

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Carlsbad**

Site Summary Level: **Waste Isolation Pilot Plant**

Project **CAO-3 / WIPP Transportation**

Report Number: **GEN-01b**

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

HQ ID: **0010**

General Project Information

Project Description Narratives

Purpose, Scope, and Technical Approach:

Definition of Scope: This project includes all transportation activities required to support the National TRU Waste Management Program. These activities include: Emergency Response training; establishing and opening transportation corridors; Contact-Handled (CH) and Remote-Handled (RH) TRU waste packaging initiatives; carrier services; and stakeholder interfaces related to transportation. TRU waste has been generated and stored resulting from the Nation's nuclear defense, research, and production activities. Primary locations where TRU waste is currently stored are: Idaho National Engineering and Environmental Laboratory (INEEL), Los Alamos National Laboratory (LANL), Rocky Flats Environmental Technology Site (RFETS), Oak Ridge National Laboratory (ORNL), Savannah River Site (SRS), Hanford Reservation (Hanford), Nevada Test Site (NTS), Lawrence Livermore National Laboratory (LLNL), Argonne National Laboratory - East (ANL-E), and Mound Plant (Mound). Other sites have small quantities of TRU waste that will be disposed at WIPP. The TRU waste sites scheduled to initially ship CH TRU waste to WIPP in FY 1999 are INEEL, LANL, and RFETS. Using the shipment schedules in the AVS Shipping Profile dated 5/21/99, SRS and Hanford will begin shipping waste to WIPP in FY 2000. By FY 2001, the WIPP facility will be capable of handling 17 CH shipments per week. ANL-E, LLNL, Mound, ORNL, and selected small quantity sites will begin shipping waste to WIPP in FY 2004. In FY 2002, CAO will begin receiving shipments of RH from LANL. CAO must open and maintain transportation corridors across the United States between each TRU waste site and the WIPP site. Currently, the corridor from INEEL, RFETS, and LANL, as well as the corridor from SRS are open. Activities required to open other corridors will require approximately two (2) years prior to shipment campaigns beginning at the sites. The phasing of corridors correspond with site shipping schedules and eliminates the need for corridor maintenance thus reducing TRU waste complex costs.

Technical Approach: The AVS Shipping Profile dated 5/21/99 has WIPP beginning waste receipt operations in March, 1999 for CH TRU waste and FY 2002 for RH TRU waste operations. WIPP was scheduled to receive CH TRU waste in February, 1999, at which time five truck sets (a set consists of a truck, trailer, and three shipping containers) was in service. Starting in mid-FY 2000, truck sets are added until the fleet size reaches 20 truck sets during FY 2001. The WIPP CH TRU waste handling capability starts at 125 shipments in FY 1999 and increases to 850 shipments per year starting in FY 2001. RH TRU waste receipt capability is approximately 75 shipments per year beginning in FY 2002. Capability should increase to approximately 300 shipments per year by FY 2004 using 8 truck sets (i.e., one truck, trailer, and RH cask). Previous planning called for maintaining open transportation corridors with minimal waste transportation traffic. Regardless of the expected traffic, the corridors would incur ongoing costs such as emergency response training and institutional payments to state governments. Designating waste work-off campaigns for some sites allows for idle corridors to be closed thus avoiding associated costs. For example, the shipping corridors from LLNL and NTS will open in FY 2004 to ship all stored waste, after which time the corridors will be closed. Thereafter, dedicated waste shipments would occur intermittently, or the corridor could be opened periodically to work off newly generated waste.

Project Status in FY 2006:

The AVS Shipping Profile dated 5/21/99 identifies site-specific waste processing rates that are coordinated with an optimal shipping fleet to complement the WIPP's waste handling and disposal capabilities. Shipments of CH-TRU waste to WIPP through FY 2006 closely match the waste handling and disposal capabilities of WIPP. During this time, WIPP can accept 5,606 shipments of CH TRU waste and 5,326 shipments are made. Through FY 2006, 89% of the WIPP's CH-TRU waste handling capability is utilized. By the end of FY 2006, Mound and RFETS have completely

Dataset Name: **FY 1999 Planning Data**

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

Page 1 of 12

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Carlsbad**

Site Summary Level: **Waste Isolation Pilot Plant**

Project **CAO-3 / WIPP Transportation**

Report Number: **GEN-01b**

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

HQ ID: **0010**

Project Description Narratives

disposed of all their CH-TRU waste at WIPP. RH-TRU waste receipt capability is approximately 75 shipments per year beginning in FY 2002, and increases to approximately 300 shipments per year in FY 2004. From FY 2002 through FY 2006, the WIPP can accept approximately 1,225 RH TRU waste shipments and 573 shipments are made resulting in a 44% utilization of RH TRU waste handling capability. The following represents the CH/RH shipments by TRU waste sites through FY 2006: ANL-E, 13/0; Hanford, 523/3; INEEL, 1367/0; LANL, 905/237; LLNL, 27/0; Mound, 67/0; NTS, 81/0; ORNL, 96/314; RFETS, 2002/0; SRS, 164/0; SQS, 36/19; D&D, 45/0, for a total of 5326 shipments of CH and 573 shipments of RH.

Post-2006 Project Scope:

Continued disposal of the remaining TRU waste inventory until the WIPP waste volume capacity reaches the statutory limits in FY 2034, after which five years are planned to seal the repository and dismantle and decommission the surface facilities. Active institutional controls will then be activated and maintained for 100 years. CH-TRU waste handling capacity utilization remains steady from FY 2004 until FY 2020 when INEEL completes shipping to WIPP. After FY 2020, only those sites still generating TRU waste continue to ship to the WIPP. RH-TRU waste receipt fluctuates from 175 to 256 shipments per year, until FY 2014 when only Hanford ships approximately 170 shipments per year, and ORNL ships approximately 9 shipments per year. This configuration results in 13,903 shipments of CH-TRU waste and 4,574 shipments of RH TRU waste over the 35-year disposal period. These shipments result in a 64% CH-TRU utilization and a 87% RH-TRU utilization of the WIPP waste volume capacity statutory limits. Decontamination and decommissioning activities will complete the remaining WIPP capacity of 175,600 cubic meters by FY 2034.

Project End State

TRU waste management activities for both CH and RH waste are projected to be completed by FY 2039 after completing the Disposal Phase in FY 2034 and five years for decommissioning of the surface facilities and permanently closing the underground. In accordance with the WIPP Land Withdrawal Amendment Act of 1996, DOE will have disposed of up to 175,600 cubic meters of TRU waste in the WIPP facility. Starting in FY 2039, a reduced Federal staff and technical contractor support will maintain the active institutional controls associated with the land and records of the WIPP. Monuments and markers will be built at the site to warn people of the presence of the repository. Active institutional controls over the site will be maintained for 100 years. Low risk has been assigned based upon performance assessments included in the licensing of the facility, which requires no migration of hazardous or radioactive material for 10,000 years. Following completion of the active institutional control phase, the surface area will be unrestricted for recreational and agricultural uses.

Project CAO-3 ends after the last shipment is completed in FY 2034. At that time, the transportation system will be terminated, all routes and corridors closed, and institutional payments to the states will end.

Cost Baseline Comments:

Since 1994, the CAO has institutionalized a formal program planning and budget execution process. The confidence level of cost estimates for the next three years is very high (+/- 5%). Out year estimates through FY 2008 have been developed with a confidence level of +/- 10 to 20%. Estimates from FY 2009 through completion are within +/- 30%. There are no contingency funds included in the CAO estimates.

Current CAO assumptions support operations of the WIPP facility, including its infrastructure, as an operational nuclear facility capable of receiving CH TRU waste at an initial disposal at a rate of 5 shipments per week and ramping to 17 shipments per week. The statutory requirement to pay impact assistance to the State of New Mexico is funded. The CAO baseline provides adequate funding to meet the National TRU Waste Management

Dataset Name: **FY 1999 Planning Data**

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

Page 2 of 12

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Carlsbad**

Site Summary Level: **Waste Isolation Pilot Plant**

Project **CAO-3 / WIPP Transportation**

Report Number: **GEN-01b**

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

HQ ID: **0010**

Project Description Narratives

Program. Escalation has been applied to the activities in accordance with the DOE Environmental Management guidelines.

Safety & Health Hazards:

The transportation system for the WIPP consists of U.S. Nuclear Regulatory Commission (NRC) certified Type B packagings. Contact-handled (CH) transuranic (TRU) waste will be shipped in the TRUPACT-II and remote-handled (RH) TRU waste will be shipped in the 72-B Cask. The TRUPACT was issued NRC Certificate of Compliance No. 9218 in 1989. The 72-B Cask design is currently being reviewed by the NRC. The use of Type B packaging ensures that a radiological release or radiation exposure to the public is essentially a non-credible event. This is due to the hypothetical accident testing that Type B packagings are subjected to in accordance with the requirements of Title 10 Code of Federal Regulations Part 71 (10 CFR 71), "Packaging and Transportation of Radioactive Material."

To respond to the public's concern for safety, the WIPP is prepared for emergencies and has in place a States Tribal and Education Program (STEP), a Radiological Assistance Program (RAP), and the Incident / Accident Response Team (IART). Additional details regarding accident risk analysis may be found in the "Waste Isolation Pilot Plant Disposal Phase Final Supplemental Environmental Impact Statement, DOE/EIS-0026-S-2."

Each site that loads or unloads the TRUPACT-II, or 72-B Cask, will use trained operators working to validated procedures. On-site contingencies are included in each site's facility safety analysis report (FSAR). There are no unacceptable risks during loading or unloading operations.

No additional transportation hazards have been identified. The National Academy of Sciences has reviewed the WIPP transportation system and declared the system "Safer than any other used for hazardous materials."

Safety & Health Work Performance:

The WIPP transportation system is currently part of the Managing and Operating (M&O) contract for the WIPP site. The M&O contract describes the scope of work and deliverables, including the transportation system. The CAO has announced that they intend to privatize the transportation system at a future date. The scope, budget, and deliverables are reviewed annually.

The CAO owns the transportation system and the costs associated with ownership are noted. No additional costs to the shippers are identified because the transportation costs are included in the WIPP operating budget.

PBS Comments:

The CAO has recommended a Management Plan configuration for implementation that will guide the ten-year planning process consistent with the strategic objectives, as well as achieve the overall TRU waste management goals. The facilities and activities described in the National TRU Waste Management Plan, Revision 1, combined with the disposal-ready waste preparation schedules, summarize current guidance to support development of site 2006 Plan.

The WIPP program is statutorily directed by the WIPP Land Withdrawal Amendment Act of 1996 (Public Law 104-201). EPA has been designated as the primary regulator for repository stability; the state of New Mexico regulates the RCRA permit; and independent oversight is provided by the

Dataset Name: **FY 1999 Planning Data**

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

Page 3 of 12

Project Baseline Summary Report

Data Source: **EM CDB**
Operations/Field Office: **Carlsbad**
Site Summary Level: **Waste Isolation Pilot Plant**
Project **CAO-3 / WIPP Transportation**

Report Number: **GEN-01b**
Print Date: **3/9/2000**
HQ ID: **0010**

Project Description Narratives

Environmental Evaluation Group (EEG) and the National Academy of Sciences. The Sandia National Laboratories has performed as the WIPP program Scientific Advisor. 40 CFR 194 establishes the specific criteria which must be met prior to EPA's approval of the Compliance Certification Application which was submitted to EPA in October 1996. The WIPP Disposal Decision Plan (Rev. 4) identifies major milestones which must be completed in order to start disposal operations.

Baseline Validation Narrative:

The National Research Council's report on the WIPP dated October, 1996, validated the project as a viable solution for the permanent, safe disposal of defense generated radioactive TRU waste. Mevatec Corporation contracted in FY 1998 to perform an independent baseline validation of the scope, schedule, and cost of the National TRU Waste Program managed by the Carlsbad Area Office (CAO). This validation and the final report was issued in April, 1999. The validation findings are consistent with this IPABS update. Information sources used in the CAO independent budget validation include, but are not limited to: Integrated Priority List Details for the FY 2000 Budget (CAO, March 1998); FY 2000/2001 Validation Submittals from CAO and TRU Waste Sites, CAO Technical Assistance Contractors (CTAC), Sandia National Labs (Vols. 1-2), and Westinghouse, WID (Vols. 1-6); Minutes of all FY 1999/2000 Validation and FY 2000-2006 Program Review Meetings; FY 2000 Validation and FY 2001-2006 Program Planning; IPABS Handbook, Rev 8; International Research and Development Plan, 1 October 1997, Rev. 0; CAO FY 2000/2001 Validation and FY 2002 through FY 2006 Planning Addendum; "Budget Planning, Programming & Execution Process Description - Draft"; and The National TRU Waste Management Plan, DOE/NTP-9691204, Rev. 1.

General PBS Information

Project Validated? Yes **Date Validated:** 5/1/1995
Has Headquarters reviewed and approved project? No
Date Project was Added: 12/1/1997
Baseline Submission Date: 7/7/1999
FEDPLAN Project? No

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

Project Identification Information

DOE Project Manager: Ines Triay
DOE Project Manager Phone Number: 505-234-7300
DOE Project Manager Fax Number: 505-234-7027
DOE Project Manager e-mail address: triayi@wipp.carlsbad.nm.us

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: **Carlsbad**

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

Site Summary Level: **Waste Isolation Pilot Plant**

HQ ID: **0010**

Project **CAO-3 / WIPP Transportation**

General PBS Information

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

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)	203,809	1,189,825	1,393,634	14,196	14,196	12,186	9,186	19,214	14,111	17,881	22,999	25,843	26,208	25,727	25,444	
PBS Baseline (constant 1999 dollars)	189,447	744,038	933,485	14,196	14,196	12,186	9,186	19,214	13,740	17,053	21,483	23,643	23,483	22,578	21,871	
PBS EM Baseline (current year dollars)	203,809	1,189,825	1,393,634	14,196	14,196	12,186	9,186	19,214	14,111	17,881	22,999	25,843	26,208	25,727	25,444	
PBS EM Baseline (constant 1999 dollars)	189,447	744,038	933,485	14,196	14,196	12,186	9,186	19,214	13,740	17,053	21,483	23,643	23,483	22,578	21,871	
	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)	31,189	31,937	32,168	32,907	176,490	197,733	221,528	248,190	217,683	0	0	0	0	0	0	0
PBS Baseline (constant 1999 dollars)	26,257	26,334	25,979	26,029	131,221	132,506	133,799	135,107	106,806	0	0	0	0	0	0	0
PBS EM Baseline (current year dollars)	31,189	31,937	32,168	32,907	176,490	197,733	221,528	248,190	217,683	0	0	0	0	0	0	0
PBS EM Baseline (constant 1999 dollars)	26,257	26,334	25,979	26,029	131,221	132,506	133,799	135,107	106,806	0	0	0	0	0	0	0

Baseline Escalation Rates

Dataset Name: **FY 1999 Planning Data**

Page 5 of 12

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

Project Baseline Summary Report

Data Source: **EM CDB**
 Operations/Field Office: **Carlsbad**
 Site Summary Level: **Waste Isolation Pilot Plant**
 Project **CAO-3 / WIPP Transportation**

Report Number: **GEN-01b**
 Print Date: **3/9/2000**
 HQ ID: **0010**

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: 9/1/2033

Current Projected End Date of Project: 9/1/2034

Explanation of Project Completion Date Difference (if applicable):

Project Cost Estimates (in thousands of dollars)

Previously Estimated Lifecycle Cost (1997 - 2070, 1998 Dollars):	943,164	Actual 1997 Cost:	14,196	Actual 1998 Cost:	9,186
Previously Estimated Lifecycle Cost of Project (1999 - 2070, 1998 Dollars):	919,782	Inflation Adjustment (2.7% to convert 1998 to 1999 dollars):	24,834		
Previously Estimated Lifecycle Cost (1999 - 2070, 1999 Dollars):	944,616				

Project Cost Changes

	Cost Adjustments	Reconciliation Narratives
Cost Change Due to Scope Deletions (-):	15,109	1 year delay of waste receipt decreased transportation costs (FY99-00).
Cost Reductions Due to Efficiencies (-):	51,062	Rescope of work: transportation privatization; opening of addtl corridors.
Cost Associated with New Scope (+):		
Cost Growth Associated with Scope Previously Reported (+):	28,103	1 year delay of waste receipt; Correction of WID unescalated labor rates unchanged since FY97.
Cost Reductions Due to Science & Technology Efficiencies (-):		
Subtotal:	906,548	

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Carlsbad**

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

Site Summary Level: **Waste Isolation Pilot Plant**

HQ ID: **0010**

Project **CAO-3 / WIPP Transportation**

Project Reconciliation

Additional Amount to Reconcile (+):

555 IDMS de-escalation calculation assumes that each five year period is based on a linear plan.

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

907,103

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
First ANL-E CH shipment to WIPP	CAO-003-005		10/1/2003								Y
First Hanford CH shipment to WIPP	CAO-003-006		10/1/1999								Y
First Hanford RH shipment to WIPP	CAO-003-018		1/2/2006								Y
First INEEL CH Shipment to WIPP	CAO-003-001		4/27/1999								Y
First INEEL RH shipment to WIPP	CAO-003-020		10/1/2006								Y
First LANL CH Shipment to WIPP	CAO-003-002		3/26/1999								Y
First LANL RH shipment to WIPP	CAO-003-012		1/21/2003								Y
First LLNL CH shipment to WIPP	CAO-003-009		10/1/2003								Y
First Mound CH shipment to WIPP	CAO-003-007		10/1/2003								Y
First NTS CH shipment to WIPP	CAO-003-010		10/1/2004								Y
First ORNL CH shipment to WIPP	CAO-003-013		6/1/2004								Y
First ORNL RH shipment to WIPP	CAO-003-014		6/1/2002								Y
First RFETS CH Shipment to WIPP	CAO-003-003		6/1/1999								Y
First SQS CH shipment to WIPP	CAO-003-008		10/1/2003								Y
First SQS RH shipment to WIPP	CAO-003-016		10/1/2003								Y
First SRS CH shipment to WIPP	CAO-003-004		10/1/2000								Y
First SRS RH shipment to WIPP	CAO-003-017		10/1/2004								Y
Last ANL-E CH shipment to WIPP	CAO-003-026		1/1/2026								Y
Last Hanford CH shipment to WIPP	CAO-003-029		8/1/2031								Y

Dataset Name: **FY 1999 Planning Data**

Page 7 of 12

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

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Carlsbad**

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

Site Summary Level: **Waste Isolation Pilot Plant**

HQ ID: **0010**

Project **CAO-3 / WIPP Transportation**

Milestones

Milestone/Activity	Field Milestone Code	Original Date	Baseline Date	Legal Date	Forecast Date	Actual Date	EA	DNFSB	Mgmt. Commit.	Key Decision	Intersite
Last Hanford RH shipment to WIPP	CAO-003-030		9/1/2031								Y
Last INEEL CH shipment to WIPP	CAO-003-025		3/1/2019								Y
Last INEEL RH shipment to WIPP	CAO-003-022		4/1/2013								Y
Last LANL CH shipment to WIPP	CAO-003-032		6/15/2034								Y
Last LANL RH shipment to WIPP	CAO-003-033		9/1/2012								Y
Last LLNL CH shipment to WIPP	CAO-003-034		9/1/2033								Y
Last Mound CH shipment to WIPP	CAO-003-011		11/1/2003								Y
Last NTS CH shipment to WIPP	CAO-003-015		6/1/2009								Y
Last ORNL CH shipment to WIPP	CAO-003-023		12/1/2015								Y
Last ORNL RH shipment to WIPP	CAO-003-024		9/1/2013								Y
Last RFETS CH shipment to WIPP	CAO-003-019		7/1/2006								Y
Last SQS CH shipment to WIPP	CAO-003-028		2/1/2023								Y
Last SQS RH shipment to WIPP	CAO-003-027		9/1/2022								Y
Last SRS CH shipment to WIPP	CAO-003-031		3/15/2033								Y
Last SRS RH shipment to WIPP	CAO-003-021		9/1/2008								Y
Project Mission Complete	CAO-003-035		9/1/2034								Y
EPA approval of first shipping sites, INEEL.			3/31/1999						Y		
EPA approval of first shipping sites, RFETS.			3/31/1999						Y		
Begin Paths to Closure and Life Cycle Costs			10/1/1996								

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
--------------------	----------------------	-------------------	-----------------------	---------------	-------------	------------------	-----------	-----------------	----------------	-----------	-----------------------

Dataset Name: **FY 1999 Planning Data**

Page 8 of 12

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

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Carlsbad**

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

Site Summary Level: **Waste Isolation Pilot Plant**

HQ ID: **0010**

Project **CAO-3 / WIPP Transportation**

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
First ANL-E CH shipment to WIPP	CAO-003-005										
First Hanford CH shipment to WIPP	CAO-003-006										
First Hanford RH shipment to WIPP	CAO-003-018										
First INEEL CH Shipment to WIPP	CAO-003-001										
First INEEL RH shipment to WIPP	CAO-003-020										
First LANL CH Shipment to WIPP	CAO-003-002										
First LANL RH shipment to WIPP	CAO-003-012										
First LLNL CH shipment to WIPP	CAO-003-009										
First Mound CH shipment to WIPP	CAO-003-007										
First NTS CH shipment to WIPP	CAO-003-010										
First ORNL CH shipment to WIPP	CAO-003-013										
First ORNL RH shipment to WIPP	CAO-003-014										
First RFETS CH Shipment to WIPP	CAO-003-003										
First SQS CH shipment to WIPP	CAO-003-008										
First SQS RH shipment to WIPP	CAO-003-016										
First SRS CH shipment to WIPP	CAO-003-004										
First SRS RH shipment to WIPP	CAO-003-017									Y	
Last ANL-E CH shipment to WIPP	CAO-003-026										
Last Hanford CH shipment to WIPP	CAO-003-029										
Last Hanford RH shipment to WIPP	CAO-003-030										
Last INEEL CH shipment to WIPP	CAO-003-025										

Dataset Name: **FY 1999 Planning Data**

Page 9 of 12

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

Project Baseline Summary Report

Data Source: **EM CDB**

Report Number: **GEN-01b**

Operations/Field Office: **Carlsbad**

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

Site Summary Level: **Waste Isolation Pilot Plant**

HQ ID: **0010**

Project **CAO-3 / WIPP Transportation**

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
Last INEEL RH shipment to WIPP	CAO-003-022										
Last LANL CH shipment to WIPP	CAO-003-032										
Last LANL RH shipment to WIPP	CAO-003-033										
Last LLNL CH shipment to WIPP	CAO-003-034										
Last Mound CH shipment to WIPP	CAO-003-011										
Last NTS CH shipment to WIPP	CAO-003-015										
Last ORNL CH shipment to WIPP	CAO-003-023										
Last ORNL RH shipment to WIPP	CAO-003-024										
Last RFETS CH shipment to WIPP	CAO-003-019										
Last SQS CH shipment to WIPP	CAO-003-028										
Last SQS RH shipment to WIPP	CAO-003-027										
Last SRS CH shipment to WIPP	CAO-003-031										
Last SRS RH shipment to WIPP	CAO-003-021									Y	
Project Mission Complete	CAO-003-035					Y					
EPA approval of first shipping sites, INEEL.											
EPA approval of first shipping sites, RFETS.											
Begin Paths to Closure and Life Cycle Costs				Y							Beginning of Paths to Closure and Life Cycle Costs

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
----------------------	-------	-----------------	-----------------	-----------------	-----------------	--------------	-------------	--------------	--------------	--------------	--------------	--------------	--------------	--------------

Dataset Name: **FY 1999 Planning Data**

Page 10 of 12

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

Project Baseline Summary Report

Data Source: **EM CDB**
 Operations/Field Office: **Carlsbad**
 Site Summary Level: **Waste Isolation Pilot Plant**
 Project **CAO-3 / WIPP Transportation**

Report Number: **GEN-01b**
 Print Date: **3/9/2000**
 HQ ID: **0010**

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
----------------------	-------	--------------------	--------------------	--------------------	--------------------	-----------------	----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------

Tech.

Deployed	Ntd	2.00	0.00	2.00					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
----------------------	-------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	---------------------------	---------------------------	---------------------------	---------------------------	---------------------------

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
----------------------	-------	---------------------------	---------------------------	---------------------------	---------------------------	---------------------------	---------------------------	---------------------------	------------	--------------------

Tech.

Deployed	Ntd								1.00	2.00
----------	-----	--	--	--	--	--	--	--	------	------

Technology Needs

Site Need Code: CAO-99-01

Site Need Name: On-line hydrogen and VOC analysis using low cost microsensors for CH-TRU and RH-TRU waste containers

Focus Area Work Package ID: Pu-02-Stabilization

Focus Area Work Package: Miscellaneous Pu Residue Stabilization and Disposition

Focus Area: PLUTOFA

Agree with Technology Link: N

Benefits (Cost, Risk Reduction, Both): Cost

Technologies

Cost Savings (in thousands of dollars)

Range of Estimate

Project Baseline Summary Report

Data Source: **EM CDB**

Operations/Field Office: **Carlsbad**

Site Summary Level: **Waste Isolation Pilot Plant**

Project **CAO-3 / WIPP Transportation**

Report Number: **GEN-01b**

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

HQ ID: **0010**

Technology Deployments

<u>Deployment Status</u>	<u>Deployment Year</u>		
	<u>Planned</u>	<u>Forecast</u>	<u>Actual Date</u>
Technology Name: Matrix Depletion Program Support			
Potential Deployment	1999		
Technology Name: Headspace Gas Sampling of RH-TRU Waste Containers			
Potential Deployment	2000		