

RAM 09-001: Documentation Required for 105-B Reactor Continued S&M Activities and Operation as a Public Museum

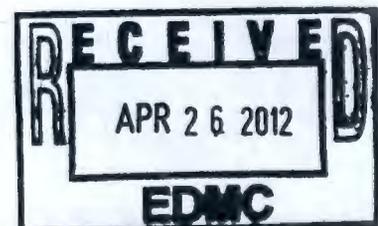
Question

What documentation is required to allow the Department of Energy (DOE) to make a decision to operate 105-B Reactor as a public museum until a decision is made to transition from the current surveillance and maintenance (S&M) phase to the final disposition phase (i.e., final configuration) as addressed in Section 8.0, *Facility Decommissioning Process*, of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement, TPA)?

Answer

An Environmental Evaluation/Cost Analysis (EE/CA) should be prepared in accordance with Environmental Protection Agency (EPA) guidance contained in EPA/540/F-94/009, *Conducting Non-Time Critical Removal Actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*. This includes the preparation of an EE/CA Approval Memorandum and a draft Action Memorandum for DOE and EPA review and approval. The EE/CA and associated Approval and Action Memoranda will carry decisions forward from the existing EE/CA and Action Memorandum, which provided for hazards mitigation and public tours through the year 2012, until such time DOE decides to transition 105-B Reactor from the current S&M phase to a final disposition phase. The EE/CA should consider the results of the *Manhattan Projects Sites Special Resources Study* being prepared by the National Park Service (NPS) in accordance with Public Law 108-340. The study was commissioned by President George W. Bush to evaluate options for preserving and interpreting facilities at four sites that were in the World War II Manhattan Project (including 105-B Reactor). The NPS plans to issue a draft of the study during the summer of 2009.

The EPA approved *Removal Action Work Plan and S&M Plan (RAWP/SMP)* for 105-B Reactor should be revised and/or reissued to reflect structural and other modifications proposed for 105-B Reactor to extend its service life beyond 2012 and until such time DOE decides to initiate the final disposition phase. The EPA should be consulted regarding the RAWP/SMP to evaluate the need to revise the plan. If a revision is determined to be necessary, the EPA will decide whether it can be accomplished through use of the change notice, or if a full revision to the plan is required. These revisions to the RAWP/SMP should include any additional deactivation and decontamination work planned by Washington Closure Hanford to further reduce S&M expenses and radiological exposure. Biennial evaluations of long-term S&M plans and schedules for 105-B Reactor should be performed throughout the S&M phase in accordance with Section 8.0 requirements of the TPA Action Plan. These evaluations should be conducted to identify, evaluate, and assess the status of Hanford Site priorities as well as tribal and stakeholder values with respect to 105-B Reactor.



B- Reactor

In addition, documentation related to compliance with key *applicable or relevant and appropriate requirements* (ARARs) including waste management standards, standards controlling releases to the environment, and standards for protection of cultural and ecological resources should be prepared, as needed. These documents will include, but may not be limited to, air monitoring plans, waste management plans, and cultural/historic and ecological resource reviews required in support of S&M activities. Cultural/historic resource reviews must be conducted by the *State Historic Preservation Office* to ensure that proposed modifications to 105-B Reactor preserve the character of the *National Historic Landmark* site and in no way compromises facility features that contributed to its nomination and placement on the *National Register of Historic Places*.

Documentation addressing the final disposition of 105-B Reactor is beyond the scope of this Regulatory Analysis Memorandum and should be handled separately, at the end of the extended S&M phase, to address decontamination, dismantlement, entombment, closure, and site restoration. Documentation addressing the final configuration of 105-B Reactor currently exists in the form of EE/CAs, Action Memoranda, and Records of Decisions (RODs). Also, a Project Design Report (PDR) should be prepared to describe activities during the disposition phase of the facility. Since residual contamination remains on site in the 105-B Reactor and underground in adjacent real estate, a final CERCLA Process (e.g., EE/CA and Action Memorandum or Remedial Investigation/Feasibility Study [RI/FS] and ROD) will need to be completed to make decisions regarding final cleanup and removal of the site from the EPA's *National Priorities List* (NPL).

Background/History

FY 1989

Four areas of the Hanford Site (100, 200, 300, and 1100 Areas) were officially listed on the Environmental Protection Agency's NPL on November 3, 1989. The TPA was signed shortly thereafter.

Section 8.0 of the TPA Action Plan, *Facility Decommissioning Process*, defines the approach that DOE will take, with involvement of the lead regulatory agencies, to transition a facility from an operational status to its end state condition (i.e., final disposition) at Hanford. This approach is accomplished in three phases by the completion of facility transition, S&M, and final disposition activities.

Section 8.0 of the TPA Action Plan applies to the transition, S&M, and disposition of "key" facilities located on the Hanford Site that are not fully addressed under Section 6.0 (TSD Process) or Section 7.0 (Past- Practice Process). The 105-B Reactor is listed as a key facility subject to the Section 8.0 process. For key facilities like 105-B Reactor which did not proceed through formal transition, S&M Plans will be submitted in accordance with established TPA milestones.

The 105-B Reactor was shut down in 1968 and although the facility did not proceed through a formal transition phase, the facility is currently in the S&M phase. Documentation has been prepared for systems and structural integrity of the facility, remaining hazardous and radioactive material in the facility, facility history for the shutdown systems, and an S&M Plan has been approved by the EPA (see FY 2002). The S&M Plan outlines facility specific activities taken to address essential systems monitoring, maintenance, and operation requirements necessary to ensure efficient, cost effective maintenance of the facility in a safe condition that presents no significant threat of release of hazardous substances into the environment and no significant risk to human health until such time a decision is made regarding the final disposition of 105-B Reactor.

In accordance with Section 8.0 of the TPA Action Plan, biennial evaluations of long-term S&M and disposition plans and schedules for 105-B Reactor will be performed throughout the S&M phase. These evaluations will be performed to identify, evaluate, and assess the status of Hanford Site priorities as well as tribal and stakeholder values. Ongoing S&M activities will be conducted in accordance with the EPA approved S&M plan and associated TPA commitments until a decision is made by DOE to initiate the disposition phase, or actions are required by the lead regulatory agency pursuant to the terms of Section 8.0 of the TPA Action Plan.

FY 1992/1993

In December 1992, the DOE issued the *Final Environmental Impact Statement (EIS): Decommissioning of Eight Surplus Production Reactors at the Hanford Site, Richland, Washington* (DOE/EIS 0119F). In September 1993, the DOE issued the *Record of Decision: Decommissioning of Eight Surplus Production Reactors at the Hanford Site, Richland, Washington* (58 *Federal Register* 48509), which calls for the implementation of the recommendation for "interim safe storage followed by one-piece removal" of the surplus reactors as described in the final surplus reactor EIS.

The ROD states the DOE will implement interim safe storage followed by deferred one-piece removal as the final disposition alternative for the eight surplus reactors. The interim safe storage period is for 75 years (until 2068). Following the 75 year interim safe storage period, the graphite block reactor cores will be removed as one-piece and transported to 200 West Area for disposal along with remaining contaminated portions of the facility. Uncontaminated structures and equipment will be demolished and placed in landfills.

The ROD acknowledges the nomination and inclusion of 105-B Reactor on the *National Register of Historic Places*. The *Federal Register* states that specific actions to mitigate cumulative impacts of decommissioning on the historic preservation of 105-B Reactor will be determined later per 36 CFR 800, *Protection of Historic Properties*, and may include extensive recordation by photos, drawings, models, exhibits, written histories, and preservation of some portions of 105-B reactor for display on or near its present location or at some other selected location.

FY 1995

In September 1995, Bechtel Hanford, Inc. issued the *105-B Reactor Facility Museum Phase I Feasibility Study Report* (BHI-00076). Since the issuance of the surplus reactor ROD in 1993, a decision was made to place 105-B Reactor on the *National Register of Historic Places*. As a result of strong and growing public support to preserve 105-B Reactor as a museum, steps were taken towards preservation; including the installation of visitor displays, conducting hazard mitigation activities along the tour route, and conducting public tours of accessible areas. Some areas contain residual contamination and are not on the tour route. This study was conducted to define activities necessary to continue using 105-B Reactor as a museum, evaluate the technical feasibility of those activities, examine the cost effectiveness of a museum versus dismantlement, and evaluate options to improve 105-B Reactor as a museum attraction.

FY 1999

In November 1999, the *Final Hanford Comprehensive Land Use Plan Environmental Impact Statement (HCLUP-EIS) Record of Decision* (6450-01-P) was issued. The HCLUP-EIS provided a strategy for future land use on the Hanford Site. This decision helped provide a framework for cleanup standards and cleanup methodologies for the Hanford Site, including the reactor sites. The HCLUP-EIS based its cleanup strategy on the assumption that “. . . the reactor blocks for the eight plutonium reactors will be kept in their present sites for up to 75 years . . .” The HCLUP-EIS ROD makes allowances for 105-B Reactor to be converted into a museum and the surrounding area made available for museum support facilities.

FY 2000

In June 2000, BHI issued *105-B Reactor Museum Feasibility Assessment (Phase II) Project* (BHI-01384). This report was issued to meet TPA Milestone M-93-05. The purpose of this report was to provide the basis and supporting documentation necessary to prepare 105-B Reactor as a facility open for partial, unescorted-access public tours. To prepare the facility for unescorted access, potential hazards and deficiencies had to be identified by performing a walk-through with professionals representing the architectural, electrical, mechanical, and structural engineering disciplines; industrial and radiological health and safety; and fire and life safety. On the basis of a review of past evaluations and information gained from this walk-through, identification of the hazards and deficiencies in 105-B Reactor and proposed corrective actions were provided in this report. The selected measures reduce or eliminate risk to persons touring the facility, provide for appropriate accessibility under the *Americans with Disabilities Act*, and retain the character of the building to the maximum extent possible as dictated by its *National Register of Historic Places* status.

FY 2001

In June 2001, the *Engineering Evaluation/Cost Analysis (EE/CA) for the 105-B Reactor Facility* (DOE/RL 2001-09) was prepared to analyze removal actions that may be performed at 105-B Reactor to protect human health and the environment. This EE/CA was intended to support and implement DOE's decision to preserve 105-B Reactor as a cultural/historic resource for a period of up to 10 years. Based on this unique intended use, the interim removal action recommended in the EE/CA and selected in the associated Action Memorandum (CCN 096526) was hazard mitigation and public access for a period of up to 10 years. The hazard mitigation activities required to support public access included the removal of accessible hazardous substances from 105-B Reactor tour routes while performing surveillance and maintenance (S&M) activities such as routine radiological and hazard monitoring and safety inspections.

The interim removal action EE/CA analyzed removal action alternatives for a period of up to 10 years with the expectation that a final removal action, or "final configuration," would be determined during the 10-year period. Activities and associated costs for structural upgrades to allow safe public access were identified during this interim time period to assess the feasibility of sustained public use and the associated risks to human health and the environment due to hazardous substances that remain in the facility. The 10 year time period is consistent with the DOE's Columbia River Corridor Initiative, the goal of which is to complete many cleanup and access decisions by the year 2012 and to restore the river corridor per the TPA M-93 milestone series.

In addition to identifying and analyzing interim removal actions for 105-B Reactor, supplemental information was provided in the interim removal action EE/CA to support decisions on the final configuration of the facility. The supplemental information included the activities needed and estimated cost for mitigating hazards in all interior and exterior areas of 105-B Reactor to enable full public access for a 75-year period.

FY 2002

In June 2002, the *Removal Action Work Plan and Surveillance and Maintenance Plan for the 105-B Reactor Facility* (DOE/RL 2001-68) was issued pursuant to TPA Milestone M-93-06. The EPA approved the RAWP/SMP on August 16, 2002. The purpose of the RAWP/SMP was to support implementation of the 2001 EE/CA Action Memorandum by:

- Providing upgrades to facility infrastructures to ensure that risks to the public and workers from remaining hazardous substances are minimized;
- Removing, decontaminating, containing, or encapsulating hazardous substances in publicly accessible areas of 105-B Reactor;
- Performing routine S&M activities in all areas of 105-B Reactor to protect workers and the public and prevent releases of hazardous substances to the environment during and after the removal action for a period of up to 10 years;
- Managing and disposing of all waste generated during these actions.

The S&M Plan was prepared, and approved by the EPA, in response to the requirements of Section 8.0 of the TPA Action Plan to support transition of 105-B Reactor into the S&M phase of the facility decommissioning process.

FY 2003

In February 2003, the *Evaluation of Final Configuration Alternatives for the 105-B Reactor Facility* (DOE/RL 2002-43), was issued. This document presents the results of an evaluation of three final configuration options (no action, interim safe storage, and long-term S&M) for 105-B Reactor pending eventual one-piece removal and disposal of the reactor core on the Central Plateau around the 2068 time frame. The "no action" alternative assumes all short-term and long-term maintenance of 105-B Reactor are terminated and the facility is locked to prevent entry. The "interim safe storage" alternative includes decontamination and demolition of 105-B Reactor up to the shield walls that surround the reactor block, the construction of an interim safe storage enclosure, and reduced surveillance and maintenance. The "long-term surveillance and maintenance" alternative includes an extended period of facility monitoring with major and minor repairs, as necessary, followed by eventual decontamination and demolition of 105-B Reactor.

Although the previous 2002 Action Memorandum called for hazards mitigation and preserved the ability to use 105-B Reactor for public access and tours, the alternatives evaluated in this document do not include this option. In accordance with previous commitments, the DOE continues to seek a sponsor with interest in preserving all or part of 105-B Reactor for historical purposes. However, such a sponsor has not yet been identified, and the alternatives summarized in this evaluation assume that there will be no long-term public use or structural preservation of the facility.

FY 2004

In July 2004, the *Engineering Evaluation/Cost Analysis for the Final Configuration of the 105-B Reactor Facility* (DOE/RL 2004-55), was issued. This document presents the results of an evaluation of three removal action alternatives (no action, interim safe storage, and long-term S&M) for the final configuration of 105-B Reactor pending eventual disposition of the reactor core by 2068.

This EE/CA was prepared in accordance with TPA Milestone C-16-06E, *Final Configuration of B-Reactor*. The alternatives evaluated in this document support the planning and budgeting process for the final configuration of 105-B Reactor with the assumption that a long-term sponsor cannot be found and there will be no long-term public use or structural preservation of the facility. The recommended removal action alternative for 105-B Reactor was interim safe storage to begin at the conclusion of the 10 year interim hazard mitigation and public access period or when deemed appropriate by the DOE and regulatory agencies. There is no evidence that an Action Memorandum was ever issued in response to this EE/CA.

However, in October 2004, President George W. Bush signed Public Law 108-340 directing the Secretary of the Interior, in conjunction with the DOE, to commission the National Park Service (NPS) to conduct the *Manhattan Projects Sites Special Resources Study* to evaluate options for preserving and interpreting facilities at four sites that were in the World War II Manhattan Project (i.e., Oak Ridge, Tennessee; Los Alamos, New Mexico; Dayton, Ohio; and Hanford, Washington). The study is intended to evaluate the potential for selected facilities at these sites to be included into the NPS system and/or to identify other management options. The facilities being studied at the Hanford Site include 105-B Reactor and T-Plant, the chemical processing plant used to extract plutonium from the irradiated fuel produced in 105-B Reactor during World War II. The total study is being managed by the NPS Denver office, with the Hanford Site portion being conducted by the NPS Pacific West Region in Seattle.

FY 2005

In August 2005, the *Surplus Reactor Final Disposition Engineering Evaluation* (DOE/RL 2005-45), was issued. This engineering evaluation was prepared in response to TPA Milestone M-93-25, "Submit an Engineering Evaluation of the Final Surplus Reactor Disposition to EPA and Ecology." The engineering evaluation reviews the original assumptions and information contained in the final surplus reactor EIS and ROD, including cost estimates and radiological inventories. The status of the DOE's progress implementing interim safe storage for the surplus reactors and cost estimates for completion of associated activities for all nine surplus reactors (including N Reactor) is presented. The report also evaluates the reactor final disposition alternatives proposed in the final surplus reactor EIS (i.e., one-piece removal, reactor dismantlement, and in situ decommissioning).

These alternatives remain viable final disposition alternatives following interim safe storage. No new technical innovations, environmental values, regulatory requirements, or advances in the decommissioning process were identified that would significantly impact the original assumptions and conclusions of the final surplus reactor EIS and ROD. The applicable cost estimates and dose estimates presented in the final surplus reactor EIS are updated to reflect current values and estimates. Finally, several follow-on actions are presented for continued implementation of interim safe storage and preparing to select and implement a final disposition alternative for the nine Hanford Site surplus reactors. Completion of interim safe storage is considered the first step of implementing the safe storage alternative followed by deferred one-piece removal of the reactor core as selected by the final surplus reactor EIS and ROD.

The 105-B Reactor is currently in a hazard mitigation and public access mode awaiting a final configuration determination on the facility. No final configuration has been determined for 105-B Reactor. As discussed previously, Congress has directed the NPS to evaluate the feasibility of operating and maintaining 105-B Reactor as a museum (Public Law 180-340). Determination of the final configuration of 105-B Reactor is expected within the 10 year interim removal action period since issuance of the EE/CA Action Memorandum (i.e., by 2012).

FY 2006 to Present

The NPS *Manhattan Projects Sites Special Resources Study* teams conducted two public meetings with stakeholders in each of the study areas. The objective of the meetings was to present and describe the purposes and goals of the special resources study and to obtain input on the issues, concerns, and vision for the future for the various sites. The Hanford Site meetings were held in Richland in March 2006 with more than 150 people participating in the two meetings.

The Richland participants expressed a high level of concern over the fate of 105-B Reactor, with strong support for its preservation as an interpreted historical exhibit. Participants would like to see public access to the reactor from the Vernita Bridge over the Columbia River at the west end of the *Hanford Reach National Monument*. They would like interpretation and access of the Hanford Site tied into the development of the *Hanford Reach National Monument Heritage and Visitor Center* to be built on Columbia Point located in Richland at the confluence of the Yakima and Columbia Rivers. Train, bus, and boat tours of the Hanford Site and 105-B Reactor from Richland were also suggested.

The public scoping meetings were followed by an evaluation by the NPS teams for each site to determine if each of the candidate facilities meet the *National Significance, Suitability and Feasibility Criteria* for new sites to be added to the NPS system. The NPS determined in their evaluation that 105-B Reactor and T-Plant both meet the criteria for significance and suitability, but only 105-B Reactor meets the feasibility criterion. T-Plant was not judged to be feasible for inclusion in a *New National Parkland* because DOE expects to continue to use T-Plant for temporary storage of contaminated materials and nuclear decontamination activities for many years to come.

In February 2007, the Seattle NPS team conducted a two-day workshop in Richland to review the results of their significance, suitability, and feasibility evaluation and to develop a set of alternative management options for the preservation and public use of the Hanford Site facilities. Since T-Plant did not meet the feasibility criterion, management options were considered only for 105-B Reactor during the workshop. There were five management alternatives identified at the workshop, with a series of pros and cons developed for each of the options, in order to assist the NPS Seattle Office in evaluating the alternatives.

The NPS Seattle office will be preparing a written draft of the description of each 105-B Reactor alternative, an evaluation of the options, and a recommended option. The 105-B Reactor options analysis will be performed in consultation with the Native American Tribes and the State Historical Preservation Office.

In the summer of 2009, the NPS Denver Office plans to issue a draft of the *Manhattan Projects Sites Special Resources Study* that will include a description of 105-B Reactor alternatives, the evaluation of the alternatives, and recommended option. Public comment will be invited on

the results of the study (including the 105-B Reactor recommended option) through a series of public meetings to be held in Richland. Following the final revision of the draft study to incorporate public comments, the final study will be published, along with the associated ROD. The Secretary of the Interior will present the study results to Congress and the report will be released to the public.

Analysis

The ultimate future of 105-B Reactor will be determined through the federal Superfund (i.e., CERCLA) regulatory process, and the commitments and milestones in the TPA and associated Action Plan that drive the timetable for the process.

The 1993 final surplus reactor EIS-ROD determined that the preferred decommissioning alternative for eight of Hanford's surplus reactors (excluding N Reactor) was to place the reactors into interim safe storage for up to 75 years (until 2068). After the interim safe storage period, the reactor cores are to be transported in one-piece to a specially prepared burial site on Hanford's Central Plateau. To meet the requirements of this ROD, "cocooning" was developed and approved as the method for providing the 75 years of interim safe storage for the Hanford Site surplus reactors. Cocooning consists of demolishing the entire reactor facility outside of the reinforced-concrete shield walls and installing a coated aluminum and zinc steel roof. The cap-type roof and the concrete shield walls, with concrete back-filled into all penetrations in the shield walls, form an interim safe storage enclosure around the reactor core. The resulting cocoon places the reactor core in a safe condition for up to 75 years, requiring only periodic surveillance inspections at selected 5 or 10 year intervals.

The June 2001 EE/CA evaluated alternative removal actions for radioactive, chemical, and industrial hazards identified in 105-B Reactor as potential threats to human health and safety and to the environment. The March 2002 Action Memorandum resulting from the EE/CA identified "interim actions" to mitigate hazards and allow public access along a designated tour route for up to 10 years (through 2012), with surveillance and maintenance on 105-B Reactor also continuing during that period. This "interim" regulatory approach was approved by the regulators and DOE in order to preserve the physical possibility of converting 105-B Reactor into an interpreted historic facility or museum sometime in the future; allow safe, ongoing public access for tours in a cost-effective manner; and provide time for an appropriate museum/interpreted historic facility sponsor (e.g., the National Park Service) to assume responsibility or create a partnership with DOE.

In order to support DOE's plans to complete the interim safe storage of all Hanford Site surplus reactors by 2012, several documents were prepared between 2003 and 2005 in accordance with TPA milestones to evaluate final configuration alternatives for 105-B Reactor. However, although the previous 2002 EE/CA Action Memorandum called for hazards mitigation and preservation of the ability to use 105-B Reactor for public access as a museum, the alternatives evaluated for the final configuration do not include this option. It is assumed that there will be no long-term public use or structural preservation of 105-B Reactor.

In the summer of 2009, the NPS Denver Office plans to issue a draft of the *Manhattan Projects Sites Special Resources Study* that will include a description of 105-B Reactor alternatives for preservation and interpreting, an evaluation of the alternatives, and a recommended option. This study was mandated by Public Law 108-340 in 2004. Public comment will be invited on the entire study, including the recommended option for 105-B Reactor, through a series of public meetings to be held in Richland. Following the final revision to the draft study to incorporate public comments, the final study will be published, along with the associated ROD. The Secretary of the Interior will present the study results to Congress and the report will be released to the public.

Recommendation

Given the desire to maintain 105-B Reactor in an S&M mode and continue public tours beyond the 2012 time frame established in the 2002 EE/CA Action Memorandum, it is recommended that a new EE/CA be prepared to support this extended mission for 105-B Reactor. The EE/CA should address structural modifications and other upgrades required to provide adequate protection of human health and the environment until such time 105-B Reactor transitions from the S&M phase to the final disposition phase of the facility decommissioning process described in the TPA Action Plan. The EE/CA should be prepared in accordance with EPA/540/F-94/009, *Conducting Non-Time Critical Removal Actions under CERCLA*. This document provides guidance for EE/CA preparation including enforcement, public involvement, and preparation of Approval and Action Memoranda. An Action Memorandum, based on the outcome of the EE/CA, should be drafted for DOE and EPA review and approval.

The current plan is to conduct 105-B Reactor structural modifications and other upgrades in accordance with the DOE *Critical Decision Process* (DOE Order 413.3A, *Program and Project Management for the Acquisition of Capital Assets*). Given that 105-B Reactor is a *National Historic Landmark* and is on the *National Register of Historic Places*, major modifications of the facility must be reviewed and approved by the Washington State Historic Preservation Office through the Hanford Site Cultural/Historic and Ecological Resource Review Process.

Under Section 8.0 of the TPA Action Plan, *Facility Decommissioning Process*, 105-B Reactor is identified as a key facility. As such, 105-B Reactor is in an S&M phase of the facility decommissioning process operating in accordance with an EPA approved S&M Plan (DOE/RL 2001-68). This S&M Plan was established as a result of the 2002 EE/CA Action Memorandum that covers the time frame until 2012. The S&M Plan should be reviewed and revised, as necessary, to address the extended mission for 105-B Reactor beyond the 2012 time frame until such time DOE makes a decision to initiate final disposition of the facility.

In accordance with the TPA Action Plan, Section 9.3, *Document Revisions*, Minor changes to approved plans which do not qualify as "minor field changes" under Section 12.4 can be made through use of a change notice. Minor changes to approved plans include specific additions, deletions, or modifications to the scope and/or requirements which do not affect the overall

intent of the plan or its schedule. The lead regulatory agency (EPA) will evaluate the need to revise the plan. If the revision is determined to be necessary, the lead regulatory agency will decide whether it can be accomplished through use of a change notice, or if a full revision to the plan is required. In accordance with the TPA Action Plan, Section 12.4, *Minor Field Changes*, to ensure efficient and timely completion of tasks, minor field changes can be made by the person in charge of the particular activity in the field. Minor field changes are those that have no adverse effect on the technical adequacy of the job or the work schedule. Such changes will be documented in the daily log books that are maintained in the field.

Given that the NPS will issue a draft of the *Manhattan Projects Sites Special Resources Study* during the summer of 2009 in accordance with Public Law 108-340, the new EE/CA should consider and be consistent with the results of this study. The study will include a description of 105-B Reactor alternatives for preserving and interpreting the facility, an evaluation of the alternatives, and the recommended option. The results of the final study will be presented to Congress and a ROD will be issued. The results of the NPS study could have an impact on the EE/CA and recommendations made in support of an Action Memorandum prepared for review and approval by the EPA. If the EE/CA does not consider and is not consistent with the NPS study results, there is a risk of having to revisit the evaluation and recommendation based on the NPS study results.

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