	DIO				
structures:		ne''				
-excess materials disposition	llin .	D				
 contaminated soils and groundwate 	er NN					
-other (explain in comments section)	V					
3rd Quarter REL Balance			-			
AFDCS 3rd Quarter Estimate						
AF Estimates Outside of the Estimate						
Active Facilities 3rd Quarter						
Balance						

Documents Checklist

Attachment

(To be completed and submitted to OFCO as part of the Financial Statement package)

Did the site consider the situations/values included in the following planning documents when updating the environmental liability estimates:

Document(s)		No	N/A	Comments
Stipulated Guidance (check "Yes"/"No" for each of the				
following):				
 SFFAS 1, Accounting for Selected Assets and Liabilities: 				
SFFAS 5, Accounting for Liabilities of The Federal				
Government,				
 SFFAS 6, Accounting for Property, Plant, and 				
Equipment;				
 Technical Bulletin 2006-1, Recognition and 				
Measurement of Asbestos-Related Cleanup Costs; Other applicable GAAP documents				
o and application of him becaments.				
Stipulated DOE Guidance (check "Yes"/"No"/"N/A" for each of the following):				
CFO guidance;				
 EM guidance; 				
-				
 NNSA guidance; 				
 SC guidance; 				
 NE guidance. 				
Draft CFO Environmental Liability Best Practices Guide				
Records of Decision (preliminary or final)				
Development disconstructions				
Regulatory negotiations/renegotiations				
Permit modifications and/or issuance				
r crimit modifications and/or issuance				
Feasibility Studies (or any equivalent-type study)				
Risk Assessments				
Infrastructure Plans (or equivalent)				
Site/Laboratory Plans (or equivalent)				

Project Execution Plans (or equivalent)		
Reports from entities outside of DOE (NAS; DNFSB; SEAB; etc.)		
Independent Cost Estimates		
External Independent Reviews		
EM Environmental Liability Standard Operating Policies and Procedures (SOPP #35)		
Rebaselining Activities (preliminary or approved)		
Major contracting/acquisition activities		
IPABS Change Requests (check "Yes"/"No"/"N/A" for each of the following): Preliminary (too early for approval); Pending; Unapproved; Sent back to the field site for revision; Other, please explain. IPABS EM EL Module adjustments		
Adjustments to the liability for previous years actual costs versus workscope completed in IPABS: • Is an adjustment for workscope necessary? • If so, has the adjustment been made in IPABS or does it need to be included on the Note 3?		
Other documents considered (not listed above): 1. 2. 3. 3.		

Please note that this list is not all-inclusive of the documents that should be included in the estimate updating process. Add all other documents considered need to be added to the list above and explained. All "N/A" responses must be explained in the "Comments" column.

Moreover, in instances where formal decisions have not been made by high-level management but a more than likely situation exists, or a cost estimate is not fully complete, a placeholder should be included in the estimate to account for such situations based on the best available information at that point in time. Once the formal decision is made, the cost estimate complete, etc. the placeholder would be replaced with a more definitive value. These situations should be discussed with CF-12 to determine an appropriate course of action.

Forecasting

- Field offices are required to forecast activities that could potentially impact the environmental liability. These activities include but are not limited to:
 - Rebaselining activities;
 - Feasibility Studies;
 - Records of Decision;
 - Regulatory negotiations/renegotiations;
 - Permit modifications and/or issuance; and,
 - Major contracting/acquisition activities.
- The forecasting should briefly summarize the activity, project(s)/estimate(s) potentially impacted, estimate of impact if available, and anticipated activity date.

Forecasting

- The 3rd quarter reporting forecast is to include 4th quarter FY13 and 1st quarter 2014. The yearend reporting forecast is to include 1st and 2nd quarter FY14.
- The FY13 reporting continues to require utilization of a environmental liability calendar in iPortal. Field CFO staff are to populate the calendar with all activities or events that could potential impact liability estimates. Additions and updates should be made as identified.

Section III Environmental Management Environmental Liability

Definition EM Update Process EM Reviews EM EL Schedule

EM Environmental Liability

- The Office of Environmental Management (EM) EL is the estimated cost for DOE to meet its present environmental cleanup obligations, including all work required to complete cleanup of facilities; remediation of soil and groundwater; and management and disposition of wastes, spent nuclear fuel (SNF), and surplus nuclear materials managed by EM.
- EM annually updates its EL estimate prior to recording this amount in DOE's Consolidated Financial Statements.
- A number of project baseline summaries (PBS)s are audited at each site selected. Idaho, Richland, Savannah River, Portsmouth Paducah Project Office are audited every year. All EM headquarters and program-wide estimates, controls and oversight activities, and all other sites' with material (in relation to the size of the project) changes in liability estimates are audited annually.

EM Environmental Liability

EM portion of the EL is based on three components:

- Approved baseline costs;
- Pending baseline change proposals; and
- Adjustments for probable costs and/or increases for EL purposes (placeholder estimates).
 - Adjustments account for new scope, cost growth, and/or changes in fundamental assumptions (such as changes in end state, regulatory approach, inability to consolidate/move materials, changes in anticipated cost efficiencies, etc.)
- Field sites should back-out pension/post-retirement benefit (PRB) costs that are included in the EM baseline since the EL associated with pensions/PRBs are recorded separately in Footnote 15 of the financial statements.

- EM annually updates and distributes an EM EL SOPP (Standard Operating Processes and Procedures) to be followed when the field sites are updating their EL estimates;
- Estimates are submitted into the Integrated Planning, Accountability, and Budgeting System (IPABS) by the field sites;
- EM HQ evaluates submittals for consistency between sites and other Program Offices;
- Office of Financial Control and Reporting (OFCR) uses these IPABS estimates (for both the 3rd and 4th quarters) as the starting point for the sites, via the "Note 3", to use to cross-walk IPABS to the sites STARS ending EL balances;
- Federal Project Directors review and concur on project estimates for each PBS by signing the project summary section of the IPABS GEN-2 reports;
- The Site Manager or Assistant Manager of EM reviews and concurs on the total EL for each site by signing the site summary section of the IPABS GEN-2 reports; and,
- EM HQ/sites report subsequent events and record final adjustments to the liability prior to issuance of the audit opinion.

- Estimates are updated based on the most current available information, such as:
 - EM Environmental Liability SOPP;
 - External Independent Reviews;
 - Feasibility Studies;
 - Records of Decision;
 - Risk Assessments;
 - Infrastructure Plans/Site/Laboratory Plans;
 - Project Execution Plans;
 - Reports from entities outside of DOE (National Academy of Sciences, Defense Nuclear Facilities Safety Board, Secretary of Energy Advisory Board, etc.);
 - Independent Cost Estimates;
 - Baseline Validation Process;
 - Headquarters guidance/planning documents/decisions; etc.

- Contingency is added to each PBS to account for uncertainties
 - In FY11, EM implemented a risk-based contingency calculation methodology, which was continued in FY12.
 - The contingency represents the difference between the IPABS 50% life-cycle baseline and an approximate 80% confidence level lifecycle baseline.
 - While the uncertainty model in IPABS, which calculates contingency based on project definition, innovation (one-of-a-kind technology), and complexity of the project will not be the primary method for EM projects, it will continue to be used for some liabilities such as longterm stewardship.

- EM prepares a placeholder estimate for LTS costs at sites where EM has an active cleanup mission.
- After EM work is complete, the responsibility for performing LTS activities transfers to the Office of Legacy Management (LM) (or other Program Secretarial Offices) and this entity is then responsible for recording the LTS liability from the expected transition date forward.
- Both the EM and non-EM LTS estimates must be updated annually and include liability covering a minimum of 75 years (unless a longer period is stipulated in agreements with the States, etc.)

EM Environmental Liability -Reviews

- When reviewing the EL estimate, EM performs numerous activities to ensure the accuracy and completeness of the EL, including but not limited to:
 - Ensuring that the adjustment narratives/explanations are complete and that the rationale supports the adjustment;
 - Ensuring consistency between:
 - Shipping and receiving sites for waste shipments destined for WIPP;
 - Number of canisters of HLW and SNF destined for a future repository; and
 - Inter-site shipments of waste, SNF, and nuclear materials.
 - Ensuring that LTS costs start dates coincide with PBS end dates for completion of EM work at each site;

EM Environmental Liability – Reviews

- Verifying that facilities D&D costs are included and not duplicated in the liability by coordinating with responsible site and field CFO personnel to:
 - Ensure that estimates for any active and surplus facilities being proposed for or are in the process of being transferred to EM but are not included in the IPABS baselines continue to be reported in the financial statements; and
 - Ensure that when active and surplus facilities are transferred to EM and included in the IPABS baseline estimates any other estimates for these facilities are removed from the liability.

EM Environmental Liability Schedule

Schedule for reporting the Environmental Liability:

- February EM HQ issues Budget/IPABS-IS guidance;
- April Sites update EL in IPABS-IS Environmental Liability Module;
- May EM HQ evaluates submittals for consistency between sites and other Program Offices;
- June EM HQ submits draft EL estimate to OFCR;
- June OIG/audit team begins field audits;

EM Environmental Liability Schedule

- August Sites submit signed GEN-2 reports;
- Sept EM HQ/Sites provide supplemental support to resolve audit issues/questions; OIG/audit team completes field audits;
- Oct EM HQ submits final EL Estimate to OFCR;
- Oct/Nov EM HQ/Sites report subsequent events and record final adjustments, audit closeout; and
- Dec EM HQ/Sites respond to findings/issues and revise procedures and processes accordingly.

Section IV Active and Surplus Facilities Environmental Liabilities

Definition AFDCS Specific Estimates Non-Contaminated OSFs Active and Surplus Facilities Liability Estimates

- The active facilities EL represents the anticipated remediation costs:
 - for contaminated facilities still in active use by active programs (active facilities); and
 - for retired contaminated facilities awaiting transfer to EM (surplus facilities).
- The Department's active facilities EL, with the exception of Naval Reactors, Idaho, and a smaller number of facilities for which more specific estimates exist, is estimated by the Active Facilities Data Collection System (AFDCS) cost-estimating model.

Active and Surplus Facilities Liability Estimates

- Cost estimates for active and surplus facilities are updated each year, during both the 3rd and 4th quarters, to reflect:
 - Current year constant dollar value by:
 - Escalating the prior year constant dollar amount by the inflation factor provided by OFCR in the annual EL guidance memo; or
 - Escalating the prior year constant dollar amount by the site-specific inflation factor; or
 - De-escalating current dollar amounts back to present year constant dollar amount (*de-escalation is calculated by the responsible program/project personnel*).
 - The transfer of cleanup and management responsibilities for active facilities to EM from other programs;
 - Changes in facility size or contamination assessments; and/or
 - Estimated cleanup costs for newly contaminated facilities.

Active Facilities Database Collection System

• AFDCS includes over 12,000 facilities at 30 sites.

- Contractor updates prior year's data with current FIMS pull and opens web-based application for field input every February and March;
- Site Data Contacts (usually site contractors working in facilities management) enter/edit:
 - Facility Gross Square Footage;
 - Facility Footprint;
 - Cost Model Code (contamination type) for each facility; and,
 - Asbestos information for a subset of facilities that are not classified as having other contamination.

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- Cognizant Federal Managers review and approve the updated facility data for their respective sites.
- OFCR performs various reviews of data and makes necessary adjustments and provides the database to the auditors in June.
- 4th Quarter update will include field inquiries regarding any significant changes from 3rd Quarter and audit findings of errors that need to be reflected in the liability.

Active and Surplus Facilities Specific Liability Estimates

- In instances where the field sites have EL estimates for individual active facilities, in these cases, the sites must:
 - Submit the estimate(s) to OFCR;
 - OFCR reviews the estimate(s) to determine the validity and reasonableness of the estimate.
 - If the estimate appears reliable, the facilities in question are excluded in AFDCS; and
 - The site records the detailed estimates for these facilities in STARS and includes the detailed estimates on the site's Note 3 as an "adjustment outside of AFDCS".
- Contact Stacy Gerau (301-903-0149) when more detailed cost estimates are available.

Non-Contaminated OSFs

- In instances where an OSF is NOT Contaminated, the SDC should assign model code "N" (no liability) to this structure instead of any other model code.
- For example, a stack that is NOT more likely than not to contain contamination should be assigned model code "N" as opposed to "J" (stack).

Section V Other Legacy Environmental Liabilities

Non-EM Clean-Up Liabilities Defense HLW and SNF Liability

Fissile Materials Disposition Liabilities

- Surplus Plutonium
- Highly Enriched Uranium

Non-EM Clean-Up Liabilities

- Non-EM environmental liabilities are all of those active program liabilities that are outside of EM Program and outside of active facilities liability estimates.
- These non-EM liabilities are categorized in STARS as restructured environmental liabilities (REL).
- REL liabilities are becoming a significant focus of the environmental liability portion of the Department's consolidated financial statement audit;
 - Audit scrutiny has dramatically increased every year in this area.

Non-EM Clean-Up Liabilities

- Major categories of REL activities:
 - Soil and groundwater remediation activities;
 - Excess materials;
 - Waste streams from current operations; and
 - Any other activity not in the EM or active facilities estimates.
- Examples of specific REL activities:
 - Existing production waste streams at Y-12;
 - Moving the reactors into the central plateau at Hanford after the EM scope of work is complete; and
 - NNSA-owned Bolas spheres at LANL.

Defense HLW and SNF Liability

- The Nuclear Waste Policy Act of 1982 (NWPA) established the Department's responsibility to provide for permanent disposal of the nation's high-level waste (HLW) and SNF.
- All owners and generators of this waste, including the Department, must pay their respective shares of the full cost of the disposition program.
- The TSLCC, Fee Adequacy and Defense Share Calculation are audited each year.

Defense HLW and SNF Liability

The TSLCC Estimate of the Civilian Radioactive Waste Management Program:

- Limited update annually FY2008 TSLCC was 1st full update to be provided to the public since 2001;
- Developed in accordance with Published Federal Register Rules;
- Used to assess Nuclear Waste Fund fee adequacy;
- Used to calculate the defense cost share of the repository;
- The 2008 TSLCC was the last TSLCC completed until the Department establishes a path-forward regarding the existence of a future geologic repository to store HLW/SNF.

Fissile Materials Disposition Surplus Plutonium

- In September 2000, the U.S. and Russia signed the Plutonium Management and Disposition Agreement, which committed each country to dispose of 34 metric tons of surplus weapon-grade plutonium.
- To dispose of weapons-grade plutonium, both the U.S. and Russia must convert the plutonium into fuel to be used in nuclear reactors (once irradiated, the plutonium is no longer readily usable for nuclear weapons).
- The Department has designed and is in the process of constructing a Mixed Oxide (MOX) Fuel Fabrication Facility, a Pit Disassembly and Conversion Facility, and a Waste Solidification Building at SRS to convert the plutonium into fuel suitable for use in nuclear reactors.

Fissile Materials Disposition Surplus Plutonium

- The MOX liability includes:
 - Design;
 - Construction;
 - Operation;
 - Facilities Decontamination and Decommissioning (D&D); and
 - Disposition of all wastes projected to be generated during the project life-cycle.
- The liability is reduced by the projected revenues from MOX fuel sales.
- The MOX liability estimate is audited each year.

Fissile Materials Disposition Highly Enriched Uranium

- Under the current uranium market the Department's revenues from down-blended HEU exceed the project costs.
- No liability is currently being recorded.

Section VI Regulatory Environment

Regulatory Environment

- Multiple Regulatory Authorities: (at a minimum)
 - State environmental or ecology agencies; and
 - Environmental Protection Agency (EPA).
- Multiple Laws and Regulations: (at a minimum)
 - Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA);
 - Resource Conservation and Recovery Act (RCRA); and,
 - Hazardous and Solid Waste Amendments (HSWA) or State equivalent.
 These laws can be found at http://www.epa.gov/lawsregs/laws/index.html
- Overlapping legally binding, and sometimes conflicting, clean-up agreements, consent decrees and orders, settlements, and/or compliance agreements.

These agreements can be found on the individual sites' public websites.

Section VII Additional Yearend Reporting and Related Liabilities

Subsequent Events Non-Monetary Loss Contingencies Related Liabilities

Subsequent Events

Subsequent events include all events that impact the EL up until the date that the audit opinion is signed.

There are 2 types of subsequent events:

- Events that provide information related to conditions that did exist as of September 30th and affect the estimates in the financial statements. These events do require adjustments to the financial statements.
- Events that provide information related to conditions that did not exist as of September 30th. These events should not result in an adjustment to the financial statements but may require disclosure to keep the statements from being misleading.

Non-Monetary Loss Contingencies

Non-monetary loss contingencies result from instances in which the plaintiff(s) is seeking a programmatic change not a monetary claim. The cost of these programmatic changes can be significant.

- Formal Yearend Non-Monetary Loss Contingency Reporting.
- Any new information related to these contingencies must be considered and included in subsequent events reporting during the October through December reporting period.
- In FY12, the new reporting threshold increased to \$30M, as opposed to \$20M.

Related Liabilities

- Legal Contingencies;
- Pensions and PRBs;
- Energy Employees Occupational Illness Compensation Program Act (EEOICPA);
- Radiation Exposure Compensation Act (RECA); and
- Environment, Safety and Health.

Section VIII Focus for FY 2013

Focus for FY 2013

- Document EM risk-based contingency
 - Ensure that adequate documentation exists that supports the contingency
- Prior Period Adjustments
- Ensure <u>ALL</u> liabilities are reported
- Do not include uncontaminated facilities in the liability
- Improvements/streamlining/cost and workload reductions

Appendix A Liability Math

Current and Constant Dollars Contingencies

Confusion is common due to differing definitions and uses of certain terms related to current and constant dollars and contingencies.

Constant Dollars = Unescalated or De-escalated Dollars

The Department's Financial Statements are presented in constant dollars. The use of constant dollars allows comparability without the effect of future inflation. Thus if the constant dollar estimate from this year is greater than or less than that of a previous year, it indicates that the estimate has had "real" growth or decrease.

Current Dollars *normally* = Escalated Dollars

- Most liability estimates cover multiple years and projects are generally managed using escalated dollars which include cost of money over time. Due to the variability in calculations of the time and cost of money that can be used in an estimate, project/program personnel should always perform the de-escalation to constant dollars.
- Depending upon the discipline of the person preparing or providing an estimate, you can receive a 'current' dollar estimate that is in fact a constant dollar estimate. This is because a FY13 estimate in current year (FY13) dollars is actually a FY13 constant dollar estimate. Also commonly used by project and some financial and budget personnel are the terms 'current year dollars' and 'current constant year dollars' which usually describe a constant dollar estimate.

STARS Inflation Adjustment

Inflation = the increase resulting from converting last year's constant dollars to this year's constant dollars.

- Example: \$100 FY12 constant dollar estimate multiplied by the constant dollar inflation factor of 1.0172 results in a \$101.72 FY13 constant dollar estimate. The inflation adjustment to be recorded in STARS is \$1.72.
- There may be instances where a more specific calculation should be used due to unique calculations within an estimate. This is not usual and would be identified by the program/project person providing the estimate. Any of these estimates are to be discussed with CF-12 (Lois Jessup or Stacy Gerau).

- Contingencies
 - Management Reserve (contractor)
 - Funded and Unfunded Contingency (DOE)
 - EM Program-Wide Contingency
 - Site and project specific risk based contingency calculations (previously based on uncertainty scores at the PBS level) were used beginning in FY11;
 - With the exception of capital projects, contingency calculated is for liability purposes only; and
 - Represents moving from ~50% confidence-level to ~80% confidence-level.
 - EM and AFDCS Contingency Percentages are applied to:
 - Adjustments outside of IPABS;
 - Estimates outside of AFDCS; and
 - Non-EM estimates.

Appendix B Common Acronyms

- o HLW High-level Waste
- o SNF Spent Nuclear Fuel
- o NNSA National Nuclear Security Administration
- o WIPP Waste Isolation Pilot Plant
- o SR.S Savannah River Site
- o NV-Nevada
- o EM Office of Environmental Management
- PRB Post-Retirement Benefits
- o SOPP Standard Operating Processes and Procedures
- PBS Project Baseline Summary
- o EL Environmental Liabilities
- o IPABS Integrated Planning, Accountability, and Budgeting
- o HQ-Headquarters
- OFCR Office of Financial Control and Reporting
- STARS Standard Accounting and Reporting System
- LTS Long-Term Stewardship
- o LM Office of Legacy Management
- D&D Decontamination and Decommissioning
- o LCC Life-Cycle Costs

- o AFDCS Active Facilities Data Collection System
- o PPC Project Performance Corporation
- o FIMS Facility Information Management System
- o NWPA Nuclear Waste Policy Act
- o TSLCC Total System Life Cycle Cost
- o Pu Plutonium
- o MOX Mixed-Oxide Fuel Fabrication Facility
- o HEU Highly Enriched Uranium
- o EPA Environmental Protection Agency
- o CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
- o RCRA Resource Conservation and Recovery Act
- o HSWA Hazardous and Solid Waste Amendments
- o EEOICPA Energy Employees Occupational Illness Compensation Program Act
- o RECA Radiation Exposure Compensation Act

Appendix C EM SOPP

Overview Objectives Field Roles and Responsibilities Key Guidance

EM EL SOPP Overview

- EM is required to annually update the EL estimate before it is recorded in the financial statements.
- The SOPP is applicable to all Federal and contractor personnel responsible for estimating and/or reporting the EM EL estimate.



- The SOPP is to be used for developing and reviewing EM EL estimate to:
 - Ensure that the approach used to formulate the estimate are consistent and properly documented;
 - Ensure that the estimate is accurate and complete; and
 - Ensure interfaces between sites and other programs are factored into the estimate.

EM EL SOPP Objectives

- The objectives of the EM EL SOPP are to:
 - Clarify the roles and responsibilities at EM HQ and the field sites for preparing and reporting the EM EL estimate;
 - Reduce errors and inconsistencies in the preparation of the estimate;
 - Improve the ability to reconcile and explain changes from the previous audit period;
 - Simplify reporting of information during the audit;
 - Improve documentation of assumptions, explanations to auditors, adjustments and subsequent events reported during the audit.

EM EL SOPP Field Roles and Responsibilities

- Each field site must designate a single POC for the EM EL estimate who will:
 - Serve as the field office liaison for information dissemination;
 - Coordinate site visits and conference calls requested by the auditors;
 - Obtain EM HQ approval to release any draft or preliminary documents requested by the auditors;
 - Ensure LTS start dates coincide with PBS end dates for completion of EM work at the site;

EM EL SOPP Field Roles and Responsibilities

- Verify that decontamination and decommissioning (D&D) costs are included only for facilities owned by EM;
 - D&D costs for active facilities are recorded by the PSOs as a non-EM EL (aka REL) liability; and
 - EM should not record a liability for D&D of non-EM facilities until these facilities are formally accepted into the EM program.
- Print the IPABS-IS GEN-2 reports for all PBSs for the site, obtain the appropriate signatures on each GEN-2 report, scan the signed reports and upload them to the IPABS-IS EL module; and
- Prepare responses to audit findings issued to the site.
 - These responses must be coordinated with the EM HQ Liaison (S. Gomberg) and the Office of Financial Control and Reporting (L. Jessup and S. Bleigh).

- Estimates are submitted into IPABS in current dollars;
 - IPABS de-escalates the estimates into constant dollars;
 - Field sites are responsible for ensuring that the correct escalation rates are reflected in IPABS along with the annual cost profile.
- If a range of estimates are available, and all points in that range are considered equally probable, then the lower end of the range should be recorded in the estimate;
 - If any point in the range is more probable than the other points in the range, the more probable point must be recorded in the estimate.

- If new information becomes available, that materially affects the estimate, prior to issuance of the audit opinion (approximately the 2nd week in Nov.) the estimate should be adjusted if the change is considered probable;
 - If sufficient time is not available to fully review the updated cost information, a placeholder adjustment should be recorded;
 - All adjustments must include an explanation for the basis of the adjustment; and
 - A zero adjustment can be made in IPABS to document that the new information was considered as long as the reason for not making the adjustment is documented and justified.

- EM portion of the EL estimate is based on four components:
 - Approved PBS lifecycle costs at the 50% confidence level (under configuration control), includes near-term baselines (NTB), out-year planning estimate ranges (OPER), and nonprojects;
 - Pending change requests;
 - Adjustments any increments not included in the two categories above, including:
 - New scope;
 - Cost growth;
 - Changing assumptions;
 - Performance; and
 - CFO adjustments.

- Adjustments; (cont.)
 - May be submitted at any point during the reporting period, up until early November.
- Contingency accounts for uncertainty in the estimate, including:
 - NTB and OPER; and
 - Non-projects.
 - Calculated using:
 - Uncertainty scores in IPABS (prior approach);
 - Risk-Based Methodology (current approach).

- LTS:
 - Field offices must prepare a placeholder estimate for LTS costs at sites where EM has an active cleanup mission until EM work is complete and the LTS responsibility transitions to the PSO or LM;
 - Start date for LTS must begin the year after EM work is complete;
 - LTS should be estimated for 75 years from the current year unless otherwise stipulated in statues, regulations, agreements, etc.;
 - LTS should be updated annually for changes to EM project schedules, changes to end-states that result in different monitoring and surveillance activities, etc.

Appendix D Active Facilities Asbestos Estimation

AFDCS Guidance Process Flow Active Facilities Asbestos Estimation AFDCS Guidance

ASBESTOS DATA COLLECTION

The Federal Accounting Standards Advisory Board has mandated that the Federal government comply with an accounting standard which requires the estimation of and inclusion of asbestos-related cleanup costs in agencies' financial statements. To meet the requirements of this rule, the Active Facilities Data Collection System (AFDCS) will collect asbestos data in addition to our current data collection effort. The data will be collected within the normal facility record update and submission in AFDCS.

In order to accurately capture the asbestos data and create the associated liability estimate, this year al sites are required to complete the previously existing field "Does the facility contain asbestos?" for all facilities that meet the following criteria:

- All "No Liability" facilities (that are not excluded from the estimate).
- All Facilities excluded as "Other" (exclusion code "6")

Note: Only indicate "yes" to asbestos if the facility contains asbestos <u>and</u> DOE has cleanup responsibilities for the facility.

Asbestos information will <u>not</u> be required for facilities excluded as land or trailer, or for facilities that are trailers or structures.

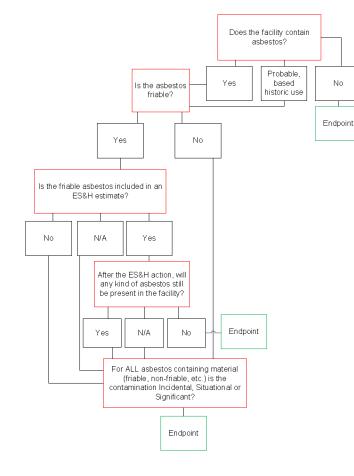
Prior to FY 2011, asbestos information was only required for those facilities that met the above criteria and were built or acquired before 1990. For FY 2011, this information will be required for all facilities that meet these criteria, regardless of the year built or acquired.

For FY 2011, additional information will be required for those facilities that have asbestos. Users will be required to answer the following questions for facilities that meet the criteria described above:

- Does the facility contain asbestos?
- Is the asbestos friable?
- If yes, is the friable asbestos included in the ES&H estimate?
- If yes, after the planned ES&H action, will there still be asbestos present in the facility?
- For all asbestos containing material (friable, non-friable, etc.), is the contamination Incidental, Situational, or Significant?

Note: <u>Only indicate "yes" to asbestos if the facility structure itself contains asbestos</u>. As with other types of contamination in AFDCS, information is not required on equipment or other removable facility components that may be contaminated with asbestos.

Active Facilities Asbestos Estimation Process Flow



Based on the responses to each of these questions, the AFDCS cost model will calculate an estimate for asbestos liability at each facility. The process will follow this basic outline:

- 1. Does the facility contain asbestos? For every eligible facility, users must answer this question. Users can select 'yes', 'no', or 'probable based on historic use'. If a user selects 'no', then no further data is required and the process ends.
- 2. Is the asbestos friable? If the user selects 'yes' or 'probable based on historic data', then they must indicate whether the asbestos is friable.
- 3. Is the friable asbestos included in the ES&H estimate? This question is only asked of users who have indicated that the facility contains friable asbestos. If the friable asbestos has resulted in an out of compliance with applicable laws and regulations condition, the cost of actions to come into compliance is an ES&H liability that must be recorded.
- 4. After the planned ES&H action, will any kind of asbestos still be present in the facility? For facilities where ES&H action will remove all asbestos from the facility, we do not want to include this in the AFDCS liability estimate since the cleanup liability has already been accounted for in the ES&H estimate.
- 5. For all asbestos containing material (non-friable, friable, etc.) is the contamination Incidental, Situational, or Significant? Users must indicate which of these general categories best describes the extent of <u>all</u> asbestos contamination in the facility. *Incidental contamination* refers to small amounts of asbestos that were not related to particular missions or activities at the facility. *Situational contamination* also describes a relatively small amount of asbestos, but the contamination is related to specific mission activity. *Significant contamination* is present if removal or demolition would be a major concern for significant portions of the facility.

If the facility **does** have asbestos contamination, the site will also have to verify that the facility's active size and footprint are correct. Please note that all facilities with asbestos will need to have active size and footprint data entered into AFDCS prior to submission. If the facility **does not** contain asbestos, then the facility record is complete after the user selects "no" to the asbestos question.

Appendix E Newly Generated Waste Liability Guidance

Determining whether an environmental liability for 'newly generated wastes' is required for non-EM funded work:

- Does the waste actually exist as of the financial reporting date? Waste projections should not be included unless the projected wastes result from clean-up activities.
- What type of wastes are these: routine industrial-type wastes or unique wastes requiring non-commercial disposal?
- For wastes needing non-commercial disposal such as TRU, HLW, mixed or classified it is unlikely that generation and final disposition will happen within a 12 month period. For these wastes, an environmental liability for the disposition of wastes held as of the end of the financial reporting period must be recorded.
- For wastes with commercial disposal paths, are the wastes periodically (quarterly, weekly, monthly) disposed of AND will the waste be disposed of within 12 months of being generated? If yes, no liability needs to be recorded. If no, an environmental liability must be recorded for the cost of disposition of the backlog of wastes existing at the end of the reporting period.

Appendix F ES&H Liabilities

Definition Guidance Attestation

ES&H Liability Definition

- The Environment, Safety and Health (ES&H) liability represents costs to bring facilities and operations into compliance with existing:
 - ES&H laws;
 - Regulations; and
 - Applicable Department of Energy (Department) Orders.
- Sites that have been "grandfathered" in for certain regulations are considered to be in compliance with existing guidance.

ES&H Liability Guidance

- During the FY 2013 ES&H liability update, sites are required to use:
 - Most current ES&H Management Plan; and/or
 - Equivalent planning documents.
- Amounts reflected in the funded and unfunded compliance Activity Data Sheets (ADSs) should be summed for FY 2014 and beyond.

ES&H Liability Guidance

- The FY 2013 estimate should be aggregated using the following three compliance funding categories:
 - Funded operating expenses (OE) and capital equipment (CE) activities within your Target Level, summed for FY 2014 to the completion of the activity;
 - Funded general plant projects (GPP) and line-item construction projects (LIP) within your Target Level, summed for FY 2014 to the completion of the projects; and
 - Total estimated funding (OE, CE, GPP, and LIP) for all currently unfunded compliance activities to be funded in the future, summed for FY 2014 to the completion of the activity/project.

ES&H Liability Guidance

ES&H liability estimates must include:

- All ES&H compliance activities funded by all Cognizant Secretarial Offices, except EM.
 - The EM portion of the ES&H compliance liability will be reported under the environmental liability estimate and should not be duplicated as an ES&H liability.
- ES&H liability estimates must be updated for 3rd Qtr and 4th Qtr financial statement reporting.
 - Any potential material changes to the liability as a result of events (e.g., fire damages) occurring after the 3rd quarter submission (but before year-end) must be included in the year-end ES&H liability.

ES&H Attestation

Field and site office managers are required to sign an ES&H Attestation Statement that is ultimately rolled-up into the overall DOE Management Representation Letter.