1.0 Tank 18 Bulk Waste Removal - Phase 1, Step 1 – Removal of Liquid Waste

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March 1986	5 - 6
April 1986	7 - 8

2.0 Tank 18 Bulk Waste Removal Phase 1, Step – Removal of Bulk Sludge Waste

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August 1987	35 - 38

3.0 Summary Table of Section 1.0 & 2.0

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1.0 Phase 1, Step 1 – Removal of Liquid Waste

January, 1986
March 1986
April 1986

1.0

DISTRIBUTION

D. G. Kasal, Wilm.
H. D. Martin, Wilm., WCC III
J. W. Stewart, II, Wilm.
E. L. Albenesius, 773-A
D. L. Charlesworth, 773-A
M. A. Ebra, 773-A
C. B. Goodlett, 773-14A
D. E. Gordon, 773-42A
O. A. Towler, 773-A
R. H. Emslie, 773-A
J. P. Ryan, 773-14A
J. E. Haywood, 703-F
J. C. Eargle/R. N. Ransom, 200-S
W. B. Boore, 703-H
E. J. O'Rourke, 703-F
J. N. Beatty/G.M. Johnson/G.W. Becker, 703-H
A. T. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H
L. E. McCarty/N. R. Davis/C. D. Strain, 703-H
D. J. Coon/B. D. Helton, 703-H
P. D. d'Entremont, 703-H
F. G. McNatt, 704-8H
T. P. Malone, 703-H
R. H. Batig/J. H. Griffin/M. S. Peters, 703-F
M. L. Wikle/D. M. Rushin, 703-H
J. N. Chen/W. B. Van Pelt, 703-F
W. J. Jaegge/S. J. Mentrup, 703-H
D. J. Zecha/D. A. Weber, 703-H
Tech File, 703-H
File Code: WM-~~8~~-2.4

February 20, 1986

WM-1.2.4
ID No. 125

MONTHLY REPORT - JANUARY, 1986
WASTE MANAGEMENT TECHNOLOGY

SUMMARY

		Page
o	An interarea line transfer of 736M gal of high heat waste was made from tank 33F to tanks 30H and 13H using the upgraded IAL facilities.	2
o	A construction pipefitter discovered contamination on his outer clothing and shoes. The source was the 1H evaporator flush water system.	3
o	The beta-gamma incinerator set a record monthly high after burning 14,550 gallons of solvent, nearly doubling the previous high achieved in November 1985.	6
o	A permit modification for reclassification of outfall H-7 from stormwater to process discharge has been submitted for public notice.	9

1.0

1/86

TANK FARM OPERATION

Intertank Transfers

Four intertank transfers were completed in F-Area this month. Three transfers were made to provide feed for the 242-F and 242-16F evaporators. One transfer was made from tank 18 to provide space for additions from the tank 20 waste removal program.

Five intertank transfers were completed in H-Area this month. Three transfers from tank 36 to tank 13 provided feed for the 242-H evaporator. One transfer from tank 41 to tank 43 provided feed for the 242-16H evaporator. A small transfer of supernate from tank 22 to tank 32 was completed as a functional test of the tank 22 transfer pump.

HHW Supernate IAL Transfer

An interarea transfer of 736M gal High-Heat Waste (HHW) supernate from tank 33F to tanks 30H and 13H was completed January 13 using the new upgraded interarea transfer facilities. This transfer provided HHW receipt space in tank 33F.

F-Area Catch Tank

One transfer of 7,000 gallons was made from the catch tank to tank 7 this month.

H-Area Catch Tank

There was one transfer of 6589 gallons from the H-Area catch tank to the seepage basins this month. Activity was 189 d/min/ml.

Tank 20 Waste Removal

The west slurry pump in tank 20 was retrofitted with a mechanical seal. A transfer of supernate was made from tank 18 to tank 26 to provide room for future waste removal transfers from tank 20. Addition of inhibited water to tank 20 for batch #1 is in progress.

In-Tank Precipitation

A review of the current salt removal schedule shows that 6 blends will exceed the proposed saltstone limit for Ru-106. The schedule includes a total of 47 blends through the year 2003, each blend comprising a third-of-a-year's worth of feed to saltstone. WMT has recommended that DWPF design additional shielding to raise the Ru-106 limit.

The proposed limit for saltstone is 47 microcuries of Ru-106 per pound of dry salt. Calculations show that one salt blend--containing the concentrated supernate from Tank 29H--will contain about 900 microcuries per pound. This is a relatively small volume of supernate that could be handled specially. The other

1.0

DISTRIBUTION

J. E. Haywood, 703-F
W. B. Boore, 703-H
E. J. O'Rourke, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
J. N. Beatty, 703-H
G. M. Johnson, 703-H
G. W. Becker, 703-H
A. T. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H (5)
F. G. McNatt, 704-8H
D. J. Coon, 703-H
M. S. Peters, 703-F
P. D. d'Entremont, 703-H
J. N. Chen/W. B. Van Pelt, 703-F
T. P. Malone/D. M. Rushin/M. L. Wikle, 703-H
D. F. Nickelson, 260-4H
C. B. Goodlett, 704-S
WMT File, 703-H
File Code: WM-1.2.4

ID No. 139

April 20, 1986

WASTE MANAGEMENT MONTHLY DATA RECORD MARCH 1986

Attached are data for March, 1986 covering Waste Management processes and activities. This data record is a companion to the WASTE MANAGEMENT TECHNOLOGY MONTHLY REPORT.

1.0

3/86

TABLE WM-7

INTERTANK TRANSFERS

1986 Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					F-Area		
3/3	25		327.5	295.5	3510	147,000	Concentrated supernate
		26	294.8	298.1	3510	153,000	
3/14	47		337.3	257.1	3510	363,000	Concentrated supernate
		26	229.8	350.1	3510	377,000	
3/15	18		242.2	182.5	3540	211,000	LLW supernate #2
		26	278.6	252.3	3510	211,000	
3/24	20		184.1	87.5	3540	307,000	LLW supernate
		18	182.7	273.7	3540	321,000	
3/25	25		345.4	314.5	3510	129,000	Concentrated supernate
		26	243.7	257.4	3510	135,000	
3/31	47		352.4	276.3	3510	417,000	Concentrated supernate
		26	249.8	312.7	3510	434,000	
					H-Area		
3/1*	38		112.9	93.2	3510	69,000	Supernate
		43	200.0	231.8	3510	72,000	
3/2	36		313.3	293.7	3510	68,000	Concentrated Supernate
		13	228.9	250.5	3500	71,000	
3/2*	41		328.2	288.2	3510	190,000	Concentrated Supernate
		43	200.0	258.9	3510	197,000	
3/17	41		331.7	295.5	3510	180,000	Concentrated supernate
		43	203.0	234.6	3510	188,000	

[a]Adjusted to account for all process flows to or from the tanks during transfer; values for receiving tanks include jet dilution.

*Transfer continued from last month.

1.0

DISTRIBUTION

J. E. Haywood, 703-F
W. B. Boore, 703-H
E. J. O'Rourke, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
J. N. Beatty, 703-H
G. M. Johnson, 703-H
G. W. Becker, 703-H
A. T. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H (5)
F. G. McNatt, 704-8H
D. J. Coon, 703-H
M. S. Peters, 703-F
P. D. d'Entremont, 703-H
J. R. Fowler, 704-T
J. N. Chen/W. B. Van Pelt, 703-F
T. P. Malone/D. M. Rushin/M. L. Wikle, 703-H
D. F. Nickelson, 260-4H
C. B. Goodlett, 704-S
WMT File, 703-H
File Code: WM-1.2.4

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ID No. 140

May 20, 1986

WASTE MANAGEMENT MONTHLY DATA RECORD, APRIL, 1986

Attached are data for April, 1986 covering Waste Management processes and activities. This data record is a companion to the WASTE MANAGEMENT TECHNOLOGY MONTHLY REPORT.

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4/86

TABLE WM-5

INTERTANK TRANSFERS

1986 Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					F-Area		
4/7	18		272.3	183.7	3540	314,000	LLW supernate #3
		26	270	332.2	3510	314,000	
4/9	47		352.8	321.6	3510	178,000	Concentrated supernate
		26	286.2	305.1	3510	185,000	
4/11	25		355.2	324.6	3510	143,000	Concentrated supernate
		26	292.3	322	3510	149,000	
4/13	47		338.1	311.6	3510	143,000	Concentrated supernate
		26	322	349.4	3510	149,000	
4/21	47		345.3	275.3	3510	374,000	Concentrated supernate
		26	309.5	344.4	3510	389,000	
4/24	25		353.3	312	3510	226,000	Concentrated supernate
		26	341.5	349.7	3510	235,000	
4/27	25		322.4	311.5	3510	65,000	Concentrated supernate
		26	324	321	3510	68,000	
					H-Area		
4/08	41		355.2	301.6	3510	264,000	Concentrated supernate
		43	158.9	213.2	3510	275,000	
4/18	29		357.6	336.5	3510	74,000	Supernate
		30	333.8	356.0	3510	77,000	
4/20	41		359.7	321.0	3510	171,000	Concentrated Supernate
		43	133.3	171.2	3510	178,000	
4/25	21		333.0	326.6	3540	22,000	Supernate
		38	95.6	101.9	3510	22,000	
4/26	41		348.2	326.3	3510	121,000	Concentrated Supernate
		43	138.7	161.1	3510	126,000	
4/30	21		326.6	301.1	3540	90,000[b]	Supernate
		38	102.2	126.6	3510	86,000	

[a]Adjusted to account for all process flows to or from the tanks during transfer; values for receiving tanks include jet dilution.

[b]Transfer still in progress

2.0 Phase 1, Step – Removal of Bulk Sludge Waste

July 1986
August 1986
September 1986
October 1986
November 1986
December 1986
January 1987
June 1987
August 1987

20

DISTRIBUTION

J. E. Haywood, 703-F
W. B. Boore, 703-H
E. J. O'Rourke, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
J. N. Beatty, 703-H
G. M. Johnson, 703-H
G. W. Becker, 703-H
A. T. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H (5)
F. G. McNatt, 704-8H
D. J. Coon, 703-H
M. S. Peters, 703-F
P. D. d'Entremont, 703-H
J. N. Chen/W. B. Van Pelt, 703-F
T. P. Malone/D. M. Rushin, 703-H
B. E. Long, 260-4H
C. B. Goodlett, 704-S
WMT File, 703-H
File Code: WM-1.2.4

ID No. 143

August 21, 1986

WASTE MANAGEMENT MONTHLY DATA RECORD JULY 1986

Attached are data for July, 1986 covering Waste Management processes and activities. This data record is a companion to the WASTE MANAGEMENT TECHNOLOGY MONTHLY REPORT.

2.0

7/86

TABLE WM-4

INTERTANK TRANSFERS

1986 Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					F-Area		
7/4	45		324.6	250	3510	298,000	Concentrated supernate
		26	172.2	223.2	3510	310,000	
7/8	25		320.7	314.6	3510	30,000	Concentrated supernate
		26	151.2	151	3510	32,000	
7/9	28		343.3	299.6	3510	153,000	Concentrated supernate
		26	149.1	176.6	3510	160,000	
7/10	18F		210.5	135.1	3540	270,000	Sludge slurry (WR)[b]
		51H	18.3	103.7	3510	300,000	
7/14	27		360.4	291.2	3510	308,000	Concentrated supernate
		26	149.2	173.1	3510	320,000	
7/16	27		291.1	273	3510	80,000	Concentrated supernate
		26	161.5	168.4	3510	83,000	
7/20	20		219.7	49	3540	604,000	Sat. salt soln. (WR)[b]
		18	134.8	161.7	3540	628,000	
7/20	45		351.1	234.5	3510	494,000	Concentrated supernate
		26	183.5	325.2	3510	514,000	
7/21	18		193.5	150	3540	589,000	Sat. salt soln. (WR)[b]
		26	165.8	341.4	3510	589,000	
7/22	47		361.6	351.5	3510	35,000	Concentrated supernate
		26	323.0	333.2	3510	37,000	
7/26	25		351.3	317.6	3510	152,000	Concentrated supernate
		26	319.6	323.1	3510	158,000	
					H-Area		
6/30	10		129.0	120.2	2710	41,000	Supernate
7/4		43	292.7	332.5	3510	43,000	
7/1	41		350.7	309.7	3510	177,000	Concentrate
7/4		43	288.7	332.5	3510	184,000	
7/4	36		356.9	288.3	3510	240,000	Concentrate
7/7		13	200.3	259.3	3500	250,000	
7/7	18F		210.5	134.9	3540	270,000	Sludge slurry (WR)[b]
7/10		51H	18.3	103.7	3510	300,000	

2.0

DISTRIBUTION

J. E. Haywood, 703-F
W. B. Boore, 703-H
E. J. O'Rourke, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
J. N. Beatty, 703-H
G. M. Johnson, 703-H
G. W. Becker, 703-H
A. T. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H (5)
F. G. McNatt, 704-8H
D. J. Coon, 703-H
M. S. Peters, 703-F
P. D. d'Entremont, 703-H
M. A. Friedline/J. N. Chen, 703-F
M. A. Ceravolo/A. D. Ruterbories/D. M. Rushin, 703-H
B. E. Long, 260-4H
C. B. Goodlett, 704-S
WMT File, 703-H
File Code: WM-1.2.4

ID No. 144

September 19, 1986

WASTE MANAGEMENT MONTHLY DATA RECORD, AUGUST, 1986

Attached are data for August, 1986 covering Waste Management processes and activities. This data record is a companion to the WASTE MANAGEMENT TECHNOLOGY MONTHLY REPORT.

2.0

8/86

TABLE WM-5 (Cont'd)

INTERTANK TRANSFERS

1986 Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					H-Area		
8/11	41		347.8	311.8	3510	176,000	Concentrated supernate
		43	293.3	334.6	3510	183,000	
8/11	10		119.2	99.3	2710	54,000	Supernate
		43	335.6	320.3	3510	56,000	
8/12	30		186.2	154.1	3510	113,000	Supernate
		32	318.7	352.4	3510	118,000	
8/13	37		355.7	322.6	3510	111,000	Concentrated supernate
		13	221.8	234.3	3500	115,000	
8/16	30		153.8	141.9	3510	42,000	Supernate
		35	348.5	361.0	3510	44,000	
8/18	30		141.9	124.5	3510	61,000	Supernate
		13	218.2	230.0	3500	63,000	
8/21	36		358.0	321.1	3510	166,000	Concentrated supernate
		13	219.1	241.1	3500	173,000	
8/23	41		355.0	313.0	3510	243,000	Concentrated supernate
		43	290.1	332.5	3510	253,000	
8/23	18		183.1	102.7	3540	285,000 ✓	Sludge slurry #2
		51	210.7	301.7	3510	319,000 ✓	
8/25	37		360.3	318.4	3510	138,000	Concentrated supernate
		13	236.9	257.8	3500	143,000	
8/28	39		360.9	283.1	3510	273,000	Fresh HHW supernate
		30	124.5	205.0	3510	283,000	
8/29	23		320.3	297.3	3540	81,000	RBOF
		22	73.3	97.6	3540	85,000	

[a]Adjusted to account for all process flows to or from the tanks during transfer; values for receiving tanks include jet dilution.

[b]Continues to next month. Gallons transferred are as of August 31 at 10:00 p.m.

2.0

TABLE WM-5

INTERTANK TRANSFERS

1986 Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					F-Area		
8/1	45		344.3	270.9	3510	333,000	Concentrated supernate
		26	297.1	334.7	3510	346,000	
8/8	47		352.7	304.1	3510	171,000	Concentrated supernate
		26	268.1	300	3510	177,000	
8/11	20		90.4	68.2	3540	79,000	Sat. salt soln.
		18	156.3	179.7	3540	82,000	
8/18	25		359.6	347.1	3540	111,000	Concentrated supernate
		26	203.2	244.7	3510	115,000	
8/21	45		361.1	325	3510	173,000	Concentrated supernate
		26	242.7	281.3	3510	180,000	
8/21	27		354.8	248.9	3510	415,000	Concentrated supernate
		26	219.5	275.1	3510	431,000	
8/27	18F		183.1	102.7	3540	282,000	Sludge slurry
		51H	212.8	301.7	3510	312,000	
8/21	45		351.1	234.5	3510	494,000	Concentrated supernate
		26	183.5	325.2	3510	514,000	
8/27	47		358.9	300	3510	207,000	Concentrated supernate
		26	236.5	271.5	3510	215,000	
8/31	20		69.4	37.9	3540	115,000	Sat. salt soln.
		18	102.9	139.1	3540	120,000	
8/31	45		360.8	272	3510	312,000	Concentrated supernate
		26	229.5	282	3510	324,000	
					H-Area		
8/1	41		347.6	310.7	3510	182,000	Concentrated supernate
		43	304.7	340.0	3510	190,000	
8/4	36		355.4	310.8	3510	157,000	Concentrated supernate
		13	220.5	259.0	3500	163,000	

20

DISTRIBUTION

I. B. New, Jr., Wilm.
H. D. Martin, Wilm., WCC III
J. W. Stewart, II, Wilm.
E. L. Albenesius, 773-A
D. L. Charlesworth, 773-A
M. A. Ebra, 773-A
H. F. Sturm, Jr., 773-A
D. E. Gordon, 773-42A
E. L. Wilhite, 773-A
R. H. Emslie, 773-A
J. P. Ryan, 773-14A
C. B. Goodlett, 704-S
J. C. Eargle/R. N. Ransom, 704-4S
J. E. Haywood, 703-F
E. J. O'Rourke, 703-F
W. B. Boore, 703-H
J. N. Beatty/G.M. Johnson/G.W. Becker, 703-H
T. M. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H
L. E. McCarty/N.R. Davis/R. A. Ator, 703-H
D. J. Coon/B. D. Helton, 703-H
P. D. d'Entremont, 703-H
F. G. McNatt, 704-8H
T. P. Malone, 703-H
R. H. Batig/J.H. Griffin/M. S. Peters, 703-F
A. D. Ruterbories/D. M. Rushin, 703-H
M. A. Friedline/J. N. Chen, 703-F
W. J. Jaegge/S. J. Mentrup, 703-H
D. J. Zecha/D. A. Weber/O. B. Wheat, 703-H
K. S. Wierzbicki, 703-H
Tech File, 703-H
File Code: WM-1.2.4

ID 133

October 17, 1986

MONTHLY REPORT - SEPTEMBER, 1986
WASTE MANAGEMENT TECHNOLOGY AND OPERATIONS

SUMMARY

	Page
o Tank 46 is the emergency spare tank for both tank farms	1
o Tank 21 and 22 waste removal completed	2
o Closure plans for F/H seepage basins were submitted to DOE	6
o Reverse osmosis pilot unit began processing radioactive feed	6
o TRU waste certification program WIPP-WACCC audit was completed	8

2.0

The performance criteria necessitate a feed pump ranging from 0 to 40 gpm. In order to meet the maximum projected net space gain of 6.95 MM gallons per year, an average overheads of 16.75 gpm, with a maximum of 21 gpm, was needed. The bottoms flow ranged between 5 and 33 gpm with a low flow possibility of 2 gpm under certain conditions. The low flows are important because of the problems they can create by salting out in the gravity drain line from the evaporator.

In developing the envelope, several flows cases were analyzed to allow the evaporator to handle a wide-range of specific gravity feeds. With the tank farm operating near capacity for the near future, the design basis for the new evaporator will be the anticipated peak rate expected in 1 year. The flow sheet is scheduled to be sent to the Engineering Department by 10/4/86.

WASTE TRANSFER AND PREPARATION FOR DWPF

Tank 21H Waste Removal

Waste removal from tank 21 was completed on September 27. The first batch containing 94,000 gallons of sludge in 346,000 gallons of slurry was transferred to tank 42H. The second batch of 267,000 gallons contained 60,000 of sludge and was transferred to tanks 42H and 51H. Based on tank level and visual inspection, there is about 20,000 gallons of sludge remaining in tank 21.

Containment of the contaminated slurry pump seal water was successfully controlled this month. This was accomplished by fabricating and installing covers at the top packing access windows.

Tank 22H Waste Removal

Waste removal from tank 22 was completed on September 28. Half of batch two containing 39,000 gallons of salt and 21,000 gallons of sludge in 165,000 of slurry was transferred to tank 21. The remaining 158,000 gallons of batch two was transferred into tank 40. This transfer contained 37,000 gallons of salt and 20,000 of sludge. About 15,000 gallons of sludge and no salt remain in this tank.

Tank 18F Waste Removal

Three batches (batches #3, 4, and 5) were transferred from tank 18F to tanks 51H and 42H. These removed an estimated 108,000 gallons of sludge. Batch #6 is currently being transferred to tank 40H as of the end of this report period.

Inhibited water was used instead of tank 20 supernate for sludge slurrying in batches #5 and 6. The water was first added to tank 20 and then transferred

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to tank 18. This was done to increase the IW addition rate to tank 18 as well as dissolve some residual salt in tank 20. Batch #4 used a 50/50 mixture of inhibited water and tank 20 supernate.

The batch #3 transfer was finally terminated because tank 51H was approaching its operating limit. However, the transfer was temporarily interrupted 3 times by high-point conductivity probe false alarms (electrical problem). The transfers were restarted each time without a problem. Batch #3 removed about 60,000 gallons of sludge.

During batch #4, the NW and E slurry pumps were lowered to 39" and the TTP to 32" elevation. However, the TTP had to be raised back to its original elevation of 62" before it would transfer batch #4. Transfer of batch #4 to tank 42H was shut down when the interarea pump suction became plugged, just like batch #2. The pluggage was again removed by flushing from the high-point flush pit. Photographic inspections showed that very little sludge was transferred by the batch.

The NW and E slurry pumps were raised back to their original elevation of 69" prior to batch #5. This was done in accordance with SRL recommendations to slurry a smaller volume of sludge per batch. Batch #5 transferred about 48,000 gallons of sludge to tank 42H.

Transfer of batch #6 to tank 40H began on 9/29/86 and is currently in progress. Calculations show that 12,000 gallons of 50 wt% caustic need to be added to tank 18 to preclude any possible out-of-Technical Standards layering in tank 40H.

Tank 20F Waste Removal

The remainder of batch #3 supernate was transferred to tank 18 on 9/7/86, completing bulk waste removal from tank 20. Over 96% of the initial 366,000 gallons salt has been removed. Photographic inspections showed a residual salt mound on the tank bottom estimated at 13,000 gallons volume.

Two additional transfers of inhibited water were made to tank 18 for sludge slurrying.

Sludge Processing Tanks Status

Waste removal has currently added 596,000 gallons of sludge in 2.5MM gallons of total transfers. Approximately 280,000 gallons of sludge in 1MM gals of total transfer will be sent to sludge processing tanks to complete tank 18 cleanout.

2.0

DISTRIBUTION

J. E. Haywood, 703-F
W. B. Boore, 703-H
E. J. O'Rourke, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
J. N. Beatty, 703-H
G. M. Johnson, 703-H
G. W. Becker, 703-H
~~T. M. Fisher, 703-A~~
T. M. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H (5)
F. G. McNatt, 704-8H
D. J. Coon, 703-H
T. H. Killian, 703-F
P. D. d'Entremont, 703-H
T. P. Malone, 703-H
D. J. Zecha, 703-H
M. A. Friedline/J. N. Chen, 703-F
M. A. Ceravolo/A. D. Ruterbories/D. M. Rushin, 703-H
B. E. Long, 260-4H
C. B. Goodlett, 704-S
WMT File, 703-H
File Code: WM-1.2.4

ID No 146

November 17, 1986, 1986

WASTE MANAGEMENT MONTHLY DATA RECORD, OCTOBER, 1986

Attached are data for October, 1986 covering Waste Management processes and activities. This data record is a companion to the WASTE MANAGEMENT TECHNOLOGY MONTHLY REPORT.

2.0

10/80

TABLE WM-5

INTERTANK TRANSFERS

1986 Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer	Type or Origin of Waste
					F-Area		
10/2[A]	18F		85.3	53.5	3,540	145,000	Sludge slurry #6
		40H	93.0	149.1	3,510	197,000	
10/3[A]	47		339.0	290.4	3,510	171,000	Concentrated supernate
		26	209.1	252.3	3,510	177,000	
10/1	27		354.0	353.1	3,510	4,000	Concentrated supernate
		26	206.8	216.7	3,510	4,000	
10/1	20		12.3	0.0	3,540	31,000	Inhibited water
		18	85.3	75.3	3,540	32,000	
10/5	45		349.8	284.3	3,510	240,000	Concentrated supernate
		26	248.1	309.7	3,510	250,000	
10/6	25		334.5	319.4	3,510	85,000	Concentrated supernate
		26	266.7	306.5	3,510	88,000	
10/11	25		332.1	319.5	3,510	70,000	Concentrated supernate
		26	263.8	266.1	3,510	73,000	
10/18	47		362.2	275.0	3,510	307,000	Concentrated supernate
		26	213.7	235.6	3,510	319,000	
10/18	18F		79.5	43.6	3,540	129,000	Sludge slurry #7
		42H	285.0	334.8	3,510	175,000	
10/26	27		358.7	197.1	3,510	619,000	Concentrated supernate
		26	207.7	349.9	3,510	643,000	
10/25	25		358.8	319.4	3,510	138,000	Concentrated supernate
		26	251.6	324.9	3,510	144,000	
					H-Area		
10/1[b]	18		85.3	53.5	3,540	145,000	Sludge slurry
		40	93.0	149.1	3,510	197,000	
10/3	36		354.7	292.2	3,510	235,000	Concentrate
		13	178.2	244.4	3,500	244,000	

[A]Continued from last month. Initial levels are as of 10 p.m., 9/30/86.

[b]Continued from last month.

2.0

TABLE WM-5 (Cont'd)

INTERTANK TRANSFERS

1986 Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					H-Area		
10/6	41		352.7	323.2	3,510	126,000	Concentrate
		43	320.0	349.6	3,510	131,000	
10/12	42		357.9	285.0	3,510	256,000	Supernate
		40	153.3	229.4	3,510	267,000	
10/13	41		348.2	317.3	3,510	105,000	Concentrate
		43	320.1	343.8	3,510	109,000	
10/14	32		352.8	312.8	3,510	140,000	HHW supernate
		13	158.3	219.9	3,500	146,000	
10/16	21		30.4	5.5	3,540	80,000	Sludge slurry
		22	5.4	28.2	3,540	80,000	
10/17	18		79.5	43.6	3,540	129,000	Sludge slurry #7
		42	285.0	334.8	3,510	175,000	
10/17	36		354.5	333.2	3,510	113,000	Concentrate
		13	214.4	231.7	3,500	117,000	
10/20	41		355.7	316.9	3,510	197,000	Concentrate
		43	301.0	339.4	3,510	205,000	
10/22	37		356.9	320.8	3,510	203,000	Concentrate
		13	211.4	233.0	3,500	211,000	
10/25	42		334.6	313.8	3,510	73,000	Supernate
		43	334.3	350.0	3,510	76,000	
10/25	42		313.8	284.9	3,510	101,000	Supernate
		40	229.0	259.8	3,510	108,000	
10/27	23		363.8	322.7	3,540	192,000	RBOF supernate
		24	3.5	49.8	3,540	199,000	

[a]Adjusted to account for all process flows to or from the tanks during transfer; values for receiving tanks include jet dilution.

-2.0

DISTRIBUTION

J. E. Haywood, 703-F
W. B. Boore, 703-H
E. J. O'Rourke, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
J. N. Beatty, 703-H
G. M. Johnson, 703-H
G. W. Becker, 703-H
M. G. O'Rear, 703-A
T. H. Fisher, 703-A
T. M. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H (5)
F. G. McNatt, 704-8H
D. J. Coon, 703-H
T. H. Killian, 703-F
P. D. d'Entremont, 703-H
T. P. Malone, 703-H
D. J. Zecha, 703-H
M. A. Friedline/J. N. Chen, 703-F
M. A. Ceravolo/A. D. Ruterbories/D. M. Rushin, 703-H
B. E. Long, 260-4H
C. B. Goodlett, 704-S
WMT File, 703-H
File Code: WM-1.2.4

ID No 147

December 10, 1986

WASTE MANAGEMENT MONTHLY DATA RECORD NOVEMBER 1986

Attached are data for November, 1986 covering Waste Management processes and activities. This data record is a companion to the WASTE MANAGEMENT TECHNOLOGY MONTHLY REPORT.

2.0

11/86

TABLE WM-5

INTERTANK TRANSFERS

Completion Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					F-Area		
11/3	18F		71.7	44.0	3540	100,000	Sludge slurry
		42H	284.9	331.0	3510	162,000	
11/3	45		355.3	280.5	3510	263,000	Concentrated supernate
		26	272.5	314.4	3510	273,000	
11/6	25		343.3	319.4	3510	84,000	Concentrated supernate
		26	291.0	303.0	3510	87,000	
11/12	18F		57.7	38.1	3540	71,000	Sludge slurry
		42H	298.6	330.8	3510	113,000	
11/12	47		354.2	296.2	3510	204,000	Concentrated supernate
		26	219.1	263.7	3510	212,000	
11/18	45		354.2	274.4	3510	280,000	Concentrated supernate
		26	210.0	253.1	3510	291,000	
11/22	18F		61.9	29.8	3540	115,000	Sludge slurry
		40H	272.2	317.4	3510	159,000	
11/24	25		335.4	319.9	3510	54,000	Concentrated supernate
		26	196.3	202.0	3510	57,000	
11/27	47		354.1	286.7	3510	237,000	Concentrated supernate
		26	187.4	233.0	3510	246,000	
					H-Area		
11/1	36		355.6	323.6	3510	99,000	Concentrate
		13	204.0	223.8	3500	103,000	
11/3	18F		71.7	44.3	3540	100,000	Sludge slurry
		42H	284.9	331.0	3510	162,000	
11/4	41		354.4	317.5	3510	168,000	Concentrate
		43	306.8	342.5	3510	175,000	
11/4	32		313.2	303.4	3510	34,000	HHW supernate
		13	211.7	217.6	3500	35,000	
11/6	37		354.4	303.2	3510	268,000	Concentrate
		13	206.5	244.5	3500	279,000	

2.0

TABLE WM-6

INTERTANK TRANSFERS (cont'd)

Completion Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					H-Area (cont'd)		
11/10	42		330.9	310.9	3510	70,000	Supernate
		43	306.7	322.0	3510	73,000	
11/11	42		310.9	298.6	3510	44,000	Supernate
		40	259.5	292.8	3510	46,000	
11/11	41		354.7	329.8	3510	136,000	Concentrate
		43	319.2	346.4	3510	141,000	
11/12	18F		57.7	43.3	3540	71,000	Sludge slurry
		42H	298.6	330.8	3510	113,000	
11/12	32		303.2	287.3	3510	56,000	HHW supernate
		13	241.2	251.0	3500	58,000	
11/17	41		348.1	318.6	3510	114,000	Concentrate
		43	316.7	344.9	3510	119,000	
11/19	36		356.6	296.8	3510	247,000	Concentrate
		13	203.0	249.4	3500	257,000	
11/22	18F		61.9	39.0	3540	115,000	Sludge slurry
		40H	272.2	317.4	3510	159,000	
11/25	32		287.2	257.2	3510	105,000	HHW supernate
		13	243.5	258.1	3500	109,000	
11/27	41		357.8	320.8	3510	161,000	Concentrate
		43	300.6	334.9	3510	167,000	

[a]Adjusted to account for all process flows to or from the tanks during transfer; values for receiving tanks include jet dilution.

2.0

DISTRIBUTION

J. E. Haywood, 703-F
G. T. Wright, 703-H
H. H. Rowland, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
J. N. Beatty, 703-H
G. M. Johnson, 703-H
G. W. Becker, 703-H
T. H. Fisher, 703-A
T. M. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
F. G. McNatt, 704-8H
T. H. Killian, 703-F
P. D. d'Entremont, 703-H
D. J. Zecha, 703-H
M. A. Friedline//A. D. Ruterbories, 703-F
M. A. Ceravolo, 703-H
B. E. Long, 260-4H
C. B. Goodlett, 704-S
WMT File, 703-H
File Code: WM-1.2.4

ID No. 148

January 26, 1987
(Revised April 30, 1987)
(Revised August 7, 1987)

WASTE MANAGEMENT MONTHLY DATA RECORD, DECEMBER, 1986

Attached are data for December, 1986 covering Waste Management processes and activities. This data record is a companion to the WASTE MANAGEMENT TECHNOLOGY MONTHLY REPORT.

Please discard previous December report and insert attached, corrected report.

2.0

12/86

TABLE WM-8

INTERTANK TRANSFERS

86 Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer	Type or Origin of Waste
					F-Area		
12/2	18F		45.1	20.3	3,540	89,000	Sludge slurry
		40H	317.4	351.9	3,510	121,000	
12/5	20		27.9	3.4	3,540	87,000	Inhibited water
		18	31.1	48.3	3,540	91,000	
12/6	27		337.0	292.6	3,510	156,000	Concentrated supernate
		26	199.5	240.2	3,510	143,000	
12/8	27		292.6	240.8	3,510	182,000	Concentrated supernate
		26	240.4	279.7	3,510	189,000	
12/16	45		351.2	268.3	3,510	291,000	Concentrated supernate
		26	246.8	306.3	3,510	303,000	
12/20	18F		55.5	18.5	3,540	133,000	Sludge slurry
		40H	231.0	276.4	3,510	159,000	
12/22	47		352.3	283.4	3,510	242,000	Concentrated supernate
		26	249.7	270.6	3,510	252,000	
12/24	25		343.5	319.0	3,510	86,000	Concentrated supernate
		26	255.1	274.4	3,510	89,000	
12/29	45		355.3	268.6	3,510	398,000	Concentrated supernate
		26	235.3	293.0	3,510	414,000	
12/30	7		263.5	253.1	2,710	28,000	LHW supernate
		26	274.6	276.7	3,510	29,000	
12/30	18F		33.0	13.5	3,540	70,000	Sludge slurry
		40H	276.1	303.5	3,510	96,000	
					H-Area		
12/1	18		45.1	31.1	3,540	50,000	Sludge slurry
12/2		40	317.4	341.9	3,510	86,000	
12/2	37		359.5	324.0	3,510	122,000	Concentrate
12/6		13	241.2	255.1	3,500	127,000	
12/5	41		348.7	321.4	3,510	124,000	Concentrate
12/7		43	311.3	335.7	3,510	129,000	

2.0

TABLE WM-8 (Cont'd)

INTERTANK TRANSFERS

Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					H-Area		
12/4	51		347.4	340.9	3,510	23,000	Supernate
12/5		43	304.9	312.2	3,510	24,000	
12/7	51		340.9	322.7	3,510	64,000	Supernate
12/7		43	335.0	348.9	3,510	67,000	
12/10	40		341.7	306.6	3,510	123,000	Supernate
12/11		51	322.3	358.8	3,510	128,000	
12/11	40		306.6	277.8	3,510	101,000	Supernate
12/12		42	330.4	360.8	3,510	106,000	
12/12	40		277.8	231.0	3,510	164,000	Supernate
12/14		43	315.6	347.8	3,510	171,000	
12/17	10		97.8	92.0	2,710	16,000	Supernate
12/18		43	323.2	318.8	3,510	22,000	
12/19	18		55.5	25.1	3,540	108,000	Sludge slurry
12/20		40	231.0	276.4	3,510	159,000	
12/19	41		356.0	323.3	3,510	138,000	Concentrate
12/21		43	312.7	343.7	3,510	143,000	
12/19	36		354.5	302.8	3,510	181,000	Concentrate
12/22		13	229.1	256.6	3,500	188,000	
12/26	41		359.2	324.7	3,510	138,000	Concentrate
12/28		43	308.8	337.0	3,510	143,000	
12/26	32		256.9	232.1	3,510	87,000	Aged waste
12/27		13	223.0	241.6	3,500	90,000	
12/27	37		358.1	323.7	3,510	118,000	Concentrate
12/30		13	240.9	254.9	3,500	123,000	
12/29	18		33.0	21.1	3,540	42,000	Sludge slurry
12/30		40	276.1	303.5	3,510	96,000	
12/30	51		359.1	340.3	3,510	66,000	Supernate
12/31		43	319.1	335.0	3,510	69,000	

[a]Adjusted to account for all process flows to or from the tanks during transfer; values for receiving tanks include jet dilution.

2.0

DISTRIBUTION

J. E. Haywood, 703-F
W. B. Boore, 703-H
E. J. O'Rourke, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
J. N. Beatty, 703-H
G. M. Johnson, 703-H
G. W. Becker, 703-H
M. G. O'Rear, 703-A
T. H. Fisher, 703-A
T. M. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H (5)
F. G. McNatt, 704-8H
D. J. Coon, 703-H
T. H. Killian, 703-F
P. D. d'Entremont, 703-H
T. P. Malone, 703-H
D. J. Zecha, 703-H
M. A. Friedline/J. N. Chen/A. D. Ruterbories, 703-F
M. A. Ceravolo, 703-H
B. E. Long, 260-4H
C. B. Goodlett, 704-S
WMT File, 703-H
File Code: WM-1.2.4

162

February 24, 1987

WASTE MANAGEMENT MONTHLY DATA RECORD JANUARY 1987

Attached are data for January, 1987 covering Waste Management processes and activities. This data record is a companion to the WASTE MANAGEMENT TECHNOLOGY MONTHLY REPORT.

2.0

1/87

TABLE WM-5

INTERTANK TRANSFERS

1987 Completion Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					F-Area		
1/5	7		253.1	118.1	2710	366,000	LHW supernate
		26	262.6	291.0	3510	380,000	
1/9	25		354.8	332.2	3510	79,000	Concentrated supernate
		26	238.6	272.1	3510	82,000	
1/9	45		347.5	324.6	3510	80,000	Concentrated supernate
		26	241.8	272.1	3510	84,000	
1/9	18F		30.1	13.7	3540	59,000	Sludge slurry
		40H	304.6	328.1	3510	82,000	
1/10	25		332.3	320.8	3510	40,000	Concentrated supernate
		26	272.1	297.1	3510	42,000	
1/10	45		325.5	306.9	3510	72,000	Concentrated supernate
		26	272.1	296.9	3510	75,000	
1/15	27		357.5	302.4	3510	215,000	Concentrated supernate
		26	260.8	295.9	3510	223,000	
1/17	27		302.4	255.8	3510	164,000	Concentrated supernate
		26	295.9	324.7	3510	170,000	
1/23	45		355.0	242.1	3510	396,000	Concentrated supernate
		26	297.0	345.5	3510	412,000	
1/27	18F		30.1	9.9	3540	73,000	Sludge slurry
		40H	328.1	356.6	3510	100,000	
1/31	47		355.4	285.3	3510	246,000	Concentrated supernate
		26	292.0	310.3	3510	256,000	
					H-Area		
1/1	41		349.5	338.0	3510	50,000	Concentrate
1/2		43	331.4	342.0	3510	52,000	
1/2	36		357.0	303.9	3510	198,000	Concentrate
1/6		13	226.8	255.0	3500	206,000	
1/6	41		361.9	311.0	3510	171,000	Concentrate
1/8		43	311.0	340.3	3510	178,000	

2.0

TABLE WM-5

INTERTANK TRANSFERS (cont'd)

1987 Completion Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					H-Area (cont'd)		
1/9	18		30.1	13.5	3540	59,000	Sludge slurry
		40	304.6	328.1	3510	82,000	
1/9	32		231.8	205.4	3510	93,000	Aged HHW
1/10		13	235.8	254.4	3500	97,000	
1/12	21		18.0	6.0	3540	42,000	RBOF liquid
		22	28.1	40.1	3540	42,000	
1/14	41		360.0	325.8	3510	151,000	Concentrate
1/16		43	296.1	326.7	3510	157,000	
1/14	37		357.7	327.4	3510	106,000	Concentrate
1/16		13	231.4	248.4	3500	110,000	
1/16	23		371.3	359.7	3540	41,000	RBOF liquid
1/17		24	58.8	71.1	3540	44,000	
1/18	32		205.4	185.5	3510	70,000	Aged HHW
1/19		39	185.7	207.6	3510	77,000	
1/20	41		353.4	326.2	3510	121,000	Concentrate
1/22		43	300.6	324.4	3510	126,000	
1/23	21		14.5	4.9	3540	34,000	RBOF liquid
		22	40.4	49.9	3540	34,000	
1/21	36		354.7	311.5	3510	170,000	Concentrate
1/24		13	214.0	244.5	3500	177,000	
1/26	18		30.1	9.9	3540	72,000	Sludge slurry
1/27		40	328.1	356.6	3510	100,000	
1/26	37		360.6	311.2	3510	165,000	Concentrate
1/29		13	232.7	256.2	3500	172,000	
1/27	41		357.2	327.7	3510	136,000	Concentrate
1/30		43	287.1	312.1	3510	141,000	

2.0

ID NO. 10

DISTRIBUTION

I. B. New, Jr., Wilm.
H. D. Martin, Wilm., WCC III
J. W. Stewart, II, Wilm.
E. L. Albenesius, 773-A
D. L. Charlesworth, 773-A
M. A. Ebra, 773-A
H. F. Sturm, Jr., 773-A
D. E. Gordon, 773-42A
E. L. Wilhite, 773-A
R. H. Emslie, 773-A
J. P. Ryan, 773-14A
M. G. O'Rear, 703-A
C. B. Goodlett, 704-S
J. C. Eargle/R. N. Ransom, 704-4S
J. E. Haywood, 703-F
E. J. O'Rourke, 703-F
W. B. Boore, 703-H
J. N. Beatty/G.M. Johnson/G.W. Becker, 703-H
T. M. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
G. T. Wright, 703-H
L. E. McCarty/N.R. Davis/R. A. Ator, 703-H
B. D. Helton, 703-H
P. D. d'Entremont, 703-H
F. G. McNatt, 704-8H
T. P. Malone, 703-H
J. H. Griffin/T. H. Killian, 703-F
A. D. Ruterbories, 703-F
M. A. Friedline/J. N. Chen, 703-F
W. J. Jaegge/S. J. Mentrup, 703-H
D. J. Zecha/D. A. Weber/O. B. Wheat, 703-H
K. S. Wierzbicki, 703-H
Tech File, 703-H
File Code: WM-1.2.4

February 11, 1987

MONTHLY REPORT - JANUARY, 1987
WASTE MANAGEMENT TECHNOLOGY AND OPERATIONS

SUMMARY

	Page
o Temperature excursion in Tank 39	1
o 518M gallons of sludge removed from Tank 18F	4
o WIPP-WACCC approves proposal for "minor liquid residues" in certifiable TRU waste drums	8
o WM to prepare response to preliminary findings of DOE-HQ environmental survey	9

30

2.0

1/87

WASTE TRANSFER AND PREPARATION FOR DWPF

33 K

Tank 18 Sludge Removal

Fifteen interarea transfers have removed 518M of the original 551M gallons of sludge from tank 18F as of the end of January, 1987. The 33M gallon residual heel will be removed in future cleanout and spray washing operations. A total of 1.85MM gallons of water were added to tank 18F for dilution purposes during the cleanout, yielding a dilution/sludge ratio of 3.6 gallons/gallon. The overall water/sludge ratio including inhibited water used for flushing was 4.7/1. The excess dilution and flush water will be returned to F-Area for evaporation.

SEEPAGE BASINS

F-Area Seepage Basin

The inflow data utilized for determining the seepage and evaporation rates for the F-Area basins was collected from a new flow system installed at the trebler. This new device will allow more accurate calculations of the seepage and evaporation rates.

H-Area Seepage Basins

The H-Area seepage basin experienced tremendous inflow due to tank farm storm water zone diversions. Of the 6.3 mm gal to seepage for this month, 80% or 5.0 mm gallons can be attributed to storm water zone diversion.

SOLID WASTE OPERATIONS

Beta-Gamma Incinerator

The incinerator was down for the entire month of January due to a release of Halon through the incinerator. Criteria for restart are being established. A Class B Investigation Report and an Unusual Occurrence Report are scheduled for completion in February. Resumption of BGI operation (i.e., liquids only, boxes and liquids) will depend on the recommendations.

Waste Management met with Naval Fuels to establish acceptance criteria for the liquid wastes that Naval Fuels will soon be generating to be incinerated at the BGI. Projects Department has begun design of the new liquid storage/feed system that will handle these Class I liquids.

Tests are being conducted at SRL to determine the number of acid washes needed to reduce the alpha activity in the tank 27 solvent by a factor of 100. This

2.0

Key Words:
WMT Monthly Report
June 1987

DISTRIBUTION

H. D. Martin, Wilm., WCC III
H. D. Harmon, 773-A
D. L. Charlesworth, 773-A
J. P. Ryan, 773-A
C. B. Goodlett, 773-14A
D. E. Gordon, 773-42A
R. H. Emslie, 773-A
E. L. Wilhite, 773-43A
M. G. O'Rear, 703-A
J. E. Haywood, 703-F
J. C. Eargle/R. N. Ransom, 200-S
G. T. Wright, 703-H
E. J. O'Rourke, 703-F
J. N. Beatty/G. M. Johnson/G. W. Becker, 703-H
T. M. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H
L. E. McCarty/N. R. Davis/R. A. Ator, 703-H
M. A. Friedline/A. D. Ruterbories, 703-F
P. D. d'Entremont, 703-H
F. G. McNatt, 704-8H
T. H. Killian, 703-F
M. A. Ceravolo, 703-H
K. S. Wierzbicki/O. B. Wheat/C. M. Cole, 703-H
W. J. Jaegge, 703-H
D. J. Zecha/D. A. Weber, 703-H
Central Files, 703-A, E16-B
Tech File, 703-H
File Code: WM-1.2.4

ID No. 155

July 20, 1987

MONTHLY REPORT - JUNE 1987
WASTE MANAGEMENT TECHNOLOGY AND WASTE MANAGEMENT OPERATIONS

SUMMARY

		Page
o	Addition of HLW Tank Farm to SRP Part A permit complete.	5
o	15 gpm Reverse Osmosis Pilot Unit makes monthly production goal.	3
o	Building 709-2G accepts mixed waste.	4

2.0

L. Hibbard, 703-A
J. E. Haywood, 703-F
G. T. Wright, 703-H (4)
T. M. Osborne, 703-H
J. N. Beatty, 703-H (3)
J. E. Crain, 704-S
H. H. Rowland, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
C. W. Miller, 703-F
W. L. Campbell, 703-H, ETF-3
H. C. Moxley, 703-H
R. A. Ator, 703-H
N. R. Davis, 703-H
F. D. Smith, 241-28H
L. C. Thomas, 703-F
W. A. Lancaster, 299-H
S. J. Mentrup, 724-7G
R. P. Lengel, 241-28H
J. E. Herbert, 241-28F (2)
C. M. Lybrand, 241-28F
S. C. Davis, 724-7G
W. S. Durant, 773-26A
W. D. Swonger, 703-F
T. F. Langford, 703-H
S. D. Thomas, 703-F
B. E. Long, 260-4H
D. W. Wilson, 241-28F
WM File, 1.2.4, 703-F
Doc: 288/0367i

July 16, 1987

J.D. #138

WASTE MANAGEMENT OPERATIONS AND SURVEILLANCE
MONTHLY REPORT - JUNE 1987

SUMMARY

F AREA

Evaporator 1F space gain was 149,212 gallons with downtime of 177.5 hours.

Evaporator 2F space gain was 173,728 gallons with 111 hours downtime.

H AREA

Evaporator 1H space gain was 70,632 gallons with downtime of 373.75 hours.

Evaporator 2H space gain was 127,373 gallons with downtime of 215.25 hours.

299-H

A F-CTS recirculation pump was decontaminated, repaired, leak checked and stored.

Received a H-CTS recirculation pump for repair and moved a repaired one to H-Area.

Decontamination of H-CTS agitator continues.

A tank 13 canned feed pump is awaiting repair while another was transported to H-Area for installation.

230-H

The Beta-Gamma Incinerator idled for 510 hours in June and burned a total of 7,190 gallons of solvent. Three drums of ash were produced and sent to the burial ground.

BURIAL GROUND

A total of 957 shipments of solid waste were received for burial.

A total of 112 drums were received in the ETWAF marked as certifiable by the generator. Nine drums were received as noncertifiable waste. Eighty-four drums were found certifiable after processing in ETWAF. Forty-three drums received as certifiable were not certified because they were found to contain less than 100 nCi/g. Four hundred ninty-seven boxes were received at the 643-G box monitor.

20

6/87

WASTE TRANSFER AND PREPARATION FOR DWPF

Sodium Titanate Vendor Visited

On June 29, a group from SRP visited AquAir Corporation in Charlotte, NC to discuss the manufacture of sodium titanate, a key chemical in the in-tank precipitation process. The company currently produces a range of chemicals primarily for large reagent distributors. A program has been developed for future contact between SRP and AquAir to resolve any concerns and to ensure that ST production remains on schedule. After discussing the ST contract, touring the company's facilities, and later talking with company's commercial DuPont customers, the SRP group felt that AquAir was committed to and capable of producing sodium titanate within contract specifications and on schedule.

IAL Sludge Transfer Test Conclusion

Test Conclusion No. 2-1111, which documents the IAL sludge transfer program, has been approved and authorized. Under this test, Waste Management transferred 518M gallons of tank 18F radioactive sludge to tanks 40H, 42H and 51H in 15 separate transfers. A small (approximately 33M gallon) heel remains in tank 18F and will be transferred to H Area as scheduling permits. IAL sludge transfers are now a standard, though not routine, Waste Management operation. Test authorizations will not be required for future IAL sludge transfers, although special technical review of IAL transfer risks will be part of cleanout operations in F-Area sludge tanks.

SEEPAGE BASINS

F and H-Area Seepage Basins

Efforts to quantify the seepage rate in the F and H-Area basins are continuing. A Site Use Permit to install the evaporative experiment equipment was received. Most of the necessary equipment has been received from the vendors and will be installed in cooperation with WMO within the next month. A Scope of Work was submitted to provide mathematical modeling of site-specific evaporative data.

The Draft ACL demonstration was received from C. T. Main, Boston. Initial in-house response to the document was extremely favorable. Final guidance from EPA on ACL demonstrations should be available within a few weeks. At this time appropriate revisions will be made in accordance with the guidance document. Further ecological testing is also necessary due to the scarcity of data, and efforts to initiate this are presently being coordinated with SRL personnel.

F/H EFFLUENT TREATMENT

F/H Effluent Treatment Facility

Construction of the Treatment Plant building shell is about 50% complete, installation of the large field erected tanks has begun, and all of the major

2.0

DISTRIBUTION

D. D. Walker, 773-A
H. D. Harmon, 773-A
R. H. Hawkins, 773-43A
J. E. Haywood, 703-F
G. T. Wright, 703-H
C. B. Jones, 703-H ETF
H. H. Rowland, 703-F
L. E. McCarty, 703-H
R. W. Wilson, 703-H
J. H. Griffin, 703-F
J. N. Beatty, 703-H
G. M. Johnson, 703-H
G. W. Becker, 703-H
M. G. O'Rear, 703-A
T. H. Fisher, 703-A
T. M. Osborne, 703-H
R. A. Scaggs, 703-H
J. E. Black, 703-H (5)
N. R. Davis, 703-H
F. G. McNatt, 704-8H
T. H. Killian, 703-F
P. D. d'Entremont, 703-H
J. E. Cantrell, 703-H
J. N. Chen, 703-H
D. J. Zecha, 703-H
A. D. Ruterbories, 703-F
M. A. Ceravolo, 703-H
M. A. Conger/B. A. Phillips, 703-H
B. E. Long, 260-4H
C. B. Goodlett, 704-S
Central Files, 703-A, E16-B
WMT File, 703-H
File Code: WM-1.2.4

KEY WORDS
WMT Monthly Report
August, 1987

ID No. 169

September 22, 1987

WASTE MANAGEMENT MONTHLY DATA RECORD, AUGUST, 1987

Attached are data for August, 1987 covering Waste Management processes and activities. This data record is a companion to the WASTE MANAGEMENT TECHNOLOGY MONTHLY REPORT.

2.0

8/07

TABLE WM-3

INTERTANK TRANSFERS

1987 Completion Date	Tanks From	Tanks To	Liq Level (in) Initial	Liq Level (in) Final	Tk Calibration, (gal/in)	Gallons Transfer[a]	Type or Origin of Waste
					F-Area		
8/10	27		351.2	301.3	3,510	210,000	Concentrated supernate
		26	226.7	298.8	3,510	218,000	
8/11	44		354.0	266.2	3,510	499,000	Concentrated supernate
		26	226.4	301.0	3,510	520,000	
8/15	18		70.7	22.9	3,540	169,000	Sludge removal #16
		51	218.9	267.1	3,510	169,000	
8/18	27		341.8	286.9	3,510	249,000	Concentrated supernate
		26	213.1	243.0	3,510	259,000	
8/22	18		27.1	13.3	3,540	49,000	Sludge removal #17
		51	267.7	292.3	3,510	86,000	
8/25	44		341.1	209.3	3,510	337,000	Concentrated supernate
		26	308.7	195.7	3,510	351,000	
					H-Area		
7/31	36		324.3	305.6	3,510	66,000	Concentrate
8/1		13	233.2	255.2	3,500	77,000	
8/12	38		347.6	314.7	3,510	130,000	Concentrate
8/14		43	310.2	345.3	3,510	137,000	
8/14	18		70.7	22.9	3,540	169,000	Supernate
8/15		51	218.9	267.1	3,510	169,000	
8/22	18		27.1	13.3	3,540	49,000	Supernate
8/22		51	267.7	292.3	3,510	86,000	
8/21	37		357.9	331.1	3,510	94,000	Concentrate
8/24		13	215.2	232.2	3,500	98,000	

[a]Adjusted to account for all process flows to or from the tanks during transfer; values for receiving tanks include jet dilution and transfer line flushing.

2.0

L. Hibbard, 703-A
J. E. Haywood, 703-F
G. T. Wright, 703-H (4)
T. M. Osborne, 703-H
J. N. Beatty, 703-H (3)
J. E. Crain, 704-S
H. H. Rowland, 703-F
L. E. McCarty, 703-H
J. H. Griffin, 703-F
C. W. Miller, 703-F
W. L. Campbell, 703-H, ETF-3
H. C. Moxley, 703-H
M. A. Friedline, 703-H
R. A. Ator, 703-H
F. D. Smith, 241-28H
R. W. Wilson, 703-H
L. C. Thomas, 703-F
W. A. Lancaster, 299-H
S. J. Mentrup, 724-7G
W. H. Greer, 241-28H
J. E. Herbert, 241-28F (2)
C. M. Lybrand, 241-28F
S. C. Davis, 724-7G
W. S. Durant, 773-26A
R. P. Lengel, 703-F
T. F. Langford, 703-H
S. D. Thomas, 703-F
B. E. Long, 260-4H
D. W. Wilson, 241-28F
WM File, 1.2.4, 703-F
Doc: 288/0367i

September 16, 1987

J.D. #136

WASTE MANAGEMENT OPERATIONS AND SURVEILLANCE MONTHLY REPORT - AUGUST 1987

SUMMARY

F AREA

Evaporator 1F space gain was 183,000 gallons with downtime of 27 hours.

Evaporator 2F space gain was 242,000 gallons with 51 hours downtime.

H AREA

Evaporator 1H space gain was 14,000 gallons with downtime of 563 hours.

Evaporator 2H space gain was 76,000 gallons with downtime of 326 hours.

299-H

Decontamination of F-CTS drawoff pump is in progress.

Repairs and run-in on a H-CTS recirculation pump were completed and it was stored.

A tank 13 canned feed pump was received, decontaminated, repaired, run-in and stored while another was sent to tank 13 for installation.

230-H

The Beta-Gamma Incinerator idled for 247 hours in August and burned a total of 1,172 gallons of waste oil mix. Three drums of ash were produced.

BURIAL GROUND

A total of 1,065 shipments of solid waste were received for burial.

A total of 103 drums were received in the ETWAF marked as certifiable by the generator. Nine drums were received as noncertifiable waste. Sixty-five drums were found certifiable after processing in ETWAF. Thirty-seven drums received as certifiable were not certified because they were found to contain less than 100 nCi/g. Six hundred forty boxes were received at the 643-G box monitor.

F-AREA, CONT'D

Tank Farm Operation

An entry was made into FDB-2 on 8/24/87 and 8/27/87 to provide a route for transferring tank 34 aged HHW to H-Area. Jumper 27(FDB-2)28 was removed, nozzle 27 wa dummied, and jumper 30(FDB-2)26 was removed to install jumper 30(FDB-2)28. Nozzle 26 was left open to provide a means of venting the interarea transfer line. The jumper leak-checked satisfactorily. ETE was 85 mR for 10 people total for entries.

Operating Personnel and Overtime

Operating with the crew of 29, WMO worked a total of 199.0 hours of overtime (3.9% of total hours worked). Service groups overtime was as follows: E&I - 31.2 hours, Maintenance - 23.4 hours, R&HE - 336.0 hours (160.0 hours tank farm, 176.0 hours Burial Ground) and HP - 320.0 hours.

Radiation Monitor Status (VAMPS)

Number of checks required	- 268
Checks completed	- 268 (100%)
Number of malfunctions	- 0
Number repairs reported	- 0

Note: Currently implementing time delay modifications to all tank farm VAMPS by E&I.

Waste Removal

Two interarea transfers from tank 18F to tank 51H were completed during this report period. A total of 218,000 gallons of sludge solution was transferred leaving approximately 25,000 gallons of sludge remaining in tank 18 (a theoretical flat level of 7.1 inches). (According to the photographs taken August 26 approximately 20% to 30% of remaining sludge was removed during this transfer.) 5,600 gallons of 50% caustic solution was added to tank 18 prior to the interarea transfer to keep tank 51 within technical standards. All waste removal equipment was down at monthend.

Slurry Pump Performance

Tank 18F	% Operated/Available Hrs	Involuntary Downtime/Hrs
East	70%/744	0
West	70%/744	0
Northwest	51%/744	145.5 hrs

3.0 Summary Table of Section 1.0 & 2.0

1/27/1986	26	18	325000	325000	LHWSN	Phase 1, step 1 liquid removal
3/15/1986	26	18	211000	211000	LHWSN	Phase 1, step 1 liquid removal
4/7/1986	26	18	314000	314000	LHWSN	Phase 1, step 1 liquid removal, includes an intermediate transfer from Tank 20 salt removal
7/10/1986	51	18	270000	300000	SLSLURRY	Transfer # 1, beginning of phase 1, step 2 bulk waste removal
7/21/1986	26	18	589000	589000	DISSALT	Saturated Salt Solution, not part of bulk sludge removal
8/27/1986	51	18	285000	319000	SLSLURRY	Transfer # 2
9/7/1986	51	18	196000	201000	SLSLURRY	Transfer # 3
9/17/1986	42	18	236000	255000	SLSLURRY	Transfer # 4
9/23/1986	42	18	277000	329000	SLSLURRY	Transfer # 5
10/2/1986	40	18	141000	167000	SLSLURRY	Transfer # 6a
10/2/1986	40	18	145000	197000	SLSLURRY	Transfer # 6b
10/18/1986	42	18	129000	175000	SLSLURRY	Transfer # 7
11/3/1986	42	18	100000	162000	SLSLURRY	Transfer # 8
11/12/1986	42	18	71000	113000	SLSLURRY	Transfer # 9
11/22/1986	40	18	115000	159000	SLSLURRY	Transfer # 10
12/2/1986	40	18	89000	121000	SLSLURRY	Transfer # 11
12/20/1986	40	18	133000	159000	SLSLURRY	Transfer # 12
12/30/1986	40	18	70000	96000	SLSLURRY	Transfer # 13
1/9/1987	40	18	59000	82000	SLSLURRY	Transfer # 14
1/27/1987	40	18	73000	100000	SLSLURRY	Transfer # 15
8/15/1987	51	18	169000	169000	SLUDGERW	Transfer # 16
8/22/1987	51	18	49000	86000	SLUDGERW	Transfer # 17, end of phase 1, step 2 bulk waste removal