

HNH-SP-1231

Revision 0

UC-900

# **HAMMER**

## **FY 1998 Multi-Year Work Plan**

### **WBS #1.9**

Date Published

**September 1997**

**Prepared for the U.S. Department of Energy  
Assistant Secretary for Environmental Management**

**Project Hanford Management Contractor for the  
U.S. Department of Energy under Contract DE-AC06-96RL13200**

**Approved for public release**

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*See below*  
 Chris Willingham for PC  
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MSIN: G5-51

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Karen McGinnis  
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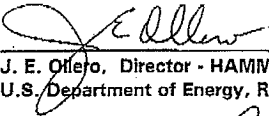
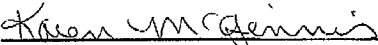
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## APPROVALS:

  
\_\_\_\_\_  
L. L. Piper, Deputy Manager  
U.S. Department of Energy, Richland Operations Office9/27/97  
Date  
\_\_\_\_\_  
J. E. Offero, Director - HAMMER Program  
U.S. Department of Energy, Richland Operations Office9/26/97  
Date  
\_\_\_\_\_  
R. P. Coe, Director Training  
Fluor Daniel Hanford, Inc.9/26/97  
Date  
\_\_\_\_\_  
K. A. McGinnis, Manager HAMMER Program  
Fluor Daniel Hanford, Inc.Date  
9/26/97

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## 1.0 TECHNICAL BASELINE

### 1.1 Mission Statement

HAMMER is a federal training and education center developed to promote realistic, hands-on training for worker health and safety that creates a partnership among DOE, its contractors, other government agencies (Federal, state, and local), labor, tribal governments, selected institutions of higher education and the private sector. Congress first appropriated funds for the program in fiscal year 1994, as a line item.

### 1.2 Boundary Diagram with Major Facilities

Table A.1-1 Generators to HAMMER Project

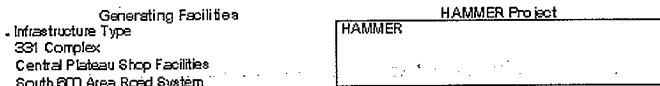


Table A.1-2 Receivers for HAMMER Project



### 1.3 Facility Responsibility Assignment Matrix

Table A.1-3 Facility Responsibility Assignment Matrix

Asset	Life Cycle							
	Program Planning	Pre Conceptual	Conceptual	Execute			Close Out	
				Design	Construction	Turnover	Operations & Maintenance	D&D
							Post Operations	
HAMMER	RL-HM01				RL-HM01	RL-HM01	RL-HM01	RL-HM01

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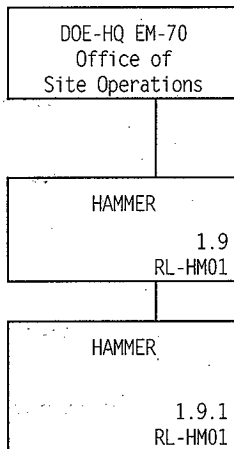
## 1.4 Planning Assumptions

The HAMMER planning assumptions include:

- 1) Funding is received as outlined to operate the HAMMER facility. In addition, ~ \$300K will be obtained via the FDH Indirects to assist in training of Hanford Site students.
- 2) Contracting processes will be in place to successfully host and broker training at HAMMER.

## 2.0 Project Hanford Breakdown Structure

### 2.1 PHBS Hierarchy



### 2.2 Tracking Workscope Changes from FY 1997 to FY 1998

PBS #	PBS Title	PHBS WBS	FY97 RL WBS	1997 ADS	1998 ADS	1999 ADS
RL-HM01	HAMMER	1.9.1.1	8.2	7221 7221-1	7221 7221-1	7221 7221-1

### 3.0 Schedule Baseline

#### 3.1 Project SMBS by PBS

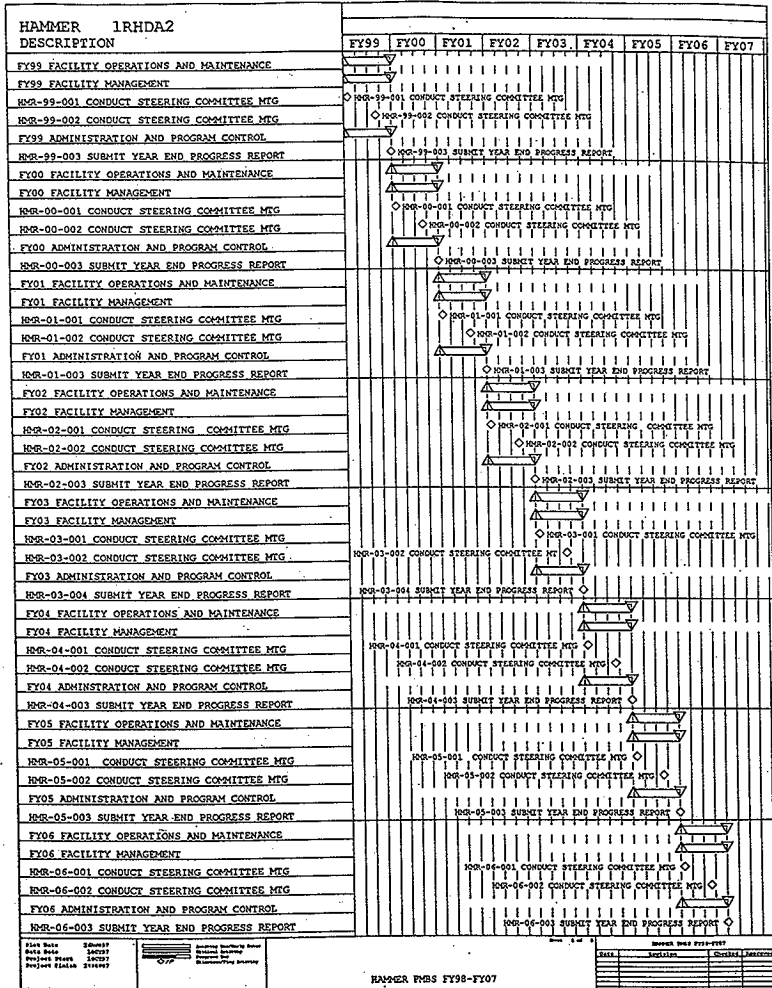
The HAMMER Project SMBS is located on Pages 4 & 5.

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WBS 1.9

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3.1 Project SMBS by PBS



## WBS 1.9

FY 1998 Work Plan

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### 3.1 Project SMBS by PBS

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#### 4.0 Cost Baseline

##### 4.1 Estimate Basis

The HAMMER Program utilizes activity based costing for the preparation of the FY98 budget estimate. Definition of the operational required work scope and supporting schedule were developed at the task and sub-task level, resource loaded, quantified and estimates were calculated using planning rates and escalation defined by the FDH CFO and approved by DOE-RL. Traceability defining the estimate is provided by the unification of the estimate, resource loaded schedule, and the budget into a consolidated planning process.

##### 4.2 Summary of Life Cycle Cost Baseline (BCWS) by Project

The HAMMER Summary Life Cycle BCWS is located on Pages 7 & 8.

##### 4.3 Summary of Life Cycle Budget Authority (B/A) by Project

The HAMMER Summary Life Cycle B/A is located on Pages 9 & 10.

##### 4.4 Cost Baseline (BCWS) for Execution Year by Month by Fund Type

The FY 1998 HAMMER BCWS by month by Fund Type is located on Page 11.

##### 4.5 Cost Baseline (BCWS) for Execution Year by Month by Cost Element

The FY 1998 HAMMER BCWS by month by cost element is located on Page 12.



#### 4.2 Summary of Life Cycle Cost Baseline (BCWS) by Project

**HAMMER**  
SUMMARY OF LIFE CYCLE COST BASELINE (BCWS) BY YEAR  
BY PROJECT BASELINE SUMMARY (PBS)  
FY 1998

(\$000\$)

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**NOTE: REFER TO APPENDIX A FOR ADDITIONAL DETAILS**

1) Life Cycle costs do not include ~ \$350K per year (FY 1999 - FY 2006) for workscope associated with improving worker safety and health, and assuring training at HAMMER fulfills regulatory requirements and meets training requirements throughout the Hanford Site and DOE complex.

## FY 1998 Work Plan

## A 2 Summary of Life Cycle Cost Baseline (BCWS) by Project

**HAMMER**  
**SUMMARY OF LIFE CYCLE COST BASELINE (BCWS) BY YEAR**  
**BY PROJECT BASELINE SUMMARY (PBS)**  
**FY 1998**

(\$000s)

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#### 4.3 Summary of Life Cycle Budget Authority (B/A) by Project

HAMMER  
 SUMMARY OF LIFE CYCLE BUDGET AUTHORITY (BIA) BY YEAR  
 BY PROJECT BASELINE SUMMARY (PBS)  
 FY 1998

(\$000s)

PROJECT WBS : 1.9		SUBTOT										
PBS TITLE	PBS NO	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	FY1997- FY2006
HAMMER	RL-HM01	13,203	5,053	4,934	4,799	4,895	5,005	4,963	4,930	4,896	4,753	57,421
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**NOTE: REFER TO APPENDIX A FOR ADDITIONAL DETAILS**

- 1) Life cycle costs do not include ~ \$850K per year (FY 1999 - FY 2006) for workspace associated with improving worker safety and health, and assessing training at HAMMER fulfills regulatory requirements and meets training requirements throughout the Hanford Site and DOE complex.

#### 4.3 Summary of Life Cycle Budget Authority (B/A) by Project

## (\$000s)

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#### 4.4 Cost Baseline (BCWS) for Execution Year by Month by Fund Type

HAMMER  
FY 1998 COST BASELINE (BCWS) BY MONTH BY FUND TYPE BY PROJECT  
EXECUTION YEAR  
(\$000s)

PROJECT WBS	PROJECT TITLE	FUND TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.9	HAMMER	Operating Expense - FDH	378	398	357	388	368	447	388	435	379	363	427	412	4,710
		Operating Expense - RL												343	343
		CENRTC													0
		GPP													0
		Line Item													0
		Total BCWS/PWB	378	398	357	388	368	447	388	435	379	363	427	412	5,053
		Mgmt Reserve <sup>2</sup>													0
		Line Item Contingency <sup>2</sup>													0
		Offsite Transfers <sup>3</sup>													0
		Total	378	398	357	388	368	447	388	435	379	363	427	412	5,053

FY 1998 Work Plan

4.5 Cost Baseline (BCWS) for Execution Year by Month by Cost Element

HAMMER  
FY 1998 COST BASELINE (BCWS) BY MONTH BY COST ELEMENT BY PROJECT  
EXECUTION YEAR  
(\$000s)

PROJECT WBS	PROJECT TITLE	COST ELEMENT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
1.9	HAMMER**	0 Salaries	157	194	148	158	168	215	169	213	162	148	203	187	2,119
		1 Material	27	21	24	25	22	28	26	23	26	25	25	25	295
		2 Purchased Serv	72	66	65	65	59	68	68	62	68	65	65	68	781
		3 Other Contr Chgs	1	1	1	1	1	1	1	1	1	0	1	1	10
		4 Internal Serv	28	22	26	28	23	27	27	25	27	26	26	27	310
		5 Internal Chgs	0	0	0	0	0	0	0	0	0	0	0	0	0
		6 LMSI	19	15	18	18	16	19	19	17	19	18	17	17	212
		7 Overheads	97	108	95	97	100	114	101	114	99	94	111	106	1,238
		8 Revenue	-29	-23	-26	-26	-24	-28	-28	-25	-28	-26	-26	-26	-315
		9 Enterprise Cos	6	4	5	5	5	5	5	5	5	5	5	7	62
		TOTAL FDR	376	366	357	368	389	447	388	435	378	353	427	412	4,710
		RL	0	0	0	0	0	0	0	0	0	0	0	0	343
		TOTAL BCWS FDR	376	366	357	368	389	447	388	435	378	353	427	412	4,710

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## 5.0 Performance Measures/Matrix

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SECTION II - PROJECT BASELINE SUMMARY (PBS) LEVEL

## 1.0 Technical Baseline

### 1.1 Project Mission

The primary purpose of HAMMER is to become the premier hands-on training center for: Environmental and Waste Management; Emergency Operations; Fire Operations; Occupational Safety and Health, Transportation, Law Enforcement and Associated Technologies.

The partnership will leverage the taxpayers investment in training for the workers and emergency responders engaged in the cleanup of the DOE sites by creating a network of training providers and customers. Nationally recognized training programs hosted at HAMMER will allow for best-in-class training available to HAMMER partners while maximizing the use of the permanent facility. HAMMER will provide training critical to the clean-up activities at Hanford and the DOE complex. HAMMER will also provide training services to non-DOE customers. As such HAMMER will be a source for economic development in the region.

The core of HAMMER is the 120-acre (80-acres developed) centralized regional training center that accommodates an array of large hands-on props, other job specific training devices and more than 30 training areas. These will allow the training providers to simulate job site activities, especially for hazardous material and emergency response challenges. This facility not only provides typical classroom training, but also realistic props and settings for hands-on training. This variety of training experience does not exist elsewhere at this time.

### 1.2 Project End Point Targets

HAMMER will be an operational training program well into the future. HAMMER will proactively strive for continuous improvement by brokering and hosting the finest training possible and identifying only high quality training providers to meet the needs of our customers. In addition HAMMER will seek out and promote new and innovative approaches to providing hands-on training, in particular those approaches that incorporate elements of realistic job scenarios with emphasis on health and safety practices into the curriculum. The current end state for the HAMMER program is 09/30/2030.

### 1.3 Major Facilities

#### 1.3.1 Facility Description

The major facility for the HAMMER Project is the HAMMER facility.

#### 1.3.2 Facility Technical Logic

The technical logic for the HAMMER Facility is captured in the facility's functional flow block diagram which shows the functions performed for each applicable life cycle phase of the facility and the sequence in which the functions are executed.

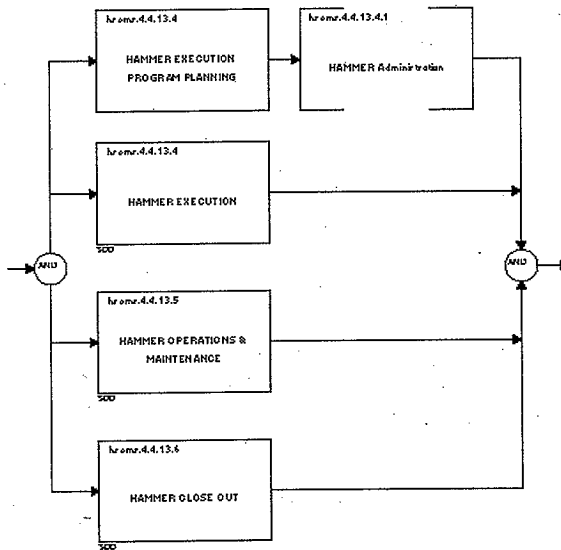


Figure B-2 HAMMER

### 1.3.3 Life-Cycle Functional Descriptions & Requirements

#### 1.3.3.1 HAMMER Execution Program Planning Work Scope Summary

Functions that include planning and developing the overall program; establishing broad priorities; providing program technical direction; preparing and defending the program budget; controlling milestones; integrating all components of the program; providing public and private sector policy liaison; expediting interface activities and follow-up actions; and retaining overall accountability for program success.

#### 1.3.3.2 HAMMER Construction Work Scope Summary

Construction of the HAMMER Project was completed in FY 1997. This does not apply in FY 1998.

#### 1.3.3.3 HAMMER Turnover Work Scope Summary

Construction of the HAMMER Project was completed in FY 1997. This does not apply in FY 1998.

#### 1.3.3.4 HAMMER Operations & Maintenance Work Scope Summary

HAMMER will host and facilitate hands-on performance based training appropriate to its customer base, facilitate training of emergency responders along the hazardous materials transportation routes, create a highly skilled workforce capable of meeting the cleanup needs of the DOE by hosting proven training programs, decrease recordable injuries and exposures while increasing productivity at Hanford, demonstrate and test new technologies in each of the Product Lines at HAMMER.

Beyond Hanford, the entire DOE complex will benefit from the training approaches demonstrated at the HAMMER facility. Thus, HAMMER will: Train to save lives and reduce injuries; Reduce training costs, and Establish a new training industry for the region.

#### 1.3.3.5 HAMMER Operations and Maintenance Specific Functions

HAMMER will broker and host training in seven specific Product Lines:

- Environmental and Waste Management
- Emergency Operations
- Fire Operations
- Occupational Safety and Health
- Transportation\*
- Law Enforcement\*
- Associated Technologies\*

\*Product Line is in the early developmental stage and not fully funded.

The HAMMER staff will:

- As a virtual organization HAMMER will broker and host the training that best meets the needs of our customers; utilizing a quality control/quality assurance continuous improvement approach to training.
- Operate and maintain the permanent HAMMER facility to include professional operation of training equipment and props; maintenance of facilities and equipment; training support services; facility safety support; and business management.
- Form partnerships to share cost and resources, and facilitate delivery of high quality training at reduced costs.
- As a virtual organization HAMMER will broker educational and training products to other federal agencies, tribal, state, local governments and the private sector by matching needs with available resources.
- Maintain the active involvement of the HAMMER partners to ensure continued support, satisfaction and the appropriate high quality products for achieving greater worker safety and productivity.
- Further develop emergency response programs for the region and support national programs as requested by DOE.
- Evaluate new techniques and approaches to training and collect data on the efficiency of these methods so as to provide the research basis for improvement in approaches and techniques.

### 1.3.3.6 HAMMER Post Operations Work Scope Summary

This section does not apply to HAMMER. HAMMER does not treat, store or dispose of any waste. No additional activities will be required to allow for a safe decommissioning of the HAMMER facility.

### 1.3.3.7 Maintain Safe & Compliant HAMMER Facility

The facilities, structures and equipment associated with HAMMER will be maintained until they are ready for cleanup.

### 1.3.3.8 Transition HAMMER Facility

Initiate the transition phase of HAMMER to prepare for final demolition.

### 1.3.3.9 HAMMER D&D Workscope Summary

This section does not apply to HAMMER. HAMMER does not treat, store or dispose of any waste. No additional activities will be required to allow for a safe decommissioning of the HAMMER facility.

## 1.3.4 Facility Boundary Diagram

Table B.1-1 Generators to HAMMER

Generating Facilities	HAMMER
Infrastructure Type	<div style="border: 1px solid black; width: 100%; height: 100%;"></div>
331 Complex	
Central Plateau Shop Facilities	
South 600 Area Road System	

Table B.1-2 Receivers for HAMMER

HAMMER	Receiving Facilities
<div style="border: 1px solid black; width: 100%; height: 100%;"></div>	Undefined Type Offsite Sites

### 1.3.5 Interface Descriptions & Summary-Level Forecast

Table B.1-3 Incoming Forecasted Infrastructure Streams for HAMMER

Source	Stream	Category	Period	Baseline	Units
331 Complex	<u>Non-rad Standards (Calibrations) for HAMMER</u>	Non-rad Standards (Calibrations)	1997 - 1997	80	calibrations
	<u>Non-rad Standards (Calibrations) for HAMMER</u>				
Central Plateau Shp Facilities	<u>Lifting (Cranes) for HAMMER</u>	Lifting (Cranes)	1997 - 1997	8	crane days
	<u>Lifting (Cranes) for HAMMER</u>				
South 800 Area Road System	<u>Heavy Equipment for HAMMER</u>	Heavy Equipment	1997 - 1997	8	equipment-days
	<u>Heavy Equipment for HAMMER</u>				
	<u>Sedans/Light Trucks for HAMMER</u>	Sedans/Light Trucks	1997 - 1997	4	no. of vehicles
	<u>Sedans/Light Trucks for HAMMER</u>				
	<u>Heavy Trucks for HAMMER</u>	Heavy Trucks	1997 - 1997	285	vehicle-hrs
	<u>Heavy Trucks for HAMMER</u>				

#### B.1.1.3.1.5.2 Outputs from HAMMER

Table B.1-4 Outgoing Streams for HAMMER with No Forecast

Stream	Status
HAMMER Training Facilities for Reuse Surplus HAMMER training facilities for reuse outside the Hanford cleanup mission.	No forecast provided.



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#### 1.4 Drivers

The key drivers for HAMMER include:

Name	Title
Section 3140	Energy & Water Development Appropriations Bill

The various regulations and requirements pertaining to protection of workers in hazardous waste operations and emergency response include:

Name	Title
29 CFR 1910	Occupational Safety and Health Administration
10 CFR 835	Occupational Radiation Protection
40 CFR 355 Part 30	Emergency Planning & Notification
49 CFR 100-178	Transportation
SARA Title II	Superfund Amendments and Reauthorization Act of 1986
WAC 173-303 Section 355	Superfund Amendments and Reauthorization Act Title III Coordination
NFPA Standard 472	National Fire Protection Association
DOE Order 151.1	Comprehensive Emergency Management System

## 1.5 Risk Management

### Risk Management

HAMMER is critical to delivering hands-on training to the Hanford Site. In addition HAMMER plays an extremely important role in preparing offsite emergency responders for DOE HazMat shipments. Worker safety is the #1 priority onsite and HAMMER is an integral part of achieving this priority. Thousands of workers are exposed to the risks of handling hazardous material and wastes, responding to emergencies, and environmental restoration activities. Protecting workers from lost-time injuries or longer term work-related health effects cannot be accomplished by engineering safety controls alone. The workers need systematic training appropriate to their tasks and associated risks. HAMMER's hands-on training is the most effective method to satisfy these knowledge, skill and ability (KSA) requirements. Hands-on performance based training is proven to sharply increase the retention of KSA during training. Workers and emergency responders are trained to recognize and respond appropriately to anticipated and unanticipated hazards in simulated work environments.

In 1992, the DNFSB wrote a 36 page report criticizing the training provided to workers at Hanford as inadequate to qualify them to accomplish their work assignments, and do it safely. In the publication "Hazards Ahead" Tara O'Toole also criticized the worker training programs at DOE for being inadequate to prepare the workers for the unknowns in the hazardous environments where they are required to work. There have been a number of incidents at the Hanford Site which have identified inadequate training as a contributing factor (root cause) thus validating these findings. Hanford has had two fatal accidents. There have been several water hammer incidents that have resulted in damaged equipment and near misses for severe injuries to workers. There have been a number of accidents and near accidents related to crane operations. The lack of appropriate emergency response training in the explosion at PFP resulted in inappropriate and untimely emergency response and emergency notifications, and inadequate handling and treatment of exposed workers.

The HAMMER risk evaluation narrative is shown below:

- |                              |      |
|------------------------------|------|
| 1) PUBLIC SAFETY AND HEALTH: | 2B-M |
| JUSTIFICATION:               |      |

If not funded, workers and emergency responders will not receive the essential hands-on training needed to safely perform their work. Proper training in Environmental/Waste Management, Emergency Operations, Fire Operations, Occupational Safety and Health, Transportation, and Law Enforcement is

essential to ensure public safety. Workers and emergency responders may be ill prepared to provide assistance required in the event of an emergency thus increasing the health and safety risks of workers and emergency responders. Also, the capabilities of providing training for foreign border interdiction personnel would be severely limited until developed elsewhere - approximately 5-10 years. With the downsizing at Hanford resulting in the loss of skilled senior personnel, HAMMER's mission is essential to ensure the existing workforce maintains the skills necessary to protect the health and safety of the public. Also, Hanford's changing mission requires retraining of the existing workforce to clean up the most dangerous waste site in the United States. DOE would not meet its commitment to ensure public and private entities along transportation corridors are properly trained. Consequently there is a potential of releases affecting the public with eventual excessive exposure to the releases. The probability of occurrence is medium.

2) WORKER SAFETY AND HEALTH: 2B-H  
JUSTIFICATION:

If not funded there will be inadequate training to the workers and emergency responders, thus increasing health and safety risks including occupational fatalities. Workers and emergency responders would not receive the hands-on training utilizing state-of-the-art props. Hands-on training is the best method to ensure the workers experience the level of stress that would occur during an actual event. This would be done under controlled conditions. It is also best in training the workers to effectively identify safety hazards associated with operation of heavy machinery, electrical hazards, exposure to extreme heat and cold, and confined space operations, fire and explosion hazards, exposure to toxic chemicals and radiation. Additionally workers would not be properly trained to encounter hazards associated with hazardous waste work. This could result in potentially dangerous situations such as being trapped in confined spaces, exposure to radiation and hazardous materials. The probability of occurrence is high due to hazardous material/radiological releases without proper training.

3) ENVIRONMENTAL PROTECTION: 2B-H  
JUSTIFICATION:

Workers would not be properly trained to deal with an emergency and will ultimately aggravate the environmental problems associated with the event. Without HAMMER, the redeployment training on new ER & D&D technology would be hampered, which would increase costs and decrease safety and efficiency. This would delay environmental clean-up and future land use of the Hanford site.

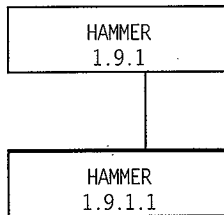
DOE would not meet its commitment to ensure public and private entities along transportation corridors are properly trained. Additionally workers not will not receive the essential hands-on training needed to safely perform their work in facility operations and waste management which will result in significant impact on the environment with very high probability of occurrence due to hazardous material/radiological releases without proper training.

HAMMER will correct these glaring training deficiencies by utilizing the recognized best providers of training, the best proven training techniques, and state-of-the-art hands-on props and simulations to training the workers to perform their assigned tasks safely and correctly.

Without HAMMER, we will continue to always do what we've always done in training. Thus, we will get what we always got in work performance as described above in the first paragraph.

## 2.0 WORK BREAKDOWN STRUCTURE

### 2.1 Work Breakdown Structure Hierarchy



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2.2 Work Breakdown Structure Dictionary

WORK BREAKDOWN STRUCTURE DICTIONARY			
1. ACTIVITY TITLE  HAMMER	2. DATE  8/15/97	3. PBS Number  RL-HM01	4. Dict Rev  0
4. Contract WBS No.  1.9	5. Corresponding FDS No.		6. Baseline CR No.
6. Organization Name  HAMMER			7. B & R No.
<p>8. Scope of Work</p> <p>Specific support includes:</p> <ol style="list-style-type: none"> <li>1) Provide FDH program management to appropriately plan, track and report the progress and cost of HAMMER activities.</li> <li>2) HAMMER will host programs that are developed and offered by labor, other government agencies and the private sector to reduce the onsite costs of maintaining specialized training courses. These programs hosted at HAMMER will be able to provide hands-on, practical training in realistic situations.</li> <li>3) The HAMMER facility will host many different types of training, education and evaluation programs. These programs will be offered in the following areas: <ul style="list-style-type: none"> <li>• Environmental and Waste Management</li> <li>• Emergency Operations</li> <li>• Fire Operations</li> <li>• Occupational Safety and Health</li> <li>• Transportation*</li> <li>• Law Enforcement*</li> <li>• Associated Technologies*</li> </ul> <p>* Product Line is in the early developmental stage and not fully funded.</p> </li> <li>4) Maintain the HAMMER partnerships, facilitate worker health and safety training programs, and emergency response training. This will include hosting two HAMMER Steering Committee meetings with HAMMER partners.</li> <li>5) HAMMER will continue to provide evaluations of hosted training programs to assure compliance with laws, regulations, site requirements and requirements of HAMMER's Continuous Improvement Program.</li> <li>6) HAMMER will actively participate in various site forums to gain an understanding of Hanford site needs.</li> </ol>			

### 2.3 Work Breakdown Structure Responsibility Assignment Matrix

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### 3.0 SCHEDULE BASELINE

#### 3.1 Project Master Baseline Schedule (PBS)

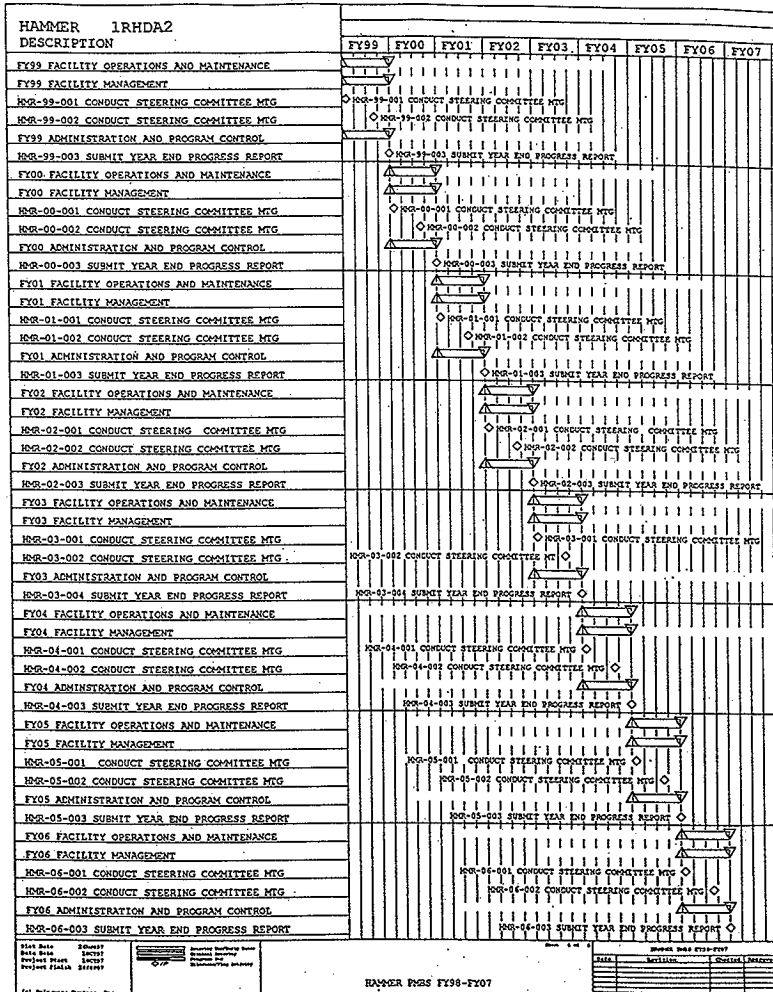
The HAMMER Project Master Baseline Schedule is located on pages 28 & 29.

#### 3.2 Execution Year PBS

The HAMMER Execution Year PBS is located on pages 30-33.



### 3.1 Project Master Baseline Schedule



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### 3.1 Project Master Baseline Schedule

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## 3.2 Execution Year PBS

WBS #'S	DESCRIPTION	FY98														
		S	O	N	D	J	F	M	A	M	J	J	A	S	O	N
1RHD2.1 FACILITY MANAGEMENT																
1.RHDA.2.1.01.	FACILITY MANAGEMENT															
1.RHDA.2.1.01.	HRM-98-001 CONDUCT A STRATEGIC PLANNING WORKSHOP															
1.RHDA.2.1.01.	HRM-98-003 MOVE TARGETED ACT FROM CENTRAL TRNG															
1.RHDA.2.1.01.	HRM-98-009 REVISE/EXECUTE STAFFING PLAN															
1.RHDA.2.1.01.	HRM-98-011 PREPARE A MID-YEAR PROGRAM REVIEW															
1.RHDA.2.1.01.	HRM-98-022 CONDUCT 2 STEERING COMMITTEE MEETING															
1RHD2.2 ADMINISTRATION AND PROGRAM CONTROL																
1.RHDA.2.2.01.01.	FACILITY COORDINATION															
1.RHDA.2.2.01.02.	FACILITY TRAINING SUPPORT															
1.RHDA.2.2.02.01.	PROVIDE PROGRAM PLANNING AND SCHEDULING															
1.RHDA.2.2.02.01.	HRM-98-002 UPDATE THE INTEGRATED MGMT SCHEDULE															
1.RHDA.2.2.02.02.	PROVIDE PROGRAM REPORTING															
1.RHDA.2.2.02.02.	HRM-98-017 SUBMIT FY98 ANNUAL REPORT TO DOE-RL															
1.RHDA.2.2.02.02.	HRM-98-021 DOCUMENT RESULTS/FACILITY/SYS/PROPS															
1.RHDA.2.2.02.03.	MANAGE/CONTROL PROGRAM SCOPE AND BUDGETS															
1.RHDA.2.2.03.01.	SUPPORT PROCUREMENT OF MATERIAL/SERVICES															
1.RHDA.2.2.03.02.	CONDUCT STUDENT BILLING/MANAGE BILLING POOLS															
1.RHDA.2.2.03.03.	CONTRACT ADMINISTRATION															
1.RHDA.2.2.03.04.	PROVIDE BUSINESS MANAGEMENT															
1.RHDA.2.2.03.04.	HRM-98-007 DEV. FINANCIAL SYS FOR FUTURE USE															
1.RHDA.2.2.03.04.	HRM-98-010 GENERATE \$130K REVENUE															
1.RHDA.2.2.04.	PLANNING AND BUSINESS SUPPORT															
1.RHDA.2.2.04.	HRM-98-004 UPDATE STRATEGIC MGMT PLAN															
1.RHDA.2.2.04.	HRM-98-015 ESTABLISH HAMMER BASELINE PROCESS															
1.RHDA.2.2.04.	HRM-98-006 UPDATE/EXPAND/IMPLEMENT BUSINESS PLAN															
1.RHDA.2.2.04.	HRM-98-008 IMPLEMENT INDEPENDENT INFO MGMT SYS															
1.RHDA.2.2.04.	HRM-98-020 EXECUTE THE HAMMER BUSINESS PLAN															
1RHD2.3 FACILITY OPERATIONS AND MAINTENANCE																
1.RHDA.2.3.01.	PROVIDE MAINTENANCE MANAGEMENT															
1.RHDA.2.3.02.	FACILITY MAINTENANCE															
1.RHDA.2.3.03.	HFD MAINTENANCE AND SUPPORT															
1.RHDA.2.3.04.	FACILITY OPERATIONS															
1.RHDA.2.3.05.	FLEET OPERATION SERVICE															
1.RHDA.2.3.06.	INDUSTRIAL SAFETY AND HYGIENE															
1.RHDA.2.3.07.	HAZARDOUS WASTE'S MGMT															
1.RHDA.2.3.08.	HERBICIDES/PESTICIDE															
1.RHDA.2.3.09.	TRANSPORTATION															
1.RHDA.2.3.10.	GENERAL SERVICES & ASSESSMENTS															
1.RHDA.2.3.11.	UTILITY OPERATIONS															
1.RHDA.2.3.12.	TRAINING SUPPORT															
1.RHDA.2.3.13.	JANITORIAL SERVICES															
1.RHDA.2.3.14.	FLEET MAINTENANCE															
1.RHDA.2.3.15.	WASTE HANDLING															
1RHD2.4 TRAINING PROGRAM SUPPORT & DEVELOPMENT																
1.RHDA.2.4.01.01.01	SAFETY/HEALTH DECISIONS FOR MANAGERS															
1.RHDA.2.4.01.01.01	TREATMENT TECHNOLOGIES FOR SUPERFUNDS															
1.RHDA.2.4.01.01.01	RADIATION SAFETY AT SUPERFUND SITES															
1.RHDA.2.4.01.01.01	CHEMICAL SAFETY AUDITS															
1.RHDA.2.4.01.01.01	INVENTORY PRELIMINARY ASSESSMENT															
1.RHDA.2.4.01.01.01	INTRO SITE INSPECTION TRAINING															
1.RHDA.2.4.01.01.02	NEGOTIATE COURSES OFFERED															
1.RHDA.2.4.01.01.02	SET SCHEDULE															
1.RHDA.2.4.01.01.02	HOST EPA NATIONAL CLASSES															
1.RHDA.2.4.01.01.03	SITE DEPT. OF TRANSPORTATION COURSES															
HAMMER PROGRAM FY98 FY98 MYWP SUMMARY SCHEDULE																

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### 3.2 Execution Year: PBS

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### 3.2 Execution Year PBS.

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### 3.3 Milestone List

Milestone Control Number	MS Level	Milestone Title	Milestone Completion Date
HMR-98-001	RL	Conduct a Strategic Planning Workshop	10/15/97
HMR-98-002	CNTR	Update the FY 1998 HAMMER Integrated Management Baseline Schedule	10/30/97
HMR-98-003	RL	Transfer Targeted Training from Central Training to HAMMER	11/20/97
HMR-98-004	RL	Update the HAMMER Strategic Management Plan	11/20/97
HMR-98-005	CNTR	Develop OSH Product Line Subcommittee	11/20/97
HMR-98-006	RL	Update/Expand the HAMMER Business Plan	12/15/97
HMR-98-007	RL	Develop a Financial System Plan for HAMMER for the Future	01/30/98
HMR-98-008	RL	Develop an Independent Information Management System Plan	01/30/98
HMR-98-009	RL	Revise and Execute a Staffing Plan to Ensure HAMMER's Success	02/27/98
HMR-98-010	CNTR	Generate \$130K of Revenue	03/27/98
HMR-98-011	RL	Prepare a Mid-Year Program Review	03/27/98
HMR-98-012	CNTR	Complete the Revegetation of HAMMER	05/29/98
HMR-98-013	RL	Conduct a Workshop to Identify Native American Training and Emergency Operations Needs	05/29/98
HMR-98-014	CNTR	Perform HAMMER VPP Safety Improvement Self Evaluation	06/26/98
HMR-98-015	RL	Establish HAMMER Baselines	06/26/98
HMR-98-016	RL	Develop Technology Deployment Partnerships	08/28/98
HMR-98-017	RL	Submit FY 1998 Annual Report to DOE-RL	09/30/98
HMR-98-018	RL	Implement Total Quality/Malcom Baldrige Principles at HAMMER	09/30/98
HMR-98-019	CNTR	Perform Comprehensive Course Evaluations at HAMMER	09/30/98
HMR-98-020	RL	Execute the HAMMER Business Plan	09/30/98
HMR-98-021	RL	Document Results of HAMMER's Facilities, Systems and Props	09/30/98
HMR-98-022	RL	Conduct Two HAMMER Steering Committee Meetings	09/30/98

\* TPA, HQ, RL, and selected contractor milestones

\* On Tri-Party Agreement Milestones, also designate if they are HQ, RL



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### 3.3 Milestone Description Sheets

MILESTONE DESCRIPTION SHEET			
Title: Conduct a Strategic Review Workshop			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 10/15/97
Control Number: HMR-98-001			Rev:
<b>MILESTONE TYPE:</b>  DOE-HQ <input checked="" type="checkbox"/> DOE-RL DOE-FO CONTRACTOR	<b>DIVISION:</b>  State Federal <input checked="" type="checkbox"/> DOE RCRA TPA Number	<b>DELIVERABLE:</b>  Report Letter Drawings <input checked="" type="checkbox"/> Other (specify) (See Below)	<b>ADDRESS TO:</b>  DOE-HQ <input checked="" type="checkbox"/> DOE-RL Other (specify)
<b>Milestone Description:</b>  Conduct a mandatory workshop for all HAMMER employees to review and analyze the key activities and accomplishments of the program during fiscal year 1997..			
<b>Description of what constitutes completion of this milestone:</b>  Hold the workshop, including a discussion and documentation of the key accomplishments, lessons learned and plans for fiscal year 1998.			

**MILESTONE DESCRIPTION SHEET**

Title: Update the FY 1998 HAMMER Integrated Management Baseline Schedule			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 10/30/97
Control Number: HMR-98-002			Rev:
<b>MILESTONE TYPE:</b>  DOE-HQ DOE-RL DOE-FO X CONTRACTOR	<b>DIVISION:</b>  State Federal X DOE RCRA TPA Number	<b>DELIVERABLE:</b>  Report Letter Drawings X Other (specify) (See Below)	<b>ADDRESS TO:</b>  DOE-HQ X DOE-RL Other (specify)
<b>Milestone Description:</b>  Expand the HAMMER integrated management schedule.			
<b>Description of what constitutes completion of this milestone:</b>  Update and maintain current the integrated management schedule. Demonstrate and utilize schedule to manage the HAMMER Program. The operational schedule will include incorporation/integration of the principles and tools necessary for oversight and management of the facility. The schedule will be organized by the work breakdown structure, identifying tasks, work scope, milestones, resources, estimated resource cost, relationships and logic between tasks, resource usage, and the constraints and contracts that may influence the accomplishment of the tasks.			

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MILESTONE DESCRIPTION SHEET			
Title: Transfer Targeted Training from Central Training to HAMMER			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 11/20/97
Control Number: HMR-98-003			Rev:
<b>MILESTONE TYPE:</b>  DOE-HQ X DOE-RL DOE-FO CONTRACTOR	<b>DIVISION:</b>  State Federal X DOE RCRA TPA Number	<b>DELIVERABLE:</b>  Report Letter Drawings X Other (specify) (See Below)	<b>ADDRESS TO:</b>  DOE-HQ X DOE-RL Other (specify)
<b>Milestone Description:</b>  Transfer targeted training from Central Training to HAMMER.			
<b>Description of what constitutes completion of this milestone:</b>  Transfer the targeted training from Central Training to HAMMER. This includes; the transfer of budget, props and equipment, scheduling HAMMER resources, providing safety and other inspections, coordination with Central Training.			

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### MILESTONE DESCRIPTION SHEET

Title: Update the HAMMER Strategic Management Plan			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 11/20/97
Control Number: HMR-98-004			Rev:
<b>MILESTONE TYPE:</b>  DOE-HQ X DOE-RL DOE-FO CONTRACTOR	<b>DIVISION:</b>  State Federal X DOE RCRA TPA Number	<b>DELIVERABLE:</b>  Report Letter Drawings X Other (specify) (See Below)	<b>ADDRESS TO:</b>  DOE-HQ X DOE-RL Other (specify)
<b>Milestone Description:</b>  Update the HAMMER Strategic Management Plan to include each product line.			
<b>Description of what constitutes completion of this milestone:</b>  Update, revise and execute the Strategic Management Plan. The plan will provide long-range (5 years +) vision, mission, values, high level strategies and objectives for the HAMMER Program. HAMMER staff will be educated on the Strategic Management Plan.			

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MILESTONE DESCRIPTION SHEET			
Title: Develop OSH Product Line Subcommittee			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 11/20/97
Control Number: HMR-98-005			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL DOE-FO X CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<p><b>Milestone Description:</b></p> <p>Develop OSH Product Line Subcommittee.</p>			
<p><b>Description of what constitutes completion of this milestone:</b></p> <p>Outcomes of this meeting include; establish committee, define role of the committee, appoint members, establish objectives, and establish meeting schedule. Development of this subcommittee will nurture the HAMMER partnership by creating a broader base partnership.</p>			

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**MILESTONE DESCRIPTION SHEET**

<b>Title:</b> Update/Expand the HAMMER Business Plan	<b>Date:</b>
<b>Assigned To:</b> KA McGinnis - HAMMER	<b>CIN:</b>
<b>Program WBS Designator:</b> 1.9.1.1	<b>Due Date:</b> 12/15/97
<b>Control Number:</b> HMR-98-006	<b>Rev:</b>

<b>MILESTONE TYPE:</b>	<b>DIVISION:</b>	<b>DELIVERABLE:</b>	<b>ADDRESS TO:</b>
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)

**Milestone Description:**

Update/expand the HAMMER Business Plan to include marketing, revenue projections and economic development.

**Description of what constitutes completion of this milestone:**

Update the Business Plan. The plan will cover projected sales, revenue and costs and will address each product line. It will also include five-year projections and economic development potential.

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MILESTONE DESCRIPTION SHEET			
Title: Develop a Financial System Plan for HAMMER for the Future			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 01/30/98
Control Number: HMR-98-007			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<p><b>Milestone Description:</b></p> <p>Develop a plan for an independent, but interfaced, financial system to position HAMMER for the future. A phased approach will be used to develop modules in the order of greatest need. This system must interface with existing Site systems as well as other HAMMER information management systems. A key component of the financial system will be the ability to collect cost data and produce reports which support HAMMER management decisions as well as diverse customer needs. An activity based costing approach will support future budget projections as well as pricing, product line and other business decisions.</p>			
<p><b>Description of what constitutes completion of this milestone:</b></p> <p>Completion of this milestone will be reached upon delivery of an acceptable strategic plan documenting the general approach and targeted schedule for development of an independent, but interfaced, financial system which supports HAMMER objectives. A tactical plan will be produced following completion of this milestone which reflects a multi-year, phased implementation.</p>			

FY 1998 Work Plan

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**MILESTONE DESCRIPTION SHEET**

<b>Title:</b> Develop an Independent Information Management System Plan			<b>Date:</b>
<b>Assigned To:</b> KA McGinnis - HAMMER			<b>CIN:</b>
<b>Program WBS Designator:</b> 1.9.1.1			<b>Due Date:</b> 01/30/98
<b>Control Number:</b> HMR-98-008			<b>Rev:</b>
<b>MILESTONE TYPE:</b>  DOE-HQ X DOE-RL DOE-FO CONTRACTOR	<b>DIVISION:</b>  State Federal X DOE RCRA TPA Number	<b>DELIVERABLE:</b>  Report Letter Drawings X Other (specify) (See Below)	<b>ADDRESS TO:</b>  DOE-HQ X DOE-RL Other (specify)
<b>Milestone Description:</b>  Develop a plan for an independent, but interfaced information management system. A phased approach will be used to develop modules in the order of greatest need. The information management system must interface with existing Site systems as well as internally.			
<b>Description of what constitutes completion of this milestone:</b>  Completion of this milestone will be reached upon delivery of an acceptable strategic plan documenting the general approach and target schedule for development of an independent, but interfaced information management system to include financial management data. Tactical plans will be produced following completion of this milestone which reflects a multi-year, phased implementation.			



MILESTONE DESCRIPTION SHEET			
Title: Revise and Execute a Staffing Plan to Ensure HAMMER's Success			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 02/27/98
Control Number: HMR-98-009			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<b>Milestone Description:</b>  Revise and execute the staffing plan to assure that the staff members are qualified to perform the necessary functions, in an effective and professional manner. Prioritize staff training needs and assure critical positions are covered.			
<b>Description of what constitutes completion of this milestone:</b>  The plan and its implementation will be accomplished to assure that the necessary staff members are in place, and have sufficient skills, knowledge and abilities to support the success of HAMMER. The plan will also include the resource requirements to transfer Tulane/Xavier scope to HAMMER.			

MILESTONE DESCRIPTION SHEET			
Title: Generate \$130K of Revenue			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 03/27/98
Control Number: HMR-98-010			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL DOE-FO X CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<p><b>Milestone Description:</b></p> <p>Generate \$130K of revenue through contracting with customers for utilization of the HAMMER facility, and develop mechanisms to offset against incurred cost.</p>			
<p><b>Description of what constitutes completion of this milestone:</b></p> <p>HAMMER has contracted with outside entities which will result in \$130K of revenues by mid-year. This revenue is necessary to help fund the HAMMER planned costs. A mechanism will be established with the FDH CFO organization to implement this process.</p>			

FY 1998 Work Plan

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REV 0

**MILESTONE DESCRIPTION SHEET**

<b>Title:</b> Prepare a Mid-Year Program Review			<b>Date:</b>
<b>Assigned To:</b> KA McGinnis - HAMMER			<b>CIN:</b>
<b>Program WBS Designator:</b> 1.9.1.1			<b>Due Date:</b> 03/27/98
<b>Control Number:</b> HMR-98-011			<b>Rev:</b>
<b>MILESTONE TYPE:</b>  DOE-HQ X DOE-RL DOE-FO CONTRACTOR	<b>DIVISION:</b>  State Federal X DOE RCRA TPA Number	<b>DELIVERABLE:</b>  Report Letter Drawings X Other (specify) (See Below)	<b>ADDRESS TO:</b>  DOE-HQ X DOE-RL Other (specify)
<p><b>Milestone Description:</b></p> <p>Prepare a Mid-Year Program Review to evaluate HAMMER's progress in enhancing existing business, operations, product lines and Conduct of Training policies and procedures.</p>			
<p><b>Description of what constitutes completion of this milestone:</b></p> <p>Prepare a program review similar to the Program Readiness Assessment completed in September 1997. The September 1997 report will be used as a benchmark. The program review will include the following objectives: customer interface systems, provider interface systems, training operations, administration and configuration systems, business management systems, Learning Resource Center, Distance Learning Center, and training safety.</p>			

MILESTONE DESCRIPTION SHEET			
Title: Complete the Revegation of HAMMER			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 05/29/98
Control Number: HMR-98-012			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL DOE-FO X CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<p>Milestone Description:</p> <p>Complete the revegetation of approximately 1 ½ acres of the HAMMER Site with native plants.</p>			
<p>Description of what constitutes completion of this milestone:</p> <p>Contract #5559 titled "HAMMER Training Center Interpretative Trail and Revegetation Project" will be complete. At completion ~1 ½ acres of the HAMMER site will be revegetated with native plants. Additionally interpretative information will be developed and posted along the existing walking paths. This effort is a significant step towards involving key partners in the ownership of HAMMER.</p>			

FY 1998 Work Plan

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**MILESTONE DESCRIPTION SHEET**

<b>Title:</b> Conduct a Workshop to Identify Native American Training and Emergency Operations Needs			<b>Date:</b>
<b>Assigned To:</b> KA McGinnis - HAMMER			<b>CIN:</b>
<b>Program WBS Designator:</b> 1.9.1.1			<b>Due Date:</b> 05/29/98
<b>Control Number:</b> HMR-98-013			<b>Rev:</b>
<b>MILESTONE TYPE:</b>  DOE-HQ X DOE-RL DOE-FO CONTRACTOR	<b>DIVISION:</b>  State Federal X DOE RCRA TPA Number	<b>DELIVERABLE:</b>  Report Letter Drawings X Other (specify) (See Below)	<b>ADDRESS TO:</b>  DOE-HQ X DOE-RL Other (specify)
<b>Milestone Description:</b>  Conduct a Workshop to Identify Native American Training and Emergency Operations Needs			
<b>Description of what constitutes completion of this milestone:</b>  Plan, coordinate, and conduct a workshop to identify native American emergency preparedness, planning and other training needs. This will include development of an agenda, sending out invitations to participate, scheduling activities, identifying facilitation processes, conducting workshop activities, and documenting the results.			

MILESTONE DESCRIPTION SHEET			
Title: Perform HAMMER VPP Safety Improvement Self Evaluation			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 06/26/98
Control Number: HMR-98-014			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL DOE-FO X CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<p><b>Milestone Description:</b></p> <p>Perform HAMMER VPP Safety Improvement Self Evaluation to establish a baseline for attaining VPP Star Status at HAMMER.</p>			
<p><b>Description of what constitutes completion of this milestone:</b></p> <p>Complete a self evaluation using VPP criteria which documents HAMMER's strengths and weaknesses, and identification of workplace hazards and demonstrates initiation of VPP at HAMMER. Develop a work plan to reinforce strengths and address weaknesses. Establish a follow up Safety Improvement Self Evaluation for FY 1999. This effort supports the overall HAMMER Safety Value - model safety in everything we do.</p>			

**MILESTONE DESCRIPTION SHEET**

Title: Establish HAMMER Baselines		Date:	
Assigned To: KA McGinnis - HAMMER		CIN:	
Program WBS Designator: 1.9.1.1		Due Date: 06/26/98	
Control Number: HMR-98-015		Rev:	
<b>MILESTONE TYPE:</b>  DOE-HQ X DOE-RL DOE-FO CONTRACTOR	<b>DIVISION:</b>  State Federal X DOE RCRA TPA Number	<b>DELIVERABLE:</b>  Report Letter Drawings X Other (specify) (See Below)	<b>ADDRESS TO:</b>  DOE-HQ X DOE-RL Other (specify)

**Milestone Description:**

Establish HAMMER baselines. This will include, but not be limited to:  
 hands-on components in training  
 contract processing  
 evaluation data  
 facility downtime  
 student capacity

**Description of what constitutes completion of this milestone:**

Identify parameters necessary to establish the baselines and measures which will be used to evaluate the facility/training/business operations at HAMMER. This also includes the development and initiation of the use of a system to collect and analyze the parameters. This will provide the basis for future evaluations which will help HAMMER increase its effectiveness.

**MILESTONE DESCRIPTION SHEET**

<b>Title:</b> Develop Technology Deployment Partnerships		<b>Date:</b>	
<b>Assigned To:</b> KA McGinnis - HAMMER		<b>CIN:</b>	
<b>Program WBS Designator:</b> 1.9.1.1		<b>Due Date:</b> 08/28/98	
<b>Control Number:</b> HMR-98-016		<b>Rev:</b>	
<b>MILESTONE TYPE:</b>  DOE-HQ X DOE-RL DOE-FO CONTRACTOR	<b>DIVISION:</b>  State Federal X DOE RCRA TPA Number	<b>DELIVERABLE:</b>  Report Letter Drawings X Other (specify) (See Below)	<b>ADDRESS TO:</b>  DOE-HQ X DOE-RL Other (specify)
<b>Milestone Description:</b>  Develop Technology Deployment Partnerships			
<b>Description of what constitutes completion of this milestone:</b>  HAMMER will assist in developing partnerships to facilitate the deployment of technologies. Milestone completion will be based upon successful formation of the partnerships. In addition this will further strengthen partnerships and increases the potential use of the HAMMER facility while helping to disseminate technologies both within and outside the DOE complex.			



**MILESTONE DESCRIPTION SHEET**

<b>Title:</b> Submit FY 1998 Annual Report to DOE-RL		<b>Date:</b>	
<b>Assigned To:</b> KA McGinnis - HAMMER		<b>CIN:</b>	
<b>Program WBS Designator:</b> 1.9.1.1		<b>Due Date:</b> 09/30/98	
<b>Control Number:</b> HMR-98-017		<b>Rev:</b>	
<b>MILESTONE TYPE:</b>  DOE-HQ X DOE-RL DOE-FO CONTRACTOR	<b>DIVISION:</b>  State Federal X DOE RCRA TPA Number	<b>DELIVERABLE:</b>  X Report Letter Drawings Other (specify)	<b>ADDRESS TO:</b>  DOE-HQ X DOE-RL Other (specify)
<b>Milestone Description:</b>  Submit annual report to DOE-RL program manager			
<b>Description of what constitutes completion of this milestone:</b>  Submit the annual report, including financial projections to DOE-RL. The report will include a summary of accomplishments, number of students trained, total revenue generated, financial statements, and key initiatives undertaken during the fiscal year. This effort delivers an excellent communication product in this highly visible initiative.			

MILESTONE DESCRIPTION SHEET			
Title: Implement Total Quality/Malcom Baldrige Principles at HAMMER			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 09/30/98
Control Number: HMR-98-018			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<p><b>Milestone Description:</b></p> <p>Include Total Quality/Malcom Baldrige Principles into how HAMMER does business.</p>			
<p><b>Description of what constitutes completion of this milestone:</b></p> <p>Complete a total quality self assessment using Malcom Baldrige as criteria for evaluation. In addition the HAMMER Total Quality Plan will incorporate appropriate recommendations from the self assessment. This effort supports the overall HAMMER values of ensuring total quality at HAMMER.</p>			

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MILESTONE DESCRIPTION SHEET			
Title: Perform Comprehensive Course Evaluations at HAMMER			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 09/30/98
Control Number: HMR-98-019			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ DOE-RL DOE-FO X CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<p><b>Milestone Description:</b></p> <p>Perform Comprehensive Course Evaluations at HAMMER and establish and implement a feedback process.</p>			
<p><b>Description of what constitutes completion of this milestone:</b></p> <p>Level I evaluations will be completed on all courses taught at HAMMER. Classroom evaluations will be performed as scheduled. Level III &amp; IV evaluations will be completed through a graded approach as determined by HAMMER, Conduct of Training Manager and the customer. Additionally a feedback process will be developed in which the Level I-IV evaluation data is incorporated into the continuous course/training improvements. This effort ensures quality control of training at HAMMER.</p>			

MILESTONE DESCRIPTION SHEET			
Title: Execute HAMMER Business Plan			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 09/30/98
Control Number: HMR-98-020			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<p>Milestone Description:</p> <p>Measure the execution successes of the plan by the revenues generated.</p>			
<p>Description of what constitutes completion of this milestone:</p> <p>The successful execution of this milestone includes the generation of at least \$365K of revenue in FY 1998 and the integration of remaining Tulane/Xavier scope into HAMMER operations. This revenue is necessary to help fund the HAMMER planned costs, and ensures integration of items developed by Tulane/Xavier for successful operation of HAMMER.</p>			

MILESTONE DESCRIPTION SHEET			
Title: Document Results of HAMMER's Facilities, Systems and Props			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 09/30/98
Control Number: HMR-98-021			Rev:
MILESTONE TYPE:  DOE-HQ X DOE-RL DOE-FO CONTRACTOR	DIVISION:  State Federal X DOE RCRA TPA Number	DELIVERABLE:  Report Letter Drawings X Other (specify) (See Below)	ADDRESS TO:  DOE-HQ X DOE-RL Other (specify)
<p>Milestone Description:</p> <p>Document Results of HAMMER's Facilities, Systems and Props</p>			
<p>Description of what constitutes completion of this milestone:</p> <p>Collect and analyze the results of the surveillance which will be used to help evaluate HAMMER's operational performance. This will assist HAMMER in increasing its effectiveness.</p>			

MILESTONE DESCRIPTION SHEET			
Title: Conduct Two HAMMER Steering Committee Meetings			Date:
Assigned To: KA McGinnis - HAMMER			CIN:
Program WBS Designator: 1.9.1.1			Due Date: 09/30/98
Control Number: HMR-98-022			Rev:
MILESTONE TYPE:	DIVISION:	DELIVERABLE:	ADDRESS TO:
DOE-HQ X DOE-RL DOE-FO CONTRACTOR	State Federal X DOE RCRA TPA Number	Report Letter Drawings X Other (specify) (See Below)	DOE-HQ X DOE-RL Other (specify)
<p>Milestone Description:</p> <p>Conduct Two HAMMER Steering Committee Meetings</p>			
<p>Description of what constitutes completion of this milestone:</p> <p>Facilitate the Steering Committee meetings including: serving as executive director, logistics, coordinating with over 30 executive level stakeholders, preparation of all required materials, developing the agenda, documenting actions, providing a project and program update and issuing meeting minutes. The agendas demonstrate a greater emphasis on safety, health and productivity issues.</p>			

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#### 4.0 COST BASELINE

##### 4.1. Life Cycle Cost Baseline (BCWS) by PBS

The HAMMER Life Cycle Cost Baseline is located on Pages 58 & 59.

##### 4.2. Life Cycle Budget Authority (B/A) by PBS

The HAMMER Life Cycle B/A is located on Pages 60 & 61.

##### 4.3. Execution Year Cost Baseline by Month by PBS by ADS

The HAMMER Baseline by Month is located on Page 62.

##### 4.4. Staffing

The HAMMER Staffing Profile is located on Page 63.



#### 4.4.1 Life Cycle Cost Baseline (BCWS) by PBS

LIFE CYCLE COST BASELINE (BCWS) BY YEAR BY FUND TYPE  
HAMMER  
BY PROJECT BASELINE SUMMARY (PBS)

PROJECT WBS: 19		\$ (0000s)									
PBS NO:											
PBS TITLE: HAMMER											
FUND TYPE	FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT
OPERATING EXPENSE	5,003	5,053	4,934	4,799	4,895	5,005	4,953	4,930	4,886	4,753	FY1997- FY2006 49,521
CENR/C	-	-	-	-	-	-	-	-	-	-	-
GENERAL PLANT PROJECT											
LINE ITEM (Lift Each One)											
HAMMER PROJECT	7,900										
<i>Subtotal Line Items</i>	7,900	-	-	-	-	-	-	-	-	-	7,900
TOTAL BSCS/PMB	13,203	5,053	4,934	4,799	4,895	5,005	4,953	4,930	4,886	4,753	57,421
MGMT RESERVE											
LINE ITEM CONTINGENCY <sup>2</sup>											
OFFSITE TRANSFERS <sup>3</sup>											
<i>Subtotal</i>											
TOTAL	13,203	5,053	4,934	4,799	4,895	5,005	4,953	4,930	4,886	4,753	57,421

**NOTE: REFER TO APPENDIX A FOR ADDITIONAL DETAILS**

4) Life Cycle costs do not include ~\$850K per year (FY 1999 - FY 2006) for workscope associated with improving worker safety and health, and assuring training at HAMMER fulfills regulatory requirements and meets training requirements throughout the Hanford Site and DOE complex.

#### 4.1 Life Cycle Cost Baseline (BCWS) by PBS

## HAMMER

FY 1998

PROJECT WBS: 1.9		0		(\$000s)										TOTAL
PBS NO:		0												
PBS TITLE: HAMMER														
FUND		FY2007- FY2010	FY2011- FY2015	FY2016- FY2020	FY2021- FY2025	FY2026- FY2030	FY2031- FY2035	FY2036 FY2040	FY2041- FY2045	FY2046 FY2050				
OPERATING EXPENSE		29,291	36,614	36,614	36,614	29,293	-	-	-	-	217,947			
CENRTC		-	-	-	-	-	-	-	-	-	-			
GENERAL PLANT PROJECT		-	-	-	-	-	-	-	-	-	-			
LINE ITEM (List Each One)		-	-	-	-	-	-	-	-	-	-			
HAMMER PROJECT		-	-	-	-	-	-	-	-	-	-			
		-	-	-	-	-	-	-	-	-	-			
		-	-	-	-	-	-	-	-	-	-			
		-	-	-	-	-	-	-	-	-	-			
Subtotal Line Items		-	-	-	-	-	-	-	-	-	7,900			
TOTAL BGS/PMB		29,291	36,614	36,614	36,614	29,293	-	-	-	-	225,847			
MIGHT RESERVE		-	-	-	-	-	-	-	-	-	-			
LINE ITEM CONTINGENCY		-	-	-	-	-	-	-	-	-	-			
OFFSITE TRANSFERS		-	-	-	-	-	-	-	-	-	-			
Subtotal		-	-	-	-	-	-	-	-	-	-			
TOTAL		29,291	36,614	36,614	36,614	29,293	-	-	-	-	225,847			

FY 1998 Work Plan

4.2 Life Cycle Budget Authority (B/A) by PBS

HAMMER  
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE  
BY PROJECT BASELINE SUMMARY (PBS)  
FY 1998

(\$000s)

PROJECT WBS:		1.9										
PBS NO:		RL-HM01										
PBS TITLE:		HAMMER										
FUND TYPE		FY1997	FY1998	FY1999	FY2000	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006	SUBTOT FY1997- FY2006
OPERATING EXPENSE		5,303	5,053	4,934	4,799	4,895	5,005	4,953	4,930	4,866	4,753	49,521
CENRTC		-	-	-	-	-	-	-	-	-	-	-
GENERAL PLANT PROJECT		-	-	-	-	-	-	-	-	-	-	-
LINE ITEM (List Each One)		7,900	-	-	-	-	-	-	-	-	-	-
HAMMER PROJECT		-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-	-	-
Subtotal Line Items		7,900	-	-	-	-	-	-	-	-	-	7,900
TOTAL NEW B/A		13,203	5,053	4,934	4,799	4,895	5,005	4,953	4,930	4,866	4,753	57,421

NOTE: REFER TO APPENDIX A FOR ADDITIONAL DETAILS

1) Life Cycle costs do not include ~ \$850K per year (FY 1999 - FY 2006) for workslope associated with improving worker safety and health, and assuring training at HAMMER fulfills regulatory requirements and meets training requirements throughout the Hanford Site and DOE complex.

4.2 Life Cycle Budget Authority (B/A) by PBS

HAMMER  
LIFE CYCLE BUDGET AUTHORITY (B/A) BY YEAR BY FUND TYPE  
BY PROJECT BASELINE SUMMARY (PBS)  
FY 1998

(\$000s)

PROJECT WBS:		1.9															TOTAL	
PBS NO:		RL-HM01																
PBS TITLE:		HAMMER																
FUND TYPE	FY2007-	FY2011-	FY2016-	FY2021-	FY2026-	FY2031-	FY2036-	FY2041-	FY2046									
	FY2010	FY2015	FY2020	FY2025	FY2030	FY2035	FY2040	FY2045	FY2050									
OPERATING EXPENSE	29,291	36,614	36,614	36,614	29,293	-	-	-	-	-	-	-	-	-	-	-	217,947	
CENRTC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GENERAL PLANT PROJECT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LINE ITEM (List Each One)																		
HAMMER PROJECT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal Line Items		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,900	
TOTAL NEW B/A	29,291	36,614	36,614	36,614	29,293	-	-	-	-	-	-	-	-	-	-	-	225,847	

4.3 Execution Year Cost Baseline by Month by PBS by ADS

HAMMER  
FY 1998 COST BASELINE (BCWS) BY MONTH  
BY PROJECT BASELINE SUMMARY (PBS)  
BY ACTIVITY DATA SHEET (ADS)  
EXECUTION YEAR

(\$000s)

PBS NO:		RL-HM01		HAMMER											
PBS TITLE:		ADS		FUND											
ADS TITLE	NO	TYPE	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOTAL
HAMMER	7221	FDH	378	398	357	368	368	447	368	435	379	353	427	412	4710
		RL												343	343
		OP EXP													
		CENITC													
		GPP													
		LI	378	398	357	368	368	447	368	435	379	353	427	765	5,053
		SUBTOT													
		OP EXP													
		CENITC													
		GPP													
		LI													
		SUBTOT													
		OP EXP													
		CENITC													
		GPP													
		LI													
		SUBTOT													
TOTAL BCWS/PMB			378	398	357	368	368	447	368	435	379	353	427	765	5,053



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FY 1998 Work Plan

## APPENDIX A



FY 1998 Work Plan

Appendix A

HAMMER Project Issues

Currently the FY 1999 Target for HAMMER is \$4934K. Additional funding of \$850K (IPL item #268 - below the line) is required to complete the following workscope.

The RL Grant to Tulane and Xavier Universities ends in FY 1998. The Tulane and Xavier scope was to design, develop and hand-off to operations processes, systems and policies for improved safety and health training.

- Tulane & Xavier developed programs that will transfer to FDH and be integrated into HAMMER operations include:
  - Level 1,2,3 & 4 Evaluation Process
  - Third Party Evaluations of Classroom Presentations
  - Safety Support for the HAMMER facility
  - Reciprocity of Safety and Health Training among DOE and government
  - Regulatory review of training being conducted at HAMMER
  - Integrate HAMMER training with national Occupational and Health Programs
  - Support the integration of props and simulations into training curriculum
  - Education Programs and the Learning Resource Center which serves as a liaison between educational and technical institutions and HAMMER in focused degree and continuing education programs.

In summary, this additional workscope is critical to successful operation of HAMMER.

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