

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Idaho**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

Report Number: **GEN-01b**

Print Date: **3/10/2000**

HQ ID: **0167**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

SUMMARY.....Waste Area Group 4 at the INEEL Central Facilities Area includes assessment and cleanup of 52 release sites and closure of a landfill and landfarm. The sites are divided into 13 Operable Units (OUs) and include landfills, underground and above ground storage tanks, french drains, soil contamination areas, a sewage treatment plant, and disposal ponds. Assessment of the sites includes field sampling and data evaluation to determine and document potential risks to human health and the environment. Sites that pose unacceptable risk will be remediated. Waste Area Group 4 implements the requirements defined in the INEEL Federal Facilities Agreement and Consent Order, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and the 1995 Settlement Agreement.

PURPOSE: This project covers the assessment, cleanup, and remediation of the Central Facilities Area (CFA), Waste Area Group 4, at the Idaho National Engineering and Environmental Laboratory (INEEL), one of the ten waste area groups at the INEEL. It also addresses the closure of the INEEL Landfill and Landfarm.

Assessment of the CFA includes field sampling to determine the nature and extent of contamination including petroleum, radiological, organic, and metal constituents.

The feasibility of cleanup alternatives will also be decided. Sites that pose unacceptable risk to human health and the environment will be remediated.

This project directly supports completion of regulatory requirements with enforceable milestones defined in the INEEL Federal Facility Agreement and Consent Order, the CERCLA, and the 1995 Settlement Agreement which dictates that the Federal Facility Agreement and Consent Order will be carried out.

Completion of these activities support the goal of de-listing the INEEL from the National Priorities List (Superfund Site).

DEFINITION OF SCOPE: The cleanup of CERCLA sites at Waste Area Group 4 is governed by the INEEL Federal Facility Agreement and Consent Order, under which a Comprehensive Remedial Investigation/Feasibility Study (RI/FS) for Waste Area Group 4 will be completed. The decision-making process for integration of Remediation Program cleanup and facility operations is tied to the CERCLA Record of Decision, which includes stakeholder participation.

The activities remaining to be completed in accordance with the requirements of the Federal Facility Agreement and Consent Order include:

* OUs 4-10 and 4-12: Continue with long-term monitoring. The OU 4-12 Record of Decision also governs the activities that must be conducted following completion of the remedial action.

* OU 4-13: Complete the Remedial Investigation Baseline Risk Assessment, Remedial Investigation Report, Feasibility Study, Proposed Plan, and Record of Decision by late FY-99, complete a removal action for soil contamination sites at Waste Area Group 4 (Sites CFA -13, -15, -17, -42, and -

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

Page 1 of 15

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Idaho**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

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HQ ID: **0167**

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47), including the removal action summary report.

* Waste Area Group 4 currently has 52 sites under evaluation in the OU 4-13 Comprehensive RI/FS.

* Closure of the INEEL Landfill and Landfarm will include characterization of the areas, evaluation of the appropriate data, design of the remediation, implementation of the remedial action, preparation of final reports, and maintenance and monitoring activities to ensure the remedial actions function as planned.

TECHNICAL APPROACH: Assessment of the 52 Waste Area Group 4 potential release sites has been or will be conducted in accordance with the INEEL's Federal Facility Agreement and Consent Order and CERCLA. The assessment has, or will include the characterization of the potential release sites through the determination of the nature and extent of the potential release as well as an evaluation of the possible impacts of the release on human health and the environment. The characterization approach, as specified in the Federal Facility Agreement and Consent Order, required Track 1, Track 2, Remedial RI/FS, and Comprehensive RI/FSs. This process provided a bias towards action where remedial actions could be initiated early for sites posing a risk.

Assessment and Remedial Design/Remedial Action documents for all sites previously described will be developed in accordance with INEEL Federal Facility Agreement and Consent Order requirements and DOE orders, accelerated site cleanup actions, including CERCLA Non-Time Critical Removal Actions will be performed to the maximum extent practicable to expedite risk reduction and reduce project lifecycle costs. Data available from previous investigations are currently being evaluated in the Waste Area Group 4 Comprehensive RI/FS (OU 4-13), the final investigation at Waste Area Group 4. Upon completion of this investigation a Record of Decision will be prepared that will detail the remedial actions that must be performed at those sites identified as posing a risk to human health and/or the environment. This process will ultimately result in the de-listing of Waste Area Group 4 and the INEEL from the Superfund National Priorities List. The assumed remedial actions for Waste Area Group 4 sites include the following:

- * Hot spot removal and shipment off-site to a commercial treatment facility of contaminated materials above risk based levels.
- * Excavation and disposal on-site of contaminated materials above risk based levels.
- * Covering, recontouring, capping, and drainage control for sites determined to pose a risk to human health and/or the environment.
- * Maintenance and monitoring of areas determined to pose a risk to human health and/or the environment.
- * Installation of groundwater and/or vadose zone monitoring wells.

Current or planned remediation activities are NOT dependent upon EM-50 science or technology development initiatives. However, development of these sciences or technologies could potentially result in schedule and/or cost savings.

There are no interdependencies of this scope of work with other national programs.

Landfill and Landfarm closures will be performed consistent with national industry standards. A typical sanitary landfill cap is assumed to be the remedial option of choice for the landfill. Landfarm soils will be sampled and released, if possible, for other uses such as backfilling excavations, etc.

Seeded data in the waste module was not provided by the PBS Manager. The data source is AVS, but validation is not possible because the data is entered by waste stream, not PBS.

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

Page 2 of 15

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Idaho**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

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Print Date: **3/10/2000**

HQ ID: **0167**

Project Description Narratives

Project Status in FY 2006:

It is assumed that as a result of this plan and the Environmental Management objectives, INEEL environmental restoration at Waste Area Group 4 will be completed and long range surveillance and maintenance activities will be ongoing. All known INEEL remediations will be completed, or ongoing, and the major sources of contamination will be under control. Surplus facilities that are currently in the Environmental Management Program will have been stabilized and/or demolished. By 2005, all known contaminated sites at Waste Area Group 4 will be remediated. Institutional controls, if necessary, will be in place for all Waste Area Group 4 sites by 2005.

The INEEL Landfill and Landfarm will be actively utilized during this period by routine INEEL operations.

Post-2006 Project Scope:

Long range maintenance and monitoring activities will continue. The long-term activities include but are not limited to: groundwater monitoring, soils analysis, air monitoring, moisture monitoring in the vadose zone, the maintenance of institutional controls, the repair and infilling of subsidences, etc. Five year CERCLA reviews will be conducted to ensure the objectives of the OU 4-13 Record of Decision are realized, as required by CERCLA.

Closure of the INEEL Landfill and Landfarm is expected to occur after 2035 because these facilities are integral to the continual operation of the INEEL.

Project End State

Long-range maintenance and monitoring activities as described above will continue. Five year CERCLA reviews will be conducted to ensure the objectives of the OU 4-13 Record of Decision are realized. The cleanup process end states described here will be refined through the Record of Decision process. No regulator or other stakeholder acceptance has been received.

Completion of the Waste Area Group 4 activities contained in the project baseline summary support the goal of delisting the INEEL from the National Priorities List. Cleanup levels and sites requiring cleanup will be determined based on the Comprehensive Remedial Investigation Baseline Risk Assessment and negotiations with the regulatory agencies. Areas of contaminated media not excavated and/or treated/disposed will be monitored under institutional controls for 100 years. These areas are assumed to remain under industrial (federal) use for 100 years.

Long range maintenance and monitoring activities for the Landfill and Landfarm will continue upon completion of their remedial actions.

A conceptual vision of the end state in the year 2095 for the INEEL and each of the major facility areas has been defined. These end states have not been agreed upon by the regulators, stakeholders, or Tribal Nations.

Cost Baseline Comments:

The Baseline costs represented here do not include contingency for authorized work packages, but do contain contingency for planning packages. This contingency is removed upon development of detailed work packages. Escalation is included. The INEEL Remediation Program has, since 1991, promoted use of the bottoms-up/Activity Based Costing (ABC) approach, in the development of planning estimates in its Assessment and RD/RA projects. All INEEL Remediation Program cost estimates have been developed using sound technical and planning principles, and are accompanied

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

Page 3 of 15

Project Baseline Summary Report

Data Source: EM CDB

Operations/Field Office: Idaho

Site Summary Level: Idaho National Engineering and Environmental Laboratory

Project ID-ER-104 / Central Facilities Area (CFA) Remediation

Report Number: GEN-01b

Print Date: 3/10/2000

HQ ID: 0167

Project Description Narratives

by basis of estimate documentation intended to demonstrate the rationale and specifics behind the estimates. Bottoms-up estimating, or ABC, wherein the work scope is portrayed down to the task level, is both desired and encouraged, but not always practical.

The basis of estimates include a well defined statement of work, performance measures, products required for completion, products delivered, key support activities, and known milestones, etc., for every level of the program work scope. For work scope with definable milestones and deliverables, the cost estimates are very detailed and more precise. For more subjective work scope, where it is difficult to identify a specific end-product or deliverable, detail is provided to the lowest level possible. In most cases, the clarity of the available scope and associated planning assumptions is a key consideration in determining the specific technique used to develop a particular cost estimate.

Escalation rates used for FY-01 through the lifecycle of the project are 2.1% compounded annually.

The cost estimates associated with the project baseline summary are based on completing the enforceable requirements identified in the Federal Facility Agreement and Consent Order.

Safety & Health Hazards:

This project is presently collecting the appropriate data to make risk based decisions regarding future clean up activities through the CERCLA process. In the outyears, remedial actions concerning the INEEL landfill and landfarm complex will be performed. Consequently the necessary Safety and Health functions required to maintain safe and compliant operations now and in the future are in place and operating properly. The primary hazards associated with the closure of the Central Facilities Area include low level radiological constituents, organic contaminants, petroleum products, inorganic compounds, and sanitary waste. During remedial actions and maintenance and monitoring activities there will also be a number of industrial safety and industrial hygiene related hazards to address such as slips, trips, and falls; lifting; working on elevated structures; moving equipment; inhalation of dusts; temperature extremes; etc. There may also be some safety concerns associated with the areas proposed to be capped because these areas may be subject to subsidence. Consequently during the remediation of these areas it will be important to observe areas of depression.

Hazard documentation developed includes, but is not limited to, project specific health and safety plans, detailed operating procedures, standard operating procedures, job safety analyses, job hazard analyses, etc. These documents will be developed during the early stages of each project and will determine the methods, procedures, and equipment used during project implementation to reduce hazards to workers and the environment.

Safety & Health Work Performance:

The resources necessary to accomplish the planned work safely and in compliance are identified through the Health and Safety Program requirements as well as the authorization basis discussed previously. Resources allocated at the site to ensure compliance with health and safety requirements, as well as safety on the job include: radcon, safety, industrial hygiene, occupational medical, fire, emergency management, safeguards and security, performance oversight, quality, the Voluntary Protection Program, etc. Safety and health resources are planned and allocated into the appropriate category by cost center through the work breakdown structure and they are loaded into each project for each fiscal year. Institutional support, such as medical facilities and personnel, security, fire protection, etc., are funded out of the financial systems indirect labor adder, and project-specific safety and health professional support (e.g., industrial safety engineer) is identified in specific control account plans where the support is required. The average cost per FTE, burdened, is approximately \$60/hour to \$65/hour for each of the safety professionals identified above. Presently there are no plans to conduct full DOE operational readiness reviews although all projects will undergo a complete evaluation of their readiness to proceed with

Dataset Name: FY 1999 Planning Data

Date of Dataset: 9/20/1999

Page 4 of 15

Project Baseline Summary Report

Data Source: EM CDB

Operations/Field Office: Idaho

Site Summary Level: Idaho National Engineering and Environmental Laboratory

Project ID-ER-104 / Central Facilities Area (CFA) Remediation

Report Number: GEN-01b

Print Date: 3/10/2000

HQ ID: 0167

Project Description Narratives

field activities. Applicable projects will complete unreviewed safety question determinations. Personnel are trained in Stop Work Authority, emergency preparedness procedures, health and safety plans, work plans, integrated safety management, integrated work control, conduct of operations, and conduct of maintenance, etc. Safety, radcon, health, fire, environmental, and quality personnel conduct routine inspections to ensure personnel and the environment are protected. The frequency of these inspections is dependent on the status of each particular project but generally ranges between daily to every other week. During field work the same level of ESH&Q support is required throughout the project. At this time the level of support required of the safety professionals will be reduced significantly and will only be performed during maintenance and monitoring activities. There are currently no unfunded or under funded safety, health, environmental, or quality resource requirements associated with this PBS. Upon completion of remedial actions, and the initiation of institutional controls, the level of safety and health resources required will be reduced to a minimum.

Resource levels vary from fiscal year to fiscal year depending on the extent of sampling and/or remediation activities being performed.

PBS Comments:

None

Baseline Validation Narrative:

The INEEL Environmental Management Integration Team performed a compliance and cost estimating review of all activities associated with this PBS. This PBS reflects the comments and recommendations associated with the review. The Remediation Program has, since 1991, promoted use of the bottoms up/ABC approach, in the development of planning estimates for Assessment and Remedial Design and Remedial Action projects. All INEEL Remediation Program cost estimates have been developed using sound technical and planning principles and are accompanied by basis of estimate documentation intended to demonstrate the rationale and specifics behind the estimates. Bottoms Up estimating or Activity Based Costing, wherein the work scope is portrayed down to the task level, is both desired and encouraged.

The basis of estimates include a well defined statement of work, performance measures, products required for completion, products delivered, key support activities, and known milestones, etc., for every level of the program work scope. For work scope with definable milestones and deliverables, the cost estimates are very detailed and more precise. For more subjective work scope, where it is difficult to identify a specific end-product or deliverable, detail is provided to the lowest level possible. In most cases, the clarity of the available scope and associated planning assumptions is a key consideration in determining the specific technique used to develop a particular cost estimate.

General PBS Information

| | | | |
|---|-----------|-----------------|-----------|
| Project Validated? | Yes | Date Validated: | 2/13/1996 |
| Has Headquarters reviewed and approved project? | No | | |
| Date Project was Added: | 12/1/1997 | | |
| Baseline Submission Date: | | | |
| FEDPLAN Project? | Yes | | |

Dataset Name: FY 1999 Planning Data

Date of Dataset: 9/20/1999

Page 5 of 15

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

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Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

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General PBS Information

| | | | | | | | | |
|-----------------|---------------|-------------|--------------|------------|---------------|--------------|-------------------|--------------|
| Drivers: | CERCLA | RCRA | DNFSB | AEA | UMTRCA | State | DOE Orders | Other |
| | Y | Y | N | N | N | Y | Y | Y |

Project Identification Information

DOE Project Manager: C. Hathaway

DOE Project Manager Phone Number: 208-526-4049

DOE Project Manager Fax Number: 208-526-0598

DOE Project Manager e-mail address: HATHAWCA@INEL.gov

Is this a High Visibility Project (Y/N):

Planning Section

Baseline Costs (in thousands of dollars)

| | 1997-2006 Total | 2007-2070 Total | 1997-2070 Total | 1997 | Actual 1997 | 1998 | Actual 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | |
|---|----------------------------|----------------------------|----------------------------|-------------|------------------------|-----------------------|------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| PBS Baseline (current year dollars) | 21,207 | 1,679 | 22,886 | 2,216 | 5,323 | 2,222 | 1,897 | 646 | 1,153 | 1,677 | 4,176 | 5,690 | 2,690 | 425 | 312 | |
| PBS Baseline (constant 1999 dollars) | 19,964 | 1,266 | 21,230 | 2,216 | 5,323 | 2,222 | 1,897 | 646 | 1,123 | 1,599 | 3,901 | 5,206 | 2,410 | 373 | 268 | |
| PBS EM Baseline (current year dollars) | 21,207 | 1,679 | 22,886 | 2,216 | 5,323 | 2,222 | 1,897 | 646 | 1,153 | 1,677 | 4,176 | 5,690 | 2,690 | 425 | 312 | |
| PBS EM Baseline (constant 1999 dollars) | 19,964 | 1,266 | 21,230 | 2,216 | 5,323 | 2,222 | 1,897 | 646 | 1,123 | 1,599 | 3,901 | 5,206 | 2,410 | 373 | 268 | |
| | 2007 | 2008 | 2009 | 2010 | 2011- 2015 | 2016- 2020 | 2021- 2025 | 2026- 2030 | 2031- 2035 | 2036- 2040 | 2041- 2045 | 2046- 2050 | 2051- 2055 | 2056- 2060 | 2061- 2065 | 2066- 2070 |
| PBS Baseline (current year dollars) | 318 | 272 | 252 | 148 | 186 | 206 | 228 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Dataset Name: **FY 1999 Planning Data**

Page 6 of 15

Date of Dataset: **9/20/1999**

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Idaho**

Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

HQ ID: **0167**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

| | 2007 | 2008 | 2009 | 2010 | 2011-2015 | 2016-2020 | 2021-2025 | 2026-2030 | 2031-2035 | 2036-2040 | 2041-2045 | 2046-2050 | 2051-2055 | 2056-2060 | 2061-2065 | 2066-2070 |
|--|------|------|------|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| PBS Baseline (constant 1999 dollars) | 268 | 224 | 204 | 117 | 139 | 138 | 138 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PBS EM Baseline (current year dollars) | 318 | 272 | 252 | 148 | 186 | 206 | 228 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PBS EM Baseline (constant 1999 dollars) | 268 | 224 | 204 | 117 | 139 | 138 | 138 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Baseline Escalation Rates

| 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
|-------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0.00% | 0.00% | 0.00% | 2.70% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% |
| 2010 | 2011-2015 | 2016-2020 | 2021-2025 | 2026-2030 | 2031-2035 | 2036-2040 | 2041-2045 | 2046-2050 | 2051-2055 | 2056-2060 | 2061-2065 | 2066-2070 |
| 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% | 2.10% |

Project Reconciliation

Project Completion Date Changes:

Previously Projected End Date of Project: 9/30/2002

Current Projected End Date of Project: 9/30/2027

Explanation of Project Completion Date Difference (if applicable):

Consistency with lifecycle cost module required inclusion of long term surveillance and monitoring.

Project Cost Estimates (in thousands of dollars)

| | | | | | |
|---|--------|--|-------|-------------------|-------|
| Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars): | 19,176 | Actual 1997 Cost: | 5,323 | Actual 1998 Cost: | 1,897 |
| Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars): | 11,956 | Inflation Adjustment (2.7% to convert 1998 to 1999 dollars): | | | 323 |

Dataset Name: **FY 1999 Planning Data**

Page 7 of 15

Date of Dataset: **9/20/1999**

Project Baseline Summary Report

Data Source: **EM CDB**
 Operations/Field Office: **Idaho**
 Site Summary Level: **Idaho National Engineering and Environmental Laboratory**
 Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

Report Number: **GEN-01b**
 Print Date: **3/10/2000**
 HQ ID: **0167**

Project Reconciliation

Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 12,279

Project Cost Changes

Cost Adjustments Reconciliation Narratives

Cost Change Due to Scope Deletions (-):

Cost Reductions Due to Efficiencies (-):

Cost Associated with New Scope (+):

Cost Growth Associated with Scope Previously Reported (+): 4,512 Lifecycle costs increased as a result of detailed schedule and cost estimate analysis

Cost Reductions Due to Science & Technology Efficiencies (-):

Subtotal: 16,791

Additional Amount to Reconcile (+): 1

Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): **16,792**

Milestones

| Milestone/Activity | Field Milestone Code | Original Date | Baseline Date | Legal Date | Forecast Date | Actual Date | EA | DNFSB | Mgmt. Commit. | Key Decision | Intersite |
|---|----------------------|---------------|---------------|------------|---------------|-------------|----|-------|---------------|--------------|-----------|
| Completed Assessments of Release Sits (20) | W4RSFA99 | | | | 9/30/1999 | | | | | | |
| Completed Release Sites (3) | W4RSFC02 | | | | 9/30/2002 | | | | | | |
| Completed Release Sites (8) | W4RSFC99 | | | | 9/30/1999 | | | | | | |
| Completed Release Sites (9) | W4RSFC03 | | | | 9/30/2003 | | | | | | |
| OU 4-12 Draft RI/FS ROD Sent by DOE-ID to EPA/IDHW for Review | VLEP010 | | 7/31/1995 | 7/31/1995 | | 7/11/1995 | Y | | | | |
| OU 4-12 Draft RI/FS Report Sent by DOE-ID to EPA/IDHW for Review | VLEP024 | | 9/30/1994 | 9/30/1994 | | 8/26/1994 | Y | | | | |
| OU 4-13 Dft RI/FS ROD Sent by DOE-ID to EPA/IDHW for Review and C | VMEP010 | | 7/1/1999 | 7/1/1999 | 7/1/1999 | | Y | | | | |
| OU 4-13 Draft RI/FS Report Sent by DOE-ID to | VMEP024 | | 9/30/1998 | 9/30/1998 | | 9/25/1998 | Y | | | | |

Dataset Name: **FY 1999 Planning Data**

Page 8 of 15

Date of Dataset: **9/20/1999**

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Idaho**

Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

HQ ID: **0167**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

Milestones

| Milestone/Activity | Field Milestone Code | Original Date | Baseline Date | Legal Date | Forecast Date | Actual Date | EA | DNFSB | Mgmt. Commit. | Key Decision | Intersite |
|--|----------------------|---------------|---------------|------------|---------------|-------------|----|-------|---------------|--------------|-----------|
| EPA/IDHW for Review | | | | | | | | | | | |
| OU 4-13 Draft RI/FS SOW Sent by DOE-ID to EPA/IDHW for Review | VMEP037 | | 8/31/1996 | 8/31/1996 | | 6/28/1996 | Y | | | | |
| OU 4-13 Draft RI/FS WP Sent by DOE-ID to EPA/IDHW for Review | VMEP039 | | 1/31/1997 | 1/31/1997 | | 11/27/1996 | Y | | | | |
| Project Start | | | 10/1/1996 | | | | | | | | |
| Project Complete | | | 9/30/2027 | | | | | | | | |
| OU 4-13 Draft RD/RA SOW sent BY DOE-ID to EPA/IDHW for review | | | 12/29/1999 | | | | | | | | |
| OU4-13 Draft RD/RA Work Plan sent by DOE-ID to EPA/IDHW for review | | | 6/30/2000 | | | | | | | | |
| OU 4-13 Draft RD/RA Report sent by DOE-ID to EPA/IDHW for review | | | 7/31/2004 | | | | | | | | |

Milestones - Part II

| Milestone/Activity | Field Milestone Code | Critical Decision | Critical Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled | Milestone Description |
|--|----------------------|-------------------|-----------------------|---------------|-------------|------------------|-----------|-----------------|----------------|-----------|-----------------------|
| Completed Assessments of Release Sits (20) | W4RSFA99 | | | | | | | | | Y | |
| Completed Release Sites (3) | W4RSFC02 | | | | | | | | | Y | |
| Completed Release Sites (8) | W4RSFC99 | | | | | | | | | Y | |
| Completed Release Sites (9) | W4RSFC03 | | | | | | | | | Y | |
| OU 4-12 Draft RI/FS ROD Sent by DOE-ID to EPA/IDHW for Review | VLEP010 | | | | | | | | | | |
| OU 4-12 Draft RI/FS Report Sent by DOE-ID to EPA/IDHW for Review | VLEP024 | | | | | | | | | | |

Dataset Name: **FY 1999 Planning Data**

Page 9 of 15

Date of Dataset: **9/20/1999**

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Milestones - Part II

| Milestone/Activity | Field Milestone Code | Critical Decision | Critical Closure Path | Project Start | Project End | Mission Complete | Tech Risk | Work Scope Risk | Intersite Risk | Cancelled | Milestone Description |
|--|----------------------|-------------------|-----------------------|---------------|-------------|------------------|-----------|-----------------|----------------|-----------|-----------------------|
| OU 4-13 Dft RI/FS ROD Sent by DOE-ID to EPA/IDHW for Review and C | VMEP010 | | | | | | | | | | |
| OU 4-13 Draft RI/FS Report Sent by DOE-ID to EPA/IDHW for Review | VMEP024 | | | | | | | | | | |
| OU 4-13 Draft RI/FS SOW Sent by DOE-ID to EPA/IDHW for Review | VMEP037 | | | | | | | | | | |
| OU 4-13 Draft RI/FS WP Sent by DOE-ID to EPA/IDHW for Review | VMEP039 | | | | | | | | | | |
| Project Start | | | | Y | | | | | | | |
| Project Complete | | | | | Y | | | | | | |
| OU 4-13 Draft RD/RA SOW sent BY DOE-ID to EPA/IDHW for review | | | | | | | | | | | |
| OU4-13 Draft RD/RA Work Plan sent by DOE-ID to EPA/IDHW for review | | | | | | | | | | | |
| OU 4-13 Draft RD/RA Report sent by DOE-ID to EPA/IDHW for review | | | | | | | | | | | |

Performance Measure Metrics

| Category/Subcategory | Units | 1997-2006 Total | 2007-2070 Total | 1997-2070 Total | Actual Pre-1997 | Planned 1997 | Actual 1997 | Planned 1998 | Planned 1999 | Planned 2000 | Planned 2001 | Planned 2002 | Planned 2003 | Planned 2004 |
|----------------------|-------|-----------------|-----------------|-----------------|-----------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| RS | | | | | | | | | | | | | | |
| Assess. | NR | 16.00 | 0.00 | 16.00 | 3.00 | | 4.00 | | | 16.00 | | | | |
| RS | | | | | | | | | | | | | | |

Dataset Name: **FY 1999 Planning Data**

Page 10 of 15

Date of Dataset: **9/20/1999**

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Idaho**

Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

HQ ID: **0167**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

Performance Measure Metrics

| Category/Subcategory | Units | 1997-2006 Total | 2007-2070 Total | 1997-2070 Total | Actual Pre-1997 | Planned 1997 | Actual 1997 | Planned 1998 | Planned 1999 | Planned 2000 | Planned 2001 | Planned 2002 | Planned 2003 | Planned 2004 |
|----------------------|-------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| RS | | | | | | | | | | | | | | |
| Cleanup | NR | 14.00 | 5.00 | 19.00 | | 3.00 | 7.00 | | | 11.00 | | | | |
| Tech. | | | | | | | | | | | | | | |
| Deployed | Ntd | 1.00 | 0.00 | 1.00 | | | | | | | | 1.00 | | |
| Category/Subcategory | Units | Planned 2004 | Planned 2005 | Planned 2006 | Planned 2007 | Planned 2008 | Planned 2009 | Planned 2010 | Planned 2011 - 2015 | Planned 2016 - 2020 | Planned 2021 - 2025 | Planned 2026 - 2030 | Planned 2031 - 2035 | Planned 2036 - 2040 |
| RS | | | | | | | | | | | | | | |
| Assess. | NR | | | | | | | | | | | | | |
| RS | | | | | | | | | | | | | | |
| Cleanup | NR | | | | | | | | | | | | | |
| Tech. | | | | | | | | | | | | | | |
| Deployed | Ntd | | | | | | | | | | | | | |
| Category/Subcategory | Units | Planned 2036 - 2040 | Planned 2041 - 2045 | Planned 2046 - 2050 | Planned 2051 - 2055 | Planned 2056 - 2060 | Planned 2061 - 2065 | Planned 2066 - 2070 | Exceptions | Lifecycle Total | | | | |
| RS | | | | | | | | | | | | | | |
| Assess. | NR | | | | | | | | | 23.00 | | | | |
| RS | | | | | | | | | | | | | | |
| Cleanup | NR | | | | | | | 5.00 | | 23.00 | | | | |
| Tech. | | | | | | | | | | | | | | |
| Deployed | Ntd | | | | | | | | | 1.00 | | | | |

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Idaho**

Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

HQ ID: **0167**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

Release Sites

| Site Code | RSF ID | Change Flag | Description | Class/Subclass Name | Planned Assess. Year | Forecast Assess. Year | Actual Assess. Date | Planned Comp. Year | Forecast Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|-----------|--------|-------------|---|--|----------------------|-----------------------|---------------------|--------------------|---------------------|-------------------|-----------|-----------|--------------|-----|
| INEL | 0266 | | CFA-01 \ CFA LANDFILL I [CFA-01] | Waste/Landfills | 1995 | | 7/11/1995 | 1997 | | 9/25/1997 | 1991 | N | | Y |
| INEL | 0267 | | CFA-02 \ CFA LANDFILL II [CFA-02] | Waste/Landfills | 1995 | | 7/11/1995 | 1997 | | 9/25/1997 | 1991 | N | | Y |
| INEL | 0268 | | CFA-03 \ CFA LANDFILL III [CFA-03] | Waste/Landfills | 1995 | | 7/11/1995 | 1997 | | 9/25/1997 | 1991 | N | | Y |
| INEL | 0269 | | CFA-04 \ CFA POND (CFA-674) [CFA-04] | Liquid Surface Impoundments/Holding Ponds | 2000 | 2000 | | 2070 | 2070 | | 1991 | N | | Y |
| INEL | 0271 | | CFA-06 \ CFA LEAD SHOP (OUTSIDE AREAS) [CFA-06] | Spills and Leaks/Surface Spills | 2000 | 2000 | | 2000 | 2000 | | 1991 | N | | Y |
| INEL | 0272 | | CFA-07 \ CFA FRENCH DRAIN E/S OF CFA-633 [CFA-07] | Liquid Surface Impoundments/Sumps | 2000 | 2000 | | 2000 | 2000 | | 1991 | N | | Y |
| INEL | 0273 | | CFA-08 \ CFA SEWAGE PLANT (CFA-691), SEPTIC TANK (CFA-716) | Tanks/Septic Tanks | 2000 | 2000 | | 2070 | 2070 | | 1991 | N | | Y |
| INEL | 0274 | | CFA-10 \ CFA TRANSFORMER YARD OIL SPILLS [CFA-10] | Spills and Leaks/Surface Spills | 2000 | 2000 | | 2070 | 2070 | | 1991 | N | | Y |
| INEL | 0275 | | CFA-12 \ CFA FRENCH DRAINS (2) (CFA-690) [CFA-12] | Liquid Surface Impoundments/Sumps | 2000 | 2000 | | 2070 | 2070 | | 1991 | N | | Y |
| INEL | 0280 | | CFA-17 \ CFA FIRE DEPARTMENT TRAINING AREA, BERMED [CFA-17] | Liquid Surface Impoundments/Seepage Basins | 2000 | 2000 | | 2000 | 2000 | | 1991 | N | | Y |
| INEL | 0285 | | CFA-22 \ CFA FUEL OIL TANK AT CFA-640 | Tanks/Underground Storage Tanks | 1999 | | 3/12/1997 | 2002 | | 3/12/1997 | 1991 | N | | Y |
| INEL | 0289 | | CFA-26 \ CFA 760 PUMP STATION FUEL SPILL [CFA-26] | Spills and Leaks/Surface Spills | 2000 | 2000 | | 2070 | 2070 | | 1991 | N | | Y |
| INEL | 0305 | | CFA-42 \ CFA TANK FARM PUMP STATION SPILLS [CFA-42] | Spills and Leaks/Surface Spills | 2000 | 2000 | | 2000 | 2000 | | 1991 | N | | Y |
| INEL | 0306 | | CFA-43 \ CFA LEAD STORAGE AREA [CFA-43] | Spills and Leaks/Surface Spills | 2000 | 2000 | | 2000 | 2000 | | 1991 | N | | Y |
| INEL | 0307 | | CFA-44 \ CFA SPRAY PAINT BOOTH | Liquid Surface | 2000 | 2000 | | 2000 | 2000 | | 1991 | N | | Y |

Dataset Name: **FY 1999 Planning Data**

Page 12 of 15

Date of Dataset: **9/20/1999**

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Idaho**

Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

HQ ID: **0167**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

Release Sites

| Site Code | RSF ID | Change Flag | Description | Class/Subclass Name | Planned Assess. Year | Forecast Assess. Year | Actual Assess. Date | Planned Comp. Year | Forecast Comp. Year | Actual Comp. Date | Acc. Year | No Action | Comp. Status | RAD |
|-----------|--------|-------------|--|---|----------------------|-----------------------|---------------------|--------------------|---------------------|-------------------|-----------|-----------|--------------|-----|
| | | | DRAIN (CFA-654) [CFA-44] | Impoundments/Sumps | | | | | | | | | | |
| INEL | 0308 | | CFA-45 \ CFA Underground Storage Tank | Tanks/Underground Storage Tanks | 1999 | | 3/12/1997 | 2002 | | 3/12/1997 | 1993 | N | | Y |
| INEL | 0309 | | CFA-46 \ CFA Cafeteria Oil Tank Spill (CFA-721) | Tanks/Underground Storage Tanks | 2000 | 2000 | | 2000 | 2000 | | 1994 | N | | Y |
| INEL | 0310 | | CFA-47 \ Fire Station Chemical Disposal | Spills and Leaks/Surface Spills | 2000 | 2000 | | 2000 | 2000 | | 1994 | N | | Y |
| INEL | 0311 | | CFA-48 \ Chemical Washout South of CFA-633 | Spills and Leaks/Surface Spills | 1999 | | 3/12/1997 | 2002 | | 3/12/1997 | 1994 | N | | Y |
| INEL | 0312 | | CFA-49 \ CFA Hot Laundry Drain Pipe | Waste/Trenches / Outfalls | 2000 | 2000 | | 2000 | 2000 | | 1994 | N | | Y |
| INEL | 0313 | | CFA-50 \ Shallow Well East of CFA-654 | Waste/Wells (injection, monitoring, etc.) | 1999 | | 3/12/1997 | 1999 | | 3/12/1997 | 1994 | N | | Y |
| INEL | 0753 | | CFA-51 \ CFA Drywell at North End of CFA-650 | / | 2000 | 2000 | | 2000 | 2000 | | 1996 | N | | |
| INEL | 0754 | | CFA-52 \ Diesel Fuel Tank at Building CFA-13 Bunkhouse (CFA-730) | / | 2000 | 2000 | | 2000 | 2000 | | 1996 | N | | |

Technology Needs

Site Need Code: ID-6.1.02

Site Need Name: Real-time Field Instrumentation for Characterization and Monitoring Soils and Groundwater.

Focus Area Work Package ID: SS-01

Focus Area Work Package: Characterization, Monitoring, Modeling and Analysis

Focus Area: SCFA

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Cost

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

Dataset Name: **FY 1999 Planning Data**

Page 13 of 15

Date of Dataset: **9/20/1999**

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Idaho**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

Report Number: **GEN-01b**

Print Date: **3/10/2000**

HQ ID: **0167**

Technology Needs

Related CCP Milestones

Related Waste Streams

Agree?

Change?

| | | |
|--------------------------------|---|---|
| 02457: I7 - MLLW-Soil/Sludge | Y | N |
| 02432: W2.2 - LLW-Soil | Y | N |
| 02446: I4.1 - Treated LLW-Soil | Y | N |
| 02443: I2 - HAZ-Soil | Y | N |
| 02465: - | Y | N |
| 02493: T9 - HAZ-Soil | Y | N |
| 02486: - | Y | N |
| 02460: - | Y | N |
| 02459: - | Y | N |
| 02499: - | Y | N |

Site Need Code: ID-S.1.04

Site Need Name: Real-time Field Instrumentation for Characterization and Monitoring Soils and Groundwater.

Focus Area Work Package ID:

Focus Area Work Package:

Focus Area:

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Cost

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

Related CCP Milestones

Related Waste Streams

Agree?

Change?

| | | |
|------------------------------|---|---|
| 02457: I7 - MLLW-Soil/Sludge | Y | N |
| 02456: I6.1 - MLLW-Sludge | Y | N |
| 02448: I6 - MLLW-Sludge | Y | N |

Dataset Name: **FY 1999 Planning Data**

Date of Dataset: **9/20/1999**

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Idaho**

Print Date: **3/10/2000**

Site Summary Level: **Idaho National Engineering and Environmental Laboratory**

HQ ID: **0167**

Project **ID-ER-104 / Central Facilities Area (CFA) Remediation**

Technology Needs

| <u>Related CCP Milestones</u> | <u>Related Waste Streams</u> | <u>Agree?</u> | <u>Change?</u> |
|-------------------------------|--------------------------------|---------------|----------------|
| | 02432: W2.2 - LLW-Soil | Y | N |
| | 02446: I4.1 - Treated LLW-Soil | Y | N |
| | 02443: I2 - HAZ-Soil | Y | N |
| | 02489: - | Y | N |
| | 02465: - | Y | N |
| | 02493: T9 - HAZ-Soil | Y | N |
| | 02486: - | Y | N |
| | 02460: - | Y | N |
| | 02459: - | Y | N |
| | 02499: - | Y | N |

Technology Deployments

| <u>Deployment Status</u> | <u>Deployment Year</u> | | |
|---|------------------------|-----------------|--------------------|
| | <u>Planned</u> | <u>Forecast</u> | <u>Actual Date</u> |
| Technology Name: Segmented Gate System | | | |
| Potential Deployment | 2002 | 2002 | |