

Project Baseline Summary Report

Data Source: EM CDB

Operations/Field Office: Idaho

Site Summary Level: Idaho National Engineering and Environmental Laboratory

Project ID-ER-101 / Test Area North Remediation

Report Number: GEN-01b

Print Date: 3/10/2000

HQ ID: 0164

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

SUMMARY: As mandated by CERCLA and the Federal Facility Agreement and Consent Order (FFA/CO), Waste Area Group 1 must complete the Operable Unit (OU) 1-10 Comprehensive Remedial Investigation/Feasibility Study (RI/FS) and Record of Decision. The subsequent OU 1-10 Remedial Design/Remedial Action will remediate 8 sites shown to present unacceptable risks to human health and the environment including 3 highly contaminated buried mixed waste tank sites, 3 soil sites contaminated with radionuclides or petroleum, and 2 burn pit sites contaminated with heavy metals and possibly other constituents. The OU 1-07B Remedial Action must reduce volatile organic compound contamination in the aquifer to below maximum contamination levels utilizing treatability studies, hydraulic containment, and pump and treat activities. The highly contaminated Test Area North (TAN)-616, which is assumed to present an unacceptable risk will be evaluated and remediated via a Track 2 and Interim Action. All activities must be completed safely and in compliance with requirements.

PURPOSE: This project covers the assessment and remediation of TAN, Waste Area Group 1, at the INEEL. TAN encompasses the Technical Support Facility (TSF), Initial Engine Test Facility, Loss of Fluid Test Facility and the Water Reactor Research Test Facility. During the course of its 40-year operating history, contaminants have been introduced into the environment through incidental releases/spills and waste management practices. The identification of organic contaminants in groundwater at TAN resulted in the INEEL being listed on the National Priorities List (Superfund Site). To address these past releases to the environment, the Department of Energy, the Environmental Protection Agency, and the State of Idaho entered into the FFA/CO in December 1991. Per the FFA/CO, TAN was designated as Waste Area Group 1. This designation was one of the ten geographic based waste area groups assigned to the INEEL to address past releases to the environment under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Waste Area Group 1 was further subdivided into 10 OUs containing a total of 94 potential release sites. The various release sites have been grouped into ten OUs based on the nature/type of the known or potential release. The known or potential releases include underground storage tanks (OUs 1-02/05), disposal ponds (OUs 1-04/05/06/09), injection well (OUs 1-07A/07B), burn/disposal pits (OUs 1-01/02/03/04), septic systems (OUs 1-08/09) and other miscellaneous releases (OUs 1-03/06), as a result of facility operations at TAN. Contaminants of concern include radionuclides, metals, organics, and inorganics. Assessment of release sites at TAN includes characterizing the nature and extent of the contamination at each known or potential release site, determining and documenting unacceptable impacts to human health and the environment, and determining the implementability and cost effectiveness of various remedial alternatives for cleanup of those release sites, which pose an unacceptable risk to human health and the environment. Of the 94 sites in Waste Area Group 1, nine were assigned as no action (no characterization/cleanup required) in the FFA/CO; 30 were identified as no action in the OU 1-07B Record of Decision (OU1-07B); three were eliminated through CERCLA removal actions (TSF-36, TSF-38, LDFT 12); an interim action (OU 1-07A, TAN Groundwater) was performed to remove contaminated sludges from an injection well and treat contaminated groundwater; and a final action Record of Decision for OU 1-07B requires continued cleanup of contaminated groundwater at TAN.

Current activities include the assessment of one remaining OU, OU 1-10, which is the comprehensive evaluation of all remaining Waste Area Group 1 known or potential release sites not previously designated as no action sites in a Record of Decision. One site TSF-08 will be evaluated by Waste Area Group 10 via a Treatability Study. Ultimately the remediation decision for all OUs will be identified in a Record of Decision (either the previous OU 1-07B Record of Decision or the upcoming Waste Area Group 1 Comprehensive Remedial Investigation/Feasibility Study (RI/FS) Record of Decision, or the future TAN-616 Interim Action Record of Decision. Remedial Design(s)/Remedial Action(s) will be described in the Record of Decisions and

Dataset Name: FY 1999 Planning Data

Date of Dataset: 9/20/1999

Page 1 of 21

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Idaho**

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

Project **ID-ER-101 / Test Area North Remediation**

Report Number: **GEN-01b**

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

HQ ID: **0164**

Project Description Narratives

performed in accordance with CERCLA and the FFA/CO. The OU 1-10 Comprehensive RI/FS is designed to determine the cumulative risk to human health and the environment from all of the release sites. The Remedial Design/Remedial Action will implement the remedial actions selected in the OU 1-10 Record of Decision. Additionally, the project continues to implement the final action Record of Decision for OU 1-07B (Groundwater Remediation). This remedial action is designed to reduce organic contaminants present in the Snake River Plain Aquifer to acceptable levels within 100 years. A Track 2 and Interim Action for TAN-616 will be completed to address an assumed unacceptable risk to human health and the environment. These activities are being conducted as specified in the tri-party (DOE, EPA, and State of Idaho) FFA/CO and CERCLA. Completion of these activities supports the goal of de-listing the INEEL from the National Priorities List (Superfund Site)

DEFINITION OF SCOPE: * Operate Groundwater Water Treatment Facility or alternative treatment system for OU 1-07B Phase B Hot Spot Containment and/or Removal per the OU 1-07B Record of Decision.

- * Perform OU 1-07B Phase B treatability study initial evaluations.
- * Prepare OU 1-07B Technology Evaluation Work Plan for Phase B treatability studies.
- * Perform OU 1-07B Phase B treatability study laboratory studies.
- * Perform OU 1-07B treatability study field demonstrations for in situ bioremediation, in situ chemical oxidation, and natural attenuation.
- * Prepare OU 1-07B Remedial Design/Remedial Action Work Plan for Medial Zone New Pump and Treat Facility.
- * Prepare OU 1-07B treatability study Field Demonstration Report - Phase I.
- * Prepare OU 1-07B treatability study Field Demonstration Report - Phase II.
- * Construct New Pump and Treat Facility for OU 1-07B Phase C Medial Zone groundwater treatment.
- * Operate New Pump and Treat Facility for OU 1-07B Phase C Medial Zone groundwater treatment.
- * Prepare OU 1-07B Remedial Design/Remedial Action Work Plan revision for Hot Spot New Groundwater Treatment Facility and Distal Zone dissolved phase treatment units.
- * Construct OU 1-07B Hot Spot New Groundwater Treatment Facility and Distal Zone dissolved phase treatment units.
- * Operate New Groundwater Treatment Facility for OU 1-07B Phase C Hot Spot Containment.
- * Operate dissolved phase treatment units for OU 1-07B Phase C Distal Zone groundwater treatment.
- * Prepare OU 1-07B Remedial Action Report.
- * Prepare OU 1-07B Operations and Maintenance Report.
- * Conduct OU 1-07B 5 year reviews.
- * Complete Track 1 and Track 2 investigations.
- * Complete OU 1-10 Comprehensive RI/FS and Record of Decision per the FFA/CO.
- * Implement OU 1-10 Remedial Design/Remedial Action activities per the FFA/CO and the Comprehensive OU 1-10 Record of Decision.
- * Perform Track 2 and Interim Action for TAN-616.
- * Prepare OU 1-10 Remedial Design/Remedial Action work plans.
- * Perform sampling of OU 1-10 sites to support remedial design.
- * Prepare remedial designs for OU 1-10 sites identified in the Record of Decision.
- * Complete in situ vitrification of the TAN V-Tanks and surrounding soils.
- * Complete excavation and disposal of PM-2A Tanks waste.
- * Complete excavation and disposal of the Soil Contamination Area South of the Turntable.
- * Complete limited action at the Technical Support Facility Disposal Pond.

Dataset Name: **FY 1999 Planning Data**

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

Page 2 of 21

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Idaho**

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

Project **ID-ER-101 / Test Area North Remediation**

Report Number: **GEN-01b**

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

HQ ID: **0164**

Project Description Narratives

- * Complete excavation and land farming at the Fuel Leak site.
- * Complete Native Soil Covers at the Technical Support Facility and WRRTF Burn Pits.
- * Complete CERCLA 5-year reviews.

TECHNICAL APPROACH: Assessment of the 94 Waste Area Group 1 potential release sites has been conducted in accordance with the FFA/CO and CERCLA. The assessment has/will include characterization of the release sites through the determination of the nature and extent of the potential release and an evaluation of the impact of the release (if any) on human health and the environment. The characterization approach, as specified in the FFA/CO, required Track 1, Track 2, an Interim Action and RI/FS's to be conducted for the 94 Waste Area Group 1 release sites. Track 1 investigations were performed at sites that did not require further characterization as a basis for a decision for No Further Action and were by definition envisioned to be evaluations of existing data. Track 2 investigations were performed at those sites that required field data collection before a decision could be made for No Further Action or Interim Action of the site. RI/FSs were performed at those sites at which sufficient data existed to demonstrate unacceptable risks to human health and the environment but required more data before a remedial action could be selected. This process provided a bias for action for those sites that posed immediate threats to human health and the environment.

To date, 44 Track 1s, 29 track 2s, one interim action, four removal actions, and one RI/FS have been completed at the ten Waste Area Group 1 OUs. The appropriate data from earlier work are currently being evaluated in the Waste Area Group 1 Comprehensive RI/FS (OU 1-10), with respect to determining the final action for all of the potential release sites that were not defined in the OU 1-07B Record of Decision. The OU 1-10 Comprehensive RI/FS Record of Decision is being prepared detailing remedial actions that must be performed at those sites that pose unacceptable risk(s) to human health and the environment. This process is designed to ultimately result in the de-listing of Waste Area Group 1 and the INEEL from the National Priorities List (Superfund Site).

The Interim Action OU 1-07A and RI/FS completed for OU 1-07B (Contaminated Groundwater) resulted in a final action Record of Decision that required that the contaminants injected into the Snake River Plain Aquifer be remediated to acceptable regulatory levels within 100 years. This Record of Decision was implemented and will continue to be implemented through continued operation of the OU 1-07B Groundwater Treatment Facility, surge and stress activities for "Hotspot" containment and/or removal, hydraulic containment and treatment of the greater than 5,000 ppb portion of the contaminant plume, treatability studies, and construction and operation of a new pump and treat facility, a new ground water treatment facility, and dissolved phase treatment units.

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.

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.

Project Status in FY 2006:

All known OU 1-10 cleanup actions will be completed, and the OU 1-07B cleanup action will be operational to provide containment of the injection well hot spot while the contaminated groundwater undergoes active remediation.

Dataset Name: **FY 1999 Planning Data**

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

Page 3 of 21

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Idaho**

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

Project **ID-ER-101 / Test Area North Remediation**

Report Number: **GEN-01b**

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

HQ ID: **0164**

Project Description Narratives

Post-2006 Project Scope:

Long-range surveillance, 5 year reviews, sitewide monitoring, institutional controls, and maintenance activities will be ongoing as required to manage waste left in place and potentially entombed contaminated surplus facilities at TAN. Long-term groundwater pump and treat operations, as required by the OU 1-07B Record of Decision, including facility D&D will continue through 2026.

Project End State

Long-range surveillance, sitewide monitoring, and maintenance activities will be ongoing for sites that the OU 1-10 Record of Decision determined that institutional controls and deed restrictions would be protective of human health and the environment as well as those other sites with contaminants left in place. Long-term monitoring and OU 1-07B groundwater pump and treat operations, and natural attenuation will continue to reduce contaminant levels to Maximum Contaminant Levels. TAN will be remediated in accordance with the current land use planning assumptions for residential/deed restricted use after 100 years. The soils contaminated with radionuclides will have been excavated and disposed of on-site/off-site. The soils contaminated with mercury will have been addressed by a WAG 10 Treatability Study. The remaining soil sites contaminated with non-radionuclide contaminants will have been covered and/or excavated for treatment and disposal. The wastes associated with the underground storage tanks will have been either stabilized and treated in place, or they will be excavated, treated, and disposed of on-site/off-site. Contaminated soil from the tank sites will be excavated and disposed of on-site. TAN-616 will be remediated in accordance with the requirements set forth in the future TAN-616 Record of Decision. Completion of the activities contained in this Project Baseline Summary support the goal of de-listing the INEEL from the National Priorities List. As remedial actions conclude, work will begin to turnover operation and maintenance processes to a site wide organization.

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 Environmental Restoration (ER) 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 Remedial Design and Remedial Action projects. All INEEL ER 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 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-2001 through the lifecycle of the project are 2.1% compounded annually.

The cost estimates associated with this Project Baseline Summary are based on completing the enforceable milestone requirements identified in the Federal Facility Agreement and Consent Order.

Dataset Name: **FY 1999 Planning Data**

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

Page 4 of 21

Project Baseline Summary Report

Data Source: EM CDB

Operations/Field Office: Idaho

Site Summary Level: Idaho National Engineering and Environmental Laboratory

Project ID-ER-101 / Test Area North Remediation

Report Number: GEN-01b

Print Date: 3/10/2000

HQ ID: 0164

Project Description Narratives

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 Waste Area Group 1 sites 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 Waste Area Group 1 sites include low level radiological constituents, organic contaminants, PCBs, and 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. These hazards will most commonly be encountered during activities such as soil removal activities and construction of process equipment that will be required for remediation of the V-tanks. Work hazards associated with decontamination and dismantlement activities will be essentially the same.

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, hazard profile screening checklist, 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 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.

Dataset Name: FY 1999 Planning Data

Date of Dataset: 9/20/1999

Page 5 of 21

Project Baseline Summary Report

Data Source: **EM CDB**
Operations/Field Office: **Idaho**
Site Summary Level: **Idaho National Engineering and Environmental Laboratory**
Project **ID-ER-101 / Test Area North Remediation**

Report Number: **GEN-01b**
Print Date: **3/10/2000**
HQ ID: **0164**

Project Description Narratives

PBS Comments:

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

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

Project Identification Information

DOE Project Manager: M. Shaw

DOE Project Manager Phone Number: 208-526-6442

DOE Project Manager Fax Number: 208-526-7245

DOE Project Manager e-mail address: SHAWRM@INEL.GOV

Dataset Name: **FY 1999 Planning Data**

Page 6 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

General PBS Information

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)	78,644	32,838	111,482	6,438	6,468	7,063	7,059	5,627	8,858	10,232	11,158	15,458	9,727	2,837	1,246	
PBS Baseline (constant 1999 dollars)	74,352	21,546	95,898	6,438	6,468	7,063	7,059	5,627	8,625	9,758	10,422	14,142	8,716	2,490	1,071	
PBS EM Baseline (current year dollars)	78,644	32,838	111,482	6,438	6,468	7,063	7,059	5,627	8,858	10,232	11,158	15,458	9,727	2,837	1,246	
PBS EM Baseline (constant 1999 dollars)	74,352	21,546	95,898	6,438	6,468	7,063	7,059	5,627	8,625	9,758	10,422	14,142	8,716	2,490	1,071	
	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)	1,013	1,068	1,066	1,231	5,940	6,641	7,849	8,030	0	0	0	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	853	881	861	974	4,416	4,449	4,741	4,371	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	1,013	1,068	1,066	1,231	5,940	6,641	7,849	8,030	0	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	853	881	861	974	4,416	4,449	4,741	4,371	0	0	0	0	0	0	0	0

Baseline Escalation Rates

Dataset Name: **FY 1999 Planning Data**

Page 7 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

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: 9/30/2026

Current Projected End Date of Project: 9/30/2026

Explanation of Project Completion Date Difference (if applicable):

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	94,882	Actual 1997 Cost:	6,468	Actual 1998 Cost:	7,059
Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	81,355	Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):			2,197
Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	83,552				

Project Cost Changes

	Cost Adjustments	Reconciliation Narratives
Cost Change Due to Scope Deletions (-):		
Cost Reductions Due to Efficiencies (-):	1,154	Cost savings associated with OU 1-07B Treatability Studies
Cost Associated with New Scope (+):		
Cost Growth Associated with Scope Previously Reported (+):		
Cost Reductions Due to Science & Technology Efficiencies (-):		
Subtotal:	82,398	

Dataset Name: **FY 1999 Planning Data**

Page 8 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

Project Reconciliation

Additional Amount to Reconcile (+): -1

Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars): 82,397

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 Sites (21)	W1RSFA98				5/25/1999						
Completed Release Sites (11)	W1RSFC98				5/25/1999						
Completed Release Sites (2)	W1RSFC25				9/30/2025						
Completed Release Sites (8)	W1RSFC01				9/30/2001						
Initiate Hydraulic Containment	CKEA737		11/18/1996	11/18/1996		11/15/1996	Y				
OU 1-07A (IA) Draft RI/FS ROD Sent by DOE-ID to EPA/IDHW	CIEPXXX1		6/30/1992	6/30/1992		5/4/1992	Y				
OU 1-07B Draft Final Bench Scale Work Plan Sent to DOE-ID	CKEP111		12/16/1996	12/16/1996		12/16/1996	Y				
OU 1-07B Draft NPTF RDD/RA WP Sent by DOE-ID to EPA/IDHW	CKEPK20		4/30/1999	4/30/1999	4/30/1999		Y				
OU 1-07B Draft Pilot Scale Work Plan Submitted to DOE-ID/EPA/IDHW	CKEPB10		2/11/1998	2/11/1998		12/16/1996	Y				
OU 1-07A Draft RA Report to EPA/IDHW	CIEP6170		12/5/1994			12/5/1994					
OU 1-07B Draft RI/FS ROD Submitted by DOE-ID to EPA/IDHW	SHEP046		7/31/1994	7/31/1994		5/23/1994	Y				
OU 1-07B Draft RI/FS Report Sent by DOE-ID to EPA/IDHW for Review	CKEPXXX3		9/30/1993	9/30/1993		9/30/1993	Y				
OU 1-07B Draft RI/FS SOW Sent by DOE-ID to EPA/IDHW for Review	CKEPXXX1		8/31/1991	8/31/1991		7/29/1991	Y				
OU 1-07B Draft RI/FS Work Plan Sent by DOE-ID to EPA/IDHW	CKEPXXX2		1/31/1992	1/31/1992		12/20/1991	Y				

Dataset Name: **FY 1999 Planning Data**

Page 9 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
OU 1-10 Draft RA Report Sent by DOE-ID to EPA/IDHW for Review	TMEP017				1/9/2001						
OU 1-10 Draft RD/RAWP Sent by DOE-ID to EPA/IDHW for Review (Soils)	SKEP115		6/9/2000		1/24/2000						
OU 1-10 Draft RI/FS ROD Sent by DOE-ID to EPA/IDHW for Review	SKEP010		5/25/1999	5/25/1999	5/25/1999		Y				
OU 1-10 Draft RI/FS Report Sent by DOE-ID to EPA/IDHW for Review	SKEP024		8/31/1997	8/31/1997		6/16/1997	Y				
OU 1-10 Draft RI/FS SOW Sent by DOE-ID to EPA/IDHW for Review	SKEP037		7/31/1995	7/31/1995		6/9/1995	Y				
OU 1-10 Draft RI/FS Work Plan Sent by DOE-ID to EPA/IDHW	SKEP039		12/31/1995	12/31/1995		10/9/1995	Y				
OU 1-10 Draft RD/RA Work Plan Sent by DOE-ID to EPA/IDHW for Review (Tanks)	SKEP209		9/27/2000		1/27/1999						
Project Start			10/1/1996								
Project Complete			9/30/2026								
OU 1-07B Draft FDR Phase I sent by DOE-ID to EPA/IDHW for review	CKEPB15		1/27/2000	1/31/2000			Y				
OU 1-07B Draft FDR Phase II sent by DOE-ID to EPA/IDHW for review	CKEPB50		4/26/2001	4/30/2001			Y				

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 Sites (21)	W1RSFA98									Y	
Completed Release Sites (11)	W1RSFC98									Y	

Dataset Name: **FY 1999 Planning Data**

Page 10 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

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 Release Sites (2)	W1RSFC25									Y	
Completed Release Sites (8)	W1RSFC01									Y	
Initiate Hydraulic Containment	CKEA737										
OU 1-07A (IA) Draft RI/FS ROD Sent by DOE-ID to EPA/IDHW	CIEPXXX1										
OU 1-07B Draft Final Bench Scale Work Plan Sent to DOE-ID	CKEP111										
OU 1-07B Draft NPTF RDD/RA WP Sent by DOE-ID to EPA/IDHW	CKEPK20										
OU 1-07B Draft Pilot Scale Work Plan Submitted to DOE-ID/EPA/IDHW	CKEPB10										
OU 1-07A Draft RA Report to EPA/IDHW	CIEP6170										
OU 1-07B Draft RI/FS ROD Submitted by DOE-ID to EPA/IDHW	SHEP046										
OU 1-07B Draft RI/FS Report Sent by DOE-ID to EPA/IDHW for Review	CKEPXXX3										
OU 1-07B Draft RI/FS SOW Sent by DOE-ID to EPA/IDHW for Review	CKEPXXX1										
OU 1-07B Draft RI/FS Work Plan Sent by DOE-ID to EPA/IDHW	CKEPXXX2										
OU 1-10 Draft RA Report Sent by DOE-ID to EPA/IDHW for Review	TMEP017									Y	
OU 1-10 Draft RD/RAWP Sent by	SKEP115										

Dataset Name: **FY 1999 Planning Data**

Page 11 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

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
DOE-ID to EPA/IDHW for Review (Soils)											
OU 1-10 Draft RI/FS ROD Sent by DOE-ID to EPA/IDHW for Review	SKEP010										
OU 1-10 Draft RI/FS Report Sent by DOE-ID to EPA/IDHW for Review	SKEP024										
OU 1-10 Draft RI/FS SOW Sent by DOE-ID to EPA/IDHW for Review	SKEP037										
OU 1-10 Draft RI/FS Work Plan Sent by DOE-ID to EPA/IDHW	SKEP039										
OU 1-10 Draft RD/RA Work Plan Sent by DOE-ID to EPA/IDHW for Review (Tanks)	SKEP209										
Project Start				Y							
Project Complete					Y						
OU 1-07B Draft FDR Phase I sent by DOE-ID to EPA/IDHW for review	CKEPB15										
OU 1-07B Draft FDR Phase II sent by DOE-ID to EPA/IDHW for review	CKEPB50										

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	2.00	0.00	2.00									1.00	

Dataset Name: **FY 1999 Planning Data**

Page 12 of 21

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: 0164

Project ID-ER-101 / Test Area North 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	9.00	3.00	12.00								1.00	2.00	2.00
Tech.														
Deployed	Ntd	3.00	0.00	3.00					2.00				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	
RS														
Assess.	NR		1.00											
RS														
Cleanup	NR	2.00	4.00					1.00			2.00			
Tech.														
Deployed	Ntd													
Category/Subcategory	Units	Planned 2036 - 2040	Planned 2041 - 2045	Planned 2046 - 2050	Planned 2051 - 2055	Planned 2056 - 2060	Planned 2061 - 2035	Planned 2066 - 2070	Exceptions	Lifecycle Total				
RS														
Assess.	NR								2.00	25.00				
RS														
Cleanup	NR									25.00				
Tech.														
Deployed	Ntd								1.00	3.00				

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: **0164**

Project **ID-ER-101 / Test Area North 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	0072		TSF-03 \ TSF BURN PIT [TSF-03]	Waste/Burn Pits	2000	2000	9/7/1999	2003	2003		1991	N		Y
INEL	0074		TSF-05 \ TSF INJECTION WELL [TSF-05]	Waste/Wells (injection, monitoring, etc.)				2025	2025		1991	N		Y
INEL	0075		TSF-06 \ TSF TAN/TSF-1 AREA (SOIL AREA) [TSF-06]	Waste/Miscellaneous Surface Debris	2000	2000	9/7/1999	2005	2005		1991	N		Y
INEL	0076		TSF-07 \ TSF DISPOSAL POND [TSF-07]	Liquid Surface Impoundments/Holding Ponds	2000	2000	9/7/1999	2005	2005		1991	N		Y
INEL	0077		TSF-08 \ TSF HTRE III MERCURY SPILL AREA [TSF-08]	Waste/Miscellaneous Surface Debris	2005	2005		2010	2010		1991	N		Y
INEL	0078		TSF-09 \ TSF INTERMED.-LEVEL(RADIOACTIVE) WASTE DISP. SYS[TSF-09]	Waste/Miscellaneous Surface Debris	2000	2000	9/7/1999	2004	2004		1991	N		Y
INEL	0079		TSF-10 \ TSF DRAINAGE POND (TAN 782) [TSF-10]	Liquid Surface Impoundments/Holding Ponds	2000	2000	9/7/1999	2000	2000	9/7/1999	1991	Y		Y
INEL	0080		TSF-11 \ TSF THREE CLARIFIER PITS E OF TAN-604 [TSF-11]	Waste/Pits	2000	2000	9/7/1999	2000	2000	9/7/1999	1991	Y		Y
INEL	0087		TSF-18 \ TSF CONTAMINATED TANK SE OF TANK V-3 [TSF-18]	Tanks/Underground Storage Tanks	2000	2000	9/7/1999	2004	2004		1991	N		Y
INEL	0090		TSF-21 \ TSF IET VALVE PIT [TSF-21]	Waste/Pits	2000	2000	9/7/1999	2000	2000	9/7/1999	1991	Y		Y
INEL	0091		TSF-22 \ TSF RAILROAD TURNTABLE [TSF-22]	Spills and Leaks/Surface Spills	2000	2000	9/7/1999	2000	2000	9/7/1999	1991	Y		Y
INEL	0092		TSF-23 \ TSF DRINKING WATER POTENTIAL CONTAMINATION [TSF-23]	Surface and Groundwater/Groundwater Plumes				2025	2025		1991	N		Y
INEL	0095		TSF-26 \ TSF PM-2A TANKS (TAN-710 A&B) [TSF-26]	Tanks/Underground Storage Tanks	2000	2000	9/7/1999	2005	2005		1991	N		Y

Dataset Name: **FY 1999 Planning Data**

Page 14 of 21

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: **0164**

Project **ID-ER-101 / Test Area North 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	0097		TSF-28 \ TSF SEWAGE TRMT PLANT(TAN-623) & SLUDGE DRY BEDS[TSF-28]	Liquid Surface Impoundments/Settling and Separation Basins	2000	2000	9/7/1999	2000	2000	9/7/1999	1991	Y		Y
INEL	0098		TSF-29 \ TSF ACID POND (TAN-735) [TSF-29]	Liquid Surface Impoundments/Holding Ponds	2000	2000	9/7/1999	2000	2000	9/7/1999	1991	Y		Y
INEL	0104		TSF-37 \ TSF CONTAMINATED WELL WATER SPILL	Surface and Groundwater/Groundwater Plumes	2000	2000	9/7/1999	2000	2000	9/7/1999	1991	Y		Y
INEL	0108		TSF-43 \ RPPSA BUILDINGS 647/648 AND PADS	Above Ground Material / Waste/Storage Yards and Pads	2000	2000	9/7/1999	2000	2000	9/7/1999	1991	Y		Y
INEL	0111		WRRTF-01 \ WRRTF BURN PIT [WRRTF-01]	Waste/Burn Pits	2000	2000	9/7/1999	2003	2003		1991	N		Y
INEL	0115		WRRTF-05 \ WRRTF INJECTION WELL (TAN-331) [WRRTF-05]	Waste/Wells (injection, monitoring, etc.)	2000	2000	9/7/1999	2000	2000	9/7/1999	1991	Y		Y
INEL	0121		WRRTF-13 \ WRRTF-13 Fuel Leak	Spills and Leaks/Surface Spills	2000	2000	9/7/1999	2002	2002		1993	N		Y
INEL	3001		TSF-41 \ Scrap Yard	/	2000	2000	9/7/1999	2000	2000	9/7/1999		Y		
INEL	3002		TSF-34 \ Fuel Tank	/	2000	2000	9/7/1999	2000	2000	9/7/1999		Y		
INEL	3003		TSF-35 \ Acid Sump	/	2000	2000	9/7/1999	2000	2000	9/7/1999		Y		
INEL	3004		TSF-40 \ Rubble Pile	/	2000	2000	9/7/1999	2000	2000	9/7/1999		Y		
INEL	3006		TAN-616 Building	Buildings & Equipment/Equipment	2003	2003		2005	2005			N		Y

Technology Needs

Site Need Code: ID-6.1.02

Dataset Name: **FY 1999 Planning Data**

Page 15 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

Technology Needs

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

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-6.1.03

Site Need Name: In-situ Treatment of Mixed TRU Tank Wastes.

Focus Area Work Package ID: SS-03

Focus Area Work Package: Stabilization Technologies

Focus Area: SCFA

Agree with Technology Link: N

Benefits (Cost, Risk Reduction, Both): Cost

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

Dataset Name: **FY 1999 Planning Data**

Page 16 of 21

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-101 / Test Area North Remediation**

Report Number: **GEN-01b**
 Print Date: **3/10/2000**
 HQ ID: **0164**

Technology Needs

<u>Related CCP Milestones</u>	<u>Related Waste Streams</u>	<u>Agree?</u>	<u>Change?</u>
	02492: T8 - HAZ-Soil	Y	N
	02485: L3 - LLW-Soil	Y	N
	02445: I4 - LLW-Soil	Y	N
	02444: I3 - ER/D&D LLW-Soil/Rubble/Debris	Y	N
	02483: -	Y	N
	02498: W2.1 - MTRU-Soil/Rubble/Debris	Y	N
	02427: C1 - HAZ-Soil	Y	N
	02487: -	Y	N
	02480: P1.1 - MTRU-Rubble/Debris	Y	N
	02479: P1 - MTRU-Rubble/Debris	Y	N
	02428: -	Y	N

Site Need Code: ID-6.1.04

Site Need Name: In-situ Treatment of VOC Contaminated Groundwater in Deep Fractured Rock

Focus Area Work Package ID: SS-08

Focus Area Work Package: Saturated Zone Treatment Systems

Focus Area: SCFA

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Cost

<u>Technologies</u>	<u>Cost Savings (in thousands of dollars)</u>	<u>Range of Estimate</u>
---------------------	---	--------------------------

<u>Related CCP Milestones</u>	<u>Related Waste Streams</u>	<u>Agree?</u>	<u>Change?</u>
	02483: -	Y	N

Site Need Code: ID-S.1.01

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

Technology Needs

Site Need Name: Microbial Alteration of Heavy Metal and Radionuclide Partitioning at Mineral Surfaces

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?

02485: L3 - LLW-Soil	Y	N
02483: -	Y	N
02466: T4 - D&D MLLW-Rubble/Debris	Y	N
02487: -	Y	N
02464: L1 - HAZ-Soil	Y	N
02463: T3 - MLLW-Soil	Y	N
02484: -	Y	N
02462: I8.1 - Treated MLLW	Y	N
02461: I8 - MLLW-Soil	Y	N
02496: W5 - MTRU-Sludge	Y	N
02488: T10 - LLW-Rubble/Debris	Y	N
02486: -	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

Dataset Name: **FY 1999 Planning Data**

Page 18 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

Technology Needs

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
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

Site Need Code: ID-S.2.01

Site Need Name: Definition of 'Biologically Active Zones' in Fractured Rock Environments

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

Dataset Name: **FY 1999 Planning Data**

Page 19 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

Technology Needs

<u>Related CCP Milestones</u>	<u>Related Waste Streams</u>	<u>Agree?</u>	<u>Change?</u>
	02483: -	Y	N
	02496: W5 - MTRU-Sludge	Y	N

Site Need Code: ID-S.2.03

Site Need Name: Aqueous Transport of Soluble Radionuclides and Heavy Metals: Evaluation of Non-Equilibrium Processes and Native Surfaces in Porous Media

Focus Area Work Package ID:

Focus Area Work Package:

Focus Area:

Agree with Technology Link: Y

Benefits (Cost, Risk Reduction, Both): Cost

<u>Technologies</u>	<u>Cost Savings (in thousands of dollars)</u>	<u>Range of Estimate</u>
---------------------	---	--------------------------

<u>Related CCP Milestones</u>	<u>Related Waste Streams</u>	<u>Agree?</u>	<u>Change?</u>
	02443: I2 - HAZ-Soil	Y	N
	02459: -	Y	N
	02460: -	Y	N
	02486: -	Y	N
	02493: T9 - HAZ-Soil	Y	N
	02484: -	Y	N
	02465: -	Y	N
	02463: T3 - MLLW-Soil	Y	N
	02464: L1 - HAZ-Soil	Y	N
	02499: -	Y	N
	02497: W2 - MTRU-Soil	Y	N

Dataset Name: **FY 1999 Planning Data**

Page 20 of 21

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: **0164**

Project **ID-ER-101 / Test Area North Remediation**

Technology Needs

<u>Related CCP Milestones</u>	<u>Related Waste Streams</u>	<u>Agree?</u>	<u>Change?</u>
	02457: I7 - MLLW-Soil/Sludge	Y	N
	02446: I4.1 - Treated LLW-Soil	Y	N
	02432: W2.2 - LLW-Soil	Y	N
	02469: O2 - MLLW-Liquid	Y	N
	02470: O2.1 - MLLW-Solids	Y	N
	02498: W2.1 - MTRU-Soil/Rubble/Debris	Y	N
	02491: T7.1 - LLW-Soil	Y	N
	02483: -	Y	N
	02485: L3 - LLW-Soil	Y	N
	02492: T8 - HAZ-Soil	Y	N
	02489: -	Y	N

Technology Deployments

<u>Deployment Status</u>	<u>Deployment Year</u>		
	<u>Planned</u>	<u>Forecast</u>	<u>Actual Date</u>
Technology Name: Micropurging of Wells			
Deployment Commitment	1999		
Technology Name: In-situ Enhanced Bioremediation with Lactate Supplements			
Deployment Commitment	1999	1999	1/7/1999
Technology Name: In-situ Vitriification - Planar			
Potential Deployment	2003	2003	

Dataset Name: **FY 1999 Planning Data**

Page 21 of 21

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