



May 23, 1994  
ML-94-023

Docket No. 70-36  
License No. SNM-33

Dr. Sean Soong, Project Manager  
Licensing Section 2, Licensing Branch  
Division of Fuel Cycle Safety and Safeguards  
U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, D. C. 20555

Subject: **Response to Questions on Decommissioning Funding Plan  
(TAC No. L21637)**

Reference: Letter, S. Soong (NRC) to R. W. Sharkey (C-E) dated April 22, 1994

Dear Dr. Soong:

The referenced letter requests additional information concerning our Hematite Decommissioning Funding Plan submitted on May 28, 1993 and information submitted on December 10, 1993. Enclosure I with this letter provides the requested information.

If there are any questions or comments regarding this material, please feel free to contact me at 203-285-5261.

Very truly yours,

COMBUSTION ENGINEERING, INC.

Mark A. Michelsen  
Licensing Engineer

3 Enclosures

cc: Mr. George France (NRC - Region III)

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Enclosure I to  
ML-94-023

COMBUSTION ENGINEERING, INC.  
HEMAITE NUCLEAR FUEL MANUFACTURING FACILITY  
RESPONSE TO NRC QUESTIONS ON THE  
DECOMMISSIONING FUNDING PLAN

May 1994

RESPONSE TO NRC QUESTIONS ON THE  
DECOMMISSIONING FUNDING PLAN

The following provides responses to the NRC's request for additional information via letter dated April 22, 1994, concerning the Decommissioning Funding Plan for the Hematite Nuclear Fuel Manufacturing Facility. The topic of each request is given below (refer to the NRC letter for the complete comment), followed by CE's response.

- (1) Provide additional detail to support the cost estimate.

**Response:** Enclosure II provides the tables which contain the specific information used to develop the cost estimates for the decommissioning funding plan.

- (2) Revise Schedule A of the Standby Trust Agreement to indicate cost.

**Response:** Enclosure III provides a proposed revision of Schedule A for the Standby Trust Agreement as requested. Combustion Engineering will arrange with the Trustee to amend the Standby Trust Agreement by substituting the Schedule A in Enclosure III for the Schedule A that was attached to the original Agreement. Upon completion of the appropriate signatures and authorizations to execute this amended Agreement, a copy will be forwarded to the NRC.

Enclosure II to  
ML-94-023

HEMATITE DECOMMISSIONING COST ESTIMATE TABLES

May 1994

HDFP-01-01  
Bldg. 230, Clear Areas

Item# Description  
1 Floor area(square ft.)  
2 Wall area(square ft.)

type floors: painted concrete & tile  
type walls: painted metal & drywall  
type ceilings: painted metal

QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
0	ft-3						
0	ft-3						
0	ft-3	\$70.00	0	\$22.00	\$0	\$0	\$0
0	ft-3						
01 RAD WASTE PACKAGE DISPOSAL/STORAGE							
02 DECONTAMINATION WALLS							
0	ft-2		0	\$22.00	\$0	\$0	\$0
0	ft-2		0	\$22.00	\$0	\$0	\$0
0	ft-2		0	\$22.00	\$0	\$0	\$0
CEILING FLOOR SURFACE							
0	ft-3		0	\$22.00	\$0	\$0	\$0
03 REMOVE E&M SERVICE							
0	ft		0	\$22.00	\$0	\$0	\$0
04 REMOVE VENTILATION							
0	ft		0	\$22.00	\$0	\$0	\$0
05 RELEASE SURVEY							
			710	\$23.00	\$16,330	\$1,633	\$17,963
				TOTAL	\$16,330.00	\$1,633.00	\$17,963.00

Labor Hours: 0

H.P. Hours: 710

Package Hours: 0

Decon Hours: 0

HDFP-01-02  
Bldg. 230, Controlled Areas

- Item# Description
- 1 Piping and E & M
  - 2 Stacking tables, 4x15x4x2 (tot.)
  - 3 End cap welders, 2 (tot.)
  - 4 Kardex unit, 11.25x8.25x20.75
  - 5 Ventilation (linear ft.)
  - 6 Floor area (square ft.)
  - 7 Wall area (square ft.)

type floors: painted concrete  
type walls: painted concrete block  
type ceilings: painted metal

Total Rad Waste

QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
2620	ft-3						
2044	ft-3		2044	\$22.00	\$44,968	\$4,497	\$49,465
2044	ft-3	\$70.00			\$143,080	\$14,308	\$157,388
613	ft-3						
01 RAD WASTE PACKAGE							
DECON SERVICE DISPOSAL/STORAGE							
02 DECONTAMINATION WALLS							
3300	ft-2		66	\$22.00	\$1,452	\$145	\$1,597
3300	ft-2		66	\$22.00	\$1,452	\$145	\$1,597
3300	ft-2		165	\$22.00	\$3,630	\$363	\$3,993
FLOOR SURFACE							
50	ft-3		25	\$22.00	\$550	\$55	\$605
03 REMOVE E&M SERVICE							
200	ft		100	\$22.00	\$2,200	\$220	\$2,420
04 REMOVE VENTILATION							
99			99	\$23.00	\$2,277	\$229	\$2,506
05 RELEASE SURVEY							
2620				TOTAL:	\$199,609.00	\$19,960.90	\$219,569.90

Labor Hours: 2466

H.P. Hours: 96

Package Hours: 2169

Decon Hours: 297

HDFP-01-03  
 Bldg. 230, Mezzanine (clear area)

item# Description  
 1 Floor area (square ft.)  
 2 Wall area (square ft.)  
 type floors: carpet  
 type walls: drywall  
 type ceilings: drop in tile

sqr. ft.  
 6100  
 5100

Total Rad Waste

0

QTY	UNIT	\$UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
0	ft-3						
0	ft-3						
0	ft-3	\$70.00	0	\$22.00	\$0	\$0	\$0
0	ft-3						
0	ft-2						
0	ft-2						
0	ft-2						
0	ft-3						
0	ft						
112	TOTAL:				\$2,576	\$258	\$2,834

Labor Hours: 0  
 H.P. Hours: 112  
 Packags Hours: 0  
 Decon Hours: 0

\$2,576.00  
 \$257.60  
 \$2,833.60

HDFP-02-01  
 Bldg. 240, Incinerator Area(Green Room)

Item#	Description	Qty	Unit	LABOR \$/HR	CONTINGENCY	TOTAL
1	Piping and E&M	50	ft			
2	No. 1 incinerator scrubber, 9.5x2.5d	46	ft			
3	No. 2 incinerator scrubber, 9.5x2.5d	46	ft			
4	No. 1 injector venturi, 8x1.5d	11	ft			
5	No. 2 injector venturi, 8x1.5d	59	ft			
6	Air to air heat exchangers, 12x2.5d	3	ft			
7	Vacuum cleaner filter 4x1d	26	ft			
8	No. 1 incinerator, 2.5x3x3.5	56	ft			
9	No. 2 incinerator, 9x2.5d-3x4x1	16	ft			
10	Quench tube, 2'x1d	33	ft			
11	No. 1 dryer, 3x2x5.5	33	ft			
12	No. 2 dryer, 3x2x5.5	63	ft			
13	Milling hood, 3x3x7	200	ft			
14	Filter out up hood, 8.5x2.5x6x2(tot.)	24	ft			
15	Vacuum hood, 2x2x4+4.5x1.5d	40	ft			
16	Ventilation(linear ft.)	2900	ft			
17	Floor area(square ft.)	3300	ft			
18	Wall area(square ft.)					

type floors: painted concrete  
 type walls: painted concrete block  
 type ceilings: painted metal

Total Rad Waste

677

01 RAD WASTE PACKAGE DISPOSAL/STORAGE	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
	677	ft-3		473.9	\$22.00	\$10,458	\$1,043	\$11,468
	474	ft-3	\$70.00			\$33,173	\$3,317	\$36,490
	142	ft-3						

Labor Hours: 787.9  
 H.P. Hours: 91  
 Package Hours: 518.9  
 Decon hours: 268

02 DECONTAMINATION WALLS	3300	ft-2		66	\$22.00	\$1,452	\$145	\$1,597
CEILING	2900	ft-2		58	\$22.00	\$1,276	\$128	\$1,404
FLOOR SURFACE	2900	ft-2		145	\$22.00	\$3,190	\$319	\$3,509
03 REMOVE E&M SERVICE	50	ft-3		25	\$22.00	\$550	\$55	\$605
04 REMOVE VENTILATION	40	ft		20	\$22.00	\$440	\$44	\$484
05 RELEASE SURVEY				91	\$23.00	\$2,093	\$209	\$2,302
					TOTAL:	\$52,599.80	\$5,259.98	\$57,859.78





HDFF-02-03  
BLDG. 240, Maintenance Shop

Items	Description	Quantity	Unit	Volume
1	Piping and E & M	75	ft.	75
2	Horoules drill press, 5x4x2	40		40
3	Bridgeport drill press, 5x3x2	30		30
4	Harig grinder, 2x2x1+2	6		6
5	Do-all beam saw, 2.25x2.25x3+2.25x2.5x1	21		21
6	Sander, 1x2x1	3		3
7	Chop saw, 2x2x1	4		4
8	Grinding hood, 3x3x7	63		63
9	Synorwavs welder, 2.5x2x4+5x1d	21		21
10	Work bench, 4x5x3x3(tot.)	180		180
11	Harrison lathe, 2x2.5x4.5+5.5x1x1+2	30		30
12	Precision welder, 2x2x3	12		12
13	Ventilation(linear ft.)	54		54
14	Floor area(square ft.)	4300		4300
15	Wall area(square ft.)	6900		6900

type floors: painted concrete  
type walls: painted concrete block  
type ceilings: painted metal

\* Wall and floor areas include those of the current lab area.

Total Rad Waste

485

QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
485	ft-3						
340	ft-3				\$7,469	\$747	\$8,216
340	ft-3	\$70.00	339.5	\$22.00	\$23,765	\$2,377	\$26,142
102	ft-3						
6900	ft-2		138	\$22.00	\$3,036	\$304	\$3,340
4300	ft-2		86	\$22.00	\$1,892	\$189	\$2,081
4300	ft-2		215	\$22.00	\$4,730	\$473	\$5,203
75	ft-3		37.5	\$22.00	\$825	\$83	\$908
54	ft		27	\$22.00	\$594	\$59	\$653
			155	\$23.00	\$3,565	\$357	\$3,922
				TOTAL:	\$45,876.00	\$4,587.60	\$50,463.60

Labor Hours:

H.P. Hours:

Package Hours:

Decon Hours:

HDFP-02-04  
Bldg. 240, Lab

Item#	Description	cu. ft.	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
			659	ft-3						
	01 RAD WASTE PACKAGE		461	ft-3		461.3	\$22.00	\$10,149	\$1,015	\$11,163
	DECON SERVICE		461	ft-3	\$70.00			\$32,291	\$3,229	\$35,520
	DISPOSAL/STORAGE		138	ft-3						
	02 DECONTAMINATION									
	WALLS		5100	ft-2		102	\$22.00	\$2,244	\$224	\$2,468
	CEILING		2400	ft-2		48	\$22.00	\$1,056	\$106	\$1,162
	FLOOR SURFACE		2400	ft-2		120	\$22.00	\$2,640	\$264	\$2,904
	03 REMOVE E&M SERVICE		25	ft-3		12.5	\$22.00	\$275	\$28	\$303
	04 REMOVE VENTILATION		100	ft		50	\$22.00	\$1,100	\$110	\$1,210
	05 RELEASE SURVEY					99	\$23.00	\$2,277	\$228	\$2,505
							TOTAL:	\$52,031.60	\$5,203.16	\$57,234.76
						Labor Hours:		793.6		
						H.P. Hours:		99		
						Package Hours:		523.8		
						Decon Hours:		270		
1	Piping and E & M	25								
2	Fume hoods, 2.5x4.75x4.75x3(tot.)	170								
3	Powder hoods, 1.75x2x2.5x2(tot.)	18								
4	Muffle furnaces, 1x1.5x1.5	2								
5	Spec. 25, 1x.5x.75x2(tot.)	1								
6	Drying oven, 2.5x2.5x2x2(tot.)	25								
7	Water bath, 2.75x1.75x.75	4								
8	British station, 4x10x3	120								
9	Sub sieve sizer, .75x2x1.5	2								
10	Incubator, 1.5x2.75x2	8								
11	Freezer, 1.75x1.75x3	9								
12	Nitrogen analyzer, 1.75x1.75x2.5	8								
13	Still, 2x1d	2								
14	Florida station, 2.5x2x1	5								
15	Balance table, 3x2x2	12								
16	Carbon analyzer, 3x2.25x2.5	17								
17	Computer station, 2x2x1.5	6								
18	Surface area analyzer, 2x2.25x4	18								
19	Metalographs, 2x3x1	6								
20	AA-1475, 1.75x1.5x3.5	9								
21	Old balance, 2.5x1.25x2	6								
22	Glove box, 2.5x3.5x2	18								
23	Compacter, 6x4x1	24								
24	Enrichment meter, 3x2x2+2x1.5d	16								
25	Counters	400								
26	Tables	70								
27	Miscellaneous	50								
28	Ventilation(linear ft.)	100								
29	Floor area(square ft.)	2400								
30	Wall area(square ft.)	5100								

type floors: painted concrete & 240 ft.2 tile  
type walls: painted concrete block  
type ceilings: painted metal

Total Rad Waste 659



HDFP-02-06  
Bldg 240, Clear Area

Item# Description sqf ft.  
1 Floor area(square ft.) 3200  
2 Wall area(square ft.) 6800

Type floors: tile(1900ft.2) & painted concrete(1300ft.2)  
Type walls: painted concrete block  
Type ceilings: painted metal & drop ceiling(900ft.2)

Total Rad Waste 0

QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
0	ft-3		0	\$22.00	\$0	\$0	\$0
0	ft-3				\$0	\$0	\$0
0	ft-3	\$70.00					
0	ft-3						
0	ft-2		0	\$22.00	\$0	\$0	\$0
0	ft-2		0	\$22.00	\$0	\$0	\$0
0	ft-2		0	\$22.00	\$0	\$0	\$0
0	ft-3		0	\$22.00	\$0	\$0	\$0
0	ft		0	\$22.00	\$0	\$0	\$0
100				\$23.00	\$2,300.00	\$230.00	\$2,530.00
				TOTAL:	\$2,300.00	\$230.00	\$2,530.00
				Labor Hours:	0		
				H.P. Hours:	100		
				Package Hours:	0		
				Decon Hours:	0		

HDFP-03-01  
Bldg. 252, Controlled Areas

Item#	Description	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
1	Piping and E&M	1309	ft-3						
2	Hespa filler tank, 8x10x4.5	916	ft-3		916.3	\$22.00	\$20,159	\$2,016	\$22,174
3	Brick cutting saw, 111x2+4	916	ft-3	\$70.00			\$64,141	\$6,414	\$70,555
4	Drill press, 1.5x.75x2.5+4	275	ft-3						
5	Hopper tumbler, 3x3x5+1x2x2	8600	ft-2		172	\$22.00	\$3,794	\$378	\$4,162
6	Recycle hoppers, 1.5x2x10(10tot.)	9400	ft-2		188	\$22.00	\$4,138	\$414	\$4,550
7	Recycle hoppers load hood, 3.5x3.5x2.25	9400	ft-2		470	\$22.00	\$10,340	\$1,034	\$11,374
8	Recycle hoppers computer station, 2.5x2.5x1.5								
9	Fresh containers, (4.25x3.25x7+1)15(tot.)	100	ft-3		50	\$22.00	\$1,100	\$110	\$1,210
10	Exhaust blower, 3x3x2	50	ft		25	\$22.00	\$550	\$55	\$605
11	Metal shearor, 5x2.5x2								
12	Metal break, 5x2.5x3.5								
13	Alrco welder, 4x4x3								
14	Boiler, 1.4x6x4+5								
15	Boiler make-up water tank, 5x2.75x4+2.75x1x5								
16	Boiler chemical tank, 3x2.5x2								
17	Ventilation(linear ft.)				274	\$23.00	\$6,302	\$630	\$6,932
18	Floor area(square ft.)	9400					\$110,511.60	\$11,051.16	\$121,562.76
19	Wall area(square ft.)	8600							
<p>TOTAL: \$23.00 \$6,302 \$630 \$110,511.60 \$11,051.16 \$121,562.76</p>									
<p>Labor Hours: 1821.3</p>									
<p>H.P. Hours: 274</p>									
<p>Package Hours: 991.3</p>									
<p>Decon Hours: 830</p>									

1309

Total Rad Waste

type floors: painted concrete  
type walls: painted concrete block  
type ceilings: painted metal

HDFP-03-02  
Bldg 253, Clear Areas

Item# (Description)  
1 Floor area(square ft.) 4400  
2 Wall area(square ft.) 7900

type floors: tile & carpet  
type walls: painted concrete block & painted metal  
type ceilings: painted metal

Total Rad Waste

0

QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
0	ft-3						
0	ft-3						
0	ft-3	\$70.00	0	\$22.00	\$0	\$0	\$0
0	ft-3						
0	ft-2						
0	ft-2						
0	ft-2						
0	ft-3						
0	ft						
123			123	\$23.00	\$2,829	\$283	\$3,112
				TOTAL:	\$2,829.00	\$282.90	\$3,111.90

Labor Hours: 0

H.P. Hours: 123

Package Hours: 0

Decon Hours: 0







HDFP-04-03  
3rd Floor Bldg. 254

Item#	Description	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
1	Piping and E&M	926	ft-3						
2	HepaFilter bank, 8x10x4.5x2(tot.)	648	ft-3				\$14,260	\$1,426	\$15,686
3	Vacuum blowers, (1.5x2x2.7Lx1d)x11(tot.)	648	ft-3	\$70.00	648.2	\$22.00	\$45,374	\$4,537	\$49,911
4	Preformer mixer hood, 2x2.5x3x2(tot.)	110	ft-2						
5	Preformer blender, (3x2d+1.5x3)x2(tot.)	2300	ft-2				\$792		\$871
6	Preformer blender receiver, 5x10x2(tot.)	8	ft-2				\$1,012		\$1,113
7	Ventilation(Linear ft.)	320	ft-2		115	\$22.00	\$2,530	\$253	\$2,783
8	Floor area(square ft.)	2300	ft-3		15	\$22.00	\$330	\$33	\$363
9	Wall area(square ft.)	1800	ft		160	\$22.00	\$3,520	\$352	\$3,872
01 RAD WASTE PACKAGE DISPOSAL/STORAGE 02 DECONTAMINATION WALL'S 03 REMOVAL E&M SERVICE 04 REMOVE VENTILATION 05 RELEASE SURVEY									
Labor Hours: 1020.2 H.P. Hours: 64 Package Hours: 823.2 Decon Hours: 197									
						TOTAL:	\$69,290.40	\$6,929.04	\$76,219.44

926

Total Rad Waste

HDFP-04-04  
Mezzanines Bldg. 254

Item#	Description	cu. ft.	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
			2330	ft-3						
	01 RAD WASTE PACKAGE		1631	ft-3		1631	\$22.00	\$35,882	\$3,586	\$39,470
	DECON SERVICE DISPOSAL/STORAGE		1631	ft-3	\$70.00			\$114,170	\$11,417	\$125,587
			489	ft-3						
	02 DECONTAMINATION WALLS		2200	ft-2		44	\$22.00	\$968	\$97	\$1,065
	CEILING		4200	ft-2		84	\$22.00	\$1,848	\$185	\$2,033
	FLOOR SURFACE		4200	ft-2		210	\$22.00	\$4,620	\$462	\$5,082
	03 REM JVE E&M SERVICE		30	ft-3		15	\$22.00	\$330	\$33	\$363
	04 REMOVE VENTILATION		200	ft		100	\$22.00	\$2,200	\$220	\$2,420
	05 RELEASE SURVEY					106	\$23.00	\$2,438	\$244	\$2,682
							TOTAL:	\$162,456.00	\$16,245.60	\$178,701.60
	type floors: painted metal									
	type walls: painted metal & drywall									
	type ceilings: painted metal & drop ceiling									
	Total Rad Waste	2330				Labor Hours:	2084			
						H.P. Hours:	106			
						Package Hours:	1746			
						Decon Hours:	338			

HDFP 04-'5  
Bldg. 254 Clear Areas

Item#	Description	sq. ft.	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
	Women's locker room		0	ft-3		0	\$22.00	\$0	\$0	\$0
	floor area:	1'-00	0	ft-3	\$70.00			\$0	\$0	\$0
	wall area:	1500	0	ft-3				\$0	\$0	\$0
	type floors: tile		0	ft-2			\$22.00	\$0	\$0	\$0
	type walls: Merlite panels		0	ft-2			\$22.00	\$0	\$0	\$0
	type ceilings: drop ceiling		0	ft-2			\$22.00	\$0	\$0	\$0
	Utility room		0	ft-3		0	\$22.00	\$0	\$0	\$0
	floor area:	450	0	ft		0	\$22.00	\$0	\$0	\$0
	wall area:	1000	0	ft		0	\$22.00	\$0	\$0	\$0
	type floors: concrete (unpainted)		40.5			40.5	\$23.00	\$932	\$93	\$1,025
	type walls: painted metal							\$931.50	\$93.15	\$1,024.65
	type ceilings: painted metal w/4 joists									
	Total Floor Area	1550								
	Total Wall Area	2500								
	Total Rad Waste	0								

LABOR Hours: 0  
H.P. Hours: 40.5  
Package Hours: 0  
Decon Hours: 0

TOTAL: \$932

\$93.15

\$1,024.65

HDFP-05-01  
Bldg. 255, Clear Areas

Item# Description  
1 floor area:  
2 wall area:  
sq. ft.  
1500  
2500

type floors: tile  
type walls: Marfite panels  
type ceilings: drop ceiling

QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
0	ft-3						
0	ft-3						
0	ft-3	\$70.00	0	\$22.00	\$0	\$0	\$0
0	ft-3				\$0	\$0	\$0
0	ft-2						
0	ft-2						
0	ft-2						
0	ft-3						
0	ft						
41					\$943	\$04	\$1,037
					\$943.00	\$94.30	\$1,037.30

05 RELEASE SURVEY

Labor Hours: 0  
H.P. Hours: 41  
Package Hours: 0  
Decon Hours: 0



HDFP-05-03  
 Bldg. 255, Uranium Storage

Item#	Description	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
		250	ft-3						
		175	ft-3				\$3,850	\$385	\$4,235
1	Piping and E&M	175	ft-3		175	\$22.00	\$3,850	\$385	\$4,235
2	Air compressor, 8x4.5x5.5	175	ft-3	\$70.00			\$12,250	\$1,225	\$13,475
3	Floor area(square ft.)	53	ft-3						
4	Wall area(square ft.)								
		4200	ft-2						
		4200	ft-2		94	\$22.00	\$1,848	\$185	\$2,033
		4300	ft-2		86	\$22.00	\$1,892	\$189	\$2,081
		4300	ft-2		215	\$22.00	\$4,730	\$473	\$5,203
		50	ft-3		25	\$22.00	\$550	\$55	\$605
		0	ft		0	\$22.00	\$0	\$0	\$0
					128	\$23.00	\$2,944	\$294	\$3,238
							\$28,064.00	\$2,806.40	\$30,870.40

type floors: painted concrete  
 type walls: painted metal & concrete block  
 type ceilings: painted metal

Total Rad Waste 250

Labor Hours: 585  
 H.P. Hours: 128  
 Package Hours: 200  
 Decon Hours: 385





HQFP-06-01  
Bldg. 256, Pellet Drying Area

- Items# Description  
 1 Piping and E&M  
 2 Drying furnace, 30x4.5x6  
 3 Heating hood, 8x11x2  
 4 Utility hood, 6.5x3x3.5  
 5 Ventilation (linear ft.)  
 6 Floor area (square ft.)  
 7 Wall area (square ft.)

type floors: concrete  
 type walls: painted concrete block  
 type ceilings: painted metal

Total Rad Waste

QTY	UNIT	\$/UNIT	HOURS	LASOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
1150	fr-3						
805	fr-3		805	\$22.00	\$17,710	\$1,771	\$19,481
805	fr-3	\$70.00			\$56,350	\$5,635	\$61,985
242	fr-3						
01 RAD WASTE PACKAGE DISPOSAL/STORAGE							
02 DECONTAMINATION							
2800	fr-2		56	\$22.00	\$1,232	\$123	\$1,355
2000	fr-2		40	\$22.00	\$880	\$88	\$968
2000	fr-2		100	\$22.00	\$2,200	\$220	\$2,420
FLOOR SURFACE							
30	fr-3		15	\$22.00	\$330	\$33	\$363
03 REMOVE E&M SERVICE							
50	fr		25	\$22.00	\$550	\$55	\$605
04 REMOVE VENTILATION							
05 RELEASE SURVEY							
1150			68	\$23.00	\$1,564	\$156	\$1,720
				TOTAL:	\$80,816.00	\$8,081.50	\$88,897.50
			Labor Hours:	1041			
			H.P. Hours:	68			
			Package Hours:	845			
			Decon Hours:	196			

HDFP-06-02  
 Bldg. 256, Clear Areas

Item# Description  
 1 Floor area(square ft.)  
 2 Wall area(square ft.)

type floors: concrete  
 type walls: painted concrete block  
 type ceilings: painted metal

Total Rad Waste

sq. ft.  
 4200  
 5600

0

	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
01 RAD WASTE PACKAGE	0	R-3						
DECON SERVICE	0	R-3	\$70.00	0	\$22.00	\$0	\$0	\$0
DISPOSAL/STORAGE	0	R-3				\$0	\$0	\$0
02 DECONTAMINATION WALLS	0	R-2			\$22.00	\$0	\$0	\$0
CEILING	0	R-2			\$22.00	\$0	\$0	\$0
FLOOR SURFACE	0	R-2			\$22.00	\$0	\$0	\$0
03 REMOVE E&M SERVICE	0	R-3			\$22.00	\$0	\$0	\$0
04 REMOVE VENTILATION	0	R			\$22.00	\$0	\$0	\$0
05 RELEASE SURVEY				98	\$23.00	\$2,254	\$225	\$2,479
					TOTAL:	\$2,254.00	\$225.40	\$2,479.40

Labor Hours: 0  
 H.P. Hours: 98  
 Package Hours: 0  
 Decon Hours: 0





HDFP-07-03  
3RD Floor Outside Building

Item#	Description	sub. ft.
1	Piping and E & M	20
2	R1 preheater, 4x7.5d	2
3	Weight hopper, 3x2.5d	29
4	R2 reactor, 14x3d	98
5	Spillash tank, 3x1d	2
6	Hepafilter bank, 8x10x4.5	360
7	Utility hood, 3.5x4.5x2.5	39
8	Utility hood tabs, 3.5x4.5x3	47
9	Electrical distribution panel, 7.5x8x2	120
10	UO2 transfer blower, 2x3x2.5	15
11	UO2 transfer blower prefilter, 3x1.5d	5
12	Ventilation (linear ft.)	80
13	Floor area (square ft.)	950
14	Wall area (square ft.)	1300

type floors: painted metal  
type walls: painted metal  
type ceilings: painted metal

Total Rad Waste

QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
738	ft-3						
517	ft-3		516.6	\$22.00	\$11,385	\$1,137	\$12,502
517	ft-3	\$70.00			\$36,162	\$3,616	\$39,778
155	ft-3						
1300	ft-2		26	\$22.00	\$572	\$57	\$629
950	ft-2		19	\$22.00	\$418	\$42	\$460
950	ft-2		48	\$22.00	\$1,045	\$105	\$1,150
20	ft-3		10	\$22.00	\$220	\$22	\$242
80	ft		40	\$22.00	\$880	\$88	\$968
			32	\$23.00	\$736	\$74	\$810
				TOTAL:	\$51,398.20	\$5,139.82	\$56,538.02

Labor Hours: 659.1

H.P. Hours: 32

Package Hours: 566.6

Decon Hours: 92.5

HOFP-07-04  
4TH Floor Outside Building

Item	Description	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONGINGENCY	TOTAL
1	Piping and E&M	578	R-3						
2	Hepa filter bank, 8x10x4.5	80	R-3				\$8,901	\$880	\$9,781
3	Crane, 3x1.5d-3R.3	360	R-3	\$70.00	404.5	\$22.00	\$28,322	\$2,832	\$31,154
4	R1 Reactor, 12x3d	5	R-3						
5	R1 back-up filter, 3x1.5d	85	R-2				\$924	\$92	\$1,016
6	R2 back-up filter, 7x3d	49	R-2				\$409	\$41	\$450
7	R3 back-up filter, 7x3d	49	R-2				\$1,023	\$102	\$1,125
8	Secondary filter, 5x2.5d	25	R-2						
9	Ventilation (linear ft.)	50	R-3				\$660	\$66	\$726
10	Floor area (square ft.)	930	R						
11	Wall area (square ft.)	2100	R						
01 RAD WASTE PACKAGE DISPOSAL/STORAGE									
02 DECONTAMINATION WALLS CEILING FLOOR SURFACE									
03 REMOVE E&M SERVICE									
04 REMOVE VENTILATION									
05 RELEASE SURVEY									
					39.6	\$23.00	\$911	\$91	\$1,002
						TOTAL:	\$41,810.20	\$4,181.02	\$45,991.22
					571.7				
					39.6				
					464.6				
					107.1				

Labor Hours: 571.7  
 H.P. Hours: 39.6  
 Package Hours: 464.6  
 Decon Hours: 107.1

Total Rad Waste

578

type floors: painted metal  
 type walls: painted metal  
 type ceilings: painted metal

HDFP-07-05  
Loading Area Oxide building

Item	Description	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
		668	ft-3						
		468	ft-3		467.6	\$22.00	\$10,287	\$1,029	\$11,316
1	Piping and E&M	10							
2	UF6 Vaporizer, 8x3.5d	77							
3	UF6 Vaporizer, 8x3.5d	77							
4	UF6 Vaporizer platform, 15x10x2.5	380							
5	UF6 Vaporizer stands, 4x7x3(frame)	84							
6	Cold trap, 5x1.5d+4x1s+10ft.3	22							
7	Crane, 6x1.5d3x.5x2+4ft.3	18							
8	Floor area(square ft.)	1600							
9	Wall area(square ft.)	3100							
				\$70.00			\$32,732	\$3,273	\$36,005
		1403	ft-3						
		3100	ft-2		62	\$22.00	\$1,364	\$136	\$1,500
		1600	ft-2		32	\$22.00	\$704	\$70	\$774
		1600	ft-2		80	\$22.00	\$1,760	\$176	\$1,936
		10	ft-3		5	\$22.00	\$110	\$11	\$121
		0	ft		0	\$22.00	\$0	\$0	\$0
		63			63	\$23.00	\$1,449	\$145	\$1,594
							TCTAL: \$48,406.20	\$4,840.62	\$53,246.82
		668							

type floors: painted metal  
type walls: painted concrete  
type ceilings: painted metal

Total Rad Waste

Labor Hours: 648.6

H.P. Hours: 63

Package Hours: 472.6

Decon Hours: 174





HDFP-08-01  
Ancillary Areas(Clear)

Item#	Description	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
	Emergency Generator Bldg.								
1	Floor area(square ft.)	4500	sq-ft		0	\$22.00	\$0	\$0	\$0
2	Wall area(square ft.)	2500	sq-ft	\$70.00	0		\$0	\$0	\$0
	type floors: painted concrete								
	type walls: painted concrete block								
	type ceilings: painted metal								
	Pump & Storage								
1	Floor area(square ft.)	680	sq-ft		0	\$22.00	\$0	\$0	\$0
2	Wall area(square ft.)	2300	sq-ft		0	\$22.00	\$0	\$0	\$0
	type floors: painted concrete								
	type walls: painted concrete block								
	type ceilings: painted metal								
	Tile Barn								
1	Floor area(square ft.)	3600	sq-ft		213.6	\$23.00	\$4,913	\$491	\$5,404
2	Wall area(square ft.)	3000	sq-ft		213.6	\$22.00	\$4,712.80	\$491.28	\$5,404.08
	type floors: painted concrete								
	type walls: tile								
	type ceilings: metal								
	Wood Barn								
1	Floor area(square ft.)	2300	sq-ft		0		\$0	\$0	\$0
2	Wall area(square ft.)	2500	sq-ft		0		\$0	\$0	\$0
	type floors: painted concrete & dirt								
	type walls: wood								
	type ceilings: metal								
	Floor area(square ft.)	10680	sq-ft				\$0	\$0	\$0
	Wall area(square ft.)	10300	sq-ft				\$0	\$0	\$0
	01 RAD WASTE PACKAGE								
	02 DECONTAMINATION WALLS								
	03 REMOVE EAM SERVICE								
	04 REMOVE VENTILATION								
	05 RELEASE SURVEY								
	TOTAL:				213.6	\$23.00	\$4,913	\$491	\$5,404
							\$4,912.80	\$491.28	\$5,404.08

Labor Hours: 0  
H.P. Hours: 213.6  
Package Hours: 0  
Decon Hours: 0

H0FT 06-02  
Ancillary Areas(roof)

Item#	Description	Quantity	Unit	Volume (cu. ft.)
1	Piping and E & M	30	ft-3	30
2	Dust separator(oxide), 6x2d	19	ft-3	19
3	Exhaust blowers, 6x6x6, 5x2(tot.)	470	ft-3	470
4	Air make-up unit, 13x5x5x2(tot.)	850	ft-3	850
5	Air make-up unit, 10x10x5x2(tot.)	1000	ft-3	1000
6	Air make-up unit, 13x10x6, 5x2(tot.)	1700	ft-3	1700
7	Small exhaust blowers, 2x2x2x7(tot.)	56	ft-3	56
8	Small vacuum blowers, 2x3x1, 5x5	40	ft-3	40
9	Flood "ants", 5x5x3x9(tot.)	680	ft-3	680
10	Hepafilter housing, 2x2x3	12	ft-3	12
11	Hepafilter housing, 2x6x3x3(tot.)	160	ft-3	160
12	Hepafilter housing, 6, 5x3x3	59	ft-3	59
13	Ventilation(linear ft.)	300	ft	300
Total Rad Waste				4678

DESCRIPTION	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONGINGENCY	TOTAL
01 RAD WASTE PACKAGE DISPOSAL/STORAGE	4878	ft-3						
	3413	ft-3		3413.2	\$22.00	\$75,090	\$7,509	\$82,599
	1024	ft-3	\$70.00			\$238,924	\$23,892	\$262,816
02 DECONTAMINATION WALLS	0	ft-2		0	\$22.00	\$0	\$0	\$0
CEILING	0	ft-2		0	\$22.00	\$0	\$0	\$0
FLOOR SURFACE	0	ft-2		0	\$22.00	\$0	\$0	\$0
03 REMOVE E&M SERVICE	30	ft-3		15	\$22.00	\$330	\$33	\$363
04 REMOVE VENTILATION	300	ft		150	\$22.00	\$3,300	\$330	\$3,630
05 RELEASE SURVEY				0	\$23.00	\$0	\$0	\$0
TOTAL:						\$317,644.40	\$31,764.44	\$349,408.84

Labor Hours: 3578.2  
 H.P. Hours: 0  
 Package Hours: 3578.2  
 Decon Hours: 0

HDFP-08-03  
 Ancillary Areas (controlled)

Item#	Description	cu. ft.	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
1	Piping and E&M	150	7672	ft-3						
2	Depleted uranium (Weet Vault)		5370	ft-3		5370.4	\$22.00	\$118,149	\$11,815	\$129,964
3	Paint shed, 12x20x8	2207	5370	ft-3	\$70.00			\$375,928	\$37,593	\$413,521
4	Oil shed, 8x5x9	580	1811	ft-3						
5	Fuel tank, 3x4.5d	48		ft-2						
6	Liquid waste sulfonation mixer station, 7x7x8	290		ft-2						
7	Ammonia tank, 4.5x6d	1300		ft-2						
8	Nitrogen tank, 7x8d	1300		ft-3						
9	Vaporizer coils, 2x2x9x3 (tot.)	96	150	ft-3		75	\$22.00	\$1,650	\$165	\$1,815
10	Dry scrubbers (oxide plant), 20x20x5 (tot.)	310		R						
11	Liquid waste tanks, 3x3x2 (tot.)	21		R						
12	Liquid waste tanks, 4x2.5x2 (tot.)	130		R						
13	Liquid waste tank, 4x3d	28		R						
14	Rock silo, 24x8d	1200		R						
15	Rock silo filter, 6x2d	19		R						
Total Rad Waste										
						5445.4		\$495,726.80	\$49,572.68	\$545,299.48
						0				
						5445.4				
						0				

Labor Hours: 5445.4  
 H.P. Hours: 0  
 Package Hours: 5445.4  
 Decon Hours: 0

TOTAL:

HDFP-06-04  
Ancillary Areas

Item#	Description	Area
1	Floor area(square ft.)	740
2	Wall area(square ft.)	680
	type floors: painted concrete	
	type walls: painted concrete block	
	type ceilings: painted metal	
	South Vault	
1	Floor area(square ft.)	680
2	Wall area(square ft.)	2500
	type floors: painted concrete	
	type walls: painted concrete block	
	type ceilings: painted metal	
	Total floor	1400
	Total wall	3200

	QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
01 RAD WASTE PACKAGE	0	ft-3						
DECON SERVICE DISPOSAL/STORAGE	0	ft-3	\$70.00	0	\$22.00	\$0	\$0	\$0
02 DECONTAMINATION WALLS	3200	ft-2		64	\$22.00	\$1,408	\$141	\$1,549
CEILING	1400	ft-2		28	\$22.00	\$616	\$62	\$678
FLOOR SURFACE	1400	ft-2		70	\$22.00	\$1,540	\$154	\$1,694
03 REMOVE ESM SERVICE	0	ft-3		0	\$22.00	\$0	\$0	\$0
04 REMOVE VENTILATION	0	ft		0	\$22.00	\$0	\$0	\$0
05 RELEASE SURVEY				60	\$23.00	\$1,380	\$138	\$1,518
					TOTAL:	\$4,944.00	\$494.40	\$5,438.40
				162				
				60				
				0				
				162				

Labor Hours: 162  
H.P. Hours: 60  
Package Hours: 0  
Decon Hours: 162

HDFP-09-05  
Bldg. 110 (clear)

Item# Description  
1 Floor area(square ft.)  
2 Wall area(square ft.)

type floors: tile & carpet  
type walls: drywall  
type ceilings: drop in tile

Total Rad Waste

QTY	UNIT	\$/UNIT	HOURS	LABOR \$/HR	SUB TOTAL	CONTINGENCY	TOTAL
0	ft-3		0	\$22.00	\$0	\$0	\$0
0	ft-3	\$70.00			\$0	\$0	\$0
0	ft-3						
0	ft-2		0	\$22.00	\$0	\$0	\$0
0	ft-2		0	\$22.00	\$0	\$0	\$0
0	ft-2		0	\$22.00	\$0	\$0	\$0
0	ft-3		0	\$22.00	\$0	\$0	\$0
0	ft		0	\$22.00	\$0	\$0	\$0
134				\$23.00	\$3,082.00	\$308.20	\$3,390.20
				TOTAL:	\$3,082.00	\$308.20	\$3,390.20

Labor Hours: 0

H.P. Hours: 134

Package Hours: 0

Decon Hours: 0

Enclosure III to  
ML-94-023

PROPOSED REVISION OF SCHEDULE A OF THE STANDBY TRUST AGREEMENT  
TO THE HEMATITE DECOMMISSIONING FUNDING PLAN

May 1994

TRUST AGREEMENT SCHEDULE A  
(Revision 1)

This agreement demonstrates financial assurance for the following cost estimate for the following licensed activities:

U. S. Nuclear Regulatory Commission License Number - SNM-33 - Docket No. 70-36

Name and address of licensee - Combustion Engineering, Inc.  
P. O. Box 107  
Hematite, MO 63047

Address of licensed activity - Combustion Engineering, Inc.  
Hematite Nuclear Fuel Manufacturing Facility  
3300 State Road P  
Hematite, MO 63047

Cost estimate for regulatory assurances demonstrated by this agreement - \$9,926,184