

Project Baseline Summary Report

Data Source: EM CDB

Operations/Field Office: Ohio

Site Summary Level: **Miamisburg Environmental Management Project**

Project **OH-MB-03 / Waste Activities**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0246**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

Definition of Scope: Removal of these waste streams will involve the following, including waste disposal costs:

- a. possible encapsulation of lead loaded gloves (0.5m3) and shipment to NTS for disposal
- b. characterization, treatment, and disposal of orphaned waste and lab packs (1.5m3)
- c. treatment and disposal of tritiated oils (1.0m3) and florco (7.3m3). Also 3.1m3 florco from contaminated waste oils.
- d. treatment and disposal of scintillation cocktail solid debris (6.2m3)
- e. treatment and disposal of transuranic waste gloves (1.6m3) and industrial press
- f. characterization of approximately 238 m3 transuranic waste. Waste will be characterized to WIPP and /or DOT specifications -- whichever most effectively facilitates waste removal from Mound site.

Technical Approach: Mixed waste will be stored in building 23. The building must be maintained compliant with RCRA as well as meet DOE operational requirements, e.g. safety documentation. Mixed waste will be stored until suitable characterization are completed and appropriate locations for treatment and/or disposal are found. The contractor proposed to solidify the tritiated oils and ship to NTS for disposal. Other mixed waste streams will be prepared for offsite treatment at DOE incinerator sites or follow treatment plans as prescribed in the Mound site treatment plan.

TRU waste will be stored in T building. No significant new quantities are expected. TRU waste will be prepared for shipment to an offsite location -- most probably another DOE site preferably WIPP for disposal. The contractor has proposed two options for the preparation of this waste: 1) Use mobile repackaging unit to ready waste for shipment to WIPP or other DOE interim storage site 2) Repackage waste to meet DOT shipping requirements (by utilizing their proposed waste processing facility) and ship to an interim DOE storage site. The contractor proposes to have TRU waste removed NLT June 2004.

Technologies for disposal, storage and treatment methods for wastes will be performed in accordance with standards established at Federal or Commercial permitted sites.

Project Status in FY 2006:

Current planning calls for completion in FY 2004. All existing waste streams associated with this project will be removed offsite for treatment or disposal by the 2nd quarter 2004.

- 1) Characterization activity in building 38 will be complete by 3rd quarter 1999.
- 2) Mixed waste storage Building 23 will be maintained until site closure in FY 2003. Existing inventories shall be removed by FY 2000.
- 3) TRU waste will be characterized sufficiently to transport to another DOE site for interim storage or disposal at WIPP.

Post-2006 Project Scope:

No scope. Project completed.

Dataset Name: **FY 1999 Planning Data**

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

Page 1 of 11

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Ohio**

Site Summary Level: **Miamisburg Environmental Management Project**

Project **OH-MB-03 / Waste Activities**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0246**

Project Description Narratives

Project End State

All waste streams as discussed above will be removed from the site.

Cost Baseline Comments:

This project includes the cost, scope and schedule from the validated baseline dated December 18, 1998 as detailed in the 21 volumes of the Exit Plan. The basis of estimate for the Standard Timberline Assemblies document utilized productivity factors from Richardson or Means Building Construction data. Bottoms up cost estimates were prepared for all activities planned for the project. Baseline documentation in the Exit Plan details all assumptions considered for each project.

Safety & Health Hazards:

Babcock & Wilcox of Ohio, Inc. is conducting an integrated safety review of all projects and work activities to identify and evaluate environmental, safety and health hazards. Typical hazards at the Mound site are chemical, biological, physical, radiological and electrical. Hazard analyses are performed for all new projects and work activities. The analyses are documented utilizing several different formats such as job safety and health analysis (JSHA), health and safety plans (HASPs), and other traditional DOE documents such as the Safety Analysis Report (SAR) and Auditable Safety Analysis (ASA). Additionally, hazard abatement inspections, self assessment audits, and project manager surveillances are conducted in accordance with Integrated Safety Management processes to identify hazardous conditions or hazardous acts as well as procedure non-compliance. Identified deficiencies are entered into a site wide database and tracked to closure. In the case of facility deficiencies such as exposed wiring a risk assessment code is assigned which requires the contractor to correct the hazard immediately or within a specified period of time.

Safety & Health Work Performance:

The resources necessary to accomplish the work safely are provided through the approved authorization basis for the project or work activities. Safety documentation that is part of the authorization basis will include the written E,S&H program requirements and procedures, health and safety plans, safety analysis reports, technical safety requirements, limiting conditions of operations documents and other as appropriate. Additionally, each project has a designated matrixed safety and health professional who will ensure the incorporation of requirements which address the following areas: industrial and construction safety, industrial hygiene, transportation safety, emergency management, fire protection, radiological protection, and occupational medicine. The cost for the matrixed safety and health professional will be applied to the project or projects in which the person is assigned to. Core groups of subject matter experts such as the fire department, occupational medicine, emergency management and training will be available to address specific or unique concerns. This cost for the core group of subject matter experts will be spread across each project.

PBS Comments:

None.

Baseline Validation Narrative:

Operations are conducted under a validated baseline for cost, scope and schedule. Validation was conducted by the Department of Energy and Army Corps of Engineers and documented in 21 volumes entitled Exit Plan.

Dataset Name: **FY 1999 Planning Data**

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

Page 2 of 11

Project Baseline Summary Report

Data Source: **EM CDB**
 Operations/Field Office: **Ohio**
 Site Summary Level: **Miamisburg Environmental Management Project**
 Project **OH-MB-03 / Waste Activities**

Report Number: **GEN-01b**
 Print Date: **3/9/2000**
 HQ ID: **0246**

General PBS Information

Project Validated? Yes **Date Validated:** 12/18/1998
Has Headquarters reviewed and approved project? Yes
Date Project was Added: 12/1/1997
Baseline Submission Date: 7/8/1999
FEDPLAN Project? Yes

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

Project Identification Information

DOE Project Manager: Rob Rothman
DOE Project Manager Phone Number: 937-865-3823
DOE Project Manager Fax Number: 937-865-4489
DOE Project Manager e-mail address: Robert.Rothman@OHIO.DOE.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)	83,304	0	83,304	6,418	6,418	8,564	8,564	13,680	8,102	4,304	7,500	23,772	10,964	0	0
PBS Baseline (constant 1999 dollars)	78,435	0	78,435	6,418	6,418	8,564	8,564	13,680	7,889	4,081	6,917	21,327	9,559	0	0
PBS EM Baseline (current year dollars)	83,304	0	83,304	6,418	6,418	8,564	8,564	13,680	8,102	4,304	7,500	23,772	10,964	0	0

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Ohio**

Print Date: **3/9/2000**

Site Summary Level: **Miamisburg Environmental Management Project**

HQ ID: **0246**

Project **OH-MB-03 / Waste Activities**

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 EM Baseline (constant 1999 dollars)	78,435	0	78,435	6,418	6,418	8,564	8,564	13,680	7,889	4,081	6,917	21,327	9,559	0	0	
	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)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	0	0	0	0	0	0	0	0	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%	2.70%	2.80%	2.80%	2.90%	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:

Dataset Name: **FY 1999 Planning Data**

Page 4 of 11

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

Project Baseline Summary Report

Data Source: **EM CDB**
 Operations/Field Office: **Ohio**
 Site Summary Level: **Miamisburg Environmental Management Project**
 Project **OH-MB-03 / Waste Activities**

Report Number: **GEN-01b**
 Print Date: **3/9/2000**
 HQ ID: **0246**

Project Reconciliation

Previously Projected End Date of Project: 9/1/2001
Current Projected End Date of Project: 6/1/2004

Explanation of Project Completion Date Difference (if applicable):

The current completion date is scheduled for FY 2004 based upon the rebaseline which was validated in December, 1998.

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	17,010	Actual 1997 Cost:	6,418	Actual 1998 Cost:	8,564
Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	2,028	Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):			55
Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	2,083				

Project Cost Changes

	Cost Adjustments	Reconciliation Narratives
Cost Change Due to Scope Deletions (-):		
Cost Reductions Due to Efficiencies (-):		
Cost Associated with New Scope (+):	61,547	\$61.547k due to rebaseline in December, 1998 and allocated costs previously in MB-10.
Cost Growth Associated with Scope Previously Reported (+):		
Cost Reductions Due to Science & Technology Efficiencies (-):		
Subtotal:	63,630	
Additional Amount to Reconcile (+):	-177	(\$178K) due to FY 1997 Actual Costs escalation error on the IDMS reconciliation tab.
Current Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	63,453	

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
100% LEGACY LOW-LEVEL WASTE SHIPPED OFF-SITE	OHMB-03-01		9/30/1999								

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Ohio**

Print Date: **3/9/2000**

Site Summary Level: **Miamisburg Environmental Management Project**

HQ ID: **0246**

Project **OH-MB-03 / Waste Activities**

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
100% MIXED WASTE (CURRENT INVENTORY) SHIPPED OFF-SITE	OHMB-03-02		9/30/1999	9/30/1999			Y				
COMPLETE DISPOSITION OF LEGACY EXCESS RCRA CHEMICALS	OHMB-03-06		5/1/1999	1/31/1999			Y		Y		
COMPLETE SOLIDIFICATION OF TRITIATED OIL	OHMB-03-05		4/30/2000								
EXCESS NUCLEAR MATERIALS SHIPPED OFF-SITE	OHMB-03-03		9/30/2000								
TRU WASTE OFF-SITE	OHMB-03-04		6/1/2004								
Project Start			10/1/1996								
Project Complete			6/1/2004								

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
100% LEGACY LOW-LEVEL WASTE SHIPPED OFF-SITE	OHMB-03-01										
100% MIXED WASTE (CURRENT INVENTORY) SHIPPED OFF-SITE	OHMB-03-02										
COMPLETE DISPOSITION OF LEGACY EXCESS RCRA CHEMICALS	OHMB-03-06										
COMPLETE SOLIDIFICATION OF TRITIATED OIL	OHMB-03-05										
EXCESS NUCLEAR MATERIALS SHIPPED OFF-SITE	OHMB-03-03										
TRU WASTE OFF-SITE	OHMB-03-04									3	

Dataset Name: **FY 1999 Planning Data**

Page 6 of 11

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

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Ohio**

Print Date: **3/9/2000**

Site Summary Level: **Miamisburg Environmental Management Project**

HQ ID: **0246**

Project **OH-MB-03 / Waste Activities**

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
Project Start				Y							
Project Complete					Y	Y					

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
TRU														
Storage	M3							247.00	247.00	247.00	247.00	247.00	247.00	0.00
TRU														
Ship. to WIPP	M3	247.00	0.00	247.00				0.00	0.00	0.00	0.00	0.00	247.00	0.00
MLLW														
Treatment	M3	0.00	0.00	0.00	0.00		0.00							
MLLW														
Storage	M3							23.84	14.30	0.00	0.00	0.00	0.00	0.00
MLLW														
Comm. Disp.	M3	24.14	0.00	24.14	0.00		0.00	0.30	9.54	14.30				
MLLW														
Ship to DOE Disp.	M3	0.00	0.00	0.00	0.00		0.00							
LLW														
Storage	M3							1,230.80	0.00	0.00	0.00	0.00	0.00	0.00
LLW														
Comm. Disp.	M3	0.00	0.00	0.00	0.00		0.00							

Dataset Name: **FY 1999 Planning Data**

Page 7 of 11

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

Project Baseline Summary Report

Data Source: EM CDB

Report Number: GEN-01b

Operations/Field Office: Ohio

Print Date: 3/9/2000

Site Summary Level: Miamisburg Environmental Management Project

HQ ID: 0246

Project OH-MB-03 / Waste Activities

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
LLW														
Ship to DOE Disp.	M3	19,823.80	0.00	19,823.80	0.00		0.00	2,309.00	2,664.80	2,839.00	3,152.00	2,670.00	5,959.00	230.00
Rem. Waste														
Disposed	M3	145,229.00	0.00	145,229.00	0.00		0.00	17,480.00	5,526.00	19,040.00	33,018.00	23,249.00	32,840.00	14,076.00
NM														
MDR - Pu	Ncont	4.00	0.00	4.00	0.00		0.00	2.00	2.00					
NM														
MDR Onsite - Ur Other	Kg/B	7.00	0.00	7.00	0.00		0.00		7.00					
NM														
MDR Offsite - U Other	Kg/B	2.00	0.00	2.00	0.00		0.00	2.00						
NM														
MDR - Other NM	Ncont	27.00	0.00	27.00	0.00		0.00	2.00	9.00	16.00				
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	
TRU														
Storage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TRU														
Ship. to WIPP	M3	0.00												
MLLW														
Treatment	M3													

Dataset Name: FY 1999 Planning Data

Page 8 of 11

Date of Dataset: 9/20/1999

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Ohio**

Print Date: **3/9/2000**

Site Summary Level: **Miamisburg Environmental Management Project**

HQ ID: **0246**

Project **OH-MB-03 / Waste Activities**

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
MLLW													
Storage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MLLW													
Comm. Disp.	M3												
MLLW													
Ship to DOE Disp.	M3												
LLW													
Storage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
LLW													
Comm. Disp.	M3												
LLW													
Ship to DOE Disp.	M3	230.00											
Rem. Waste													
Disposed	M3	14,076.00											
NM													
MDR - Pu	Ncont												
NM													
MDR Onsite - Ur Other	Kg/B												
NM													
MDR Offsite - U Other	Kg/B												
NM													
MDR - Other NM	Ncont												

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Ohio**

Site Summary Level: **Miamisburg Environmental Management Project**

Project **OH-MB-03 / Waste Activities**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0246**

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
TRU										
Storage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
TRU										
Ship. to WIPP	M3								0.00	247.00
MLLW										
Treatment	M3									11.00
MLLW										
Storage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
MLLW										
Comm. Disp.	M3									33.30
MLLW										
Ship to DOE Disp.	M3									1.00
LLW										
Storage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
LLW										
Comm. Disp.	M3									3,928.00
LLW										
Ship to DOE Disp.	M3									21,467.00
Rem. Waste										
Disposed	M3								0.00	125,779.00
NM										
MDR - Pu	Ncont									2.00
NM										
MDR Onsite - Ur Other	Kg/B									7.00

Dataset Name: **FY 1999 Planning Data**

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

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Ohio**

Site Summary Level: **Miamisburg Environmental Management Project**

Project **OH-MB-03 / Waste Activities**

Report Number: **GEN-01b**

Print Date: **3/9/2000**

HQ ID: **0246**

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
NM										
MDR Offsite - U Other	Kg/B									2.10
NM										
MDR - Other NM	Ncont									19.00