



P.O. BOX 1625, IDAHO FALLS, IDAHO 83415

August 11, 1980

Distribution

LOW-LEVEL WASTE MANAGEMENT PROGRAM-CURRENT YEAR WORK PLANS-GBL-119-80

The Low-Level Waste Management Program requires that all program participants submit current year work plans. Such plans should follow the general format of the monthly report including a page or two describing the scope of work, a schedule or milestone list, and cost projections. Plans containing the desired information in a different format are acceptable.

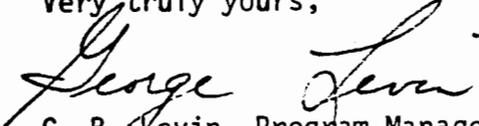
Enclosed is a description of the current year work plans and the funding priority list presented at the August 13-14, 1980 headquarters coordination meeting. Also enclosed is the background information presented at the field coordination meeting.

Please prepare current year work plans for all defense funded items through \$11,800,000 and commercial funded items. Five copies of the plans should be submitted to:

Dr. George Levin  
EG&G Idaho, Inc.  
P.O. Box 1625  
Idaho Falls, ID 83415

All current year work plans are due by September 15, 1980. Further information may be obtained from me or Dr. John Peel (DOE-ID).

Very truly yours,

  
G. B. Levin, Program Manager  
Low-Level Waste

mc

Enclosure:  
As stated



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General

Distribution

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LOW-LEVEL WASTE MANAGEMENT PROGRAM

FY 81 BUDGET

AUGUST 13, 1980

SINCE THE PREVIOUS COORDINATION MEETING, THE KEY ACCOMPLISHMENTS ARE:

- o COMPLETED STRATEGY
- o REFINED DEFINITION OF PROGRAM GOALS
- o INITIATED PREPARATION OF WASTE MANAGEMENT PLAN FOR TENNESSEE
- o INITIATED COOPERATIVE WASTE MANAGEMENT PLANNING EFFORTS WITH FLORIDA AND IDAHO
- o CONTINUED TO SUPPORT MIDWEST EFFORT
- o SPONSORED WESTERN INTERSTATE ENERGY BOARD WORKSHOP ON LOW LEVEL WASTE
- o CONCLUDED CONTRACTS WITH NATIONAL COUNCIL STATE LEGISLATORS, AMERICAN PLANNING ASSOCIATION, AND AMERICAN COUNCIL OF NUCLEAR PHYSICIANS FOR PUBLIC INFORMATION MATERIALS

CURRENT MILESTONES

<u>MILESTONE</u>	<u>ORGANIZATION</u>	<u>HQ DATE</u>	<u>STATUS</u>
<u>DEFENSE</u>			
1. ISSUE FINAL DOE OPERATING CRITERIA	ID/EG&G	9/80	ON SCHEDULE
2. ISSUE REPORT ASSESSING GAPS IN SLB TECHNOLOGY	OR/ORNL	1/80	COMPLETED
3. ISSUE FINAL REPORTS ON IMPROVED SLB TECHNOLOGY FIELD TESTS AT ORNL AND LASL	OR/ORNL	4Q 82	ON SCHEDULE
4. ISSUE DRAFT CRITERIA FOR SITE SELECTION, WASTE FORM AND DECOMMISSIONING	ID/EG&G	2Q 81	ON SCHEDULE
5. ISSUE FINAL REPORT ON DEMONSTRATION OF ADVANCED TREATMENT TECHNOLOGY	ID/TBD	3Q 85	ON SCHEDULE
<u>COMMERCIAL</u>			
1. COMPLETE PILOT PLANT TEST OF ULTRAFILTRATION	AL/MOUND	4/80	ON SCHEDULE
2. SELECT TECHNOLOGY FOR REMOVAL OF RADIONUCLIDES FROM LIQUID WASTES FOR PLANT DEMONSTRATION	OR/ORNL	4Q 81	ON SCHEDULE

CURRENT MILESTONES (CONTD)

<u>MILESTONE</u>	<u>ORGANIZATION</u>	<u>HQ DATE</u>	<u>STATUS</u>
<u>GENERAL</u>			
1. ESTABLISH STATE INFORMATION EXCHANGE SYSTEM AND ISSUE PROCEDURE FOR USE	ID/EG&G	9/80	ON SCHEDULE
2. ISSUE DRAFT STRATEGY DOCUMENT FOR PUBLIC COMMENT	ID/EG&G	7/80	COMPLETED
3. ISSUE FINAL PROGRAM STRATEGY DOCUMENT	ID/EG&G	3Q 81	ON SCHEDULE
4. HOLD ANNUAL PROGRAM REVIEW COMMITTEE MEETING	ID/EG&G	9/80	COMPLETED
5. ISSUE SYSTEMS ANALYSIS MODEL REPRESENTATIVE OF FY 80 LLV DATA	ID/EG&G	9/80	ON SCHEDULE
6. DEMONSTRATE AN INCINERATOR FOR TREATMENT OF INSTITUTIONAL WASTE AND ISSUE REPORT	ID/EG&G	9/80	LATE
7. START FIELD TESTING TO SUPPORT INTERMEDIATE DEPTH DISPOSAL	NV/TBD	7/80	LATE
*8. SELECT AND BEGIN DEMONSTRATION OF SECOND ALTERNATE DISPOSAL METHOD	ID/TBD	1Q 81	ON SCHEDULE

CURRENT MILESTONES (CONTD)

<u>MILESTONE</u>	<u>ORGANIZATION</u>	<u>HQ DATE</u>	<u>STATUS</u>
9. ISSUE FINAL REPORT ON DEMONSTRATION OF INTERMEDIATE-DEPTH DISPOSAL	ID/TBD	4Q 83	LATE
*10. ISSUE FINAL REPORT ON DEMONSTRATION OF SECOND ALTERNATIVE DISPOSAL METHOD	ID/TBD	4Q 84	ON SCHEDULE
*11. ISSUE FINAL REPORT ON DEMONSTRATION OF THIRD ALTERNATIVE DISPOSAL METHOD	ID/TBD	4Q 86	ON SCHEDULE
12. ISSUE FIRST PART OF WASTE GENERATION REDUCTION HANDBOOK	OR/ORNL	4Q 81	ON SCHEDULE
13. ISSUE UPDATED PROGRAM PLAN FOR LLW TO HQ	ID/EG&G	4/80	COMPLETED

\* RECOMMENDED FOR DELETION BECAUSE OF BUDGET REDUCTION

THE OBJECTIVE OF THE LOW-LEVEL WASTE MANAGEMENT PROGRAM  
IS TO HAVE AN APPROVED AND ACCEPTED LOW-LEVEL WASTE  
MANAGEMENT SYSTEM BY 1988

- O ACHIEVED VIA AN OPEN AND EFFECTIVE DECISION-  
MAKING PROCESS
  
- O MANAGES LOW-LEVEL WASTE FROM PRODUCTION  
THROUGH DISPOSAL

THE LOW-LEVEL WASTE MANAGEMENT SYSTEM IS SUPPORTED BY  
THREE LEVELS OF MILESTONES

0 LEVEL 1

PROGRAM STRATEGY

- 0 INVOLVING PUBLIC REPRESENTATIVES EARLY  
IN THE PROCESS
- 0 POLICY GUIDANCE TO FULFILL THE  
PROGRAM OBJECTIVE

- THE PROGRAM STRATEGY DOCUMENT IS SUPPORTED BY THREE LEVEL
- 2 MILESTONES

- o LEVEL 2

PUBLIC PARTICIPATION PLAN  
PROGRAM IMPLEMENTATION PLAN  
PROGRAM MANAGEMENT MANUAL  
STRATEGY REFERENCE DOCUMENT

COMPLETION OF LEVEL 3 MILESTONES WILL ADDRESS SPECIFIC WASTE MANAGEMENT CONCERNS. THE PROGRAM'S NEAR TERM ENGINEERING EMPHASIS IS FOCUSED ON THREE

- o SUPPORT PACKAGE AND DESIGN SPECIFICATIONS FOR  
SHALLOW LAND BURIAL IN THE EASTERN UNITED STATES - 1985 (c)
- o MANUAL OF PROVEN REMEDIAL ACTION TECHNIQUES - 1984 (d)
- o DESIGN SPECIFICATIONS FOR WASTE TREATMENT AND SOLIDIFICATION  
SYSTEMS - 1983 (b)

THE REMAINING LEVEL 3 MILESTONES COMPLETE THE ENGINEERING  
FOCUS OF THE PROGRAM

- o WASTE CLASSIFICATION SYSTEM (F)
- o SUPPORT PACKAGE AND DESIGN SPECIFICATIONS FOR  
ENGINEERED INTERIM STORAGE (H)
- o MANUAL OF PROVEN WASTE GENERATION REDUCTION TECHNOLOGY (A)
- o WASTE TREATMENT METHODS FOR GREATER ISOLATION DISPOSAL (G)
- o SUPPORT PACKAGE AND DESIGN SPECIFICATIONS FOR DISPOSAL  
SITE PROVIDING GREATER ISOLATION THAN SHALLOW LAND BURIAL (E)

LOW-LEVEL WASTE MANAGEMENT PROGRAM PRIORITY LIST

COMMERCIAL FUNDING FY 81 (\$000's)

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1.	ID 3.4.2 AP		STATE AID	1,000	1,000
2.	ID 3.2.1 AP	ACEI	DATA SYSTEMS	275	1,275
3.	ID 3.2.2 AP	ACEI	SYSTEM STUDIES	450	1,725
4.	ID 3.5.2 AP	B	INSTITUTIONAL INCINERATOR	250	1,975
5.	ID 3.4.1 AP		CITIZEN PARTICIPATION	600	2,575
6.	OR 3.4.4 AP		ORNL NEWSLETTER AND CLIPPING SERVICES	150	2,725
7.	ID 3.4 AP		STRATEGY REFERENCE DOCUMENT	500	3,225
8.	ID 3.4.2 AP		STATE PARTICIPATION	100	3,325
9.	ARO 3.4.1 AP		UNIVERSITY PROJECTS	300	3,625
10.	ID 3.4.2 AP		STATE, PUBLIC, INDUSTRY PROJECTS	675	4,300

LOW-LEVEL WASTE MANAGEMENT PROGRAM  
 PRIORITY LIST - DEFENSE FUNDING FY 81 (\$000's)

PRIORITY NO.	TASK NO.	OBJECTIVES	TITLE	BA	CUMULATIVE BA
1.			REPAY AIRBORNE	50	
2.			REPAY TRU	360	410
3.	AL 3.5.4 AR	C	MODEL SLB SITE	350	760
4.	ID 3.1.1 AR	1	PROGRAM MANAGEMENT	600	1360
5.	OR 3.1.1 AR	1	PROGRAM MANAGEMENT	675	2035
6.	TBD 3.3.1.1 AR	CE	SITE SELECTION CRITERIA	150	2185
7.	ID 3.3.1.2 AR	CDEG	WASTE FORM CRITERIA	150	2335
8	ID 3.3.1.1 AR	C	OPERATING CRITERIA	150	2485
9.	SA 3.5.3 AR	CE	MODELING - SITE SCREENING	200	2685
10.	OR 3.5.4.1 AR	C	SLB MANUAL	200	2885
11.	OR 3.5.4.2 AR	C	SLB REMEDIAL ACTION MANUAL	100	2985
12.	OR 3.5.4.3 AR	C	ORNL REMEDIAL ACTION	375	3360
13.	AL 3.5.4 AR	CD	LASL - REMEDIAL ACTION TESTING	100	3460
14.	CH 3.5.2 AR	D	WASTE FORM DEVELOPMENT	250	3710
15.	OR 3.5.2 AR	BC	HANDLING STUDY	50	3760
16.	CH 3.5.2 AR	BCE	WASTE SEGREGATION	125	3885
17.	CH 3.5.3 AR	CE	GENERIC DISPOSAL SITE MONITORING	175	4060
18.	SA 3.5.2 AR	CE	GENERIC MONITORING - STATISTICS	50	4110
19.	ID 3.1.2 AR		INDEPENDENT REVIEW	100	4210
20.	ID 3.1.3 AR		COORDINATION WITH OTHER DOE PROGRAMS	50	4260
21.	ID 3.1.4 AR		PARTICIPATING SITE COORDINATION	70	4330
22.	ID 3.2.1 AR		DATA SYSTEMS	100	4430
23.	ID 3.4.1 AR		CITIZEN PARTICIPATION	300	4630

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LOW-LEVEL WASTE MANAGEMENT PROGRAM  
 PRIORITY LIST - DEFENSE FUNDING FY 81 (\$000's)

PRIORITY NO.	TASK NO.	OBJECTIVES	TITLE	BA	CUMULATIVE BA
24.	ID 3.4.2	AR	STATE PARTICIPATION	750	5380
25.	ID 3.4.3	AR	FEDERAL AGENCY COORDINATION	70	5450
26.	ID 3.4.4	AR	INDUSTRY COMMUNICATION	50	5500
27.	OR 3.5.4	AR	C SLB BARRIERS - MIGRATION	100	5600
28.	AL 3.5.4	AR	C SLB BARRIERS - MIGRATION	150	5750
29.	AL 3.5.4	AR	C SLB BARRIERS - INTRUSION	150	5900
30.	SA 3.2.3	AR	CE HAZARDS ANALYSIS	300	6200
31.	ID 3.4.2	AR	H INTERIM STORAGE FACILITY	150	6350
32.	RL 3.5.4	AR	C ORGANIC MIGRATION	100	6450
33.	SR 3.5.4	AR	C LYSIMETERS - SRL	650	7100
34.	RL 3.5.4	AR	C LYSIMETERS - PNL	210	7310
35.	RL 3.5.3.1	AR	CE DISPOSAL SITE MONITORING INSTRUMENTS	125	7435
36.	RL 3.5.3	AR	CE ASSAY INSTRUMENTS	100	7535
37.	AL 3.5.2	AR	B ULTRAFILTRATION - REVERSE OSMOSIS	300	7835
38.	SR 3.5.4	AR	C SR DISPOSAL SITE	250	8085
39.	ID 3.5.4	AR	C INEL DISPOSAL SITE	250	8335
40.	OR 3.5.4	AR	C ORNL DISPOSAL SITE	250	8585
41.	AL 3.5.4	AR	C LASL DISPOSAL SITE	350	8835
42.	AL 3.5.3	AR	CE BOREHOLE GEOPHYSICS	190	9025
43.	IV 3.5.4	AR	C AREA 5 STUDIES	90	9115
44.	IV 3.5.4	AR	C REVEGETATION STUDY	70	9185

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LOW-LEVEL WASTE MANAGEMENT PROGRAM  
 PRIORITY LIST - DEFENSE FUNDING FY 81 (\$'000's)

PRIORITY NO.	TASK NO.	OBJECTIVES	TITLE	BA	CUMULATIVE BA	LASL CUM #/K
45.	NV 3.5.5 AR	E	INTERMEDIATE DEPTH BURIAL	250	9435	
46.	SR 3.5.5 AR	E	INTERMEDIATE DEPTH BURIAL	150	9585	
47.	AL 3.5.4 AR	C	ARID SITE CLOSURE	200	9785	1300
48.	AL 3.5.2 AR	BG	GLASS MELTER STUDY	250	10035	
49.	SR 3.5.2 AR	BG	INCINERATOR	700	10735	
50.	AL 3.5.5 AR	E	ALTERNATIVE ASSESSMENT	110	10845	1410
51.	TBD 3.5.2 AR	BG	WASTE TREATMENT	150	10995	
52.	OR 3.5.1 AR	A	WASTE GENERATION REDUCTION MANUAL	150	11045	
53.	NV 3.6 AR	I	QUALITY ASSURANCE MANUAL	100	11145	
54.	AL 3.5.1 AR	A	WASTE GENERATION REDUCTION - NITRATES	75	11220	
55.	ID 3.5.2 AR	B	SMELTER	330	11550	
56.	RL 3.5.2 AR	B	MICROWAVE PLASMAS TORCH	250	11800	
57.	SR 3.5.5 AR	E	INTERMEDIATE DEPTH DISPOSAL EXPERI- MENTS	150	11950	
58.	CH 3.5.4 AR	C	SODIUM WASTE DISPOSAL	100	12050	
59.	SA 3.5.3 AR	CE	HAZARDS ANALYSIS	100	12150	
60.	OR 3.4 AR		CITIZEN PARTICIPATION	100	12250	
61.	TBD 3.5.2 AR	B	WASTE TREATMENT	250	12500	
62.	CH 3.5.4 AR	C	LEACHING STUDIES	100	12600	
63.	OR 3.5.2 AR	B	DECONTAMINATION EFFECTIVENESS	150	12750	
64.	TBD 3.5.2 AR	C	STRATEGY REFERENCE DOCUMENT	200	13050	

LOW-LEVEL WASTE MANAGEMENT PROGRAM  
 PRIORITY LIST - DEFENSE FUNDING FY 81 (\$000's)

PRIORITY NO.	TASK NO.	OBJECTIVES	TITLE	BA	CUMULATIVE BA
65.	NV 3.5.5 AR	E	INTERMEDIATE DEPTH DISPOSAL 250	250	13300
66.	TBD 3.5.2 AR	C	DEVELOPMENT OF CONTAINERS AS CARRIERS	300	13600
67.	TBD 3.5.3 AR	C	SLB SITE SELECTION MODEL	250	13850
68.	TBD 3.5.3 AR	CE	VERIFICATION AND VALIDATION OF MODELS	300	14150
69.	SR 3.5.3 AR	B	INCINERATOR	100	14250
70.	RL 3.5.2 AR	B	SMELTER	100	14350
71.	AL 3.5.2 AR	B	GLASS MELTER	200	14550
72.	RL 3.5.3 AR	C	DISPOSAL SITE MONITORING INSTRUMENTS	150	14700
73.	ID 3.5 AR	G	FRG COOPERATIVE PROGRAM	100	14800
74.	CH 3.5.2 AR	B	WASTE FORM	100	14900
75.	ID 3.4.2 AR	H	INTERIM STORAGE FACILITY	550	15150
76.	RL 3.5.3 AR	C	ASSAY INSTRUMENTS	100	15250
77.	AL 3.5.4 AR	C	SLB INTRUSION AND MIGRATION BARRIERS	200	15450
78.	AL 3.5.3 AR	B	CAI INCINERATOR	350	15800
79.	TBD 3.4.4 AR		SITE SELECTION CRITERIA	100	15900
80.	SA 3.5.3 AR	C	GENERIC MONITORING STATISTICS	100	16000
81.	TBD 3.5.2 AR	B	WASTE TREATMENT	450	16450

LOW LEVEL WASTE PROGRAM  
CAPITAL EQUIPMENT FY 81

TASK NO.	OBJECTIVES	TITLE	AMOUNT	CUMULATIVE
RL 3.5.3 AR	CE	MONITORING INSTRUMENTS	80	80
RL 3.5.3 AR	CE	ASSAY INSTRUMENTS	25	105
RL 3.5.2 AR	B	MICROWAVE PLASMA TORCH	70	175
RL 3.5.3 AR	C	ORGANIC COMPLEXES	17	192
ID 3.5.2 AR	BC	SMELTER	115	307
AL 3.5.4 AR	D	REMEDIAL ACTION	53	362
AL 3.5.4 AR	C	BARRIERS AND SITE CLOSURE	50	412
AL 3.5.2 AR	BG	GLASS MELT STUDY	150	562
AL 3.5.2 AR	B	ULTRAFILTRATION	11	573
AL 3.5.1 AR	A	NITRATES	4	577
OR 3.5.4.3 AR	D	ORNL REMEDIAL ACTION	120	697
OR 3.5.4 AR	CE	SLB BARRIER - MIGRATION	70	767
OR 3.5.4 AR	C	ORNL DISPOSAL SITES	50	817
CH 3.5.3 AR	BC	WASTE FORM	50	867
CH 3.5.3 AR	BC	SEGREGATION	25	892
ID 3.2.1 AP		DATA SYSTEMS	158	1050

## MILESTONES FOR FY 81

ISSUE DRAFT CRITERIA FOR SITE SELECTION AND WASTE FORM	ID/EG&G	3/81
PROGRAM MANUAL ISSUED	ID/EG&G	9/81
LOW LEVEL WASTE DATA BASE ESTABLISHED	ID/EG&G	9/81
COMPLETE STATE WORKSHOPS ON STRATEGY	ID/EG&G	3/81
ISSUE WASTE GENERATION REDUCTION MANUAL	OR/ORNL	9/81
ISSUE DRAFT SLB MANUAL	OR/ORNL	7/81
ISSUE INTERIM STORAGE FACILITY DESIGN PACKAGE	ID/EG&G	7/81

OTHER INFORMATION REQUESTED

FY 81 COST DOES NOT IMPACT FY 82 FUNDING

TRANSPORTATION REQUIREMENTS:

STUDY OF FEASIBILITY OF REGIONAL PROCESSING CENTERS

ESTIMATED COST \$65,000.

CURRENT MIX OF CAPITAL/OPERATING FUNDS LIST

## PRIORITY

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- C1 State Aid: States will be supported in assuming their responsibility for dealing with Low-Level Waste by the provision of technical support and specific data relative to waste disposal options.
- 
- D3 Model SLB Site: LASL will be creating a test plot where new concepts can be tried on an accelerated basis and on a reasonable scale.
- 
- C2, D22 Data and Data Systems: The assembly and organization of data will enable DOE to respond to requests from states and regions for information concerning disposal volumes and costs, as well as serving as a resource for all federal agencies and systems studies.
- 
- C3 Systems Studies: Systems studies will examine the potential effect of various program options as well as providing an understanding of the disposal system as it currently exists. System study supports all program objectives by keeping data on Low Level Waste available in increasingly useful forms.
- 
- D4 Program Management: Direction of the LLW program will ensure accomplishment of program objectives by continuance of internal program direction.
- 
- D5 Program Management: Direction of the Low Level Waste programs technology program will provide coordination for development of environmental, disposal, volume reduction, fixation, and handling methods needed to meet SLB site operating criteria.
- 
- D6 Site Selection Criteria: In order to support opening of a burial site in the Eastern U.S., specific criteria for selection of burial sites will be established.
- 
- D7 Waste Form Criteria: Acceptable waste properties and waste forms will be defined to enable program participants to provide specific fixation techniques meeting SLB operating criteria.
- 
- D8 Operating Criteria: Operating criteria for a disposal site will be defined to enable an operator to follow a clear set of guidelines in locating a SLB site.

PRIORITY

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- C4 Institutional Incinerator: A demonstrated incinerator operational plan will be provided to assist institutions in undertaking volume reduction programs that meet SLB operating criteria.
- 
- D9 Modeling - Site Screening: A computer model will be chosen to aid in site selection and to support licensing for SLB site and to assist in evaluation of disposal sites providing greater isolation than SLB.
- 
- D10 SLB Manual: The designs and procedures necessary to open and operate a SLB site will be presented in a single document.
- 
- D11 SLB Remedial Action Manual: Methods for upgrading performance and ensuring continued performance in closed SLB sites will be presented in a single document.
- 
- D12 ORNL Remedial Action: Specific steps will be taken to reduce or eliminate release of radionuclides into White Oak Creek.
- 
- D13 LASL Remedial Action Testing: In order to provide for stabilization of an SLB site in an arid environment, practices to be applied after site closure will be demonstrated.
- 
- D14 Waste Form Development: Actual waste forms will be researched to make improved fixation and solidification techniques available to the commercial industry.
- 
- D15 Handling Methods Study: Handling methods meeting the SLB operating criteria will be detailed.
- 
- D16 Waste Segregation: Specific physical, isotopic and chemical segregation practices will be evaluated to support appropriate waste treatment to meet SLB site operating criteria and minimize post site closure operations.
- 
- D17 Generic Monitoring: The monitoring principles, procedures, and methods for SLB site operation will be defined.

PRIORITY

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D18 Generic Monitoring: In support of CH 3.5.3 - Generic monitoring to provide statistical analysis of monitoring requirements. Specifically this program will analyze "what is enough monitoring."

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D19 Independent Review: Support the Program Review Committee efforts in reviewing the Low-Level Waste Management Program goals and policy.

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D21 Participating Site Coordination: Organization of national lab efforts in support of Low Level Waste Program including preparation of monthly reports and program directives.

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D20 Coordination with other DOE Programs: Coordination of efforts with other DOE lead laboratories and programs. Including information and data exchange and cooperative program efforts.

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C5 Citizen Participation: To improve communication between the Low Level Waste  
D23 Program and public in providing public input into the program and gaining wider acceptance of program goals.

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C8 State Participation: To increase communications between the Low Level Waste  
D24 Program and states in providing input to the program goals and providing information to the states.

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D25 Federal Agency Coordination: To work with other cognizant federal agencies to develop a coordinated federal government policy plan.

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D26 Industry Communication: For the transfer of technology and information between the industrial sector and the Low-Level Waste Management Program.

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D27 SLB Barrier - Migration: For the study and design of barriers to reduce migration potential in humid zones. Included will be designed development and construction of trenches, pits, caps, and materials to prevent erosion and subsidence.

PRIORITY

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- D28 SLB Barrier - Migration: For the study and design of barriers to reduce migration potential in arid zones.
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- D29 SLB Barrier - Intrusion: For the study and design of barrier to reduce the potential for intrusion of man, animals and vegetation into closed out SLB's
- 
- D30 Hazards Analysis: To develop a method of classifying and analyzing wastes and disposal practice by degree of hazard. Program is designed to analyze and compare naturally occurring hazards with those associated with Low Level Waste.
- 
- D31 Interim Storage Facility: To provide the design and performance criteria for an engineered interim storage facility. This is to support states unable to enter into agreements or compacts with states having disposal facilities and therefore requiring storage facilities while developing their own disposal options.
- 
- D32 Organic Migration: To analyze the effects of organic materials (natural and man-made) on migration of radionuclides in soils. Included are the effects of chelating agents and humic materials.
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- D33 Lysimeters - SRL: To monitor water balance in and nuclide migration through commercial low level waste form. The lysimeters are designed to simulate shallow land burial in humid zones and the leachability of disposed wastes.
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- D34 Lysimeters - PNL: To analyze migration of nuclides and water balances in arid zones. These lysimeters are designed to examine physical transport process in arid shallow land burial areas.
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- D35 Monitoring Instruments: Design and development of in situ spectrometers and other monitoring equipment for analyzing migration pathway, transport processes, and predictive performance.
- 
- D36 Assay Instruments: Design and development of instruments to assay waste shipments for verification of manifests and for classification of wastes.

PRIORITY

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D37 Reverse Osmosis - Ultrafiltration: Volume reduction of aqueous waste streams in power plant and fuel fabrication operations.

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D38 - D44

Disposal Sites: These programs are being phased out of the program due to their site specific nature. Funding is provided to finalize ongoing studies and redesign program efforts.

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D42 Borehole Geophysics - USGS-D: Design and development of in situ downhole logging instruments for characterization and monitoring of sites.

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D45 Intermediate Depth Burial: An intermediate depth burial (IDB) site in the midwest will be established after an evaluation of site needs, appropriate environmental monitoring and site selection to provide a disposal method offering greater isolation than SLB for the eastern U.S.

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D46 Intermediate Depth Burial - Humid: An IDB site in the humid East will be established after an evaluation of site needs, appropriate environmental monitoring and site selection to provide a disposal method offering greater resolution SLB for the western U.S.

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D47 Arid Site Closure: Procedures for closure of an arid SLB site will be demonstrated and documented to support licensing of an SLB site.

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D48 Glass Melter Study: A volume reduction, fixation, and waste handling techniques which may be useful to meet SLB and other disposal criteria will be investigated.

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D49 Incinerator: Volume reduction of defense and commercial wastes meeting SLB and greater isolation disposal operating criteria will be demonstrated.

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D50 Complete Alternatives Assessment - LASL: Disposal methods providing greater isolation than SLB will be assessed to provide confidence in the selection of a disposal method for demonstration.

PRIORITY

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D51 Commercial Waste Treatment: Treatment methods for non DOE wastes will be supported to ensure the availability of systems meeting the SLB and greater isolation operating criteria.

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C6 ORNL Newsletter: In order to provide for the timely transfer of program results and to increase awareness of program participants of their place in the program, newsletters describing progress in the program will be composed and transmitted to interested parties.

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C9 University Funding: A series of projects recommended by a consortium of universities generally attended by culturally disadvantaged persons which will serve to include these universities in DOE's Low Level Waste Program.

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D52 Waste Generation Reduction Manual: Methods for reducing the amount of Low Level Waste generated will be documented and demonstrated, and these methods will be published and presented to the industry.

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D53 Quality Assurance: The policy for what level of specificity is required in work for the program will be defined and placed in the Program Management Manual.

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C7 Reference Document: Information relevant to and in support of the program strategy document will be presented.

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C54 Waste Generation Reduction Nitrates: Specific methods for generation of smaller amounts of nitrate waste will be incorporated in the Waste Generation Reduction Handbook.

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C55 Smelter: Volume reduction of contaminated metals will be demonstrated in support of SLB operation and to provide a volume reduction method meeting operating criteria for disposal methods yielding greater resolution.

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C56 Microwave Plasma Torch: Volume reduction of liquids providing a treatment method for destruction of otherwise untractable substances.

## Format

### Current Year Working Plan

#### I. Detailed description of work included in the subject Field Task Proposal/ Agreement, (FTP/A):

This must be written so as to provide a clear verbal picture of the subject work, and will include:

- A. Objectives - why is this work being done? What significant contribution does this work provide to the LLW Program?
- B. Interface - What LLW Management projects (FTP/A's) are supported by this work, and what projects support this work?
- C. What tangible end products(s) are produced by this work?

#### II. Milestones

Milestones will be identified at a minimum of two levels:

- A. Major milestones shall identify the completion of elements of work critical to the successful completion of the FTP/A in accordance with the schedule and budget.
- B. Operational Milestones will be established by the FTP/A Task Manager to provide the guidelines of day-to-day management. Operational Milestones will be keyed to major milestones, the project schedule, and the budget. Operational Milestones and the budget distribution provide the base of performance measurement.

#### III. Schedule

A working schedule will be provided at the level of detail sufficient to show the complete integration of major and operational milestones.

#### IV. Budget

The working budget shall be distributed by month and keyed directly to both operational and major milestones. This distribution shall be displayed graphically in the same format used for monthly status reporting.

A current year working plan will frequently require specific supporting data in addition to the requirements already described. As example, this will include construction projects, major procurements and engineered items critical to the successful completion of the work defined by the FTP/A. If an FTP/A includes the examples used or any major element critical to the FTP/A, a mini-working plan will be developed and included in the FTP/A current year working plan immediately following section IV Budget. A mini current year working plan shall

be provided for each unique, critical item within the FTP/A.

The current year working plan shall be maintained current throughout the life cycle of the FTP/A. Any change of major milestone schedule, budget or work scope initiates the need for update of the plan. Schedule slippage that impacts, through delay, the successful completion of work and delays the end product delivery must be identified clearly, explained in detail, and the remedial action, rescheduling/rebudgeting must be included in the current year working plan as an addendum.