

EM SSAB CHAIRS
Bi-Monthly Conference Call
January 27, 2011

Participants

<i>Board</i>	<i>Chairs/Representatives</i>	<i>Site Support Staff</i>
Hanford	Susan Leckband	
Idaho	R.D. Maynard, Willie Preacher	
Nevada	Walt Wegst, Kathleen Bienenstein	Kelly Snyder, Denise Rupp
Northern New Mexico	Ralph Phelps, Robert Gallegos	Lee Bishop, Menice Santistevan
Oak Ridge	Ron Murphree, Kevin Westervelt	David Adler, Spencer Gross, Pete Osborne
Paducah		Buz Smith, Eric Roberts
Portsmouth	Dick Snyder, Larry Parker	Rick Greene, Julie Galloway
Savannah River	Don Bridges	Erica Williams

DOE-HQ Representatives:

EM-5	Shari Davenport
EM-60	Joann Luczak
EM-41	Tish O’Conor
EM-42	Catherine Brennan, Michelle Hudson, Allison Clark
EM-43	Arnie Edelman, Dave Mathes
EM-3.1	Colin Jones

Opening Remarks

Ms. Catherine Brennan, Designated Federal Officer for the Environmental Management Site-Specific Advisory Board (EM SSAB), called the meeting to order.

Congressional Update

Ms. Shari Davenport, Director for the Office of Communications and External Affairs, reported that at the beginning of January new members of Congress were sworn in and provided committee assignments. Ms. Davenport noted that Ms. Madelyn Creedon is planning to depart from the Senate Armed Services Committee and Mr. Robert DeGrasse from the House Armed Services Committee has already left. These are the most prominent changes in staff and the congressional makeup remains largely the same. Congress will be working steadily for the next month and anticipates the roll-out of the budget for February.

Budget Update

Ms. Joann Luczak, Deputy Assistant Secretary of the Office of Program Planning and Budget, reported that the Fiscal Year (FY) 2012 budget remains embargoed because President Obama

has not submitted it yet. DOE's Chief Financial Officer is closing discussions with EM and then moving on to the Office of Management and Budget. The week of February 7-14, the appendix and four volumes that comprise the President's budget will be sent to Capitol Hill. Leading up to the budget roll-out on February 14, EM will send forward a narrative justification that supports the President's request. The budget roll-out will entail press information sessions and a presentation by the Secretary of Energy. Additionally, there will be break-out sessions for the various Assistant Secretaries to communicate with the stakeholders. He is tentatively scheduled to testify on Capitol Hill February 15, and is currently preparing for high-level question and answer sessions. EM's Assistant Secretary is tentatively scheduled to testify on March 30. In between the two dates, representatives of other major programs in DOE will testify.

Ms. Luczak concluded by noting that the Office of Program Planning and Budget is still working to release the budget guidance memo promised on the October 5, teleconference¹.

Discussion

Dr. Walt Wegst, Chair of the Nevada Site Specific Advisory Board (NSSAB) asked if EM was currently operating under a continuing resolution (CR).

Ms. Luczak responded that EM is working under a CR based on the 2010 enacted numbers, and it will end March 3. There is concern about appropriations for the rest of the year and whether they will be at the CR level of 2010 or closer to the 2008 levels. Returning to the 2008 levels could prove devastating for some agencies since FY 2011 is more than half way through.

Ms. Susan Leckband, Chair of the Hanford Advisory Board (HAB), asked if the guidance letters referred to earlier were the ones being sent to the field offices to provide instructions on sharing budget information.

Ms. Luczak confirmed that it was the same memo promised. One memo will be sent to all field managers at once.

Mr. R.D. Maynard, Chair of the Idaho National Laboratory Site Environmental Management Citizens Advisory Board (INL CAB), asked Ms. Luczak to explain the rationale behind returning to the 2008 funding levels.

Ms. Luczak explained that Congress could examine the 2008 enacted appropriations for the federal budget and find substantial savings to reduce the current deficit. The goal of this approach is to shrink federal spending overall, but if pursued, it would affect the budget that is in place.

ARRA Update

Mr. Colin Jones from the EM Recovery Act Program provided the Chairs with an update on EM's American Recovery and Reinvestment Act (ARRA) activities. Regarding the transition of

¹ That memo is in concurrence as of February 23, 2011, and is awaiting signature by EM's Principal Deputy Assistant Secretary.

Recovery Act workers, restructuring plans have officially been released for Savannah River, Idaho and Hanford and will be enacted from January-September 2011. Job centers will be located at the larger sites including Savannah River, Idaho, Hanford and Oak Ridge while virtual job centers will be available online and via telephone for workers across the complex. These job centers will provide workers with job placement services, resume writing support, and job search support.

Mr. Jones concluded that the Recovery Act has spent over \$3.7 billion and is on track to reduce the footprint of the EM complex 40% by September 2011. To date EM has achieved 28% of that milestone.

Discussion

Mr. Maynard asked if the transition of Recovery Act workforce at Idaho included building trade workers or solely plant operations staff.

Mr. Jones responded that he did not know the specifics of Idaho's workforce transition, but he would find out and report back².

Ms. Leckband asked why the circumstances for retirement and severance are different at each of the sites.

Mr. Jones responded that there is no uniform policy for retirement and severance across the complex. He pointed out that this is a result of the agreements that have been negotiated at the sites. The severance agreements at the some sites date back decades.

Mr. Maynard asked who negotiated the Section 3161 agreements.

Mr. Jones clarified that these are not specifically Section 3161 agreements. Section 3161 of the National Defense Authorization Act for Fiscal Year 1993 is a program that was designed to transition workers at the end of the Cold War from the nuclear weapons complex. Section 3161 is considered payment for enhanced benefits and funds activities like the job centers.

Ms. Leckband asked Mr. Jones to speak to the DOE's recent announcement offering incentive-based retirement packages at a time when so many contractors are being laid off with no severance.

Mr. Jones responded that the announcement came at an unfortunate time. EM has been given the authority to buyout 291 federal positions across the complex. The Hanford window for the buyouts was open at the end of last year for a number of weeks and opened again January 14 due to employee interest. Contractor workforce early retirement options were examined at Hanford and would have cost significantly more than the \$25,000 offered to federal employees. The

² The approved Idaho contractor workforce restructuring plan will reduce the sites workforce by 600 between January and September 2011, due to the completion of Recovery Act scope and base line cleanup work at the site. The approved plan does not include building trade workers. Upon completion of work on the Idaho Cleanup Project building trade workers return to the union halls to be reassigned.

\$25,000 buyout offered to federal employees is not related to pensions and carries severe restrictions regarding post-DOE employment.

Mr. Maynard asked if the funding for severance pay comes from the contractors.

Mr. Jones replied that the money will come from base program funding that DOE provides to the sites.

GTCC Draft EIS

Mr. Arnie Edelman from the Office of Disposal Operations provided the Chairs with an update on the Greater-Than-Class C (GTCC) Draft Environmental Impact Statement (EIS). The Low-Level Radioactive Waste Policy Amendments Act of 1985 gave the federal government the responsibility for the disposal of GTCC waste. The classification is based upon a Nuclear Regulatory Commission (NRC) classification of various wastes types; A, B, C and GTCC. GTCC is a higher activity waste than A, B, and C and contains certain radioisotopes, including americium, plutonium, and uranium. In 2005, the Energy Policy Act assigned the responsibility for the disposal of GTCC waste to DOE, and development began on the GTCC draft EIS.

In 2007, a notice of intent was issued and several public scoping meetings were held throughout the DOE complex (Savannah River, Carlsbad, Los Alamos, Oak Ridge, Nevada, Hanford, and Idaho) to discuss disposal options. Mr. Edelman noted that in the next couple of weeks a notice of public availability will be issued for the GTCC draft EIS in the Federal Register³. EM has a mailing list comprised of over 1500 individuals that it will use to inform local stakeholders. The list was developed from the National Environmental Policy Act staff at the locations potentially impacted to include Savannah River, Carlsbad, Los Alamos, Nevada, Idaho, and Hanford. The public comment period will be 120 days. Public hearings will be held no less than 45 days after the GTCC draft EIS is available to the public at each of the possible disposal sites (see <http://www.gtcceis.anl.gov> for hearing locations, time and dates). At this point in time DOE does not have a preferred alternative for a GTCC disposal and will be soliciting all interested parties, federal agencies, and commissions for their thoughts on the criteria to be used in making the determination.

Before DOE can make a final decision on the disposal alternative(s) for GTCC waste, a report to Congress must be prepared. The report will describe GTCC waste, current locations of GTCC waste, alternatives and impacts of various disposal methods and sites, and opportunities for cost recovery. Congress must take an action such as appropriations, or change in legislation in order for DOE to move forward. The goal is for the GTCC EIS to be finalized in early 2012, and then a Record of Decision (ROD) will be issued in order for construction and operation of a disposal site to begin.

Mr. Edelman concluded that DOE is open to any sidebar meetings with advisory boards and sites with Tribal interests, in addition to the scheduled public hearings. He pointed out that the GTCC draft EIS honors the moratorium for disposal at Hanford, as it was addressed in the Tank Closure & Waste Management EIS.

³A notice of public availability was published in the Federal Register February 25, 2011.

Dr. Wegst asked about the relationship between the GTCC EIS and the report from the Blue Ribbon Commission that will be released in 2012.

Mr. Edelman responded that DOE is working with members of the Blue Ribbon Commission. DOE will share information gathered from the GTCC draft EIS comment period and share it with the Blue Ribbon Commission. The primary focus of the Blue Ribbon Commission is on the end of the nuclear life-cycle, and GTCC is not part of their review. DOE will take into consideration the Blue Ribbon Commission's proposed recommendations when making the final decisions regarding the GTCC EIS.

Waste Disposal Update

Mr. Dave Mathes (representing Ms. Christine Gelles who was on travel) from the Office of Disposal Operations provided the Chairs with an update on waste disposition.

Waste Isolation Pilot Plant (WIPP)

Regarding RCRA milestones, a ten-year permit renewal and five-year recertification process were both completed in late 2010. A maintenance outage at WIPP was completed during the fall, but shipments to the facility have since resumed. During the outage, scheduled inter-site shipments to Idaho for characterization were also completed. EM has set and approved the shipping goals for FY 2011, and performance against those goals is being monitored on a monthly basis. After many years, the TRUPACT-III shipping container process is coming to a close. The fabrication of the first container is now underway, and its delivery is expected by summer. The initial containers will be used for transporting waste from Savannah River to Carlsbad.

Mixed Low-Level Waste

For the past five years, the Nevada National Security Site (NNSS) accepted Mixed Low-Level Waste (MLLW) under an interim RCRA permit provided by the Nevada Division of Environmental Protection. The permit allowed DOE to dispose of up to 20,000 cubic meters of LLW at the site, through November 2010. Last summer, the state approved construction of a new, fully RCRA compliant, MLLW cell, which was completed in December and began waste disposal January 26. Over the last six months, there have been several incidents of LLW being mischaracterized, which were non-compliant with the receiver site requirements. This is a significant management concern.

Waste Management Conference 2011

DOE and NRC are planning to hold a public meeting at the Waste Management 2011 Conference to discuss DOE Order 435.1 on Radioactive Waste Management. The DOE order is undergoing the first major re-write in the past ten years, and NRC will be discussing its efforts to revise federal regulation Part 61 for LLW disposal and licensing.

Depleted Uranium

There may be regulatory changes for depleted uranium disposal in commercial facilities under Part 61 of the Title 10, Code of Federal Regulations. Energy Solutions in Utah plans to submit its site-specific performance assessment to the State of Utah late in February. Mr. Marty

Letourneau from the Office of Environmental Compliance will participate in the next public meeting related to the performance assessment. He is heavily involved with the performance assessments of EM facilities as part of the LLW Federal Review Group.

Mr. Mathes concluded that EM is collecting annual updates to the Baseline Disposition Data. The data is due to HQ within the next couple of weeks, followed by a peer review and question and answer check of the data. Once the peer review process is completed, the data will be posted via the Waste Information Management System.

Discussion

Ms. Leckband pointed out that the DOE and NRC public meeting at the Waste Management 2011 Conference is of great interest to the HAB. She asked if it was possible to stream the meeting online and to provide the presentations ahead of time to meeting participants.

Mr. Mathes indicated that he would pass the request on to Mr. Letourneau.

Long-Term Stewardship

Ms. Tish O'Connor from the Office of Environmental Compliance provided the Chairs with an update on EM's Long-Term Stewardship (LTS) activities. She recently visited Oak Ridge, Tennessee and met with the Oak Ridge Site Specific Advisory Board (ORSSAB) Stewardship Committee to discuss their specific LTS issues. Once EM completes its mission landlord programs under the Office of Nuclear Energy (NE), Office of Science (SC) and the National Nuclear Security Administration (NNSA) will ensure LTS. Currently, a Department-wide internal meeting to discuss an LTS path forward for mission sites is being scheduled. The meeting will include managers from the Office of Legacy Management, EM, NE, SC and NNSA.

There are three offices within EM that work with LTS issues. An effort is underway to formulate a public website that brings together all the guidance and policy associated with LTS. Ms. O'Connor stated that her goal is to have a strategic plan for LTS formulated by EM SSAB Chairs meeting in April.

Ms. O'Connor recalled that on the December 2, teleconference Mr. Maynard asked if when cleanup is complete EM will transfer LTS to NE, the site landlord at Idaho. She reported that certain facilities at the Idaho Nuclear Technology and Engineering Center are expected to be transferred to NE within the next five years and will be covered by a memorandum of understanding between EM and NE. Other facilities after cleanup will be demolished and NE will likely be responsible for any LTS and monitoring as warranted. There are no near-term plans to develop documents to outline this transfer of stewardship for current EM facilities. Such documents will be prepared in sufficient time to allow for an orderly transition.

Ms. O'Connor concluded that prior to the call she sent the Chairs two fact sheets regarding cleanup completion and how site transitions work within DOE from cleanup to LTS. DOE's Institutional Control Policy which covers site stewardship requirements was also sent to the Chairs.

Ms. Leckband commented that in the past, DOE held national workshops on waste disposition with the assistance of the League of Woman Voters that involved advisory boards and were very successful. She urged Ms. O'Connor to follow that model to gather public input regarding a path forward for LTS at mission.

Announcements

Ms. Brennan reported that Dr. Mary Neu is joining EM in the new position of Chief Scientist for Environmental Management in the Office of the Assistant Secretary. Dr. Neu will provide technical direction for all applied research and development performed in EM programs. Additionally, Dr. Neu will be responsible for developing policy and guidance and providing technical assistance to EM's projects and operations. Previously, Dr. Neu was the Associate Laboratory Director for Chemistry, Biological, and Earth Sciences at Los Alamos National Laboratory. The Directorate includes 850 researchers and staff for programs budgeted at \$310 million annually, involving nuclear, radiological, chemical, biological, geophysics and field studies. She is internationally recognized as an expert in plutonium chemistry and actinide biogeochemistry and received her Ph.D. in nuclear and inorganic chemistry from the University of California, Berkeley.

Spring 2011 Chairs Meeting

Dr. Wegst reported that the planning committee finalized the meeting agenda last week. He noted that each round robin presentation will be limited to five minutes and this will be strictly enforced by the facilitator. A group dinner will be held at 6:30pm on April 30 at Lucille's Smokehouse Bar-B-Que for a fixed price of \$30. A meeting registration and tour package will be sent out to the Chairs the week of February 14. Dr. Wegst recommended that individuals interested in visiting the Las Vegas Strip at night rent a car.

Ms. Brennan asked if there were any comments on the meeting agenda.

Ms. Leckband suggested that Mr. Frank Marcinowski provide a high-level GTCC draft EIS during his presentation if Mr. Edelman would not be attending the meeting.

Mr. Ron Murphree, Chair of the ORSSAB, indicated that his board would be presenting a recommendation to the Chairs to consider at the meeting. He predicted that the recommendation would be ready for distribution by the week of February 14.

Ms. Denise Rupp, administrator for the NSSAB, noted that she would send an email to the members of the planning committee to schedule a final call prior to the meeting.

Around the Complex

Paducah Citizens Advisory Board – Eric Roberts

- The Paducah Citizens Advisory Board (Paducah CAB) has been working closely with DOE regarding future use of the site.

- The Kentucky Research Consortium for Energy and Environment's community-based end state vision report is nearing completion.

Portsmouth Site-Specific Advisory Board – Dick Snyder and Larry Parker

- The Portsmouth Site-Specific Advisory Board (PORTS SSAB) submitted two recommendations that are being implemented.
 - [Recommendation 10-01](#): Request for an End Use Study for the Portsmouth Gaseous Diffusion Plant.
 - [Recommendation 10-06](#): Waste Disposition of Process Building Decontamination and Decommissioning Project Activities
- DOE is in the process of having discussions with the Ohio Environmental Protection Agency with regard to the Remedial Investigations Feasibility Studies under CERCLA.

Savannah River Site Citizens Advisory Board – Don Bridges

- The Savannah River Site Citizens Advisory Board (SRS CAB) last met on January 24-25.
- The Blue Ribbon Commission held a full day meeting on January 7 in Augusta, Georgia.
- The Chair of the SRS CAB will be presenting a paper on the SRS CAB at the Waste Management 2011 Conference.

Hanford Advisory Board – Susan Leckband

- Along with regular committee and full-board meetings the HAB issue managers have been meeting separately to discuss key concerns.
- HAB members are preparing for discussions regarding the Hanford RCRA site-wide permitting process.
- The HAB participated in a full-day workshop on Tank Closure. The first tank farm isn't scheduled to close at Hanford until 2019. Participants were provided with an overview of the regulatory world regarding Tank Closure.
- The board has worked closely with DOE to implement new procedures concerning the HAB membership nomination process including the official appointment of alternates. The HAB has operated with alternates since its inception.
- The HAB will hold its next meeting February 10-11, during which five pieces of advice will be introduced.

Idaho National Laboratory Site Environmental Management Citizens Advisory Board – R.D. Maynard

- The State of Idaho has entered into an amended agreement allowing commercial fuel to be shipped into the state.

- The INL CAB has a new administrative support contractor.
- The board is in the middle of a membership recruitment campaign.

Nevada Site Specific Advisory Board – Walt Wegst

- A dedication ceremony was held Jan 26, for the new MLLW disposal facility.
- The NSSAB is preparing a recommendation regarding a permit for a MLLW treatment facility at the site.
- Membership on the NSSAB is down to 10 people. The board has begun a membership recruitment campaign and has already received six applications.
- The NSSAB has recently approved revisions to the board standard operation procedures to reflect its reorganization into two committees, one focused on soils and one on industrial sites.

Northern New Mexico Citizens' Advisory Board – Ralph Phelps

- The Northern New Mexico Citizens' Advisory Board (NNMCAB) held their bi-monthly meeting Jan 26 and approved three recommendations.
 - [Recommendation 2011-01](#): FY 2012 Budget Request for LANL/EM Work.
 - [Recommendation 2011-02](#): Accelerating TRU Waste Shipments from Area G to WIPP
 - [Recommendation 2011-03](#): Using Rail Transport for Moving Waste.
- The NNMCAB will be submitting Recommendation 2011-03 to the Chairs for consideration.
- The board's membership is up to 18 members.
- A membership package has been submitted to EM-HQ for approval.
- F. David Martin has been named the New Mexico Environmental Department Cabinet Secretary.

Oak Ridge Site Specific Advisory Board – Ron Murphree

- The ORSSAB will experience a significant amount of membership turnover this year. The board conducted a membership recruitment campaign that ended December 31, and yielded 63 applications.
 - There are currently two vacancies on the board, but a number of term limited members will be leaving the board in June and a 50% turnover is predicted.
 - The board will vote in February to raise their membership level from 20 to 22.
 - A review of orientation and training materials is currently underway to help facilitate the transition of new members.
- The board has formed a new committee to address issues of EM budget and prioritization. The committee will focus on a number of different funding and prioritization scenarios DOE-Oak Ridge is creating with a specialized modeling tool.
- The ORSSAB will hold its next meeting February 9, and will discuss a recommendation concerning the contamination in Bear Creek burial grounds.
- Ms. O'Connor attended the board's stewardship committee meeting in January.
- The board received a letter from Paul Sloan, the Deputy Commissioner at the Tennessee Department of Environment and Conservation (TDEC) regarding the EM program at Oak

Ridge. TDEC would like more emphasis to be placed on environmental media as opposed to just D&D.

Closing Remarks

Ms. Brennan thanked the participants for their time and adjourned the meeting at 4:45 pm EST.



Site Transition Process Upon Cleanup Completion

FACT SHEET

This fact sheet explains the process for transferring a site to the U.S. Department of Energy Office of Legacy Management.

Introduction

After environmental remediation is completed at a site and there is no continuing mission, responsibility for the site and the associated records are transferred to the U.S. Department of Energy (DOE) Office of Legacy Management for post-closure management. Where residual hazards (e.g., disposal cells, ground water contamination) remain, active long-term surveillance and maintenance will be required to ensure protection of human health and the environment.

Transition Process

The DOE Office of Legacy Management (LM) established transition guidance for remediated sites that will transfer to LM for long-term surveillance and maintenance.

The primary DOE Orders related to the transition process are:

- DOE Order 430.1B *Real Property Asset Management*. This order specifies the requirements of real property and asset management including the disposition and transition of the real property and assets.
- DOE Order 413.3A *Program and Project Management for Acquisition of Capital Assets*. This order specifies a disciplined process for project management using the Critical Decision process.

The transition process is the passage from the phase during which engineered, near-term actions are taken to mitigate environmental and human health risks to the next phase where residual risks are maintained in a sustainable safe condition to allow beneficial use.

Seven fundamental steps are implemented during the transition process to ensure a successful transfer to LM. These steps are identified as (1) notification, (2) site transition plan, (3) determination of long-term surveillance and maintenance requirements, (4) communication and outreach, (5) budget and authority documentation, (6) verification of readiness, and (7) transfer.

Notification

Notification is an ongoing dialogue between the responsible agency, usually the DOE Office of Environmental Management (EM), and LM. EM and LM communicate quarterly about projected dates that environmental remediation is estimated to be complete at a site. The notification allows enough time for both

organizations to work jointly on the transition and for LM to engage in remediation considerations that may impact long-term surveillance and maintenance costs and effectiveness. For a small site, notification of 4 to 6 months prior to completion may be adequate. For a larger site (e.g., Fernald, Mound, Rocky Flats), notification of 2 years or longer is necessary to ensure a smooth transition.

Site Transition Plan

The transition plan identifies and guides the execution of the actions needed to move the site to a point where responsibility can be transitioned from EM to LM. The transition plan is jointly developed, approved by EM-1 and LM-1, and jointly executed by EM and LM staff. The transition plan should meet the requirements of DOE Order 430.1B *Real Property Asset Management* and include the disposition of federal work force responsibilities. The transition plan structure is based on transition guidance established by DOE-LM. The Site Transition Framework (STF) defines site conditions, documentation, and the long-term surveillance and maintenance aspects that must be addressed. However, it does not prescribe a transition process.

Long-Term Surveillance and Maintenance (LTS&M) Requirements

Post-closure activities should be identified and clearly documented in a LTS&M Plan. The LTS&M Plan should include those actions that are required to maintain the protection of the remedy (e.g., remedy performance monitoring, ground water pump and treat); manage the natural, cultural, and historical resources; and involve and inform the public. For Comprehensive Environmental Response, Compensation, and Liability Act sites, the LTS&M Plan will meet the requirements of the Operations and Maintenance Plan and include the enforceable activities to be administered under a post-closure agreement. LM will require support from EM but will lead the development of the LTS&M Plan.

Communication and Outreach

Communication with the site's stakeholders and regulatory agencies builds on existing communication and outreach efforts. One goal of the transition process is to ensure stakeholders and regulators are aware of the plan to transition, and participate in the development of the LTS&M Plan.

Budget and Authority Documentation

EM and LM will work together to ensure appropriate cost estimates are developed for the post-closure management of the site. This will require cost estimates for LTS&M, contractor pensions and benefits, and other costs that are needed for post-closure management. It is important that both organizations understand the post-closure cost estimates as those estimates define the planned target transfer from EM to LM.

Prior to the expected transfer of the site, DOE will prepare a Program Budget Decision (PBD) document. The PBD is signed coincident with the preparation of the President's Request for the fiscal year LM is expected to receive the site. The document is the official notification that the Department intends to transfer budget and scope from EM to LM.

Verification of Readiness

The Critical Decision 4 (CD-4) package is a formal determination that addresses commitments to be met before a project is allowed to be designated as completed in accordance with DOE O. 413.1A. The CD-4 package documents the completion of the EM mission at the site and validates the successful execution of the transition plan. Thus, the CD-4 package includes a final assessment of the site readiness to transfer. The CD-4 package represents agreement between EM and LM on the conditions of the site and associated activities at the time of transfer. The CD-4 package is signed by the Under Secretary for Energy, Science and Environment.

Transfer

Once the budget request has been approved by Congress and the CD-4 package is signed, the site is officially transferred from EM to LM. It should be noted that even though the site has been transferred, there may be some remaining activities that remain for EM to complete. These activities will be documented in the approved CD-4 package.

Site Transition Framework Establishes Conditions for 10 Areas

1. Authorities and accountabilities are assigned and documented.
2. Site conditions are accurately and comprehensively documented.
3. Engineered controls, operation and maintenance requirements, and emergency/contingency planning are documented.
4. Institutional controls and enforcement authorities are identified.
5. Regulatory requirements and authorities are identified.
6. Long-term surveillance and maintenance budget, funding, and personnel requirements are identified.
7. Information and records management requirements are satisfied.
8. Public education, outreach, information and notice requirements are documented.
9. Natural, cultural, and historical resource management requirements are satisfied.
10. Business functions including contractor benefits are addressed.



Definition of EM Completion and DOE Site Closure

This fact sheet defines critical points in the cleanup process, specifies where the Office of Environmental Management (EM) programmatic responsibility ends, and clarifies the responsibilities of other Program Secretarial Offices managing a site after EM's mission is complete. Accordingly, these definitions serve as the framework for developing or revising strategic plans, site baselines, and implementation plans.

Environmental Management (Cleanup) includes those activities necessary to evaluate and mitigate a release of a hazardous substance that may pose a risk to human health or the environment. Cleanup activities may include source term remediation, facility disposition, ground water response measures, surface water response measures, and legacy waste management (e.g., transuranic and orphan waste disposition). The term *cleanup* is used interchangeably with the terms *remedial action*, *removal action*, *response action*, and *corrective action*.

Response Action Completion occurs when a specific response attains its response action objective(s)/cleanup criteria such that no land use restrictions remain (e.g., contaminant concentrations reduced to acceptable, health-based levels in ground water).

EM Completion occurs when: 1) all required short-term response activities at a specific site are complete (e.g., soil excavation, cap construction, building decommissioning); 2) all required long-term response measures (e.g., ground water treatment systems) are constructed and determined to be operational and functional; 3) all necessary documentation is in place (e.g., engineering certifications/and verifications, post-closure or operating

permits, final site condition/configuration records); and 4) the site is administratively transferred from EM responsibility to another DOE, Federal, State or private entity.^{1,2,3}

Long-Term Response Action (LTRA) comprises the set of activities at a site, following EM completion, that are required as a result of ongoing operations, maintenance, or monitoring that is necessary to manage residual contamination above levels allowing unrestricted uses. For some response actions (e.g., capped burial grounds or containment cells for long-lived radionuclide metals), LTRA activities will be required indefinitely.

DOE Site Closure occurs (for non-DOE owned sites) with the cessation of any DOE mission at the site, or (for DOE-owned sites) when ownership of all real property is

¹ After response action objectives or cleanup criteria have been achieved, any necessary dismantling/decommissioning of remediation facilities will be conducted as part of the LTRA scope.

² Should DOE determine that it is appropriate to initiate additional response measures following EM Completion, either to enhance remedy performance or reduce lifecycle project costs, these efforts will be conducted as part of the LTRA scope.

³ DOE will maintain liability for any residual wastes left onsite unless, as part of a transfer agreement, the receiver has agreed to assume future liability.

transferred to a non-DOE entity. *DOE site closure is not required for EM completion.*

In most situations, there will be multiple response actions initiated over a period of months or years at a site and therefore, individual projects will reach “Project Closeout” (CD-4) prior to EM completion.⁴ In these cases, EM will be responsible for operation and maintenance (O&M) activities until the project or site is administratively transferred, at which time the O&M activities become LTRA activities. The critical points defined above are illustrated in Figures 1 and 2.

Administrative Transfer of programmatic responsibility or ownership can be accomplished in one of three ways:

1. *Programmatic responsibility is transferred (or returned) to another DOE office* (responsibilities include administration, asset management, legal, regulatory and financial responsibilities);

2. *Ownership is transferred to another federal governmental agency.* If a response action is ongoing, transfer entails demonstration that the remedy is operational and functional—that is, the response system is in place and operating as designed (e.g., system pumping and treating x gallons of ground water per minute). Transfer of responsibility for an ongoing ground water remediation should include formal documentation of an exit strategy (See Highlight 1).

3. *Ownership is transferred to a state governmental agency or a private entity.* For National Priorities List sites, transfer of property to a state agency or a private entity entails meeting the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act section 120(h). This includes demonstrating that the remedy is operating properly and successfully (i.e.,) performance data demonstrate the system is performing as expected and will likely achieve the cleanup criteria or response action objectives as intended.)

Highlight 1 – Exit Strategies

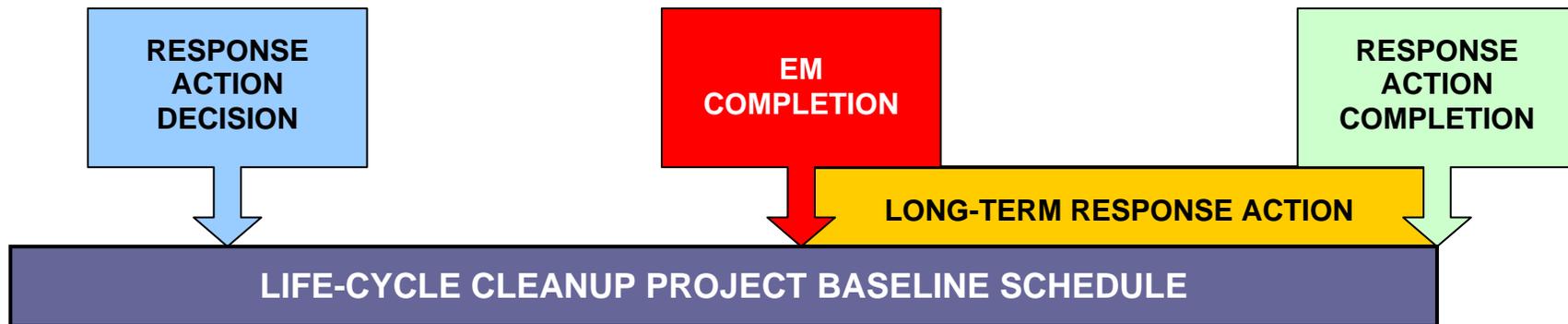
An exit strategy comprises the set of information that will be used to demonstrate the desired performance has been achieved, the cleanup criteria have been met and the associated activities (e.g., treatment systems, monitoring) can be terminated. Exit strategies contain four essential elements:

1. A description of the objective of the activity,
2. A performance “model” that describes the expected course of the remediation process,
3. A listing of the performance metrics, decision criteria, and endpoints that will be used to assess how the response is progressing and demonstrate when the objective has been reached; and
4. Contingency plan that will be implemented if data indicate that objectives will not be met.

For more information on exit strategies, see the related fact sheet, *Developing Exit Strategies for Environmental Restoration Projects*, March 2000.

⁴ As specified in DOE Order 413.3, “Project Closeout” (Critical Decision-4) for environmental management projects is the point at which a project may proceed to EM Completion.

Figure 1. Conceptual Depiction of EM Completion



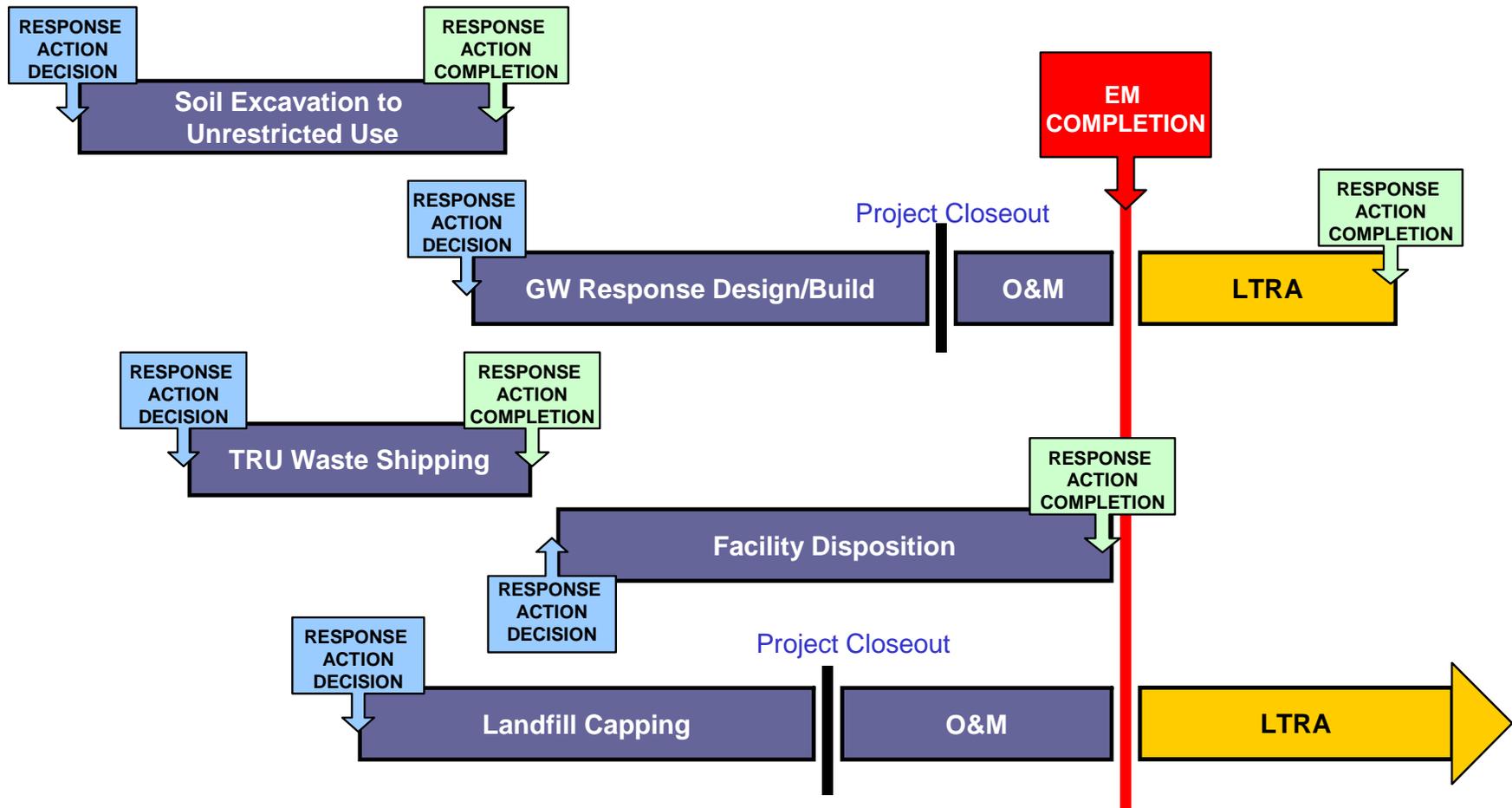
RESPONSE ACTION DECISION: Required remedial/response measures are adequately defined, agreed to with regulatory agencies, and documented in a CERCLA Record of Decision, RCRA Permit Modification, or equivalent decision document.

EM COMPLETION: All required short-term response activities (e.g., soil excavation, cap construction, building decommissioning) at a specific site are complete; all required long-term response measures (e.g., groundwater treatment systems) are constructed and are operational and functional; all required documentation (e.g., certifications/verifications, post-closure or operating permits, final site conditions/configuration records) is in place; and the site is administratively transferred from EM responsibility to another DOE, Federal, State, or private entity.

LONG-TERM RESPONSE ACTION (LTRA): Set of activities at a site, following EM completion, that are required as a result of ongoing operations, maintenance, or monitoring that is necessary to manage residual contamination above levels allowing unrestricted uses.

RESPONSE ACTION COMPLETION: Response action attains its specific response action objectives/cleanup criteria (e.g., contaminant concentrations reduced to acceptable, health-based levels in ground water), such that no land use restrictions remain. *[Note: For some response actions (e.g., capped burial grounds or containment cells for long-lived radionuclides), LTRA activities will be required indefinitely.]*

Figure 2. Conceptual Depiction of EM Completion at a Site where Multiple Response Actions are Initiated Over an Extended Period of Time



SUBJECT: USE OF INSTITUTIONAL CONTROLS

PURPOSE AND SCOPE:

This Policy delineates how the Department of Energy (DOE), including the National Nuclear Security Administration, will use institutional controls in the management of resources, facilities and properties under its control and to implement its programmatic responsibilities. The Policy will guide site-specific and programmatic decisions on DOE's own planning, maintenance and implementation of institutional controls, and address responsibilities related to DOE's role as a steward of Federal lands and properties, and identify activities that DOE needs to accomplish.

DOE uses a wide range of institutional controls as part of efforts to:

- appropriately limit access to, or uses of, land, facilities and other real and personal properties;
- protect the environment (including cultural and natural resources);
- maintain the physical safety and security of DOE facilities; and
- prevent or limit inadvertent human and environmental exposure to residual contaminants and other hazards.

The purpose of this Policy is to ensure that DOE programs:

- reaffirm a DOE-wide commitment to use institutional controls effectively;
- establish a consistent approach to the implementation, delegation, documentation, maintenance and reevaluation of institutional controls as an integral part of missions and operational activities;
- integrate the use of well-designed, effective, and reliable institutional controls with other tools to manage, monitor, and transfer lands and real and personal property under DOE control; and
- apply institutional controls in a cost-effective way and maximize the use of low-maintenance institutional controls to the extent possible.

The Office of Environment, Safety and Health is responsible for developing guidance for the implementation of this Policy, and will coordinate this effort with Headquarters and field offices. DOE line management including operations office managers, field office managers, the service center director and lead program secretarial offices have primary responsibility for implementing this Policy for properties under their control, for properties released or transferred from their control or for properties they accept for control or oversight. DOE line management is responsible for ensuring that institutional control needs are addressed as part of relevant

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integrated safety management and environmental management systems. DOE functional offices such as budget, chief information officer, legal, safety, and personal and real property management have staff responsibility for assisting line management with implementation of this policy, and related directives.

This Policy is only intended to improve the internal management of the Department, and is not intended to create any right or benefit, substantive or procedural, enforceable at law by a party against the Department of Energy. This policy does not alter or amend any institutional control under applicable law or enforceable agreement, and any terms, definitions, or implementation of this policy do not expand or modify the scope of requirements or authorities of existing laws and regulations.

BACKGROUND:

DOE is a responsible Federal land manager and steward of natural and cultural resources at DOE sites. DOE uses institutional controls to manage lands, facilities, materials and resources under its jurisdiction. In certain circumstances these institutional controls may be authorized by, or required as part of the decision process established by, various laws such as the Nuclear Waste Policy Act; the Atomic Energy Act; the Resource Conservation and Recovery Act; the Comprehensive Environmental Response, Compensation and Liability Act, or cultural resource management statutes. In other cases there are no specific statutory requirements, but DOE has decided to use institutional controls to supplement active remediation, pollution control, public and resource protection, physical security, or to bolster the integrity of engineered remedies.

Institutional controls may include administrative or legal controls, physical barriers or markers, and methods to preserve information and data and inform current and future generations of hazards and risks. Because of the different needs and objectives for institutional controls and the different types used throughout DOE, the term “institutional controls” is used in a broader context in this Policy than it may be used in internal and external regulatory requirements or policies established under individual statutes. This broader application of the term is necessary to encompass the diverse institutional controls used throughout DOE in a consistent yet flexible, policy framework. Additionally, differences among the various types of DOE facilities often lead to systematic tailoring of institutional controls.

DOE uses institutional controls as components in –

- protection of waste disposal operations,
- conduct of normal operations and site security,
- maintenance of storage facilities,
- conduct of restoration and cleanup programs, and
- management of natural and cultural resources.

POLICY:

In situations where unrestricted use or unrestricted release of property is not desirable, practical, or possible, institutional controls are necessary and important to DOE efforts to fulfill its programmatic responsibilities to protect human health and the environment (including natural and cultural resources). It is DOE policy to use institutional controls as essential components of a defense-in-depth strategy that uses multiple, relatively independent layers of safety to protect human health and the environment (including natural and cultural resources). This strategy uses a graded approach to attain a level of protection appropriate to the risks involved. DOE will use a graded approach to determine what types and levels of protective measures (e.g., physical, administrative, etc.) should be used.

The Department will implement institutional controls, along with other mitigating or preventive measures as necessary, to provide a reasonable expectation that if one control temporarily fails, other controls will be in place, or actions will be taken, to mitigate significant consequences of the failure. Institutional controls are not to be used to circumvent or substitute for permanent solutions when such solutions are reasonably achievable. Institutional controls will not be applied, or will be terminated, when DOE determines that such controls are not necessary or required.

Implementation Goals:

DOE will apply and implement institutional controls in an integrated manner to ensure that:

- the purpose for controls is identified clearly, need for the controls is well established and has been considered early in planning processes consistent with integrated safety management, and both purpose and need are documented and made available to the public as appropriate and allowed by law;
- mechanisms are in place to ensure controls are effective, implemented as planned, properly maintained, inventoried, periodically reevaluated, and modified as necessary to reflect changes in conditions, needs or technological advancements;
- where multiple institutional control needs or goals exist at the same site, the institutional controls address relevant requirements or goals in an integrated cost effective and protective manner;
- actions are taken to maintain long-term site stability, minimize reliance on institutional controls, and keep maintenance requirements for such controls as low as practicable; and
- decisions to terminate or reduce controls (e.g., because of mitigating actions, scientific advances, natural attenuation, or changes in policy or programmatic needs) are documented and publicly available, as appropriate.

DOE will maintain the institutional controls as long as necessary to perform their intended protective purposes and seek sufficient funds.

Property Issues:

The need for institutional controls on real and personal property may be related directly to the property that requires control (e.g., the presence of residual contamination, waste or cultural resources) or may be an indirect result of a requirement associated with neighboring activities (e.g., land is required to be under DOE control because of conditions specified in a DOE disposal authorization or because the land is used as a buffer in a safety analysis). Institutional controls may be necessary for property that DOE will retain indefinitely, for property under consideration for transfer, and for property that has actually been transferred.

Before DOE authorizes transfer of property, there will be a reasonable expectation that:

- all necessary institutional controls can be maintained after the transfer, and
- the new owner (whether a DOE or non-DOE entity) understands and is capable of meeting its institutional control responsibilities.

DOE will determine whether responsibility for required institutional controls on transferred property can be maintained by subsequent owners consistent with applicable law. If this implementation responsibility cannot be reliably assured, then DOE will retain necessary responsibility and authority for the institutional controls, including continued ownership of the property if necessary. The respective responsibilities of DOE and the new owner for any required institutional controls will be documented and communicated to all directly involved parties at the time of transfer. Before accepting property from non-DOE entities, DOE will determine whether it can accept continuing responsibility for previously or newly established institutional controls.

For properties that it does not own or directly control (e.g., uranium mill tailings remedial action properties needing controls to restrict access to ground water), DOE will arrange for appropriate institutional controls, to the extent that DOE is required to take such actions. Actions to ensure that these institutional controls are durable may involve coordination with State, local, or tribal governments and other entities having jurisdiction over the properties, or where appropriate, the use of DOE authorities for the protection of public health and safety, the environment, and national security.

BY ORDER OF THE SECRETARY OF ENERGY:



KYLE E. McSLARROW
Deputy Secretary