

**U.S. Department of Energy  
Office of Environmental Management  
Standing Operating Policies and Procedures (SOPP)**

Title: EM-HQ Life-Cycle Change Control Process

SOPP # 74

Revision #: 0

Effective Date: December 4, 2013

Responsible EM Org: EM-62

Review Date: December 30, 2014

**1. PURPOSE:**

- a. This SOPP is intended to define the corporate policies and procedures to establish EM's corporate change control process for creating, changing, and validating life cycle scope, cost, and schedule data in the Integrated Planning, Accountability, and Budgeting System (IPABS) Cost module, including new or existing baseline information, and
- b. This SOPP is intended to ensure consistency between site managed and controlled baselines and the key scope, cost, and schedule data captured in the EM corporate database.

**2. OBJECTIVES:**

This procedure is to be used at HQ and Site levels to establish a change control process on certain EM portfolio data maintained in IPABS:

- a. To effectively report and validate the established life-cycle baseline (scope, cost, and schedule) of the Environmental Management (EM) portfolio,
- b. To place certain corporate data, such as scope descriptions, life-cycle cost estimates, and key project and activity schedules under configuration control,
- c. To meet Departmental requirements for internal controls on financial management and reporting systems, and
- d. To ensure EM's corporate portfolio data are consistent with site project and operations activity life-cycle baselines.

**3. CANCELLATIONS:** This SOPP cancels:

- a. SOPP RM 1.1, Resource Management: Configuration Management Change Control Process for the Environmental Management Program, Feb 2, 2005.

**4. APPLICABILITY:**

- a. The provisions of this procedure will apply to all EM HQ and Field organizations responsible for the execution of programs, projects and activities funded by EM.
- b. This procedure is applicable to Project Baseline Summaries (PBS) and all subordinate reporting entities. For simplification of text, this SOPP will use the term "Projects and Activities" to apply PBS and all subordinate reporting entities, as defined in Section 7.
- c. This SOPP establishes the process for submittal, review, and disposition of change requests in EM's corporate database - IPABS - for life-cycle scope, cost, and schedule estimates. Other processes related to baseline change control and configuration management (for example, changes to capital projects under DOE Order 413.3B and site baseline change control processes)

- are precursors to the implementation of this SOPP.
- d. This SOPP does not apply to the IPABS Performance Measures or Milestones modules.

## 5. **REFERENCES:**

- a. "Program and Project Management for Acquisition of Capital Assets", DOE Order 413.3B dated November 29, 2010.
- b. "Office of Environmental Management Operations Policy and Protocol" Memorandum from Tracy Mustin (EM-2) dated March 15, 2012. [This memorandum also cancels "Office of Environmental Management's Operations Program Protocol" from Dae Chung (EM-2) dated April 21, 2010.]
- c. "Implementation of the Office of Environmental Management Corporate Work Breakdown Structure" Memorandum from Dae Chung (EM-2) dated August 26, 2010.
- d. "Modification of the Office of Environmental Management Corporate Work Breakdown Structure" Memorandum from David Huizenga dated November 9, 2011.
- e. "Separating Project Baseline Summary Costs into the Appropriate Entities for Operations Activities and Capital Asset Projects – Office of Environmental Management Base Program Portfolio" Memorandum from Dae Chung (EM-2) dated April 22, 2010.
- f. SOPP 41 "Project Critical Decision Approval Process", Revision 2, December 11, 2012.
- g. IPABS Cost Module Guidance, <https://ipabs-is.em.doe.gov>, dated July 13, 2012.

## 6. **HQ CONTACT:**

- a. Jack Surash, Deputy Assistant Secretary for Project and Acquisition Management, EM-50, [Jack.Surash@em.doe.gov](mailto:Jack.Surash@em.doe.gov).
- b. Teresa Tyborowski, Deputy Assistant Secretary for Planning and Budget, EM-60, [Teresa.Tyborowski@em.doe.gov](mailto:Teresa.Tyborowski@em.doe.gov).

## 7. **DEFINITIONS:**

- a. Administrative Change: A change that requires no formal coordination or validation because it does not substantially change scope, cost, or schedule data, but only corrects errors in previously approved data or updates project or activity information, such as project title or PBS designator.
- b. Analytical Building Block (ABB): The work scope, description, and other relevant information related to approved or proposed projects or activities at Level 4 of the Corporate Work Breakdown Structure. ABBs are placed under IPABS configuration control in the Cost-ABB module. ABBs are described in further detail in References 5.c and 5.d.
- c. Acquisition Executive: Refer to the definition in DOE Order 413.3B (reference 5.a).
- d. Capital Asset and Capital Asset Project: A project with defined start and end points required in the acquisition of capital assets (land, structures, equipment, and intellectual property). This definition is derived from DOE Order 413.3B, Attachment 2 "Definitions".
- e. Change Request (CR): The notification submitted through IPABS that informs a formal change to corporate data under change control and covered under this SOPP. Submittal of a BCP is integral and precedential to the submittal of

- a CR in IPABS for corporate data within the contract performance period. CR approval levels can be AE/DAS (Level 1), HQ-Other, or Site and are determined through the application of thresholds (refer to Appendix 1) against the specific change(s)..
- f. Contract Performance Baseline: The scope, cost, and schedule [of milestones/deliverables] reflecting the agreed-to definitization of scope under the period of performance covered by the contract.
  - g. Critical Decision (CD): A CD is a formal determination or decision at a specific point in a project's life-cycle that confirms the mission need and allows the project to proceed to the next phase and commit resources (e.g., from project definition to execution). CD's only apply to capital assets managed in accordance with DOE Order 413.3. Refer to SOPP 41 (Reference 5.f) for additional requirements for preparing and submitting CD's for capital assets.
  - h. Directed Change: Directed changes are caused by DOE policy directives (such as those that have the force and effect of law and regulation), regulatory, or statutory actions and are initiated by entities external to the Department. For the purposes of this SOPP, Directed Changes are processed as any other Change Request with the following additional requirements: the title of the CR must include the text "DIRECTED CHANGE" and the document that provides the direction resulting in a change to life-cycle cost, scope, and/or schedule be included as one of the supporting documents submitted with the CR(s).
  - i. EM Corporate Change Control Board (EM CCB): The change control board comprised of the EM DASs and Chaired by the DAS for Program, Planning and Budget (EM-60). The EM CCB dispositions all elevated HQ-Other and AE/DAS CRs, and is informed of the dispositions of all AE/DAS, HQ-Other and Site CRs. The EM CCB will meet as needed.. All functions and authorities of the EM CCB will be documented in an EM CCB Charter.
  - j. Federal Project Director (FPD): The FPD is the DOE employee assigned the responsibility and accountability for all project management activities including oversight of the project, and is a key point of contact between the government staff and the contractor staff on all matters relating to project execution, including preparing and presenting requests for change control actions above his/her authority.
  - k. Field Elements: These are organizations (e.g., Operations Office, Area Office, or Field Office) responsible for oversight of EM mission work scope in the field.
  - l. Fiscal Year Work Plan: The plan between the Field Office and EM HQ. The FYWP sets Operations Activity performance and financial targets for the upcoming Fiscal Year.
  - m. Integrated Site Team (IST): The site integrated project team consists of mission unit and mission support members associated with a specific site. The IST is comprised of subject matter experts with knowledge of EM-wide programs and (PBS) mission areas. IST members act in different capacities depending on the impacted areas of a CR. The IST is the central integrator of all changes controlled under this SOPP. As used in this SOPP, each site IST is comprised of the following members:

- i. The IST Liaison is associated with the Mission Unit organization that establishes programmatic work at that site.
- ii. The IST Lead is the IST Liaison or the IST mission area lead with responsibility to lead the review of a CR. If the CR is not related, or linked, to other CRs, or if related CRs only affect one mission area, then the mission area IST member is the IST Lead. If the CR is related, or linked, to other CRs related to multiple mission areas, then the IST Liaison is the IST Lead.
- iii. Impacted members are those persons on the IST representing an EM mission unit or mission support organization whose program area, (PBS) mission area, or site is affected by one or more CRs, as determined by the Impact Analysis submitted with each CR.
- n. Life Cycle Cost (LCC) Estimate: As used in this SOPP, the approved cost profile from the start date of an entity through its end date. The life cycle cost represents all prior year (since 1997) costs, current contract performance baseline (e.g., near-term baseline), and the out-year planning estimate. The components that comprise the overall life-cycle cost of an entity in IPABS are the Performance Measurement Baseline, Management Reserve, Fee, Other Direct Costs, and Contingency.
- o. Mission Unit (MU) Deputy Assistant Secretaries (DAS): The EM HQ that assigns programmatic work conducted at an assigned site. The MU DAS is responsible for managing its assigned program mission elements and integrating programs (e.g. regulatory compliance). Each EM MU DAS is authorized to review or validate CRs for scope, cost, or schedule changes, as described in Section 11.
- p. Mission Support (MS) DAS: The EM HQ authority with support responsibilities necessary to facilitate this SOPP. The MS DASs oversee EM-wide programmatic activities (e.g., budget formulation, contracts, strategic planning) and for certain changes which impact MS DAS responsibilities, MS DASs are authorized to review or validate on CRs.
- q. Operations Activity: The general categorization of an operations, maintenance, or support function, either directly or indirectly related to EM's mission. These activities are defined under Reference 5.b.
- r. Operations Activity Manager (OAM): The person responsible for overseeing and directing the work of the Operations Activities as assigned by the Site or Field Office Manager.
- s. Integrated Planning, Accountability, and Budgeting System (IPABS): The information system used by EM to capture and report corporate information, including capital project and operations activity data under change control.
- t. Site Office/Field Office Manager: The person responsible for integrating and executing all work at the site level.

**8. REQUIREMENTS:**

This SOPP supports EM's compliance with the following statutes:

- a. Federal Managers' Financial Integrity Act of 1982, which requires internal controls in support of DOE's financial reporting
- b. Government Management Reform Act of 1984, which requires annual reporting of audited agency financial statements

**9. RECORDS:**

- a. IPABS will maintain a change request package for all CRs. It will include the CR description, impacts and justification for the CR and any support documentation uploaded. These records will be captured, archived and maintained electronically by the system.
- b. IPABS will also maintain, through a History log, the individual actions associated with each CR from initiation through final disposition.

## 10. **TRAINING:**

Training requirements are satisfied through on-line learning. Tutorials, work flow demonstrations, IPABS Users Guides, and on-line documentation of references are available to support the execution of this SOPP.

## 11. **ROLES & RESPONSIBILITIES:**

- a. EM Associate Principal Deputy Assistant Secretary (EM-2.1)
  - i. EM-2.1 will normally make the final disposition validation review in instances where there are unresolved CR conflicts.
  - ii. Is notified of decisions made on all CRs
- b. Deputy Assistant Secretaries (DAS): Mission Unit Organizations (EM-10, -20, -30)
  - i. Serve as the coordinating and validating authorities for significant (DAS CRs) scope, cost, and schedule changes to all programmatic activities and projects under their responsibility. (The DAS or OD responsible for validating a change request for a given PBS will be determined based on the category of work performed under that PBS. For example, a DAS-level change request for any soil and groundwater remediation PBS would be the responsibility of the DAS for Site Restoration)
  - ii. MU DAS responsibilities include programmatic oversight of the work conducted at EM Sites, EM Program Areas, and Mission Areas
  - iii. DAS authority under this SOPP may be delegated to the Associate Deputy Assistant Secretary.
- c. DAS: Mission Support Organizations (EM-40, -50, -60)
  - i. Office of Safety (etc) oversees EM corporate-level Programs, such as safeguards and security, quality assurance. Other MU/MS organizations oversee regulatory compliance, budget formulation, and contract management programs.
  - ii. Office of Acquisition and Project Management coordinates DOE Order 413.3B process for EM's capital projects, including EMAAB/ESAAB or AE approval actions.
  - iii. Office of Planning and Budget has programmatic responsibilities for Budget formulation and execution, strategic planning, environmental liability, and management of the Corporate WBS to Level 4 (Analytical Building Blocks).
  - iv. Office of Planning and Budget maintains the electronic corporate change control system, databases, and reporting in IPABS.
  - v. Office of Planning and Budget maintains and updates this SOPP.
  - vi. When designated as Lead DAS, an MS DAS will serve as the validating authority for AE/DAS CRs.
  - vii. DAS authority under this SOPP may be delegated to the Associate Deputy Assistant Secretary.
- d. EM Corporate Change Board (EM CCB)
  - i. The EM CCB is the change control board for HQ-controlled items,

- including those items covered under this SOPP. The EM CCB is chaired by the Deputy Assistant Secretary for Planning and Budget, and its members include all EM DASs.
- ii. If elevated by the Lead DAS for an AE/DAS CR or the Lead OD for an HQ-Other CR, the EM CCB will disposition all elevated CRs.
  - iii. The EM CCB will be briefed on a monthly, or as-needed basis, on the disposition and impacts of all CRs validated or otherwise reviewed since the previous EM CCB meeting.
  - iv. The Associate Principal Deputy Assistant Secretary will make final validation decisions on all appealed CRs and all elevated CRs that do not receive a majority disposition decision from the EM lead and impacted DASs.
  - v. The EM CCB Chair will select an EM HQ staff person to act as Secretariat of the board.
- e. Integrated Site Team (IST)
    - i. Is the primary liaison between the site and EM HQ.
    - ii. Administratively verifies completeness of CRs in IPABS and identifies members impacted by CRs to support the IST review.
    - iii. Coordinates the HQ review of all submitted CRs.
    - iv. Recommends disposition to designated validation authorities for all HQ-Other and AE/DAS CRs
    - v. Verifies all Site CRs for accuracy.
  - f. Site Manager
    - i. Reviews and approves all site-level BCP, Change Request packages, supporting documents, and briefings before submittal to EM-HQ.
    - ii. Has approval authority in IPABS for all Site-level CRs.
    - iii. Ensures that his/her site has assigned at least one IPABS Site Administrators (a primary and backup, if needed), who will be given special access privileges.
    - iv. Site Manager authority under this SOPP may be delegated to lower levels of management, as appropriate.
  - g. Federal Project Director or Operations Activity Manager
    - i. Prepare necessary BCP/CR documents including briefings and revisions as necessary.
    - ii. After ensuring accuracy, submit documents through the Site Manager to EM-HQ through the Mission Unit DAS or the IST.
    - iii. If necessary, initiates local changes to corporate data upon CR validation and implementation of any actions associated with CR disposition.
    - iv. Assign a Site Point-of-Contact (POC) to coordinate with subject matter experts and others and to enter CRs into IPABS.

## 12. **PROCEDURES:**

This procedure's six-step workflow is depicted graphically in Appendix 4.

- a. **Initiate a Change:** The process is triggered by any significant event at a site or EM HQ that would result in a substantive change in scope, cost, or schedule to any controlled Project Baseline Summary, capital project, or operations activity.
  1. Capturing the effects of trigger events is intended to
    - i. Conservatively bound a range of events (e.g., actions, conditions, modified assumptions, or factors) which cause a change to the currently-approved site and/or corporate baseline and
    - ii. Keep EM's corporate baseline as closely aligned as achievable with

site-level baselines.

2. Change events may result in changes to scope, cost, and/or schedule estimates that have been previously reviewed and approved at the site and/or contractor level under different controlling procedures. The significance of these changes are determined through change thresholds defined in Appendix 1. These resulting changes must be submitted as change requests into IPABS within a reasonable timeframe. Examples of reasonable timeframes include: within 30 days after approval of an AE decision or BCP approval and within 10 days prior to the end of the third or fourth fiscal quarters in support of environmental liability estimates. An end-of-year change request must be submitted, if needed, to align the prior years' scope, cost, and schedule between the site and EM HQ. General definitions of trigger events are:
  - i. SCOPE: Changes to controlled work scope are those events which would result in the addition, modification, or deletion to a Corporate Work Breakdown Structure Level 4 (ABB Level) scope description. These could include new or modified scope resulting from changes in regulatory agreements or modifications to scope due to updated characterization information. The significance of scope changes are determined through scope-based thresholds.
  - ii. COST: Changes to controlled life-cycle cost estimates (including changes which may result from changes to a Contract Performance Baseline) are those events which would result in a change to the approved life-cycle cost profile. Triggers could include changes in planned costs due to modified work scope, approval of new contract budget base, reduced funding targets, etc.
  - iii. SCHEDULE: Changes to schedules are those events which would result in a change to a capital project CD status/AE approval date, contract period of performance, or CD-4 date, or an operations activity contract period of performance or end date .
  - iv. Special Cases: In certain instances, special processing may be required for:
    1. Administrative CRs for fixing small errors or changing descriptive information. These CRs may be processed without management approval, but must still be entered into IPABS.
    2. De Minimis/Unsubstantive Changes are changes below 1% of future life-cycle costs or \$1M (in current year dollars), whichever is less. These changes, as they occur during the execution year do not require a CR. However, following completion of the execution year, year-end update CRs are to be submitted to align IPABS with site baselines to adjust for site-managed changes, if needed. Such changes could result from processing local BCPs, truing-up outyear estimates based on final execution year results, or updating the estimate at completion of a capital project. These CRs are Site-level, unless the changes fall within a HQ-Other or AE/DAS threshold.
- b. **Create a CR:** The site (for site PBSSs) or EM HQ (for HQ PBSSs) will create new change requests in IPABS for all entities affected. If multiple entities are affected, then multiple CRs would be created. Related CRs should be linked in IPABS. Guidance for creating, entering, and routing change requests in IPABS is available on-line through the IPABS Help function. For all change requests, the following information is required:

1. Change Request Type: **AE/DAS, HQ-Other, or Site** . The type or level is based on the CHANGE THRESHOLDS TABLE provided as Attachment 1. The type also determines the validation authority for each specific change.
2. Adequately detailed description and justification of the change requested, such as revised work scope, updated cost estimate, approval of new/updated contract performance baseline, regulatory change, etc.
3. Analysis, by discipline, that describes the likely impacts resulting from the change request. An Impact Analysis template is provided in Appendix 2. The purpose of this analysis is to provide information on the change request's impacts (whether implemented or not implemented) to assist the IST in determining the level of review required to disposition the change request. Depending on the number of impacts, the impact analysis could be entered directly into the change request form in IPABS or the completed template could be uploaded as a document with the change request.
4. If PBS (CWBS Level 3) or ABB-level (CWBS Level 4) scope changes, the proposed scope descriptions.
5. . Any additional uploaded documentation to provide information to allow a review of the Change Request and to provide a document trail supporting the disposition review.
6. The Site Administrator, or designee, will move the CR to Administrative Review. IPABS will generate an automated email to appropriate Site and EM HQ staff announcing that a CR is in **Ready for Admin Review** status.

IMPORTANT NOTE: Some change requests that would be created in IPABS must be preceded, or processed in parallel, by a baseline change proposal required under another controlling process. These baseline change proposals steps are independent of the automated work flow in IPABS. For example, DOE Order 413.3B (and EM SOPP 41 "Project Critical Decision Approval Process") change control requirements for Capital projects must be satisfied before final disposition can be recorded in IPABS. Site or contractor baseline change requests are another example of change processes under local procedures which could be followed prior to, or in parallel to, this SOPP.

- c. **Site Review and Submittal of CRs:** The IPABS Site Administrator, or designee, reviews the CR for accuracy and completeness. Once satisfied, this person submits the CR for HQ Review. Site submittal of a CR verifies that the appropriately authorized site management representative (e.g. Site Manager, FPD, and OAM) approved submittal. This action would generate an e-mail to Site and EM HQ staff to announce that a CR is in **HQ Validation Review** status.

Prior to submittal, Site staff should ensure the CR information is complete, including:

- Adequate detail to allow a review, including the documented description, its justification, and all life-cycle data (e.g. cost profiles) for the CR are complete.
- Supporting documents are uploaded, as needed,
- An Impact Analysis describing the impacted Programs, mission areas, and sites if this CR is/is not approved
- Appropriate linkages and relationships to other CRs, pending or approved (e.g., ARRA and Base funding for the same activity or transfer of scope from one PBS to another) or if a linked CR needs to be created.

NOTE: Nothing in this SOPP precludes the ability to informally communicate upcoming trigger events or any site's plans to submit CRs.

- d. **IST Pre-Review:** Within 5 calendar days following submittal for **HQ Review**, the IST for the submitting site is responsible for initiating the review of the CR. The IST Liaison will identify, based on the CR specifics, an IST Lead. The IST Lead will be the (PBS) mission area covered by the CR(s) or the site liaison, if multiple mission areas are involved with one or more related CRs.

The IST Lead will verify:

- Whether the CR is Administrative and does not require a detailed IST review
- Whether the CR applies to a Capital project or an Operations activity.
- Whether the CR Type is the correct level, based on authorities and thresholds in Attachment 1.
- Whether the Impact Analysis is detailed enough to identify which EM organizations will be impacted. An impact analysis form template is included in Appendix 2.
- That the information submitted is complete
- If combinations of related CRs would impact the above considerations (e.g., two related CRs of \$75 million)

If the CR does not meet the IST's expectation for completeness or correctness, the IST will send the CR back to the site for **Rework**, and communicate to the CR POC the required information needed for the site to resubmit the CR. IPABS will generate an email to appropriate Site and EM HQ staff announcing that the CR is in **Rework** status. If a CR is set to **Rework**, implementation of this SOPP would continue at section 12.b above. CRs may be set to **Rework** until they are ready to be resubmitted.

- e. **IST Review:**

Prior to disposition, the IST Lead will coordinate a review of the CR. The review will include coordination from impacted IST members. The review process can be different, primarily dependent upon whether a capital project or operating activity and the CR type (level). Appendix 3 provides generic review criteria for consideration by the IST.

1. FOR CAPITAL ASSET AND LINE ITEM PROJECTS. The level of review and process steps differ between **AE**, **HQ-Other** [currently Reserved], and **Site** CRs. This SOPP is consistent with and subsequent to the DOE Order 413.3 process. DOE Order 413.3's authorities and thresholds regarding Baseline Change Proposals supersede this SOPP. In addition, much of EM's change control process for Capital projects is detailed in Standing Operating Policy and Procedure (SOPP) No. 41 "Project Critical Decision Approval Process". Note that changes to pre-CD2 capital project scope, cost, and schedule may fall under the process for Operations Activities in section 12.e.2 below.

- i. **AE Level CR:** An AE CR may set or revise the capital project's performance baseline. The EM-50 IST member will assist on CRs for capital projects.

IPABS provides two-steps to integrate with the AE decision process. The **HQ Review** step is conducted during IST Review. Note that the **Formal HQ Review** follows a formal AE disposition (e.g., final AE

decision memorandum) to document the completed Baseline Change Proposal process under DOE Order 413.3. The **Formal HQ Review** is performed at the completion of this process, in section 12.f.

As part of the **HQ Review** under this SOPP, the IST should:

1. Evaluate scope, cost, and schedule information in the CR against the site's BCP and the AE presentation for accuracy
  2. Evaluate the CR information against any recent project reviews conducted
- ii. **HQ-Other CR:** This type of CR for a Capital Project is Reserved and currently not applicable to this SOPP.
- iii. **Site CR:** This type of CR is designed to provide maximum flexibility to the site, consistent with thresholds in Appendix 1. Its primary intent is to allow a site to:
1. Update their out year life-cycle cost profiles, based on prior year actual costs and revised planned costs (similar to the concept of Estimate to Complete) on an annual basis.
  2. Reflect movement of costs between different cost profiles, such as allocating contingency to the performance measurement baseline to cover a realized risk
  3. Change the project's life-cycle profile but not its total project cost (TPC)
  4. Update any information in the IPABS Cost module not controlled under DOE Order, such as CD status or approval date
  5. Update pre-CD2 capital project scope, cost, and/or schedule

The IPABS Site Administrator, as requested by the FPD, may approve any **verified Site** CR if it has not been acted upon by the IST within 10 calendar days following submittal to EM HQ. For the purposes of this CR, **verification by the IST** is intended only to assure that the IST agrees the CR falls within Site-level thresholds. However, if the CR cannot be verified by the IST during this timeframe, the CR will be sent to the site POC for **Rework**. The IST will include a justification in IPABS on why the rework is required. The most common reasons for reworking a Site CR would be to re-assign the CR as another CR type or to correct an error. IPABS will generate an email to appropriate Site and EM HQ staff announcing that the CR is in **Rework** status.

## 2. FOR OPERATIONS ACTIVITIES

The level of review, approval authorities, and process steps differ between **DAS**, **HQ-Other**, and **Site** CRs.

- i. **DAS Level CR:** Operations activities do not normally use an Acquisition Executive. However, Operations Activity change requests are submitted as **DAS** type in IPABS based on the significant nature of the change against thresholds in Appendix 1. An EM Corporate Change Board (EM CCB) is the highest authority to disposition DAS CRs. Operations activity change requests are processed only in IPABS.

IPABS uses a two-step process during DAS CR review, with the HQ Review stage conducted during the IST Review. Refer to section 12.f for a description of the **Formal HQ Review** step.

The following steps would be taken by the IST as part of the **HQ Review**:

1. The IST Lead identifies those impacted organizations that are required to review the CR (based on the Impact Analysis and other information available) and make a recommendation.
2. If reviewers identify additional information is needed or if questions arise during the review, the IST Lead will work with the OAM, through the CR POC, to address outstanding items. Once all information is provided, the review can continue.
3. Within 30 calendar days, all impacted reviewers will document their recommendations for disposition to the IST Lead. Other members of the IST may submit recommendations, but these are optional.
4. The IST will provide the authorized DAS with a DRAFT Disposition Memorandum to the Site Manager, based on the IST's recommended disposition of the CR(s). The memorandum will include review from the DAS organizations impacted under section 12.e.2.i.1 above. The format and content of the memorandum is to be determined by the IST Lead and the authorized DAS.

Refer to section 12.f regarding the **Formal HQ Review**.

- ii. **HQ-Other CR**: An Operations Activity or Program change request submitted as **HQ-Other**, based on Appendix 1, would be validated by the IST Team Lead (with recommendations from impacted IST members). The review of a **HQ-Other** CR includes the following:
  1. The IST Lead identifies those impacted organizations that are required to review the CR (based on the Impact Analysis and other information available) and make a recommendation.
  2. If reviewers identify additional information is needed or if questions arise during the review, the IST Lead will work with the OAM, through the CR POC, to address outstanding items. Once all information is provided, the review can continue.

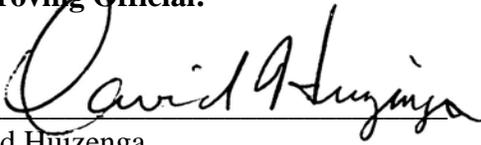
Note: The IST members may pose questions to the Site or may arrange a videoconference or teleconference between the IST and Site representatives to discuss comments, receive clarification, etc. The Site responses should be documented for submittal and review by the IST; and possible inclusion as an uploaded document in IPABS.

3. Within 20 calendar days, all impacted reviewers will document their recommendations for disposition to the IST Lead. Other members of the IST may submit recommendations, but these are optional.
4. The IST will provide the authorized reviewer with a document (e.g., email or informal memorandum) requesting disposition of the CR, consistent with the IST's recommended disposition. The document will identify the recommendations of all impacted IST members under section 12.e.ii.1 above. The format and

content of the document is to be determined by the IST Lead and the authorized reviewer.

- iii. **Site CR:** This type of CR is designed to provide maximum flexibility to the site, consistent with thresholds in Appendix 1. The IPABS Site Administrator, as requested by the OAM, may approve any **verified Site CR** if it has not been acted upon by the IST within 10 working days following submittal to EM HQ. However, if the CR cannot be verified by the IST during this timeframe, the CR will be sent to the site POC for **Rework**. The IST will include a justification in IPABS on why the rework is required. The most common reasons for reworking a Site CR would be to re-assign the CR as another CR type or to correct an error.
- f. **CR Disposition and Closure:** Following completion of the IST Review, and any parallel approval processes (if applicable), the CR is ready for final disposition and closure in IPABS. The IST Lead will initiate the process to obtain disposition and document the decision. The following steps are required to complete CR processing:
  1. The Lead DAS, Office Director, Site Manager (or Field element designee) may disposition the CR, based on the review authority identified in Appendix 1. Note that AE/DAS and HQ-Other validations may be conditioned with follow-on actions. Such conditions will be documented.
    - i. A disposition validation on a CR will be made by the Lead DAS/OD/Site Manager
    - ii. Review of disposition decisions will be required from all impacted organizations, at the same level as the approver. EM-wide programmatic area impacts are included as part of the Impact Analysis in Appendix 2.
  2. At the discretion of the reviewer, and considerate of impacted offices,
    - i. The Lead DAS may elevate the disposition of any **AE/DAS** CR to the EM CCB.
    - ii. The Lead OD may elevate the disposition of any **HQ-Other** CR to either the Lead DAS or the EM CCB.
  - iii. The Site Manager, or Field designee, may change the CR Type to **HQ-Other** and resubmit.
  3. Any validation decisions will be documented. In most cases, IPABS Comment fields are adequate. In some cases, email attachments or e-documents may be uploaded as part of the CR Package. For **AE/DAS** CRs, a final disposition memorandum must be attached.
  4. Once disposition validation is reached, the IST Lead will ensure that
    - i. For **AE/DAS** CRs, the **Formal HQ Review** stage is when the AE or DAS final validation memorandum is uploaded into IPABS,
    - ii. The CR Package residing in IPABS is updated to reflect any changes to information or data between submittal and final validation of the CR.
    - iii. The CR Package residing in IPABS is complete;
    - iv. The final disposition validation is captured in IPABS (either directly or through a designated IPABS administrator).
  5. At this point, the CR is **Closed**.

**Approving Official:**

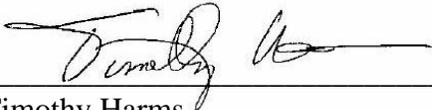


David Huizenga  
Senior Advisor, Environmental Management

12-4-13

Date

**Certifying Official:**



Timothy Harms  
Director, Management Systems and Analysis

December 4, 2013

Date

13. **APPENDICES/EXHIBITS:**

**Appendix 1: CHANGE REQUEST AUTHORITIES AND THRESHOLDS TABLES**

<b>CR VALIDATION AUTHORITIES AND THRESHOLDS FOR OPERATIONS ACTIVITY CHANGES</b>			
<b>[See Notes 1 and 2]</b>			
<b>Threshold Description</b>	<b>CR Type</b>	<b>Threshold Value</b>	<b>Validation Authority</b>
Remaining Life-Cycle Cost (Current Year Dollars during Contract Performance Baseline and Out-Year Estimate) [See Note 3]	DAS	Any change exceeding \$100M or 20% of approved costs (whichever is less)	Lead Deputy Assistant Secretary
	HQ-Other	Any change between \$25M to \$100M or between 5% to 20% of approved costs (whichever is less)	Lead Office Director
	Site	Any change less than \$25M or 5% of approved costs (whichever is less)	Site Manager
End Date of Operations Activity	DAS	Any change in the end date exceeding 3 years	Lead DAS
	HQ-Other	Any change in end date exceeding 1 year but less than 3 years	Lead OD
	Site	Any change in end date of less than 1 year	Site Manager
Change in Contract Period of Performance	HQ-Other	A change in CPP when the contract performance baseline has not been concurred in by EM HQ (per Reference 5.b)	Lead OD
	Site	A change in CPP when the CPB has been concurred in by EM HQ	Site Manager
Work Scope [See Note 4]	DAS	Significant change to PBS Scope	Lead DAS
	HQ-Other	Significant change to ABB Scope	Lead OD
	Site	Minor change to PBS/ABB scope	Site Manager
New Operating Activity	DAS	New PBS	Lead DAS
	HQ-Other	New Level 4 Activity	Lead Office Director
<b>Notes:</b> <ol style="list-style-type: none"> <li>1. All <b>cost</b> thresholds are to apply at the PBS level. This will allow for net changes within PBSs to be appropriately reviewed by the Lead IST member. For related CRs (such as a Life-Cycle Baseline update) which apply to multiple mission areas, the threshold value would be determined by multiplying the number of PBSs affected by all related CRs by the value listed in the above table.</li> <li>2. Change thresholds are cumulative over any fiscal year. Therefore, the total of all change requests to the life cycle cost or schedule within any operations activity would</li> </ol>			

be added to determine the validation authority for the next change request submitted. In such instances, it may be agreed to adjust thresholds beyond the quantitative limits in this Table. Note that in certain instances, special processing of CRs may be required for Administrative CRs and Year-End Update CRs. Refer to Section 12.a.iv.

3. The remaining LCC threshold is intended to focus on changes to EM’s liability. Liability costs are usually indexed to constant year dollars. For IPABS CRs, current year dollars are to be used to determine the threshold level.
4. The **scope** threshold is based on the level of *significance* in a change to the approved PBS or ABB scope description. To apply this threshold, significant changes would be those that impact the life-cycle or end state of an Operations Activity. It is recognized that this is a subjective measure of change and that, in most cases, significant changes in scope will also result in cost changes. Examples of significant scope description changes could include adding scope to complete an activity (e.g., changing a remediation (exhume v. cap) or demolition (implode vs. dismantle) approach, adding a disposal cell). For purposes of this SOPP, cost thresholds would supersede scope thresholds for determining the CR type.

**CHANGE REQUEST APPROVAL AUTHORITIES AND THRESHOLDS FOR CAPITAL PROJECT CHANGES**

[See Notes 1 and 2]

Threshold Description	CR Type	Threshold Value	Approval Authority
Total Project Cost	AE	Any change requiring an AE approval in accordance with DOE Order 413.3	Designated Acquisition Executive
	HQ-Other	Reserved	N/A
	Site	Any year-end update to a project’s cost profile which does not affect its TPC	Site Manager
Schedule	AE	Any change to the CD-4 date or change in CD phase in accordance with DOE Order 413.3	Designated AE
	HQ-Other	Reserved	N/A
	Site	As noted in the approved Project Execution Plan	Site Manager
Work Scope	AE	Any change to Key Performance Parameters or Mission Need requiring DOE Order 413.3 approval	Designated AE
	Site	Any change to Approved ABB scope description not affecting KPP or mission need	Site Manager

Notes:

1. This procedure is primarily intended to be implemented following submittal and/or approval of other superseding processes relevant to Capital Projects, including DOE Order 413.3, executed contract mods, new contractor performance baselines, and site Project Execution Plans. Changes to Capital Projects may be entered into IPABS and submitted for review at any time; however, they will not be dispositioned in IPABS until they are first dispositioned in the

superseding process.

2. All thresholds are to apply at the capital project level. Changes to pre-CD-2 capital projects or capital projects with a TPC of less than \$10M would use the Thresholds and Authorities of Operating Activities.

## Appendix 2: Impact Analysis Template

CR Number:

CR Title:

Entity ID:

Linked CR Number(s):

AE/DAS  HQ-Other  Site

Site Point-of-Contact:

IMPACT ANALYSIS SUMMARY NARRATIVE	
<b>HQ Controlled Items</b>	
<input type="checkbox"/>	Scope/Technical (at CWBS Levels 3 and/or 4):
<input type="checkbox"/>	Life Cycle Cost (Out-year Planning Estimate or Contract Performance Baseline):
<input type="checkbox"/>	Project/Activity Schedule (Contract Period of Performance or End Date):
<b>EM Program Area Impacts</b>	
<input type="checkbox"/>	Budget/Funding:
<input type="checkbox"/>	Contracts:
<input type="checkbox"/>	Environmental Liability:
<input type="checkbox"/>	Regulatory Compliance:
<input type="checkbox"/>	Strategic Planning:
<input type="checkbox"/>	Health, Safety, S&S, Quality Assurance:
<input type="checkbox"/>	Effect on Other Projects/Activities (Identify Other PBSs affected at this or other Sites ):
<input type="checkbox"/>	Performance Measures/Milestones
<input type="checkbox"/>	Institutional
<input type="checkbox"/>	Complex-Wide Integration or Implications
<b>EM Mission Area Impacts</b>	
<input type="checkbox"/>	Used Nuclear Fuel/Special Nuclear Material
<input type="checkbox"/>	Waste Management
<input type="checkbox"/>	HLW Tanks
<input type="checkbox"/>	Soil & Ground Water Remediation

<input type="checkbox"/> D&D
<input type="checkbox"/> Disposal Operations (LLW/MLLW/TRU)

Note: IPABS contains text fields within its Change Request tool to describe the change, the reasons for the change, and impacts. If the required information to adequately document the change and its impacts can be captured within the available text fields, the applicable topics shown below may be entered directly into IPABS. For complex or detailed CRs, this Template may be used to describe impacts and uploaded as a supporting document.

Review Category	General Criteria
Work Scope: CWBS Level 4 (ABB) is lowest	<ul style="list-style-type: none"> <li>• What is the specific scope to be accomplished under the CR?</li> <li>• What are the major drivers, assumptions, and risks/uncertainties related to the proposed work scope?</li> <li>• How is the proposed scope different from the approved scope?</li> <li>• Does the CR discuss changes in scope that are effective and demonstrate that the best alternative approach was selected?</li> <li>• Does the CR conflict or overlap with other CRs?</li> <li>• Are the changes in work scope consistent with DOE or EM policies and guidance?</li> <li>• Are the changes in work scope necessary to ensure statutory, regulatory, or judicial requirements?</li> <li>• Are impacts (detailed in Appendix 2) acceptable to impacted organizations?</li> <li>• Are there any inter-site and/or intra-site dependencies identified?</li> <li>• Are contract negotiations or modifications required and what is their status?</li> </ul>
Life-Cycle Cost	<ul style="list-style-type: none"> <li>• Has an independent cost review (e.g. ICE/IGCE) been conducted?</li> <li>• Are the cost increases or decreases adequately explained and reasonable?</li> <li>• Is the contingency estimate consistent with project/activity risks?</li> <li>• Are all proposed costs identified and explained, including contractor, government furnished items, fee, and contingency?</li> <li>• Is the relationship between changes in scope and/or schedule and its effect on costs described and is it reasonable.</li> </ul>
Schedule	<ul style="list-style-type: none"> <li>• What are the key milestones and end dates for completion of the work scope addressed by the CR?</li> <li>• Has the contract period of performance been changed?</li> <li>• Is the basis for changing end dates appropriate and justified?</li> </ul>
Supporting Documentation	<p>Adequacy for review of CR, including backup electronic files of</p> <ul style="list-style-type: none"> <li>• Decision documents providing a reason or justification for CR</li> <li>• AE Decision memorandum documenting key cost/performance parameters</li> <li>• Contracting Officer's letter approving a new CPB or contract mod or site BCP</li> <li>• Cost calculation and model spreadsheets</li> <li>• Summary electronic files describing change events or schedule assumptions/drivers</li> </ul>

## Appendix 4: Process Flow

**Note:** This flowchart provides a graphic representation, by role, consistent with the process steps described in Section 12.



**Approving Official:**

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David Huizenga  
Senior Advisor, Environmental Management

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Date

**Certifying Official:**

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Timothy Harms  
Director, Management Systems and Analysis

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Date