EPA Contract No. 68-W6-0042
EPA Work Assignment No. 122-RICO-01N9

EPA Project Officer: Diana King
EPA Remedial Project Manager: Leslie McVickar

Final Remedial Investigation

Volume III
Appendices AA-GG

Pownal Tannery Superfund Site
Pownal, Vermont

July 2002

Prepared By

Metcalf & Eddy, Inc.
30 Harvard Mill Square
Wakefield, Massachusetts 01880

Team Subcontractor
TRC Environmental Corporation
Boott Mills South, Foot of John Street
Lowell, Massachusetts 01852

Appendix AA
Laboratory Data:
Sediment AVS/SEM Results

Sediment AVS/SEM Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft) RESULT TYPE	SD-020 DAMU98 05/24/2000 0.00 Primary	SD-024 DAMV04 05/23/2000 0.00 Primary	SD-024 DAMU67 05/23/2000 0.00 Duplicate 1	SD-027 DAMU50 05/16/2000 0.00 Primary	SD-027 DAMU51 05/16/2000 0.00 Duplicate 1	SD-029 DAMU88 05/22/2000 0.00 Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Arsenic	(umo/g)	0.23 U	0.31 U	0.31 U	0.14 U	0.14 U	0.13 U
Cadmium	(umo/g)	0.0060	0.0070	0.010	0.0022 U	0.0023 U	0.0022 U
Copper	(umo/g)	0.14	0.25	0.12	0.090	0.090	0.070
Lead	(umo/g)	0.11	0.14	0.18	0.030	0.030	0.040
Mercury	(umo/g)	0.000088 UJ	0.00012 UJ	0.00012 UJ	0.000051 UJ	0.000052 UJ	0.000049 UJ
Nickel	(umo/g)	0.15 U	0.20 U	0.20 U	0.087 U	0.088 U	0.083 U
Zinc	(umo/g)	0.75	1.1	1.5	0.47	0.45	0.48
SEM/AVS Ratio		0.27 J	0.13 J	0.08 J	>3.75 J	>3.5 J	>3.9 J
Sulfide, Acid Volatile/sem	(umo/g)	3.8 J	11 J	24 J	R	R	R

Sediment AVS/SEM Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft) RESULT TYPE	SD-030 DAMU86 05/22/2000 0.00 Primary	SD-034 DAMU58 05/19/2000 0.00 Primary	SD-035 DAMU56 05/18/2000 0.00 Primary	SD-038 DAMU52 05/18/2000 0.00 Primary	SD-039 DAMU63 05/17/2000 0.00 Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00
Arsenic	(umo/g)	0.13 U	0.16 U	0.15 U	0.14 U	0.23 U
Cadmium	(umo/g)	0.0022 U	0.0030	0.0024 U	0.0022 U	0.0038 U
Copper	(umo/g)	0.080	0.080	0.090	0.050	0.20
Lead	(umo/g)	0.050	0.050	0.040	0.024 U	0.11
Mercury	(umo/g)	0.000050 UJ	0.000058 UJ	0.000054 UJ	0.000051 UJ	0.000087 UJ
Nickel	(umo/g)	0.085 U	0.099 U	0.092 U	0.087 U	0.15 U
Zinc	(umo/g)	0.43	0.36	0.51	0.17	0.89
SEM/AVS Ratio		>3.5 J	1.2 J	0.16 J	>1.4 J	1.9 J
Sulfide, Acid Volatile/sem	(umo/g)	R	0.41 J	4.1 J	R	0.64 J

Appendix BB
Laboratory Data:
Sediment TCO/TOC/% Moisture Results

Sediment TCO/TOC/% Moisture Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE	SD-001	SD-002	SD-003	SD-004	SD-004	SD-005
	SAMPLE ID	DAMV93	DAMV94	DAMW04	DAMV86	DAMW05	DAMV92
	DATE	06/01/2000	06/01/2000	06/01/2000	06/01/2000	06/01/2000	06/01/2000
	DEPTH (ft)	0.00	0.00	0.00	0.00	0.00	0.00
	RESULT TYPE	Primary	Primary	Primary	Primary	Duplicate 1	Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Percent Moisture (ave.)	(%)	8.19	35.5	45.75	47.35	40.4	44.6
TOC (ave.)	(mg/kg)	15100 J	17800 J	39900 J	56600 J	42800 J	24300 J
Total Combust.Organics (ave.)	(mg/kg)	43850	58650	102000	115500	88400	71600

Sediment TCO/TOC/% Moisture Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft) RESULT TYPE	SD-006 DAMV01 05/25/2000 0.00 Primary	SD-007 DAMV00 05/25/2000 0.00 Primary	SD-008 DAMU95 05/24/2000 0.00 Primary	SD-009 DAMU99 05/24/2000 0.00 Primary	SD-010 DAMU96 05/25/2000 0.00 Primary	SD-011 DAMV02 05/26/2000 0.00 Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Percent Moisture (ave.)	(%)	28.8	36.6	17.15	19.45	24.75	67
TOC (ave.)	(mg/kg)	16600 J	23900 J	3810 J	19500 J	8200 J	93600 J
Total Combust.Organics (ave.)	(mg/kg)	53350	30100	35600	42000	32150	21500

Sediment TCO/TOC/% Moisture Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft) RESULT TYPE	SD-012 DAMV03 05/26/2000 0.00 Primary	SD-013 DAMV85 05/31/2000 0.00 Primary	SD-014 DAMU68 05/25/2000 0.00 Primary	SD-015 DAMV09 05/25/2000 0.00 Primary	SD-016 DAMU70 05/25/2000 0.00 Primary	SD-017 DAMV12 05/24/2000 0.00 Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Percent Moisture (ave.)	(%)	50.5	36.85	63.45	64.6	65.65	69.1
TOC (ave.)	(mg/kg)	63800 J	27000 J	66000 J	55600 J	48400 J	74500 J
Total Combust.Organics (ave.)	(mg/kg)	119000	65800	46150	32550	156000	34550

Sediment TCO/TOC/% Moisture Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE	SD-018	SD-019	SD-020	SD-022	SD-023	SD-024
	SAMPLE ID	DAMV10	DAMV11	DAMU98	DAMU97	DAMU69	DAMV04
	DATE	05/24/2000	05/24/2000	05/24/2000	05/24/2000	05/23/2000	05/23/2000
	DEPTH (ft)	0.00	0.00	0.00	0.00	0.00	0.00
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Percent Moisture (ave.)	(%)	38.2	56.95	48.75	55.75	66.85	51.5
TOC (ave.)	(mg/kg)	33500 J	55000 J	40100 J	36900 J	85000 J	38600 J
Total Combust.Organics (ave.)	(mg/kg)	169500	120000	105000	111500	177000	102500

Sediment TCO/TOC/% Moisture Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE	SD-024	SD-025	SD-026	SD-027	SD-027	SD-028
	SAMPLE ID	DAMU67	DAMU94	DAMU90	DAMU50	DAMU51	DAMU89
	DATE	05/23/2000	05/23/2000	05/23/2000	05/16/2000	05/16/2000	05/22/2000
	DEPTH (ft)	0.00	0.00	0.00	0.00	0.00	0.00
	RESULT TYPE	Duplicate 1	Primary	Primary	Primary	Duplicate 1	Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Percent Moisture (ave.)	(%)	54.3	42.8	18.25	22.9	21.1	19.8
TOC (ave.)	(mg/kg)	40200 J	34200 J	4310 J	1810 J	2160 J	5000 J
Total Combust.Organics (ave.)	(mg/kg)	110500	84450	23500	32000	26800	26050

Sediment TCO/TOC/% Moisture Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft) RESULT TYPE	SD-029 DAMU88 05/22/2000 0.00 Primary	SD-030 DAMU86 05/22/2000 0.00 Primary	SD-031 DAMU85 05/22/2000 0.00 Primary	SD-031 DAMU55 05/22/2000 0.00 Duplicate 1	SD-032 DAMU81 05/19/2000 0.00 Primary	SD-033 DAMU54 05/19/2000 0.00 Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Percent Moisture (ave.)	(%)	23.0	24.6	19.4	19.4	40.4	31.1
TOC (ave.)	(mg/kg)	9350 J	30500 J	38800 J	24100 J	41000 J	8540 J
Total Combust.Organics (ave.)	(mg/kg)	28050	26150	24050	24050	120500	42450

Sediment TCO/TOC/% Moisture Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE	SD-034	SD-035	SD-036	SD-037	SD-038	SD-039
	SAMPLE ID	DAMU58	DAMU56	DAMU57	DAMU66	DAMU52	DAMU63
	DATE	05/19/2000	05/18/2000	05/18/2000	05/18/2000	05/18/2000	05/17/2000
	DEPTH (ft)	0.00	0.00	0.00	0.00	0.00	0.00
	RESULT TYPE	Primary	Primary	Primary	Primary	Primary	Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Percent Moisture (ave.)	(%)	25.4	25.5	17.4	33.8	14.6	38.9
TOC (ave.)	(mg/kg)	15200 J	5770 J	8830 J	9880 J	3580 J	32200 J
Total Combust.Organics (ave.)	(mg/kg)	31100	41500	25600	47700	33100	77300

Sediment TCO/TOC/% Moisture Results

PERIOD: From 05/10/2000 thru 06/01/2000 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE SAMPLE ID DATE DEPTH (ft) RESULT TYPE	SD-040 DAMU62 05/17/2000 0.00 Primary	SD-041 DAMU53 05/17/2000 0.00 Primary	SD-042 DAMU87 05/23/2000 0.00 Primary	SD-043 DAMU64 05/23/2000 0.00 Primary	SD-044 DAMV95 06/01/2000 0.00 Primary	SD-045 DAMW06 06/01/2000 0.00 Primary
Starting Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Ending Depth	(feet)	0.00	0.00	0.00	0.00	0.00	0.00
Percent Moisture (ave.)	(%)	30.8	20.9	26.85	42.2	45.4	39.95
TOC (ave.)	(mg/kg)	13500 J	1930	12500 J	30200 J	34400 J	32900 J
Total Combust.Organics (ave.)	(mg/kg)	50900	21400	37200	30200	90900	86750