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Office of Environmental Management

Operations Activities Protocol

February 28, 2012

Revision 0

Prepared by a team of Field and HQ personnel chartered by EM HQ to develop guidance for implementing an EM Operations Activities Policy and Protocol



Department of Energy

Washington, DC 20585

March 15, 2012

MEMORANDUM FOR DISTRIBUTION

FROM: TRACY P. MUSTIN *Tracy P. Mustin*
PRINCIPAL DEPUTY ASSISTANT SECRETARY
FOR ENVIRONMENTAL MANAGEMENT

SUBJECT: Policy and Protocol for Office of Environmental Management
Operations Activities

The purpose of this memorandum is to provide you the policy (attachment 1) and the protocol for Environmental Management (EM) Operations Activities that will define EM's framework for managing and reporting progress for Operations Activities (attachment 2). The framework focuses on an integrated system of program management elements (e.g., scope, schedule, and cost) for planning and executing Operations Activities. This memorandum rescinds any previous EM policies or protocols for managing Operations Activities. Capital Asset Projects will continue to be managed in accordance with the requirements of Department of Energy (DOE) Order 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, dated November 29, 2010.

The policy and protocol is being issued as Revision 0, dated February 28, 2012. EM Field and Headquarters elements should begin using this policy and should provide comments and suggestions for changes and improvements. In early fiscal year (FY) 2013, we will consider whether revisions to the policy and protocol are needed. In addition, we will ask you to identify staff to participate on a team (or teams) to develop guidance documents on various related topics such as the preparation of the FY Work Plan; qualifications for Operations Activity Managers, who will function for Operations Activities in a role similar to Federal Project Directors for Capital Asset Projects; and for other areas as they are identified.

If you have any further questions, please feel free to contact me or Ms. Alice C. Williams, Associate Principal Deputy Assistant Secretary, at (202) 287-5230.

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Policy for Environmental Management Operations Activities
Revision 0
February 28, 2012

The purpose of this policy is to define the framework for managing and reporting progress for the Office of Environmental Management (EM) Operations Activities. The framework focuses on an integrated management control system with principles and policies that require operations activities to do the following:

- Plan all work through completion.
- Break down scope into manageable pieces that can be assigned to responsible organizations for control of scope, schedule and cost objectives.
- Integrate scope, schedule, and cost objectives into a plan by which accomplishments may be measured.
- Objectively measure activity performance.
- Analyze significant variances and implement management actions to mitigate risks and manage cost and schedule performance.

Operations activities will be managed using two timeframes: Contract Period of Performance (CPP) and Life-cycle Cost (LC). The CPP will represent the current contract requirements. The LC timeframe will include CPP, and any remaining scope until the activity is completed.

Planning assumptions for the CPP will be consistent with the contract and the life cycle will be consistent with guidance from Headquarters. To accurately monitor, measure, and report performance, appropriate performance metrics and milestones for both the CPP and LC will be developed for each operating activity based on the size and complexity of the activities and contractually established performance-based incentives, if applicable. The performance metrics shall be developed consistent with EM corporate-level metrics.

Execution year assumptions, scope definition, annual appropriation/allotment, cost, schedule, metrics, milestones, risk assessment, management reserve, and progress reporting are key elements in managing operations activities and shall be defined in Fiscal Year Work Plans (FYWP). The Site Operations Activity Manager, or equivalent, will develop a FYWP by site or Project Baseline Summary and submit to the responsible Site or Field Office Manager for approval with coordination from the applicable Deputy Assistant Secretary with mission unit responsibility by the end of September for the upcoming fiscal year. Sites with multiple prime contractors will have multiple CPPs and may have multiple FYWPs. EM site management is responsible for the oversight of the operations activities (including any contracts, grants, agreements, etc.). This oversight will be accomplished utilizing site-level processes and procedures to manage the work scope effectively and efficiently, and meet contract and performance requirements within funding constraints. The cost, schedule, and defined set of performance metrics within the CPP and LC will be under change control with established thresholds for determining change approval authorizations.

At the start of a new CPP, the Site or Field Office Manager will verify that the scope, cost, and schedule are executable and within the contract requirements and the life-cycle cost estimate. It

is the responsibility of the Field Office Manager to conduct the review on all operations activities with Headquarters participation and update its baseline/estimate, if needed, consistent with established change control processes.

Periodic progress reviews of operations activities will be conducted with Headquarters. Presentation content must include sufficient data to adequately describe Operations Activities progress as it relates to the scope, cost, schedule, safety, contract, performance metrics, key milestones, significant risks and mitigations, financial status, and management and other issues and concerns.

Office of Environmental Management

Operations Activities Protocol

February 28, 2012

Revision 0

Prepared by a team of Field and HQ personnel chartered by EM HQ to develop guidance for implementing an EM Operations Activities Policy and Protocol

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1.0 PURPOSE

The purpose of this protocol is to define the framework for managing and reporting progress for the Department of Energy (DOE) Office of Environmental Management (EM) Operations Activities. The framework focuses on an integrated management control system with principles and policies that provide for the following:

- Plan all work through completion.
- Delineate scope into manageable pieces for control of scope, schedule and cost objectives within established roles and responsibilities.
- Integrate scope, schedule, and cost objectives into a plan by which accomplishments are measured.
- Objectively measure and analyze Operations Activity performance.
- Analyze significant variances and implement and then implement management actions to mitigate risks.

To support the above requirements, the protocol describes the processes and mechanisms for planning, managing, and reporting Operations Activities.

This document cancels the Office of Environmental Management's Operations Program Protocol issued by the Principal Deputy Assistant Secretary, dated April 21, 2010.

2.0 APPLICABILITY

This protocol applies to Operation Activities work scope defined and approved by each site or field office and concurred by EM Headquarters (HQ). Operations Activities are often preceded by, or integrated with, Capital Asset Projects (CAP) to demonstrate progress on work scope. Operations Activities require objective metrics to measure performance; milestone and schedule progress; cost performance; and risk analysis. Although Operations Activities are not subject to DOE Order (O) 413.3B, *Program and Project Management for the Acquisition of Capital Assets*, requirements for critical decision and earned value management system (EVMS) certification and reporting, the appropriate project management principles will be applied using a graded approach.

In summary, Operations Activities may include, but are not limited to, the following:

- Facility operations.
- Environmental remediation operations.
- Waste management operations.
- Environmental stewardship.
- Facility shutdown and deactivation activities.

Appendix B provides the chronology of EM actions to separate Operations Activities from CAPs. Additionally, section 4.0 and appendix C provide expanded definitions of Operations Activities.

3.0 ROLES AND RESPONSIBILITIES

The site or field office is responsible for execution of the EM Operations Activities. The site or field office develops and approves the Fiscal Year Work Plan (FYWP), which defines the execution year scope of work. In addition, each site or field office approves all changes to the FYWP that do not impact HQ-controlled items. Examples of HQ-controlled items include changes in EM liability, corporate performance metrics, scope that may impact other sites, or changes in Project Baseline Summary (PBS) funding. Upon contract award, each site or field office is responsible for reviewing and approving their contractor's contract performance baseline (CPB); also referred to as contract period of performance (CPP) to ensure it meets the contractual requirements. HQ participates in CPB review, reviews all FYWPs and approves HQ-controlled items. The roles and responsibilities for planning and approving EM's Operations Activities FYWP are provided in the table below. The assigned Assistant Manager or Operations Activity Manager (OAM) is responsible for the management of the FYWP. Table 1 summarizes FYWP responsibilities by function.

Table 1 Operations Activities Responsibilities

Function	Responsibility
Program Secretarial Officer	Review and oversight of Operations Activities.
Site or Field Office Manager*	Review and oversight of each site or field office work planning and execution process for Operations Activities. At the start of a new CPP, the Site or Field Office Manager verifies that a plan documenting scope, cost, and schedule requirements for Operations Activities are executable, and within the contractual requirements and the lifecycle cost estimate. It is the responsibility of the Site or Field Office Manager to approve FYWPs and conduct the review on all Operations Activities within their site or office with HQ participation.
Assistant Manager or Operations Activity Manager	Individual designated by the Site or Field Office Manager to oversee the preparation and management of Operations Activities FYWPs. Ensures Operations Activities work scope is performed as approved by the Site or Field Office Manager.
Operations Activity Manager	The responsible site manager for Operational Activities implements the protocol.
Contracting Officer	The individual with the authority to enter into, administer, and/or terminate contracts, and make related determinations and findings.
Staff support personnel	Coordinates preparation of the Operations Activities FYWP and reports information to HQ through the appropriate site reporting method.

* Includes National Nuclear Security Administration (NNSA) sites with EM work scope.

4.0 OPERATIONS ACTIVITY SCOPE

Operations Activities are ongoing operations that include, but are not limited to, treatment, stabilization, packaging, storage, transportation and disposition of waste and nuclear materials; operation of environmental remediation systems, such as groundwater treatment systems; post-construction and post-closure care of remediated land burial sites; long-term environmental stewardship, including environmental monitoring and institutional controls; characterization; and facility shutdown and deactivation activities.

Consequently, Operations Activities represent both: (1) non-capital asset activities that are project-like with definable start and end dates, discrete scopes of work, and measurable accomplishments; and (2) routine or re-occurring facility or environmental operations. Appendix C provides further Operations Activities explanation and definition.

5.0 MANAGING PRINCIPLES FOR OPERATIONS ACTIVITIES

Operations Activities are grouped according to Work Breakdown Structure (WBS) with an associated mission category definition. Operations Activities are defined at the lowest planning level of the contractor WBS and summarized at the EM Corporate WBS Analytical Building Block (ABB) level for reporting purposes. Operations Activities are managed to their definable scopes of work, cost, schedule plans, milestones, and performance metrics.

5.1 Fiscal Year Work Plan (FYWP)

This section establishes requirements for the development, submittal, and approval of an Operations Activity FYWP by contract, PBS, and/or ABB, if appropriate. The FYWP provides the scope, cost, schedule, performance metrics, milestones, assumptions, and risks for the execution. Each site has the option of developing lower level work plans to improve the visibility of the contractor's performance and management of the Operations Activities.

Changes to the FYWP are approved by the site or field office in accordance with their change control process. Authorities, for change approval, are identified in the FYWP.

5.1.1 FYWP Structure

The site or field office determines the WBS level for which the FYWP is prepared. Consequently, FYWPs may be prepared at Level 2, 3, or 4 of the EM Corporate WBS as follows in Table 2:

Table 2 Corporate WBS Levels for FYWP

Level	Description
1	The EM Program level which represents the entire EM work across the DOE complex.
2	The site level. EM scope by geographical area, as assigned to the appropriate site or field office.
3	The program level, as captured in a PBS. PBSS include CAPs, projects that do not meet the definition of a CAP, and Operations Activities.
4	The ABB level where work is defined. The ABB represents the elements of the Integrated Priority List (IPL).

Scope complexity, risks, CPB value, site size, durations of the activities, performance metrics and milestones are some of the factors that are considered in determining the Corporate WBS level for the FYWP. Progress against the Operations Activity FYWP is reported in the EM Integrated Planning, Accountability, and Budgeting System (IPABS).

5.1.2 FYWP Content

The FYWP content is comprised of the basic elements that describe the scope, cost, and schedule of the work in the upcoming execution year as suggested in table 3.

Operations Activities are described in the CPP and lifecycle timeframes. The CPP timeframe represents the current contract period, whereas, the lifecycle timeframe represents the entire duration of the Operations Activities work, which includes the historical actual performance, the CPP, and any out-year remaining scope planned to completion.

The FYWP:

- Is based on fiscal year performance information, and, where practical, provides information on any impacts to the life-cycle information.
- Contains upcoming execution year budget/funding levels.
- Provides upcoming execution year milestones, corporate performance metrics, as applicable, and, if appropriate, site specific metrics as the key performance indicators for progress.

The composition of the Operations Activities FYWP document is left to the discretion of the site or field office; however, a suggested format is provided in the following Table 3.

Table 3 FYWP Content

FYWP Element
Cover Page: Site or Field Office Name, Date, Document Name, and DOE logo
Signature Page: Site or Field Office Manager, PBS Managers, Operations Activity Program Managers
Table of Contents
Acronyms (optional)
PBS Number and Title, Contractor Performing the Work, and Responsible Operations Activity Program Managers
Scope Description (Contractor's WBS Dictionary may be attached) and Key Assumptions for the contract per PBS or ABB
Spend Plan Table by Month by PBS, or if appropriate, by ABB (if EVMS data is required per the contract, then data should be provided for the progress reviews)
Schedules, Key Milestones and Deliverable Chart with Planned Due Dates (updates provided in progress reviews with actual dates)
Performance Metrics Table with Planned Amounts by Month (updates provided in progress reviews with actual amounts)
Risks by PBS or ABB if appropriate (Risk Register may be attached); mitigation actions discussed in progress review; and Management Reserve
Change Control Thresholds, if not already covered in other site or field office program documents

Appendix A provides a sample Operations Activity FYWP template.

The FYWP represents approved EM work scope for specific WBS elements with defined scope, cost, schedule, risks, performance metrics/milestones, etc. The FYWP scope is directly linked to contract(s), grants, approved funding program requests, and other statements of work within the Operations Activities and developed for the upcoming execution year based on the budget level or target provided by EM HQ by PBS or ABB. When the fiscal year appropriations are determined for the site at the PBS level, the approved FYWP may be revised through the site or field office's change control process and provided to EM for informational review. In addition to any adjustments (e.g., metrics, scope, etc.), the change request should also discuss contract and life-cycle impacts, if applicable.

5.1.3 FYWP Planning Process

The Operations Activity FYWP is prepared by the responsible site or field office using the CPB, with input from the contractor, as required. The FYWP reflects the approved CPB scope, budgeted cost, schedule, and funding in accordance with contract requirements and DOE guidance. An FYWP is prepared for each contractor within a PBS when multiple PBS contractors exist. The steps for preparation and approval of the Operations Activity FYWP are provided in Table 4.

Table 4 FYWP Preparation and Approval Process

Action Step	Action Description	Responsibility	Recommended Schedule
1.	Contractor(s) and other site or field office participant(s) prepare and submit FYWP(s) to DOE. The FYWP is based on the approved contract scope and budget guidance.	Contractor(s) and other site or field office participants	By September 1
2.	DOE (site and HQ) reviews and comments concurrently on the FYWP(s).	DOE EM site or field office and HQ points of contact	Within 10 working days
3.	Operations Activity FYWP(s) are updated and finalized.	Contractor(s) and other site or field office participants	Within 10 working days of receipt of comments
4.	Operations Activity FYWP(s) are approved by DOE EM site/field office management and provided to HQ.	DOE EM site	By September 30
5.	Operations Activity FYWP information loaded into IPABS.	DOE EM site	By October 15

5.1.4 Contract Changes

FYWPs are executed through contracts. If a FYWP necessitates a change to the contract, the Contracting Officer (CO) acting within the scope of his/her authority is the only person empowered to execute a contract modification. For non-management and operating traditional contracts, the FYWP may require a contract modification. Changes affecting the contract-defined scope, cost, or schedule will require a contract modification and must be negotiated prior to the start of the fiscal year.

5.2 Performance Metrics and Milestones

Standard earned value measurement, traditionally used to measure performance of CAPs, may not be sufficient to measure the progress of Operations Activities. Therefore, additional performance metrics and milestones are used to define the progress of an Operations Activity, and should, at a minimum, be tied to the appropriate EM corporate mission category and its corresponding program goals. Some examples of EM corporate performance metrics include: high-level liquid waste in inventory eliminated; liquid waste tanks closed; transuranic waste in

inventory eliminated (currently referred to as TRU waste dispositioned); or remediation completed. The 16 EM corporate metrics are provided in appendix D.

5.2.1 Establishment of Metrics and Milestones

Performance metrics and milestones are included annually in the FYWP(s). Performance metrics and milestones are based on the annual appropriation and are placed under configuration control once the FYWP is approved by the site. After continuing resolutions, the site or field office will approve changes in performance metrics and milestones based on the actual amount of funds provided. These changes are discussed during the quarterly progress reviews with HQ. In addition, the site or field office has the authority to approve all performance metrics and milestone changes in the FYWP, unless there is a specific requirement for HQ approval (i.e. EM-controlled metrics). All changes to the corporate metrics must be approved by HQ.

5.2.2 Progress Measurement

Performance metrics that measure the progress of an activity toward completing the scope of the CPP and lifecycle are also developed. Such metrics are cost or milestone-based, are measurable, and are directly related to the scope completion. In addition, the site or field office has the option of developing contract scope or site-specific performance metrics or milestones to improve their evaluation of the contractor's performance. These metrics and milestones are usually at a lower level, at the discretion of the Site or Field Office Manager, and may be reported to HQ in the quarterly progress reviews.

Cost performance is assessed by the site or field office by utilizing red/yellow/green indicators assigned in terms of the variance determined between the dollars planned to be spent for the month or quarter against the actual dollars spent in the month or quarter (i.e. spend plan). Schedule progress is measured by comparing the planned amount for each metric by month or quarter against the actual amount of the metric completed by month or quarter and completion of milestones. Contractors are required to continue to use an EVMS if it is required in the contract. As such, the site or field office will continue to collect and report this data on a monthly basis unless otherwise agreed upon.

5.2.3 Progress Reporting

Cost, schedule, and performance measurement is reported to HQ during the quarterly progress reviews. Enforceable compliance milestones are examples of site-specific milestones that are tracked by the site or field office while the performance against those milestones is reported to HQ at a summary level. Contract requirements and deliverables are reflected in performance metrics and milestones based on the funding targets provided by HQ.

Contractors and other site or field office participants report metrics and milestones to the site or field office on a monthly basis. The site or field office enters the monthly data into IPABS following the entry schedule provided by HQ prior to the beginning of the fiscal year. Field elements utilize FYWPs to develop and submit annual waste disposition forecasts as required by DOE Manual 435.1-1, *Radioactive Waste Management*. These forecasts should be consistent with the content of the waste disposition data calls.

5.3 Formal Progress Reviews

The site or field office ensures that HQ is informed about issues that require increased management attentions as they arise. However, a standard review with HQ, including a quarterly progress report, is required. This section describes the data requirements for presenting Operations Activities progress, accomplishments, and performance data to HQ on a quarterly basis. Topics covered in this quarterly review relate to the planned activities described in the FYWP and an assessment of the contractor's ability to meet the CPP requirements.

5.3.1 Quarterly Review Format

Presentation format and content are at the discretion of the site to allow for unique issues and site-specific information to be highlighted. The following data by PBS or ABB is addressed in preparing the briefing. The level of detail in this format is consistent with the information in the FYWP.

- 1) Cost Performance and/or Spend Plan: Actual cost vs. planned cost by month, quarter and fiscal year to date, along with a forecasted estimate at completion for the fiscal year. Information also may include management reserve usage, if appropriate, and earned value (EV) data if EV is required in the contract. An explanation of any changes to the spend plan or Budgeted Cost of Work Scheduled (BCWS) is required.
- 2) Schedule/Performance Metrics: Status of planned vs. actual metrics, including but not limited to corporate, regulatory, PBS, ABB, or site-specific metrics by month or quarter, and site projection including projected forecasts and explanations. Information also includes an explanation of actions in place or required to recover the scheduled, critical path activities that are in jeopardy, and any significant schedule changes.
- 3) Scope/Technical: Scope that is accomplished, significant programmatic and technical risks, and proposed mitigations, unresolved technical issues, lessons learned, quality control issues, and any changes in scope (additions, changes, or deletions).
- 4) Management Planning and Control: Management concerns and issues, regulatory concerns including projected milestones that will be missed or are in jeopardy, potential workforce adjustments, Government Furnished Services and Items (GFSI) in jeopardy, assistance required from other sites, organizations, or HQ, and approvals or help needed from HQ.
- 5) Safety: Status of any event investigations and incidents that impact performance.
- 6) Contract: Contract status and issues; contract modifications or options in process, number of outstanding requests for equitable adjustments (REA) or changes and timeframe for resolution; and expected future REAs or contract changes.
- 7) Funding: Changes in the annual funding profile and impacts of a continuing resolution, if applicable, and year-end projected uncOSTed obligations (third and fourth quarter only).
- 8) EM Liability: Actual or projected changes to the EM liability (increases, decreases or shifts) by PBS and entire site totals.

5.3.2 Monthly Contractor Reviews

The Site or Field Office Assistant Manager or the OAM is encouraged to hold reviews of the site Operations Activities more often than the quarterly reviews described above. Ideally, a monthly update schedule is recommended for critical activities. Format, attendance, subject areas, and all other aspects of the review are at the discretion of the Site or Field Office Manager, including selection of the presenter (contractor or Federal personnel).

5.4 Managing the CPP

Managing the CPP establishes the requirements for planning Operations Activities that are the subject of a contract award or extension, or a contract option execution, and establishes change control requirements for Operations Activities during the CPP.

If required by contract, each contractor with Operations Activities shall submit a CPB. The requirements and appropriate level of detail for CPB will be described in the contract. The CPB should generally address the following items:

- WBS and WBS dictionary
- Spend plan
- Cost estimates
- Assumptions, contractor risk and associated Management Reserve
- Corporate performance metrics (if applicable)
- Other performance metrics (if applicable)
- Enforceable Agreement milestones (if applicable)
- EVMS (if applicable)
- Integrated resource loaded schedule and milestones (if applicable)
- Contract performance-based incentives (if applicable)

The following approved elements will be loaded into IPABS in accordance with requirements in effect at the time:

- Spend plan – Project Execution Module
- Corporate performance metrics (if applicable) – Metrics Module
- Enforceable Agreement milestones (if applicable) – Milestone Module
- Other milestones as determined by the OAM – Milestone Module
- Approved CPB cost profile

5.5 Managing the Life Cycle

Life cycle data will be maintained for operations activities within IPABS support of the EM environmental liability. The life-cycle will include work performed to date (prior year costs), the CPP, and the remaining scope, if any, to the completion of the Operations Activity, or transfer of the activity to an organization outside of EM. The scope shall be defined in a WBS that is compatible to the EM Corporate WBS ABB structure.

Scope descriptions shall be at a summary level and identified in planning packages. Enforceable Agreement milestones and corporate performance metrics for the life cycle must be identified. Life-cycle costs beyond the CPP must be estimated as a range around a point estimate, to allow for estimated uncertainty and Federal risks. All major assumptions must be documented and taken into account when developing the cost range.

HQ will establish timeframes for the submission of cost, schedule, and metric changes made necessary as a result of directed changes (e.g., appropriations differing from assumptions, changes in Office of Management and Budget funding targets, changes in Waste Isolation Pilot Plant (WIPP) receiving schedules, etc.). The responsible OAM will submit change requests to HQ for life-cycle costs, metrics or milestones made resulting from approving or revising a CPB.

5.6 Operations Activity Closeout

In general, if an Operations Activity had corporate performance metrics associated with it, a closeout package will be required at the end of each CPP (or when the Operations Activity is completed or transferred to another organization). The process of completing an Operations Activity requires that technical and administrative matters be addressed during early phases of the Operation Activity. Prior to accepting completion, the site or field office shall verify the achievement of the Operation Activity completion criteria, including transfer of records and information, transfer of long-term surveillance, if required for the protection of human health or the environment, and administration of worker pensions and benefits.

Closeout packages should include scope of work planned, scope of work accomplished, variance explanation for differences, planned cost, actual cost, variance explanation for differences, lessons learned, regulatory milestones achieved (or missed), and updates of real and personal property (Facilities Information Management System (FIMS)) records, if necessary.

5.7 Operations Activity Manager Requirements

This section describes the qualification for and responsibilities of the OAM.

The OAM is responsible for overseeing and directing the requirements of the Operations Activities and programs as assigned by the Site or Field Office Manager. The OAMs are qualified, experienced at the appropriate grade level, and have appropriate communication and leadership skills to ensure effective interface with the contractor and Federal workforce. The credentials of the OAM must commensurate with the complexity and size of the work set. The OAM must meet the qualification requirements for a Contracting Officer Representative in accordance with the DOE's Acquisition Career Management Program at Level I or Level II, depending on the type of contract, and Level III for contracts implementing an EVMS.

The Site or Field Office Manager designates an OAM with the authority and accountability for any Operations Activity. The OAM is accountable to the Site or Field Office Manager.

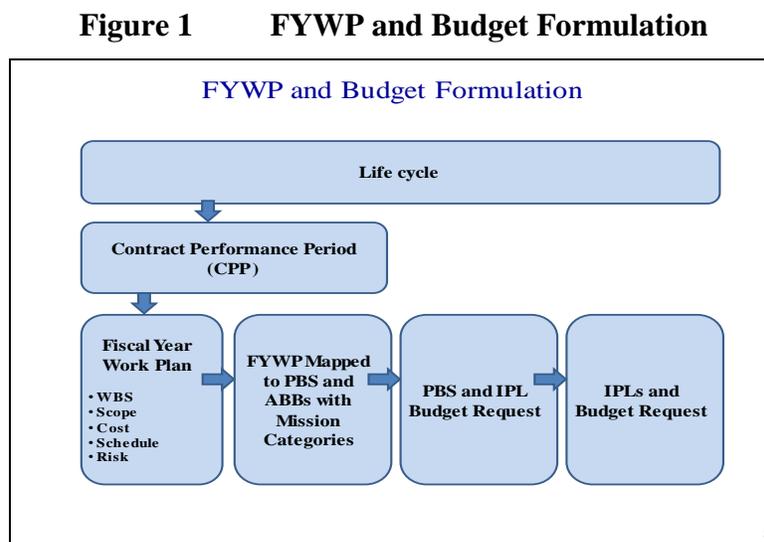
OAM's responsibilities include:

- Demonstrate initiative in incorporating and managing an appropriate level of risk to ensure best value for the Government. In cases where significant cost overruns and/or delays may occur, alert senior management in a timely manner and take appropriate steps to mitigate them.
- Serve as the single technical point-of-contact between Federal and contractor staff for all matters relating to the assigned Operations Activity.
- Ensure the development and implementation of required Operations Activity documentation (e.g., the FYWP).
- Define cost, schedule, performance, and scope in the FYWP per the Operations Activity protocol.
- Ensure timely, reliable, and accurate integration of contractor performance data into the Operations Activity's performance measurement systems.
- Evaluate and verify reported progress; make projections of progress and identify trends.
- Approve (in coordination with the CO) changes in compliance with the approved change control process documented or referenced in the FYWP or in the contract.
- Ensure that the principles of project management, safety management, contract management, and funds/budget management are fully integrated into the Operations Activity.

5.8 FYWP and Budget Formulation

The distinction of Operations Activities from CAPs does not fundamentally change the EM planning and budget formulation process. The FYWP is extracted from the CPB, which is prepared for the CPP and feeds the life-cycle baseline. The CPB serves as the source document for the annual budget formulation process and feeds the PBS planning.

Figure 1 shows the logical flow from the FYWP to the PBS, the IPL, and the budget request.



The CPB represents the near-term baseline work that is executed under contract or soon to be under contract. This work is captured as part of the CPP or a bridge baseline that covers work between terms of contracts and/or during periods of contract transition.

The FYWP may be specific to a PBS or collection of PBSs, and represents the level at which EM reports progress and performance. The FYWP is the collective scope, cost, and schedule elements for a given fiscal year (October 1 to September 30) from the approved CPB and updated annually for approval including management reserve.

6.0 REFERENCES

The following references were used for preparation of this document:

- *Policy for Environmental Management Operations Activities (February 28, 2012, Rev. 0).*
- *DOE O 413.3B, Program and Project Management for the Acquisition of Capital Assets (November 29, 2010).*

7.0 TERMS, DEFINITIONS AND ACRONYMS

7.1 Terms and Definitions

Analytical Building Block (ABB): Work scope elements planned at Level 4 of the EM Corporate WBS. ABB scope is defined as either a capital project, an Operations Activity, or Program Activity. A project can be composed of one or more ABBs. However, a single ABB cannot be established for more than one project. The ABB also represents the elements of the IPL with each as strategic planning element.

Contract Budget Base (CBB): Contract budget baseline including management reserve.

Contract Performance Baseline (CPB): Contract scope, CBB, schedule, deliverables and end date.

Integrated Priority List (IPL): A prioritized listing of site work scope categorized by ABB with associated budgeted cost and mission category definition. The IPL is a planning tool used to determine work scope and funding scenario decisions.

Facility Information Management System (FIMS): The Department's corporate real property database for real property as required by DOE O 430.1B, *Real Property Asset Management*. The system provides the Department with an inventory and management tool that assists with planning and managing all real property assets.

Fiscal Year Work Plan (FYWP): The Operations Activities annual planning document that defines the cost, scope, schedule, performance metric and milestones by PBS as defined by the CPP requirements.

Key Performance Parameter (KPP): A vital characteristic, function, requirement or design basis that if changed, would have a major impact on the facility or system performance, scope, schedule, cost and/or risk, or the ability of an interfacing project to meet its mission requirements.

Lifecycle: The time span for a program activity or project from beginning to end.

Milestone: Any significant or substantive point, time or event of the program.

Mission Category: The defined categories of work scope used during the budget formulation process to prioritize ABBs and develop the IPL.

Operations Activities: Non-CAP work scope that includes treatment, stabilization, packaging, storage, transportation and disposition of waste and nuclear materials; environmental operations; long-term environmental stewardship; and facility shutdown and deactivation activities.

Performance Metrics: Performance measures and metrics that express work performance in terms of accuracy, capacity, throughput, quantity, processing rate, reliability, sustainability, or others that define how well an activity is performed.

Project Baseline Summary (PBS): The PBS is defined as the EM-designated WBS Level 3 work element containing technical scope, cost and schedule baselines, defining performance metrics, budget request justification, and other information, such as programmatic risk and compliance drivers.

Spend Plan: The monthly time-phased budget or cost profile for a given accounting period.

7.2 Acronyms

ABB	Analytical Building Block
BCWS	Budgeted Cost of Work Scheduled
CAP	Capital Asset Project
CO	Contracting Officer
CPB	Contractor Performance Baseline
CPP	Contract Period of Performance
DOE	U.S. Department of Energy
EM	Office of Environmental Management
EV	Earned Value
EVMS	Earned Value Management System
FIMS	Facilities Information Management System
FYWP	Fiscal Year Work Plan
GFSI	Government Furnished Services and Items
HQ	Headquarters (DOE)
IPABS	Integrated Planning, Accountability, and Budgeting System
IPL	Integrated Priority List
MR	Management Reserve
NNSA	National Nuclear Security Administration

NTB	Near-Term Baseline
O	Order
O&M	Operations and Maintenance
O&S	Operations and Sustainment
OAM	Operations Activities Manager
OECM	Office of Engineering and Construction Management
PBS	Project Baseline Summary
REA	Request for Equitable Adjustment
WBS	Work Breakdown Structure
WIPP	Waste Isolation Pilot Plant

Appendix A – Fiscal Year Work Plan (FYWP) Template

Operations Activity FYWP Template

Operations Activities (OA) Annual Work Plan (FYWP)	
1. Cover Page	
2. Signature Page	
3. Table of Contents	
4. Acronyms	
5. Management Information	
5.1 PBS Number and Title	
5.2 Performing Contractor and participant(s)	
5.3 WBS Number(s)/Title(s)	
5.4 Responsible Operations Activity Manager	
5.5 Senior Site or Field Office Manager	
6. FYWP Work Scope and Objectives	
6.1 Work Scope Summary and Objectives (By PBS and/or ABB)	

Operations Activities (OA) Annual Work Plan (FYWP)

6.2 Key Planning Assumptions

7. – Budgeted Cost Baseline Profile

7.1 Total Annual Cost Profile | \$

7.2 Time-Phased Budgeted Cost

(Dollars in Thousands)													FY
Element	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Budgeted Cost
BCWS													

7.3 Budgeted Cost Assumptions

8. – Schedules, Milestones and Deliverables

Appendix B - Chronology of EM Restructuring Effort

Chronology of EM Restructuring Effort Separation of Operations Activities and Capital Asset Projects

In 1997, EM established a Project Baseline Summary (PBS) for each major mission category of site activity to establish a consistent structuring of work and performance reporting. In fiscal year 2003, EM began to “projectize” most of the PBSs by establishing them as a single element subject to DOE O 413.3A. The result was very large “PBS Projects” consisting of Capital Asset Projects (CAPs) at various critical decision points and Operations Activities with end-states that were yet to be determined by the regulatory decision-making process, timeframes that spanned decades, and cost estimates that were overly influenced by annual budgets. Furthermore, project life cycles were separated into a near-term baseline (NTB), which represented the scope of work under contract and/or a 5-year period; and an out-year planning estimate range for the balance of the project’s life cycle. The Acquisition Executive responsible for the PBS projects was the Assistant Secretary for Environmental Management, who was accountable for the approval of all work in the NTB whether capital asset or operations activities.

This management approach aided EM in defining and controlling its technical scope, project and lifecycle costs, completion dates, and risks. The rigor, discipline, structure, and tooling of the project management system helped to improve EM’s overall performance. However, it became apparent that the approach had limitations because: (1) some PBSs were very large and difficult to manage and track; (2) annual budgets were unpredictable and were often subject to competing priorities; (3) the PBSs included work that spanned several decades; (4) capital asset work and Operations Activities were often part of the same PBS structure making earned value measurement difficult to apply and report; and (5) some EM stakeholders did not agree with the definition of project and portfolio success.

The American Recovery and Reinvestment Act of 2009 (Recovery Act) signed by the President on February 17, 2009, provided \$6 billion to EM to execute its mission activities while saving and creating jobs to help rejuvenate and stabilize the U.S. economy. In order to maximize the benefit of this new infusion of funds, many of the business and project management practices had to be re-evaluated and streamlined so “shovel-ready” projects could be clearly defined within Recovery Act boundaries. EM examined the utility of the structure of the PBS projects and identified the need for a streamlined project management approach. In July 2009, EM issued the EM Recovery Act Program, *Portfolio Management Framework* (Project Document No. RAPD-EM-09004, Revision 0, July 10, 2009), which described and prescribed a new framework for managing its portfolio of projects and for applying the project management requirements documented in DOE O 413.3A. Shortly after initiation of Recovery Act work, EM and the Office of Engineering and Construction Management (OECM) agreed that the PBS for all work conducted by EM should be differentiated between CAPs, which are subject to DOE O 413.3A and Operations Activities, which are not subject to DOE O 413.3A, but the April 20, 2010, memorandum from Mr. Dae Chung that established the initial protocol to be used to manage Operations Activities. The requirements established by EM in this protocol will supersede the April 2010 memorandum.

Appendix C - Delineation of EM Operations Activities

Delineation of Operations Activities

To ensure the appropriate management principles are applied to Operations Activities, it is important to clearly differentiate CAPs and program activities from Operations Activities work scope. The following provides definition and criteria for Operations Activities.

1. Operations Activities

Non-CAPs and operations that include treatment, stabilization, packaging, storage, transportation and disposition of waste and nuclear materials; the operation of environmental remediation systems such as groundwater treatment systems; post-construction and post-closure care of remediated land burial sites; long-term environmental stewardship including environmental monitoring and institutional controls; and facility shutdown and deactivation activities.

Consequently, Operations Activities represent both: (1) non-capital asset activities that are project-like with definable start and end dates, discrete scopes of work, and measurable accomplishments; and (2) routine or re-occurring facility or environmental operations. The following sections further explain the Operations Activities categories.

2. Facility Operations Activities

Facility Operations Activities are defined as the processes, functions, and activities that are performed within, by, or in support of a facility as it was designed, constructed, or otherwise modified to result in a specific output (e.g., waste product and nuclear solution). Facility Operations Activities include sustainment (maintenance and repair) and support activities that are needed to maintain facility operations safely and efficiently. Operations and maintenance (O&M) and operations and sustainment (O&S) are interchangeable terms that refer to the set of integrated activities that take place at the facility. Assets acquired to support O&M/O&S are not capitalized provided they meet the criteria provided in the *DOE Accounting Handbook* and DOE O 413.3B.

Facility Operations Activities are generally focused on the treatment (stabilization), analytical services, storage, disposition, and the lifecycle management of both solid and liquid waste streams, as well as waste streams generated during environmental cleanup and facility disposition.

3. Environmental Operations Activities

Environmental operations involve the processes, functions and activities that are performed in environmental cleanup, facility disposition, environmental protection and compliance, and environmental stewardship. The non-capital activities of the cleanup lifecycle and the facility disposition lifecycle are considered to be Operations Activities, and are specifically distinguished from activities taken during remedial action construction and facility decommissioning (deconstruction).

Environmental cleanup operations include: (1) activities that take place the moment that an actual or apparent spill or release of a contaminant to the natural environment has been

discovered or identified through the issuance of the approved regulatory decision that documents the action to be taken in response to the environmental impact; (2) activities that take place after the near-term cleanup action is completed, including the operations demonstration; and (3) cleanup actions that are taken when the danger of a release, or a substantial threat of a release, is great.

4. Waste Management Operations Activities

Waste management operations include: (1) all activities related to the treatment, storage, and disposal of solid waste and (2) the operation and sustainment of waste management facilities. Waste retrieval operations include, but are not limited to: (1) removing transuranic waste from temporary storage in at- or above-grade pads; (2) removing liquid waste and residual materials from tanks in support of final closure; and (3) recovering polychlorinated biphenyl (PCB) and PCB-contaminated items for disposal within 1 year from when the item was declared a waste or was rendered to be no longer in service. Depending on site/project conditions, the treatment, stabilization, storage, transportation, and disposal of waste may be performed as Operations Activities, especially when there is significant interruption or significant intermediary steps in the work flow process from the time waste is generated to final disposal. In contrast, when waste is generated and transported off of the work site for direct disposal, the associated costs are part of the total project cost. At the time of original performance baseline (CD-2) approval, the WBS and associated dictionary must clearly identify waste management activities that are part of the CAP scope.

5. Environmental Stewardship

Environmental stewardship refers to the responsible use and protection of the environment, through protection, conservation and sustainable practices. Long-term stewardship includes the physical controls, institutions, information and other mechanisms needed to ensure protection of people and the environment at sites or portions of sites where DOE has completed or plans to complete cleanup (e.g., landfill closures, remedial actions, corrective actions, removal actions and facility stabilization) and where legacy contamination remains hazardous.

6. Facility Disposition, Shutdown and Deactivation

The final life-cycle phase of a facility includes its disposition that may result in its disposal. Transition starts once a permanent cessation of operations has been declared at a facility and it has been determined to be excess to current and future DOE needs. During transition, facility operations are terminated - the facility undergoes shutdown. After shutdown is completed, the process of facility disposition begins with the start of deactivation. During deactivation, actions are taken to place the facility in a low-cost, safe and stable configuration. Therefore, facility disposition operations include: (1) all near-term activities that occur after the Department has formally declared the cessation of facility operations; (2) facility deactivation and other activities performed in preparation for decommissioning; (3) facility surveillance and maintenance; and (4) post-decommissioning care.

7. Program Activities

DOE office management of projects, programs and site services such as landlord activities, site infrastructure maintenance; safeguards and security; emergency management; land management; fleet (vehicle transportation) management; technology research, development, demonstration and deployment; community-support grants; public outreach, regulatory oversight grants; and preservation of cultural resources.

Appendix D - EM Corporate Metrics

EM Corporate Metrics

EM has developed 16 corporate performance measures to enable the program to monitor annual and life-cycle progress towards meeting the Department's Strategic Goal 4.1 and EM's Program Goal. These corporate performance measures are as follows:

- 1) Certified DOE storage/treatment/disposal 3013 containers (or equivalent) of plutonium metal or oxide packaged ready for long-term storage.
- 2) Certified containers of enriched uranium packaged ready for long-term storage.
- 3) Plutonium or uranium residues packaged for disposition (kg of bulk material).
- 4) Depleted and other uranium packaged for disposition (metric tons).
- 5) Liquid tank waste eliminated (millions of gallons).
- 6) Number of liquid waste tanks closed.
- 7) Canisters of high-level waste packaged for final disposition.
- 8) Spent nuclear fuel packaged for final disposition (metric tons of heavy metal).
- 9) Transuranic waste shipped for disposal at WIPP (cubic meters).
- 10) Low-level waste/mixed low-level waste disposed (cubic meters).
- 11) Number of material access areas eliminated.
- 12) Number of nuclear facilities completed.
- 13) Number of radioactive facilities completed.
- 14) Number of industrial facilities completed.
- 15) Number of geographic sites closed.
- 16) Number of release sites remediated.