PORSF
11.3.245.1V56

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 2, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:13
Time out :	11:34
Ticket No.:	689310
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.86	.0000	per TON			
[Gross: 84,040	Tare:	52,320		Net: 31,720]		

Customer Signature

Generator

SCHN00242150

USEPA SF
1336472

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 2, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:21
Time out :	11:40
Ticket No.:	689314
Site :	COFFIN BUTTE LANDF
Truck No.:	2
Card ID	SCHSTE2
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	14.67	.0000	per TON			
[Gross: 79,440	Tare:	50,100		Net: 29,340]		

Customer signature

Generator

COMMENT: CAP81

SCHN00242151

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 3, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:04
Time out :	10:30
Ticket No.:	689524
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	15.05	.0000	per TON			
[Gross: 86,380	Tare:	56,280		Net: 30,100]		

Customer signature

Generator

COMMENT: UDS61

SCHN00242152

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 4, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:26
Time out :	12:46
Ticket No.:	689832
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.89	.0000	per TON			
[Gross: 88,660	Tare:	56,880		Net: 31,780]		

Customer Signature

Generator

SCHN00242153

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 4, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:58
Time out :	13:25
Ticket No.:	689851
Site :	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	14.41	.0000	per TON			
[Gross: 83,060	Tare:	54,240		Net: 28,820]		

Customer signature

Generator

SCHN00242154

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 5, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:53
Time out :	8:49
Ticket No.:	689991
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	FZ2Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	8.56	.0000	per TON			
[Gross: 39,120	Tare:	22,000		Net:	17,120]	

Customer signature

Generator

COMMENT: UDS 61TR

SCHN00242155

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 5, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:23
Time out :	12:49
Ticket No.:	690098
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	FS2Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 OWD Schnitzer	14.60	.0000	per TON			
[Gross: 83,720	Tare:	54,520		Net: 29,200]		

Customer signature

Generator

SCHN00242156

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 6, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:28
Time out :	10:48
Ticket No.:	690290
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.49	.0000	per TON			
[Gross: 90,080	Tare:	57,100		Net: 32,980]		

Customer signature

Generator

SCHN00242157

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 9, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:46
Time out :	7:47
Ticket No.:	690865
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	06
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 OWD Schnitzer	15.53	.0000	per TON			
[Gross: 89,260 Man.Wt.	Tare:	58,200		Net: 31,060]		

Customer signature

MARIO SISTO

Generator

SCHN00242158

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 9, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:24
Time out :	10:48
Ticket No.:	690933
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.49	.0000	per TON			
[Gross: 89,160	Tare:	56,180		Net: 32,980]		

Customer Signature

Generator

SCHN00242159

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 10, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:14
Time out :	10:34
Ticket No.:	691191
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.29	.0000	per TON			
[Gross: 89,040	Tare: 56,460		Net: 32,580]			

Customer signature

Generator

COMMENT: UDS61/61TR

SCHN00242160

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 12, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:12
Time out :	10:40
Ticket No.:	691752
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.06	.0000	per TON			
[Gross: 90,140	Tare:	56,020		Net: 34,120]		

Customer Signature

Generator

COMMENT: UDS61/61TR

SCHN00242161

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 12, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:39
Time out :	11:18
Ticket No.:	691774
Site 1	COFFIN BUTTE LANDF
Truck No.:	2
Card ID	SCHSTE2
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.50	.0000	per TON			
[Gross: 90,500	Tare:	57,500		Net: 33,000]		

Customer signature

Generator

COMMENT: UDS49/49TR
MARIO SISTO

SCHN00242162

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 12, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:54
Time out :	11:25
Ticket No.:	691779
Site 1	COFFIN BUTTE LANDF
Truck No.:	3
Card ID	SCHSTE3
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.28	.0000	per TON			
[Gross: 80,780	Tare:	50,220		Net: 30,560]		

Customer signature

Generator

COMMENT: CAP81

SCHN00242163

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 16, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:43
Time out :	8:10
Ticket No.:	692523
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 000 Schnitzer	16.39	.0000	per TON			
[Gross: 87,920	Tare: 55,140			Net: 32,780]		

Customer signature

Generator

MARIO SISTO

SCHN00242164

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 16, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:06
Time out :	10:27
Ticket No.:	692562
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.41	.0000	per TON			
[Gross: 89,840	Tare:	57,020		Net: 32,820]		

Customer signature

Generator

SCHN00242165

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 17, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:27
Time out :	11:52
Ticket No.:	692805
Site	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.56	.0000	per TON			
[Gross: 90,940	Tare:	57,820		Net: 33,120]		

Customer signature

Generator

COMMENT: UDS76/76TR

SCHN00242166

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 18, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	8:35
Time out :	8:58
Ticket No.:	692945
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.79	.0000	per TON			
[Gross: 91,400	Tare:	57,820		Net: 33,580]		

Customer signature

Generator

COMMENT: UDS49,-49B
Mario Soto

SCHN00242167

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 18, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:00
Time out :	11:22
Ticket No.:	693003
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.57	.0000	per TON			
[Gross: 82,680	Tare:	51,540		Net: 31,140]		

Customer signature

Generator

COMMENT: CAP81

SCHN00242168

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 19, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:51
Time out :	8:16
Ticket No.:	693169
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.49	.0000	per TON			
[Gross: 93,180	Tare:	60,200		Net: 32,980]		

Customer signature

Generator

COMMENT: 49 AND 49TR UDS

SCHN00242169

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 19, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:33
Time out :	10:57
Ticket No.:	693239
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.78	.0000	per TON			
[Gross: 90,140	Tare:	56,580		Net: 33,560]		

Customer signature

Generator

COMMENT: UDS61761TR

SCHN00242170

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 19, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:45
Time out :	12:04
Ticket No.:	693268
Site i	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	15.31	.0000	per TON			
[Gross: 91,280	Tare:	60,660		Net: 30,620]		

Customer signature

Generator

COMMENT: UDS49/49TR

SCHN00242171

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 20, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:38
Time out :	10:59
Ticket No.:	693483
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.43	.0000	per TON			
[Gross: 89,360	Tare:	56,500		Net: 32,860]		

Customer signature

Generator

COMMENT: UNITED DISPOSAL

SCHN00242172

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 21, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:30
Time out :	10:31
Ticket No.:	693678
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.68	.0000	per TON			

[Gross: 89,900 Man.Wt. Tare: 56,540 Man.Wt. Net: 33.360]

Customer signature

Generator

COMMENT: UDS 61

SCHN00242173

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 23, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:00
Time out :	11:14
Ticket No.:	694127
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.92	.0000	per TON			
[Gross: 82,100	Tare:	50,260		Net: 31,840]		

Customer signature

Generator

COMMENT: CAP81

SCHN00242174

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 23, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:40
Time out :	12:57
Ticket No.:	694180
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	17.05	.0000	per TON			
[Gross: 90,040	Tare:	55,940		Net: 34,100]		

Customer signature

Generator

SCHN00242175

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 24, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:36
Time out :	11:01
Ticket No.:	694404
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.81	.0000	per TON			
[Gross: 91,440	Tare:	57,820		Net: 33,620]		

Customer signature

Generator

SCHN00242176

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 24, 2004

*** DUPLICATE TICKET ***

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:38
Time out :	11:58
Ticket No.:	694439
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.01	.0000	per TON			
[Gross: 90,380	Tare:	56,360		Net: 34,020]		

Customer signature

Generator

COMMENT: UD561/61TR

SCHN00242177

VALLEY LANDFILLS, INC. * COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 25, 2004

*** DUPLICATE TICKET ***

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:31
Time out :	7:57
Ticket No.:	694597
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.12	.0000	per TON			
[Gross: 89,480	Tare:	57,240		Net: 32,240]		

Customer signature

Generator

COMMENT: UDS 76/ 76TR

SCHN00242178

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 25, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:51
Time out :	11:52
Ticket No.:	694691
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate	$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.12	.0000 per TON			
[Gross: 90,220 Man.Wt.	Tare:	57,980 Man.Wt.	Net: 32,240]		

Customer signature

Generator

COMMENT: UDS49/49TR

SCHN00242179

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 26, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	9:30
Time out :	10:00
Ticket No.:	694889
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.73	.0000	per TON			
[Gross: 89,660	Tare:	58,200		Net: 31,460]		

Customer signature

Generator

COMMENT: UDS 49

SCHN00242180

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 14, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	8:57
Time out :	9:21
Ticket No.:	692173
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
16 Do ~~Not Use~~ Quo Schnitzer	8.39	.0000	per TON			
[Gross: 39,120	Tare:	22,340		Net:	16,780]	

123

Customer signature

Generator

COMMENT: UDS61TR

Corrected Commodity code

SCHN00242181

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 14, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	9:27
Time out :	9:28
Ticket No.:	692176
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate	$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.75	.0000 per TON			
[Gross: 90,140 Man.Wt.	Tare: 56,640 Man.Wt.	Net: 33,500]			

Customer signature

Generator

COMMENT: IN BOOK - UDS61

~~Rick Fennings~~ Jeff Hoffman

SCHN00242182

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

February 27, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	8:33
Time out :	8:57
Ticket No.:	695099
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.00	.0000	per TON			
[Gross: 92,500	Tare:	58,500		Net: 34,000]		

Customer signature

Generator

COMMENT: UDS 49

SCHN00242183

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 12, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:36
Time out :	11:08
Ticket No.:	684449
Site :	COFFIN BUTTE LANDF
Truck No.:	2
Card ID	SCHSTE2
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	13.73	.0000	per TON			
Gross: 84,640	Tare:	57,180		Net: 27,460]		

Customer signature

Generator

COMMENT: 76

MARIO SISTO

SCHN00242184

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 12, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:34
Time out :	11:12
Ticket No.:	684452
Site :	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 OUD Schnitzer	15.98	.0000	per TON			
[Gross: 88,340	Tare: 56,380			Net: 31,960]		

Customer signature

Generator

COMMENT: 161

Jeff Hoffman

SCHN00242185

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 13, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:51
Time out :	8:10
Ticket No.:	584667
Site	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	14.61	.0000	per TON			
[Gross: 86,160	Tare: 56,940		Net: 29,220]			

Customer Signature

Generator

COMMENT: 61

SCHN00242186

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 13, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:33
Time out :	10:59
Ticket No.:	684735
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
120 QUO Schnitzer	16.04	.0000	per TON			
Gross: 89,420	Tare:	57,340		Net: 32,080		

Customer signature

Generator

COMMENT: UDS76 MARIO
Sisto

SCHN00242187

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 14, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:04
Time out :	12:37
Ticket No.:	685051
Site 1	COFFIN BUTTE LANDF
Truck No.:	2
Card ID	SCHSTE2
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 DUO Schnitzer	14.27	.0000	per TON			
[Gross: 85,300	Tare:	56,760		Net: 28,540]		

Customer signature

Generator

COMMENT: 76 MARIO SISTO

Scales eliminating weight

ticket 685026 has both Gross & tare for ticket # 685032 + 685051 Replaces Ticket # 685026

SCHN00242188

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 14, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:09
Time out :	12:10
Ticket No.:	685032
Site	1 COFFIN BUTTE LANDF
Truck No.:	3
Card ID	SCHSTE3
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.61	.0000	per TON			

[Gross: 90,120 Man.Wt. Tare: 56,900 Net: 33,220]

Customer signature

Generator

Problem with Scales fluctuating weights

Ticket 685026 has both for Ticket #685032 + 685051
replaces ticket 685024

SCHN00242189

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2013

January 16, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:14
Time out :	10:44
Ticket No.:	685479
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	14.10	.0000	per TON			
[Gross: 86,320	Tare:	58,120		Net: 28,200]		

Jesse Hulett

Customer signature

Generator

COMMENT: 76

SCHN00242190

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 19, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:26
Time out :	10:50
Ticket No.:	686061
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	14.07	.0000	per TON			
[Gross: 86,020	Tare: 57,880			Net: 28,140]		

Customer signature

Generator

SCHN00242191

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 19, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:47
Time out :	11:09
Ticket No.:	686072
Site :	1 COFFIN BUTTE LANDF
Truck No.:	2
Card ID	SCHSTE2
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123,000 Schnitzer	16.31	.0000	per TON			
[Gross: 89,420	Tare:	56,800		Net: 32,620]		

Customer signature

Generator

COMMENT: 76 MARIO SISTO

SCHN00242192

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 19, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:29
Time out :	12:30
Ticket No.:	686114
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate	$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	13.66	.0000 per TON			
[Gross: 78,780	Tare: 51,460	Man.Wt.	Net: 27,320]		

MARIO

Customer signature

Generator

UDS 76

SCHN00242193

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 20, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.: SCHSTE
Time in : 10:13
Time out : 10:29
Ticket No.: 686338
Site 1 COFFIN BUTTE LANDF
Truck No.: 1
Card ID SCHSTE1
Origin 16
Manifest # F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.83	.0000	per TON			

[Gross: 88,260 Man.Wt. / Tare: 56,600 Net: 31,660]

Customer signature MARIO SISTO

Generator

COMMENT: UDS76

SCHN00242194

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 20, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:27
Time out :	11:53
Ticket No.:	886368
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.54	.0000	per TON			
[Gross: 85,180	Tare: 52,100		Net: 33,080]			

Customer signature

Generator

COMMENT: UDS61

SCHN00242195

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 22, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	13:08
Time out :	13:28
Ticket No.:	686995
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.36	.0000	per TON			
[Gross: 89,120	Tare:	56,400		Net:	32,720]	

Customer signature

Generator

COMMENT: 61

SCHN00242196

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 22, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:		SCHSTE
Time in :		13:32
Time out :		13:53
Ticket No.:		687008
Site	1	COFFIN BUTTE LANDF
Truck No.:		1
Card ID		SCHSTE1
Origin		16
Manifest #		F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	12.39	.0000	per TON			
[Gross: 79,280	Tare:	54,500		Net: 24,780]		

Customer signature

Generator

COMMENT: CAP81

SCHN00242197

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 21, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:36
Time out :	10:58
Ticket No.:	686635
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	15
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.53	.0000	per TON			
[Gross: 86,900	Tare:	53,840		Net: 33,060]		

Customer signature

Generator

COMMENT: 61

SCHN00242198

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 21, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:43
Time out :	12:03
Ticket No.:	586074
Site i	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	14.69	.0000	per TON			
Gross: 85,840	Tare:	56,460		Net: 29,380 I		

Customer signature

Generator

COMMENT: 76 MARIO SISTO

SCHN00242199

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 24, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	9:16
Time out :	9:50
Ticket No.:	687364
Site	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	16.59	.0000	per TON			
[Gross: 90,000	Tare: 56,820		Net: 33,180]			

Customer signature

Generator

COMMENT: UDS 61

SCHN00242200

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2013

January 28, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	14:01
Time out :	14:26
Ticket #No.:	688364
Site	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	14.01	.0000	per TON			
[Gross: 83,260	Tare:	55,240		Net: 28,020]		

BOD

Customer signature

Generator

SCHN00242201

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 29, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:04
Time out :	11:23
Ticket *No.:	688530
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	10.52	.0000	per TON			
[Gross: 78,300	Tare:	57,260		Net: 21,040]		

Customer signature

Generator

COMMENT: UUS61/61TR

MARIO SISTO

SCHN00242202

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
29972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 29, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:17
Time out :	12:45
Ticket No.:	688577
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	14.79	.0000	per TON			
[Gross: 84,840	Tare:	55,260		Net: 29,580]		

Customer signature

Generator

COMMENT: CAP85

SCHN00242203

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

January 30, 2004

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:34
Time out :	12:00
Ticket No.:	688798
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	14.36	.0000	per TON			
[Gross: 85,440	Tare:	56,720		Net: 28,720]		

Customer signature

Generator

COMMENT: CAP 85

SCHN00242204

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 2, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:20
Time out :	10:42
Ticket No.:	663819
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.44	.0000	per TON			
[Gross: 88,980	Tare: 56,100			Net: 32,880]		

Customer signature

Generator

COMMENT: 61 UDDS

SCHN00242278

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28572 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 3, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.: SCHSTE
Time in : 10:14
Time out : 10:33
Ticket No.: 66138
Site COFFIN BUTTE LANDF
Truck No.: 1
Card ID SCHSTE1
Origin 16
Manifest # F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.01	.0000	per TON			

[Gross: 87,900 Tare: 55,880 Net: 32,020]

Customer signature Generator

COMMENT: UDS

SCHN00242279

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 7, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	14:04
Time out :	14:05
Ticket No.:	665340
Site 1	COFFIN BUTTE LANDF
Truck No.:	2
Card ID	SCHSTE2
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	10.45	.0000	per TON			

[Gross: 38,760 Man.Wt. Tare: 17,860 Man.Wt. Net: 20,900]

Dean Cooley AL526A

Customer signature

Generator

COMMENT: ALBSANTR

SCHN00242280

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 7, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:		SCHSTE
Time in :		14:04
Time out :		14:05
Ticket No.:		665341
Site	1	COFFIN BUTTE LANDF
Truck No.:		1
Card ID		SCHSTE1
Origin		12
Manifest #		F32Y32900

Commodity	Units	Rate	$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	10.64	.0000 per TON			

[Gross: 53,400 Man.Wt. Tare: 32,120 Man.Wt. Net: 21,280]

Dean Coakley ALS #26

Customer signature

Generator

COMMENT: ALBSAN26

SCHN00242281

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 8, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	14:01
Time out :	14:21
Ticket No.:	665628
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.21	.0000	per TON			
[Gross: 88,420	Tare: 56,000		Net: 32,420]			

Customer signature _____ Generator _____

COMMENT: UDS61

SCHN00242282

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 8, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	13:06
Time out :	13:21
Ticket No.:	665599
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	19.52	.0000	per TON			
[Gross: 88,880	Tare:	49,840		Net: 39,040]		

Dean C ALS #26-26A

Customer signature

S. Steel dirt

Generator

COMMENT: ALBSAN26
COMMENT: ALBSAN26TR

SCHN00242283

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 10, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	15:05
Time out :	15:21
Ticket No.:	666248
Site	1 COFFIN BUTTE LANDF
Truck No.:	2
Card ID	SCHSTE2
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	19.36	.0000	per TON			
[Gross: 88,860	Tare:	50,140		Net: 38,720]		

Dean C 26-26A
Customer signature

S. Steel-dirt
Generator

COMMENT: ALBSAN26

SCHN00242284

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 10, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	15:03
Time out :	15:17
Ticket No.:	666245
Site	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	18.13	.0000	per TON			
[Gross: 87,700	Tare:	51,440		Net: 36,260]		

Customer signature

Generator

COMMENT: ALBSAN 53

SCHN00242285

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 14, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	13:18
Time out :	13:34
Ticket No.:	667058
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	19.39	.0000	per TON			
[Gross: 88,620	Tare:	49,840		Net: 38,780]		

Dean C
Customer signature

S. Steel dirt
Generator
2-30yds

COMMENT: ALB26/ALS26TR

SCHN00242286

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 15, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:46
Time out :	7:47
Ticket No.:	667178
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.13	.0000	per TON			

[Gross: 90,580 Man.Wt. Tare: 56,320 Man.Wt. Net: 34,260]

Customer signature

Generator

COMMENT: UDS61

SCHN00242287

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone # 541-745-2018

October 16, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:26
Time out :	7:41
Ticket No.:	667397
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	17.02	.0000	per TON			
[Gross: 90,640 Man.Wt.	Tare:	56,600		Net: 34,040]		

Customer signature

Generator

COMMENT: UDS61

SCHN00242288

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 20, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:43
Time out :	12:02
Ticket No.:	668390
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	15.45	.0000	per TON			
[Gross: 80,640	Tare:	49,740		Net: 30,900]		

Customer signature

Generator

COMMENT: CAP81

SCHN00242289

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 21, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:19
Time out :	10:38
Ticket No.:	668620
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	17.92	.0000	per TON			
[Gross: 91,760	Tare:	55,920		Net: 35,840]		

Customer signature

Generator

COMMENT: UDS61

SCHN00242290

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 22, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:59
Time out :	8:00
Ticket No.:	668834
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.60	.0000	per TON			
[Gross: 89,820 Man.Wt.	Tare:	56,620 Man.Wt.	Net: 33,200]			

Customer signature

Generator

COMMENT: UDS 61

SCHN00242291

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 24, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:		SCHSTE
Time in :		7:44
Time out :		8:06
Ticket No.:		669343
Site	1	COFFIN BUTTE LANDF
Truck No.:		1
Card ID		SCHSTE1
Origin		16
Manifest #		F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.76	.0000	per TON			
[Gross: 87,600	Tare:	56,080		Net: 31,520]		

Jesse Hulett Jesse Hulett

Customer signature Generator

COMMENT: UDS 61

SCHN00242292

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 24, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:28
Time out :	10:48
Ticket No.:	669410
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 DUO Schnitzer	17.37	.0000	per TON			
[Gross: 91,680	Tare:	56,940		Net: 34,740]		

Customer signature

Generator

COMMENT: UDS76 DIRT MIX

SCHN00242293

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 27, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in	11:29
Time out	11:46
Ticket No.:	670081
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 000 Schnitzer	15.77	.0000	per TON			
[Gross: 87,540	Tare:	56,000		Net: 31,540]		

Customer signature

Generator

SCHN00242294

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 29, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:		SCHSTE
Time in		14:28
Time out		14:56
Ticket No.:		670703
Site	1	COFFIN BUTTE LANDF
Truck No.:		1
Card ID		SCHSTE1
Origin		16
Manifest #		F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.72	.0000	per TON			
[Gross: 88,620	Tare:	55,180		Net: 33,440]		

R. Oase
Customer signature

Bob Oase
Generator

COMMENT: CAP85

SCHN00242295

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 30, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in	11:09
Time out	11:26
Ticket No.:	670849
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	16.83	.0000	per TON			
[Gross: 89,880	Tare:	56,220		Net: 33,660]		

Customer signature

Generator

COMMENT: UDS 76

SCHN00242296

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2013

October 30, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.: SCHSTE
Time in : 12:34
Time out : 12:59
Ticket No.: 670887
Site : COFFIN BUTTE LANDF
Truck No.: 1
Card ID SCHSTEi
Origin 16
Manifest # F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 DUO Schnitzer	15.91	.0000	per TON			
[Gross: 86,060	Tare:	54,240		Net: 31,820]		

Customer signature

Generator

COMMENT: CAP 81

SCHN00242297

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 30, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:36
Time out :	13:00
Ticket No.:	670888
Site 1	COFFIN BUTTE LANDF
Truck No.:	2
Card ID	SCHSTE2
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.30	.0000	per TON			
[Gross: 87,740	Tare: 55,140		Net: 32,600]			

Customer signature

Generator

COMMENT: CAP85

SCHN00242298

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 31, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in	11:21
Time out	11:22
Ticket No.:	671088
Site	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.30	.0000	per TON			

[Gross: 88,460 Man.Wt. Tare: 55,860 Man.Wt. Net: 32,600]

Customer signature

Generator

COMMENT: UDS61
COMMENT: SIGNATURE ON 671032

SCHN00242299

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 31, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in	11:21
Time out	11:22
Ticket No.:	671088
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.30	.0000	per TON			
[Gross: 88,460 Man.Wt. Tare: 55,860 Man.Wt. Net: 32,600]						

Customer signature

Generator

COMMENT: UDS61
COMMENT: SIGNATURE ON 671032

SCHN00242300

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

October 31, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	13:13
Time out :	13:36
Ticket No.:	671196
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	18.82	.0000	per TON			
[Gross: 87,800	Tare:	50,160		Net: 37,640]		

Customer signature

Generator

COMMENT: CAP85

SCHN00242301

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
20972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 3, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:21
Time out :	12:36
Ticket No.:	655111
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	14.77	.0000	per TON			
[Gross: 85,700	Tare:	56,160		Net: 29,540]		

Customer signature

Generator

COMMENT: UDS76

SCHN00242322

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 5, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:05
Time out :	10:25
Ticket No.:	655687
Site	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.32	.0000	per TON			
[Gross: 90,480	Tare: 55,840			Net: 34,640]		

Customer signature Generator

COMMENT: UDS61

SCHN00242323

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 9, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:51
Time out :	12:35
Ticket No.:	656945
Site :	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.83	.0000	per TON			
[Gross: 88,700	Tare:	57,040		Net: 31,660]		

Customer signature

Generator

SCHN00242324

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 12, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:59
Time out :	11:21
Ticket No.:	657943
Site :	1 COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.59	.0000	per TON			
[Gross: 87,980	Tare:	56,800	Net:	31,180]		

Customer signature

Generator

SCHN00242325

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 16, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:01
Time out :	12:19
Ticket No.:	659074
Site :	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.23	.0000	per TON			
[Gross: 90,780	Tare:	56,200		Net: 34,580]		

Customer signature

Generator

SCHN00242326

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 19, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.: SCHSTE
Time in : 11:28
Time out : 11:41
Ticket No.: 659966
Site: COFFIN BUTTE LANDF
Truck No.: 1
Card ID SCHSTE1
Origin 16
Manifest # F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	17.37	.0000	per TON			

[Gross: 90,440 Man.Wt. Tare: 55,700 Net: 34,740]

Customer signature

Generator

COMMENT: TOTAL TRANSFER

SCHN00242327

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 23, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.: SCHSTE
Time in : 7:33
Time out : 7:47
Ticket No.: 660904
Site : COFFIN BUTTE LANDF
Truck No.: 1
Card ID SCHSTE1
Origin 16
Manifest # F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.59	.0000	per TON			
[Gross: 89,020	Tare:	55,840		Net: 33,180]		

Customer signature Generator

COMMENT: UDS61

SCHN00242328

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 23, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.: SCHSTE
Time in : 12:01
Time out : 12:20
Ticket No.: 661061
Site : COFFIN BUTTE LANDF
Truck No.: 1
Card ID SCHSTE1
Origin 16
Manifest # F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.18	.0000	per TON			
[Gross: 90,560	Tare:	56,200		Net: 34,360]		

Customer signature

Generator

SCHN00242329

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 25, 2003

SCHNITZER STEEL
PO BOX #10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:30
Time out :	7:34
Ticket No.:	661636
Site :	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.95	.0000	per TON			
[Gross: 89,600 Man.Wt.	Tare:	55,700		Net: 33,900]		

Customer signature _____ Generator

COMMENT: UDS61

SCHN00242330

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 25, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	10:10
Time out :	10:25
Ticket No.:	661727
Site :	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.31	.0000	per TON			
[Gross: 90,700	Tare:	56,080		Net:	34,620]	

Customer signature

Generator

COMMENT: UDS76

SCHN00242331

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 25, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	13:51
Time out :	14:07
Ticket No.:	661849
Site :	1 COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 GUO Schnitzer	17.38	.0000	per TON			
[Gross: 90,280	Tare: 55,520		Net: 34,760]			

Customer signature Generator

COMMENT: UDS61

SCHN00242332

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 26, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	13:08
Time out :	13:24
Ticket No.:	662169
Site	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32300

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.83	.0000	per TON			
[Gross: 90,160	Tare:	56,500	Net: 33,660]			

Customer signature

Generator

COMMENT: UDS 76

SCHN00242333

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

September 30, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	11:04
Time out :	11:22
Ticket No.:	663177
Site	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	15.83	.0000	per TON			
[Gross: 87,940	Tare:	56,280		Net: 31,660]		

Customer signature

Generator

SCHN00242334

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

August 15, 2003

SCHNITZER INVESTMENT CORP
PO BOX 10047
PORTLAND, OR 97296

Account No.: ~~SCHNIT~~ SCHSTE
Time in : 10:30
Time out : 10:52
Ticket No.: 649412
Site : 1 COFFIN BUTTE LANDF
Truck No.: 5
Card ID SCHNIT5
Origin 16
Manifest # F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.70	13.0000	per TON	217.10	.00	217.10
[Gross: 91,220	Tare:	57,820		Net: 33,400]		
Totals))))))))))))				217.10	.00	217.10
			Total Due		$	217.10

Customer signature

Generator

SCHN00242335

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

July 18, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.: SCHSTE
Time in : 7:49
Time out : 8:10
Ticket No.: 640823
Site 1 COFFIN BUTTE LANDF
Truck No.: 1
Card ID SCHSTE1
Origin 16
Manifest # F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	16.78	.0000	per TON			
[Gross: 87,280	Tare:	53,720		Net: 33,560]		

Customer signature

Generator

SCHN00242336

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

July 17, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	12:59
Time out :	13:21
Ticket No.:	640657
Site: 1	COFFIN BUTTE LANDF
Truck No.: 7	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.06	.0000	per TON			
[Gross: 90,320	Tare:	56,200		Net: 34,120]		

Customer signature

Generator

COMMENT: UDS - 76

SCHN00242337

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

July 22, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.: SCHSTE
Time in : 10:43
Time out : 11:13
Ticket No.: 641977
Site # 1 COFFIN BUTTE LANDF
Truck No.: 1
Card ID SCHSTE1
Origin 16
Manifest # F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	17.36	.0000	per TON			
[Gross: 90,880	Tare: 56,160		Net: 34,720]			

Customer signature

Generator

COMMENT: HAULER:76

SCHN00242338

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

July 28, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	7:53
Time out :	8:22
Ticket No.:	543611
Site 1	COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	16.78	.0000	per TON			
[Gross: 91,280	Tare: 57,720		Net: 33,560 1			

Customer Signature

Generator

SCHN00242339

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

July 29, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	13:20
Time out :	13:44
Ticket No.:	644105
Site # :	1 COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUD Schnitzer	16.76	.0000	per TON			
[Gross: 90,200	Tare:	56,680		Net: 33,520]		

Customer signature

Generator

COMMENT: UD876

SCHN00242340

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

July 30, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	13:02
Time out :	13:10
Ticket No.:	644427
Site	1 COFFIN BUTTE LANDF
Truck No.:	1
Card ID	SCHSTE1
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	8.72	4.0000	per TON			
[Gross: 50,860 Man.Wt.	Tare: 33,420			Net: 17,440]		

Customer signature

Generator

COMMENT: UDS HAULER TRAVIS #61

Refer: # 644418

SCHN00242341

VALLEY LANDFILLS, INC. COFFIN BUTTE LF
28972 COFFIN BUTTE ROAD
CORVALLIS, OR 97330

Telephone : 541-745-2018

July 30, 2003

SCHNITZER STEEL
PO BOX 10047
PORTLAND, OR 97296

Account No.:	SCHSTE
Time in :	13:03
Time out :	13:10
Ticket No.:	644428
Site :	1 COFFIN BUTTE LANDF
Truck No.:	2
Card ID	SCHSTE2
Origin	16
Manifest #	F32Y32900

Commodity	Units	Rate		$ Waste	$ Tax	$ Amount
123 QUO Schnitzer	8.52	.0000	per TON			
[Gross: 37,200 Man.Wt.	Tare: 20,160		Net: 17,040]			

Customer signature

Generator

COMMENT: UDS HAULER TRAVIS #61

Refer: # 644413

SCHN00242342

18.71+
18.05+
22.19+
19.83+
17.22+
22.45+
18.24+
17.50+
17.75+
17.70+
17.77+
18.39+
18.21+
16.58+
17.88+
18.25+
18.95+

United

017

315.67*

0.*

Diff.
13.64/NT

18.48+
18.14+
19.80+
16.51+
16.40+
17.04+
17.91+
17.72+
17.53+
17.60+
17.36+
18.29+
17.66+
17.74+
17.98+
17.70+
18.17+

Coffin Butte

017

302.03*

0.*

SCHN00242385

United Disp. #	Tons	Coffin Butte #	Tons	Date	Inv.# United Disp.
77946	18.71	613243	18.48	4/1 4/3	
77949	18.05	613274	18.14	4/3	
78460	22.19	613431	19.80	4/4	
78602	19.83	613409	16.51	4/4	
78463	17.22	613955	16.40	4/7	
78466	22.45	614149	17.04	4/8	
78617	18.24	614723	17.91	4/10	
78618	17.50	614941	17.72	4/11	
78623	17.75	615864	17.53	4/15	
78624	17.70	616309	17.66	4/16	
78484	17.77	615619	17.36	4/14	
78628	18.39	616539	18.29	4/17 4/18	
78308	18.21	617214	17.66	4/21	
78315	16.58	617607	17.74	4/22 4/23	
78640	17.88	617690	17.98	4/23	
78326	18.25	618165	17.70	4/25	
78336	18.95	618956	18.17	4/29	

AFE 10992108 Paid May 2003

Coffin Butte Landfills - $4,916.95 302.09 tons
United Disposal Services - $3,400.00 $27.53 per ton
4/3/03 - 4/29/03
$8,316.95

Landfill Charged - $18.50 Net ton disposal plus $200 per load

Invoice Date	Invoice #	Tonnage	$ Amount
5-31-03	0456-00021 0036	10 trips	$2000.00

144 loads @ $9.50 per load = Tonnage reported $4,474.34 tons
$98,428

Tonnage reported $5,049.69 tons

56

United Disposal	Total Loads	Tonnage	$ Amount
5/23/03 thru 5/30/03	144	4,474.34	$42,506.23 $9.50/ton
Coffin Butte	171	5,049.69	$67175.22 $13.30/ton
5/02/03 thru 5/30/03			$109,681.45 $22.80/ton

1) 20K on #14
2) AFE Addendum (No)
3) New AFE's

0-21-11

"All Documents for IT.
"Make copies"

United Disposal Service, Inc.

2215 N. Front Street Woodburn, OR 97071 503-981-1278

Fax

To: Jim J. From: Brett Davis

Fax: Pages: 5

Phone: Date: 6-24-3

Re: CC:

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Jim, here is the Bill for 3rd party hauling for the dirt to C. Butte, there still is 1 trucking co. That has not sent their bill too us, we'll try to get that completed as soon as possible!

Thanks Jim if you have any questions please call me cell # 503 209-2819
503 981-1278

~~DIRT~~ HAUL FROM SCHNITZER TO COFFIN
MAY 2003

	DATE	LANDFILL TICKET #	TONS	AMOUNT
1	5/23	624987	33.74	$9.50
2	5/23	624828	31.15	$9.50
3	5/23	624791	30.53	$9.50
4	5/23	624825	30.99	$9.50
5	5/23	624841	31.84	$9.50
6	5/23	624977	32.68	$9.50
7	5/23	624836	28.75	$9.50
8	5/23	624975	30.80	$9.50
9	5/23	624979	33.08	$9.50
10	5/23	624834	32.19	$9.50
11	5/23	624855	32.13	$9.50
12	5/23	624985	31.68	$9.50
13	5/23	624857	30.08	$9.50
14	5/23	624983	29.65	$9.50
15	5/23	624896	30.29	$9.50
16	5/23	624859	29.92	$9.50
17	5/23	625024	30.11	$9.50
18	5/23	624871	29.87	$9.50
19	5/23	waiting on ticket #'s	30.00	$9.50
20	5/23	waiting on ticket #'s	30.00	$9.50
21	5/27	625586	33.27	$9.50
22	5/27	625751	32.77	$9.50
23	5/27	625532	31.30	$9.50
24	5/27	625783	31.61	$9.50
25	5/27	625545	31.34	$9.50
26	5/27	625703	29.99	$9.50
27	5/27	625865	31.00	$9.50
28	5/27	625592	32.25	$9.50
29	5/27	625752	32.94	$9.50
30	5/27	625596	29.72	$9.50
31	5/27	625753	29.59	$9.50
32	5/27	625589	32.85	$9.50
33	5/27	625735	33.00	$9.50
34	5/27	625612	30.13	$9.50
35	5/27	625769	30.18	$9.50
36	5/27	625706	28.59	$9.50
37	5/27	625628	31.07	$9.50
38	5/27	625795	30.99	$9.50
39	5/27	625627	30.90	$9.50
40	5/27	625780	31.74	$9.50
41	5/27	625804	29.61	$9.50
42	5/27	625632	29.93	$9.50

	DATE	LANDFILL TICKET #	TONS	AMOUNT
43	5/27	625876	28.83	$9.50
44	5/27	625563	30.66	$9.50
45	5/27	625727	28.50	$9.50
46	5/27	625600	29.48	$9.50
47	5/27	625766	29.80	$9.50
48	5/27	625742	30.32	$9.50
49	5/27	625565	28.57	$9.50
50	5/28	625895	31.94	$9.50
51	5/28	626016	32.66	$9.50
52	5/28	626184	32.89	$9.50
53	5/28	626277	34.49	$9.50
54	5/28	625972	32.42	$9.50
55	5/28	626179	33.29	$9.50
56	5/28	625853	30.58	$9.50
57	5/28	626107	30.36	$9.50
58	5/28	625891	32.03	$9.50
59	5/28	626126	32.37	$9.50
60	5/28	625963	33.49	$9.50
61	5/28	626145	31.10	$9.50
62	5/28	625890	31.30	$9.50
63	5/28	625964	30.79	$9.50
64	5/28	625968	33.47	$9.50
65	5/28	626110	33.90	$9.50
66	5/28	625892	33.13	$9.50
67	5/28	625967	31.24	$9.50
68	5/28	626157	30.60	$9.50
69	5/28	625905	30.63	$9.50
70	5/28	625931	31.81	$9.50
71	5/28	626060	32.86	$9.50
72	5/28	625934	31.66	$9.50
73	5/28	626070	32.83	$9.50
74	5/28	626075	30.01	$9.50
75	5/28	625841	26.28	$9.50
76	5/28	626907	31.17	$9.50
77	5/28	626163	32.44	$9.50
78	5/28	626114	32.55	$9.50
79	5/28	625898	31.38	$9.50
80	5/28	625961	32.06	$9.50
81	5/28	626000	32.87	$9.50
82	5/28	625899	31.25	$9.50
83	5/28	625914	31.74	$9.50
84	5/28	626165	30.94	$9.50
85	5/28	626152	31.30	$9.50
86	5/28	626019	28.04	$9.50
87	5/28	625896	28.00	$9.50
88	5/28	625960	30.18	$9.50
89	5/28	626199	29.66	$9.50
90	5/28	626121	29.71	$9.50

	DATE	LANDFILL TICKET #	TONS	AMOUNT
91	5/28	625962	30.94	$9.50
92	5/28	625904	29.05	$9.50
93	5/28	626029	29.73	$9.50
94	5/28	626198	30.02	$9.50
95	5/28	626162	30.48	$9.50
96	5/28	625979	30.04	$9.50
97	5/29	626444	32.75	$9.50
98	5/29	626535	32.19	$9.50
99	5/29	626262	33.39	$9.50
100	5/29	626306	29.91	$9.50
101	5/29	626475	31.35	$9.50
102	5/29	626230	32.57	$9.50
103	5/29	626521	32.36	$9.50
104	5/29	626355	32.83	$9.50
105	5/29	626271	30.12	$9.50
106	5/29	626428	30.41	$9.50
107	5/29	626228	32.56	$9.50
108	5/29	626518	32.70	$9.50
109	5/29	626341	32.86	$9.50
110	5/29	626288	31.45	$9.50
111	5/29	626453	30.74	$9.50
112	5/29	626346	29.01	$9.50
113	5/29	626526	29.73	$9.50
114	5/29	626222	32.07	$9.50
115	5/29	626325	31.46	$9.50
116	5/29	626221	32.34	$9.50
117	5/29	626324	31.52	$9.50
118	5/29	626226	32.24	$9.50
119	5/29	626506	32.44	$9.50
120	5/29	626335	32.68	$9.50
121	5/29	626265	29.48	$9.50
122	5/29	626424	29.23	$9.50
123	5/29	626361	31.49	$9.50
124	5/29	626231	32.24	$9.50
125	5/29	626351	30.73	$9.50
126	5/29	626430	29.00	$9.50
127	5/29	626229	31.67	$9.50
128	5/29	626362	30.68	$9.50
129	5/29	626234	31.47	$9.50
130	5/29	626224	29.95	$9.50
131	5/29	626296	30.46	$9.50
132	5/29	626459	30.34	$9.50
133	5/29	626302	29.54	$9.50
134	5/29	626473	30.27	$9.50
135	5/29	626462	29.90	$9.50
136	5/29	626281	30.17	$9.50
137	5/30	626577	32.67	$9.50
138	5/30	626614	31.25	$9.50

	DATE	LANDFILL TICKET #	TONS	AMOUNT
139	5/30	626594	30.58	$9.50
140	5/30	626626	31.73	$9.50
141	5/30	626611	29.14	$9.50
142	5/30	626583	29.50	$9.50
143	5/30	626580	29.65	$9.50
144	5/30	626584	29.41	$9.50
			4474.34	$9.50
				$42,506.23

TOTAL P.05

United Disposal Service, Inc.

P.O. BOX 608 • 2215 N. FRONT STREET
WOODBURN, OREGON 97071-5999
RESIDENTIAL - COMMERCIAL - INDUSTRIAL - RECYCLING
TELEPHONE 503-981-1278 FAX 503-982-7930
http://www.uniteddisposal.com

Dear Jim,

Here is our new proposal for hauling the dirt from your facility at 12005 N. Burgard Rd Portland, OR to Coffin Butte landfill.
The disposal fee at the landfill including metro fees will be $13.00 per ton which Valley landfills will bill Schnitzer Steel direct.
The transportation charges for hauling the dirt will be $9.50 per ton which United Disposal Service & other Allied co.'s will haul with Drop box truck & trailers maximizing our payloads.
United Disposal Service will bill Schnitzer Steel for all Transportation.

Thank you for the opportunity to be of service to Schnitzer Steel.

Sincerely,
Brett Davis
Operations Manager

PRINTED ON RECYCLED PAPER

AN EQUAL OPPORTUNITY EMPLOYER M/F/D/V

United Disposal Service, Inc.

2215 N. Front Street Woodburn, OR 97071 503-981-1276

Fax

To: Jim Jakubiak	**From:** Brad Davis
Fax:	**Pages:** 2
Phone:	**Date:** 7-16-3
Re:	**CC:**

☐ Urgent ☒ For Review ☒ Please Comment ☐ Please Reply ☐ Please Recycle

COFFIN BUTTE LANDFILL

May 26, 2003

Schnitzer Steel Products
Mr. Jim Jakubiak
120005 N. Burgard Rd
Portland, OR 97203

RE: Stockpile of Soil

Dear Jim,

As per our conversation on Friday, I am sending this revised work order for your records. The total cost to your company is not to exceed $22 per ton for transporting, disposal, and metro fees of the stockpiled material at your site that has already been approved with Allied Waste Industries corporate office. Coffin Butte Landfill will charge you for the disposal and metro fees, and United Disposal will charge you for the transportation, as per your original arrangement. The only change being made is that we are utilizing third party hauling to transport the material as well as company trucks. I will be onsite throughout the week to ensure a smooth operation with the trucking companies. I will also impose all safety rules of the mill to the trucking companies to ensure a safe operation. If you need to reach me for any reason please feel free to call upon me via my mobile, that number is 503-991-1144 or in the afternoon in my office at 541-745-2018.

Best Regards,

Shane M. Teeters
Project Manager

Trucking Companies:

Keith Moll Trucking
Dick Moll Trucking
Mike Herberger Trucking
Munitor Construction
Don Hines Trucking
Brad Russell Trucking
F & S Trucking
Pheleps Trucking
Obrist Trucking
C & I Trucking
Peck Trucking

COFFIN BUTTE LANDFILL

May 26, 2003

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Best Regards,

Shane M. Teeters
Project Manager

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Pheleps Trucking
Obrist Trucking
C & I Trucking
Peck Trucking

United Disposal Service, Inc.

2215 N. Front Street Woodburn, OR 97071 503-981-1278

Fax

To: Jim Jakubiak From: Karla

Fax: 503-286-6948 Pages: 2

Phone: Date: 8/27/03

Re: Dirt Hauls for July CC:

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

These are the dirt Hauls so far this month.

Thanks!
Karla

SCHNITZER DIRT
August

Date Taken	Date Disposed	UDS #	CB #	Tonnage	Charges
08/01/03	08/05/03	80244	646114	16.68	$ 158.46
08/04/03	08/06/03	80249	646516	17.24	$ 163.78
08/07/03	08/07/03	77071	646846	16.26	$ 154.47
08/11/03	08/11/03	77086	648059	17.50	$ 166.25
08/15/03	08/15/03	2670	649412	16.70	$ 158.65
08/15/03	08/15/03	2672	649663	16.00	$ 152.00
08/15/03	08/16/03	77091	649710	16.50	$ 156.75
08/18/03	08/18/03	79580	650164	17.65	$ 167.68
08/19/03	08/19/03	77100	650477	16.87	$ 160.27
08/20/03	08/20/03	79587	650962	17.37	$ 165.02
08/21/03	08/21/03	81855	651155	17.00	$ 161.50
08/22/03	08/22/03	81858	651516	17.36	$ 164.92
08/22/03	08/22/03	81634	651528	17.16	$ 163.02
08/25/03	08/25/03	81860	652299	17.32	$ 164.54
08/26/03	08/26/03	81149	652701	17.01	$ 161.60
					$ 2,418.89

United Disposal Service, Inc.

2215 N. Front Street Woodburn, OR 97071 503-981-1278

Fax

To: Jim Jakubiak From: Brett Davis

Fax: Pages: 5

Phone: Date:

Re: CC:

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Jim,
Here is the current bill as of 8/20 for dirt hauls & there is the bill from may hauls for $2,000.00 that hasn't been paid
Julys hauls for $ 815.19

SCHNITZER DIRT
August

Date Taken	Date Disposed	UDS #	CB #	Tonnage	Charges	
08/01/03	08/05/03	80244	646114	16.68	$	158.46
08/04/03	08/06/03	80249	646516	17.24	$	163.78
08/07/03	08/07/03	77071	646846	16.26	$	154.47
08/11/03	08/11/03	77086	648059	17.50	$	166.25
08/15/03	08/15/03	2670	649412	16.70	$	158.65
08/15/03	08/15/03	2672	649663	16.00	$	152.00
08/15/03	08/16/03	77091	649710	16.50	$	156.75
08/18/03	08/18/03	79580	650164	17.65	$	167.68
08/19/03	08/19/03	77100	650477	16.87	$	160.27
08/20/03	08/20/03	79587	650962	17.37	$	165.02
					$	1,603.32

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: N2032

EXPIRATION DATE: 3/31/2009

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242447

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G2122

EXPIRATION DATE: 2/28/2009

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: E2006

EXPIRATION DATE: 3/31/2009

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242449

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: N1014

EXPIRATION DATE: 3/31/2009

Registrant: SCHNITZER STEEL OF TACOMA
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: WA

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242450

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G1150

EXPIRATION DATE: 2/28/2009

Registrant: SCHNITZER STEEL OF TACOMA
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: WA

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242451

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: E1005

EXPIRATION DATE: 3/31/2009

Registrant: SCHNITZER STEEL OF TACOMA
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: WA

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242452

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

TRUCK NO.	89
SHIPMENT NO:	T1258
CONTACT:	Mat Cusma
DATE:	4/4/2008

NAME OF CARRIER: Thomas Gray & Associates, Inc.

TO:	FROM:
CONSIGNEE: Thomas Gray & Associates, Inc.	CONSIGNOR: Schnitzer Steel, Inc.
STREET: 1205 West Barkely Ave.	STREET: 12005 N. Burgard Way
CITY: Orange STATE: CA	CITY: Portland STATE: OR
ZIP CODE: 92868 PHONE: 714-997-8090	ZIP CODE: 97203 PHONE: 503.286.6944

24 HOUR EMERGENCY RESPONSE TELEPHONE NUMBER: (714) 997-8090

TOTAL QUANTITY	HM	BASIC DESCRIPTION (PROPER SHIPPING NAME, IDENTIFICATION # (UN OR NA), PACKING GROUP, PER 172.101-103)	NO. OF UNITS & CONTAINER TYPE	WEIGHT (LBS)	RATE
30-gal steel		Radioactive Material, Type A Package, 7, UN2915	1	60.0	
drum					
		Isotope: Cs137			
		Activity: 925 MBq (25 mCi)			
		Contact Dose Rate: 0.6 mR/hr			
		TI: 0			
		Label: Yellow II			
		Drum ID: T1258-D01			
		Description:			
		Kay-Ray/Sensall Gamma Belt Gauge Model 7019 Series			
		GENERATOR: Schnitzer Steel			
		RMA#			

PLACARDS TENDERED: None

I hereby declare that the contents of this consignment are full and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

4-4-08

GENERATOR SIGNATURE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and conditions of contents of packages unknown), marked, consigned and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutally agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the Bill of Lading terms and conditions in the governing classification on the date of shipment.

Receiver hereby certifies that he is familar with all the Bill of Lading term and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

RECEIVER: Thomas Gray & Associates, Inc.	CARRIER: Thomas Gray & Associates, Inc.
SIGNATURE:	SIGNATURE
DATE:	DATE: 4-4-08

SCHN00242455

NRC FORM 540 — U.S. NUCLEAR REGULATORY COMMISSION
EXPIRES 8/30/2007 — rev. 12-07

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST
SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code): M-F 8am-5pm (714) 997-8090 / After Hours (714) 745-5211
ORGANIZATION: Thomas Gray & Associates, Inc.

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? [X] YES [ ] NO
3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST → 2

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes" provide Manifest Number → NO
EPA MANIFEST NUMBER

5. SHIPPER - NAME AND FACILITY
Schnitzer Steel
12005 N. Burgard Road
Portland, OR 97203
USER PERMIT NUMBER: G2122
SHIPMENT NUMBER:
CONTACT: Mat Cusma
EXT
SHIPPER EPA I.D. NUMBER:
[ ] COLLECTOR
[ ] PROCESSOR
[X] GENERATOR TYPE (Specify)
TELEPHONE NUMBER: 503.286.6944

6. CARRIER - Name and Address
Thomas Gray & Associates, Inc.
1205 W. Barkley Ave
Orange, CA 92868
CONTACT: Rich Gallego
EPA I.D. NUMBER: CAD 068 151 648
SHIPPING DATE: 04/04/08
TELEPHONE NUMBER: 714-997-8090
SIGNATURE - Authorized carrier acknowledging waste receipt
DATE: 4-4-08

7. NRC FORM 540 AND 540A PAGE 1 OF 1 PAGES(S)
NRC FORM 541 AND 541A PAGE 1 OF 2 PAGES(S)
NRC FORM 542 AND 542A PAGE 1 OF 1 PAGES(S)
ADDITIONAL INFORMATION PAGE 1 OF _____ PAGES(S)

8. MANIFEST NUMBER: T1259

9. CONSIGNEE - Name and Facility Address
Environmental Management & Controls
3106 S. Faith Home Road
Turlock, CA 95380
CONTACT: Gaye Nelson
TELEPHONE NUMBER: 209-667-1102
SIGNATURE - Authorized consignee acknowledging waste receipt
DATE

10. CERTIFICATION: This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are packaged, marked, and labeled and are in proper condition for transportation disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.
AUTHORIZED SIGNATURE
TITLE: Environmental Admin
DATE: 4-4-08

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANS INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY (Bq)	17. LSA / SCO CLASS	18. TOTAL WEIGHT (kg/lbs)	19. PACKAGE I.D. NUMBER
Radioactive material, Type A Package, 7, UN2915	Yellow II	.1	solid / broken line source	Cs137	5550.0 MBq (150.0) mCi	N/A	113.4 250.0	T1259-D02
Radioactive material, Type A Package, 7, UN2915	Yellow II	.1	solid / broken line source	Cs137	5550.0 MBq (150.0) mCi	N/A	113.4 250.0	T1257-D03

FOR CONSIGNEE USE ONLY
EMC
email: mcusma@schn.com
fax: 503.471.4894

WASTE RECEIPT ACKNOWLEDGEMENT PREFERENCE (please check a box and add information if necessary)
[ ] FAX _____
[ ] EMAIL _____

SCHN00242456

NRC FORM 541
EXPIRES 8/30/2007 rev. 05.12

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

1. MANIFEST TOTALS

NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME (m³/ft³)	NET WASTE WEIGHT (kg/lbs)	SPECIAL NUCLEAR MATERIAL (grams) U233	U235	Pu	TOTAL (g)
2	0.6436 22.73	226.8 500.0	0	0	0	0

ACTIVITY (MBq/mCi) ALL NUCLIDES	TRITIUM	C14	Tc-99	I129	SOURCE (kg)
11100.0 MBq 300.0 mCi	0	0	0	0	0.0E+00

2. MANIFEST NUMBER
T1259

3. PAGE 1 OF 2 PAGE(S)

4. SHIPPER NAME
Schnitzer Steel

SHIPPER ID NUMBER

PERMIT NUMBER
G2122

5. CONTAINER ID NUMBER / GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (SEE NOTE 1)	7. VOLUME (m³/ft³)	8. WASTE & CONTAINER WEIGHT (kg/lbs)	9. SURFACE RADIATION LEVEL mR/hr X / mRem/hr X	10. SURFACE CONTAMINATION MBq / 100 cm² ALPHA	BETA-GAMMA	PHYSICAL DESCRIPTION 11. WASTE DESCRIPTOR (SEE NOTE 2)	12. APPROX. WASTE VOLUME(S) IN CONTAINER (m³/ft³)	13. SORBENT, SOLIDIFICATION, STABILIZATION MEDIA (SEE NOTE 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM / CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITIES (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND ISOTOPE	(MBq)	(mCi)	kg	gm	16. WASTE CLASSIFICATION AB, AU, B, C
T1259-D02	4	0.3218 11.36	113.4 250.0	0 mR/hr mRem/hr	<1.67e-6	<1.67e-5	36	0.3218 11.36	100	broken line source	NP	Cs137	5550.0	150.0			AU
T1259-D03	4	0.3218 11.36	113.4 250.0	0 mR/hr mRem/hr	<1.67e-6	<1.67e-5	36	0.3218 11.36	100	broken line source	NP	Cs137	5550.0	150.0			AU

NOTE 1: Container Description Code. For containers/ waste requiring disposal in approved structural overpacks the numerical code must be followed by "-OP".
1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
19. Other. Describe in item 6, or additional page

NOTE 2: Waste Descriptor Codes: (Choose up to three which predominate by volume)
20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-Exchange Media
31. Anion Ion-Exchange Media
32. Mixed Bed Ion-Exchange Media
33. Contaminated Equipment
34. Organic Liquid (except Oil)
35. Glassware or Labware
36. Sealed sources/devices
37. Paint or Plating
38. Evaporator Bottoms/Sludge/ Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal carcass)
43. Activated Material
59. Other. Describe in item 11, or additional page

NOTE 3: For solidification media that meet disposal site structural stability requirements, the numerical code must be followed by "-S". For all solidification media, the vendor (manufacturer) and brand name must also be identified in item 13. Code 100 = NONE REQUIRED.

Sorbtion
60. Speedi Dri
61. Celatom
62. Floor Dry/ Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Floroc
67. Floroc X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicapsel HP200
73. Dicapsel HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
89. Other. Describe in item 13 or additional page

Solidification
90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ether Styrene
99. Other. Describe in item 13, or additional page

SCHN00242457

NRC FORM 542 U.S. NUCLEAR REGULATORY COMMISSION
EXPIRES 7/31/2004 rev. 05.12

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

MANIFEST INDEX AND REGIONAL COMPACT TABULATION

List all original "PROCESSED WASTE" generators (if any) before "COLLECTED WASTE" generators

1. WASTE COLLECTOR/PROCESSOR

NAME: Thomas Gray & Associates, Inc.

IDENTIFICATION NUMBER / PERMIT NUMBER: G2122

SHIPPING DATE: 4/4/2008

SHIPPER USE ONLY

2. MANIFEST NUMBER: T1259

3. PAGE 1 of 1

4. GENERATOR IDENTIFICATION NUMBER	5. GENERATOR NAME PERMIT NUMBER (IF APPLICABLE) AND TELEPHONE NUMBER	6. GENERATOR FACILITY ADDRESS	7. PREPROCESSED WASTE (OR MATERIAL VOLUME (m³)	8. MANIFEST NUMBER(S) UNDER WHICH WASTE (OR MATERIAL) RECEIVED AND DATE OF RECEIPT	9. WASTE CODE P = PROCESSED C = COLLECTED	10. ORIGINATING COMPACT REGION OR STATE	11. AS PROCESSED/COLLECTED TOTAL A. SOURCE MATERIAL (kg)	B. SNM (g)	C. ACTIVITY (MBq)	D. VOLUME (m³)
	Schnitzer Steel G2122 503.286.6944	12005 N. Burgard Road Portland, OR 97203 Mat Cusma	0.6436 m³	T1259 4/4/2008	C	WA	0.00E+00	0.00E+00	1.11E+04	0.6436

SCHN00242458

LOW-LEVEL AND NATURALLY OCCURRING OR ACCELERATOR PRODUCED RADIOACTIVE WASTE SHIPMENT CERTIFICATION FOR COMMERCIAL GENERATORS/PACKAGERS, BROKERS, AND CARRIERS

The following certification, completed as applicable, is made to the state of Washington:

Certification is hereby made to the state of Washington that Radiation Shipment Record No. T1259 of radioactive waste has been inspected in accordance with requirements of the Governor of Washington's Executive Order dated November 19, 1979, prior to its shipment. Further certification is made that the inspection has revelaed no items of noncompliance with all applicable laws, rules, and regulations.

The undersigned shall indemnify and hold harmless the state of Washington, in an amount not to exceed $1,000,000.00 per individual who may be injured, provided that indemnification shall not exceed $5,000,000.00 in total, for each occurrence, from any and all claims, suits, losses, damage, injury, and expenses to any person whomsoever or to property arising or growing out of or in any manner connected with the activities performed under this order.

Except for any violation of applicable existing state or federal statute or regulation respecting packaging and shipment, inspection and acceptance of any items or container or material covered by this certification by the state of Washington or a duly authorized contactor shall release the party who executed this certificate from any and all indemnificaiton from injury or loss.

SECTION A:
FOR THE GENERATOR/PACKAGER: Schnitzer Steel
(Company Name)

PERMIT NUMBER: G2122

VOLUME OF WASTE IN THIS SHIPMENT: 0.6436 m³

DATE: 4/4/2008 BY:

TITLE:

SECTION B:
FOR THE BROKER: Thomas Gray & Associates, Inc.
(Company Name)

PERMIT NUMBER: B400

VOLUME OF WASTE IN THIS SHIPMENT: 0.6436 m³

DATE: 4/4/2008 BY:

TITLE:

SECTION C:
FOR THE CARRIER: Thomas Gray + Associates
(Company Name)

VOLUME OF WASTE IN THIS SHIPMENT: .6436 m³

DATE: 4-4-08 BY:

TITLE: Driver

DOH RHF-31A
Updated 3/00

Rev. 03/28/06

SCHN00242459

--DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

Approval Number: _____-_____-_____-_____ (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR CHTT 286964

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR. 97128

Shippers name: Cascade Steel Date Advised:07/26/01

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph: (503) 434-3324 Fax: (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad.Level: <0.1 mr/hr located on vehicle at unable to deternine

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 07/26/01

Inspected by: Vern McClure Ph: (503) 434-3271 **Fax: (503) 472-5739**

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: **07/26/01**

Address: 110 West 10th AVE. Albany, OR. 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:**07/26/01**
Address: 1200 N Burgard RD. Portland, OR. 97210

Contact Person: Terry Glucoft Ph: (503) 286-5771 Fax: (503)286-6948

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:**07/26/01**

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: _____ Date: _____
Signiture

SCHN00242642

Jim Jakubiak

From: Daniel Lee
Sent: Monday, January 22, 2001 10:20 AM
To: '503-731-4081@faxsr.schn.com'
Cc: Jim Jakubiak
Subject: DOT E shipment approval

DOT-E shipment approval.doc

Daniel Lee
Cascade Steel Rolling Mills, Inc.
3200 N HWY 99W
McMinnville, OR 97128
Phone: (503) 434-3324
Fax: (503) 471-4582
(503) 434-5739
Dlee@schn.com

SCHN00242643

CASCADE STEEL ROLLING MILLS, INC.
3200 N. HIGHWAY 99 WEST
MCMINNVILLE, OR 97128

Fax Cover Sheet

DATE:		January 22, 2001	**TIME:**
TO:	Ed Wright	**PHONE:**	(503) 731-4014, 674
	Terry Lindsey	**FAX:**	(503) 731-4081
FROM:	DANIEL LEE	**PHONE:**	(503) 434-3324
		FAX:	(503) 434-5739
RE:		DOT-E 10656 SHIPMENT APPROVAL	
CC:			

Number of pages including cover sheet: 2

Message: ***Urgent Response Required***

ATTACHED IS FOR YOUR REVIEW AND APPROVAL.

PLS FAX ME THE APPROVED FORM AT **(503) 471-4582 or (503) 434-5739**

The railcar(s) will be unloaded to a truck at Whiteson railroad junction nearby Cascade Steel, McMinnville. Each load, about a half-full of truckload of scrap, will pass through the radiation detectors at Cascade Steel. The rejected truckload will be sent to the destined facility to search for the source.

Should you have any questions regarding follow up issues, such as a written notification for that radioactive material(s) was found, please contact Matt Cusma, Schnitzer Steel Products (SSP), at (503) 286-6944.

-DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

Approval Number: _____-_____-_____-_____ (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR : CHTT286390

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR. 97128

Shippers name: Cascade Steel Date Advised:01/22/01

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph: (503) 434-3324 Fax: (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad.Level: <0.1 mr/hr located on vehicle at_____

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 01/22/01

Inspected by: Vern McClure Ph: (503) 434-3271 **Fax: (503) 472-5739**

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: **01/22/01**

Address: 110 West 10th AVE. Albany, OR. 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:**01/22/01**
Address: 1200 N Burgard RD. Portland, OR. 97210

Contact Person: Terry Glucoft Ph: (503) 286-5771 Fax: (503)286-6948

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:**01/22/01**

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: _____ Date: _____
Signiture

SCHN00242645

CASCADE STEEL ROLLING MILLS, INC.
3200 N. HIGHWAY 99 WEST
MCMINNVILLE, OR 97128

Fax Cover Sheet

DATE:		March 20, 2001 **TIME:**	
TO:	Ed Wright	**PHONE:**	(503) 731-4014, 674
	Terry Lindsey	**FAX:**	(503) 731-4081
FROM:	DANIEL LEE	**PHONE:**	(503) 434-3324
		FAX:	(503) 434-5739
RE:		DOT-E 10656 SHIPMENT APPROVAL	
CC:			

Number of pages including cover sheet: 2

Message: ***Urgent Response Required***

ATTACHED IS FOR YOUR REVIEW AND APPROVAL.

PLS FAX ME THE APPROVED FORM AT **(503) 471-4582 or (503) 434-5739**

The railcar(s) will be unloaded to a truck at Whiteson railroad junction nearby Cascade Steel, McMinnville. Each load, about a half-full of truckload of scrap, will pass through the radiation detectors at Cascade Steel. The rejected truckload will be sent to the destined facility to search for the source.

Should you have any questions regarding follow up issues, such as a written notification for that radioactive material(s) was found, please contact Matt Cusma, Schnitzer Steel Products (SSP), at (503) 286-6944.

-DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

Approval Number: _____-_____-_____-_____ (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR : CNW 350277, CBRY 3942

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR. 97128

Shippers name: Cascade Steel Date Advised:03/20/01

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph: (503) 434-3324 Fax: (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad.Level: <0.1 mr/hr located on vehicle at_____

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 03/20/01

Inspected by: Vern McClure Ph: (503) 434-3271 **Fax: (503) 472-5739**

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: **03/20/01**

Address: 110 West 10th AVE. Albany, OR. 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:**03/20/01**
Address: 1200 N Burgard RD. Portland, OR. 97210

Contact Person: Terry Glucoft Ph: (503) 286-5771 Fax: (503)286-6948

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:**03/20/01**

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: _____ Date: _____
Signiture

SCHN00242659

CASCADE STEEL ROLLING MILLS, INC.
3200 N. HIGHWAY 99 WEST
MCMINNVILLE, OR 97128

Fax Cover Sheet

DATE:		March 20, 2001 **TIME:**	
TO:	Ed Wright	**PHONE:**	(503) 731-4014, 674
	Terry Lindsey	**FAX:**	(503) 731-4081
FROM:	DANIEL LEE	**PHONE:**	(503) 434-3324
		FAX:	(503) 434-5739
RE:		DOT-E 10656 SHIPMENT APPROVAL	
CC:			

Number of pages including cover sheet: 2

Message: ***Urgent Response Required***

ATTACHED IS FOR YOUR REVIEW AND APPROVAL.

PLS FAX ME THE APPROVED FORM AT **(503) 471-4582 or (503) 434-5739**

The railcar(s) will be unloaded to a truck at Whiteson railroad junction nearby Cascade Steel, McMinnville. Each load, about a half-full of truckload of scrap, will pass through the radiation detectors at Cascade Steel. The rejected truckload will be sent to the destined facility to search for the source.

Should you have any questions regarding follow up issues, such as a written notification for that radioactive material(s) was found, please contact Matt Cusma, Schnitzer Steel Products (SSP), at (503) 286-6944.

-DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

Approval Number: _____-_____-_____-_____ (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR : MP 640643

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR. 97128

Shippers name: Cascade Steel Date Advised:03/20/01

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph: (503) 434-3324 Fax: (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad.Level: <0.1 mr/hr located on vehicle at_____

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 03/20/01

Inspected by: Vern McClure Ph: (503) 434-3271 **Fax: (503) 472-5739**

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: **03/20/01**

Address: 110 West 10th AVE. Albany, OR. 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:**03/20/01**
Address: 1200 N Burgard RD. Portland, OR. 97210

Contact Person: Terry Glucoft Ph: (503) 286-5771 Fax: (503)286-6948

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:**03/20/01**

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: _____ Date: _____
Signiture

SCHN00242661

CASCADE STEEL ROLLING MILLS, INC.
3200 N. HIGHWAY 99 WEST
MCMINNVILLE, OR 97128

Fax Cover Sheet

DATE:		April 11, 2001	**TIME:**
TO:	Ed Wright	**PHONE:**	(503) 731-4014, 674
	Terry Lindsey	**FAX:**	(503) 731-4081
FROM:	DANIEL LEE	**PHONE:**	(503) 434-3324
		FAX:	(503) 434-5739
RE:		DOT-E 10656 SHIPMENT APPROVAL	
CC:			

Number of pages including cover sheet: 2

Message: ***Urgent Response Required***

ATTACHED IS FOR YOUR REVIEW AND APPROVAL.

PLS FAX ME THE APPROVED FORM AT **(503) 471-4582 or (503) 434-5739**

No readings on handheld geiger counter. Radiation level is reported as <0.1 mr/hr

Therefore, location wasn't able to determine.

The railcar(s) will be unloaded to a truck at Whiteson railroad junction nearby Cascade Steel, McMinnville. Each load, about a half-full of truckload of scrap, will pass through the radiation detectors at Cascade Steel. The rejected truckload will be sent to the destined facility to search for the source.

Should you have any questions regarding follow up issues, such as a written notification for that radioactive material(s) was found, please contact Jim Jakubiak, Schnitzer Steel Products (SSP), at (503) 286-6976.

-DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

Approval Number: _____-_____-_____-_____ (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR MP643581, CNW340008

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR, 97128

Shippers name: Cascade Steel *Date Advised:04/11/01*

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph: (503) 434-3324 Fax: (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad.Level: <0.1 mr/hr located on vehicle at unable to deternine

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 04/11/01

Inspected by: Vern McClure Ph: (503) 434-3271 **Fax: (503) 472-5739**

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: **04/11/01**

Address: 110 West 10th AVE. Albany, OR. 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:**04/11/01**
Address: 1200 N Burgard RD. Portland, OR. 97210

Contact Person: Terry Glucoft Ph: (503) 286-5771 Fax: (503)286-6948

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:**04/11/01**

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: _____ Date: _____
Signiture

SCHN00242669

CASCADE STEEL ROLLING MILLS, INC.
3200 N. HIGHWAY 99 WEST
MCMINNVILLE, OR 97128

Fax Cover Sheet

DATE:		August 2, 2000 **TIME:**	
TO:	Ed Wright	**PHONE:**	(503) 731-4014, 674
	HEALTH DIVISION	**FAX:**	(503) 731-4081
FROM:	DANIEL LEE	**PHONE:**	(503) 434-3324
		FAX:	(503) 434-5739
RE:		DOT-E 10656 SHIPMENT APPROVAL	
CC:			

Number of pages including cover sheet: 2

Message

ATTACHED IS FOR YOUR REVIEW AND APPROVAL.

PLS FAX ME THE APPROVED FORM AT **(503) 471-4582 or (503) 434-5739**

The railcar(s) will be unloaded to a truck at Whiteson railroad junction nearby Cascade Steel, McMinnville. Each load, about a half-full of truckload of scrap, will pass through the radiation detectors at Cascade Steel. The rejected truckload will be sent to the destined facility to search for the source.

Should you have any questions regarding follow up issues, such as a written notification for that radioactive material(s) was found, please contact Matt Cusma, Schnitzer Steel Products (SSP), at (503) 286-6944.

DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

Approval Number: _____-_____-_____-_____ (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR : CNW137308

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR. 97128

Shippers name: Cascade Steel Date Advised:08/02/00

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph: (503) 434-3324 Fax: (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad.Level: <0.1 mr/hr located on vehicle at_____

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 08/02/00

Inspected by: Vern McClure Ph: (503) 434-3271 **Fax: (503) 472-5739**

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: **08/02/00**

Address: 110 West 10th AVE. Albany, OR. 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:**08/02/00**
Address: 1200 N Burgard RD. Portland, OR. 97210

Contact Person: Terry Glucoft Ph: (503) 286-5771 Fax: (503)286-6948

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:**08/02/00**

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: _____ Date: _____
Signiture

SCHN00242692

State of Oregon
Health Division
Radiation Protection Services
(503)731-4014
FAX: (503)731-4081

FAX

This fax may contain confidential information. If you receive this FAX in ERROR, would you please take a moment to call us? Thank you.

DATE: 10/10/00

TO: DANIEL LEE

FROM: ED WRIGHT

PAGES (including this cover page): 2

Message: HERE IS YOUR EXEMPTION

SG/~N4/fax.snt 12/22/98 3:28

DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

Approval Number: OR - OR - 00 - 15 (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR : CHTT 286932

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR 97128

Shippers name: Cascade Steel Date Advised:10/09/00

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph: (503) 434-3324 Fax: (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad.Level: <0.1 mr/hr located on vehicle at

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 10/09/00

Inspected by: Vern McClure Ph: (503) 434-3271 **Fax: (503) 472-5739**

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: **10/09/00**

Address: 110 West 10th AVE. Albany, OR 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:**10/09/00**
Address: 111 Highway 99N Eugene OR 97402

Contact Person: David Marco Ph: (541) 686-0515 Fax: (541) 687-0189

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:**10/09/00**

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: Edwin D. Wright Date:
Signiture

CASCADE STEEL ROLLING MILLS, INC.

-DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

Approval Number: _____-_____-_____-_____ (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR : CNW741059, MP641420

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR. 97128

Shippers name: Cascade Steel Date Advised:11/26/00

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph: (503) 434-3324 Fax: (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad.Level: <0.1 mr/hr located on vehicle at_____

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 11/26/00

Inspected by: Vern McClure Ph: (503) 434-3271 **Fax: (503) 472-5739**

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: **11/26/00**

Address: 110 West 10th AVE. Albany, OR. 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:**11/26/00**
Address: 1200 N Burgard RD. Portland, OR. 97210

Contact Person: Terry Glucoft Ph: (503) 286-5771 Fax: (503)286-6948

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:**11/26/00**

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: _____ Date: _____
Signiture

SCHN00242699

CASCADE STEEL ROLLING MILLS, INC.
3200 N. HIGHWAY 99 WEST
MCMINNVILLE, OR 97128

Fax Cover Sheet

DATE:		November 25, 2000	**TIME:**
TO:	Ed Wright	**PHONE:**	(503) 731-4014, 674
	Terry Lindsey	**FAX:**	(503) 731-4081
FROM:	DANIEL LEE	**PHONE:**	(503) 434-3324
		FAX:	(503) 434-5739
RE:		DOT-E 10656 SHIPMENT APPROVAL	
CC:			

Number of pages including cover sheet: 2

Message: ***Urgent Response Required***

ATTACHED IS FOR YOUR REVIEW AND APPROVAL.

PLS FAX ME THE APPROVED FORM AT **(503) 471-4582 or (503) 434-5739**

The railcar(s) will be unloaded to a truck at Whiteson railroad junction nearby Cascade Steel, McMinnville. Each load, about a half-full of truckload of scrap, will pass through the radiation detectors at Cascade Steel. The rejected truckload will be sent to the destined facility to search for the source.

Should you have any questions regarding follow up issues, such as a written notification for that radioactive material(s) was found, please contact Jim Jakubiak, Schnitzer Steel Products (SSP), at (503) 286-6976.

-DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

Approval Number: _____-_____-_____-_____ (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR : CNW741059, MP641420

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR. 97128

Shippers name: Cascade Steel Date Advised:11/25/00

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph: (503) 434-3324 Fax: (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad.Level: <0.1 mr/hr located on vehicle at_____

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 11/25/00

Inspected by: Vern McClure Ph: (503) 434-3271 **Fax: (503) 472-5739**

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: **11/25/00**

Address: 110 West 10th AVE. Albany, OR. 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:**11/25/00**
Address: 1200 N Burgard RD. Portland, OR. 97210

Contact Person: Terry Glucoft Ph: (503) 286-5771 Fax: (503)286-6948

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:**11/25/00**

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: _____ Date: _____
Signiture

SCHN00242701

State of Oregon
Health Division
Radiation Protection Services
(503)731-4014
FAX: (503)731-4081

FAX

This fax **may contain confidential information.** If you receive this FAX in ERROR, would you please take a moment to call us? Thank you.

DATE: 12/20/00

TO: DANIEL LEE

FROM: ED WRIGHT

PAGES (including this cover page): 2

Message: HERE IS YOUR DOT EXEMPTION

SG/-N4/fax.snt*12/22/98-2:28

-DOT-E 10656 Shipment Approval
For scrap metal or related recycling material

00-063

Approval Number: OR-OR-00-20 (Refer to E 10656 item 8 b)

Description and location

Truck, rail car type: Gondola ID.NR : MP 641198

Present location of vehicle(place, city, state, Zip Code):
On-site McMinnville, OR 97128

Shippers name: Cascade Steel Date Advised:12/19/00

Address: 3200 N Hwy. 99w McMinnville, OR 97128

Contact Person: Daniel Lee Ph. (503) 434-3324 Fax. (503) 434-5739

Description of cargo: Scrap Steel

Max. Rad Level: <0.1 mr/hr located on vehicle at_____

Meter Mfg. & Model Nr. Bicron/Surveyor50 Bkg: <0.1 mr/hr Date: 12/19/00

Inspected by: Vern McClure Ph: (503) 434-3271 Fax: (503) 472-5739

Destination and Transportation

Carrier's name: Willamette Pacific Date Advised: 12/19/00

Address: 110 West 10th AVE, Albany, OR 97231

Contact Person: Tom Ph: (800) 677-4875 Fax: (541) 928-3151

Anticipated route and distance: WP Line

Destination firm: Schnitzer Steel Date Advised:12/19/00
Address: 1200 N Burgard RD, Portland, OR 97210

Contact Person: Terry Glucoft Ph: (503) 286-5771 Fax: (503)286-6948

State Radiation Control Officials

Destination state Rad. control program: Oregon RPS Date Advised:12/19/00

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Terry Lindsey Ph:(503)731-4014,674 Fax (503)731-4081

Special Conditions of Approval (if any): Report to RPS if RAM found

Rad. Control pgm. issuing this shipment Approval: Oregon RPS

Address: 800 NE Oregon ST., Suite 260, Portland, OR 97232

Contact Person: Ed Wright Ph:(503)731-4014,674 Fax: (503)731-4081

Authorizing official: Edwin D. Wright Date: 12/20/00
Signature

CASCADE STEEL ROLLING MILLS, INC.
3200 N. HIGHWAY 99 WEST

Memorandum

To: File

From: Jim Jakubiak

Date: April 21, 2004

Re: Radioactive Material Disposal Event:

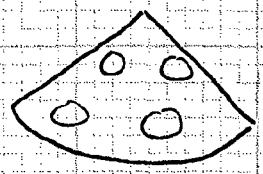
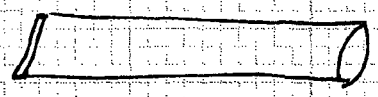
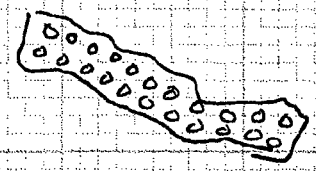
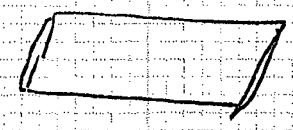
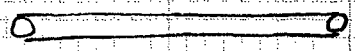
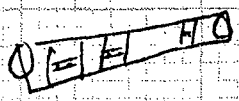
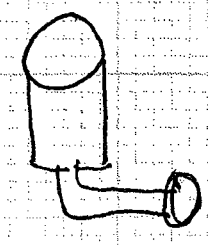
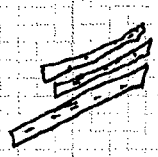
On April 21, 2004, Thomas Gray and Associates picked up and transported for disposal a 98 cubic foot metal box with cover (Supplied by Thomas Gray and Associates) from the Schnitzer Steel Portland facility at 12005 N Burgard. The box was filled with 16 items as described in Attachment 1.

The cost for transport and disposal was $10,595.00. The weight of the box with contents was 1,460 pounds. Weights were determined using Schnitzer's Portland scales. The transport box was loaded on April 20 and 21, 2004. Loose items and materials were placed in clear heavy duty plastic bags prior to placement in the box.

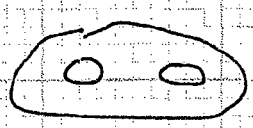
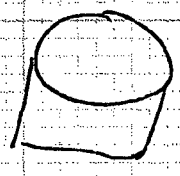
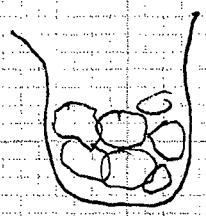
Characterization for profiling the materials was completed by Kirner Consulting, Inc. (Nancy Kirner, CHP) in December 2003 and documented in the Radioactivity Assessment Report dated January 2004.

2180 lbs

Items Packed for Disposal 4/19/07

#	ITEM			
1	Large metal plate		Cut metal plate with holes. Looks like slice of Swiss cheese	(IT)
2	Large metal pipe		Long, sheared at end. Looks like well pipe. Maybe 20-24" diameter. Maybe 4' long	(Eugene)
3	Face from former Furnace Door			(IT)
4	Large metal pipe		Long & fat. sheared at end. Looks like drill pipe. Maybe ~24" diameter. Maybe 2' long	(Eugene)
5	Long metal pipe		Long slender pipe. Looks like well drilling pipe. Maybe 6" diameter	(Eugene)
6	Pipe & well head (2 pieces)	 	~3' long pipe (3" diameter) with couplings	(Eugene)
7	Metal bands - from furnace door (3 bags)		All different sizes, bent. Tearing plastic bags	(IT)

SCHN00242716

8	Guages from dash		Small guages contained in dash (Eugene)
9	Guages in dash		Smashed metal with several guages
10	Large Guage with liquid		(IT)
11	Bag of insulator material from sweat furnace (Double bagged)		Looks like balls of wet cotton (IT)
12	Bag of insulator material from sweat furnace (Double bagged)		Looks like dirt and brick (fire) (IT) (white)
13	Bag of dirt/debris from rail car		rust color with wood, plastic, etc. (IT)
14	Battery Cell (Cell only in plastic bag)		Broken battery cell pinched between 3 empty propane tanks. Tanks removed (Eugene)
15	Misc. samples and waste handling PPE		Box of rad. samples and plastic gloves (IT)

SCHN00242717

16) Bag of soil with metallic debris (double bagged)

SCHNITZER STEEL INDUSTRIES, INC.

CERTIFIED PUBLIC SCALE

☐ COUPLED ☐ UNCOUPLED

DATE _____

CUSTOMER _____ CAR NO. _____

ADDRESS _____ COMMODITY Blue Box

2140 lb 08:38 am 04/31/04 Tm/DH

680 Tare

1460 NeT

DRY	RAIN G	SLEET G	DOORS
WET	SNOW G	SEALS	LEAK G

CARRIER _____

TRACTOR NO. _____

STENCIL/LOAD LIMIT _____ STENCIL/TARE _____ WEIGHER _____

S1011 (Rev. 12/99)

SCHN00242719

SCHNITZER STEEL INDUSTRIES, INC.

CERTIFIED PUBLIC SCALE

☐ COUPLED ☐ UNCOUPLED

DATE _____

CUSTOMER _____ CAR NO. _____

ADDRESS _____ COMMODITY Blue Box

2140 lb 08:38 am 04/21/04 Tm/Dt
680 Tare
1460 NeT

CARRIER _____

TRACTOR NO. _____

DRY	RAIN G	SLEET G	DOORS
WET	SNOW G	SEALS	LEAK G

STENCIL/LOAD LIMIT _____ STENCIL/TARE _____ WEIGHER _____

S1011 (Rev. 12/99)

SCHN00242720

SCHNITZER STEEL INDUSTRIES, INC.

CERTIFIED PUBLIC SCALE

☐ COUPLED ☐ UNCOUPLED

DATE _____

CUSTOMER _____ CAR NO. _____

ADDRESS _____ COMMODITY Blue Box

2140 lb 08:38 am 04/21/04 Tm/Dt

680 Tare

- 1460 NeT

CARRIER _____

TRACTOR NO. _____

DRY	RAIN G	SLEET G	DOORS
WET	SNOW G	SEALS	LEAK G

STENCIL/LOAD LIMIT _____ STENCIL/TARE _____ WEIGHER _____

S1011 (Rev. 12/99)

SCHN00242721

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ____ of ____

PLEASE PRINT, provide as much information as possible.
Refer to corresponding notes on reverse side.

Company Name: Kirner Consulting	Project Name, PWS #, Permit #, Etc.:
Report Address:	Contact Name, Phone, Fax, E-mail: Nancy Kirner / Jim Jakubiak — Sampler Name if other than Contact:
Invoice Address:	Invoice Contact & Phone #: — Purchase Order #: — ELI Quote #:

Report Required For: POTW/WWTP DW
Other _____

Special Report Formats - ELI must be notified prior to sample submittal for the following:
NELAC ☐ A2LA ☐ Level IV ☐
Other _____
EDD/EDT ☐ Format _____

Number of Containers
Sample Type: A W S V B O
Air Water Soils/Solids Vegatation Bioassay Other

ANALYSIS REQUESTED

Notify ELI prior to RUSH sample submittal for additional charges and scheduling

Comments: Returning Samples

Receipt Temp _____ ° C
Cooler ID(s) _____
Custody Seal Y N
Intact Y N
Signature Match Y N

	SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	SEE ATTACHED	Normal Turnaround (TAT)	RUSH Turnaround (TAT)	Lab ID
1	C03121077-1-6			SOLID				LABORATORY USE ONLY
2								
3								
4								
5								
6								
7								
8								
9								
10								

Custody Record MUST be Signed

Relinquished by: Cathy Scott	Date/Time: 1-20-04 1415	Shipped by:	Received by: Date/Time:
Relinquished by:	Date/Time:	Shipped by:	Received by: Date/Time:
Sample Disposal: Return to client: _____	Lab Disposal: _____		LABORATORY USE ONLY Sample Type: _____ # of fractions _____

Visit our web site at *www.energylab.com* for additional information, downloadable fee schedule, forms, & links.

SCHN00242737

Contact us through one of our six branches or through our web site www.energylab.com

BILLINGS, MT 1120 South 27th (59101) PO Box 30916 (59107)	Toll Free Voice Fax	800.735.4489 406.252.6325 406.252.6069	CASPER, WY 2393 Salt Creek Highway (82601) PO Box 3258 (82602)	Toll Free Voice Fax	888.235.0515 307.235.0515 307.234.1639	COLLEGE STATION, TX 415 Graham Road (77845)	Toll Free Voice Fax	888.690.2218 979.690.2217 979.690.2045
GILLETTE, WY 1105 West First Street (82716)	Toll Free Voice Fax	866.686.7175 307.686.7175 307.682.4625	HELENA, MT 3161 E Lyndale Ave (59601) PO Box 5688 (59604)	Toll Free Voice Fax	877.472.0711 406.442.0711 406.442.0712	RAPID CITY, SD 2821 Plant Street (57702)	Toll Free Voice Fax	888.672.1225 605.342.1225 605.342.1397

1. Please complete the Chain of Custody with as much detailed information as possible. This information is required so that the appropriate analytical services, reporting and invoicing can be provided for your project.

2. If services other than standard are required for your analytical project, contact ELI *PRIOR* to sample submittal. Additional charges will be applied for the following services: RUSH TAT, NELAC, A2LA, or Level IV reporting, EDD/EDT, etc.

3. ELI provides quotes for project specific sampling requirements that may include, but are not limited to, non-standard reporting limits, odd matrices, RUSH TAT and specific method requests. It is very important to provide the ELI quote number to assure that you receive the quoted pricing for your project.

4. Basic Aqueous Sampling Instructions: Analytical services include preserved and upreserved sample bottles, preservatives, and shipping containers at no additional cost. In certain cases, additional charges will be made for special sampling containers (i.e. Tedlar or equivalent bags, 3M or equivalent passive monitors). Preservatives are contained in small vials with color-coded caps and labels that correspond to the table below.

Preservative	Cap Color	Label Color
Hydrochloric Acid	Blue	Blue
Nitric Acid	Red	Fluorescent Red
Non-Preserved (raw)	None	White w/Red Print
Phosphoric Acid	White	White w/Black Print
Sodium Hydroxide	Green	Fluorescent Green w/ Black Print
Sulfuric Acid	Yellow	Fluorescent Yellow
Zinc Acetate	Purple	Fluorescent Green w/ Black Print

Fill container with sample and empty contents of preservative vial into container or as instructed. If sample containers are pre-preserved, DO NOT FLUSH or RINSE PRESERVATIVE. Secure lid and invert slowly to mix.

If you are uncertain of the preservative or preparation required for your sampling project, please contact an ELI representative for instructions.

Proper cooling for specific sample matrices is required. ELI provides resealable bags for crushed ice to be packed around the sample(s). Blue ice or equivalent does not maintain the required 4 C temperature. Samples should be securely packed in the shipping containers provided.

5. Sample Disposal: ELI, when applicable, will dispose of all non-hazardous samples. Routinely, hazardous samples will be returned to client. If requested, ELI will dispose of hazardous samples at client's expense.

ENERGY LABORATORIES

Chain of Custody and Analytical Request Record

Page ___ of ___

PLEASE PRINT, provide as much information as possible.
Refer to corresponding notes on reverse side.

Company Name: ABC Corporation
Project Name, PWS #, Permit #, Etc.: Rockport Reclamation Project
Report Address: 1234 Main St. Anywhere, MT 59101
Contact Name, Phone, Fax, E-mail: John Smith 605-444-1234 anyone@email.com
Sampler Name if other than Contact: SAME
Invoice Address: P.O. Box 222 City, ST 11111
Invoice Contact & Phone #: Jane Doe 406-555-1212
Purchase Order #: A96765
ELI Quote #: HO1-172

Report Required For: POTW/WWTP DW Other ___
Special Report Formats - ELI must be notified prior to sample submittal for the following:
NELAC ☐ A2LA ☐ Level IV ☐
Other ___
EDD/EDT ☐ Format ___

ANALYSIS REQUESTED

Notify ELI prior to RUSH sample submittal for additional charges and scheduling
Comments: Spoke to Joe RE: Rush TAT

Receipt Temp ___ °C
Cooler ID(s) ___
Custody Seal Y N
Intact Y N
Signature Match Y N

SAMPLE IDENTIFICATION (Name, Location, Interval, etc.)	Collection Date	Collection Time	MATRIX	Number of Containers Bottle Type & Vol. (Preservative, Filtered, Composite, Grab, Other)	Mercury	VOCs 8260	TOX	SEE ATTACHED	Normal Turnaround (TAT)	RUSH Turnaround (TAT)	Lab ID
1 MW-1	08/01/01	13:10	3-W		X	X	X				
2 Soil From Pad	08/02/01	09:47	1-S		X	X	X				
3											
4											
5											
6											
7											
8											
9											
10											

LABORATORY USE ONLY

Custody Record MUST be Signed

Relinquished by: John Smith	Date/Time: 08/08/01 14:15	Received by: Mary Cook	Date/Time: 08/08/01
Relinquished by:	Date/Time:	Received by:	Date/Time:

Shipped by: Hand Deliver
Received by:

LABORATORY USE ONLY
Sample Disposal: Return to client ___ Lab Disposal ___
Sample Type: ___ # of fractions ___

Visit our web site at www.energylab.com for additional information, downloadable fee schedule, forms, & links.

Example

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All sub-contract data will be clearly notated on your analytical report.

SCHN00242738

Kirner Consulting, Inc.
6108 Nahane West NE
Tacoma, WA 98422-4225
Tel. 253 927 3663
Fax 253 924 1177

CHAIN OF CUSTODY / ANALYSIS REQUEST FORM

Date 12/30/03 Page 1 of 1

C0312077

Project Name: Schnitzer
Project Mgr.: Kirner
Send Results To: Nancy Kirner
6108 Nahane West NE
Tacoma, WA 98422-4225
Phone Number: 253 927-3663
Samplers Signature: Nancy Kirner

Sample ID	Date	Lab #	Sample Matrix	# Containers	Gamma Spec. As Is	Gross Beta	Gross Alpha	Alpha Spec	Sr-90	Ra-226	Ra-228	Total Uranium	Isotopic Uranium	As Is Density				
#1 Pipe	12/29/03		Geo		X									X				
2 Door			Concrete		X									X				
3 Pie			Scale		X									X				
4 Mixed Metal lt Green			Soil + metal		X									X				
5 Red Powder			Soil		X									X				
6 Plastic white thing			Solid		X									X				

Relinquished by:	Received by:	Turnaround	Report Requirements	Invoice Information	Sample Receipt
Signature: Nancy Kirner	Signature:	☐ 24 hr ☐ 48 hr ☐ Std.	☒ I. Routine Report	P.O. Number:	Waybill #:
Printed Name: Nancy Kirner	Printed Name:	☐ Verbal Prelim. ☐ Fax	☐ II. Report Includes QA	Bill To: Kirner Consulting	Condition:
Company: KCI	Company:	Requested Report Date: Before 1/8/04	☐ III. Data Validation		Lab. #:
Date: 12/30/03	Date:		☐ IV. Other:		

Relinquished by:	Received by:	Special Instructions/Comments:
Signature:	Signature:	Please FAX results to Nancy Kirner (253) 924-1177
Printed Name:	Printed Name:	
Company:	Company:	
Date	Date	

Kirner Consulting, Inc.

December 15, 2003

Mr. James Jakubiak
Schnitzer Steel Industries, Inc.
12005 N. Burgard Rd.
P.O. Box 10047
Portland, OR 97296-0047

Dear Mr. Jakubiak:

Kirner Consulting is pleased to provide you with a proposal to perform sampling, analysis, and radiological characterization services in order for Schnitzer to properly dispose of materials at its Portland terminal. Nancy Kirner, Certified Health Physicist, will perform the work. A brief summary of Ms. Kirner's resume is attached.

The work is anticipated to include direct measurement of the materials, sampling for gamma energy analysis, as needed, and estimates of affected volume. The material in question consists of the door of a sweat furnace, pipes from the petroleum industry containing scale, self-luminous dials from aircraft, and dirt from a rail car. Analysis is expected to be performed by Energy Laboratories, Inc., of Casper, Wyoming or other suitable laboratory.

Anticipated costs include:

• Sample collection, evaluation, reporting: 10 hours @ $85/hour	$ 850
• Technical assistant: 7 hours @ $25/hour	175
• Local travel, materials, and equipment usage:	125
• Postage and delivery:	30
• Analytical services: $250/sample, no more than 4 samples:	1000
TOTAL:	$ 2180

If you need additional information, please call my pager at (888) 613-7937. Kirner Consulting's standard terms and conditions are attached for your consideration. Thank you for your interest in Kirner Consulting, Inc.

Sincerely,

Nancy P. Kirner

Nancy P. Kirner, CHP
President

Approved: James J. Jakubiak
Date: 2-4-03

6108 Nahane West NE Tacoma, WA 98422-4225 Phone 253 927-3663 Fax 253 924-1177 Email NancyK55@aol.com

KIRNER CONSULTING, INC.
STANDARD TERMS AND CONDITIONS
HEALTH PHYSICS AND ENVIRONMENTAL MANAGEMENT SERVICES

1. Definitions and Contract Formation.

a) "Client: shall mean the person or entity identified in the Kirner Consulting, Inc. (KCI) proposal for whom Services are to be performed.
b) "KCI" shall mean Kirner Consulting, Inc., a Washington corporation.
c) "Client Order" shall mean the purchase order, request, authorization or other notification, and additions or modifications thereto whereby Client indicates its desire that KCI furnish Services.
d) "KCI Proposal" shall mean these terms and conditions and the letter, proposal, quotation or other notification, including any response to the Client Order, wherein KCI offers to furnish Services.
e) "Services" shall mean the Services of KCI personnel described in the KCI Proposal or Client Order and any other Services as may be added to, or performed in connection with, the Contract.
f) "Contract" shall mean these Terms and Conditions and the KCI Proposal, and shall include, only to the extent not inconsistent with any aspect of the KCI Proposal and these Terms and Conditions, the provisions of the Client Order. Upon execution by Client or commence of Services at Client's request, KCI's Proposal and these Terms and Conditions shall constitute a binding Contract and govern exclusively any Services provided.

2. Compensation.

Unless otherwise specified in the KCI Proposal, KCI shall be compensated as follows: (a) Client shall pay KCI at KCI's customary rates applicable to the personnel, services, and for the time actually engaged in supplying Services. Such rates are subject to adjustment periodically; (b) Client shall also reimburse KCI at cost plus five percent (5%) for its expenses, including travel, living, and incidental expenses allowed to personnel while engaged in performance of Services away from KCI's offices, cost of reproduction, delivery, telegraph and telephone, and other out-of-pocket expenses as may be necessary in performing Services. Subcontractors, consultants, etc. will be billed at cost plus five percent (5%). Use of monitoring equipment, if required, will be invoiced at KCI's customary rates. Should nonexempt personnel be required to work overtime, such personnel will receive overtime compensation, the premium portion of which will also be billed to Client at KCI's cost. KCI's invoices are rendered monthly and are payable upon receipt. Interest at the rate of two percent over prevailing prime rate shall be charged on a monthly basis on any amounts not paid within thirty (30) days of invoice submittal. KCI may terminate its services if any invoice is unpaid for ninety (90) days; (c) KCI, its officers, employees or consultants may be asked or required to appear as a witness or deponent, to furnish information or data through interrogatories, or otherwise be compelled to participate in, administrative or judicial proceedings arising in connection with a Client's project. In that event and notwithstanding expiration or termination of this Contract, Client shall compensate KCI in accordance with (a) and (b) above and reimburse KCI for reasonable legal expenses incurred in connection therewith; provided, however, that the provisions of Article 5, below, shall govern in the event KCI is found to be at fault.

3. Confidentiality, Access to Site, Use of Facilities, and Information.

Client shall provide KCI with access to facilities and information conducive to the efficient and accurate provision of Services, including such maps, drawings, and records as are needed for the proper conduct of the Services, and shall indicate the reliability of all information provided. KCI will maintain in confidence and return to Client any information designated by Client as confidential.

4. INSURANCE.

a) During the course of performance of the Services, KCI will maintain the following insurance coverages:

Type of Coverage	Amount of Coverage
Workers Compensation (excludes President, KCI)	Statutory
Commercial Errors and Omissions	$1,000,000

b) If required, KCI shall deliver to Client, Certificates evidencing that the above coverages are in effect and will not be canceled or materially changed without thirty (30) days written notice;
c) Additional Coverages: If desired, KCI will, on a cost-reimbursable basis, endeavor to procure property damage, construction risk, completed operations, pollution liability, environmental impairment or other desired insurance coverages on a project specific basis.

5. Indemnification.
KCI shall indemnify and save harmless Client from claims, actions and judgments arising out of bodily injury, death or damage to physical property of third parties to the extent caused by the negligence of KCI.

6. Warranty of Services.
KCI warrants that KCI and its employees shall, in performing Services hereunder, exercise the degree of skill, care and diligence consistent with customarily accepted good practices and procedures at the time and location and for the type of Services performed. Should KCI fail to perform to those standards, it shall (a) without cost to Client, reperform and correct any substandard Services; and (b) reimburse Client for Client's direct damages or otherwise correct faulty performance, to the extent resulting from such substandard Services. Services involving such activities as the prediction of ecological or health impacts, population assessments, wetland delineations, air or water modeling, scheduling, and cost estimating are highly sensitive to changes in regulatory and scientific criteria, methodologies and interpretations thereof and require the balance of diverse, often conflicting, Client business, economic, legal and other priorities. Client acknowledges these conditions and accepts the risk that, although KCI may perform to the above standards, the Client's goals or desires may nevertheless not be realized. KCI makes no other warranties, expressed or implied, with respect to its performance under this Contract. KCI's liability hereunder, including any for damage to or loss of Client property, shall in no event extend beyond one year after completion of the Services in question or exceed the amount specified in Article 7 below.

7. KCI Liability.
Except for KCI's duty to indemnify Client as provided in Article 5 above, KCI's total aggregate liability in connection with or arising out of the Contract or Services, including without limitation any under Article 6 above, shall in no event exceed the total amount of compensation paid to KCI hereunder up to a maximum amount of $250,000.

8. Consequential Damages and Other Liabilities.
KCI and its employees shall in no event be liable for any special, indirect or consequential damages, including specifically but without limitation, any based on loss of profits or revenue, loss of or interference, whether or not by third parties, with full or partial use of any equipment, facility or property, including real property, cost of replacement power, energy or product, delay in or failure to perform or to obtain permits or approvals, cost of capital, loss of goodwill, claims of customers, fines or penalties assessed against Client or similar damages. These terms provide allocations of risk and reward consistent with the nature and extent of the Services and to that end include (I) protections against, and limitations on, liability of KCI and (II) specific remedies of Client which shall be its sole and exclusive remedies. The allocations, including without limitation those set forth above and under Articles 6, 7, 8, and 11, shall survive this contract and apply to the fullest extent allowed by law irrespective of whether liability of KCI is claimed, or found, to be based in contract, tort, or otherwise (including negligence, warranty, indemnity, and strict liability) and Client hereby waives all rights of recovery and assumes all risks beyond those explicitly allocated to KCI herein.

9. Delays.
Neither party shall be considered in default in the performance of its obligations hereunder to the extent that the performance of such obligations is prevented or delayed by any cause which is beyond the reasonable control of the affected party, and the time for performance of either party hereunder shall in such event be extended for a period equal to any time lost as a result thereof, and an equitable adjustment shall be made to KCI's compensation.

10. Third Party Interests.
This Contract and the Services and Work Product produced hereunder are solely for the benefit of Client and are not intended to be for the benefit, or to be construed as creating rights in favor, of any third party. If Client is not the ultimate beneficiary of the Services or KCI's work product is used in such a way as to create or induce any reliance by any third party, Client represents and warrants (I) that it shall bind its clients and/or such third parties to limitations on and protections against liability " protective provisions" commensurate with those afforded KCI hereunder and that such protective provisions will, in fact, inure to the benefit of KCI, and/or (ii) that Client has the power to act on behalf of its clients and/or such third parties and does hereby bind such parties to these protective provisions.

11. Changes and Termination.
This Contract shall not be modified except by written agreement signed by both parties. Client shall have the right to make changes within the general scope of Services upon execution of a mutually accepted change order. Client shall also have the right to terminate this Contract prior to completion of the Services, after reasonable notice to KCI in writing, in which event Client shall pay KCI all amounts due KCI hereunder up to the effective date of termination, plus KCI's reasonable costs incurred after such date in terminating the Services. In the event that Client alleges breach on behalf of KCI, Client shall afford KCI in 30 days written notice to cure any alleged deficiency prior to termination. Recognizing that termination prior to completion may involve risks and exposures both as to cost of work and third party claims, Client shall in such event indemnify, protect and defend KCI from claims arising out of any incomplete aspect of the Services.

12. Governing Law, Precedence, and Divisibility.
Unless specified otherwise in Client orders, this Agreement shall be governed by the laws of the State of Washington excluding choice of law rules with direct application of the laws of another jurisdiction. The provisions of the KCI Proposal and these Terms and Conditions shall govern exclusively any Services furnished by KCI and shall prevail over and render void any inconsistent or conflicting provision of the Client Order. If any term condition, provision, or portion of this Contract is declared void or unenforceable, or limited in its application or effect, such event shall not affect any other provision or portion hereof. All other provisions and unaffected portions thereof shall remain fully enforceable and an adjustment in the compensation or other provisions shall be made with the purpose of equitably effecting the intent of the Contract to the maximum extent allowed by law.

13. Entire Agreement.
This Contract contains the entire agreement between the parties as to the Services rendered hereunder. All previous or contemporaneous agreements, representations, warranties, promises, and conditions relating to the subject matter of this Contract are superseded by this Contract.

Consulting Services to Schnitzer Steel Industries, Inc.,
Portland, OR 97290

Contract or Project Name: Radiological
Characterization Servces

by Nancy P. Kirner,
President
Kirner Consulting, Inc.

Nancy P. Kirner

Signature \Date

Client

by (Print Name)

Title

Signature \Date

Kirner Consulting, Inc.

December 15, 2003

Mr. James Jakubiak
Schnitzer Steel Industries, Inc.
12005 N. Burgard Rd.
P.O. Box 10047
Portland, OR 97296-0047

Dear Mr. Jakubiak:

Kirner Consulting is pleased to provide you with a proposal to perform sampling, analysis, and radiological characterization services in order for Schnitzer to properly dispose of materials at its Portland terminal. Nancy Kirner, Certified Health Physicist, will perform the work. A brief summary of Ms. Kirner's resume is attached.

The work is anticipated to include direct measurement of the materials, sampling for gamma energy analysis, as needed, and estimates of affected volume. The material in question consists of the door of a sweat furnace, pipes from the petroleum industry containing scale, self-luminous dials from aircraft, and dirt from a rail car. Analysis is expected to be performed by Energy Laboratories, Inc., of Casper, Wyoming or other suitable laboratory.

Anticipated costs include:

• Sample collection, evaluation, reporting: 10 hours @ $85/hour	$ 850
• Technical assistant: 7 hours @ $25/hour	175
• Local travel, materials, and equipment usage:	125
• Postage and delivery:	30
• Analytical services: $250/sample, no more than 4 samples:	1000
TOTAL:	$ 2180

If you need additional information, please call my pager at (888) 613-7937. Kirner Consulting's standard terms and conditions are attached for your consideration. Thank you for your interest in Kirner Consulting, Inc.

Sincerely,

Nancy P. Kirner

Nancy P. Kirner, CHP
President

6108 Nahane West NE Tacoma, WA 98422-4225 Phone 253 927-3663 Fax 253 924-1177 Email NancyK55@aol.com

(b) (6)

Nancy P. Kirner, CHP 6108 Nahane West NE Tacoma, WA 98422-4225 Telephone (253) 927-3663

Telephone Records – 11/11/03 Radioactive Material Disposal

10:30 am – Talked with Rich Gellego of Thomas Grey & Associates. He said you need the materials characterized before he can pack and ship them. He told me to call Joe Skovron in the PNW and he can help me get it characterized. Joe's number is (206)251-4495. Rich said he just did a pickup in the Northwest last week and his next pickup is scheduled for January 25, 2004. He said he could make a special pick up for us in Portland for $2,500.

10:38 am - I called Joe Skovron and left a message to call.

10:42 am – Joe called me back. I described the materials and he said he works for NW Radiation Services. He said he does not do waste characterization, but does packing and labeling services. He suggested I call Nancy Kirner who he described as a Health Physicist who used to work for the State of Washington Radiation Services Division. Her number is (253) 927-3663.

Joe told his number is (206) 417-1823 and his email is nwrad@attbi.com .

11:20 am – I called Nancy Kirner of Kirner Consulting. I left her my number to call.

Kirner Consulting, Inc.

January 29, 2004

Mr. James Jakubiak
Schnitzer Steel Industries, Inc.
12005 N. Burgard Rd.
P.O. Box 10047
Portland, OR 97296-0047

Dear Mr. Jakubiak:

Enclosed, please find the final report describing the radioactivity content of the items that were surveyed and sampled by Kirner Consulting, Inc. on December 29, 2003.

Also, enclosed is the final invoice for that work. Laboratory costs were less than expected and labor was slightly higher, for a total cost of $2,442.47. This is less than the amended estimate of $2680.

If you should find yourself again collecting slightly radioactive items in the future, please remember Kirner Consulting, Inc. I can usually be reached by calling my pager at (888) 613-7937 or office at (253) 927-3663.

Sincerely,

Nancy P. Kirner

Nancy P. Kirner, CHP
President

Enclosures: Final Report
Invoice #KCI-04-329

6108 Nahane West NE Tacoma, WA 98422-4225 Phone 253 927-3663 Fax 253 924-1177 Email NancyK55@aol.com

USEcology Washington, Inc.
an *American Ecology* company
1777 Terminal Drive
Richland, Washington 99354

October 15, 2007

James L. Jakubiak
Schnitzer Steel Products Co.
P.O. Box 10047
Portland, OR 97296-0047

The Washington Utilities and Transportation Commission (WUTC) regulate disposal rates for low level radioactive waste (LLRW) at the Richland, WA facility. The structure for collection of disposal rates is outlined in a rate design and revenue requirement stipulation developed by US Ecology (the Company) and rate case participants and approved by the WUTC.

The stipulation specifies that rates shall be determined each January on the basis of projections provided by the Company's customers. The Company is required to submit the enclosed written request to each of its customers for estimates of LLRW by volume, number of containers, number of shipments, and dose rates on containers to be disposed at the site during the following year. According to information provided by the Washington Department of Ecology, Schnitzer Steel Products Co. was assigned Site Use Permit No. G2122 for all or a part of 2007, and may continue using the Richland facility for disposal of LLRW during 2008.

Please complete your projections for 2008 on the enclosed form and ***return it to US Ecology Washington, Inc. by November 15, 2007***. If the services of a Broker/Processor are utilized for treatment, volume reduction, or other purpose you may need to contact that vendor for assistance in completing the form. We request that you complete the form ***even if no shipments are planned during 2008.*** Additionally, please notify US Ecology if you ***do not*** plan to renew your current site use permit for 2008.

The information received from site use permit holders will be the basis for determining disposal rates for 2008. US Ecology Washington plans to file proposed rates for 2008 prior to December 1, 2007. Projections returned after November 15, 2007 may not be used in the preparation of this filing.

Recycled Paper

There are five basic components in the schedule of charges.

1. A per cubic foot charge based on the volume of the disposal container.
2. A charge per manifested shipment.
3. A charge per container.
4. A charge for exposure per container based upon the dose rate at the container surface.
5. A site availability charge.

The site availability charge is an annual fee assessed by US Ecology Washington on each holder of a site use permit issued by the Washington Department of Ecology. The charge represents a portion of fixed costs such as licenses, regulatory compliance, and monitoring.

The site availability charge is composed of eleven blocks for permit holders who ship waste to the facility and one block for permit holders who ship no waste to the facility during the year. The assignment of a permit holder to a particular block depends on two factors: (1) the volume of waste shipped to the facility during the calendar year; and (2) the dose rate at container surface, summed over all containers shipped during the year.

If a permit holder uses a broker, they will be placed in the appropriate block for the site availability charge on the basis of volume and dose rate of waste after processing by the broker.

The stipulation provides for a reduction in the site availability charge for not-for-profit post-secondary educational institutions with respect to waste that is generated at the institution' s facility. The charge assessed is one block lower than the rate that would otherwise apply.

Thank you for the opportunity to be of service. Please contact me at (509) 946-4945 or by email at tcaldwell@americanecology.com if additional information is required.

Tray Caldwell
Rate Analyst

US ECOLOGY WASHINGTON, INC.

2008 LOW LEVEL RADIOACTIVE WASTE DISPOSAL PROJECTIONS

Company Schnitzer Steel Products Co.

Address P.O. Box 10047
Portland, OR. 97296-0047

Current Site Use Permit No. N2032, 62122, E2006 This Permit will be renewed: YES X NO ___

1. LLRW to be delivered to the Richland site in 2008: Ø cu. ft.
2. Projected number of containers in 2008: Ø
3. Projected number of shipments in 2008: Ø
4. Exposure: Number of containers with dose rate at container surface:
   - Less than or equal to 200 mR/Hr: Ø
   - Greater than 200 mR/Hr but less than or equal to 1,000 mR/Hr: Ø
   - Greater than 1,000 mR/Hr but less than or equal to 10,000 mR/Hr: Ø
   - Greater than 10,000 mR/Hr but less than or equal to 100,000 mR/Hr: Ø
   - Greater than 100,000 mR/Hr: Ø
5. Projection of extraordinary volumes[1] NA cu. ft.
6. Projected volume from decommissioning a nuclear generating facility[2] NA cu. ft.

CERTIFICATION

I hereby certify that I have reviewed the foregoing waste disposal projection for 2008 and know the contents thereof, and that these projections are made in good faith based on the best information currently available to this company.

Jim Jakubiak
Printed Name

Signature

Environmental Administrator
Title

November 8, 2007
Date

[1] An "extraordinary volume" is waste caused by non-recurring events, outside normal operations of a generator, that are in excess of 20,000 cubic feet or 20% of the total volume disposed at the Richland facility during 2007, whichever is less. RCW 81.108.020(3)

[2] Nuclear decommissioning waste is defined as waste generated from the decommissioning and/or dismantling of a nuclear powered electric generating facility.

(OVER)

INSTRUCTIONS

GENERAL Rates for receipt and disposal of low level radioactive waste (LLRW) at the Richland, WA facility are regulated by the Washington Utilities and Transportation Commission. The tariff (schedule of rates & charges) is based on the projected usage of the disposal facility by site use permit holders. US Ecology Washington is directed by the WUTC to solicit projections from permit holders and to use those projections in formulating disposal rates for 2008. Therefore, it is extremely important that serious time and thought is spent in developing your projections for 2008.

IMPORTANT

THE PROJECTIONS ARE FOR WASTE RECEIVED FOR DISPOSAL AT THE RICHLAND, WA FACILITY. IF THE SERVICES OF A BROKER/PROCESSOR ARE UTILIZED FOR TREATMENT, VOLUME REDUCTION, OR OTHER PURPOSE YOU MAY NEED TO CONTACT THAT VENDOR FOR ASSISTANCE IN COMPLETING THIS FORM.

COMPANY INFORMATION List the name and address of each location that has a site use permit. Companies with multiple locations must submit separate projections for each location.

SITE USE PERMIT NUMBER This is the number assigned by the Washington Department of Ecology (WDOE) to each generator/shipper. Projections are to be made for each permit number/location.

1. VOLUME PROJECTIONS: Enter the cubic feet of LLRW projected to be shipped to the Richland disposal facility.

2. PROJECTED NUMBER OF CONTAINERS: Enter the number or containers projected to be shipped to the Richland facility.

3. PROJECTED NUMBER OF SHIPMENTS: Enter the projected number of shipments to the Richland facility.

4. PROJECTED EXPOSURE: Enter the number of containers to be shipped in each of the five categories.

5. EXTRAORDINARY VOLUME: This classification of waste is defined on the reverse side. Enter the volume, if any, to be shipped during 2008.

6. DECOMMISSIONING WASTE: Enter the volume, if any, of waste from the decommissioning and/or dismantling of a nuclear powered electric generating facility to be shipped during 2008.

CERTIFICATION The purpose of this certification is to assure that an authorized representative of the company has reviewed the projections and agrees with the data entered.

RETURN BY NOVEMBER 15, 2007 TO:

US ECOLOGY WASHINGTON, INC.
1777 Terminal Dr.
Richland, WA 99354-4952
or via FAX to
(509) 946-5495

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: N2032

EXPIRATION DATE: 3/31/2008

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242785

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G2122

EXPIRATION DATE: 2/29/2008

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242786

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: E2006

EXPIRATION DATE: 3/31/2008

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242787

SCHNITZER STEEL PRODUCTS CO.

12005 N Burgard Road, Portland, Oregon 97203
P.O. Box 10047, Portland, Oregon 97296-0047
(503) 224-9900 FAX (503) 286-6948

February 19, 2007

Diane Hallisy
Nuclear Waste Program
P.O. Box 47600
Olympia, Washington 98504-7600

Re: Renewal of Site Use Permits to Dispose of Low-Level Radioactive, N.A.R. M. and Exempt Waste – Disposal Site, Richland, Washington.

Dear Ms. Hallisy:

Attached are signed renewal applications for the disposal of N.A.R.M, Low-Level and Exempt Radioactive Material at the disposal site in Richland, Washington. Each year we renew these applications in the event we inadvertently receive contaminated material from suppliers. Along with the applications is a check in the amount of $424.00.

Should there be questions or comments regarding the completed forms or the accompanying payment, please call me at (503) 286-6976.

Sincerely,
Schnitzer Steel Products Co.

Jim Jakubiak
Environmental Administrator

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

TO: Applicant

FROM: Diane Hallisy
Nuclear Waste Program

SUBJECT: Application for a Site Use Permit to Dispose of Low-Level Radioactive Waste in Washington State

Enclosed is an application form for a Generator Site Use Permit and a permit fee schedule to enable you to calculate the permit fee due in accordance with Chapter 173-326 WAC, Commercial Low-Level Radioactive Waste Disposal -- Site Use Permits, accessible online at http://www.ecy.wa.gov/biblio/wac173326.html .
NOTE: This application is for generators of low-level radioactive wastes within the Northwest Interstate and Rocky Mountain compacts only. If your waste stream contains N.A.R.M. (naturally occurring or accelerator produced radioactive material) or Exempt wastes, you must apply for a separate disposal permit for those portions of the waste.

All items on the application must be answered. Completed applications with full payment should be returned to the address listed on the application. Failure to provide complete information (including the 9-digit Zipcode) on the application form, or lack of accompanying payment, will delay processing your application. Please note that the permit period runs from March 1 through February 28 of the following year. Permit fees for permits issued for less than the twelve month period will not be pro-rated. **USE THIS LETTER AS AN ORIGINAL INVOICE.**

In accordance with Washington State's Dangerous Waste Regulations, accessible online at http://www.ecy.wa.gov/biblio/wac173303.html , neither chemically hazardous nor mixed wastes (both chemically hazardous and radioactive) are acceptable for disposal at the low-level radioactive waste disposal site. These include, but are not limited to, scintillation fluids containing organic solvents (benzene, toluene, etc.).

If you have any questions or require additional information, please contact me at (360) 407-7109, or via e-mail at diha461@ecy.wa.gov.

DKH:dh
Enclosures

STATE OF WASHINGTON
SITE USE PERMIT FEE SCHEDULE
FOR THE
COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE
DISPOSAL SITE,
RICHLAND, WASHINGTON

1. Generators, except nuclear utilities, who have previously held a site use permit for disposal of NARM, Exempt, or low-level radioactive wastes at the Richland site, must determine the amount of waste disposed by their organization in the most recent complete calendar year in which they held a permit. Using this volume figure, the Site Use Permit fee may be determined by referencing the table in paragraph 2.

2. Generators applying for a permit for the first time must estimate the volume of waste which they plan to dispose of during the period of March 1 through February 28 (low-level waste generators) or April 1 through March 31 (NARM and Exempt waste generators). Using this volume figure, the Site Use Permit fee may be determined by referencing the table below.

CATEGORY	FEE
Brokers	$ 1,000
< 50 cubic feet	$ 424
≥ 50 < 500 cubic feet	$ 848
≥ 500 < 1000 cubic feet	$ 2,120
≥ 1000 < 2500 cubic feet	$ 4,240
≥ 2500 cubic feet	$14,840
Nuclear Utilities	$42,400

STATE OF WASHINGTON

2007

APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF LOW-LEVEL RADIOACTIVE WASTE AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE, RICHLAND, WASHINGTON

A. *Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.*

Schnitzer Steel Products Co.

GENERATOR'S NAME:

B. *Address where waste is generated. (YOU MUST INCLUDE THE 9-DIGIT ZIP-CODE OR PERMIT WILL NOT BE PROCESSED. Contact your local Post Office for further information.) Generators who own multiple facilities within the same state may apply for one permit if the same contact person within the generator's organization will be responsible for handling the waste shipments from the multiple facilities (attach a list of in-state facilities to the application). Otherwise, separate permits will be required. Facilities which are owned by the same generator but located in different states will require separate permits.*

ADDRESS WHERE WASTE IS GENERATED	*MAILING ADDRESS (OF CONTACT PERSON)*
	PO Box 10047
CITY STATE ZIP CODE (9 DIGITS)	Portland Oregon 97296-0047 *CITY STATE ZIP CODE (9 DIGITS)*

C. *Name of contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: PERMITS WILL BE MAILED ADDRESSED TO CONTACT PERSON; ENSURE MAILING ADDRESS AND CONTACT NAME AGREE.)*

James L. Jakubiak — Environmental Administrator — (503) 286-6976 Ext —

(First) (M.I.) (Last) TITLE PHONE

D. *A Nuclear Regulatory Commission or agreement state license is required for activities involving the possession, use, ownership, or transfer of most radioactive materials. List all license numbers pertaining to materials to be disposed. If you do not have a license relating to the materials to be disposed, please explain fully in the space provided.*

NRC LICENSE #(S):	*OR AGREEMENT STATE LICENSE #*
—	—
EXPIRATION DATE(S):	*EXPIRATION DATE:*

IF YOU DO NOT HAVE EITHER LICENSE PLEASE EXPLAIN.

We keep active permits in the event we inadvertantly receive contaminated scrap from a supplier. SSP does not generate contaminated scrap metal.

E. *Type of permit you are applying for. If you possess a current permit, or previously had a permit that expired, please state your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. First-time applicants should enter projected volume of waste to be disposed during the period March through February of the coming year.*

X *RENEWAL - SITE USE PERMIT #* 62122 *VOLUME DISPOSED DURING PREVIOUS PERMIT* _____ *(CU FT)* _____ *(YEAR)*

___ *FIRST-TIME APPLICANT - VOLUME PROJECTION (March - February)* _____ *(CU FT)*

F. *Calculate the permit fee due using the enclosed fee schedule and indicate amount of fee enclosed.*

AMOUNT ENCLOSED $ 424.00

G. *Do you use a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.*

YES X *NO* ___ - Thomas Gray & Associates, Inc. - B400

BROKER NAME(S) BROKER'S SITE USE PERMIT #(S)

RCW 70.98.101

SCHN00242792

H. Please indicate the one specific type which best describes your facility:

1. **FUEL CYCLE**
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )

2. **MEDICAL**
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )

3. **GOVERNMENT (NON-MEDICAL)**
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )

4. **INDUSTRIAL**
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER ( )

5. **ACADEMIC (NON-MEDICAL)**
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

I. Types of wastes (e.g. solidified liquids, ion exchange resins, activated components, pipe scale, building rubble, etc.), and all radionuclides (e.g. C-14, H-3) that you will be shipping for disposal in Washington State.

1. Unknown at this time. See previous applications for waste types.
   TYPES OF WASTES

2. Unknown at this time. See previous applications for waste types.
   RADIONUCLIDES

J. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. ***DO NOT USE SCIENTIFIC NOTATION FOR ACTIVITY.***

NA ____ ft^3 ____ mCi

K. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm

NA
CLASS A (%) CLASS B (%) CLASS C (%)

L. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State site use permit number (if renewing) written on the check or money order. Please provide the following information:

508689 — CHECK OR MONEY ORDER

Schnitzer Steel Industries, Inc. — NAME OF COMPANY ISSUING CHECK OR MONEY ORDER

M. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of low-level radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK)	Tom Zelenka
PRINTED NAME OF PERSON SIGNING	Tom Zelenka
TITLE	Vice President
DATE OF SIGNATURE	2/19/07

N. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

Correspondence (other than application forms) may be addressed to dlha461@ecy.wa.gov (e-mail), or:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

The Department of Ecology is an Equal Opportunity employer. If you need this document in an alternate format, please contact the Nuclear Waste Program at (360) 407-7109 (voice) or 1-800-833-6388 (TTY).

PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

TO: N.A.R.M. Site Use Permit Applicant

FROM: Diane Hallisy
Nuclear Waste Program

SUBJECT: Application for a Site Use Permit for Disposal of N.A.R.M. Wastes in Washington State

Enclosed is an application form for a N.A.R.M. (naturally occurring or accelerator produced radioactive material) Site Use Permit, and a permit fee schedule to enable you to calculate the permit fee due, as outlined in Chapter 173-326 WAC, Commercial Low-Level Radioactive Waste Disposal -- Site Use Permits, available for review online at http://www.ecy.wa.gov/biblio/wac173326.html .

All items on the application must be answered. Completed applications with full payment should be returned to the address listed on the application. Failure to provide complete information (including the 9-digit Zipcode) on the application form, or lack of accompanying payment, will delay processing your application. Please note that the permit period runs from April 1 through March 31 of the following year. Permit fees for permits issued for less than the twelve month period will not be pro-rated. **USE THIS LETTER AS AN ORIGINAL INVOICE.**

In accordance with Washington State's Dangerous Waste Regulations, accessible online at http://www.ecy.wa.gov/biblio/wac173303.html , neither chemically hazardous nor mixed wastes (both chemically hazardous and radioactive) are acceptable for disposal at the low-level radioactive waste disposal site. These include, but are not limited to, scintillation fluids containing organic solvents (benzene, toluene, etc.).

If you have any questions or require additional information, please contact me at (360) 407-7109, or via e-mail at diha461@ecy.wa.gov.

DKH:dh
Enclosures

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
2007
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF N.A.R.M. WASTES AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE RICHLAND, WASHINGTON

A. Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.

Schnitzer Steel Products Co.
APPLICANT'S NAME:

B. Address where waste is generated (MUST include the 9-digit Zip. Contact your Post Office to obtain your Zip Code).

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (IF DIFFERENT)
	PO Box 10047
CITY STATE ZIP CODE (9 DIGITS)	Portland Oregon 97296-0047 CITY STATE ZIP CODE (9 DIGITS)

C. Name of the contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: **Permits will be mailed addressed to contact person; ensure mailing address and contact name agree.**)

James L. Jakubiak — Environmental Administrator — (503) 286-6976 Ext
(FIRST) (M.I.) (LAST) — TITLE — PHONE

D. If this is a renewal of a site use permit please enter your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. Indicate if you are a first-time applicant.

X RENEWAL - SITE USE PERMIT # N2032 - VOLUME DISPOSED _____ (CU FT) ____ (YEAR)

____ FIRST-TIME APPLICANT

E. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. **DO NOT USE SCIENTIFIC NOTATION.**

NA _____ft³ _____ mCi

F. Calculate the permit fee due using the enclosed fee schedule and enter amount of fee enclosed. $ Ø

G. Types of N.A.R.M. wastes (e.g. pipe scale, decontamination waste, building rubble, etc.), and all radionuclides that you have approval to dispose of in Washington State.

1. See previous applications for waste types.
TYPES OF WASTES

2. See previous applications for waste types.
RADIONUCLIDES

H. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm).

CLASS A (%) CLASS B (%) CLASS C (%)

I. Do you u se a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.

YES X NO __ - Thomas Gray & Associates, Inc. - B400
BROKER NAME(S) — BROKER'S SITE USE PERMIT #(S)

ECY 070-102

SCHN00242795

J. Do you have a specific radioactive materials license from the NRC or Agreement State? YES _____ NO X If yes, do you package your own radioactive waste? YES _____ NO X

K. If you operate under a general radioactive materials license who packages your waste for you?

Thomas Gray & Associates, Inc. — PACKAGER'S NAME

B4 00 — PACKAGER'S SITE USE PERMIT #

L. Please indicate the one specific type which best describes your facility:

1. FUEL CYCLE
   a. NUCLEAR POWER REACTOR ( )
   b. REACTOR FUEL PRODUCTION ( )
   c. OTHER (NON-REACTOR) ( )
2. MEDICAL
   a. HOSPITAL/CLINIC ( )
   b. RESEARCH ( )
   c. LABORATORY ( )
   d. OTHER ( )
3. GOVERNMENT (NON-MEDICAL)
   a. MILITARY ( )
   b. RESEARCH ( )
   c. REGULATORY ( )
   d. OTHER ( )
4. INDUSTRIAL
   a. RESEARCH & DEVELOPMENT ( )
   b. MANUFACTURING ( )
   c. NUCLEAR PHARMACY ( )
   d. WASTE BROKER ( )
   e. OTHER (X)
5. ACADEMIC (NON-MEDICAL)
   a. RESEARCH ( )
   b. LABORATORY ( )
   c. REACTOR ( )
   d. OTHER ( )

M. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State Site Use Permit number (if applicable) written on the check or money order. Please provide the following information:

#508689 — CHECK OR MONEY ORDER #

Schnitzer Steel Industries, Inc. — NAME OF COMPANY ISSUING CHECK

N. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303 WAC, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK): Tom Zelenka

PRINTED NAME OF PERSON SIGNING: Tom Zelenka

TITLE: Vice President

DATE OF SIGNATURE: 2/19/07

O. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

P. Correspondence (other than application forms) may be addressed to diha461@ecy.wa.gov (e-mail), or:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

The Department of Ecology is an Equal Opportunity employer. If you need this document in an alternate format, please contact the Nuclear Waste Program at (360) 407-7109 (voice) or 1-800-833-6388 (TTY).

PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
SITE USE PERMIT FEE SCHEDULE
FOR THE
COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE
DISPOSAL SITE,
RICHLAND, WASHINGTON

1. Generators, except nuclear utilities, who have previously held a site use permit for disposal of NARM, Exempt, or low-level radioactive wastes at the Richland site, must determine the amount of waste disposed by their organization in the most recent complete calendar year in which they held a permit. Using this volume figure, the Site Use Permit fee may be determined by referencing the table in paragraph 2.

2. Generators applying for a permit for the first time must estimate the volume of waste which they plan to dispose of during the period of March 1 through February 28 (low-level waste generators) or April 1 through March 31 (NARM and Exempt waste generators). Using this volume figure, the Site Use Permit fee may be determined by referencing the table below.

CATEGORY	FEE
Brokers	$ 1,000
< 50 cubic feet	$ 424
≥ 50 < 500 cubic feet	$ 848
≥ 500 < 1000 cubic feet	$ 2,120
≥ 1000 < 2500 cubic feet	$ 4,240
≥ 2500 cubic feet	$14,840
Nuclear Utilities	$42,400

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

TO: Exempt Site Use Permit Applicant

FROM: Diane Hallisy
Nuclear Waste Program

SUBJECT: Application for a Site Use Permit for Disposal of Exempt Wastes in Washington State

Enclosed is an application form for an Exempt Site Use Permit, and a permit fee schedule to enable you to calculate the permit fee due, as outlined in Chapter 173-326 WAC, Commercial Low-Level Radioactive Waste Disposal -- Site Use Permits, available for review online at http://www.ecy.wa.gov/biblio/wac173326.html . All items on the application must be answered. Completed applications with full payment should be returned to the address listed on the application. Failure to provide complete information (including the 9-digit Zipcode) on the application form, or lack of accompanying payment, will delay processing your application. Please note that the permit period runs from April 1 through March 31 of the following year. Permit fees for permits issued for less than the twelve month period will not be pro-rated. **USE THIS LETTER AS AN ORIGINAL INVOICE.**

In accordance with Washington State's Dangerous Waste Regulations, accessible online at http://www.ecy.wa.gov/biblio/wac173303.html , neither chemically hazardous nor mixed wastes (both chemically hazardous and radioactive) are acceptable for disposal at the low-level radioactive waste disposal site. These include, but are not limited to, scintillation fluids containing organic solvents (benzene, toluene, etc.).

If you have any questions or require additional information, please contact me at (360) 407-7109, or via e-mail at diha461@ecy.wa.gov.

DKH:dh
Enclosures

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
SITE USE PERMIT FEE SCHEDULE
FOR THE
COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE
DISPOSAL SITE,
RICHLAND, WASHINGTON

1. Generators, except nuclear utilities, who have previously held a site use permit for disposal of NARM, Exempt, or low-level radioactive wastes at the Richland site, must determine the amount of waste disposed by their organization in the most recent complete calendar year in which they held a permit. Using this volume figure, the Site Use Permit fee may be determined by referencing the table in paragraph 2.

2. Generators applying for a permit for the first time must estimate the volume of waste which they plan to dispose of during the period of March 1 through February 28 (low-level waste generators) or April 1 through March 31 (NARM and Exempt waste generators). Using this volume figure, the Site Use Permit fee may be determined by referencing the table below.

CATEGORY	FEE
Brokers	$ 1,000
< 50 cubic feet	$ 424
≥ 50 < 500 cubic feet	$ 848
≥ 500 < 1000 cubic feet	$ 2,120
≥ 1000 < 2500 cubic feet	$ 4,240
≥ 2500 cubic feet	$14,840
Nuclear Utilities	$42,400

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
2007
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF EXEMPT WASTES AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE AT RICHLAND, WASHINGTON

A. *Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.*

Schnitzer Steel Products Co.
APPLICANT'S NAME:

B. *Address where waste is generated (MUST include the 9-digit Zip. Contact your Post Office to obtain your Zip Code).*

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (IF DIFFERENT)
	PO Box 10047
CITY STATE ZIP CODE (9 DIGITS)	Portland Oregon 97296-0047 (CITY STATE ZIP CODE (9 DIGITS))

C. *Name of the contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: Permits will be mailed addressed to contact person; ensure mailing address and contact name agree.)*

James L. Jakubiak — Environmental Administrator — (503) 286-6576 Ext
(FIRST) (M.I.) (LAST) — TITLE — PHONE

D. *If this is a renewal of a site use permit please enter your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. Indicate if you are a first-time applicant.*

X RENEWAL - SITE USE PERMIT # N2032 62122 - VOLUME DISPOSED DURING PREVIOUS PERMIT _____ (CU FT) ____ (YEAR)

___ FIRST-TIME APPLICANT

E. *Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. DO NOT USE SCIENTIFIC NOTATION.*

NA ____ ft^3 ____ mCi

F. *Calculate the permit fee due using the enclosed fee schedule and enter amount of fee enclosed.*

AMOUNT ENCLOSED $ 424.00

G. *Types of Exempt wastes (e.g. magnesium-thorium aircraft parts, etc.), and all radionuclides that you have approval to dispose of in Washington State.*

1. See previous applications for waste types.
TYPES OF WASTES

2. See previous applications for waste types.
RADIONUCLIDES

H. *Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at* http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm.

NA CLASS A (%) CLASS B (%) CLASS C (%)

I. *Do you use a broker's (this includes waste packagers) services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.*

YES X NO __ - Thomas Gray & Associates Inc. - B4006
BROKER NAME(S) — BROKER'S SITE USE PERMIT #(S)

ECY 070-103

SCHN00242800

J. *Please indicate the one specific type which best describes your facility:*

1. *FUEL CYCLE*
   - a. *NUCLEAR POWER REACTOR* ( )
   - b. *REACTOR FUEL PRODUCTION* ( )
   - c. *OTHER (NON-REACTOR)* ( )
2. *MEDICAL*
   - a. *HOSPITAL/CLINIC* ( )
   - b. *RESEARCH* ( )
   - c. *LABORATORY* ( )
   - d. *OTHER* ( )
3. *GOVERNMENT (NON-MEDICAL)*
   - a. *MILITARY* ( )
   - b. *RESEARCH* ( )
   - c. *REGULATORY* ( )
   - d. *OTHER* ( )
4. *INDUSTRIAL*
   - a. *RESEARCH & DEVELOPMENT* ( )
   - b. *MANUFACTURING* ( )
   - c. *NUCLEAR PHARMACY* ( )
   - d. *WASTE BROKER* ( )
   - e. *OTHER* ⊠
5. *ACADEMIC (NON-MEDICAL)*
   - a. *RESEARCH* ( )
   - b. *LABORATORY* ( )
   - c. *REACTOR* ( )
   - d. *OTHER* ( )

K. *The permit fee is required at time of submitting application (WAC 173-326-040(1)). It is not possible to invoice. Make check payable to the State of Washington, with your Washington State Site Use Permit number (if applicable) written on the check. Please provide the following information:*

CHECK # 508689 *NAME OF COMPANY ISSUING CHECK* Schnitzer Steel Industries, Inc.

L. *I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303 WAC, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.*

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN INK)	Tom Zelenka
PRINTED NAME OF PERSON SIGNING	Tom Zelenka
TITLE	Vice President
DATE OF SIGNATURE	2/19/07

M. *Mail check and application form (with original ink signature) to:*

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

N. *Correspondence (other than application forms) may be addressed to: diha461@ecy.wa.gov (e-mail), or*

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

The Department of Ecology is an Equal Opportunity employer. If you need this document in an alternate format, please contact the Nuclear Waste Program at (360) 407-7109 (voice) or 1-800-833-6388 (TTY).

PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

SCHNITZER STEEL INDUSTRIES, INC
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

STUB 1 OF 1

Check No. 508689

INVOICE NUMBER	INVOICE DATE	DESCRIPTION	AMOUNT	DISCOUNT	AMOUNT
42400021907A	19-FEB-07		424.00	0.00	424.00
		TOTALS	**424.00**	**0.00**	**424.00**

PLEASE DETACH BEFORE DEPOSITING

THIS CHECK HAS A GREEN AND BLUE BACKGROUND AS WELL AS AN ARTIFICAL WATERMARK ON THE BACK. THE BORDER IS MICROPRINTED AS A SAFETY PRECAUTION.

Bank of America, N.A.
Atlanta, Georgia
Member F.D.I.C
64-1278/611

Check No.
508689

DATE
21-FEB-07

SCHNITZER STEEL INDUSTRIES, INC
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

PAY ONLY FOUR TWO FOUR 424 00 CTS CTS

PAY Four Hundred Twenty-Four Dollars And 00 Cents

$ *******424.00

TO THE ORDER OF
WASHINGTON DEPT OF ECOLOGY
ATTN: CASHIERING
PO BOX 5128
LACEY, WA 98509-5128

Authorized Signature

SCHN00242802

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: E2006

EXPIRATION DATE: 3/31/2007

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242825

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G2122

EXPIRATION DATE: 2/28/2007

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242826

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: N2032

EXPIRATION DATE: 3/31/2007

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242827

SCHNITZER STEEL PRODUCTS CO.

12005 N Burgard Road, Portland, Oregon 97203
P.O. Box 10047, Portland, Oregon 97296-0047
(503) 224-9900 FAX (503) 286-6948

February 21, 2006

Diane Hallisy
Nuclear Waste Program
P.O. Box 47600
Olympia, Washington 98504-7600

Re: Renewal of Site Use Permits to Dispose of Low-Level Radioactive, N.A.R. M. and Exempt Waste – Disposal Site, Richland, Washington.

Dear Ms. Hallisy:

Attached are signed renewal applications for the disposal of N.A.R.M and Low-Level Radioactive Material at the disposal site in Richland, Washington. We have also included an application for Exempt Wastes. Each year we renew these applications in the event we inadvertently receive contaminated material from suppliers. Along with the applications is a check in the amount of $424.00.

I sincerely appreciate you assistance in completing these renewal applications. Should there be questions or comments regarding the completed forms or the accompanying payment, please call me at (503) 286-6976.

Sincerely,
Schnitzer Steel Products Co.

Jim Jakubiak
Environmental Administrator

SCHNITZER STEEL INDUSTRIES, INC.
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

STUB 1 OF 1

Check No. 225533

INVOICE NUMBER	INVOICE DATE	DESCRIPTION	AMOUNT	DISCOUNT	AMOUNT
42400021706	2/17/2006		424.00		424.00
		TOTALS	424.00	0.00	424.00

PLEASE DETACH BEFORE DEPOSITING

THIS CHECK HAS A GREEN AND BLUE BACKGROUND AS WELL AS AN ARTIFICAL WATERMARK ON THE BACK. THE BORDER IS MICROPRINTED AS A SAFETY PRECAUTION.

Bank of America, N.A.
Atlanta, Dekalb County, Georgia
Member F.D.I.C.
64-1278/611

Check No.
225533

SCHNITZER STEEL INDUSTRIES, INC.
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

PAY ONLY FOUR TWO FOUR 424 00 CTS CTS

DATE
2/22/2006

PAY FOUR HUNDRED TWENTY FOUR AND 00/100 ********** $ ********424.00

TO THE ORDER OF
WASHINGTON DEPT. OF ECOLOGY
ATTN: CASHIERING
PO BOX 5128
LACEY WA 98509-5128

AUTHORIZED SIGNATURE

SCHN00242830

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

TO: Applicant

FROM: Diane Hallisy
Nuclear Waste Program

SUBJECT: Application for a Site Use Permit to Dispose of Low-Level Radioactive Waste in Washington State

Enclosed is an application form for a Generator Site Use Permit and a permit fee schedule to enable you to calculate the permit fee due in accordance with Chapter 173-326 WAC, Commercial Low-Level Radioactive Waste Disposal -- Site Use Permits, accessible online at http://www.ecy.wa.gov/biblio/wac173326.html .
NOTE: This application is for generators of low-level radioactive wastes within the Northwest Interstate and Rocky Mountain compacts only. If your waste stream contains N.A.R.M. (naturally occurring or accelerator produced radioactive material) or Exempt wastes, you must apply for a separate disposal permit for those portions of the waste.

All items on the application must be answered. Completed applications with full payment should be returned to the address listed on the application. Failure to provide complete information (including the 9-digit Zipcode) on the application form, or lack of accompanying payment, will delay processing your application. Please note that the permit period runs from March 1 through February 28 of the following year. Permit fees for permits issued for less than the twelve month period will not be pro-rated. **USE THIS LETTER AS AN ORIGINAL INVOICE.**

In accordance with Washington State's Dangerous Waste Regulations, accessible online at http://www.ecy.wa.gov/biblio/wac173303.html , neither chemically hazardous nor mixed wastes (both chemically hazardous and radioactive) are acceptable for disposal at the low-level radioactive waste disposal site. These include, but are not limited to, scintillation fluids containing organic solvents (benzene, toluene, etc.).

If you have any questions or require additional information, please contact me at (360) 407-7109, or via e-mail at diha461@ecy.wa.gov.

DKH:dh
Enclosures

STATE OF WASHINGTON

2006

APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF LOW-LEVEL RADIOACTIVE WASTE AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE, RICHLAND, WASHINGTON

A. *Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.*

Schnitzer Steel Products Co.

GENERATOR'S NAME:

B. *Address where waste is generated. (YOU MUST INCLUDE THE 9-DIGIT ZIP-CODE OR PERMIT WILL NOT BE PROCESSED. Contact your local Post Office for further information.) Generators who own multiple facilities within the same state may apply for one permit if the same contact person within the generator's organization will be responsible for handling the waste shipments from the multiple facilities (attach a list of in-state facilities to the application). Otherwise, separate permits will be required. Facilities which are owned by the same generator but located in different states will require separate permits.*

ADDRESS WHERE WASTE IS GENERATED	*MAILING ADDRESS (OF CONTACT PERSON)*
	PO Box 10047
CITY *STATE* *ZIP CODE (9 DIGITS)*	Portland Oregon 97296-0047 *CITY* *STATE* *ZIP CODE (9 DIGITS)*

C. *Name of contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: PERMITS WILL BE MAILED ADDRESSED TO CONTACT PERSON; ENSURE MAILING ADDRESS AND CONTACT NAME AGREE.)*

James L. Jakubiak — Environmental Administrator — 503) 286-6976 Ext

(First) *(M.I.)* *(Last)* *TITLE* *PHONE*

D. *A Nuclear Regulatory Commission or agreement state license is required for activities involving the possession, use, ownership, or transfer of most radioactive materials. List all license numbers pertaining to materials to be disposed. If you do not have a license relating to the materials to be disposed, please explain fully in the space provided.*

NRC LICENSE #(S): *OR* *AGREEMENT STATE LICENSE #*

EXPIRATION DATE(S): *EXPIRATION DATE:*

IF YOU DO NOT HAVE EITHER LICENSE PLEASE EXPLAIN.

We keep active permits in the event we inadvertently receive contaminated scrap from a supplier. SSP does not generate contaminated scrap metal.

E. *Type of permit you are applying for. If you possess a current permit, or previously had a permit that expired, please state your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. First-time applicants should enter projected volume of waste to be disposed during the period March through February of the coming year.*

X *RENEWAL - SITE USE PERMIT #* G2122 *- VOLUME DISPOSED DURING PREVIOUS PERMIT* _____ *(CU FT)* _____ *(YEAR)*

___ *FIRST-TIME APPLICANT - VOLUME PROJECTION (March - February)* _____ *(CU FT)*

F. *Calculate the permit fee due using the enclosed fee schedule and indicate amount of fee enclosed.*

AMOUNT ENCLOSED $ 424.00

G. *Do you use a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.*

YES X *NO* __ - Thomas Gray & Assoc., Inc. - B400

BROKER NAME(S) *BROKER'S SITE USE PERMIT #(S)*

ECY 070-101

SCHN00242832

H. Please indicate the one specific type which best describes your facility:

1. **FUEL CYCLE**
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )
2. **MEDICAL**
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )
3. **GOVERNMENT (NON-MEDICAL)**
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )
4. **INDUSTRIAL**
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER ( )
5. **ACADEMIC (NON-MEDICAL)**
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

I. Types of wastes (e.g. solidified liquids, ion exchange resins, activated components, pipe scale, building rubble, etc.), and all radionuclides (e.g. C-14, H-3) that you will be shipping for disposal in Washington State.

1. Unknown at this time. See previous applications for waste types.
TYPES OF WASTES

2. Unknown at this time. See previous applications for waste types.
RADIONUCLIDES

J. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. ***DO NOT USE SCIENTIFIC NOTATION FOR ACTIVITY.***

HA _____ ft^3 _____ mCi

K. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm

HA

CLASS A (%) **CLASS B (%)** **CLASS C (%)**

L. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State site use permit number (if renewing) written on the check or money order. Please provide the following information:

225533 — **CHECK OR MONEY ORDER #**

Schnitzer Steel Products Co. — **NAME OF COMPANY ISSUING CHECK OR MONEY ORDER**

M. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of low-level radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK)	Thomas F Zelenka
PRINTED NAME OF PERSON SIGNING	Thomas F. Zelenka
TITLE	Vice President
DATE OF SIGNATURE	2/23/06

N. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

Correspondence (other than application forms) may be addressed to diha461@ecy.wa.gov (e-mail), or:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

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PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY

STATE OF WASHINGTON
SITE USE PERMIT FEE SCHEDULE
FOR THE
COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE
DISPOSAL SITE,
RICHLAND, WASHINGTON

1. Generators, except nuclear utilities, who have previously held a site use permit for disposal of NARM, Exempt, or low-level radioactive wastes at the Richland site, must determine the amount of waste disposed by their organization in the most recent complete calendar year in which they held a permit. Using this volume figure, the Site Use Permit fee may be determined by referencing the table in paragraph 2.

2. Generators applying for a permit for the first time must estimate the volume of waste which they plan to dispose of during the period of March 1 through February 28 (low-level waste generators) or April 1 through March 31 (NARM and Exempt waste generators). Using this volume figure, the Site Use Permit fee may be determined by referencing the table below.

CATEGORY	FEE
Brokers	$ 1,000
< 50 cubic feet	$ 424
≥ 50 < 500 cubic feet	$ 848
≥ 500 < 1000 cubic feet	$ 2,120
≥ 1000 < 2500 cubic feet	$ 4,240
≥ 2500 cubic feet	$14,840
Nuclear Utilities	$42,400

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

TO: N.A.R.M. Site Use Permit Applicant

FROM: Diane Hallisy
Nuclear Waste Program

SUBJECT: Application for a Site Use Permit for Disposal of N.A.R.M. Wastes in Washington State

Enclosed is an application form for a N.A.R.M. (naturally occurring or accelerator produced radioactive material) Site Use Permit, and a permit fee schedule to enable you to calculate the permit fee due, as outlined in Chapter 173-326 WAC, Commercial Low-Level Radioactive Waste Disposal -- Site Use Permits, available for review online at http://www.ecy.wa.gov/biblio/wac173326.html.

All items on the application must be answered. Completed applications with full payment should be returned to the address listed on the application. Failure to provide complete information (including the 9-digit Zipcode) on the application form, or lack of accompanying payment, will delay processing your application. Please note that the permit period runs from April 1 through March 31 of the following year. Permit fees for permits issued for less than the twelve month period will not be pro-rated. **USE THIS LETTER AS AN ORIGINAL INVOICE.**

In accordance with Washington State's Dangerous Waste Regulations, accessible online at http://www.ecy.wa.gov/biblio/wac173303.html, neither chemically hazardous nor mixed wastes (both chemically hazardous and radioactive) are acceptable for disposal at the low-level radioactive waste disposal site. These include, but are not limited to, scintillation fluids containing organic solvents (benzene, toluene, etc.).

If you have any questions or require additional information, please contact me at (360) 407-7109, or via e-mail at diha461@ecy.wa.gov.

DKH:dh
Enclosures

STATE OF WASHINGTON
200 6
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF N.A.R.M. WASTES AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE RICHLAND, WASHINGTON

WASHINGTON STATE DEPARTMENT OF ECOLOGY

A. Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.

Schnitzer Steel Products Co.
APPLICANT'S NAME:

B. Address where waste is generated (MUST include the 9-digit Zip. Contact your Post Office to obtain your Zip Code).

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (IF DIFFERENT)
	PO Box 10047
CITY STATE ZIP CODE (9 DIGITS)	Portland, Oregon 97296-0047 CITY STATE ZIP CODE (9 DIGITS)

C. Name of the contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. **(NOTE: Permits will be mailed addressed to contact person; ensure mailing address and contact name agree.)**

James L. Jakobiak Environmental Administrator (503) 286-6976 Ext —
(FIRST) (M.I.) (LAST) TITLE PHONE

D. If this is a renewal of a site use permit please enter your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. Indicate if you are a first-time applicant.

X **RENEWAL - SITE USE PERMIT #** N2032 **- VOLUME DISPOSED** _____ **(CU FT)** ___ **(YEAR)**

___ **FIRST-TIME APPLICANT**

E. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. **DO NOT USE SCIENTIFIC NOTATION.**

NA ____ ft^3 ____ mCi

F. Calculate the permit fee due using the enclosed fee schedule and enter amount of fee enclosed. $ Ø

G. Types of N.A.R.M. wastes (e.g. pipe scale, decontamination waste, building rubble, etc.), and all radionuclides that you have approval to dispose of in Washington State.

1. See previous applications for waste types.
TYPES OF WASTES

2. See previous applications for waste types.
RADIONUCLIDES

H. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm).

CLASS A (%) **CLASS B (%)** **CLASS C (%)**

I. Do you u se a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.

YES X **NO** __ - Thomas Gray & Associates Inc. B400
BROKER NAME(S) **BROKER'S SITE USE PERMIT #(S)**

ECY 070-102

SCHN00242836

J. Do you have a specific radioactive materials license from the NRC or Agreement State? YES _____ NO X If yes, do you package your own radioactive waste? YES _____ NO X

K. If you operate under a general radioactive materials license who packages your waste for you?

Thomas Gray & Associates, Inc. — PACKAGER'S NAME

B400 — PACKAGER'S SITE USE PERMIT #

L. Please indicate the one specific type which best describes your facility:

1. **FUEL CYCLE**
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )
2. **MEDICAL**
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )
3. **GOVERNMENT (NON-MEDICAL)**
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )
4. **INDUSTRIAL**
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER (X)
5. **ACADEMIC (NON-MEDICAL)**
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

M. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State Site Use Permit number (if applicable) written on the check or money order. Please provide the following information:

_____ — CHECK OR MONEY ORDER #

Schnitzer Steel Products Co. — NAME OF COMPANY ISSUING CHECK

N. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303 WAC, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK)	Thomas F Zelenka
PRINTED NAME OF PERSON SIGNING	Thomas F. Zelenka
TITLE	Vice President
DATE OF SIGNATURE	2/23/06

O. Mail check or money order and application form (with **original ink signature**) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

P. Correspondence (other than application forms) may be addressed to diha461@ecy.wa.gov (e-mail), or:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

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PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

TO: Exempt Site Use Permit Applicant

FROM: Diane Hallisy
Nuclear Waste Program

SUBJECT: Application for a Site Use Permit for Disposal of Exempt Wastes in Washington State

Enclosed is an application form for an Exempt Site Use Permit, and a permit fee schedule to enable you to calculate the permit fee due, as outlined in Chapter 173-326 WAC, Commercial Low-Level Radioactive Waste Disposal -- Site Use Permits, available for review online at http://www.ecy.wa.gov/biblio/wac173326.html . All items on the application must be answered. Completed applications with full payment should be returned to the address listed on the application. Failure to provide complete information (including the 9-digit Zipcode) on the application form, or lack of accompanying payment, will delay processing your application. Please note that the permit period runs from April 1 through March 31 of the following year. Permit fees for permits issued for less than the twelve month period will not be pro-rated. **USE THIS LETTER AS AN ORIGINAL INVOICE.**

In accordance with Washington State's Dangerous Waste Regulations, accessible online at http://www.ecy.wa.gov/biblio/wac173303.html , neither chemically hazardous nor mixed wastes (both chemically hazardous and radioactive) are acceptable for disposal at the low-level radioactive waste disposal site. These include, but are not limited to, scintillation fluids containing organic solvents (benzene, toluene, etc.).

If you have any questions or require additional information, please contact me at (360) 407-7109, or via e-mail at diha461@ecy.wa.gov.

DKH:dh
Enclosures

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
2006
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF EXEMPT WASTES AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE AT RICHLAND, WASHINGTON

A. *Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.*

Schnitzer Steel Products Co.
APPLICANT'S NAME:

B. *Address where waste is generated (MUST include the 9-digit Zip. Contact your Post Office to obtain your Zip Code).*

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (IF DIFFERENT)
	PO Box 10047
	Portland Oregon 97296-0047
CITY STATE ZIP CODE (9 DIGITS)	CITY STATE ZIP CODE (9 DIGITS)

C. *Name of the contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: Permits will be mailed addressed to contact person; ensure mailing address and contact name agree.)*

James L. Jakubiak Environmental (503)286-6976 Ext
(FIRST) (M.I.) (LAST) TITLE PHONE

D. *If this is a renewal of a site use permit please enter your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. Indicate if you are a first-time applicant.*

X RENEWAL - SITE USE PERMIT # 62122 M2032 VOLUME DISPOSED DURING PREVIOUS PERMIT ____ (CU FT) ___ (YEAR)

___ FIRST-TIME APPLICANT

E. *Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. DO NOT USE SCIENTIFIC NOTATION.*

NA ____ ft^3 ____ mCi

F. *Calculate the permit fee due using the enclosed fee schedule and enter amount of fee enclosed.*

AMOUNT ENCLOSED $ 424.00

G. *Types of Exempt wastes (e.g. magnesium-thorium aircraft parts, etc.), and all radionuclides that you have approval to dispose of in Washington State.*

1. See previous applications for waste types.
TYPES OF WASTES

2. See previous applications for waste types.
RADIONUCLIDES

H. *Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at* http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm .

CLASS A (%) CLASS B (%) CLASS C (%)

I. *Do you use a broker's (this includes waste packagers) services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.*

YES X NO ___ - Thomas Gray & Associates, Inc. - B400
BROKER NAME(S) BROKER'S SITE USE PERMIT #(S)

ECY 070-103

SCHN00242839

J. *Please indicate the one specific type which best describes your facility:*

1. ***FUEL CYCLE***
   - a. *NUCLEAR POWER REACTOR* ( )
   - b. *REACTOR FUEL PRODUCTION* ( )
   - c. *OTHER (NON-REACTOR)* ( )
2. ***MEDICAL***
   - a. *HOSPITAL/CLINIC* ( )
   - b. *RESEARCH* ( )
   - c. *LABORATORY* ( )
   - d. *OTHER* ( )
3. ***GOVERNMENT (NON-MEDICAL)***
   - a. *MILITARY* ( )
   - b. *RESEARCH* ( )
   - c. *REGULATORY* ( )
   - d. *OTHER* ( )
4. ***INDUSTRIAL***
   - a. *RESEARCH & DEVELOPMENT* ( )
   - b. *MANUFACTURING* ( )
   - c. *NUCLEAR PHARMACY* ( )
   - d. *WASTE BROKER* ( )
   - e. *OTHER* (✓)
5. ***ACADEMIC (NON-MEDICAL)***
   - a. *RESEARCH* ( )
   - b. *LABORATORY* ( )
   - c. *REACTOR* ( )
   - d. *OTHER* ( )

K. *The permit fee is required at time of submitting application (WAC 173-326-040(1)). It is not possible to invoice. Make check payable to the State of Washington, with your Washington State Site Use Permit number (if applicable) written on the check. Please provide the following information:*

CHECK # 22533 ***NAME OF COMPANY ISSUING CHECK*** Schnitzer Steel Products Co.

L. *I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303 WAC, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.*

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN INK)	Thomas F Zelenka
PRINTED NAME OF PERSON SIGNING	Thomas F. Zelenka
TITLE	Vice President
DATE OF SIGNATURE	2/23/06

M. *Mail check and application form (with original ink signature) to:*

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

N. *Correspondence (other than application forms) may be addressed to: diha461@ecy.wa.gov (e-mail), or*

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

The Department of Ecology is an Equal Opportunity employer. If you need this document in an alternate format, please contact the Nuclear Waste Program at (360) 407-7109 (voice) or 1-800-833-6388 (TTY).

PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
SITE USE PERMIT FEE SCHEDULE
FOR THE
COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE
DISPOSAL SITE,
RICHLAND, WASHINGTON

1. Generators, except nuclear utilities, who have previously held a site use permit for disposal of NARM, Exempt, or low-level radioactive wastes at the Richland site, must determine the amount of waste disposed by their organization in the most recent complete calendar year in which they held a permit. Using this volume figure, the Site Use Permit fee may be determined by referencing the table in paragraph 2.

2. Generators applying for a permit for the first time must estimate the volume of waste which they plan to dispose of during the period of March 1 through February 28 (low-level waste generators) or April 1 through March 31 (NARM and Exempt waste generators). Using this volume figure, the Site Use Permit fee may be determined by referencing the table below.

CATEGORY	FEE
Brokers	$ 1,000
< 50 cubic feet	$ 424
≥ 50 < 500 cubic feet	$ 848
≥ 500 < 1000 cubic feet	$ 2,120
≥ 1000 < 2500 cubic feet	$ 4,240
≥ 2500 cubic feet	$14,840
Nuclear Utilities	$42,400

US Ecology Washington, Inc.
an *American Ecology* company
1777 Terminal Drive
Richland, Washington 99354

October 11, 2005

James L. Jakubiak
Schnitzer Steel Products Co.
P.O. Box 10047
Portland, OR 97296-0047

The Washington Utilities and Transportation Commission (WUTC) regulate disposal rates for low level radioactive waste (LLRW) at the Richland, WA facility. The structure for collection of disposal rates is outlined in a rate design and revenue requirement stipulation developed by US Ecology (the Company) and rate case participants and approved by the WUTC.

The stipulation specifies that rates shall be determined each January on the basis of projections provided by the Company's customers. The Company is required to submit the enclosed written request to each of its customers for estimates of LLRW by volume, number of containers, number of shipments, and dose rates on containers to be disposed at the site during the following year. According to information provided by the Washington Department of Ecology, Schnitzer Steel Products Co. was assigned Site Use Permit No. G2122 for all or a part of 2005, and may continue using the Richland facility for disposal of LLRW during 2006.

Please complete your projections for 2006 on the enclosed form and ***return it to US Ecology Washington, Inc. by November 14, 2005***. If the services of a Broker/Processor are utilized for treatment, volume reduction, or other purpose you may need to contact that vendor for assistance in completing the form. We request that you complete the form ***even if no shipments are planned during 2006.*** Additionally, please notify US Ecology if you ***do not*** plan to renew your current site use permit for 2006.

The information received from site use permit holders will be the basis for determining disposal rates for 2006. US Ecology Washington plans to file proposed rates for 2006 prior to December 1, 2005. Projections returned after November 14, 2005 may not be used in the preparation of this filing.

Recycled Paper

There are five basic components in the schedule of charges.

1. A per cubic foot charge based on the volume of the disposal container.
2. A charge per manifested shipment.
3. A charge per container.
4. A charge for exposure per container based upon the dose rate at the container surface.
5. A site availability charge.

The site availability charge is an annual fee assessed by US Ecology Washington on each holder of a site use permit issued by the Washington Department of Ecology. The charge represents a portion of fixed costs such as licenses, regulatory compliance, and monitoring.

The site availability charge is composed of eleven blocks for permit holders who ship waste to the facility and one block for permit holders who ship no waste to the facility during the year. The assignment of a permit holder to a particular block depends on two factors: (1) the volume of waste shipped to the facility during the calendar year; and (2) the dose rate at container surface, summed over all containers shipped during the year.

If a permit holder uses a broker, they will be placed in the appropriate block for the site availability charge on the basis of volume and dose rate of waste after processing by the broker.

The stipulation provides for a reduction in the site availability charge for not-for-profit post-secondary educational institutions with respect to waste that is generated at the institution' s facility. The charge assessed is one block lower than the rate that would otherwise apply.

Thank you for the opportunity to be of service. Please contact this office if additional information is needed.

Sincerely,

Tray Caldwell

Tray Caldwell
Rate Analyst

US ECOLOGY WASHINGTON, INC.

2006 LOW LEVEL RADIOACTIVE WASTE DISPOSAL PROJECTIONS

Company Schnitzer Steel Products Co.

Address P.O. Box 10047. Portland, OR. 97296-0047

Current Site Use Permit No. N2032 & C2122 This Permit will be renewed: YES X NO ___

1. LLRW to be delivered to the Richland site in 2006: Ø cu. ft.
2. Projected number of containers in 2006: Ø
3. Projected number of shipments in 2006: Ø
4. Exposure: Number of containers with dose rate at container surface:
   - Less than or equal to 200 mR/Hr: Ø
   - Greater than 200 mR/Hr but less than or equal to 1,000 mR/Hr: Ø
   - Greater than 1,000 mR/Hr but less than or equal to 10,000 mR/Hr: Ø
   - Greater than 10,000 mR/Hr but less than or equal to 100,000 mR/Hr: Ø
   - Greater than 100,000 mR/Hr: Ø
5. Projection of extraordinary volumes[1] NA cu. ft.
6. Projected volume from decommissioning a nuclear generating facility[2] NA cu. ft.

CERTIFICATION

I hereby certify that I have reviewed the foregoing waste disposal projection for 2006 and know the contents thereof, and that these projections are made in good faith based on the best information currently available to this company.

Jim Jakubcak
Printed Name

Signature

Environmental Administrator
Title

November 23, 2005
Date

[1] An "extraordinary volume" is waste caused by non-recurring events, outside normal operations of a generator, that are in excess of 20,000 cubic feet or 20% of the total volume disposed at the Richland facility during 2005, whichever is less. RCW 81.108.020(3)

[2] Nuclear decommissioning waste is defined as waste generated from the decommissioning and/or dismantling of a nuclear powered electric generating facility.

(OVER)

USEcology Washington, Inc.
an *American Ecology* company
1777 Terminal Drive
Richland, Washington 99354

October 11, 2006

James L. Jakubiak
Schnitzer Steel Products Co.
P.O. Box 10047
Portland, OR 97296-0047

The Washington Utilities and Transportation Commission (WUTC) regulate disposal rates for low level radioactive waste (LLRW) at the Richland, WA facility. The structure for collection of disposal rates is outlined in a rate design and revenue requirement stipulation developed by US Ecology (the Company) and rate case participants and approved by the WUTC.

The stipulation specifies that rates shall be determined each January on the basis of projections provided by the Company's customers. The Company is required to submit the enclosed written request to each of its customers for estimates of LLRW by volume, number of containers, number of shipments, and dose rates on containers to be disposed at the site during the following year. According to information provided by the Washington Department of Ecology, Schnitzer Steel Products Co. was assigned Site Use Permit No. G2122 for all or a part of 2006, and may continue using the Richland facility for disposal of LLRW during 2007.

Please complete your projections for 2007 on the enclosed form and ***return it to US Ecology Washington, Inc. by November 15, 2006***. If the services of a Broker/Processor are utilized for treatment, volume reduction, or other purpose you may need to contact that vendor for assistance in completing the form. We request that you complete the form ***even if no shipments are planned during 2007.*** Additionally, please notify US Ecology if you ***do not*** plan to renew your current site use permit for 2007.

The information received from site use permit holders will be the basis for determining disposal rates for 2007. US Ecology Washington plans to file proposed rates for 2007 prior to December 1, 2006. Projections returned after November 15, 2006 may not be used in the preparation of this filing.

Recycled Paper

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G2122

EXPIRATION DATE: 2/28/2006

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242870

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: N2032

EXPIRATION DATE: 3/31/2006

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242871

SCHNITZER STEEL PRODUCTS CO.

12005 N Burgard Road, Portland, Oregon 97203
P.O. Box 10047, Portland, Oregon 97296-0047
(503) 224-9900 FAX (503) 286-6948

February 16, 2005

Diane Hallisy
Nuclear Waste Program
P.O. Box 47600
Olympia, Washington 98504-7600

Re: Renewal of Site Use Permits to Dispose of Low-Level Radioactive an N.A.R.M. Waste – Disposal Site, Richland, Washington.

Dear Ms. Hallisy:

Attached are signed renewal permit applications for the disposal of N.A.R.M. and Low-Level Radioactive Materials at the disposal site in Richland, Washington. Each year we renew these applications in the event we inadvertently receive contaminated materials from suppliers. Along with the applications as a check in the amount of $424.00

Please contact me at (503) 286-6976 if you have questions or would like additional information.

Sincerely,
Schnitzer Steel Products Co.

Jim Jakubiak
Environmental Administrator

STATE OF WASHINGTON
2005
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF LOW-LEVEL RADIOACTIVE WASTE AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE, RICHLAND, WASHINGTON

A. *Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.*

Schnitzer Steel Products Co.
GENERATOR'S NAME:

B. *Address where waste is generated. (YOU MUST INCLUDE THE 9-DIGIT ZIP-CODE OR PERMIT WILL NOT BE PROCESSED. Contact your local Post Office for further information.) Generators who own multiple facilities within the same state may apply for one permit if the same contact person within the generator's organization will be responsible for handling the waste shipments from the multiple facilities (attach a list of in-state facilities to the application). Otherwise, separate permits will be required. Facilities which are owned by the same generator but located in different states will require separate permits.*

ADDRESS WHERE WASTE IS GENERATED	*MAILING ADDRESS (OF CONTACT PERSON)*
	PO Box 10047
CITY *STATE* *ZIP CODE (9 DIGITS)*	Portland Oregon 97296-0047 *CITY* *STATE* *ZIP CODE (9 DIGITS)*

C. *Name of contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: PERMITS WILL BE MAILED ADDRESSED TO CONTACT PERSON; ENSURE MAILING ADDRESS AND CONTACT NAME AGREE.)*

James L. Jakubiak — Environmental Administrator — 503) 286-6976 Ext —
(First) *(M.I.)* *(Last)* *TITLE* *PHONE*

D. *A Nuclear Regulatory Commission or agreement state license is required for activities involving the possession, use, ownership, or transfer of most radioactive materials. List all license numbers pertaining to materials to be disposed. If you do not have a license relating to the materials to be disposed, please explain fully in the space provided.*

NRC LICENSE #(S): *OR* *AGREEMENT STATE LICENSE #*

EXPIRATION DATE(S): *EXPIRATION DATE:*

IF YOU DO NOT HAVE EITHER LICENSE PLEASE EXPLAIN.
We keep active permits in the event we inadvertently receive contaminated scrap from a supplier. SSP does not generate contaminated scrap metal.

E. *Type of permit you are applying for. If you possess a current permit, or previously had a permit that expired, please state your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. First-time applicants should enter projected volume of waste to be disposed during the period March through February of the coming year.*

X *RENEWAL - SITE USE PERMIT #* 62122 *- VOLUME DISPOSED DURING PREVIOUS PERMIT* ____ *(CU FT)* ____ *(YEAR)*

___ *FIRST-TIME APPLICANT - VOLUME PROJECTION (March - February)* ____ *(CU FT)*

F. *Calculate the permit fee due using the enclosed fee schedule and indicate amount of fee enclosed.*

AMOUNT ENCLOSED $ 424.00

G. *Do you use a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.*

YES X *NO* ___ - Thomas Gray & Assoc., Inc. - B400
BROKER NAME(S) *BROKER'S SITE USE PERMIT #(S)*

ECY 070-101

SCHN00242873

H. *Please indicate the one specific type which best describes your facility:*

1. **FUEL CYCLE**
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )

2. **MEDICAL**
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )

3. **GOVERNMENT (NON-MEDICAL)**
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )

4. **INDUSTRIAL**
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER ( )

5. **ACADEMIC (NON-MEDICAL)**
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

I. *Types of wastes (e.g. solidified liquids, ion exchange resins, activated components, pipe scale, building rubble, etc.), and all radionuclides (e.g. C-14, H-3) that you will be shipping for disposal in Washington State.*

1. Unknown at this time. See previous applications for waste types.
   TYPES OF WASTES

2. Unknown at this time. See previous applications for waste types.
   RADIONUCLIDES

J. *Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year.* ***DO NOT USE SCIENTIFIC NOTATION FOR ACTIVITY.***

NA _____ ft³ _____ mCi

K. *Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at* http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm

NA
CLASS A (%) CLASS B (%) CLASS C (%)

L. *The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State site use permit number (if renewing) written on the check or money order. Please provide the following information:*

_____ Schnitzer Steel Products Co.
CHECK OR MONEY ORDER # NAME OF COMPANY ISSUING CHECK OR MONEY ORDER

M. *I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of low-level radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.*

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK)	Tom Zelenka
PRINTED NAME OF PERSON SIGNING	Tom Zelenka
TITLE	Vice President
DATE OF SIGNATURE	3/18/05

N. *Mail check or money order and application form (with original ink signature) to:*

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

Correspondence (other than application forms) may be addressed to dlha461@ecy.wa.gov (e-mail), or:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

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PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
2005
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF N.A.R.M. WASTES AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE RICHLAND, WASHINGTON

A. Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.

Schintzer Steel Products Co.
APPLICANT'S NAME:

B. Address where waste is generated (MUST include the 9-digit Zip. Contact your Post Office to obtain your Zip Code).

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (IF DIFFERENT)
	P.O. Box 10047
CITY STATE ZIP CODE (9 DIGITS)	Portland, Oregon 97296-0047
	CITY STATE ZIP CODE (9 DIGITS)

C. Name of the contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: **Permits will be mailed addressed to contact person; ensure mailing address and contact name agree.**)

James L. Jakubiak Environmental Administrator (503) 286-6976 Ext
(FIRST) (M.I.) (LAST) TITLE PHONE

D. If this is a renewal of a site use permit please enter your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. Indicate if you are a first-time applicant.

X RENEWAL - SITE USE PERMIT # N2032 - VOLUME DISPOSED _____ (CU FT) ___ (YEAR)

___ FIRST-TIME APPLICANT

E. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. **DO NOT USE SCIENTIFIC NOTATION.**

NA _____ ft^3 _____ mCi

F. Calculate the permit fee due using the enclosed fee schedule and enter amount of fee enclosed. $ ∅

G. Types of N.A.R.M. wastes (e.g. pipe scale, decontamination waste, building rubble, etc.), and all radionuclides that you have approval to dispose of in Washington State.

1. See previous applications for waste types
TYPES OF WASTES

2. See previous applications for waste types
RADIONUCLIDES

H. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm).

NA CLASS A (%) CLASS B (%) CLASS C (%)

I. Do you u se a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.

YES X NO __ - Thomas Gray & Associates, Inc. - B4∅∅
BROKER NAME(S) BROKER'S SITE USE PERMIT #(S)

ECY 070-102

SCHN00242875

J. Do you have a specific radioactive materials license from the NRC or Agreement State? YES _____ NO X If yes, do you package your own radioactive waste? YES _____ NO X

K. If you operate under a general radioactive materials license who packages your waste for you?

Thomas Gray & Associates, Inc. — PACKAGER'S NAME

B400 — PACKAGER'S SITE USE PERMIT #

L. Please indicate the one specific type which best describes your facility:

1. FUEL CYCLE
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )
2. MEDICAL
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )
3. GOVERNMENT (NON-MEDICAL)
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )
4. INDUSTRIAL
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER (X)
5. ACADEMIC (NON-MEDICAL)
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

M. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State Site Use Permit number (if applicable) written on the check or money order. Please provide the following information:

—— — CHECK OR MONEY ORDER #

Schnitzer Steel Products Co. — NAME OF COMPANY ISSUING CHECK

N. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303 WAC, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK): Tom Zelenka

PRINTED NAME OF PERSON SIGNING: Tom Zelenka

TITLE: Vice President

DATE OF SIGNATURE: 2/18/05

O. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

P. Correspondence (other than application forms) may be addressed to diha461@ecy.wa.gov (e-mail), or:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

The Department of Ecology is an Equal Opportunity employer. If you need this document in an alternate format, please contact the Nuclear Waste Program at (360) 407-7109 (voice) or 1-800-833-6388 (TTY).

PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

SCHNITZER STEEL
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

STUB 1 OF 1

Check No. 196968

INVOICE NUMBER	INVOICE DATE	DESCRIPTION	AMOUNT	DISCOUNT	AMOUNT
42400011105	1/11/2005		424.00		424.00
		TOTALS	424.00	0.00	424.00

PLEASE DETACH BEFORE DEPOSITING

THIS CHECK HAS A GREEN AND BLUE BACKGROUND AS WELL AS AN ARTIFICIAL WATERMARK ON THE BACK. THE PORDER IS MICROPRINTED AS A SAFETY PRECAUTION.

Bank of America, N.A.
Atlanta, Dekalb County, Georgia
Member F.D.I.C.
64-1278/611

Check No.
196968

SCHNITZER STEEL
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

PAY ONLY 424 00 FOUR TWO FOUR CTS CTS

DATE
2/24/2005

PAY FOUR HUNDRED TWENTY FOUR AND 00/100********** $*******424.00

TO THE ORDER OF
WASHINGTON STATE DEPT OF ECOLOGY
PO BOX 5128
LACEY WA 98509-5128

AUTHORIZED SIGNATURE

SCHN00242877

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
SITE USE PERMIT FEE SCHEDULE
FOR THE
COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE
DISPOSAL SITE,
RICHLAND, WASHINGTON

1. Generators, except nuclear utilities, who have previously held a site use permit for disposal of NARM, Exempt, or low-level radioactive wastes at the Richland site, must determine the amount of waste disposed by their organization in the most recent complete calendar year in which they held a permit. Using this volume figure, the Site Use Permit fee may be determined by referencing the table in paragraph 2.

2. Generators applying for a permit for the first time must estimate the volume of waste which they plan to dispose of during the period of March 1 through February 28 (low-level waste generators) or April 1 through March 31 (NARM and Exempt waste generators). Using this volume figure, the Site Use Permit fee may be determined by referencing the table below.

CATEGORY	FEE
Brokers	$ 1,000
< 50 cubic feet	$ 424
≥ 50 < 500 cubic feet	$ 848
≥ 500 < 1000 cubic feet	$ 2,120
≥ 1000 < 2500 cubic feet	$ 4,240
≥ 2500 cubic feet	$14,840
Nuclear Utilities	$42,400

SCHNITZER STEEL PRODUCTS CO.

12005 N Burgard Road, Portland, Oregon 97203
P.O. Box 10047, Portland, Oregon 97296-0047
(503) 224-9900 FAX (503) 286-6948

February 12, 2004

Diane Hallisy
Nuclear Waste Program
P.O. Box 47600
Olympia, Washington 98504-7600

Re: Renewal of Site Use Permits to Dispose of Low-Level Radioactive and N.A.R. M. Waste – Disposal Site, Richland, Washington.

Dear Ms. Hallisy:

Attached are signed renewal applications for the disposal of N.A.R.M and Low-Level Radioactive Material at the disposal site in Richland, Washington. Each year we renew these applications in the event we inadvertently receive contaminated material from suppliers. Along with the applications is a check in the amount of $424.00.

I sincerely appreciate you assistance in completing these renewal applications. Should there be questions or comments regarding the completed forms or the accompanying payment, please call me at (503) 286-6976.

Sincerely,
Schnitzer Steel Products Co.

Jim Jakubiak
Environmental Administrator

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
2004
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF LOW-LEVEL RADIOACTIVE WASTE AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE, RICHLAND, WASHINGTON

A. *Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.*

Schnitzer Steel Products Co.
GENERATOR'S NAME:

B. *Address where waste is generated. (YOU MUST INCLUDE THE 9-DIGIT ZIP-CODE OR PERMIT WILL NOT BE PROCESSED. Contact your local Post Office for further information.) Generators who own multiple facilities within the same state may apply for one permit if the same contact person within the generator's organization will be responsible for handling the waste shipments from the multiple facilities (attach a list of in-state facilities to the application). Otherwise, separate permits will be required. Facilities which are owned by the same generator but located in different states will require separate permits.*

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (OF CONTACT PERSON)
12005 North Burgard	P.O. Box 10047
Portland, OR. 97203-6432	Portland, Oregon 97296-0047
CITY STATE ZIP CODE (9 DIGITS)	CITY STATE ZIP CODE (9 DIGITS)

C. *Name of contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: PERMITS WILL BE MAILED ADDRESSED TO CONTACT PERSON; ENSURE MAILING ADDRESS AND CONTACT NAME AGREE.)*

James L. Jakubick — Environmental Administrator — (503) 286-6976 Ext —
(First) (M.I.) (Last) — TITLE — PHONE

D. *A Nuclear Regulatory Commission or agreement state license is required for activities involving the possession, use, ownership, or transfer of most radioactive materials. List all license numbers pertaining to materials to be disposed. If you do not have a license relating to the materials to be disposed, please explain fully in the space provided.*

NRC LICENSE #(S): _____ *OR* *AGREEMENT STATE LICENSE #* _____

EXPIRATION DATE(S): _____ *EXPIRATION DATE:* _____

IF YOU DO NOT HAVE EITHER LICENSE PLEASE EXPLAIN.

We keep a site use permit active in the event we receive a piece of contaminated scrap metal that requires disposal. We do not generate contaminated material, but on rare occasion may receive material from suppliers

E. *Type of permit you are applying for. If you possess a current permit, or previously had a permit that expired, please state your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. First-time applicants should enter projected volume of waste to be disposed during the period March through February of the coming year.*

X *RENEWAL - SITE USE PERMIT #* G2122 *- VOLUME* _____ *(CU FT)* ____ *(YEAR)*

____ *FIRST-TIME APPLICANT - VOLUME PROJECTION (March - February)* _____ *(CU FT)*

F. *Calculate the permit fee due using the enclosed fee schedule and indicate amount of fee enclosed.*

AMOUNT ENCLOSED $ 424.00

G. *Do you use a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.*

YES X *NO* ___ - Thomas Gray & Associates, Inc. - 3400
BROKER NAME(S) — *BROKER'S SITE USE PERMIT #(S)*

ECY 070-101

SCHN00242903

H. Please indicate the one specific type which best describes your facility:

1. *FUEL CYCLE*
   - *a. NUCLEAR POWER REACTOR* ( )
   - *b. REACTOR FUEL PRODUCTION* ( )
   - *c. OTHER (NON-REACTOR)* ( )
2. *MEDICAL*
   - *a. HOSPITAL/CLINIC* ( )
   - *b. RESEARCH* ( )
   - *c. LABORATORY* ( )
   - *d. OTHER* ( )
3. *GOVERNMENT (NON-MEDICAL)*
   - *a. MILITARY* ( )
   - *b. RESEARCH* ( )
   - *c. REGULATORY* ( )
   - *d. OTHER* ( )
4. *INDUSTRIAL*
   - *a. RESEARCH & DEVELOPMENT* ( )
   - *b. MANUFACTURING* ( )
   - *c. NUCLEAR PHARMACY* ( )
   - *d. WASTE BROKER* ( )
   - *e. OTHER* (X)
5. *ACADEMIC (NON-MEDICAL)*
   - *a. RESEARCH* ( )
   - *b. LABORATORY* ( )
   - *c. REACTOR* ( )
   - *d. OTHER* ( )

I. Types of wastes (e.g. solidified liquids, ion exchange resins, activated components, pipe scale, building rubble, etc.), and all radionuclides (e.g. C-14, H-3) that you will be shipping for disposal in Washington State.

1. Unknown at this time. See previous applications for waste types.
   TYPES OF WASTES

2. Unknown at this time. See previous applications for waste types.
   RADIONUCLIDES

J. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. DO NOT USE SCIENTIFIC NOTATION FOR ACTIVITY.

NA ____ ft^3 ____ *mCi*

K. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm

NA
CLASS A (%) *CLASS B (%)* *CLASS C (%)*

L. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State site use permit number (if renewing) written on the check or money order. Please provide the following information:

CHECK OR MONEY ORDER # Schnitzer Steel Products Co.
NAME OF COMPANY ISSUING CHECK OR MONEY ORDER

M. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of low-level radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK) Tom Zelenka

PRINTED NAME OF PERSON SIGNING Tom Zelenka

TITLE Vice President

DATE OF SIGNATURE 2/12/04

N. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

Correspondence (other than application forms) may be addressed to diha461@ecy.wa.gov (e-mail), or:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

The Department of Ecology is an Equal Opportunity employer. If you need this document in an alternate format, please contact the Nuclear Waste Program at (360) 407-7109 (voice) or 1-800-833-6388 (TTY).

PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

SCHNITZER STEEL INDUSTRIES, INC.
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

STUB 1 OF 1

Check No. 168872

INVOICE NUMBER	INVOICE DATE	DESCRIPTION	AMOUNT	DISCOUNT	AMOUNT
42400021304	2/13/2004	PERMITS	424.00		424.00
		TOTALS	424.00	0.00	424.00

PLEASE DETACH BEFORE DEPOSITING

THIS CHECK HAS A GREEN AND BLUE BACKGROUND AS WELL AS AN ARTIFICAL WATERMARK ON THE BACK. THE BORDER IS MICROPRINTED AS A SAFETY PRECAUTION.

Bank of America, N.A.
Atlanta, Dekalb County, Georgia
Member F.D.I.C.
54-1278/611

Check No.
168872

SCHNITZER STEEL INDUSTRIES, INC.
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

PAY ONLY FOUR 4 TWO 2 FOUR 4 00 CTSCTS

DATE
2/13/2004

PAY FOUR HUNDRED TWENTY FOUR AND 00/100********** $********424.00

TO THE ORDER OF
WASHINGTON STATE DEPT OF ECOLOGY
PO BOX 5128
LACEY WA 98509-5128

AUTHORIZED SIGNATURE

SCHN00242905

WASHINGTON STATE DEPARTMENT OF ECOLOGY

STATE OF WASHINGTON
2004
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF N.A.R.M. WASTES AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE RICHLAND, WASHINGTON

A. Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.

Schnitzer Steel Products Co.
APPLICANT'S NAME:

B. Address where waste is generated (MUST include the 9-digit Zip. Contact your Post Office to obtain your Zip Code).

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (IF DIFFERENT)
12005 North Burgard Road 97203-6432	P.O. Box 10047
Portland, Oregon 97203-6432	Portland, Oregon 97296-0047
CITY STATE ZIP CODE (9 DIGITS)	CITY STATE ZIP CODE (9 DIGITS)

C. Name of the contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. **(NOTE: Permits will be mailed addressed to contact person; ensure mailing address and contact name agree.)**

James L. Jakubiak — Environmental Administrator — (503) 286-6976 Ext
(FIRST) (M.I.) (LAST) — TITLE — PHONE

D. If this is a renewal of a site use permit please enter your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. Indicate if you are a first-time applicant.

X RENEWAL - SITE USE PERMIT # N2032 - VOLUME DISPOSED _____ (CU FT) ___ (YEAR)

___ FIRST-TIME APPLICANT

E. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. **DO NOT USE SCIENTIFIC NOTATION.**

_____ft³ _____ mCi NA

F. Calculate the permit fee due using the enclosed fee schedule and enter amount of fee enclosed. $ Ø

G. Types of N.A.R.M. wastes (e.g. pipe scale, decontamination waste, building rubble, etc.), and all radionuclides that you have approval to dispose of in Washington State.

1. See previous applications for waste types.
TYPES OF WASTES

2. See previous applications for waste types.
RADIONUCLIDES

H. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm).

NA CLASS A (%) CLASS B (%) CLASS C (%)

I. Do you u se a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.

YES X NO __ - Thomas Gray & Associates, Inc. - B4ØØ
BROKER NAME(S) — BROKER'S SITE USE PERMIT #(S)

ECY 070-102

SCHN00242906

J. Do you have a specific radioactive materials license from the NRC or Agreement State? YES _____ NO X If yes, do you package your own radioactive waste? YES _____ NO X

K. If you operate under a general radioactive materials license who packages your waste for you?

Thomas Gray & Associates, Inc. — PACKAGER'S NAME

B400 — PACKAGER'S SITE USE PERMIT #

L. Please indicate the one specific type which best describes your facility:

1. **FUEL CYCLE**
   - a. NUCLEAR POWER REACTOR ( )
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   - c. OTHER (NON-REACTOR) ( )
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   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )
3. **GOVERNMENT (NON-MEDICAL)**
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )
4. **INDUSTRIAL**
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER (X)
5. **ACADEMIC (NON-MEDICAL)**
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

M. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State Site Use Permit number (if applicable) written on the check or money order. Please provide the following information:

CHECK OR MONEY ORDER # _____

NAME OF COMPANY ISSUING CHECK _____

N. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303 WAC, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK): Tom Zelenka

PRINTED NAME OF PERSON SIGNING: Tom Zelenka

TITLE: Vice President

DATE OF SIGNATURE: 2/12/04

O. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

P. Correspondence (other than application forms) may be addressed to diha461@ecy.wa.gov (e-mail), or:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

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OCCUPATIONAL SERVICES, INC.

6397 Nancy Ridge Drive, Suite B
San Diego, CA 92121
Voice: (858) 558-6736
Fax: (858) 558-6756
admin@occserv.com
www.occserv.com

June 28, 2000

FAX

To:	Jim Jakubiak, Environmental Administrator	From:	Nick Rinaldi, President NR
Of:	Schnitzer Steel Industries, Inc. Portland, OR	Date:	June 28, 2000
Fax:	1-503-286-6948	Pages:	2, including this cover page
Re:	Agreement To Identifiy Of Unknown Radionuclides In Scrap Metal		

Thank you for calling OSI concerning the identification of unknown radionuclides in scrap metal located at your facility in Portland, OR. OSI will travel to Portland, OR, to identify and estimate the activity of radionuclides in various pieces of scrap metal. Our labor rate is $105 per hour portal to portal plus an additional few hours to reduce the data, prepare and send you a report of the findings. Total time is estimated to be about 15 hours. Round trip weekday fares on Southwest Airlines is approximately $330. Car rental is approximately $50 per day. OSI's fix price for this job is **one thousand nine hundred fifty-five dollars ($1,955.00)**. Upon payment of the invoice amount, OSI will issue the final report.

JJ 7/10/00
OSI will provide a draft report with identification results prior to payment.

If this agreement and the attached terms and conditions are acceptable to you, please sign below and return a copy to us.

For
OCCUPATIONAL SERVICES, INC.

Nick Rinaldi 6-28-00
Nick Rinaldi, Health Physicist
President

For
SCHNITZER STEEL INDUSTRIES, INC.

J. Jakubiak 7/10/00
Jim Jakubiak,
Environmental Administrator

SEE IMPORTANT TERMS AND CONDITIONS ON NEXT PAGE

OCCUPATIONAL SERVICES, INC.

6397 Nancy Ridge Drive, Suite B
San Diego, CA 92121
Voice: (858) 558-6736
Fax: (858) 558-6756
admin@occserv.com
www.occserv.com

TERMS AND CONDITIONS

1 **Engagement.** SCHNITZER STEEL INDUSTRIES, INC. (Client) located in Portland, OR, hereby engages Occupational Services, Inc. (OSI) located at 6397 Nancy Ridge Drive, Suite B, San Diego, CA 92121 to provide radiation safety services. OSI accepts such engagement and agrees to perform such services for Client, according to the terms of this agreement at the Client's facilities located in Portland, OR.

2 **Fees, Expenses, and Payments.** For **Radiation Safety Services described** herein, OSI will submit an invoice to Client for **one thousand nine hundred fifty-five dollars ($1,955.00).** Payment must be received in OSI's offices in San Diego before OSI will deliver a copy of the results to Client.

3 **Effective Date and Termination of Agreement.** This Agreement is effective when signed by both Parties, and the Effective Date shall be the date the last Party signed the Agreement. Either party may cancel this Agreement on thirty (30) days written notice. In the event of such termination, OSI waives any further rights to compensation relative to future services to be performed, and Client shall promptly pay OSI for all fees, charges, and expenses incurred pursuant to paragraph 2 of this Agreement prior to the date of such termination. This Agreement shall terminate immediately if circumstances occur that make it impossible or impractical for either OSI or Client to continue conducting business.

4 **Reports** OSI shall maintain, complete and submit to Client such records, reports, or other documents, as required by Client that are either an integral part of or usually associated with the services that are to be performed by OSI under this Agreement.

5 **Dispute Arbitration.** If there is a dispute between the Parties regarding OSI's fees charged to Client under this Agreement for OSI's services that cannot be resolved between the parties, the Client and OSI agree to submit the controversy to binding arbitration, which shall be held in the City of San Diego, California, in accordance with the rules then in effect of the American Arbitration Association, and judgement of the award entered shall be accepted by both parties and may be entered in any court having jurisdiction thereof.

6 **Authority to Bind.** The parties executing this agreement represent to each other that they have full authority and right to execute this agreement on behalf of their respective party and to bind such party to this agreement.

7 **Consequential Damages.** OSI shall not be liable for special, consequential, or contingent damages resulting from delay of performance or any default or defect hereunder.

8 **Governing Law.** The validity of this agreement and of its terms and conditions, as well as the rights and duties of the parties hereunder, shall be governed by the laws of the State of California.

9 **Complete Integration, Binding Upon All Parties.** This Agreement contains the entire agreement between Client and OSI regarding this matter and the fees, charges, expenses, and responsibilities relative thereto. This Agreement shall not be modified except by written agreement. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument. This Agreement shall be binding upon Client and OSI and their respective heirs, executors, legal representatives, and successors. Client and OSI agree the Terms and Conditions as set forth on this agreement shall take precedence over and supersede all other Terms and Conditions including those that may accompany any Purchase Order, Contract, Subcontract or other document Client may issue in response to this agreement.

Nick Rinaldi's Initial's NR Date 6-28-00
Jim Jakubiak's Initial's JJ Date 7-11-00

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 June 28, 2000

FAX

To: Jim Jakubiak, Environmental Administrator

From: Nick Rinaldi, President NR

Of: Schnitzer Steel Industries, Inc. Portland, OR

Date: June 28, 2000

Fax: 1-503-286-6948

Pages: 2, including this cover page

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OSI will provide a draft report with identification results prior to payment.

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For
OCCUPATIONAL SERVICES, INC.

Nick Rinaldi 6-28-00
Nick Rinaldi, Health Physicist
President

For
SCHNITZER STEEL INDUSTRIES, INC.

Jim Jakubiak 7/10/00
Jim Jakubiak,
Environmental Administrator

SEE IMPORTANT TERMS AND CONDITIONS ON NEXT PAGE

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9 **Complete Integration, Binding Upon All Parties.** This Agreement contains the entire agreement between Client and OSI regarding this matter and the fees, charges, expenses, and responsibilities relative thereto. This Agreement shall not be modified except by written agreement. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which together shall constitute one and the same instrument. This Agreement shall be binding upon Client and OSI and their respective heirs, executors, legal representatives, and successors. Client and OSI agree the Terms and Conditions as set forth on this agreement shall take precedence over and supersede all other Terms and Conditions including those that may accompany any Purchase Order, Contract, Subcontract or other document Client may issue in response to this agreement.

Nick Rinaldi's Initial's NR Date 6-28-00
Jim Jakubiak's Initial's JJ Date 7-11-00

OCCUPATIONAL
SERVICES, INC.

July 31 2000

Jim Jakubiak
Schnitzer Steel Industries, Inc.
P.O. Box 10047
Portland, OR 97296-0047
Phone: (503) 286-6976

RE: Unknown Radioactive Material Analysis

Mr. Jakubiak:

On July 17, 2000 Occupational Services, Inc. analyzed unknown radioactive material at the Schnitzer Steel Industries, Inc. location in Portland, Oregon. A Davidson Multi-Channel Analyzer was used in determining the radionuclide of each unknown radioactive material. Table (1) contains the results from the analysis using the Multi-Channel Analyzer. On contact and 1 foot radiation levels were measured using a Victoreen 450P pressurized ion chamber. Refer to the attached survey sheets for radiation level results. The 1 foot radiation results were used in conjunction with a thumb rule to calculate the activity of each item analyzed. Table (1) contains the activity amounts of each item. Wipe samples were taken on each item to determine if loose surface contamination is greater than Minimum Detectable Activity. Table (1) contains the results from the wipe samples taken. Refer to the attached survey sheets for the wipe test locations.

Occupational Services, Inc. recommends placing items that can be placed into a steel 55-gallon approved DOT 17H shipping drum. These drums can be attained from a licensed radioactive material hauler. When placing the items into the 55-gallon drums ensure the items are segregated by radionuclides, i.e. all the items containing Ra-226 are placed together. All the items contain loose surface contamination greater than the loose surface contamination limits, therefore place each item into a plastic bag to prevent spread of contamination. Some items may not be placed into the 55-gallon drums because of shape or size, in this case a larger approved DOT shipping container will be necessary. After the containers have been closed and sealed, attach a radioactive materials tag on the drum and fill out the activity amount of the container. Use Table (1) to calculate the total amount of activity placed into each drum.

Before shipping the radioactive materials, wipe surveys need to be taken on the outside of the shipping containers and analyzed for loose surface contamination.

NOTE: ITEMS CONTAIN LOOSE SURFACE CONTAMINATION LEVELS GREATER THAN THE LIMIT FOR LOOSE SURFACE CONTAMINATION. USE GLOVES AND CAUTION IN HANDLING EACH ITEM TO PREVENT SPREAD OF CONTAMINATION. IT IS RECOMMENDED THAT EACH ITEM BE PLACED INTO PLASTIC BAGS OR AN APPOPRIATE CONTAINER.

Sincerely,
Occupational Services, Inc.

George Hoskison
Health Physicist

6397 Nancy Ridge Drive • Suite B • San Diego, California • 92121
(858) 558-6736 • FAX (858) 558-6756 • www.occserv.com

TABLE (1) Schnitzer Steel Industries, Inc

ITEM NUMBER	Radionuclide	Radiation Level On Contact (mr/hr)	Radiation Level at 1 Foot (mr/hr)	Activity of Item (mCi)	Wipe Number	Wipe Test Results (DPM/100 cm²)	
1	Th-230	0.080	0.020	0.005	1	815	LRW
2a	Th-230	0.470	0.110	0.030	2	1142	
2b	Th-230	0.380	0.085	0.023	3	1605	
2c	Th-230	0.270	0.100	0.027	4	1128	
3	Uranium Ore	0.035	0.020	0.005	5	3610	LLRW
4 (14 pcs)	Uranium Ore	0.110	0.030	0.115 (Total of 14 pcs combined)	6, 7, 8, 9	1335, <MDA, 1387, 805	
5a	Ra-226	0.100	0.035	0.010	11	1657	NARM
5b	Ra-226	0.110	0.050	0.014	10	723	NARM
5c	None				12	1957	N.S.
6	Ra-226	1.330	0.150	0.041	13	16443	NARM
7	None				14	1650	N.S.
8	Ra-226	0.200	0.090	0.025	15, 16, 17, 18	2100, <MDA, 1910, 3207	NARM
9	Ra-226	0.440	0.105	0.029	19	4530	
10	Ra-226	0.470	0.120	0.033	21	25700	
11	Ra-226	0.290	0.120	0.033	22	1288137	
12	Ra-226	0.190	0.050	0.014	23	83793	
13	Ra-226	0.490	0.170	0.047	24	6793	
14	Ra-226	0.340	0.070	0.019	25	2150	
15	Ra-226	0.240	0.050	0.014	26	13103	
16	Ra-226	0.100	0.030	0.008	27	3933	
17	Ra-226	0.290	0.070	0.019	28	17787	
18	Ra-226	0.230	0.080	0.022	29	3397	
19	Ra-226	0.290	0.090	0.025	30	6844	
20	Sr-90	2.290	0.390	4.300	31	1504	LLRW
21	Ra-226	0.070	0.020	0.005	32	2110	NARM
22	Ra-226	0.080	0.030	0.008	33	1060	NARM
23	Ra-226	0.080	0.030	0.008	34, 35, 36	3667, 4030, 5027	NARM
24	Ra-226	0.390	0.140	0.038	37	17070	NARM
25	Uranium Ore	0.080	0.050	0.014	38	1910	
26	Uranium Ore	0.140	0.050	0.014	39	2847	
27	Uranium Ore	0.190	0.070	0.019	40	3022	
28	Uranium Ore	0.080	0.050	0.014	41	3930	
29	Uranium Ore	0.110	0.055	0.015	42	2880	
30	Uranium Ore	0.140	0.070	0.019	43	510	
31	Uranium Ore	0.170	0.070	0.019	44	1538	
32	Uranium Ore	0.180	0.090	0.025	45	1197	
33	Uranium Ore	0.990	0.190	0.052	46	777	
34	Uranium Ore	0.130	0.075	0.021	47	3805	
35	None				48	367	N.S

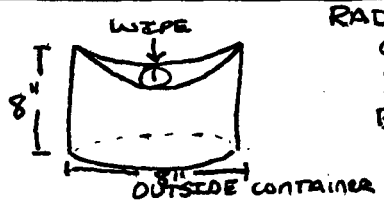
RADIATION CONTAMINATION SURVEY

Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

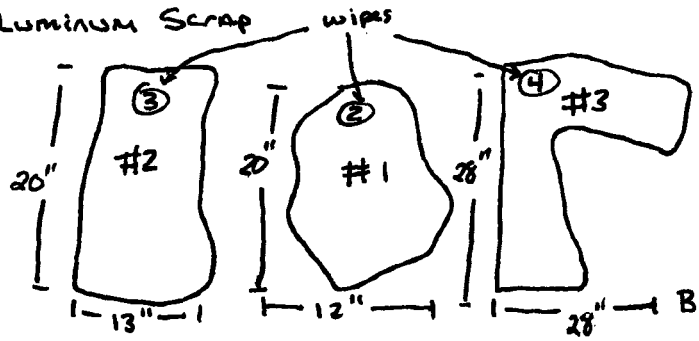
#1 = 815 - Th-230
#2 = 1142 - Th-230
#3 = 1605 - Th-230
#4 = 1128 - Th-230
#5 = 3610 U-ORE
#6 = 1335 U-ORE
#7 = 1387 U-ORE
#9 = 805 U-ORE

ITEM #1
LANTERN MANTELS
Th-230



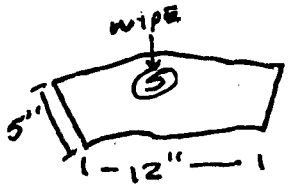
RADIATION LEVELS:
ON CONTACT: 90 μR/hr
1 FOOT AWAY: 30 μR/hr
BKG = 10 μR/hr

ITEM #2
3 pcs. ALUMINUM SCRAP
Th-230



RADIATION LEVELS:
ON CONTACT
#1 = 480 μR/hr
#2 = 390 μR/hr
#3 = 280 μR/hr
1 FOOT AWAY:
#1 = 120 μR/hr
#2 = 95 μR/hr
#3 = 110 μR/hr
BKG = 10 μR/hr

ITEM #3
STEEL PIPE - CRUSHED
URANIUM ORE



RADIATION LEVELS:
ON CONTACT = 45 μR/hr
1 FOOT AWAY = 30 μR/hr
BKG = 10 μR/hr

ITEM(S) #4
BATCH OF STEEL PIPE
TOTAL OF 14 pcs.
URANIUM ORE

SAMPLED FOUR -

AVG RADIATION LEVELS:
ON CONTACT: 120 μR/hr
1 FOOT AWAY = 40 μR/hr
EACH PIPE
BKG = 10 μR/hr

3" DIAMETER EACH

pc #	LENGTH (inches)	pc #	LENGTH (inches)
1	22	7	15
2	16	8	32
3	18	9	17
4	15	10	14
5	40	11	41
6	48	12	22
		13	16
		14	19

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

SCHN00242918

RADIATION CONTAMINATION SURVEY

Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

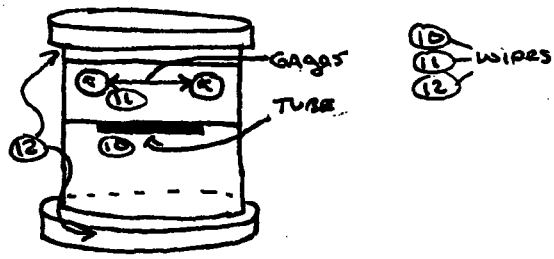
#10 = 723 = Ra-226
#11 = 1657 = Ra-226
#12 = 1957 Ra-226
#13 = 16443 Ra-226
#14 = 1652 Ra-226
#15 = 2100 Ra-226
#17 = 1910 Ra-226
#18 = 3207 Ra-226

ITEM #5

NAVY GYROSCOPE – DIALS & TUBE

Ra-226

RADIATION LEVELS:
DIALS: ON CONTACT: 110 μR/h
1 FOOT: 45 μR/h
TUBE: ON CONTACT: 120 μR/h
1 FOOT: 50 μR/h



BKG AND REST OF STAND 10 μR/h

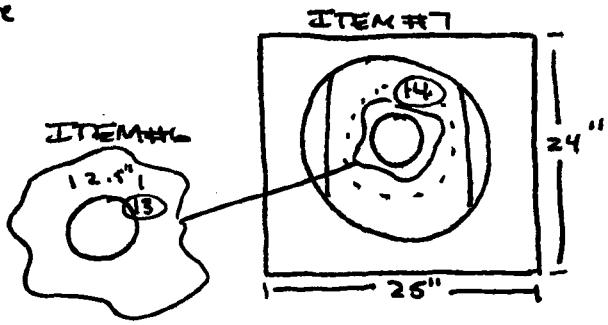
ITEM #6 & #7

#6 = DISC FROM STEEL PLATE
#7 = STEEL PLATE

Ra-226 (ITEM #6 ONLY)

RADIATION LEVELS:
ITEM #6:
ON CONTACT = 1.34 mR/h
1 FOOT AWAY = 160 μR/h
ITEM #7:
ON CONTACT = 10 μR/h
1 FOOT AWAY = 10 μR/h
BKG = 10 μR/h

(13) & (14) = WIPES



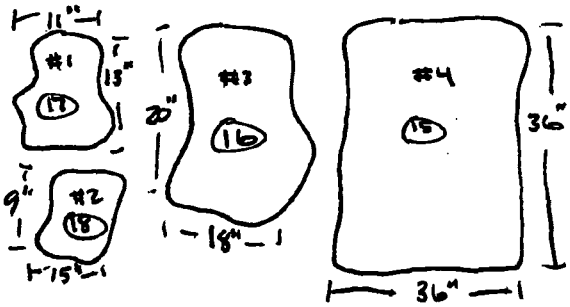
NOTE: WITH DISC REMOVED FROM STEEL PLATE – STEEL PLATE CONTAINS NO RADIONUCLIDE.

ITEMS #8

TIN SCRAP (4 pcs)

Ra-226

AVG. RADIATION LEVEL (EACH)
ON CONTACT = 210 μR/h
1 FOOT AWAY = 100 μR/h
BKG = 10 μR/h



(15) → (18) – WIPES

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

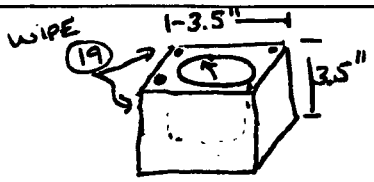
RADIATION CONTAMINATION SURVEY

Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

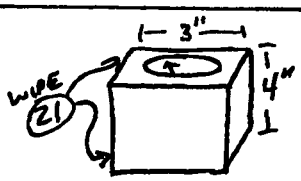
#19 = 4530 Ra-226
#20 = N/A
#21 = 25700
#22 = 1,280,137
#23 = 83,793
#24 = 6793
#25 = 2150
#26 = 13,103
#27 = 3933

ITEM #9
DIAL (ALTIMETER)
Ra-226



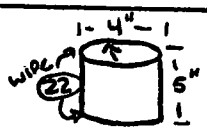
RADIATION LEVELS:
ON CONTACT = 450 mR/h
1 FOOT AWAY = 115 mR/h
BKG = 10 mR/h

ITEM #10
COMPASS (DIAL)
Ra-226



RADIATION LEVELS:
ON CONTACT = 480 mR/h
1 FOOT AWAY = 130 mR/h
BKG = 10 mR/h

ITEM #11
DIAL - RPM INDICATOR
Ra-226

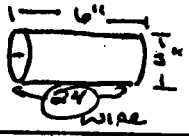


RADIATION LEVELS:
ON CONTACT = 300 mR/h
1 FOOT AWAY = 130 mR/h
BKG = 10 mR/h

ITEM #12
DIAL - RPM INDICATOR
Ra-226

RADIATION LEVELS
ON CONTACT = 200 mR/h
1 FOOT AWAY = 60 mR/h
BKG = 10 mR/h

ITEM #13
DIAL - FLIGHT LEVEL
Ra-226



RADIATION LEVELS:
ON CONTACT: 500 mR/h
1 FOOT AWAY = 180 mR/h
BKG = 10 mR/h

ITEM #14
DIAL - Fuel gage
Ra-226

RADIATION LEVELS:
ON CONTACT = 350 mR/h
1 FOOT = 80 mR/h
BKG = 10 mR/h

ITEM #15
DIAL - COMPASS
Ra-226

RADIATION LEVELS:
ON CONTACT = 250 mR/h
1 FOOT = 60 mR/h
BKG = 10 mR/h

ITEM #16
Ra-226
TOGGLE SWITCH

RADIATION LEVELS
ON CONTACT = 110 mR/h
1 FOOT = 40 mR/h
BKG = 10 mR/h

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

SCHN00242920

RADIATION CONTAMINATION SURVEY

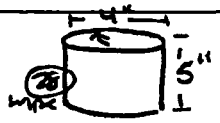
Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

#28 = 17,787 Ra-226
29 = 3397
30 = 6844
31 = 1504 Sr 90
32 = 2112 Ra-226
33 = 1060
34 = 3667
35 = 4030
36 = 5027

ITEM #17

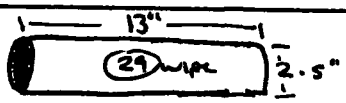
DIAL: SPEEDOMETER
Ra-226



RADIATION LEVELS:
ON CONTACT = 300 mr/h
1 FOOT = 80 mr/h
BKG = 10 mr/h

ITEM #18

PLASTIC TRANSDUCER
Ra-226



RADIATION LEVELS:
ON CONTACT = 240 mr/h
1 FOOT = 90 mr/h
BKG = 10 mr/h

ITEM #19

DIAL -
Ra-226

RADIATION LEVELS
ON CONTACT = 300 mr/h
1 FOOT = 100 mr/h
BKG = 10 mr/h

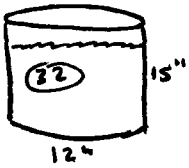
ITEM #20

SOURCE - DISK
Sr-90

RADIATION LEVELS:
ON CONTACT = 2.3 mr/h
1 FOOT AWAY = 0.4 mr/h
BKG = 0.01 mr/h

ITEM #21

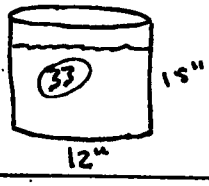
Bucket of DIRT
Ra-226



RADIATION LEVELS:
ON CONTACT = 80 mr/h
1 FOOT AWAY = 30 mr/h
BKG = 10 mr/h

ITEM #22

Bucket of DIRT
Ra-226



RADIATION LEVELS
ON CONTACT = 90 mr/h
1 FOOT = 40 mr/h
BKG = 10 mr/h

ITEM #23

SCRAP METAL (COCKPIT ??)
Ra-226

RAD LEVELS:
O.C. = 90 mr/h
1 FOOT = 40 mr/h

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

RADIATION CONTAMINATION SURVEY

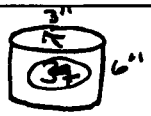
Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

#37 = 17070 Ra-226
38 = 1910 U-ore
39 = 2847
40 = 3022
41 = 3930
42 = 2880
43 = 510
44 = 1538

ITEM # 24

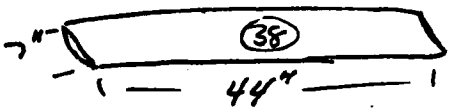
DIAL - GAS gage
Ra-226



RADIATION LEVELS:
O.C. = 400 mR/h
1 foot = 150 mR/h
BKG = 10 mR/h

ITEM # 25

PIPE - STEEL
URANIUM ORE



RADIATION LEVELS:
O.C. = 90 mR/h
1 foot = 60 mR/h
BKG = 10 mR/h

ITEM # 26

Rubber PIPE w/ METAL PLATE

URANIUM ORE

RADIATION LEVELS:
O.C. = 150 mR/h
1 ft = 60 mR/h
BKG = 10 mR/h

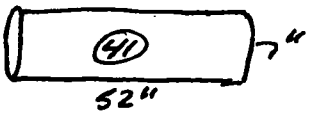
ITEM # 27

STEEL PIPE
URANIUM ORE

RADIATION LEVELS
O.C. = 200 mR/h
1 ft = 80 mR/h
BKG = 10 mR/h

ITEM # 28

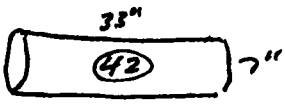
STEEL PIPE
URANIUM ORE



RADIATION LEVELS
O.C. = 90 mR/h
1 ft = 60 mR/h
BKG = 10 mR/h

ITEM # 29

STEEL PIPE
URANIUM ORE



RADIATION LEVELS
O.C. = 120 mR/h
1 ft = 65 mR/h
BKG = 10 mR/h

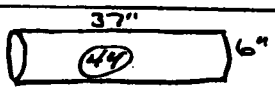
ITEM # 30

STEEL PIPE
URANIUM ORE

RADIATION LEVELS
O.C. = 150 mR/h
1 ft = 80 mR/h
BKG = 10 mR/h

ITEM # 31

STEEL PIPE
URANIUM ORE



RADIATION LEVELS:
O.C. = 180 mR/h
1 ft = 80 mR/h
BKG = 10 mR/h

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

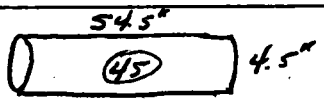
RADIATION CONTAMINATION SURVEY

Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

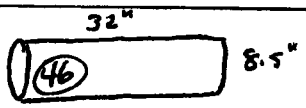
#45 = 1197 U-ore
46 = 777
47 = 3805
48 = 367 unknown

ITEM # 32
STEEL PIPE
URANIUM ORE



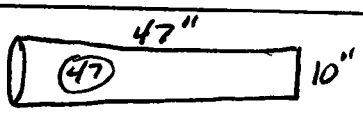
RADIATION LEVELS
O.C. = 190 mr/hr
1 ft = 100 mr/hr
BKG = 10 mr/hr

ITEM # 33
STEEL PIPE
URANIUM ORE



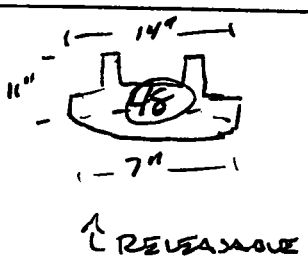
RADIATION LEVELS
O.C. = 1 mr/hr
1 ft = 0.2 mr/hr
BKG = 0.01 mr/hr

ITEM # 34
STEEL PIPE
URANIUM ORE



RADIATION LEVELS:
O.C. = 140 mr/hr
1 ft = 85 mr/hr

ITEM # 35
LEAD STAND
NO INDICATION



RADIATION LEVELS
O.C. = 10 mr/hr
1 ft = 10 mr/hr
BKG = 10 mr/hr

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

OCCUPATIONAL
SERVICES, INC.

6397 Nancy Ridge Drive, Suite B
San Diego, CA 92121
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george@occserv.com
www.occserv.com

F A X

To:	Jim Jakubiak	**From:**	George Hoskison
Of:	Schnitzer Steel Industries, Inc.	**Date:**	July 31, 2000
Fax:	(503) 286-6948	**Pages:**	2, including this cover page
Re:	Rough Draft of the Unknown Radioactive Material Analysis		

Mr. Jakubiak:

Here is the rough draft concerning the analysis performed on July 17, 2000 by Occupational Services, Inc.

If you have any questions please contact either Nick Rinaldi at (619) 252-2211 or George Hoskison at (619) 708-8136.

Sincerely,
Occupational Services, Inc.

George Hoskison
Health Physicist

OCCUPATIONAL SERVICES, INC.

July 31 2000

Jim Jakubiak
Schnitzer Steel Industries, Inc.
P.O. Box 10047
Portland, OR 97296-0047
Phone: (503) 286-6976

RE: Unknown Radioactive Material Analysis

Mr. Jakubiak:

On July 17, 2000 Occupational Services, Inc. analyzed unknown radioactive material at the Schnitzer Steel Industries, Inc. location in Portland, Oregon. A Davidson Multi-Channel Analyzer was used in determining the radionuclide of each unknown radioactive material. Table (1) contains the results from the analysis using the Multi-Channel Analyzer. On contact and 1 foot radiation levels were measured using a Victoreen 450P pressurized ion chamber. Refer to the attached survey sheets for radiation level results. The 1 foot radiation results were used in conjunction with a thumb rule to calculate the activity of each item analyzed. Table (1) contains the activity amounts of each item. Wipe samples were taken on each item to determine if loose surface contamination is greater than Minimum Detectable Activity. Table (1) contains the results from the wipe samples taken. Refer to the attached survey sheets for the wipe test locations.

Occupational Services, Inc. recommends placing items that can be placed into a steel 55-gallon approved DOT 17H shipping drum. These drums can be attained from a licensed radioactive material hauler. When placing the items into the 55-gallon drums ensure the items are segregated by radionuclides, i.e. all the items containing Ra-226 are placed together. All the items contain loose surface contamination greater than the loose surface contamination limits, therefore place each item into a plastic bag to prevent spread of contamination. Some items may not be placed into the 55-gallon drums because of shape or size, in this case a larger approved DOT shipping container will be necessary. After the containers have been closed and sealed, attach a radioactive materials tag on the drum and fill out the activity amount of the container. Use Table (1) to calculate the total amount of activity placed into each drum.

Before shipping the radioactive materials, wipe surveys need to be taken on the outside of the shipping containers and analyzed for loose surface contamination.

NOTE: ITEMS CONTAIN LOOSE SURFACE CONTAMINATION LEVELS GREATER THAN THE LIMIT FOR LOOSE SURFACE CONTAMINATION. USE GLOVES AND CAUTION IN HANDLING EACH ITEM TO PREVENT SPREAD OF CONTAMINATION. IT IS RECOMMENDED THAT EACH ITEM BE PLACED INTO PLASTIC BAGS OR AN APPOPRIATE CONTAINER.

Sincerely,
Occupational Services, Inc.

George Hoskison
Health Physicist

6397 Nancy Ridge Drive • Suite B • San Diego, California • 92121
(858) 558-6736 • FAX (858) 558-6756 • www.occserv.com

State of Oregon
Health Division
Radiation Protection Services
(503)731-4014
FAX: (503)731-4081

FAX

This fax **may contain confidential information**. If you receive this FAX in ERROR, would you please take a moment to call us? Thank you.

DATE: 4/26/00

TO: Jim Jakubiak

FROM: Ed Wright

PAGES (including this cover page): 4

Message: Here is our list of consultants. You will still have to deal with a licensed broker for disposal.

State DOT – Doing Inspections of Shippers

Over 400 Liscenses www.dot.gov.
Left side icon
Regulations

SG/-N4/fax.snt*12/22/98-3:28

Oregon State Health Division
Radiation Protection Services
800 N.E. Oregon, Suite 260
Portland, OR 97232
(503) 731-4014 FAX: (503) 731-4081

DIRECTORY OF HEALTH PHYSICS CONSULTANTS

The following list of Health Physics Consultants located in the Pacific Northwest is provided as a service to licensees and other interested persons. Neither the State of Oregon or any of its agents make any certification or endorsement as to the expertise of any listed individual or company to perform the indicated services. The statements of offered services, qualifications and certifications are presented as they were submitted to the Radiation Protection Agency.

Companies are listed in ALPHABETICAL ORDER. This is not intended to be an exhaustive list. Names and addresses of other consultants may be added to this list upon their written request and submission of an approximate 25-word summary of their services.

Paul H. Brown, Ph.D.
Certified Medical Physicist
5730 S.W. 56th Avenue
Portland, Oregon 97221-1742
(503) 245-6964 (503) 273-5355
FAX: (503) 721-7883
Consultation in medical physics and mammography.

Cacak, Robert, Ph.D.
(b) (6) [redacted]
Salem, Oregon 97306
(503) 370-5294 (b) (6) [redacted]
Consultation in medical and health physics including: physics surveys of diagnostic radiographic equipment, calibration of teletherapy units, preparing radioactive materials licenses, general radiation safety consultation.

William V. Carlson, P.E.
CTI, Inc.
80 North West Street
P.O. Box 2453
Fernley, Nevada 89408
(702) 575-6511 weekdays (702) 575-6511 FAX
(702) 575-7075, evenings
(702) 750-5401, cell phone
carlassoc@aol.com
Provide radiation safety training to fulfill NRC and Agreement State requirements for operators of nuclear moisture/density gauges.

Martha G. Dibblee
(b) (6) [redacted]
Portland, Oregon 97202-8305
(503) 775-3843 / FAX: Call First (Same #)
Materials license applications, audits, training procedures and health & safety training

* R. E. Donelson
R. E. Donelson Company, Inc.
P.O. Box 68446
Portland, Oregon 97268
(503) 654-3137
Installation and training in principles of radiation safety of fixed gauging devices, radiation surveys and leak tests, emergency services, preparation for disposal of fixed gauging devices.

Norman C. Dyer, Ph.D.
OAR Services
(b) (6) [redacted]
Beaverton, Oregon 97005
(503) 643-1943 / FAX: (503) 524-6778
OAR Services provides assistance in radiation control and health physics. Areas of expertise include internal and external dosimetry, environmental monitoring, radiation instrumentation, radionuclide transport, nuclear medicine, accelerators, and decommissioning.

Rainier H. Farmer
(b) (6) [redacted]
Albany, Oregon 97321
(b) (6) [redacted]
Health physics services.

* John Fletcher, C.N.M.T.
Radiation Specialist
(b) (6) [redacted]
Gresham, Oregon 97080-9788
(503) 667-2968 / FAX: (503) 667-2968
Radioactive materials license application and renewal. Medical ALARA audits, regulatory compliance review. Nuclear medicine department start-up, instrument testing, radiation safety training, Clean Air Act compliance. Experience with NRC and Agreement state licensees.

Can't help
Al Kastalaim
OHSU
(503) 494-2583
Rainier Farmer
OSU

Janet Franco, C.N.M.T., M.S.
(b) (6)
Portland, Oregon 97219
(b) (6)
Health physics services and radiation safety training.

Robert Gunther, Radiochemistry Manager
Analytical Resources, Incorporated
333 Ninth Avenue, North
Seattle, Washington 98109-5187
(206) 621-6490 / FAX: (206) 621-7523
Radiochemistry analyses in mixed wastes, soil, air, sediments, tissue. Radiation safety training of persons using radioactive material.

Duane A. Hevly
(b) (6)
East Wenatchee, Washington 98802-4546
(509) 884-3210 / FAX: (509) 886-1814
Nuclear gauge operator training programs for radiation safety; specifically, fixed industrial and portable density/moisture.

Jack F. Higginbotham, Ph.D., CHP
(b) (6)
Corvallis, Oregon 97330
(b) (6)
FAX: NO FAX
Nuclear instrumentation, radiation detection and spectroscopy, radiation safety program administration, radioactive material license renewal and application, radiation regulations, standards and application, shielding analysis, and radiation worker training programs and methods.

Steven M. Herman
Stan A. Huber Consultants, Inc.
200 North Cedar Road
New Lenox, Illinois 60451-1751
(800) 383-0468 or (815) 485-6161
FAX: (815) 485-4433
E-mail: sahci@aol.com
Home Page: www.sahci.com
Services include radioactive waste management consulting, NORM consulting, decontamination-decommissioning services, radiation safety consulting, 24-hour emergency response services, licensing, regulatory compliance, radiation safety audits and training, nuclear equipment calibrations, leak testing, radiation surveys, contamination tests, risk assessment, environmental pathway analysis, and radiation safety and management training seminars.

Michael A. Kay
Ambry, Inc.
P.O. Box 22266
Milwaukie, Oregon 97222-0266
(503) 653-5899
Provides consulting in radioactive materials licensing, transporting, and disposal; assistance with radioactive materials programs, procedures and training for industry and academia.

Nancy P. Kirner, CHP
Kirner Consulting, Inc.
6108 Nahane West, N.E.
Tacoma, Washington 98422-4225
(206) 927-3663 (voice)
(206) 924-1177 (FAX)
E-mail: NancyK55@aol.com
General health physics services including radioactive materials licensing; enviornmental monitoring program design and/or implementation; radioactive, hazardous, and mixed waste identification, characterization, minimization, and management; NORM; radiological air permitting; training; ALARA; and audits. In addition, provides consultation on ISO 14000 compatible environmental management system development and implementation.

William Mancuso
or Robin Christie
Pacific Nuclear Technology
2545 West Tenth Street, Suite N
Antioch, California 94509
(510) 706-8300
FAX: (510) 706-8396
Sales, service including removal and installation of sealed sources, user and radiation safety officer training, consulting, and leak test analysis of wipes for portable and fixed moisture/density gauges.

Ross Mercer
Health Physics Northwest
11535 S.W. 67th
Tigard, Oregon 97223
(503) 620-6617
(800) 762-8444
Personnel monitoring, X-ray calibration, radiation surveys, radon monitoring, nuclear medicine, licensing assistance, quality assurance, training orientation, shielding specifications shielding materials, instrument sales, calibration and repair.

Doris A. Minor
Attenuation Environmental Company
3417 Fremont Avenue North, Suite 317
Seattle, Washington 98103-8811
(206) 633-3208 (206) 545-1462 FAX
Email: nuclear@aecnuclear.com
Provides radioactive material and waste engineering and regulatory services in Northwest region. Engineering and consulting services with respect to hazardous, toxic, and mixed waste characterization, treatment, and management as well as performing environmental assessment, characterization, remediation and restoration (U.S. EPA & U.S. NRC). Regulatory liaison, health physics guidance, permitting and licensing assistance, and closure and decommissioning planning. Background includes advanced degree in Nuclear Engineering and almost 15 years in the nuclear and environmental fields.

Marshall W. Parrott, Sc.D. $100/hour
Radiation Counseling
10390 S.W. Cynthia Street
Beaverton, Oregon 97008-6032
(503) 646-7694
Qualified for training. JCAH diagnostic X-ray measurements, shielding designs, ACR mammographic surveys, radiation source location and recovery, radioactive material licensing assistance and industrial radiation surveys.

Jim Randle, C.N.M.T.
SAA, Nuclear Medicine Consulting Services
2357 NW Fairlawn Street
Corvallis, Oregon 97330
(541)753-5326 / FAX: (541)757-5048
Qualified expert - Nuclear medicine services

Steven R. Reese, Ph.D.
(b) (6)
Corvallis, Oregon 97330
(b) (6) home)
(541) 737-7046 (OSU)
FAX: (541) 737-0480 (OSU)
Radiation safety program audits, radiation shielding calculations, waste disposal issues, radiation dosimetry, environmental transport and general waste handling.

Joan E. Stovall, Certified Health Physicist
(b) (6)
Portland, Oregon 97223
(b) (6)
Internal and external radiation dosimetry, shielding design, ALARA exposure reduction, litigation assistance, evaluation of airborne discharges.

David A. Sweitzer
TEAM Support Services, Inc.
800 N.W. Starker, Suite 14
Corvallis, Oregon 97330
(541) 753-5919 FAX: (541) 753-8326
Consulting for research and development firms including facility design, health physics, facility O&M, laboratory safety, and hazardous materials management.

Tuttle, William K. III, Ph.D.
(b) (6)
Lake Oswego, Oregon 97035
(b) (6)
Health physics services, medical physics services

Winans, Lawrence F., Ph.D.
(b) (6)
Beaverton, Oregon 97005
(b) (6)
X-ray machine safety surveys, shielding analysis, radioactive materials license counseling, training, JCAH hospital compliance reviews, executive board safety summaries, dosimetry planning, radiation database organization/preparation.

I:\rad\bob\lists\consulta.lst*April 26, 2000
Updated:April 26, 2000 (3:23pm)

NRC FORM 541

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT

CONTAINER AND WASTE DESCRIPTION

1. MANIFEST TOTALS

NUMBER OF PACKAGES / DISPOSAL CONTAINERS	NET WASTE VOLUME (m3/ft3)	NET WASTE WEIGHT (kg/lbs)	SPECIAL NUCLEAR MATERIAL (grams) U233	U235	Pu	TOTAL
3	3.0139 m³	2372 kg				

ACTIVITY (mCi) ALL NUCLIDES	TRITIUM	C14	Tc-99	I129	SOURCE (kg)
175.8732 MBq	#N/A	#N/A	#N/A	#N/A	0.468
4.7533 mCi	#N/A	#N/A	#N/A	#N/A	

2. MANIFEST NUMBER 4186

3. PAGE 1 OF 1 PAGE(S)

4. SHIPPER NAME Schnitzer Steel Industries, Inc

SHIPPER ID NUMBER ~~ORR 9997 534 29~~ ORR 99 97 53428

5. CONTAINER ID NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (SEE NOTE 1)	7. VOLUME (m3/ft3)	8. WASTE & CONTAINER WEIGHT (lb/kg)	9. SURFACE RADIATION LEVEL (mR/hr / mSv/hr)	10. SURFACE CONTAMINATION (1/100cm2) ALPHA	BETA-GAMMA	PHYSICAL DESCRIPTION 11. WASTE DESCRIPTOR (SEE NOTE 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER	13. SORBENT, SOLIDIFICATION, STABILIZATION MEDIA (SEE NOTE 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM / CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITIES (MBq) AND CONTAINER TOTAL ACTIVITY AND CONTAINER TOTAL ACTIVITY AND	MBq	mCi	kg	16. WASTE CLASSIFICATION AS ALL
D1	4	2.7636 m³	1600 lb kg	0.005	<1.67e-5	<1.67e-5	33	2.7636	100	solid / contaminated metal & pipes	NP	Th230	2.0461	0.0553		AU
			lb kg									Ra226	2.442	0.066		
												Nat U	9.37321	0.25333	357	
												Drum Total	13.86131	0.37463		
D2	4	0.2124 m³	224 lb kg	0.005	<1.67e-5	<1.67e-5	33	0.2124	100	solid / contaminated gauges	NP	Th230	0.185	0.005		
			lb kg									Ra226	12.802	0.346		
												Nat U	2.9119	0.0787	111	
												Drum Total	15.8989	0.4297		
D3	4	0.0379 m³	548 lb kg .05		<1.67e-5	<1.67e-5	35	0.0379	100	solid / sealed source	NP	Sr90	159.1	4.3		
												Drum Total	159.1	4.3		
			lb kg													
			lb kg													
			lb kg													
			lb kg													
			lb kg													
			lb kg													
			lb kg													

NOTE 1: Container Descriptor Codes. For containers/ waste requiring disposal in approved structural overpacks the numerical code must be followed by "-OP".

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Decontaminator
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
19. Other. Describe in Item 6, or additional page

NOTE 2: Waste Descriptor Codes: (Choose up to three which predominate by volume)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-Exchange Media
31. Anion Ion-Exchange Media
32. Mixed Bed Ion-Exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed source/device
37. Paint or Plating
38. Evaporator Bottoms/Sludge/ Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal carcass)
43. Activated Material
99. Other. Describe in Item 11, or additional page

NOTE 3: For solidifiable media that meet disposal site structural stability requirements, the numeric code must be followed by "-S". For all solidification media, the vendor (manufacturer) and brand name must also be identified in Item 13. Code 100 = NONE REQUIRED.

Sorption
50. Speedi Dri
51. Celatom
52. Floor Dry/ Superfine
53. Hi Dri
54. Safe T Sorb
55. Safe N Dri
56. Floroc
57. Floroc X
58. Solid A Sorb
59. Chemdi 30
70. Chemdi 99
71. Chemdi 3000
72. Dicapel HP200
73. Dicapel HP400
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
80. Other. Describe in Item 13 or additional page

Solidification
90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ether Styrene
99. Other. Describe in Item 13, or additional page
100. None Required

SCHN00242955

NRC FORM 540 — U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

N2032

1. EMERGENCY TELEPHONE NUMBER (Include Area Code): (714) 997-8090
ORGANIZATION: Thomas Gray & Associates, Inc.

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? [X] YES [ ] NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ——> 3

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes" provide Manifest Number ——> NO

EPA MANIFEST NUMBER:

5. SHIPPER - NAME AND FACILITY
Schnitzer Steel Industries, Inc
P.O.Box 10047
Portland, OR 97296

USER PERMIT NUMBER: 62122 | SHIPMENT NUMBER: 1
CONTACT: Jim Jakubiak
TELEPHONE NUMBER: 503 / 286-6976

6. CARRIER - Name and Address
Thomas Gray & Associates, Inc.
1205 W. Barkley Ave
Orange, CA 92868
CONTACT: Rich Gallego
TELEPHONE NUMBER: 714/997-8090
SIGNATURE: [signature] DATE: 5-23-01

SHIPPER EPA ID NUMBER: CAD 020 210 407
[X] COLLECTOR [ ] PROCESSOR
[M] (Specify)
EPA I.D. NUMBER: CAD 068 151 648
SHIPPING DATE: 05/23/01

7. NRC FORM 540 AND DATA — PAGE 1 OF ___ PACKAGE(S)
NRC FORM 541 AND DATA — PAGE 1 OF ___ PACKAGE(S)
NRC FORM 542 AND DATA — PAGE 1 OF ___ PACKAGE(S)
ADDITIONAL INFORMATION — PAGE 1 OF ___ PACKAGE(S)

8. MANIFEST NUMBER: 4186

9. CONSIGNEE - Name and Facility Address
Thomas Gray & Associates, Inc.
1205 W. Barkley Ave
Orange, CA 92868
CONTACT: Rich Gallego
TELEPHONE NUMBER (Include Area Code): 714/997-8090
SIGNATURE: [signature] DATE: 5/25/01

10. CERTIFICATION. This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are packaged, marked, and labeled and are in proper condition for transportation disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE: [signature] TITLE: [illegible] DATE: 5/25/01

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN/ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANS. INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY (Bq)	17. LSA/SCO CLASS	18. TOTAL WEIGHT	19. PACKAGE I.D. NUM
Radioactive Material, LSA, n.o.s., 7, UN 2912	N/A	N/A	solid / contaminated metal & pipes	Th230, Ra226, Nat U	13.85131 MBq 0.37463 mCi	LSA II	lb kg	D1
Radioactive Material, LSA, n.o.s., 7, UN 2912	N/A	N/A	solid / contaminated metal & gagues	Th230, Ra226, Nat U	15.8559 MBq 0.4297 mCi	LSA II	2.24 lb kg	D2
Radioactive Material, LSA, n.o.s., 7, UN 2912	N/A	N/A	solid / sealed source	Sr90	159.1 MBq 4.3 mCi	LSA II	54 lb kg	D3
					MBq mCi		lb kg	
					MBq mCi		lb kg	
					MBq mCi		lb kg	
					MBq mCi		lb kg	
					MBq mCi		lb kg	
					MBq mCi		lb kg	
					MBq mCi		lb kg	
					MBq mCi		lb kg	

FOR CONSIGNEE USE ONLY

SCHN00242956

Weighmaster: **SCHNITZER STEEL PRODUCTS - PORTLAND**
Weighed at : 12005 NORTH BURGARD
PORTLAND, OR 97203
800-888-5771

Certified Public Scale

MEMO WEIGHT CERTIFICATE

Date 05-23-01 Time 10:45

WEIGHED ON OUTBOUND SCALE

1600
224
548
2372

WEIGHTS

GROSS	39480 lbs	
TARE	37880 lbs	
NET	1600 lbs	— weight on large blue box.

Product out Questions Jim J

FORKLIFT/

DRIVERS COPY

3497

Weighmaster: **SCHNITZER STEEL PRODUCTS - PORTLAND**
Weighed at : 12005 NORTH BURGARD
PORTLAND, OR 97203
800-888-5771

Certified Public Scale

MEMO WEIGHT CERTIFICATE

Date 05-23-01 Time 10:45

WEIGHED ON OUTBOUND SCALE

WEIGHTS

GROSS	39480 lbs
TARE	37880 lbs
NET	1600 lbs

Product out Questions per Jim J.

FORKLIFT/

HOUSE COPY

3497

SCHN00242957

1205 West Barkley Avenue
Orange, CA 92868

714-997-8090
714-997-3561 (fax)

Thomas Gray & Associates, Inc.

Fax

To:	Jim Juakubiak	**From:**	Louie Cueva
Company:	Schnitzer Steel	**Pages:**	9
Fax:	503 / 286-6948	**Phone:**	
Re:	**Packing of Waste**	**Date:**	May 18, 2001

☐ **Urgent** ☑ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

• **Comments:** Also attached are the manifest and the item descriptions that I used. If you have any questions feel free to call.

Items to be packed in the 98 ft^3 bin:
- Item 2 (3 pcs)
- Item 4 (4 pcs) #'s 5, 6, 8, 11
- Item 8
- Item 25
- Items 27-34

Items to be packed in the 55-gallon drum:
- Item 1
- Item 3
- Item 4 (10 pcs) #'s 1-4, 7, 9, 10, 12-14
- Item 5 (3 pcs)
- Item 6-7
- Items 9-19
- Items 21-24
- Item 26

Items to be packed in the 10gal 7A drum:
- Item 20

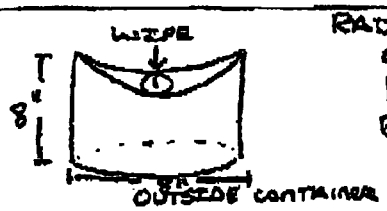
RADIATION CONTAMINATION SURVEY

Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

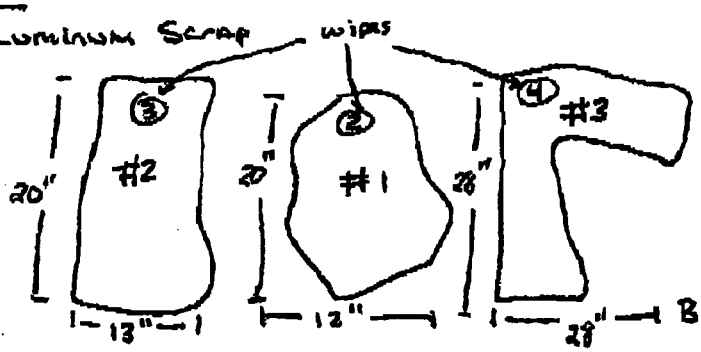
#1 = 815 - Th-230
#2 = 1142 - Th-230
#3 = 1605 - Th-230
#4 = 1128 - Th-230
#5 = 3010 U-ORE
#6 = 1335 U-ORE
#7 = 1387 U-ORE
#8 = 805 U-ORE

ITEM #1
LANTERN MANTELS
Th-230



RADIATION LEVELS:
on contact: 90 μR/hr
1 foot away: 30 μR/hr
BKG = 10 μR/hr

ITEM #2
3 pcs. ALUMINUM SCRAP
Th-230

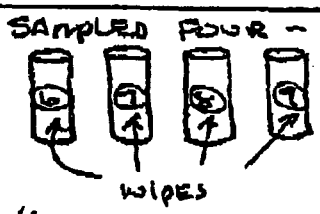


RADIATION LEVELS
on contact
#1 = 480 μR/hr
#2 = 390 μR/hr
#3 = 280 μR/hr
1 foot away:
#1 = 120 μR/hr
#2 = 95 μR/hr
#3 = 110 μR/hr
BKG = 10 μR/hr

ITEM #3
STEEL PIPE - crushed
URANIUM ORE

RADIATION LEVELS:
on contact = 45 μR/hr
1 foot away = 30 μR/hr
BKG = 10 μR/hr

ITEM(S) #4
BATCH OF STEEL PIPE
TOTAL OF 14 pcs.
URANIUM ORE



AVG RADIATION LEVELS:
on contact: 120 μR/hr
1 foot away = 40 μR/hr
each pipe
BKG = 10 μR/hr

335"

3" DIAMETER EACH

PC #	LENGTH (inches)		PC #	LENGTH (inches)	
1	22	.00755	7	15	.005143
2	16	.00549	8	32	.0109824
3	18	.0061776	9	17	
4	15	.005148	10	14	
5	40	.013728	11	41	.0140712
6	48	.01647	12	22	
			13	16	
			14	19	

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

0597

SCHN00242963

RADIATION CONTAMINATION SURVEY

Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

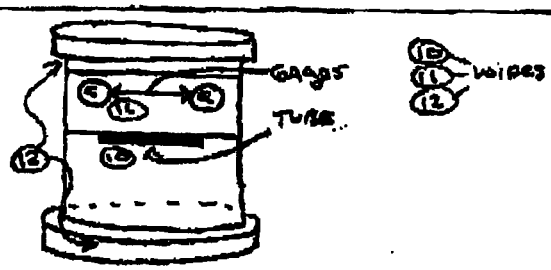
#10 = 723 = Ra-226
#11 = 1657 = Ra-226
#12 = 1957 Ra-226
#13 = 16443 Ra-226
#14 = 1652 Ra-226
#15 = 2103 Ra-226
#17 = 191 Ra-226
#18 = 3207 Ra-226

ITEM #5

NAVY GYROSCOPE – DIALS & TUBE

Ra-226

RADIATION LEVELS:
DIALS: ON CONTACT: 110 μR/hr
1 FOOT: 45 μR/hr
TUBE: ON CONTACT: 120 μR/hr
1 FOOT: 50 μR/hr



BKG AND REST OF STAND 10 μR/hr

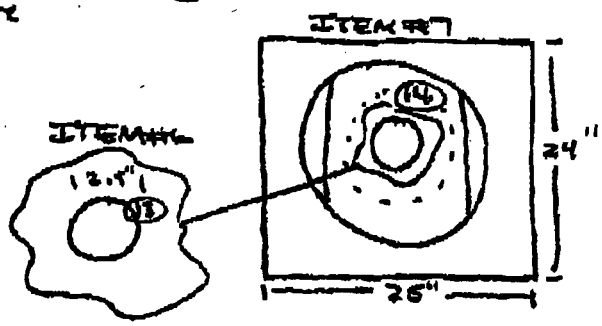
ITEM #6 & #7

#6 = DISC FROM STEEL PLATE
#7 = STEEL PLATE

Ra-226 (ITEM #6 ONLY)

RADIATION LEVELS:
ITEM #6:
ON CONTACT = 1.34 mR/hr
1 FOOT AWAY = 160 μR/hr
ITEM #7:
ON CONTACT = 10 μR/hr
1 FOOT AWAY = 10 μR/hr
BKG = 10 μR/hr

(13) & (14) = WIPES



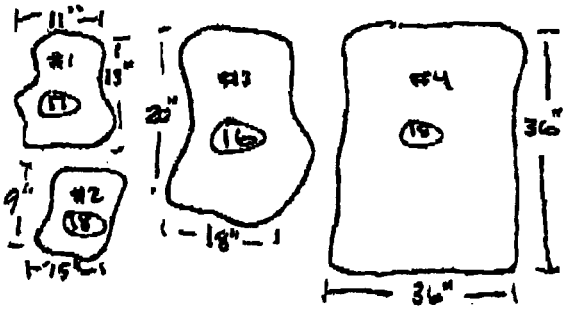
NOTE: WITH DISC REMOVED FROM STEEL PLATE – STEEL PLATE CONTAINS NO RADIONUCLIDE.

ITEMS #9

TIN SCRAP (4 pcs)

Ra-226

AVG. RADIATION LEVEL (EACH)
ON CONTACT = 210 μR/hr
1 FOOT AWAY = 100 μR/hr
BKG = 10 μR/hr



(15) → (18) – WIPES

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

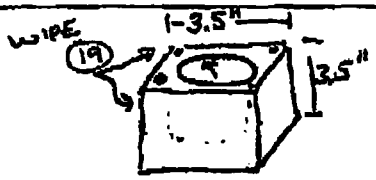
RADIATION CONTAMINATION SURVEY

Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

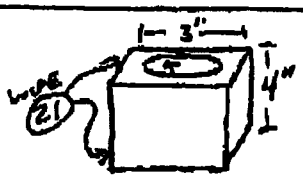
#19 = 4530 Ra-226
#20 = N/A
#21 = 25700
#22 = 1,280,137
#23 = 83,793
#24 = 6793
#25 = 2150
#26 = 13,103
#27 = 3933

ITEM #9
DIAL (ALTIMETER)
Ra-226



RADIATION LEVELS:
ON CONTACT = 450 mr/h
1 FOOT AWAY = 115 mr/h
BKG = 10 mr/h

ITEM #10
COMPASS (DIAL)
Ra-226



RADIATION LEVELS:
ON CONTACT = 480 mr/h
1 FOOT AWAY = 130 mr/h
BKG = 10 mr/h

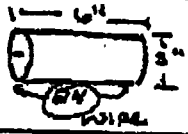
ITEM #11
DIAL - RPM INDICATOR
Ra-226

RADIATION LEVELS:
ON CONTACT = 300 mr/h
1 FOOT AWAY = 130 mr/h
BKG = 10 mr/h

ITEM #12
DIAL - RPM INDICATOR
Ra-226

RADIATION LEVELS
ON CONTACT = 200 mr/h
1 FOOT AWAY = 60 mr/h
BKG = 10 mr/h

ITEM #13
DIAL - FLIGHT LEVEL
Ra-226

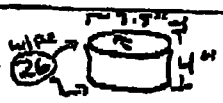


RADIATION LEVELS:
ON CONTACT: 500 mr/h
1 FOOT AWAY = 180 mr/h
BKG = 10 mr/h

ITEM #14
DIAL - Fuel gage
Ra-226

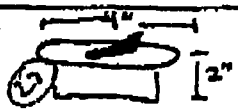
RADIATION LEVELS:
ON CONTACT = 350 mr/h
1 FOOT = 80 mr/h
BKG = 10 mr/h

ITEM #15
DIAL - COMPASS
Ra-226



RADIATION LEVELS:
ON CONTACT = 250 mr/h
1 FOOT = 60 mr/h
BKG = 10 mr/h

ITEM #16
Ra-226
TOGGLE SWITCH



RADIATION LEVELS
ON CONTACT = 110 mr/h
1 FOOT = 40 mr/h
BKG = 10 mr/h

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

RADIATION CONTAMINATION SURVEY

Schnitzer Steel Industries
Sample No. DPM/100cm^2

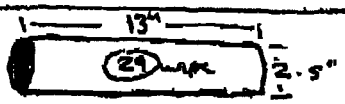
All samples < MDA (background) except:

#20 = 17,787 Ra-226
29 = 3397
30 = 6844
31 = 1504 Sr-90
32 = 2110 Ra-226
33 = 1060
34 = 3667
35 = 4330
36 = 5027

ITEM #17.
DIAL: SPEEDOMETER
Ra-226

RADIATION LEVELS:
ON CONTACT = 300 mr/h
1 FOOT = 80 mr/h
BKG = 10 mr/h

ITEM #18.
PLASTIC TRANSDUCER
Ra-226



RADIATION LEVELS
ON CONTACT = 240
1 FOOT = 90 mr/h
BKG = 10 mr/h

ITEM #19.
DIAL -
Ra-226

RADIATION LEVELS
ON CONTACT = 300
1 FOOT = 100 mr/h
BKG = 10 mr/h

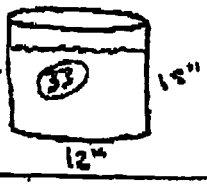
ITEM #20.
SOURCE - DESK
Sr-90

RADIATION LEVELS:
ON CONTACT = 2.3 mr/h
1 FOOT AWAY = 0.4 mr/h
BKG = 0.01 mr/h

ITEM #21
BUCKET OF DIRT
Ra-226

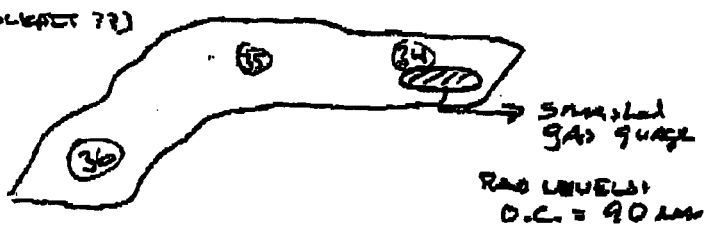
RADIATION LEVELS:
ON CONTACT = 80 mr/h
1 FOOT AWAY = 30 mr/h
BKG = 10 mr/h

ITEM #22
BUCKET OF DIRT
Ra-226



RADIATION LEVELS
ON CONTACT = 90 mr/h
1 FOOT = 40 mr/h
BKG = 10 mr/h

ITEM #23
SCRAP METAL (COLLECT 72)
Ra-226



RAD LEVELS:
O.C. = 90 mr/h
1 FOOT = 40 mr/h

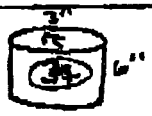
Survey Date: 7-17-00 Survey Conducted By: George Hoskison

RADIATION CONTAMINATION SURVEY

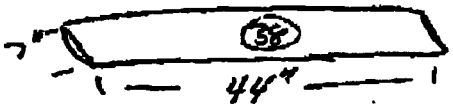
Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

#37 = 17070 Ra226
38 = 1910 U-ORE
39 = 2847
40 = 3022
41 = 3930
42 = 2880
43 = 510
44 = 1538

ITEM # 24
DEAL - Gas gage
Ra-226


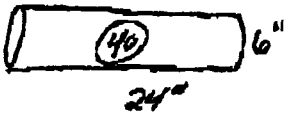
RADIATION LEVELS:
O.C. = 400 mr/hr
1 foot = 150 mr/hr
BKG = 10 mr/hr

ITEM # 25
PIPE - STEEL
URANIUM ORE


RADIATION LEVELS:
O.C. = 90 mr/hr
1 foot = 60 mr/hr
BKG = 10 mr/hr

ITEM # 26
Rubber PIPE w/ METAL PLATE
URANIUM ORE

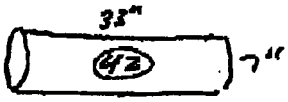
RADIATION LEVELS:
O.C. = 150 mr/hr
1 ft = 60 mr/hr
BKG = 10 mr/hr

ITEM # 27
STEEL PIPE
URANIUM ORE


RADIATION LEVELS
O.C. = 200 mr/hr
1 ft = 80 mr/hr
BKG = 10 mr/hr

ITEM # 28
STEEL PIPE
URANIUM ORE

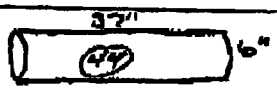
RADIATION LEVELS
O.C. = 90 mr/hr
1 ft = 60 mr/hr
BKG = 10 mr/hr

ITEM # 29
STEEL PIPE
URANIUM ORE


RADIATION LEVELS
O.C. = 120 mr/hr
1 ft = 65 mr/hr
BKG = 10 mr/hr

ITEM # 30
STEEL PIPE
URANIUM ORE

RADIATION LEVELS
O.C. = 150 mr/hr
1 ft = 80 mr/hr
BKG = 10 mr/hr

ITEM # 31
STEEL PIPE
URANIUM ORE


RADIATION LEVELS:
O.C. = 180 mr/hr
1 ft = 80 mr/hr
BKG = 10 mr/hr

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

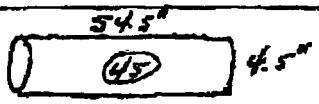
RADIATION CONTAMINATION SURVEY

Schnitzer Steel Industries
Sample No. DPM/100cm^2

All samples < MDA (background) except:

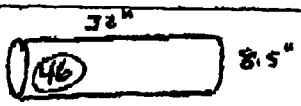
#45 = 1197 U-Dec
46 = 777
47 = 3805
48 = 367 Unknown

ITEM # 32
STEEL PIPE
URANIUM ORE



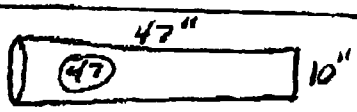
RADIATION LEVELS
O.C. = 140 mr/hr
1 ft = 100 mr/hr
BKG = 10 mr/hr

ITEM # 33
STEEL PIPE
URANIUM ORE



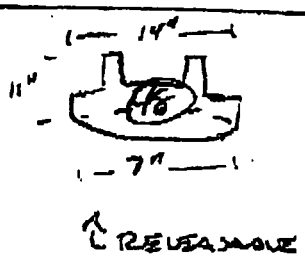
RADIATION LEVELS
O.C. = 1 mr/hr
1 ft = 0.2 mr/hr
BKG = 0.01 mr/hr

ITEM # 34
STEEL PIPE
URANIUM ORE



RADIATION LEVELS:
O.C. = 140 mr/hr
1 ft = 85 mr/hr

ITEM # 35
LEAD STAND
NO INDICATION



RADIATION LEVELS
O.C. = 10 mr/hr
1 ft = 10 mr/hr
BKG = 10 mr/hr

Survey Date: 7-17-00 Survey Conducted By: George Hoskison

SCHNITZER STEEL PRODUCTS CO.

12005 N. Burgard St. Portland, Oregon 97203
P.O. Box 10047 Portland, Oregon 97210
Phone 503/286-5771 FAX 503/286-6948

SCRAP DIVISION
FAX TRANSMITTAL COVER SHEET

TO: Rich Gallego
Thomas Gray & Associates, Inc.

DATE: May 16, 2001

NUMBER OF PAGES BEING SENT (INCLUDING COVER PAGE) _____

FROM: Jim Jakubiak

If message is incomplete or illegible, please call (503) 286-5771.

If you want to send a Fax to Schnitzer Steel, our Fax Number is (503) 286-6948.

RE: Attached are the Permits and facility generator number documents you requested. Also I'd just like to confirm our recent telephone conversation about payment for transport and disposal of this load of material. Based on our conversation, I will give the Thomas Gray & Assoc. driver a check for $10,000 when the material is picked up. This payment will cover all disposal and transportation costs associated with this material as outlined in your March 22, 2001 FAX proposal.

10 gal - 54 lbs
55 gal - 224 lbs
Box -

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: N2032

EXPIRATION DATE 3/31/2002

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242970

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G2122

EXPIRATION DATE 2/28/2002

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242971

US Ecology

Radioactive Waste Generator Registration

Please Print or Type

(1) Generator Name: Schnitzer Steel Products Co.

(2) Corporate Billing Address: P.O. Box 10047

City: Portland State: Oregon

Zip Code: 97296 - 0047

(3) Generating Facility Address: International Terminals

12005 N. Burgard

City: Portland County: Multnomah

State: Oregon Zip Code: 97203

(4) Generator Administrative Contact: Jim Jakubiak

Generator Administrative Title: Environmental Administrator

	Generator Telephone:	After Hours Telephone:
Working Hours	(503) - 286 - 6976	(503) - 519 - 4795

Fax No. (503) - 286 - 6948

(5) Site Use Permit number(s) N2032

(6) Description of Business: Scrap Metal Recycler

(7) Please indicate your 4 digit Standard Industry Code (SIC) here: 5093

(8) Will you be using the services of a broker (Transporter) in shipping wastes to US Ecology for disposal:

☐ No ☒ Yes

Name of Broker (Transporter): Thomas Grey & Associates Broker Permit # B900

(9) How much waste do you expect to ship during a typical 12 Month Period: ~2 Cu.Ft.

RETURN COMPLETED FORM TO:

US ECOLOGY, INC
Laura Lee Harry
P.O. Box 638
Richland, WA 99352-0638
Fax (509) 377-2244

Signature: James L. Jakubiak (503) 286-6976

Print Name: James L. Jakubiak

Title: Environmental Administrator

Date: December 14, 2000

FOR OFFICIAL USE ONLY

ORR-99-975-3428 KW 5/14/01
ORR-99-975-3429-G2122

SCHN00242972

1205 West Barkley Avenue
Orange, CA 92868

714-997-8090
714-997-3561 (fax)

Thomas Gray & Associates, Inc.

Fax

To:	Jim Jakubiak	**From:**	Rich Gallego REG
Company:	Schnitzer Steel Industries, Inc.	**Pages:**	1
Fax:		**Phone:**	503/286-6976
Re:	**Quote**	**Date:**	March 22, 2001 (30 days)

Revisit before shipping

☐ **Urgent** ☑ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

• **Comments:**

Disposal*	$ 10,000.00	
Pickup & Transportation (if done in conjunction with milk run)	$ 1,000.00	(May 2001) Next Milk Run
Dedicated Shipment	$ 2,500.00	
Supplies (FOB Orange, CA)		
B-25 Metal Box	$ 1,000.00	98 ft^3
55-gal Open Top Metal Drum	$ 40.00	7.5 ft^3
10-gal 7-A Drum (SR 90)	$ 40.00	1.34 ft^3

*Disposal of the various contaminated equipment and the Sr90 source referenced in the fax sent by George Hoskison from Occupational Services on March 19, 2001

Quote valid for 30 days.

CHECK REQUEST FORM

VENDOR NO. _____ BANK _____ COMPANY Schnitzer Steel Products Co.

ISSUE CHECK TO: Thomas Gray & Associates, Inc.
1205 West Barkley Avenue
Orange, CA. 92868

INVOICE NO. _____ DESCRIPTION Please put on the check " Preparation, Transportation and Disposal of Radioactive Materials".

DATE 4/20/01

AMOUNT $10,000

DUE DATE 5/15/01

COMMENTS This check is being issued so a contractor can prepare, transport and dispose of radioactive materials currently in SSP possession.

SIGNATURES

PREPARED BY _____

AUTHORIZATION _____

AUTHORIZATION _____

G/L DISTRIBUTION

DESCRIPTION	ACCOUNT NO	AMOUNT
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__

CHECK AMOUNT _____

SPECIAL HANDLING INSTRUCTIONS Please send the check to me the first or second week in May 2001. I will forward to Thomas Gray and arrange for material pickup.

REV. 1/90

SCHN00242991

CHECK REQUEST FORM

VENDOR NO. _____ BANK _____ COMPANY Schnitzer Steel Products Co.

ISSUE CHECK TO: State of Washington

INVOICE NO. Not Applicable

DATE April 20, 2001

AMOUNT $800.00

DUE DATE April 25, 2001

DESCRIPTION This check will be used to obtain a Site Use Permit for disposal of MARM and Low Level radioactive Waste at US. Ecology's Facility in Hanford Washington

COMMENTS Put on the check - " Site Use Permit Fee"

SIGNATURES

PREPARED BY Jim Jakubiak

AUTHORIZATION [illegible]

AUTHORIZATION [illegible]

G/L DISTRIBUTION

DESCRIPTION	ACCOUNT NO	AMOUNT
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__

CHECK AMOUNT _____

SPECIAL HANDLING INSTRUCTIONS Please send the check to Jim Jakubiak who will hand deliver with application to the WA. Dept. of Ecology.

REV. 1/90

SCHN00242992

CHECK REQUEST FORM

VENDOR NO. _____ BANK _____ COMPANY Schnitzer Steel Products Co.

ISSUE CHECK TO: Thomas Gray & Associates, Inc
1205 West Bickley Avenue
Orange, California 92868

INVOICE NO. _____ DESCRIPTION Please put on the check
DATE 4/20/01 " Waste Shipping Container Purchase".
AMOUNT $2,080.00
DUE DATE 4/25/01

COMMENTS This check is being issued for the purchase radioactive waste shipping containers. Payment is due prior to receiving equipment.

SIGNATURES

PREPARED BY [signature]
AUTHORIZATION [signature]
AUTHORIZATION _____

G/L DISTRIBUTION

DESCRIPTION	ACCOUNT NO	AMOUNT
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__
	___-___-___-___-___-___	$___,___,___.__

CHECK AMOUNT _____

SPECIAL HANDLING INSTRUCTIONS Please send the check to Jim Jakubiak who will mail the check along with a letter describing project instructions.

REV. 1/90

SCHN00242993

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G2122

EXPIRATION DATE: 2/28/2005

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00242995

US Ecology, Inc.
P.O. Box 638
1777 Terminal Drive
Richland,Washington 99352

509/946-4945
Fax: 509/946-5495

www.americanecology.com

USEcology
an American Ecology company

February 11, 2004

James L. Jakubiak
Schnitzer Steel Products Co.
P.O. Box 10047
Portland, OR 97296-0047

Re: Site Availability Charge for Disposal of Low-Level Radioactive Waste (LLRW)

Enclosed is the 2004 Site Availability invoice for Site Use Permit No. G2122. This annual charge for the availability of and access to US Ecology's Richland, WA disposal facility is authorized in tariffs filed with and approved by the Washington Utilities and Transportation Commission. A copy of this tariff was provided in correspondence dated December 1, 2003. This charge is by US Ecology, Inc. as the site operator and is not associated with charges from the Washington State Department of Ecology for issuance of the Site Use Permit. Also, this Site Availability Charge is separate from the charges for the disposal of LLRW.

In October of 2003, we requested generators with current Site Use Permits to return annual projections of LLRW disposal needs. For generators who did not return projections, we have estimated their disposal needs for the coming year based upon previous years. The 2004 Site Availability Charge is based upon these annual projections.

The enclosed invoice also reflects any adjustments for the 2003 Site Availability Charge. In the event the Site Availability Charge based upon projections for 2003 was greater than actual totals for 2003, the overcharge is credited to your 2004 charge. Any undercharge is added to the 2004 charge.

In the event the Site Use Permit is not renewed for 2004, please contact this office. If the Site Use Permit is not renewed, refunds will be issued in instances where payments exceeded the actual charges for 2003. Any undercharges will still be due.

If additional information is required please contact:

Tray Caldwell
Telephone (509) 946-4945
Facsimile (509) 946-5495
Email tcaldwell@americanecology.com

Recycled Paper

US Ecology, Inc.
P.O. Box 638
1777 Terminal Drive
Richland,Washington 99352

509/946-4945
Fax: 509/946-5495

www.americanecology.com

USEcology
an American Ecology company

INVOICE

Invoice No. R405783
Date 2/17/2004

Shipper ID RS003186
Order Type Invoice
Customer ID 998512

JAMES L. JAKUBIAK
SCHNITZER STEEL PRODUCTS CO
P.O. BOX 10047
PORTLAND, OR 97296-0047

RICHLAND
40680RN

TERMS: net 30

Please remit checks to:
P.O. Box 26273
Salt Lake City, UT
84126-0273

Please wire to:
Bank: Wells Fargo Bank, N.A. Boise, ID
ABA: 121000248 Account # 5130000820
Account Name: AEC/Subsidiaries

DATE RECEIVED	PROFILE	GENERATOR	CUSTOMER PO	SALES PERSON
2/11/2004	SAC BLOCK 0	SCHNITZER STEEL PRODUC	SITE AVAILABILITY	

Manifest # N/A

Shipment # N/A Bates # N/A

DESCRIPTION	QTY	PRICE	EXT. PRICE
2003 SITE AVAILABILITY AS INVOICED	-1.0000	163.0000	-163.00
2003 WUTC REGULATORY FEE AS INVOICED	-163.0000	0.0050	-0.82
2003 ADJUSTED SITE AVAILABILITY	1.0000	164.0000	164.00
SITE AVAILABILITY CHARGE 2004	1.0000	169.0000	169.00
WUTC REGULATORY FEE (ON RATES & CHARGES)	333.0000	0.0100	3.33
BUSINESS & OCCUPATION TAX (ON RATES & CHARGES)	170.0000	0.0330	5.61

Approved: James L Jakubiak
Date: March 2, 2004
Issue: Disposal Permit

Sales Total	178.12
Shipping & Handling	0.00
Misc. Charges	0.00
Tax Total	0.00
	178.12
Less Paid Amount	0.00
TOTAL	178.12

Recycled Paper

US ECOLOGY, INC.
RICHLAND, WASHINGTON FACILITY
RADIOACTIVE WASTE DISPOSAL

DISPOSAL CHARGES
EFFECTIVE JANUARY 1, 2004
SCHEDULE A, TWENTIETH REVISION

Note: Rates in this Schedule A are subject to adjustment in accordance with the rate adjustment mechanism adopted in the Washington Utilities and Transportation Commission's Sixth Supplemental Order in Docket No. UR-950619 as extended by Commission Order in Docket Nos. UR-010623 and UR-010706.

A. SITE AVAILABILITY CHARGE

1. Rates

Block	Block Criteria	Annual Charge per Generator
0	No site use at all	$169
1	Greater than zero but less than or equal to 10 ft^3 and 50 mR/h	325
2	Greater than 10 ft^3 or 50 mR/h* but less than or equal to 20 ft^3 and 100 mR/h*	623
3	Greater than 20 ft^3 or 100 mR/h* but less than or equal to 40 ft^3 and 200 mR/h*	1,195
4	Greater than 40 ft^3 or 200 mR/h* but less than or equal to 80 ft^3 and 400 mR/h*	2,295
5	Greater than 80 ft^3 or 400 mR/h* but less than or equal to 160 ft^3 and 800 mR/h*	4,411
6	Greater than 160 ft^3 or 800 mR/h* but less than or equal to 320 ft^3 and 1,600 mR/h*	8,462
7	Greater than 320 ft^3 or 1,600 mR/h* but less than or equal to 640 ft^3 and 3,200 mR/h*	16,289
8	Greater than 640 ft^3 or 3,200 mR/h* but less than or equal to 1,280 ft^3 and 6,400 mR/h*	31,204
9	Greater than 1,280 ft^3 or 6,400 mR/h* but less than or equal to 2,560 ft^3 and 12,800 mR/h*	59,868
10	Greater than 2,560 ft^3 or 12,800 mR/h* but less than or equal to 5,120 ft^3 and 25,600 mR/h*	115,294
11	Greater than 5,120 ft^3 or 25,600 mR/h*	127,708

* For purposes of determining the site availability charge, mR/hour is calculated by summing the mR per hour at container surface of all containers received during the year.

2. Exemptions

a. As to waste which is generated for research, medical or educational purposes, educational research institutions shall be placed in a rate block for the site availability charge which is one (1) lower than what would otherwise apply through application of the block criteria shown above. ***"Educational research institution" means a state or independent, not-for-profit, post-secondary educational institution.***

b. As to waste which arises as residual or secondary waste from brokers' provision of compaction or processing services for others, if application of the block criteria shown above would place a broker in a rate block for the site availability charge which is greater than Block No. 7, such broker shall be placed in the rate block which is the greater of (i) Block No. 7, or (ii) the block which is two (2) lower than what would otherwise apply through application of the block criteria shown above. "Brokers" are those customers holding the "broker" classification of site use permits issued by the Department of Ecology.

3. Payment Arrangements

a. Initial Determination

Initial determination as to the applicable rate block for each customer shall be based on projections provided by customers prior to the beginning of each calendar year. For those customers who do not intend to ship waste to the facility during the calendar year (those assigned to block No. 0) and for those customers who are initially determined to fall into block Nos. 1-2, the entire site availability charge for the year will be due and payable as of January 1. For those customers who are initially determined to fall into block Nos. 3-8, the entire site availability charge will also be due and payable as of January 1, although those customers may make special arrangements with the Company to pay the charge in equal installments at the beginning of each calendar quarter. For those generators who are initially determined to fall in block Nos. 9-11, 1/12 of the site availability charge will be due and payable as of the beginning of each calendar month. These customers may pay in advance if they wish.

b. Reconciliation

The site availability charge is assessed on the basis of actual volume and dose rate of waste delivered during the calendar year. Assessment of additional amounts, or refunds of overpaid amounts, will be made as appropriate to reconcile the initial determination regarding applicable rate block with the actual volume and dose rates during the calendar year.

(OVER)

B. DISPOSAL RATES

1. Volume: $58.10 per cubic foot
2. Shipment: $10,550 per manifested shipment
3. Container: $4,700 per container on each manifest.
4. Exposure:

Block No.	Dose Rate at Container Surface	Charge per Container
1	Less than or equal to 200 mR/h	$ 213
2	Greater than 200 mR/h but less than or equal to 1,000 mR/h	15,150
3	Greater than 1,000 mR/h but less than or equal to 10,000 mR/h	60,690
4	Greater than 10,000 mR/h but less than or equal to 100,000 mR/h	90,500
5	Greater than 100,000 mR/h	1,520,000

EXTRAORDINARY VOLUMES

Waste shipments qualifying as an "extraordinary volume" under RCW 81.108.020(3) are charged a rate equal to 51.5% of the volume disposal rate.

NUCLEAR DECOMMISSIONING WASTE

The volume disposal rate applicable to waste from the decommissioning of nuclear generating units shall be 80% of those set forth above; provided, however, that such waste must satisfy the quantity requirements for "extraordinary volume" under RCW 81.108.020(3).

SCHEDULE B
Surcharges and Other Special Charges
Sixth Revision

ENGINEERED CONCRETE BARRIERS

72" x 8' barrier	$7,451.00 each
84" x 8' barrier	$8,955.00 each

SURCHARGE FOR HEAVY OBJECTS

The Company shall collect its actual labor and equipment costs incurred, plus a margin thereon of 25%, in handling and disposing of objects or packages weighing more than seventeen thousand five hundred (17,500) pounds.

SCHEDULE C
Tax and Fee Rider
Fourteenth Revision

The rates and charges set forth in Schedules A and B shall be increased by the amount of any fee, surcharge or tax assessed on a volume or gross revenue basis against or collected by US Ecology, as listed below:

Perpetual Care and Maintenance Fees	$1.75 per cubic foot
Business & Occupation Tax	3.3% of rates and charges
Site Surveillance Fee	$9.00 per cubic foot
Surcharge (RCW 43.200.233)	$6.50 per cubic foot
Commission Regulatory Fee	1.0% of rates and charges

-end-

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: N2032

EXPIRATION DATE: 3/31/2004

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00243001

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G2122

EXPIRATION DATE: 2/29/2004

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00243002

SCHNITZER STEEL PRODUCTS CO.

12005 N Burgard Road, Portland, Oregon 97203
P.O. Box 10047, Portland, Oregon 97296-0047
(503) 224-9900 FAX (503) 286-6948

March 19, 2003

Diane Hallisy
Nuclear Waste Program
P.O. Box 47600
Olympia, Washington 98504-7600

Re: Renewal of Site Use Permits to Dispose of Low-Level Radioactive and N.A.R. M. Waste – Disposal Site, Richland, Washington.

Dear Ms. Hallisy:

Attached are signed renewal applications for the disposal of N.A.R.M and Low-Level Radioactive Material at the disposal site in Richland, Washington. Each year we renew these applications in the event we inadvertently receive contaminated material from suppliers. Along with the applications is a check in the amount of $1,425.00.

I sincerely appreciate you assistance in completing these renewal applications. Should there be questions or comments regarding the completed forms or the accompanying payment, please call me at (503) 286-6976.

Sincerely,
Schnitzer Steel Products Co.

Jim Jakubiak
Environmental Administrator

STATE OF WASHINGTON
2003
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF LOW-LEVEL RADIOACTIVE WASTE AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE, RICHLAND, WASHINGTON

WASHINGTON STATE DEPARTMENT OF ECOLOGY

A. *Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.*

Schnitzer Steel Products Co.
GENERATOR'S NAME:

B. *Address where waste is generated. (YOU MUST INCLUDE THE 9-DIGIT ZIP-CODE OR PERMIT WILL NOT BE PROCESSED. Contact your local Post Office for further information.) Generators who own multiple facilities within the same state may apply for one permit if the same contact person within the generator's organization will be responsible for handling the waste shipments from the multiple facilities (attach a list of in-state facilities to the application). Otherwise, separate permits will be required. Facilities which are owned by the same generator but located in different states will require separate permits.*

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (OF CONTACT PERSON)
12005 North Burgard	P.O. Box 10047
Portland, Oregon 97203-6432	Portland, Oregon 97296-0047
CITY STATE ZIP CODE (9 DIGITS)	CITY STATE ZIP CODE (9 DIGITS)

C. *Name of contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: PERMITS WILL BE MAILED ADDRESSED TO CONTACT PERSON; ENSURE MAILING ADDRESS AND CONTACT NAME AGREE.)*

James L. Jakubiak — Environmental Administrator — (503) 286-6976 Ext —
(First) (M.I.) (Last) — TITLE — PHONE

D. *A Nuclear Regulatory Commission or agreement state license is required for activities involving the possession, use, ownership, or transfer of most radioactive materials. List all license numbers pertaining to materials to be disposed. If you do not have a license relating to the materials to be disposed, please explain fully in the space provided.*

NRC LICENSE #(S): _____ OR AGREEMENT STATE LICENSE # _____

EXPIRATION DATE(S): _____ EXPIRATION DATE: _____

IF YOU DO NOT HAVE EITHER LICENSE PLEASE EXPLAIN.
We keep a site use Permit active in the event we receive a piece of contaminated scrap metal that requires disposal. We do not generate contaminated material, but on rare occassion may receive material from suppliers.

E. *Type of permit you are applying for. If you possess a current permit, or previously had a permit that expired, please state your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. First-time applicants should enter projected volume of waste to be disposed during the period March through February of the coming year.*

X RENEWAL - SITE USE PERMIT # 62122 - VOLUME _____ (CU FT) ___ (YEAR)

___ FIRST-TIME APPLICANT - VOLUME PROJECTION (March - February) _____ (CU FT)

F. *Calculate the permit fee due using the enclosed fee schedule and indicate amount of fee enclosed.*

AMOUNT ENCLOSED $ 1425.00

G. *Do you use a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.*

YES X NO ___ - Thomas Gray & Associates, Inc. - B400
BROKER NAME(S) — BROKER'S SITE USE PERMIT #(S)

SCHN00243004

STATE OF WASHINGTON
2003
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF N.A.R.M. WASTES AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE RICHLAND, WASHINGTON

A. Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.

Schnitzer Steel Products Co.
APPLICANT'S NAME:

B. Address where waste is generated (MUST include the 9-digit Zip. Contact your Post Office to obtain your Zip Code).

12005 North Burgard Road 97203-6432 · P.O. Box 10047
ADDRESS WHERE WASTE IS GENERATED — MAILING ADDRESS (IF DIFFERENT)

Portland, Oregon 97203-6432 — Portland, Oregon 97296-0047
CITY STATE ZIP CODE (9 DIGITS) — CITY STATE ZIP CODE (9 DIGITS)

C. Name of the contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: Permits will be mailed addressed to contact person; ensure mailing address and contact name agree.)

James L. Jakubiak — Environmental Administrator — (503) 286-6976 Ext —
(FIRST) (M.I.) (LAST) — TITLE — PHONE

D. If this is a renewal of a site use permit please enter your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. Indicate if you are a first-time applicant.

✓ RENEWAL - SITE USE PERMIT # N2032 - VOLUME DISPOSED ____ (CU FT) ___ (YEAR)

___ FIRST-TIME APPLICANT

E. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in the next calendar year. DO NOT USE SCIENTIFIC NOTATION.

____ft³ ____ mCi NA

F. Calculate the permit fee due using the enclosed fee schedule and enter amount of fee enclosed. $ Ø

G. Types of N.A.R.M. wastes (e.g. pipe scale, decontamination waste, building rubble, etc.), and all radionuclides that you have approval to dispose of in Washington State.

1. See previous applications for waste types.
TYPES OF WASTES

2. See previous applications for waste types.
RADIONUCLIDES

H. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040 online at http://search.leg.wa.gov/wslwac/WAC%20246%20%20TITLE/WAC%20246%20-249%20%20CHAPTER/WAC%20246%20-249%20%20CHAPTER.htm).

NA CLASS A (%) CLASS B (%) CLASS C (%)

I. Do you u se a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.

YES X NO ___ - Thomas Gray & Associates, Inc. - B4ØØ
BROKER NAME(S) — BROKER'S SITE USE PERMIT #(S)

J. Do you have a specific radioactive materials license from the NRC or Agreement State? YES _____ NO X If yes, do you package your own radioactive waste? YES _____ NO X

K. If you operate under a general radioactive materials license who packages your waste for you?

Thomas Gray & Associates, Inc. — PACKAGER'S NAME

B400 — PACKAGER'S SITE USE PERMIT #

L. Please indicate the one specific type which best describes your facility:

1. FUEL CYCLE
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )
2. MEDICAL
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )
3. GOVERNMENT (NON-MEDICAL)
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )
4. INDUSTRIAL
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER (X)
5. ACADEMIC (NON-MEDICAL)
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

M. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State Site Use Permit number (if applicable) written on the check or money order. Please provide the following information:

NA — CHECK OR MONEY ORDER #

NA — NAME OF COMPANY ISSUING CHECK

N. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303 WAC, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK)	Tim Zeleniak
PRINTED NAME OF PERSON SIGNING	Tim Zeleniak
TITLE	Vice President Environmental Affairs
DATE OF SIGNATURE	3/18/03

O. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

P. Correspondence (other than application forms) may be addressed to:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

Telephone number for information is (360) 407-7109. Internet address is diha461@ecy.wa.gov .

PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

SCHNITZER STEEL PRODUCTS
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

STUB 1 OF 1

Check No. 145079

INVOICE NUMBER	INVOICE DATE	DESCRIPTION	AMOUNT	DISCOUNT	AMOUNT
100000120302	12/3/2002		1,000.00		1,000.00
4250010703	1/7/2003		425.00		425.00
		TOTALS	1,425.00	0.00	1,425.00

PLEASE DETACH BEFORE DEPOSITING

THIS CHECK HAS A GREEN AND BLUE BACKGROUND AS WELL AS AN ARTIFICAL WATERMARK ON THE BACK. THE BORDER IS MICROPRINTED AS A SAFETY PRECAUTION.

Bank of America, N.A.
Atlanta, Dekalb County, Georgia
Member F.D.I.C.
64-1278/611

Check No.
145079

SCHNITZER STEEL PRODUCTS
PO BOX 10047
PORTLAND OR 97296-0047
(503) 224-9900

PAY ONLY 1425 00 ONE FOUR TWO FIVE CTS CTS

DATE
3/18/2003

PAY ONE THOUSAND FOUR HUNDRED TWENTY FIVE AND 00/100 ********** $ ******1,425.00

TO THE ORDER OF
STATE OF WASHINGTON DEPT OF ECOLOGY
CASHIERING DEPT PO BOX 5128
LACEY WA 98509-5128

AUTHORIZED SIGNATURE

(b) (4)

ROADWAY EXPRESS, INC.
P.O. BOX 471, AKRON, OH 44309-0471 (RDWY) (EIN 34-0492670)

GR

RDWY P/U DATE	DESTINATION	RATE CODE	ITEM/TENDER NO.	PAGE
05-01-01	875-1	/A2	607..304	01 OF 01

PRO NO 813-214016-1 ***

PO NO./DEPT NO.
NS
EMC

SHPR CODE 0542

BEY C/L CODE

BEY C/L AMT

SHIPPER
3105 S FAITH HOME RD
TURLOCK CA 95380

CONSIGNEE
SCHNITZER STEEL INDUSTRIE
JIM JAKUBLAK
12005 N BURGARD RD
PORTLAND OR 97203

CONS CODE 5723

SPECIAL INSTS

ALL FREIGHT RECEIVED IN GOOD ORDER AND SHRINKWRAP/BANDING INTACT UNLESS NOTED BELOW. SIGN AND DATE IN YELLOW BLOCK. THANK YOU! ROADWAY EXPRESS, INC.

PLEASE SIGN HERE DATE TIME

X [signature]

B/L OR GBL NO.
NS

INVOICE

CENTRAL INVOICING- DO NOT INV. LOCALLY

CHARGES

PRO 813-214016-1

NO. H/U	PKG	HM	DESCRIPTION OF ARTICLES	CODE	WEIGHT (LB)	RATE	CHARGES
1	DRM		METAL DRUM NMFC=05276000 CLC70	C70	55		
2	BOX		METAL BOXES NMFC=02959000 CLC125	C125	1436		
1	DRM		METAL DRUM NMFC=05276000 CLC70	C70	10		
			PERCENT DISCOUNT				
			GENERAL SURCHARGE (FUEL/FRT)				
4	TTL	////		TTL	1501		COL
			C: 503-224-9900				

F-002.02/01

CONSIGNEE'S COPY

ADV C/L	C/L P/U DATE	ADV C/L FRT BILL NO.	ADV C/L AMT	DUE FM ADV C/L

SCHN00243015

REPORTING CONCEALED LOSS OR DAMAGE

Check your freight immediately. If you discover concealed loss or damage, report it promptly to your local Roadway terminal. Notice of loss or damage and request for inspection may be made by phone, in writing, or in person. If made by phone or in person, written confirmation must be mailed to the terminal. Hold the shipping containers and contents in the same condition they were in when the damage was discovered.

INSPECTION BY ROADWAY

An inspector will examine the freight and shipping container and provide you with a copy of his/her inspection report. Under certain circumstances inspection may be waived and you will be sent a written waiver of inspection. If an inspection is made, a copy of the report should be sent with your formal claim. (The inspection report alone does not constitute a claim.)

LOSS AND DAMAGE CLAIM FILING REQUIREMENTS

The bill of lading contract requires that a claim must be filed in writing within nine (9) months from the date of delivery. In the event of nondelivery, a claim must be filed within (9) months after a reasonable time for delivery has elapsed. Consult the bill of lading and tariff covering your shipment for time limits on claim filing.★

A claim may be filed by the shipper, consignee, or a third party who may have claim or title to the freight.

A claim may be filed with the origin or destination carrier, or the carrier on whose line the loss or damage occurs, if known.

INFORMATION REQUIRED IN FILING A CLAIM

1. **A claim statement** showing the value of the lost or damaged merchandise and how the amount of claim was determined. A "Cargo Loss and Damage Claim Form" may be obtained from your Roadway sales representative or local terminal.
2. **Bill of lading or freight bill** — One of these documents is required as proof that Roadway transported the freight.
3. **A copy of the inspection report.**
4. **Invoice copy** or other documents establishing the cost to you of the freight lost or damaged, or an invoice for repairs made to restore your merchandise to its original condition.

★Shipments originating in Canada are subject to the Canadian bill of lading contract terms and conditions. The Canadian bill of lading contract terms require that a claim for loss, damage, or delay must be filed within sixty days, or in the case of failure to make delivery, within nine (9) months from the date of shipment.

A Fax from Gaye

3106 S. Faith Home Road
Turlock, CA 95380
209-667-1102
209-667-1583 fax
EMC@TGAINC.com

Fax to: Jim Jukubiak Date: 5-1-01

Company: SIC Time: noon

Re: Fax No: 503-288-6948

Page #: 1

Comments:

TA cert for 10-gal drum leaving today by Roadway.

WCS
WASTE CONTAINMENT SYSTEMS

SPECIFICATIONS AND TECHNICAL SUPPORT DOCUMENT

FOR

U.S.A. D.O.T. 7A TYPE A CONTAINER

10 GALLON STEEL DRUM CONTAINER

TYPE A CERTIFICATION

WCS-2-00

TECHNICAL SUPPORT DOCUMENT

WCS-TS2-00

CONTAINER CERTIFICATION

This is to certify that the 10 Gallon Steel Drum Container WCS-2-00 complies with the applicable requirements and specifications as set forth in Title 49 CFR, IAEA Safety Series No. 6 and the following specific references:

1.	Title 49 CFR 173.24	General Requirements Packagings and Packages
2.	Title 49 CFR 173.410	General Design Requirements
3.	Title 49 CFR 173.411	Industrial Packagings
4.	Title 49 CFR 173.412	Additional Design Requirements For Type A Packages
5.	Title 49 CFR 173.461	Demonstration of Compliance With Tests
6.	Title 49 CFR 173.465	Type A Packaging Tests
7.	Title 49 CFR 178.350	Specifications 7A; General Packaging, Type A

7A TYPE A CONTAINER

CONTAINER DESCRIPTION - 10 Gallon Steel Container
20 Gauge Sides, Bottom and Removable Head
Bolt Ring Closure - 5/8" bolt and lock nut

DIMENSIONS - 14.5" Diameter OD x 16.5" High ID

AUTHORIZED CONTENTS - Type a quantities of solid radioactive material in normal or special form.

SPECIFICATIONS/RESTRICTIONS - Authorized Gross Weight 330 lbs.

Any bulky equipment with sharp corners, protrusions, etc. must be securely positioned within the drum.

Gasket material must have a minimum operating range of -40°F to + 158°F. If sponge rubber is used, minimum of 1/2" is required.

Drum must be marked with UN/1A2/ Y or X (weight in KG)/S or the appropriate Military Specification No.

RTV sealant must be used.

Must have a seal, paper or wire.

TEST RESULTS

TEST	RESULTS	DISCUSSIONS/REFERENCES
(a) Heat, +158°F	Pass	49 CFR 173.412(c) Engineering analysis temperature is within normal operating range for materials of construction.
b) Cold, -40°F	Pass49	CFR 173.412(c) Engineering analysis temperature is within normal operating range for materials of construction.
c) Reduced Pressure	Pass	49 CFR 173.412(f) Test show with RTV Sealant and proper closing technique this container will hold the required 11.5 lbs. pressure with no release of contents.
d) Vibration	Pass	49 CFR 173.410(f) Containers have withstood years of transport with no occurrence of significant damage due to normal vibration.

Container Certification
Page 3

(e) Water Spray	Pass	49 CFR 173.465(b) Engineering evaluation of closure and materials of construction unaffected by water.
(f) Free Drop	Pass	49 CFR 173.465(c)(1) Engineering evaluation and review of prior tests show that this container will withstand a 4 foot drop test with a maximum load of 330 lbs. with no damage or release of contents. See Technical Support Document WCS-TS2-00.
(g) Penetration	Pass	49 CFR 173.465(e)(1)(2) Container withstood penetration test with no breach of container integrity.
(h) Compression	Pass	49 CFR 173.465(d)(1) Tests and engineering evaluation shows that this container will withstand a compressive load of greater than 1,650 lbs. See Technical Support Document WCS-TS2-00.

William H. Cromwell

William H. Cromwell

July 24, 2000

For Further Information Contact:

Waste Containment Systems
4659 Lakewood Street
Pleasanton, California 94588
(925) 846-0494
FAX (925) 462-6241
e-mail: bcromwell@home.com

10 GALLON STEEL DRUM PACKAGE

TECHNICAL SUPPORT DOCUMENT TYPE A STUDY

WCS-TS2-00

1.0 INTRODUCTION

This document summarizes the results of a four foot drop test and a compression test conducted to verify the integrity of a 10 Gallon Steel Drum complying with Type A requirements of the Department of Transportation.

2.0 CONTAINER PREPARATION

A new 10 gallon Open Head Drum was filled full of clean material to simulate 340 lbs. The drum was then properly sealed.

3.0 FREE DROP TEST

The container was elevated to a height of 48 inches above a concrete slab with a forklift. The drum was then pushed off the forks in a manner to facilitate it landing on its bolt ring closure. Maximum damage would be expected from the container landing in this position.

3.1 RESULTS OF THE FREE DROP TEST

The integrity of the containment package was maintained. An indentation was noted on the bottom rim of the drum with no noticeable breach of the drum. An indentation of approximately 1/2 inch was observed on the lid of the drum at the bolt closure.

4.0 COMPRESSION TEST

After the completion of the free drop test a compression test was performed on the container. A pallet of 68 concrete bricks each weighing approximately 25 pounds were placed on the lid while the drum was standing in an upright position for a 24 hour time period.

4.1 RESULTS OF THE COMPRESSION TEST

At the end of the 24 hour time period the bricks were still in place on top of the drum with no noticeable change in the condition of the container.

5.0 SUMMARY

It has been conclusively demonstrated through actual tests that a 10 Gallon Steel Drum, as described in Section 2.0 of this document, can withstand the special tests for Type A packaging as specified in 49 CFR 173.465.

William H. Cromwell

William H. Cromwell

July 24, 2000

For Further Information Contact:

William H. Cromwell
Waste Containment Systems
4659 Lakewood St.
Pleasanton, CA 94588
(925) 846-0494
Fax (925) 462-6241
e-mail: bcromwell@home.com

ENVIRONMENTAL MANAGEMENT AND CONTROLS, INC.

3106 SOUTH FAITH HOME ROAD
TURLOCK, CALIFORNIA 95380
E-MAIL:emctga@aol.com

PHONE (800) 552-6121
PHONE (209) 667-1102
FAX (209) 667-1583

March 27, 2002

Mr. Jim Jakubiak
Schnitzer Steel
PO Box 10047
Portland, OR 97296

Dear Mr. Jakubiak:

The following is a list of the radioactive waste drum(s) that were sent for disposal to the Richland, Washington disposal site on our shipment 02-W-N1. Enclosed is the NRC Form 542 and acknowledgement of receipt.

Manifest	*Drum #*
4186	*D1, D2*

If you require any further information, please do not hesitate to contact me.

Sincerely,

Gaye Nelson

Gaye Nelson
Interim Manager
Environmental Management & Controls, Inc.

Attachment 41-5

Bates #23427

US Ecology, Inc.
P.O. Box 638
Richland, Washington 99352

509/377-241
Fax: 509/377-2344
www.americanecology.com

US Ecology

an American Ecology company

ENVIRONMENTAL MANAGEMENT & CONTROLS
RON WILCOX
3106 S FAITH HOME ROAD
TURLOCK CA 95380

This is to certify that the waste shipment described below was received for disposal at the US Ecology Richland, Low-Level Radioactive Waste Disposal Facility. This certification satisfies the Acknowledgment of Receipt of Waste Conditions of the State of Washington Radioactive Materials License WN-I019-2 issued to US Ecology, Inc.

BATES NUMBER: 23427

GENERATOR NUMBER: CAT-08-001-1828

SHIPMENT NUMBER: 02-W-N1

DATE RECEIVED: 3/22/02

SIGNATURE: _____ DATE: 3/25/02

Discrepancies (if any) between wastes listed on the manifest and waste materials received in the shipment:

SEE ATTACHED MANIFEST CORRECTION FORM

NOTE: This certification does not necessarily imply that the waste has been buried. You will be advised if any problems with the shipment are encountered during the burial process.

Any inquiries to this acknowledgment should be directed to Michael Ault, Facility Manager.

Recycled Paper

NRC FORM 542
Expires 7/31/2004

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

MANIFEST INDEX AND REGIONAL COMPACT TABULATION

List all original "PROCESSED WASTE" generators (if any) before "COLLECTED WASTE" generators

1. WASTE COLLECTOR/PROCESSOR
NAME: Environmental Management & Controls
IDENTIFICATION NUMBER: CAT080011828
SHIPPING DATE: 3/20/02

2. MANIFEST NUMBER: 01134

3. PAGE 1 OF 2 PAGE(S)

4. GENERATOR IDENTIFICATION NUMBER	5. GENERATOR NAME PERMIT NUMBER (IF APPLICABLE) AND TELEPHONE NUMBER	6. GENERATOR FACILITY ADDRESS	7. PREPROCESSED WASTE (OR MATERIAL) VOLUME (m3)	8. MANIFEST NUMBER(S) WHICH WASTE (OR MATERIAL) RECEIVED AND DATE OF RECEIPT	9. WASTE CODES P= PROCESSED C= COLLECTED	10 ORIGINATING COMPACT REGION OR STATE	11. AS PROCESSED/COLLECTED TOTAL A. SOURCE MATERIAL (kg)	B. SNM (g)	C. ACTIVITY (MBq/mCi)	D. VOLUME (m3/m3)
CAR999753735	City of Sonoma N4606 916-341-6314	1001 I Street PO Box 4025 Sacramento, CA 95812	0.2124	6176 10/26/01	P	CA	0	0	1.776 0.048	0.195408 0.69
WYR999753367	Envirotest (Core Labs) N2031 307-235-5741	420 West First St Casper, WY 82601	0.2124	2719 8/17/99	P	WY	0.000512	0	2.0114384 0.0543632	0.8498 3
CAR990006173	Isotope Products N4464 818-843-7000	1800 N Keystone St Burbank, CA 91504	1.4868	4503 10/2/01 4547 10/3/01 4467 9/13/01 4632 12/4/01 4683 1/4/02	P	CA	0	0	26242.91452 709.26796	9.637296 34.03
CAR999752843	North American Scientific N4532 818-255-0780	20200 Sunburst St Chatsworth, CA 91311-6218	2.42249	3956 3/5/01 4517 10/8/01 4695 1/4/02	P	CA	0	0	39923 1079	6.9384 24.5
ORR999753428	Schnitzer Steel N2032 503-286-6976	PO Box 10047 Portland, OR 97296	2.996256	4186 3/5/01	P	OR	0.46800287	0	29.76021 0.80433	7.9295 28
CAR999752604	US Air Force (CA Sites) E4020 309-782-2988	HQ OSC Attn: AMSOS-SF 1 Rock Island Arsenal Rock Island, IL 61299	0.14188	AF-R-00-001A 2/7/01 DLA2001-006 6/4/01	P	CA	0.00691	0	93055.93832 2515.02536	0.65136 2.3
CAR999752603	US Air Force (CA Sites) N4492 309-782-2988	HQ OSC Attn: AMSOS-SF 1 Rock Island Arsenal Rock Island, IL 61299	0.4248	AF00-071 5/10/01	P	CA	0	0	57.831 1.563	0.654192 2.31
				TOTALS ON ALL PAGES (NRC FORMS 542 & 542A)			22.88502487	0	291550.97335413 7879.756036598	8.351568 294.9

SCHN00243027

ENVIRONMENTAL MANAGEMENT AND CONTROLS, INC.

3106 SOUTH FAITH HOME ROAD
TURLOCK, CALIFORNIA 95380
E-MAIL:emctga@aol.com

PHONE (800) 552-6121
PHONE (209) 667-1102
FAX (209) 667-1583

January 7, 2002

Mr. Jim Jakubiak
Schnitzer Steel
PO Box 10047
Portland, OR 97296

Dear Mr. Jakubiak:

The following is a list of the radioactive waste drum(s) that were sent for disposal to the Richland, Washington disposal site on our shipment 01-W-5. Enclosed is the NRC Form 542 and acknowledgement of receipt.

Manifest	*Drum #*
4186	*D3*

If you require any further information, please do not hesitate to contact me.

Sincerely,

Gaye Nelson

Gaye Nelson
Interim Manager
Environmental Management & Controls, Inc.

US Ecology, Inc.
P.O. Box 638
Richland, Washington 99352

Attachment 41-5

Bates #23383

509/377-2411
Fax: 509/377-2244
www.americanecology.com

US Ecology

an American Ecology company

ENVIRONMENTAL MANAGEMENT & CONTROLS
RON WILCOX
3106 S FAITH HOME ROAD
TURLOCK CA 95380

This is to certify that the waste shipment described below was received for disposal at the US Ecology Richland, Low-Level Radioactive Waste Disposal Facility. This certification satisfies the Acknowledgment of Receipt of Waste Conditions of the State of Washington Radioactive Materials License WN-I019-2 issued to US Ecology, Inc.

BATES NUMBER: 23383

GENERATOR NUMBER: CAT-08-001-1828

SHIPMENT NUMBER: 01-W-5

DATE RECEIVED: 12/20/01

SIGNATURE: _____ DATE: 12/26/01

Discrepancies (if any) between wastes listed on the manifest and waste materials received in the shipment:

SEE ATTACHED MANIFEST CORRECTION FORM

NOTE: This certification does not necessarily imply that the waste has been buried. You will be advised if any problems with the shipment are encountered during the burial process.

Any inquiries to this acknowledgment should be directed to Michael Ault, Facility Manager.

Recycled Paper

NRC FORM 542A

US NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

MANIFEST INDEX AND REGIONAL COMPACT TABULATION (CONTINUATION)

2. MANIFEST NUMBER
01089

3.
PAGE 4 OF 5 PAGE(S)

4. GENERATOR IDENTIFICATION NUMBER	5. GENERATOR NAME PERMIT NUMBER (IF APPLICABLE) AND TELEPHONE NUMBER	6. GENERATOR FACILITY ADDRESS	7. PREPROCESSED WASTE (OR MATERIAL) VOLUME (m3)	8. MANIFEST NUMBER(S) WHICH WASTE (OR MATERIAL) RECEIVED AND DATE OF RECEIPT	9. WASTE CODES P= PROCESSED C= COLLECTED	10 ORIGINATING COMPACT REGION OR STATE	11. AS PROCESSED/COLLECTED TOTAL A. SOURCE MATERIAL (kg)	B. SNM (g)	C. ACTIVITY (NBqorCi)	Σ VOLUME (m3/ft3)
ORR999753429	Schnitzer Steel G2122 503-286-6976	PO Box 10047 Portland, OR 97296	0.037949	4186 5/23/01	P	OR	0	0	159.1 4.3	0.0303024 1.07
COR999752602	Severn Trent Laboratories G3116 303-736-0136	4955 Yarrow Rd Englewood, CO 80002	0.6372	6131 8/20/01	P	CO	0.89031	0.7867	29.01604528 0.78421744	0.4508544 15.92
NMR990030363	Spectratek Services G3061 800-866-8611	2726 Aztec NE Albuquerque, NM 87107	0.965712	004320 11/2/01	P	NM	0	0	999 27	0.4236672 14.96
COR999751855	Thermo MF Physics G3095 719-599-1667	5074 List Drive Colorado Springs, CO 80919	1.9824	6054 5/7/01	P	CO	0	0	27750000 750000	1.37352 48.5
COD041096314	UN of Colorado Health Sciences Ctr G3006 303-315-5890	4405 E Eighth Ave Hazmat Cooling Tower Facility Denver, CO 80220	1.4868	6125 8/20/01 6161 10/22/01	P	CO	0	0	1893.04025 51.16325	0.7620912 26.91
COD007431505	UC Boulder G3016 303-492-2622	1000 Regent Drive 413 UCB Boulder, CO 80309	0.6372	6117 8/20/01 6157 10/25/01	P	CO	0.484174	0.0014889	1242.066505 33.569365	0.3387072 11.96
NVR990014771	UN Reno G3007 775-784-4540	1664 N Virginia St Reno, NV 89557	0.4248	6169 10/25/01	P	NV	0	0	1111.1988 30.0324	0.1432992 5.06
WAR990005860	UN of Washington G1015 206-543-9331	PO Box 354400 Seattle, WA 98195	4.0356	20013 8/14/01 20014 11/7/01	P	WA	0	0	13889.457 375.391	3.00192 106
COR999753670	US Air Force (Colorado Sites) G3048 309-782-2988	Attn: AMSOS-SF 1 Rock Island Arsenal Rock Island, IL 61299-6000	0.018974	AF99-035 2/3/00	P	CO	0	0	2050.952735 55.431165	0.01416 0.5

SCHN00243030

US Ecology, Inc.
P.O. Box 638
1777 Terminal Drive
Richland, Washington 99352

509/946-4945
Fax: 509/946-5495

USEcology

an *American Ecology* company

October 10, 2003

James L. Jakubiak
Schnitzer Steel Products Co.
P.O. Box 10047
Portland, OR 97296-0047

The Washington Utilities and Transportation Commission (WUTC) regulates disposal rates for low level radioactive waste (LLRW) at the Richland, WA facility. The structure for collection of disposal rates is outlined in a rate design and revenue requirement stipulation developed by US Ecology (the Company) and rate case participants and approved by the WUTC.

The stipulation specifies that rates shall be determined each January on the basis of projections provided by the Company's customers. The Company is required to submit the enclosed written request to each of its customers for estimates of LLRW by volume, number of containers, number of shipments, and dose rates on containers to be disposed at the site during the following year. According to information provided by the Washington Department of Ecology, Schnitzer Steel Products Co. was assigned Site Use Permit No. G2122 for all or a part of 2003, and may continue using the Richland facility for disposal of LLRW during 2004.

Please complete your projections for 2004 on the enclosed form and ***return it to US Ecology, Inc. by November 10, 2003***. If the services of a Broker/Processor are utilized for treatment, volume reduction, or other purpose you may need to contact that vendor for assistance in completing the form. We request that you complete the form ***even if no shipments are planned during 2004.*** Additionally, please notify US Ecology if you ***do not*** plan to renew your current site use permit for 2004.

The information received from site use permit holders will be the basis for determining disposal rates for 2004. US Ecology will file proposed rates for 2004 prior to December 1, 2003. Projections returned after November 10, 2003 may not be used in the preparation of this filing.

Recycled Paper

There are five basic components in the schedule of charges.

1. A per cubic foot charge based on the volume of the disposal container.
2. A charge per manifested shipment.
3. A charge per container.
4. A charge for exposure per container based upon the dose rate at the container surface.
5. A site availability charge.

The site availability charge is an annual fee assessed by US Ecology on each holder of a site use permit issued by the Washington Department of Ecology. The charge represents a portion of fixed costs such as licenses, regulatory compliance, and monitoring.

The site availability charge is composed of eleven blocks for permit holders who ship waste to the facility during the year and one block for permit holders who ship no waste to the facility during the year. The assignment of a permit holder to a particular block depends on two factors: (1) the volume of waste shipped to the facility during the calendar year; and (2) the dose rate at container surface, summed over all containers shipped during the year.

If a permit holder uses a broker, they will be placed in the appropriate block for the site availability charge on the basis of volume and dose rate of waste after processing by the broker.

The stipulation provides for a reduction in the site availability charge for not-for-profit post-secondary educational institutions with respect to waste that is generated at the institution's facility. The charge assessed is one block lower than the rate that would otherwise apply.

Thank you for the opportunity to be of service. Please contact this office if additional information is needed.

Sincerely,

Tray Caldwell

Tray Caldwell
Rate Analyst

Recycled Paper

US ECOLOGY, INC.

2004 LOW LEVEL RADIOACTIVE WASTE DISPOSAL PROJECTIONS

Company Schnitzer Steel Products Co.

Address P.O. Box 10047 · Portland, OR. 97296-0047

Current Site Use Permit No. N2032 & 62122 This Permit will be renewed: YES X NO ___

1. LLRW to be delivered to the Richland site in 2004: Ø cu. ft.
2. Projected number of containers in 2004: Ø
3. Projected number of shipments in 2004: Ø
4. Exposure: Number of containers with dose rate at container surface:
   - Less than or equal to 200 mR/Hr: Ø
   - Greater than 200 mR/Hr but less than or equal to 1,000 mR/Hr: Ø
   - Greater than 1,000 mR/Hr but less than or equal to 10,000 mR/Hr: Ø
   - Greater than 10,000 mR/Hr but less than or equal to 100,000 mR/Hr: Ø
   - Greater than 100,000 mR/Hr: Ø
5. Projection of extraordinary volumes[1] NA cu. ft.
6. Projected volume from decommissioning a nuclear generating facility[2] NA cu. ft.

CERTIFICATION

I hereby certify that I have reviewed the foregoing waste disposal projection for 2004 and know the contents thereof, and that these projections are made in good faith based on the best information currently available to this company.

Jim Jakobiak
Printed Name

Signature

Environmental Administrator
Title

November 10, 2003
Date

[1] An "extraordinary volume" is waste caused by non-recurring events, outside normal operations of a generator, that are in excess of 20,000 cubic feet or 20% of the total volume disposed at the Richland facility during 2003, whichever is less. RCW 81.108.020(3)

[2] Nuclear decommissioning waste is defined as waste generated from the decommissioning and/or dismantling of a nuclear powered electric generating facility.

(OVER)

American Ecology Corporation
Lakepoint Centre I
300 East Mallard Dr., Suite 300
Boise, ID 83706

208/331/8400
Fax: 208/331-7900
800/590-5220
www.americanecology.com

American Ecology

January 28, 2003

James L. Jakubiak
Schnitzer Steel Products Co.
P.O. Box 10047
Portland, OR 97296-0047

Re: Site Availability Charge for Disposal of Low-Level Radioactive Waste (LLRW)

Enclosed is the invoice for the 2003 Site Availability Charge for Site Use Permit No.G2122. This annual charge for the availability of and access to US Ecology's Richland, WA disposal facility is authorized in tariffs filed with and approved by the Washington Utilities and Transportation Commission. A copy of this tariff was provided in correspondence dated November 27, 2002. This charge is by US Ecology, Inc. as the site operator and is not associated with charges from the Washington State Department of Ecology for issuance of the Site Use Permit. Charges for disposal of LLRW are in addition to the Site Availability Charge.

The Site Availability Charge is based upon annual projections of disposal needs by generators of LLRW. Generators who did not return projections of disposal needs may be placed in Block "0" or "1".

In the event the Site Availability Charge for 2002, based upon projections, was greater than actual totals for 2002, the overcharge is credited to your 2003 charge. Any undercharge is added to the 2003 charge. In instances where payments exceeded the actual charges, refunds will be issued.

In the event the Site Use Permit is not renewed for 2003, please contact this office.

The enclosed invoice reflects charges and adjustments for 2002 as well as charges for 2003. If additional information is required please contact:

Arvil Crase
Customer Service Manager
Telephone (360) 753-3669
Facsimile (360) 753-3684
Email...arvcra@msn.com

Approved: [signature]
Date: 2-10-03
Project: Disposal Permit

US Ecology, Inc.
P.O. Box 638
1777 Terminal Drive
Richland, Washington 99352

509/946-4945
Fax: 509/946-5495

USEcology

an American Ecology company

INVOICE

Invoice No. R405494
Date 1/27/2003

Shipper ID	RS002861
Order Type	Invoice
Customer ID	998512

JAMES L JAKUBIAK
SCHNITZER STEEL PRODUCTS CO
P.O. BOX 10047
PORTLAND, OR 97296-0047

RICHLAND

TERMS: NET 30 DAYS

Please remit checks to:
P.O. Box 26273
Salt Lake City, UT
84126-0273

Please wire to:
Bank: Wells Fargo Bank, N.A. Boise, ID
ABA: 121000248 Account # 5130000820
Account Name: AEC/Subsidiaries

DATE RECEIVED	PROFILE	GENERATOR	CUSTOMER PO	SALES PERSON
1/27/2003	SAC BLOCK 0	SCHNITZER STEEL	SITE AVAILABILITY	

DESCRIPTION	QTY	PRICE	EXT. PRICE
Manifest # N/A			
Shipment # N/A Bates # N/A			
2002 SITE AVAILABILITY AS INVOICED	-1.0000	160.0000	-160.00
2002 ADJUSTED SITE AVAILABILITY	1.0000	160.0000	160.00
- - -	0.0000	0.0000	0.00
SITE AVAILABILITY CHARGE 2003	1.0000	163.0000	163.00
BUSINESS & OCCUPATION TAX (ON RATES & CHARGES)	163.0000	0.0330	5.38
WUTC REGULATORY FEE (ON RATES & CHARGES)	163.0000	0.0050	0.82

Sales Total	169.20
Shipping & Handling	0.00
Misc. Charges	0.00
Tax Total	0.00
	169.20
Less Paid Amount	0.00
TOTAL	169.20

Recycled Paper

US ECOLOGY, INC.

YEAR 2003 LOW LEVEL RADIOACTIVE WASTE DISPOSAL PROJECTIONS

Company Schnitzer Steel Products Co.

Address P.O. Box 10047 · Portland, OR. 97296-0047

Current Site Use Permit No. N2032 & 62122 This Permit will be renewed: YES X NO ___

1. LLRW to be delivered to the Richland site in 2003: Ø cu ft
2. Projected number of containers in 2003: Ø
3. Projected number of shipments in 2003: Ø
4. Exposure: Number of containers with dose rate at container surface:
   - Less than or equal to 200 mR/Hr: Ø
   - Greater than 200 mR/Hr but less than or equal to 1,000 mR/Hr: Ø
   - Greater than 1,000 mR/Hr but less than or equal to10,000 mR/Hr: Ø
   - Greater than 10,000 mR/Hr but less than or equal to100,000 mR/Hr: Ø
   - Greater than 100,000 mR/Hr: Ø
5. Projection of extraordinary volumes[1] NA cu ft
6. Projected volume from decommissioning a nuclear generating facility[2] NA cu ft

CERTIFICATION

I hereby certify that I have reviewed the foregoing waste disposal projection for 2003 and know the contents thereof, and that these projections are made in good faith based on the best information currently available to this company.

Jim Jakubiak
Printed Name

Jim Jakubiak
Signature

Environmental Administrator
Title

November 4, 2002
Date

---

[1] An "extraordinary volume" is waste caused by non-recurring events, outside normal operations of a generator, that are in excess of 20,000 cubic feet or 20% of the total volume disposed at the Richland facility during 2002, whichever is less. RCW 81.108.020(3)

[2] Nuclear decommissioning waste is defined as waste generated from the decommissioning of a nuclear powered electric generating facility.

(OVER)

P.O. Box 11846
Olympia, WA 98508
Courier:
7043 Monaco Drive S.E.
Olympia, WA 98501-6519

360/753-3669
Fax: 360/753-3684

US Ecology

A Division of American Ecology Corporation

October 11, 2002

James L. Jakubiak
Schnitzer Steel Products Co.
P.O. Box 10047
Portland, OR 97296-0047

The Washington Utilities and Transportation Commission (WUTC) regulates disposal rates for low level radioactive waste (LLRW) at the Richland, WA facility. The structure for collection of disposal rates is outlined in a rate design and revenue requirement stipulation developed by the Company and rate case participants and approved by the WUTC.

The stipulation specifies that rates shall be determined each January on the basis of projections provided by the Company's customers. The Company is required to submit the enclosed written request to each of its customers for estimates of LLRW by volume, number of containers, number of shipments, and dose rates on containers to be disposed at the site during the following year. According to information provided by the Washington Department of Ecology, Schnitzer Steel Products Co. was assigned Site Use Permit No. G2122 for all or a part of 2002, and may continue using the Richland facility for disposal of LLRW during 2003.

Please complete your projections for 2003 and return the enclosed form. We request that you complete the form ***even if no shipments are planned during 2003.*** Additionally, please notify US Ecology, Inc. if you ***do not*** plan to renew your current site use permit for 2003.

The information received from site use permit holders will be the basis for determining disposal rates for 2003. Please complete the projection form and ***return it to US Ecology by November 15, 2002***. If the services of a Broker/Processor are utilized for treatment, volume reduction, or other purpose you may need to contact that vendor for assistance in completing the form. US Ecology will file proposed rates for 2003 prior to December 1, 2002. Projections returned after November 15, 2002 may not be used in the preparation of this filing.

In correspondence dated September 3, 2002 the Washington Department of Health notified US Ecology, Inc. that the Site Surveillance Fee would be increased to $9.00 per cubic feet. This adjustment will be included in the filing. A copy of the notification is enclosed for your information.

Recycled Paper

There are five basic components in the schedule of charges:

1. A per cubic foot charge based on the volume of the disposal container.
2. A charge per manifested shipment.
3. A charge per container.
4. A charge for exposure per container based upon the dose rate at the container surface.
5. A site availability charge.

The site availability charge is an annual fee assessed by US Ecology on each holder of a site use permit issued by the Washington Department of Ecology as of January 1, 2003. The charge represents a portion of the cost of licenses, regulatory compliance, and monitoring.

The site availability charge has eleven blocks for permit holders who ship waste to the facility during the year and one block for permit holders who ship no waste to the facility during the year. The assignment of a permit holder to a particular block depends on two factors: (1) the volume of waste shipped to the facility during the calendar year; and (2) the dose rate at container surface, summed over all containers shipped during the year.

If a permit holder uses a broker, the holder will be placed in the appropriate block for the site availability charge on the basis of volume and dose rate of waste after processing by the broker.

The stipulation provides some reduction in the site availability charge for not-for-profit post-secondary educational institutions with respect to waste that is generated at the facility. The charge assessed is one block lower than the rate that would otherwise apply.

Thank you for the opportunity to be of service. Please contact this office if additional information is needed.

Sincerely,

Arvil Crase

Arvil Crase
Customer Service Manager

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
DIVISION OF RADIATION PROTECTION
7171 Cleanwater Lane, Bldg. 5 • P.O. Box 47827 • Olympia, Washington 98504-7827
TDD Relay 1-800-833-6388

September 3, 2002

Tom Hayes, Vice President
US Ecology, Inc.
P.O. Box 638
1777 Terminal Drive
Richland, Washington 99352

Dear Mr. Hayes:

This letter serves as notification, in accordance with RCW 70.98.085 and WAC 246-254-130, that the site surveillance fee must be adjusted in order to ensure adequate funding to cover the actual costs of regulating the commercial low-level radioactive waste disposal facility. This adjustment is necessary because of the continuing decline in radioactive waste disposal volumes, and the continuing costs for the preparation of the environmental impact statement. The following figures represent how the annual volumes have been decreasing since the last fee increase in January 1998:

July 1997 – June 1998	-	119,920.45 cubic feet
July 1998 – June 1999	-	165,571.08 cubic feet
July 1999 – June 2000	-	134,047.87 cubic feet
July 2000 – June 2001	-	153,685.54 cubic feet
July 2001 – June 2002	-	89, 269.05 cubic feet

Additionally, it has been projected that for the second half of calendar year 2002, the volume of waste for disposal will be 15,000 cubic feet. The projected volume of disposed waste in calendar year 2003 will be approximately 40,000 cubic feet.

In order to meet the department's costs, the department is requesting that the site surveillance fee be raised from $ 6.00 per cubic foot to $ 9.00 per cubic feet. This revised fee should be implemented by January 1, 2003. The department will again review the adequacy of the surveillance fee in July 2003.

If you should have any questions, do not hesitate to contact me at (360) 236-3241.

Sincerely,

Mikel J. Elsen

Mikel J. Elsen, Acting Head
Waste Management Section

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

TO: N.A.R.M. Site Use Permit Applicant

FROM: Diane Hallisy
Nuclear Waste Program

SUBJECT: Application for a Site Use Permit for Disposal of N.A.R.M. Wastes in Washington State

Enclosed is the 2001 application form for a N.A.R.M. (naturally occurring or accelerator produced radioactive material) Waste Site Use Permit, a permit fee schedule to enable you to calculate the permit fee due, and a copy of Chapter 173-326 WAC, Commercial Low-Level Radioactive Waste Disposal -- Site Use Permits

All items on the application must be answered. Completed applications with full payment should be returned in the envelope provided. Failure to provide complete information (including the 9-digit Zipcode) on the application form, or lack of accompanying payment, will delay processing your application. Please note that the permit period runs from April 1, 2001, through March 31, 2002. Permit fees for permits issued for less than the twelve month period will not be pro-rated. **USE THIS LETTER AS AN ORIGINAL INVOICE.**

Generators of N.A.R.M. wastes, other than sealed sources or radium therapy needles, must provide analytical data or a description of the process knowledge which indicates compliance with the Resource Conservation and Recovery Act and the Washington State Dangerous Waste Regulations (Chapter 173-303 WAC) with their applications.

If you have any questions or require additional information, please contact me at (360) 407-7109, or via e-mail at diha461@ecy.wa.gov.

DKH:dh
Enclosures

STATE OF WASHINGTON
2001
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF N.A.R.M. WASTES AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE RICHLAND, WASHINGTON

A. Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.

Schnitzer Steel Products Co.
APPLICANT'S NAME:

B. Address where waste is generated (MUST include the 9-digit Zip. Contact your Post Office to obtain your Zip Code).

12005 N. Burgard Road, 97203-6432 • P.O. Box 10047
ADDRESS WHERE WASTE IS GENERATED — MAILING ADDRESS (IF DIFFERENT)

Portland, OR. 97203-6432 • Portland, Oregon 97296-0047
CITY — STATE — ZIP CODE (9 DIGITS) — CITY — STATE — ZIP CODE (9 DIGITS)

C. Name of the contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: Permits will be mailed addressed to contact person; ensure mailing address and contact name agree.)

James L. Jakubiak Environmental Administrator (503) 286-6976 Ext —
(FIRST) (M.I.) (LAST) — TITLE — PHONE

D. If this is a renewal of a site use permit please enter your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. Indicate if you are a first-time applicant.

___ RENEWAL - SITE USE PERMIT # _____ - VOLUME DISPOSED _____ (CU FT) ___ (YEAR)

X FIRST-TIME APPLICANT

E. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you willl dispose of in Washington State in calendar year 2001. **DO NOT USE SCIENTIFIC NOTATION.**

7.5 ft³ 0.412 mCi

F. Calculate the permit fee due using the enclosed fee schedule and enter amount of fee enclosed. $ 400.00

G. Types of N.A.R.M. wastes (e.g. pipe scale, decontamination waste, building rubble, etc.), and all radionuclides that you have approval to dispose of in Washington State.

1. Small dials (altimeter, compass, gauges, switches)
TYPES OF WASTES

2. Ra-226
RADIONUCLIDES

H. Estimated percentage of each class of waste (as defined by WAC 246-249-040 (see attached)). Total of percentage from all classes should equal 100%

CLASS A (100 %) CLASS B (%) CLASS C (%)

I. Do you u se a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.

YES X NO ___ - Thomas Gray & Associates, Inc. - B400
BROKER NAME(S) — BROKER'S SITE USE PERMIT #(S)

ECY 010-75-N (Rev. 12/2000)

SCHN00243048

J. Do you have a specific radioactive materials license from the NRC or Agreement State? YES _____ NO X If yes, do you package your own radioactive waste? YES _____ NO ___

K. If you operate under a general radioactive materials license who packages your waste for you?

Thomas Gray & Associates, Inc. — PACKAGER'S NAME

B400 — PACKAGER'S SITE USE PERMIT #

L. Please indicate the one specific type which best describes your facility:

1. **FUEL CYCLE**
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )
2. **MEDICAL**
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )
3. **GOVERNMENT (NON-MEDICAL)**
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )
4. **INDUSTRIAL**
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER (X)
5. **ACADEMIC (NON-MEDICAL)**
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

M. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State Site Use Permit number (if applicable) written on the check or money order. Please provide the following information:

CHECK OR MONEY ORDER # _____ NAME OF COMPANY ISSUING CHECK _____

N. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303 WAC, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK): Tom Zelenka

PRINTED NAME OF PERSON SIGNING: Tom Zelenka

TITLE: MGR Environmental Affairs

DATE OF SIGNATURE: 4/19/01

O. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

P. Correspondence (other than application forms) may be addressed to:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

Telephone number for information is (360) 407-7109. Internet address is diha461@ecy.wa.gov.

PLEASE ALLOW A MINIMUM OF 4 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

STATE OF WASHINGTON
2001
SITE USE PERMIT FEE SCHEDULE
FOR THE
COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE
DISPOSAL SITE, RICHLAND, WASHINGTON

1. Generators, except nuclear utilities, who have previously held a site use permit for disposal of wastes at the Richland site must determine the amount of waste disposed by their organization in the most recent complete calendar year in which they held a permit. Using this volume figure, the Site Use Permit fee may be determined by referencing the table in paragraph 2.

2. Generators applying for a permit for the first time must estimate the volume of waste which they plan to dispose of during the period of April 1, 2001, through March 31, 2002. Using this volume figure, the Site Use Permit fee may be determined by referencing the table below.

CATEGORY	FEE
< 50 cubic feet	$ 400
≥ 50 < 500 cubic feet	$ 800
≥ 500 < 1000 cubic feet	$ 2,000
≥ 1000 < 2500 cubic feet	$ 4,000
≥ 2500 cubic feet	$14,000
Nuclear Utilities	$40,000

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
P.O. Box 47600 • Olympia, Washington 98504-7600
(360) 407-6000 • TDD Only (Hearing Impaired) (360) 407-6006

April 2, 2001

TO: Applicant

FROM: Nuclear Waste Program

SUBJECT: Application for a Site Use Permit to Dispose of Low-Level Radioactive Waste in Washington State

As requested, enclosed is the 2001 application form for a Generator Site Use Permit, a permit fee schedule to enable you to calculate the permit fee due, and a copy of Chapter 173-326 WAC, Commercial Low-Level Radioactive Waste Disposal – Site Use Permits. **NOTE:** This application is for generators of low-level radioactive wastes within the Northwest Interstate and Rocky Mountain compacts only. If your waste stream contains N.A.R.M. (naturally occurring or accelerator produced radioactive material) or Exempt wastes, you must apply for a separate disposal permit for those portions of the waste.

All items on the application must be answered. Completed applications with full payment should be returned in the envelope provided. Failure to provide complete information (including the 9-digit Zipcode) on the application form, or lack of accompanying payment, will delay processing your application. Please note that the permit period runs from March 1, 2001, through February 28, 2002. Permit fees for permits issued for less than the twelve month period will not be pro-rated. **USE THIS LETTER AS AN ORIGINAL INVOICE.**

In accordance with Washington State's Dangerous Waste Regulations (Chapter 173-303 WAC), enclosed, neither chemically hazardous nor mixed wastes (both chemically hazardous and radioactive) are acceptable for disposal at the low-level radioactive waste disposal site. These include, but are not limited to, scintillation fluids containing organic solvents (benzene, toluene, etc.).

If you have any questions or require additional information, please contact Diane Hallisy at (360) 407-7109, or via e-mail at diha461@ecy.wa.gov.

DKH:dh
Enclosures

STATE OF WASHINGTON
2001
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF LOW-LEVEL RADIOACTIVE WASTE AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE, RICHLAND, WASHINGTON

WASHINGTON STATE DEPARTMENT OF ECOLOGY

A. *Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.*

Schnitzer Steel Products Co.
GENERATOR'S NAME:

B. *Address where waste is generated. (YOU MUST INCLUDE THE 9-DIGIT ZIP-CODE OR PERMIT WILL NOT BE PROCESSED. Contact your local Post Office for further information.) Generators who own multiple facilities within the same state may apply for one permit if the same contact person within the generator's organization will be responsible for handling the waste shipments from the multiple facilities (attach a list of in-state facilities to the application). Otherwise, separate permits will be required. Facilities which are owned by the same generator but located in different states will require separate permits.*

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (OF CONTACT PERSON)
12005 North Burgard Road 97203-6432	P.O. Box 10047
Portland, Oregon 97203-6432	Portland, Oregon 97296-0047
CITY STATE ZIP CODE (9 DIGITS)	CITY STATE ZIP CODE (9 DIGITS)

C. *Name of contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: PERMITS WILL BE MAILED ADDRESSED TO CONTACT PERSON; ENSURE MAILING ADDRESS AND CONTACT NAME AGREE.)*

James L. Jakubiak — Environmental Administrator — (503) 286-5176 Ext —
(First) (M.I.) (Last) — TITLE — PHONE

D. *A Nuclear Regulatory Commission or agreement state license is required for activities involving the possession, use, ownership, or transfer of most radioactive materials. List all license numbers pertaining to materials to be disposed. If you do not have a license relating to the materials to be disposed, please explain fully in the space provided.*

NRC LICENSE #(S): _____ *OR* *AGREEMENT STATE LICENSE #* _____

EXPIRATION DATE(S): _____ *EXPIRATION DATE:* _____

IF YOU DO NOT HAVE EITHER LICENSE PLEASE EXPLAIN.
This is a one-time disposal event of scrap metal that was detected at our facility. We do not anticipate future generation of such material.

E. *Type of permit you are applying for. If you possess a current permit, or previously had a permit that expired, please state your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. First-time applicants should enter projected volume of waste to be disposed during the period 3/1/2000- 2/28/2001.*

___ *RENEWAL - SITE USE PERMIT #* _____ *- VOLUME* _____ *(CU FT)* ___ *(YEAR)*

X *FIRST-TIME APPLICANT - VOLUME PROJECTION (3/1/2001 - 2/28/2002)* 99.34 *(CU FT)*

F. *Calculate the permit fee due using the enclosed fee schedule and indicate amount of fee enclosed.*

AMOUNT ENCLOSED $ 800.00

G. *Do you use a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.*

YES X *NO* ___ - Thomas Gray & Associates, Inc. - B400
BROKER NAME(S) — *BROKER'S SITE USE PERMIT #(S)*

ECY 070-75-G (Rev. 11/2000)

SCHN00243052

H. *Please indicate the one specific type which best describes your facility:*

1. **FUEL CYCLE**
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )
2. **MEDICAL**
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )
3. **GOVERNMENT (NON-MEDICAL)**
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )
4. **INDUSTRIAL**
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER ☒
5. **ACADEMIC (NON-MEDICAL)**
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

I. *Types of wastes (e.g. solidified liquids, ion exchange resins, activated components, pipe scale, building rubble, etc.), and all radionuclides (e.g. C-14, H-3) that you will be shipping for disposal in Washington State*

(Lantern Mantels, ashes) (pipes - steel) (Source disk)

1. Th-230, Uranium Ore, Sr-90

TYPES OF WASTES

2. Th-230, Uranium Ore, Sr-90

RADIONUCLIDES

J. *Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State during calendar year 2001. DO NOT USE SCIENTIFIC NOTATION FOR ACTIVITY.*

~~99.3~~ ft³ 472 mCi

K. *Estimated percentage of each class of waste (as defined by WAC 246-249-040 (see attached)). Total of percentage from all classes should equal 100%*

CLASS A (100 %) CLASS B (%) CLASS C (%)

L. *The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State site use permit number (if renewing) written on the check or money order. Please provide the following information:*

CHECK OR MONEY ORDER # NAME OF COMPANY ISSUING CHECK OR MONEY ORDER

M. *I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of low-level radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.*

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK)	Tom Zelenka
PRINTED NAME OF PERSON SIGNING	Tom Zelenka
TITLE	MGR Environmental Affairs
DATE OF SIGNATURE	4/19/01

N. *Mail check or money order and application form (with original ink signature) to:*

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

Correspondence (other than application forms) may be addressed to:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

Telephone number for information is (360) 407-7109 or e-mail dlha461@ecy.wa.gov

PLEASE ALLOW A MINIMUM OF 4 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

STATE OF WASHINGTON
2001
SITE USE PERMIT FEE SCHEDULE
FOR THE
COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE
DISPOSAL SITE,
RICHLAND, WASHINGTON

1. Generators, except nuclear utilities, who have previously held a site use permit for disposal of low-level radioactive wastes at the Richland site must determine the amount of waste disposed by their organization in the most recent complete calendar year in which they held a permit. Using this volume figure, the Site Use Permit fee may be determined by referencing the table in paragraph 2.

2. Generators applying for a permit for the first time must estimate the volume of waste which they plan to dispose of during the period of March 1, 2001, through February 28, 2002. Using this volume figure, the Site Use Permit fee may be determined by referencing the table below.

CATEGORY	FEE
Brokers	$ 1,000
< 50 cubic feet	$ 400
≥ 50 < 500 cubic feet	$ 800
≥ 500 < 1000 cubic feet	$ 2,000
≥ 1000 < 2500 cubic feet	$ 4,000
≥ 2500 cubic feet	$14,000
Nuclear Utilities	$40,000

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: N2032

EXPIRATION DATE 3/31/2002

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00243055

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G2122

EXPIRATION DATE 2/28/2002

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00243056

LOW-LEVEL AND NATURALLY OCCURRING OR ACCELERATOR PRODUCED RADIOACTIVE WASTE SHIPMENT CERTIFICATION FOR COMMERCIAL GENERATORS/PACKAGERS, AND BROKERS AND CARRIERS

The following certification, completed as applicable, is made to the state of Washington:

Certification is hereby made to the state of Washington that Radiation Shipment Record No. 4186 of radioactive waste has been inspected in accordance with requirements of the Governor of Washington's Executive Order dated November 19, 1979, prior to its shipment. Further certification is made that the inspection has revealed no items of noncompliance with all applicable laws, rules, and regulations.

The undersigned shall indemnify and hold harmless the state of Washington, in an amount not to exceed $1,000,000.00 per individual who may be injured, provided that indemnification shall not exceed $5,000,000.00 in total, for each occurrence, from any and all claims, suits, losses, damage, injury, and expenses to any person whomsoever or to property arising or growing out of or in any manner connected with the activities performed under this order.

Except for any violation of applicable existing state or federal statute or regulation respecting packaging and shipment, inspection and acceptance of any item or container or material covered by this certification by the state of Washington or a duly authorized contractor shall release the party who executed this certificate from any and all requirements of indemnification from injury or loss.

SECTION A:
FOR THE GENERATOR/PACKAGER: Schnitzer Steel Industries, Inc.
(Company Name)

PERMIT NUMBER: 62122-N2032

VOLUME OF WASTE IN THIS SHIPMENT: 3.0139 m3

DATE: 5/23/01 BY: [signature]

TITLE: Environmental Administrator

SECTION B:
FOR THE BROKER: Thomas Gray & Associates, Inc.
(Company Name)

PERMIT NUMBER: B400

VOLUME OF WASTE IN THIS SHIPMENT: 3.0139 m3

DATE: 5/23/01 BY:

TITLE:

SECTION C:
FOR THE CARRIER: Thomas Gray & Associates
(Company Name)

VOLUME OF WASTE IN THIS SHIPMENT:

DATE: 5-23-01 BY: [signature]

TITLE: Driver

DOH RHF-31A
Updated 3/00

SCHN00243057

WASHINGTON STATE DEPARTMENT OF ECOLOGY

DAILY MONEY MAIL RECEIPT LOG

For Monies Received on ____/____/____

Location: NWP.

1	2	3	4	5	6	For Fiscal Use Only 7	8	9
Number	Remitter	Amount	Cash	Check	Purpose	Deposited	Not Deposited	Explanation if not deposited
1	Schnitzer Steel	$800.00		✓	Site Use Permit			
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								

TOTAL AMOUNT RECEIVED: $ 800.00

RECIPIENT SIGNATURE: [signature]

DATE: 5/1/01

TOTAL AMOUNT DEPOSITED: $ _____

CJ NUMBER: _____

CASHIER SIGNATURE: _____

Distribution - White - Fiscal
Yellow - Fiscal
Pink - Originator

ECY 010-17 (Rev 11/97)

SEE INSTRUCTIONS ON REVERSE

SCHN00243058

Instructions for the completion of the Daily Money Mail Receipt Log

The Daily Money Mail Receipt Log will be used to record and forward daily to the Cashiering Section of the Fiscal Office monies received via "mail" (USPS, UPS, FedEx, etc.). It will NOT be used to forward monies received "in person" by walk-in customers.

If CASH is received in the mail, a hand receipt will also be prepared, and the total amount recorded on the Daily Money Receipt Log. The log then **must** be either hand delivered or sent to the Cashiering Section by Registered Mail.

The following instructions are keyed to the various sections of the form:

1. Below the form title, enter the date the money is received on the "For Monies Received on" line.

2. In the "Location" box, enter the region, program or office where the money is received.

3. In the "Remitter" column, enter the remitter's name from the check or money order. The remitter name will be the name of the account to be credited when cash is received.

4. Enter the amount received in the "Amount" column.

5. Place a check mark in either the "Cash" or "Check" column. A money order is considered a check. If a check mark is placed in the "Cash" column, a hand receipt must accompany the money and the total amount of money recorded on the form **must** be hand delivered or sent by Registered Mail to the Cashiering Section.

6. In the "Purpose" column, describe for what reason the money is being received (e.g., Water Rights (fees, applications, extensions, etc.), Copy Fees, IRAP, etc.) and any additional information desired. This information is used by the Cashiering staff to determine the proper allocation of the money.

7. Do NOT complete columns 7, 8, and 9. These columns are reserved for Fiscal Office use only.

8. Total the amount of money received (column 3) on the "Total Amount Received" line.

9. The employee completing the form will sign on the "Recipient Signature" line and show the date signed on the "Date" line.

10. If forwarding to the Fiscal Office by mail, detach and retain the Pink copy. If hand delivering to the Fiscal Office, Cashiering staff will detach and return the Pink copy to the delivering employee after they have signed for the money.

For further information, contact the Cashiering Section at (360) 407-7094/7095.

FAX COVER PAGE

DATE: 12/14/00 NUMBER OF PAGES 3
(Including Cover Page)

TO: Jim Jakubcak

Phone: ( )
Fax: (503) 286-6948

FROM: Laura Lee
US Ecology
1777 Terminal Drive
Richland, WA 99352
Phone: (509) 946-4945
Fax: (509) 946-5495

REMARKS:
Jim,
Please feel free to call.
Laura Lee

(FSHARE:MISCOFF:FAXCOVERSHEET)

From:

— Diane Halisy - WA. Dept. of Ecology (Turnover time - Middle of Renewals Mid of April - May 1st., 2001)
(360) 407-7109

—

Orange: Rich Geligo

— Kirk Gabbit - Misolex Technology

888 - 306 · 6843

↔ Low-Level
↔ NORM

Isotope Activity
size & weight
Phone
FAX (714) 997-3561

SCHN00243063

SCHNITZER STEEL PRODUCTS CO.

12005 N. Burgard St. Portland, Oregon 97203
P.O. Box 10047 Portland, Oregon 97210
Phone 503/286-5771 FAX 503/286-6948

SCRAP DIVISION
FAX TRANSMITTAL COVER SHEET

TO: Laura Lee

DATE: March ~~17~~ 19, 2001

NUMBER OF PAGES BEING SENT (INCLUDING COVER PAGE) 2

FROM: Jim Jakubiak

If message is incomplete or illegible, please call (503) 286-5771.

If you want to send a Fax to Schnitzer Steel, our Fax Number is (503) 286-6948.

RE: I haven't heard from you in awhile regarding my registration, so I thought I'd resend the form. Please call me at (503) 286-6976 on Monday. Thanks.

I talked with Diane Halisy this morning. She said I should get a permit by ~ May 1, 2001.

Confirmation Report - Memory Send

Time : Mar-19-2001 10:12am
Tel line :
Name :

Job number	:	743
Date	:	Mar-19 10:11am
To	:	915099465495
Document pages	:	002
Start time	:	Mar-19 10:11am
End time	:	Mar-19 10:12am
Pages sent	:	002
Status	:	OK

Job number : 743 *** SEND SUCCESSFUL ***

SCHNITZER STEEL PRODUCTS CO.

12005 N. Burgard St. Portland, Oregon 97203
P.O. Box 10047 Portland, Oregon 97210
Phone 503/286-5771 FAX 503/286-6948

SCRAP DIVISION
FAX TRANSMITTAL COVER SHEET

TO: Laura Lee DATE: March ~~17~~ 19, 2001

NUMBER OF PAGES BEING SENT (INCLUDING COVER PAGE) 2

FROM: Jim Jakubiak

If message is incomplete or illegible, please call (503) 286-5771. If you want to send a Fax to Schnitzer Steel, our Fax Number is (503) 286-6948.

RE: I haven't heard from you in awhile regarding my registration, so I thought I'd resend the form. Please call me at (503) 286-6976 on Monday. Thanks.

I talked with Diane Haley this morning. She said I should get a permit by - May 1, 2001.

US Ecology, Inc.
P.O. Box 638
Richland, Washington 99352

509/377-2411
Fax: 509/377-2244
www.americanecology.com

US Ecology

an *American Ecology* company

Fax cover sheet

DATE: 5/14/01	# OF PAGES INLCUDING COVER SHEET 2

To: Jim Jakibiak	From: Kathie Wilson ¼ of mile West of 200 East Area Hanford Reservation Richland, WA 99352
Phone: ( ) Fax: ( )	Phone: (509) 377-2411 Fax: (509) 377-2244

Remarks:

Recycled Paper

US Ecology

Radioactive Waste Generator Registration

Please Print or Type

(1) Generator Name: Schnitzer Steel Products Co.

(2) Corporate Billing Address: P.O. Box 10047

City: Portland State: Oregon

Zip Code: 97296 - 0047

(3) Generating Facility Address: International Terminals

12005 N. Burgard

City: Portland County: Multnomah

State: Oregon Zip Code: 97203

(4) Generator Administrative Contact: Jim Jakubiak

Generator Administrative Title: Environmental Administrator

Generator Telephone:	After Hours Telephone:
Working Hours (503) - 286 - 6776	(503) - 519 - 4795
Fax No. (503) - 286 - 6248	

(5) Site Use Permit number(s) N2032

(6) Description of Business: Scrap Metal Recycler

(7) Please indicate your 4 digit Standard Industry Code (SIC) here: 5093

(8) Will you be using the services of a broker (Transporter) in shipping wastes to US Ecology for disposal:

☐ No ☒ Yes

Name of Broker (Transporter): Thomas Gray & Associates Broker Permit # B 900

(9) How much waste do you expect to ship during a typical 12 Month Period: ~2 Cu.Ft.

RETURN COMPLETED FORM TO:

US ECOLOGY, INC
Laura Lee Harry
P.O. Box 638
Richland, WA 99352-0638
Fax (509) 377-2244

Signature: James L. Jakubiak (503) 286-6776

Print Name: James L. Jakubiak

Title: Environmental Administrator

Date: December 14, 2000

FOR OFFICIAL USE ONLY

ORR-99-975-3428 KW 5/14/01

ORR-99-975-3429-G2122

SCHN00243069

Confirmation Report — Memory Send

Time : 05-14-2001 02:44
Tel line :
Name :

Job number	:	324
Date	:	05-14 02:43
To	:	915093772244
Document pages	:	001
Start time	:	05-14 02:43
End time	:	05-14 02:44
Pages sent	:	001
Status	:	OK

Job number : 324
DEC-14-2000 THU 03:21 PM

*** SEND SUCCESSFUL ***
FAX NO.

P. 03

US Ecology

Radioactive Waste Generator Registration

Please Print or Type

(1) Generator Name: Schnitzer Steel Products Co.

(2) Corporate Billing Address: P.O. Box 10047
City: Portland State: Oregon
Zip Code: 97296 - 0047

(3) Generating Facility Address: International Terminals
12005 N. Burgard
City: Portland County: Multnomah
State: Oregon Zip Code: 97203

(4) Generator Administrative Contact: Jim Jakubiak
Generator Administrative Title: Environmental Administrator

	Generator Telephone:	After Hours Telephone:
Working Hours	(503) - 286 - 6976	(503) - 519 - 4795
Fax No.	(503) - 286 - 6948	

(5) Site Use Permit number(s): _____

(6) Description of Business: Scrap Metal Recycler

(7) Please indicate your 4 digit Standard Industry Code (SIC) here: 5093

(8) Will you be using the services of a broker (transporter) in shipping wastes to US Ecology for disposal:

☐ No ☒ Yes

Name of Broker (Transporter): Thomas Grey & Associates Broker Permit # B460

(9) How much waste do you expect to ship during a typical 12 Month Period: ~ 2 Cu.Ft.

RETURN COMPLETED FORM TO:
US ECOLOGY, INC
Laura Lee Barry
P.O. Box 638
Richland, WA 99352-0638
Fax (509) 377-2244

Signature: James L. Jakubiak (503) 286-6976
Print Name: James L. Jakubiak
Title: Environmental Administrator
Date: December 14, 2000

FOR OFFICIAL USE ONLY

___-___-___-___ ___/___/___

SCHN00243070

US ECOLOGY, INC.

YEAR 2002 LOW LEVEL RADIOACTIVE WASTE DISPOSAL PROJECTIONS

Company Schnitzer Steel Products Co.

Address P.O. Box 10047 · Portland, Oregon 97296-0047

Current Site Use Permit No. N2032 & 62122

1. LLRW to be delivered to the Richland site in 2002: Ø cu ft
2. Projected number of containers in 2002: Ø
3. Projected number of shipments in 2002: Ø
4. Exposure: Number of containers with dose rate at container surface:
   - Less than or equal to 200 mR/Hr: Ø
   - Greater than 200 mR/Hr but less than or equal to 1,000 mR/Hr: Ø
   - Greater than 1,000 mR/Hr but less than or equal to10,000 mR/Hr: Ø
   - Greater than 10,000 mR/Hr but less than or equal to100,000 mR/Hr: Ø
   - Greater than 100,000 mR/Hr: Ø
5. Projection of extraordinary volumes[1] NA cu ft
6. Projected volume from decommissioning a nuclear generating facility[2] NA cu ft

CERTIFICATION

I hereby certify that I have reviewed the foregoing waste disposal projection for 2002 and know the contents thereof, and that these projections are made in good faith based on the best information currently available to this company.

Jim Jakubiak
Printed Name

Signature

Environmental Administrator
Title

November 12, 2001
Date

---

[1] An "extraordinary volume" is waste caused by non-recurring events, outside normal operations of a generator, that are in excess of 20,000 cubic feet or 20% of the total volume disposed at the Richland facility during 2001, whichever is less. RCW 81.108.020(3)

[2] Nuclear decommissioning waste is defined as waste generated from the decommissioning of a nuclear powered electric generating facility.

Post-it® Fax Note 7671	Date 11/20/01	# of pages ▶ 1
To Arvil Crase	From Jim Jakubiak	
Co./Dept. US Ecology, Inc.	Co. SSP	
Phone #	Phone #	
Fax # (360) 753-3684	Fax #	

P.O. Box 11846
Olympia, WA 98508
Courier:
7043 Monaco Drive S.E.
Olympia, WA 98501-6519

360/753-3669
Fax: 360/753-3684

USEcology

A Division of American Ecology Corporation

October 12, 2001

James L. Jakubiak
Schnitzer Steel Products Co.
P.O. Box 10047
Portland, OR 97296-0047

The Washington Utilities and Transportation Commission (WUTC) regulates disposal rates for low level radioactive waste (LLRW) at the Richland, WA facility. The structure for collection of disposal rates is outlined in a rate design and revenue requirement stipulation developed by the Company and rate case participants and approved by the WUTC.

The stipulation specifies that rates shall be determined each January on the basis of projections provided by the Company's customers. The Company is required to submit the enclosed written request to each of its customers for estimates of LLRW by volume, number of containers, number of shipments, and dose rates on containers to be disposed at the site during the following year. According to information provided by the Washington Department of Ecology, Schnitzer Steel Products Co. was assigned Site Use Permit No. G2122 for all or a part of 2001, and may continue using the Richland facility for disposal of LLRW during 2002.

Please complete your projections for 2002 and return the enclosed form. We request that you complete the form ***even if no shipments are planned during 2002.*** Additionally, please notify US Ecology, Inc. if you ***do not*** plan to renew your current site use permit for 2002.

The information received from site use permit holders will be the basis for determining disposal rates for 2002. Please take the necessary time and effort to complete the projection form and return it to US Ecology by November 12, 2001. If the services of a Broker/Processor are utilized for treatment, volume reduction, or other purpose you may need to contact that vendor for assistance in completing the form. US Ecology will file proposed rates for 2002 prior to December 1, 2001. Projections returned after November 12, 2001 may not be used in the preparation of this filing.

Recycled Paper

INSTRUCTIONS

GENERAL Rates for receipt and disposal of low level radioactive waste (LLRW) at the Richland, WA facility are regulated by the Washington Utilities and Transportation Commission. The tariff (schedule of rates & charges) is based on the projected usage of the disposal facility by site use permit holders. US Ecology is directed by the WUTC to solicit projections from permit holders and to use those projections in formulating disposal rates for 2002. Therefore, it is extremely important that serious time and thought is spent in developing your projections for 2002.

IMPORTANT

THE PROJECTIONS ARE FOR WASTE RECEIVED FOR DISPOSAL AT THE RICHLAND, WA FACILITY. IF THE SERVICES OF A BROKER/PROCESSOR ARE UTILIZED FOR TREATMENT, VOLUME REDUCTION, OR OTHER PURPOSE YOU MAY NEED TO CONTACT THAT VENDOR FOR ASSISTANCE IN COMPLETING THIS FORM.

COMPANY INFORMATION List the name and address of each location. Companies with multiple locations must submit projections for each location independent of the other.

SITE USE PERMIT NUMBER This is the number assigned by the Washington Department of Ecology (WDOE) to each generator/shipper. Projections are to be made for each permit number/location.

1. 2002 VOLUME PROJECTIONS: Enter the cubic feet of LLRW to be **shipped from the permit holder to the Richland disposal facility.**

2. PROJECTED NUMBER OF CONTAINERS: Enter the number or containers projected to be shipped to the Richland facility.

3. PROJECTED NUMBER OF SHIPMENTS: Enter the number of shipments to the Richland, WA facility.

4. PROJECTED EXPOSURE: Enter the number of containers to be shipped in each of the five categories.

5. EXTRAORDINARY VOLUME: This classification of waste is defined on the reverse side. Enter the volume, if any, to be shipped during 2002.

6. DECOMMISSIONING WASTE: This waste is from a nuclear powered electric generating station which is undergoing decommissioning and/or dismantling. Enter the volume, if any, to be shipped during 2002.

CERTIFICATION

The purpose of this certification is to assure that an authorized representative of the company has reviewed the projections and agrees with the data entered.

RETURN BY NOVEMBER 12, 2001 TO:

US ECOLOGY, INC.
P.O. Box 11846
OLYMPIA, WA 98508

or via FAX to

(360) 753-3684

SCHN00243077

There are five basic components in the schedule of charges.

1. A per cubic foot charge based on the volume of the disposal container.
2. A charge per manifested shipment.
3. A charge per container.
4. A charge for exposure per container based upon the dose rate at the container surface.
5. A site availability charge.

The site availability charge is an annual fee assessed by US Ecology on each holder of a site use permit issued by the Washington Department of Ecology as of January 1, 2002. The charge represents a portion of the cost of licenses, regulatory compliance, and monitoring.

The site availability charge has eleven blocks for permit holders who ship waste to the facility during the year and one block for permit holders who ship no waste to the facility during the year. The assignment of a permit holder to a particular block depends on two factors: (1) the volume of waste shipped to the facility during the calendar year; and (2) the dose rate at container surface, summed over all containers shipped during the year.

If a permit holder uses a broker, the holder will be placed in the appropriate block for the site availability charge on the basis of volume and dose rate of waste after processing by the broker.

The stipulation provides some reduction in the site availability charge for not-for-profit post-secondary educational institutions with respect to waste that is generated at the facility. The charge assessed is one block lower than the rate that would otherwise apply.

Thank you for the opportunity to be of service. Please contact this office if additional information is needed.

Sincerely,

Arvil Crase

Arvil Crase
Customer Service Manager

Confirmation Report – Memory Send

Time : 11-20-2001 05:01pm
Tel line : 5032866948
Name : SCHNITZER SCRAP OFFICE

Job number	:	989
Date	:	11-20 05:00pm
To	:	913607533684
Document pages	:	001
Start time	:	11-20 05:00pm
End time	:	11-20 05:01pm
Pages sent	:	001
Status	:	OK

Job number : 989 *** SEND SUCCESSFUL ***

US ECOLOGY, INC.

YEAR 2002 LOW LEVEL RADIOACTIVE WASTE DISPOSAL PROJECTIONS

Company Schnitzer Steel Products Co.
Address P.O. Box 10047 · Portland, Oregon 97296-0047
Current Site Use Permit No. N2032 & 62122

1. LLRW to be delivered to the Richland site in 2002: Ø cu ft
2. Projected number of containers in 2002: Ø
3. Projected number of shipments in 2002: Ø
4. Exposure: Number of containers with dose rate at container surface:
   - Less than or equal to 200 mR/Hr Ø
   - Greater than 200 mR/Hr but less than or equal to 1,000 mR/Hr Ø
   - Greater than 1,000 mR/Hr but less than or equal to10,000 mR/Hr Ø
   - Greater than 10,000 mR/Hr but less than or equal to100,000 mR/Hr Ø
   - Greater than 100,000 mR/Hr Ø
5. Projection of extraordinary volumes[1] NA cu ft
6. Projected volume from decommissioning a nuclear generating facility[2] NA cu ft

CERTIFICATION

I hereby certify that I have reviewed the foregoing waste disposal projection for 2002 and know the contents thereof, and that these projections are made in good faith based on the best information currently available to this company.

Jim Jakubiak
Printed Name
[signature]
Signature
Environmental Administrator
Title
November 12, 2001
Date

[1] An "extraordinary volume" is waste caused by non-recurring events, outside normal operations of a generator, that are in excess of 20,000 cubic feet or 20% of the total volume disposed at the Richland facility during 2001, whichever is less. RCW 81.108.020(3)

[2] Nuclear decommissioning waste is defined as waste generated from the decommissioning of a nuclear powered electric generating facility.

Post-it® Fax Note 7671	Date 11/20/01 # of pages ▸ 1
To Arvil Crase	From Jim Jakubiak
Co./Dept. US Ecology, Inc.	Co. SSP
Phone #	Phone #
Fax # (360) 753-3684	Fax #

SCHN00243079

Washington Mutual Bank

16-3717/1220 000097300

WASHINGTON MUTUAL 411 00

FOUR ONE ONE CTS CTS

*********Feb 19, 2002 FOUR HUNDRED ELEVEN DOLLARS AND 00 CENTS *********

4556 (10/99)

PAY TO THE ORDER OF

State of Washington
Site Use Permit #G2122

Washington Mutual Bank

DRAWER / PURCHASER COPY

NON-NEGOTIABLE

REMITTER
Schnitzer Steel Products Co. 319 108

Issued By Integrated Payment Systems Inc., Englewood, Colorado Wells Fargo Bank Ltd, N.A., Los Angeles, CA

SCHN00243083

STATE OF WASHINGTON
2002
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF LOW-LEVEL RADIOACTIVE WASTE AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE, RICHLAND, WASHINGTON

WASHINGTON STATE DEPARTMENT OF ECOLOGY

A. *Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as th original generator of its client's radioactive material or waste, nor sign on behalf of the generator.*

Schnitzer Steel Products Co.
GENERATOR'S NAME:

B. *Address where waste is generated. (YOU MUST INCLUDE THE 9-DIGIT ZIP-CODE OR PERMIT WILL NOT BE PROCESSED. Contact your local Post Office for further information.) Generators who own multiple facilities within the same state may apply for one permit if the same contact person within the generator's organization will be responsible for handling the waste shipments from the multiple facilities (attach a list of in-state facilities to the application). Otherwise, separate permits will be required. Facilities which are owned by the same generator but located in different states will require separate permits.*

ADDRESS WHERE WASTE IS GENERATED	MAILING ADDRESS (OF CONTACT PERSON)
12005 North Burgard Road	P.O. Box 10047 · Portland, OR. 97203-6432
Portland, OR. 97203-6432	Portland, OR. 97296-0047
CITY / STATE / ZIP CODE (9 DIGITS)	CITY / STATE / ZIP CODE (9 DIGITS)

C. *Name of contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: PERMITS WILL BE MAILED ADDRESSED TO CONTACT PERSON; ENSURE MAILING ADDRESS AND CONTACT NAME AGREE.)*

James L. Jakubiak — Environmental Administrator — 503) 286-6976 Ext
(First) (M.I.) (Last) — TITLE — PHONE

D. *A Nuclear Regulatory Commission or agreement state license is required for activities involving the possession, use, ownership, or transfer of most radioactive materials. List all license numbers pertaining to materials to be disposed. If you do not have a license relating to the materials to be disposed, please explain fully in the space provided.*

NRC LICENSE #(S): _____ OR AGREEMENT STATE LICENSE # _____

EXPIRATION DATE(S): _____ EXPIRATION DATE: _____

IF YOU DO NOT HAVE EITHER LICENSE PLEASE EXPLAIN.
We keep a Site Use Permit active in the event we receive a piece of contaminated scrap metal that requires disposal. We do not generate contaminated material, but on rare occassion may receive such material from suppliers.

E. *Type of permit you are applying for. If you possess a current permit, or previously had a permit that expired, please state your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. First-time applicants should enter projected volume of waste to be disposed during the period 3/1/2002- 2/28/2003.*

X RENEWAL - SITE USE PERMIT # 62122 - VOLUME _____ (CU FT) ____ (YEAR)

____ FIRST-TIME APPLICANT - VOLUME PROJECTION (3/1/2002 - 2/28/2003) _____ (CU FT)

F. *Calculate the permit fee due using the enclosed fee schedule and indicate amount of fee enclosed.*

AMOUNT ENCLOSED $ 411

G. *Do you use a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.*

YES X NO ___ - Thomas Gray & Assoc., Inc. - B4ØØ
BROKER NAME(S) — BROKER'S SITE USE PERMIT #(S)

ECY 010-75-G (Rev. 12/2001)

SCHN00243084

H. Please indicate the one specific type which best describes your facility:

1. **FUEL CYCLE**
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )
2. **MEDICAL**
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )
3. **GOVERNMENT (NON-MEDICAL)**
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )
4. **INDUSTRIAL**
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER (X)
5. **ACADEMIC (NON-MEDICAL)**
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

I. Types of wastes (e.g. solidified liquids, ion exchange resins, activated components, pipe scale, building rubble, etc.), and all radionuclides (e.g. C-14, H-3) that you will be shipping for disposal in Washington State.

1. Unknown at this time. Refer to previous applications for waste types.
   TYPES OF WASTES

2. Unknown at this time. Refer to previous applications for waste types.
   RADIONUCLIDES

J. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State during calendar year 2002. DO NOT USE SCIENTIFIC NOTATION FOR ACTIVITY.

NA _____ ft^3 _____ mCi

K. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040).

CLASS A (%) CLASS B (%) CLASS C (%)

NA

L. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State site use permit number (if renewing) written on the check or money order. Please provide the following information:

97300 — CHECK OR MONEY ORDER #

Schnitzer Steel Products Co. — NAME OF COMPANY ISSUING CHECK OR MONEY ORDER

M. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of low-level radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179) I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the be of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK): Thomas F Zelenka

PRINTED NAME OF PERSON SIGNING: Thomas F. Zelenka

TITLE: MGR Environmental Affairs

DATE OF SIGNATURE: 2/19/02

N. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

Correspondence (other than application forms) may be addressed to:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

Telephone number for information is (360) 407-7109 or e-mail diha461@ecy.wa.gov

PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

STATE OF WASHINGTON
2002
APPLICATION FOR A SITE USE PERMIT TO DISPOSE OF N.A.R.M. WASTES AT THE COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE, RICHLAND, WASHINGTON

A. Name of the company, organization, institution, etc., that is the original generator of the waste to be disposed of under this permit. (If the name changes, you must notify us by mail on the new letterhead.) Original generator means the last person who puts radioactive material to practical use. A broker may not list itself as the original generator of its client's radioactive material or waste, nor sign on behalf of the generator.

Schnitzer Steel Products Co.
APPLICANT'S NAME:

B. Address where waste is generated (MUST include the 9-digit Zip. Contact your Post Office to obtain your Zip Code).

12005 North Burgard Road, 97203-6432 · P.O. Box 10047
ADDRESS WHERE WASTE IS GENERATED — MAILING ADDRESS (IF DIFFERENT)

Portland, OR. 97203-6432 · Portland, Oregon 97296-0047
CITY STATE ZIP CODE (9 DIGITS) — CITY STATE ZIP CODE (9 DIGITS)

C. Name of the contact person who will be able to provide answers to any questions we may have on your application, waste generating activities or shipments. (NOTE: Permits will be mailed addressed to contact person; ensure mailing address and contact name agree.)

James L. Jakubiak Env. Administrator (503) 286-6976 Ext
(FIRST) (M.I.) (LAST) TITLE PHONE

D. If this is a renewal of a site use permit please enter your permit number and volume of waste disposed of at the Richland site in the most recent calendar year in which you held a permit. Indicate if you are a first-time applicant.

X RENEWAL - SITE USE PERMIT # N2032 VOLUME DISPOSED ____ (CU FT) ___ (YEAR)

___ FIRST-TIME APPLICANT

E. Estimated volume of waste in cubic feet, and amount of activity in millicuries (mCi) that you will dispose of in Washington State in calendar year 2002. DO NOT USE SCIENTIFIC NOTATION.

____ ft^3 ____ mCi NA

F. Calculate the permit fee due using the enclosed fee schedule and enter amount of fee enclosed. $ Ø

G. Types of N.A.R.M. wastes (e.g. pipe scale, decontamination waste, building rubble, etc.), and all radionuclides that you have approval to dispose of in Washington State.

1. See previous applications for waste types.
TYPES OF WASTES

2. See previous applications for waste types
RADIONUCLIDES

H. Estimated percentage of each class of waste. Total of percentage from all classes should equal 100%. (See WAC 246-249-040, attached).

NA CLASS A (%) CLASS B (%) CLASS C (%)

I. Do you u se a broker's services? If yes, indicate your broker's name and its Washington State Broker Site Use Permit number. If you use more than one broker, list them all.

YES Y NO ___ - Thomas Gray & Associates, Inc. - B400
BROKER NAME(S) — BROKER'S SITE USE PERMIT #(S)

ECY 010-75-N (Rev. 12/2001)

SCHN00243096

J. Do you have a specific radioactive materials license from the NRC or Agreement State? YES _____ NO X If yes, do you package your own radioactive waste? YES _____ NO —

K. If you operate under a general radioactive materials license who packages your waste for you?

Thomas Gray & Associates, Inc. — PACKAGER'S NAME

B400 — PACKAGER'S SITE USE PERMIT #

L. Please indicate the one specific type which best describes your facility:

1. FUEL CYCLE
   - a. NUCLEAR POWER REACTOR ( )
   - b. REACTOR FUEL PRODUCTION ( )
   - c. OTHER (NON-REACTOR) ( )
2. MEDICAL
   - a. HOSPITAL/CLINIC ( )
   - b. RESEARCH ( )
   - c. LABORATORY ( )
   - d. OTHER ( )
3. GOVERNMENT (NON-MEDICAL)
   - a. MILITARY ( )
   - b. RESEARCH ( )
   - c. REGULATORY ( )
   - d. OTHER ( )
4. INDUSTRIAL
   - a. RESEARCH & DEVELOPMENT ( )
   - b. MANUFACTURING ( )
   - c. NUCLEAR PHARMACY ( )
   - d. WASTE BROKER ( )
   - e. OTHER (X)
5. ACADEMIC (NON-MEDICAL)
   - a. RESEARCH ( )
   - b. LABORATORY ( )
   - c. REACTOR ( )
   - d. OTHER ( )

M. The permit fee is required at the time of submitting an application (WAC 173-326-040(1)). Make check or money order payable to the State of Washington, with your Washington State Site Use Permit number (if applicable) written on the check or money order. Please provide the following information:

NA — CHECK OR MONEY ORDER #

NA — NAME OF COMPANY ISSUING CHECK

N. I certify that I am fully authorized to enter into the terms and conditions of this permit and am legally authorized to bind the applicant thereto. I hereby agree to comply with all applicable state and federal regulations related to the safe management of radioactive waste (including the assurance that the waste contains no hazardous components as defined in Washington Administrative Code, Chapter 173-303 WAC, Dangerous Waste Regulations, and complies with the site operator's Radioactive Materials License and with all Department of Transportation packaging and shipping requirements as defined in 49 CFR 170 through 179). I understand that the State of Washington reserves the right to suspend or revoke this permit. The information provided on this form is complete and true to the best of my knowledge.

SIGNATURE OF PERSON AUTHORIZED TO SIGN THIS APPLICATION (IN BLUE INK): Thomas F. Zelenka

PRINTED NAME OF PERSON SIGNING: Thomas F. Zelenka

TITLE: MGR Environmental Affairs

DATE OF SIGNATURE: 2/19/02

O. Mail check or money order and application form (with original ink signature) to:

Department of Ecology
Cashiering Section
PO Box 5128
Lacey, WA 98509-5128

P. Correspondence (other than application forms) may be addressed to:

Department of Ecology
Nuclear Waste Program
PO Box 47600
Olympia, WA 98504-7600

Telephone number for information is (360) 407-7109. Internet address is dihb461@ecy.wa.gov .

PLEASE ALLOW A MINIMUM OF 5 WEEKS TO PROCESS AND ISSUE SITE USE PERMIT. INCOMPLETE APPLICATION OR LATE PAYMENT WILL CAUSE DELAY.

Oregon
John A. Kitzhaber, M.D., Governor

Department of Human Resources
Health Division
800 NE Oregon Street # 21
Portland, OR 97232-2162
(503) 731-4030 Emergency
(503) 731-4014
FAX (503) 731-4081
TTY-Nonvoice (503) 731-4031

April 12, 2000

James L. Jakubiak, Environmental Administrator
Schnitzer Steel Industries, Inc.
3200 NW Yeon Avenue
Portland, Oregon 97296-0047

Dear Mr. Jakubiak:

Enclosed are instructions to complete an application for a radioactive materials license. Please review your application and clearly identify any information that may be excluded under the Public Records Law (ORS 192.610 through 192.690). Mail the completed application (along with any attachments), and the fee payment to:

Manager, Radioactive Materials Program
Radiation Protection Services
800 NE Oregon, Suite 260
Portland, Oregon 97232

All licenses require a validation fee. Validation fees may be either by facility (f) or by source (s). Source validation fees apply to each separate source or device. Your license will not be issued until all fees have been received and processed.

The fee for a Basic License is $696. Make checks payable to Oregon Health Division. Licenses cannot be issued until the validation fee is received and processed.

Should you have any questions regarding the preparation of your application, please do not hesitate to call for assistance.

Sincerely,

Terry D. Lindsey

Terry D. Lindsey, Manager
Radioactive Materials Licensing Program
Radiation Protection Services

sg

Enclosures

Assisting People to Become Independent, Healthy and Safe
An Equal Opportunity Employer

P:\RPS\RML\LICENSES\LICFORMS\RML001.LTR-4/27/00
24-26

SCHN00243108

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: G2122

EXPIRATION DATE: 2/28/2003

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00243137

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

SITE USE PERMIT

for the Commercial Low-Level Radioactive Waste Disposal Site

PERMIT NUMBER: N2032

EXPIRATION DATE: 3/31/2003

Registrant: SCHNITZER STEEL PRODUCTS CO
PO BOX 10047
PORTLAND, OR 97296-0047

For Waste Generated in the State of: OR

The person or organization to whom this certificate is issued must comply with applicable federal and state regulations related to the safe management of low-level radioactive waste.

Permit Does Not Imply Approval

ECY 010-2-78-G (2/93)

SCHN00243138

SCHNITZER GROUP

FAX MESSAGE

3200 NW YEON AVENUE
P.O. BOX 10047
PORTLAND, OREGON 97210-0047

PHONE: (503) 224-9900
TELEX: 360144
FAX: (503) 299-2277

DATE: 10/25/01

TO: JIM JAKUBIAK

COMPANY: IT

FAX NO.:

FROM: CHARLIE FORD

TOTAL NUMBER OF PAGES (INCLUDING COVER PAGE): 7

MESSAGE:

PLEASE CALL ASAP TO DISCUSS

IF YOU DO NOT RECEIVE THIS TRANSMISSION IN ITS ENTIRETY, OR IF YOU HAVE RECEIVED THIS TRANSMISSION IN ERROR, PLEASE CALL US IMMEDIATELY AT (503) 224-9900. THIS TRANSMISSION MAY INCLUDE CONFIDENTIAL INFORMATION AND IS INTENDED ONLY FOR THE INDIVIDUAL OR ENTITY NAMED ABOVE. ANY PERSON OTHER THAN THE INTENDED RECIPIENT (OR OTHERS AUTHORIZED BY THE INTENDED RECIPIENT) IS PROHIBITED FROM READING, COPYING, OR DISTRIBUTING THIS TRANSMISSION.

FORM.SG

WESTFARM FOODS

635 ELLIOTT AVENUE WEST • SEATTLE, WA • (206) 284-7220
MAILING ADDRESS: PO BOX 79007 • SEATTLE, WA 98119-7907

Sent by: Lisa Whitley
Date: 10/25/01
Number of Pages: 6 (Includes cover sheet)

Please notify us either by phone (206) 286-6769 or by FAX number (206) 270-9860 if you do not receive all pages.

CONFIDENTIAL MESSAGE TO:

NAME: Charles Ford
COMPANY: Schnitzer Steel Industries
CITY: Portland
FAX NO. 503 471 4421

This is all I have in our file - Thanks for your swift cooperation -

Lisa Whitley

The information contained in this facsimile message is proprietary and confidential. It is intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient, or the employee or agent responsible to deliver it to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify Darigold Technical Services Dept. by telephone, and we will arrange for disposition of the original message.

SCHNITZER STEEL INDUSTRIES, INC.
3200 NW Yeon Avenue P.O. Box 10047 Portland, Oregon 97296-0047
Phone (503) 224-9900 Telex 289876 FAX (503) 299-2277

June 18, 1999

Mr. David Landis
Dairygold
P.O. Box 578
Caldwell, ID 83606

RE: Radioactive Gauging Device

Dear Mr. Landis:

I am the assistant general counsel for Schnitzer Steel Industries, Inc. ("SSI"). I write to request reimbursement of $5,149 from Dairygold for costs incurred by SSI in removing and disposing of a radioactive gauge belonging to Dairygold. The facts, as I understand them, are as follows.

In November or December 1998, Cascade Steel Rolling Mills, Inc. ("CSRM"), a subsidiary of SSI, received a railcar from Levi's Iron & Metal, Inc., in Sacramento, that contained a radioactive gauging device. The car was shipped to SSI's facility at International Terminals ("IT") in Portland, Oregon, where SSI staff and equipment were used to unload the car, and identify and remove the gauge. The car was returned to CSRM. SSI hired Kay-Ray/Sensall to evaluate and dispose of the device, which contained a 200 milli-Curie cesium 137 source.

With the help of the Oregon Health Department Radiation Services Division and the U.S. Nuclear Regulatory Commission, the owner of the source was identified as Dairygold of Caldwell, Idaho. It is also my understanding that both agencies have initiated enforcement action against Dairygold.

The costs incurred by SSI in this matter are as follows:

• Evaluation and disposal (Kay-Ray/Sensall): (see attached invoices)	$3,371.00
• Freight (railcar from CSRM to IT):	$1,128.00
• Labor (10 hours @ $35/hour):	$ 350.00
• Equipment (3 hours crane @ $100/hour):	$ 300.00
Total:	$5,149.00

Please make your check payable to Schnitzer Steel Industries, Inc. and send to my attention. Thank you for your cooperation in this regard.

Very truly yours,

Charles A. Ford
Assistant General Counsel

CAF/llc
G:\CAF\LANDIS-LTR.DOC
Enclosures

cc: Mr. Terry Glucoft
Mr. Jim Jakubiak
Mr. Anton U. Pardini

IN Technologies

INVOICE

2555 North IH 35 • PO Box 800 • Round Rock, TX 78680-0800
512-388-9100 • 512-388-9200 (fax)

INVOICE NO: 15090
INVOICE DATE: 04-01-99
PAGE NO.: 1
CUSTOMER NO: 10001269

T-827 P.005/007 F-977

BILL TO
ACCOUNT NO. 10001269
SCHNITZER STEEL PRODUCTS
12205 N. BURGARD RD./PO Box 1047
PORTLAND, OR ~~97210~~ 97296
USA

SHIP TO
SCHNITZER STEEL PRODUCTS
12205 N. BURGARD RD.
PORTLAND, OR 97210
USA

SOLD TO
SCHNITZER STEEL PRODUCTS
12205 N. BURGARD RD.
PORTLAND, OR 97210
USA

OUR ORDER NO.	YOUR P.O. NO.	SHIPPING TERMS	TAX STATUS	SERVICE CHARGE
700096	34710			

REV.	REV. DATE	SHIP VIA	PAYMENT TERMS	DATE SHIPPED	SALES REPRESENTATIVE
		N/A	0.00/0/30	04-01-99	9116 FINE LINE IND PROD

ITEM NUMBER	QUANTITY SHIPPED	QUANTITY BACK ORDERED	PRODUCT DESCRIPTION	UNIT PRICE	DISC %	NET PRICE	T	EXTENSION
1	1.00	0.00	NOTE CONTACT-TIM TODD PROVIDE PERSONNEL AND MATERIALS ON TWO SEPERATE TRIPS TO EVALUATE 2 NUCLEAR GAUGES RECEIVD IN A LOAD OF SCRAP METAL.THE OWNER WAS LOCATED AND PROPER DISPOSAL COMPLETED	0.0000	0.00	0.0000	R	0.00
2	1.00	0.00	JE JAMES EISENHART ONSITE 1/11/99, 1/13/99 2/15/99	0.0000	0.00	0.0000	R	0.00
3	5.00	0.00	KPT LABOR, PREPARATION	50.0000	0.00	50.0000	R	250.00
4	9.00	0.00	KTT LABOR, TRAVEL	70.0000	0.00	70.0000	R	630.00
5	9.00	0.00	KOS LABOR, TECHNICIAN	130.0000	0.00	130.0000	R	1170.00
6	1.00	0.00	XAF	343.6700	0.00	343.6700	R	343.67

INVOICE SUBTOTAL				SALES TAX	FREIGHT	PLEASE PAY THIS AMOUNT
						-

5032892277 From-SCHNITZER STEEL Oct-25-2001 11:33

TN Technologies

INVOICE

1555 North IH 35 • PO Box 800 • Round Rock, TX 78680-0800
512-388-9100 • 512-388-6200 (fax)

INVOICE NO: 15090
INVOICE DATE: 04-01-99
PAGE NO.: 2
CUSTOMER NO: 10001269

ACCOUNT NO. 10001269

BILL TO
SCHNITZER STEEL PRODUCTS
12205 N. BURGARD RD.
PORTLAND, OR 97210
USA

SHIP TO
SCHNITZER STEEL PRODUCTS
12205 N. BURGARD RD.
PORTLAND, OR 97210
USA

SOLD TO
SCHNITZER STEEL PRODUCTS
12205 N. BURGARD RD.
PORTLAND, OR 97210
USA

OUR ORDER NO.	YOUR P.O. NO.	SHIPPING TERMS	TAX STATUS	SERVICE CHARGE
700096	34710			

REV.	REV. DATE	SHIP VIA	PAYMENT TERMS	DATE SHIPPED	SALES REPRESENTATIVE
		N/A	0.00/0/30	04-01-99	9116 FINE LINE IND PROD

ITEM NUMB.	QUANTITY SHIPPED	QUANTITY BACK ORDERED	PRODUCT/DESCRIPTION	UNIT PRICE	DISC %	NET PRICE	T A X	EXTENSION
			EXPENSE, AIRFARE					
7	1.00	0.00	KCR	57.9000	0.00	57.9000	R	57.90
			EXPENSE, CAR RENTAL					
8	1.00	0.00	KPD1	130.0000	0.00	130.0000	R	130.00
			EXPENSE, PERDIEM FULL DAY					
9	2.00	0.00	KPD2	65.0000	0.00	65.0000	R	130.00
			EXPENSE, PERDIEM HALF DAY					
10	1.00	0.00	DCS200	660.0000	0.00	660.0000	R	660.00
			DISPOSAL, Cs-137, 200 mCi RADIATION SOURCE, KAY RAY MODEL 7063P, S/N 10722, RMA#24089; AKNOWLEDGEMENT OF RECEIPT OF RADIOACTIVE MATERIAL MAILED TO WAYNE ESKEW AT DARIGOLD, CALDWELL, ID ON 3/5/99					

INVOICE SUB TOTAL				SALES TAX	FREIGHT	PLEASE PAY THIS AMOUNT

T-927 P.006/007 F-677
5032982277
From-SCHNITZER STEEL
Oct-25-2001 11:33

TN Technologies

INVOICE

2555 North IH 35 • PO Box 600 • Round Rock, TX 78680-0600
512-388-9100 • 512-388-9200 (fax)

INVOICE NO: 15090
INVOICE DATE: 04-01-99
PAGE NO.: 3
CUSTOMER NO: 10001269

T-927 P.007/007 F-977

ACCOUNT NO. 10001269

BILL TO
SCHNITZER STEEL PRODUCTS
12205 N. BURGARD RD.
PORTLAND, OR 97210
USA

SHIP TO
SCHNITZER STEEL PRODUCTS
12205 N. BURGARD RD.
PORTLAND, OR 97210
USA

SOLD TO
SCHNITZER STEEL PRODUCTS
12205 N. BURGARD RD.
PORTLAND, OR 97210
USA

OUR ORDER NO.	YOUR P.O. NO.	SHIPPING TERMS	TAX STATUS	SERVICE CHARGE
700096	34710			

REV.	REV. DATE	SHIP VIA	PAYMENT TERMS	DATE SHIPPED	SALES REPRESENTATIVE
		N/A	0.00/0/30	04-01-99	9116 FINE LINE IND PROD

ITEM NUMB.	QUANTITY SHIPPED	QUANTITY BACK ORDERED	PRODUCT/DESCRIPTION	UNIT PRICE	DISC %	NET PRICE		EXTENSION
			PLEASE REMIT IN US DOLLARS TO: TN TECHNOLOGIES PO BOX DEPTCH 10588 PALATINE, IL 60055-0588 SA					

INVOICE SUB TOTAL		DISC% 0.00	VAT	SALES TAX	FREIGHT	PLEASE PAY THIS AMOUNT
3,371.57		0.00		0.00	0.00	$3371.57

6032082277

From-SCHNITZER STEEL

Oct-26-2001 11:33

SCHN00243164

TN Technologies

ACKNOWLEDGMENT OF RECEIPT OF RADIOACTIVE MATERIAL

March 5, 1999

Wayne Eskew
Darigold
520 Albany Street
Caldwell, ID 83606

RMA Number - 24089

This is to certify that TN Technologies has received and accepted ownership of the radioactive material described below pursuant to applicable regulations and as authorized by our Texas Radioactive Material License LO3524.

Manufacturer	Model	Serial	Isotope	Source	Activity	Units	Assay
KAY-RAY/SENSALL	7063P	10722	Cs-137	KR-5303	200	mCi	8/79
Summary (1 source)					200	mCi	

This receipt should be retained in your files as a permanent record showing the disposition of this radioactive material. If you are not the Radiation Safety Officer or responsible for maintaining regulatory records for radioactive material, please forward this letter to the appropriate person.

If you have any questions or require additional assistance, please contact us at 512-388-9100 or 800-736-0801.

Sincerely,
TN Technologies

Laurie Hiler

Laurie Hiler
Technical Services Coordinator

2555 North IH-35
P.O. Box 800
Round Rock TX
78680

800-736-0801
512-388-9100
(fax) 512-388-9200

www.tn-technologies.com
info@tn-technologies.com

Thermo MeasureTech

Facsimile Transmittal

March 19, 2001

To

Company: Schnitzer Steel
Fax: 503-286-6948
Contact: Jim Jakubiak

No. of Pages 2
Including Cover

From

Jon George
Service Engineer
jgeorge@ThermoMT.com

Phone: 512-388-9308
Fax: 512-388-9333

Formerly TN Technologies - Kay-Ray/Sensall

Notes

Jim,

Following is the receipt letter sent to Darigold for their Kay-Ray source inadvertently sent to your site that we have taken for disposal. If you need anything else let me know, thank you.

Jon George

2555 North IH-35 Round Rock, Texas 78664

Confirmation Report — Memory Send

Time : Mar-19-2001 10:41am
Tel line :
Name :

Job number	:	746
Date	:	Mar-19 10:40am
To	:	915037314081
Document pages	:	002
Start time	:	Mar-19 10:40am
End time	:	Mar-19 10:41am
Pages sent	:	002
Status	:	OK

Job number : 746 *** SEND SUCCESSFUL ***

SCHNITZER STEEL PRODUCTS CO.

12005 N. Burgard St. Portland, Oregon 97203
P.O. Box 10047 Portland, Oregon 97210
Phone 503/286-5771 FAX 503/286-6948

SCRAP DIVISION
FAX TRANSMITTAL COVER SHEET

TO: Terry Lindsey DATE: March 17, 2001

FROM: Jim Jakobiak NUMBER OF PAGES BEING SENT (INCLUDING COVER PAGE) 2

If message is incomplete or illegible, please call (503) 286-5771. If you want to send a Fax to Schnitzer Steel, our Fax Number is (503) 286-6948.

RE: Attached is the disposal certification letter you requested. It's my understanding TH Technologies manufactured the source and is currently storing the device at their facility in Round Rock, Texas. Kay-Ray/Sensall (now TH Technologies) removed the material from our facility on March 5, 1999. Please call if you have questions or comments.

SCHN00243167

SCHNITZER STEEL PRODUCTS CO.

12005 N. Burgard St. Portland, Oregon 97203
P.O. Box 10047 Portland, Oregon 97210
Phone 503/286-5771 FAX 503/286-6948

SCRAP DIVISION
FAX TRANSMITTAL COVER SHEET

TO: Terry Lindsey

DATE: March 17, 2001

NUMBER OF PAGES BEING SENT (INCLUDING COVER PAGE) 2

FROM: Jim Jakobiak

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Memorandum

To: Charlie Ford

CC: Tom Zelenka

From: Tim Todd

Date: 03/03/99

Re: Radioactive Scrap

In November or December 1998, CSRM received a railcar from Levi's in Sacramento that contained a radioactive gauging device. The car was shipped to IT, where SSP staff and equipment were used to unload the car, and identify and remove the gauge. The car was returned to CSRM. SSP then contracted with Kay-Ray/Sensall to evaluate and dispose of the device, which contained a 200 milli-Curie cesium 137 source. Fortunately, the shielding was intact, so the source did not pose an immediate health threat to SSP personnel.

With the help of the Oregon Health Department Radiation Services Division and the U.S. Nuclear Regulatory Commission, the owner of the source was identified as Dairygold of Caldwell, Idaho. It is my understanding that both agencies have initiated enforcement action against Dairygold. This includes imposition of fines of $20,000 from both agencies.

In the meantime, we need a "cost recovery" letter. SSP's costs are summarized below:

- Evaluation and disposal (Kay-Ray/Sensall): $3,000.00
- Freight (railcar from CSRM to IT): $1,128.00
- Labor (10 hours @ $35/hour): $ 350.00
- Equipment (3 hours crane @$100/hour): $ 300.00

Total: **$4,778.00**

The Kay-Ray invoice is verbal only, I will forward the hard copy when it comes.

Dairygold can be contacted as follows:
Mr. David Landis
Dairygold
PO Box 578
Caldwell, ID 83606

Please call me at 6944 with questions. Thank you!!

SCHN00243169

SCHNITZER STEEL INDUSTRIES, INC.
3200 NW Yeon Avenue P.O. Box 10047 Portland, Oregon 97296-0047
Phone (503) 224-9900 Telex 289875 FAX (503) 299-2277

COPY

June 18, 1999

Mr. David Landis
Dairygold
P.O. Box 578
Caldwell, ID 83606

RE: Radioactive Gauging Device

Dear Mr. Landis:

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• Equipment (3 hours crane @ $100/hour):	$ 300.00
Total:	$5,149.00

Please make your check payable to Schnitzer Steel Industries, Inc. and send to my attention. Thank you for your cooperation in this regard.

Very truly yours,

Charles A. Ford
Assistant General Counsel

CAF/llc
G:\CAF\LANDIS-LTR.DOC
Enclosures

cc: Mr. Terry Glucoft
Mr. Jim Jakubiak
Mr. Anton U. Pardini

For service call: (512) 388-9320

Field Service Report Summary

TN Technologies
2555 N. IH-35
PO Box 800
Round Rock, Texas 78680
(800) 736-0801, (512) 388-9100
Fax: 512-388-9333
www.tn-technologies.com

Kay-Ray/Sensall
1400 Business Center Dr.
Suite 100
Mt. Prospect, Illinois 60065
(800) 323-7594, (847) 803-5100
Fax: (847) 803-5466
www.kayray-sensall.com

USER		JOB NO.		
company	Schnitzer Steel Products Co.	SERVICE TYPE	start up ☐ repair ☐ training ☐	disposal ☒ warranty ☐ other ☒
address	12005 N. Burgard Rd.			
city	Portland			
state, zip	OR. 97210	CALL STATUS	incomplete ☐	complete ☒
contact	Tim Todd			
phone	(503) 286-5771			

PURCHASE ORDER	34710	PRODUCT	SERVICE REP.	START DATE
		7063P	James Eisenhart	01/11/99

LABOR

DAY	DATE	PREP	TRAVEL		ONSITE		MILES	WAIT	WRTY	COMMENTS
		ADMIN	R	OT	R	OT				
SUN										
MON	1/11/99	5	3		3		76			See page 2
TUE										
WED	1/13/99		3		3		78			
THU	2/15/99		3		3		125			
FRI										
SAT										
TOT										

PARTS

QUAN	PART NO	DESCRIPTION

DISPOSAL INVENTORY

RMA NO

MANUF	MODEL	SERIAL	ISOTOPE	ACTIVITY (mCi)

CUSTOMER REPRESENTATIVE

Tim Todd — SIGNATURE

2/15/99 — DATE

For service call: (512) 388-9320

Field Service Report Summary

TN Technologies
2555 N. IH-35
PO Box 800
Round Rock, Texas 78680
(800) 736-0801, (512) 388-9100
Fax: 512-388-9333
www.tn-technologies.com

Kay-Ray/Sensall
1400 Business Center Dr.
Suite 100
Mt. Prospect, Illinois 60065
(800) 323-7594, (847) 803-5100
Fax: (847) 803-5466
www.kayray-sensall.com

USER company city state	Schnitzer Steel Products Co. Portland OR.	JOB NO.	

DATE	DESCRIPTION OF SERVICE
1/08/99	Received a call from Tim Todd about a Kay-Ray Model 7063P being received in a load of scrap metal. Tim said the State of Oregon was on site and they told him to give me a call. There are two units involved but only one is a Kay-Ray unit. The customer has them locked in a room where they store radioactive material, so I will be able to go on site Monday, (1/11/99).
1/11/99	At 0700 I called Diaryman Creamery in Codewell, ID. , (the serial number I was given on Friday was sold to them around 1979). I talked with a Dave at (208) 459-3687 and he said it was their source and he was already called by the NRC. At about 0745 I talked with Robert Miller with the State of Oregon and he gave me more information about the units. At about 1100 I arrived on site and talked with Tim. I told him that I wanted talk with the people next door because it was Northwest Pipeline and I knew that they did a ;lot of x-raying of their pipes. I was right they were x-raying pipes and would not be able to stop until after 1230. I asked them to let me know when they stop x-raying so I could do a background survey. (Customer told me that whan they are doing there x-raqys there meters go to full scale). I took a look at the units that were received and the Kay-Ray Model 7063P S/N 10722 was 200mCi of Cs-137. The housing was bent and the dust cover was missing, the shutter would only move half way and I felt the housing would not be good enough to ship it to TN. The other unit had about 6 inches of depeted uranium and 8 to 10 inches of lead. Using my Ludlum Model 3 I took readings and found 5 mR/hr on the head (front & back). I than put on my pan-cake probe and the readings I got would me more than 5mR/hr. I feel there may be something else in this head. I called TN and they are going to ship me a drum to ship the Kay-Ray source head back for disposal and they are sending me a unit to find out what type of radiation is in that room. (Note; The customer has a number of pipes, gauges and items that are radioactive and he would like them dispose of.) I called ADCO and Thomas Gray and both need to know what type of radiation the customer has. I will know on 1/13/99 and let them know so they can pick ut the units.
1/13/99	Arrived on site and talked with Robert Miller from the State of Oregon. We ran some tests and took some samples. Robert will get back in touch with me and at that time I will return and have the unit shipped out.
2/15/99	Arrived on site and I will take the unit to the shipper and make sure that Thomas Gray will pick up the other units when they come out in this area.

CUSTOMER REPRESENTATIVE

Tim Todd 2/15/99

SIGNATURE DATE

* Only 2 pages to this report
John George 3/19/2001

Oregon
Theodore Kulongoski, Governor

Department of Environmental Quality
Northwest Region Portland Office
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5263
FAX (503) 229-6945
TTY (503) 229-5471

August 23, 2005

Mr. Jim Jakubiak
Schnitzer Steel Industries, Inc
P.O. Box 10047
Portland, OR 97296-0047

Re: Information request regarding the Schnitzer International Terminal: Notice of Future Dock Construction and Soil Sampling.

Dear Mr. Jakubiak:

Thanks you for submitting the notice of future dock construction and soil sampling to the Oregon Department of Environmental Quality (DEQ) in accordance with the Portland Harbor Voluntary Agreement (Agreement). The notice was received by DEQ on August 18, 2005.

As we discussed during our telephone conversation on Aug 18th, the Agreement between DEQ and Schnitzer Steel Industries requires five working days notice for excavation and sampling of soil. If sediments are to be removed or disturbed, 60 days notice is required. During the phone call DEQ, requested additional information on the start date, scope of work, sampling and materials handling plan and the location of this particular excavation. That request was followed up in writing in an email sent on August 19th. DEQ is again requesting this information.

DEQ understands that Schnitzer has determined the soil excavation will take place in an area of non-contaminated soil. DEQ is obligated to ensure that the agreement is being adhered to and that the effort is synchronized with the ongoing remedial investigation (RI) of the site. As the improvements to the dock continue, it is possible that contaminant impacted soil may be encountered. Any removal or excavation of contaminated soil could be considered a Source Control Measure as defined in the Agreement. A Source Control Measure would require detailed documentation to determine its effectiveness.

Since the potential for the dock improvement project to involve Source Control Measures exists, DEQ is also requesting information on the details and scope of the overall dock improvement project. Those details will also prove useful in ensuring the correct information is gathered to complete the RI. Please submit the requested information.

DEQ would like to meet with you to discuss this proposed work, its relationship to the Portland Harbor Agreement and the Remedial Investigation. The meeting could also serve as opportunity to discuss the overall status and direction of the RI. Please contact me at (503) 229-5563 or Romero.Mike@deq.state.or.us to schedule a meeting time.

Sincerely,

Michael Romero, Project Manager
Cleanup & Lower Willamette Section

cc: Rod Struck, DEQ
Jim Anderson, DEQ
Matt Cusma, Schnitzer
Tom Zelenka, Schnitzer
ECSI # 4319

NORWEST ENGINEERING
Consulting Engineers

Since 1975

4110 N.E. 122nd Ave., Suite 207 · Portland, Oregon 97230 (503) 254-0110

SSI
17R1
Agency Comm

COPY

May 23, 2002

Alicia C. Voss
Voluntary Cleanup and Portland Harbor Section
2020 SW Fourth Ave., Suite 400
Portland, OR 97204

Subject: Notice Of Construction Project
International Terminals

Dear Ms. Voss:

Norwest Engineering has been retained by Schnitzer Steel Products Co. to provide the engineering, permitting and project management responsibilities for their 'Phase 1, Dock Modifications & Crane Upgrade' project at Schnitzer's International Terminals located at 12005 N. Burgard Road, Portland. As part of Schnitzer's Voluntary Clean-up Agreement with the Oregon Department of Environmental Quality, it is our understanding that you are to be notified in the event of any planned work at or near the above referenced facility that may disturb the adjacent river or vessel slip sediments. This letter is to provide you formal notice as required by the referenced agreement. Our intent is to proceed with this project, as briefly described below:

A recent engineering inspection and evaluation of the dock structure at International Terminals determined and concluded that the existing timber piles have experienced extensive deterioration creating a clear safety concern for operations and personnel. The proposed dock modifications consist of repairing approximately 240 existing deteriorated timber support piles and replacing approximately 300 timber fender piles with steel pipe piles. This work has been approved by the US Army Corps of Engineers (File #2001-00870) and the State of Oregon, Division of State Lands (Permit #24809). Also see the attached drawing 2816-001, further illustrating and indicating this work.

In conjunction with repairing and replacing the deteriorated timber piles, Schnitzer Steel Products Co. will install a fourth ship and barge loading / unloading crane. This crane installation requires the strengthening of the existing outboard crane rail support, as well as construction of upland crane rails, including the installation of approximately (36) 24" Ø x 120' pipe piles, new concrete caps, new concrete crane girders and new steel rails. The outboard crane rail support will involve the installation of approximately (54) 24" Ø x 120' in-water pipe piles, new steel pile caps and new steel crane girders.

An in-water and upland geotechnical study will be required for this project in order to determine required pile depth and design load bearing capacity. Norwest Engineering has requested that the existing permits be modified to include this work. We have already received approval from the Division of State Lands and expect approval from the Corps of Engineers in the near future. This work is illustrated on the attached drawings D2839-002 & 003.

It is anticipated that all project work will be performed and completed during the July through October 2002, in-water work window.

RECEIVED
MAY 24 2002
By CU 5/24/02

We understand the VCP agreement between Schnitzer and the Oregon Department of Environmental Quality requires the following issues to be addressed:

a) *Evaluate the concentration of hazardous substances present in and below the affected sediments based on sampling and analyses performed in advance of the notice.*

There are no "affected sediments". The project does not involve any dredging activities.

b) *Document the steps to be taken to ensure that both the activity and the subsequent management and disposal of dredged spoils will be conducted in a manner protective of human health and the environment.*

Again, there are no dredging activities associated with this project. Construction activities will consist of the repair of the deteriorated existing timber piles, the removal of the untreated timber fender piles, driving new steel pipe fender piles, replacement of deteriorated timber dock support members with new steel members and driving new pipe piles for support of the crane mentioned above. Construction debris will not be permitted to enter the waterway. Full time construction supervision and project management by Norwest Engineering will take place throughout the construction period.

c) *Evaluate the effect of the activity on the Portland Harbor Remedial Investigation and Feasibility Study.*

We do not anticipate any effect on the Harbor investigation and study.

Again, this letter is submitted to meet Schnitzer's requirements to notify the DEQ before undertaking any dredging or other activities. A copy of Corps of Engineers and DSL permit application covering this work is attached.

If you have further questions, please call. You can also contact me at mhagan@norwestengineering.com.

Norwest Engineering

Michael D. Hagan
Project Manger

cc: w/o enclosure
T. Glucoft, Schnitzer
M. Cusma, Schnitzer
J. Goodrich, Schnitzer
J. Deppa, Norwest

File

SCHNITZER STEEL INDUSTRIES, INC.

12005 N Burgard Road, Portland, Oregon 97203
P.O. Box 10047, Portland, Oregon 97296-0047
(503) 224-9900 FAX (503) 286-6948

August 15, 2005

Alicia Voss
Voluntary Cleanup Program
Northwest Region
2020 SW Fourth Ave. Suite 400
Portland, OR 97204

SUBJECT: SCHNITZER INTERNATIONAL TERMINAL: NOTICE OF FUTURE DOCK CONSTRUCTION AND SOIL SAMPLING

Dear Ms. Voss:

Schnitzer Steel Inc. has retained Advanced American Diving of Portland, Oregon to construct a new dock structure at the International Terminal located in Portland. As part of this project, the contractor will excavate an estimated 5,000 cubic yards of upland soil near the dock and stockpile the soil on-site. Once stockpiled, the soil will be sampled and profiled and appropriate disposal options will be evaluated.

This excavation activity is scheduled to begin sometime during the week of August 22, 2005. Stockpile soil sampling will occur sometime in September 2005.

We would be happy to answer any questions you have related to this project. Please contact me at (503) 519-4795 or Mat Cusma at (503) 286-6944.

Sincerely yours,
Schnitzer Steel Industries, Inc.

Jim Jakubiak

Oregon
Theodore Kulongoski, Governor

Department of Environmental Quality
Northwest Region Portland Office
2020 SW 4th Avenue, Suite 400
Portland, OR 97201-4987
(503) 229-5263
FAX (503) 229-6945
TTY (503) 229-5471

August 23, 2005

Mr. Jim Jakubiak
Schnitzer Steel Industries, Inc
P.O. Box 10047
Portland, OR 97296-0047

Re: Information request regarding the Schnitzer International Terminal: Notice of Future Dock Construction and Soil Sampling.

Dear Mr. Jakubiak:

Thanks you for submitting the notice of future dock construction and soil sampling to the Oregon Department of Environmental Quality (DEQ) in accordance with the Portland Harbor Voluntary Agreement (Agreement). The notice was received by DEQ on August 18, 2005.

As we discussed during our telephone conversation on Aug 18th, the Agreement between DEQ and Schnitzer Steel Industries requires five working days notice for excavation and sampling of soil. If sediments are to be removed or disturbed, 60 days notice is required. During the phone call DEQ, requested additional information on the start date, scope of work, sampling and materials handling plan and the location of this particular excavation. That request was followed up in writing in an email sent on August 19th. DEQ is again requesting this information.

DEQ understands that Schnitzer has determined the soil excavation will take place in an area of non-contaminated soil. DEQ is obligated to ensure that the agreement is being adhered to and that the effort is synchronized with the ongoing remedial investigation (RI) of the site. As the improvements to the dock continue, it is possible that contaminant impacted soil may be encountered. Any removal or excavation of contaminated soil could be considered a Source Control Measure as defined in the Agreement. A Source Control Measure would require detailed documentation to determine its effectiveness.

Since the potential for the dock improvement project to involve Source Control Measures exists, DEQ is also requesting information on the details and scope of the overall dock improvement project. Those details will also prove useful in ensuring the correct information is gathered to complete the RI. Please submit the requested information.

DEQ would like to meet with you to discuss this proposed work, its relationship to the Portland Harbor Agreement and the Remedial Investigation. The meeting could also serve as opportunity to discuss the overall status and direction of the RI. Please contact me at (503) 229-5563 or Romero.Mike@deq.state.or.us to schedule a meeting time.

Sincerely,

Michael Romero, Project Manager
Cleanup & Lower Willamette Section

cc: Rod Struck, DEQ
Jim Anderson, DEQ
Matt Cusma, Schnitzer
Tom Zelenka, Schnitzer
ECSI # 4319

SCHNITZER STEEL INDUSTRIES, INC.

3200 NW Yeon Avenue
P.O. Box 10047
Portland, Oregon 97296-0047
Phone: (503) 224-9900
Fax: (503) 323-2804
Telex: 289875

August 29, 2005

Mr. Michael Romero
Oregon Department of Environmental Quality, Northwest Region
2020 SW 4th Ave, Ste. 400
Portland, Oregon 97201

Subject: Response to Information Request
International Terminal Dock Construction

Dear Michael,

I am writing in response to your August 23, 2005, request for additional information related to the excavation activities being undertaken at International Terminals as part of the dock reconstruction project.

As we discussed by telephone, the excavation in question involves upland soils that have been historically isolated under asphalt and concrete surface pavement, and behind a steel bulkhead wall. The soils have not been subject to erosion or potential entrainment in stormwater, nor is the excavated area subject to these concerns. The excavated area is still isolated from the slip by the steel bulkhead, and the area will be capped with a concrete slab (the new dock deck). Drawings showing the extents of the excavation and a typical cross-section are enclosed for reference.

As detailed in the initial dock construction notification to DEQ (dated May 23, 2002, attached), the International Terminals dock project was required to repair the deteriorating structure, and to provide for modifications necessary for the continued safe operation of the dock for the foreseeable future. Much of the required in-water work (e.g., pile driving and geotechnical sampling) was performed in 2002, and remaining work is focused primarily on upland construction. (Installation of five additional support piling may be pursued under the existing permit and the SLOPES III framework.)

Under the Burgard Remedial Investigation, two boreholes were advanced in the general vicinity of the excavation – PP-5 (Phase I) and PP-7 (Phase II). Although neither borehole included sampling of the specific soils removed in the excavation, the borehole were located with the specific intent of discovering potential

contamination related to historical site activities. Therefore, results of this sampling were expected to provide a conservative determination of the potential for contamination of the soils to be excavated.

- Soil samples were collected from 5 foot depth intervals from PP-5, and analyzed for Total Petroleum Hydrocarbons, with follow-up analysis for PAHs if TPH were detected. The samples were also evaluated in the field for VOCs by headspace analysis, with follow-up analysis for VOCs if the results were positive. TPH was found to be below detection limits for all samples from PP-5, and no VOCs were detected in the headspace testing.

- A groundwater sample was collected from the shallow water table at PP-5, and was submitted for VOC analysis. No VOCs were detected in the groundwater sample from PP-5.

- A groundwater sample was collected from the shallow water table at PP-7, and was submitted for VOC analysis. No VOCs were detected in the groundwater sample from PP-7.

Complete results and other information related to the sampling and analysis are included in the Phase I Remedial Investigation Data Report (May 2002) and the Phase II Remedial Investigation Results (May 2003).

Despite the fact that no contamination is expected to be present in the excavated soil, the soil has been stockpiled onsite on plastic sheeting pending sampling and analysis to determine appropriate disposal options. The soil will be characterized for upland disposal. Sampling requirements are currently being discussed with several landfills. A final decision on numbers of samples and for what parameters will be determined once those discussions are finalized. We estimate a minimum of six soil samples will be collected and likely analyzed for VOCs, PCBs, PAHs, TPH, and metals.

I hope this information meets your needs. We look forward to meeting with you in the near future to discuss the status of the RI and answer any additional questions you may have.

Sincerely,

SCHNITZER STEEL INDUSTRIES, INC.

Jim Jakubiak
Environmental Administrator

Attachments

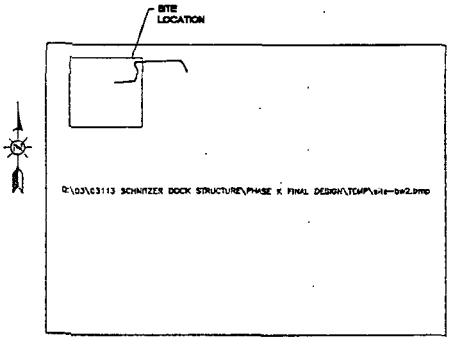
Cc: Mat Cusma

SCHNITZER STEEL INDUSTRIES INC.

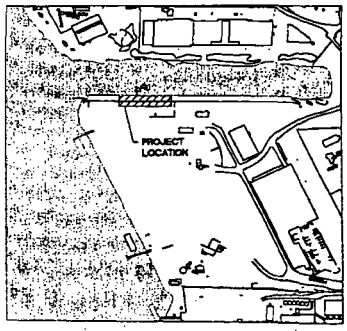
INTERNATIONAL TERMINALS

BERTH 1 - DOCK MODIFICATIONS
PHASE 2 - CONSTRUCTION

REVISION TO BUILDING PERMIT 02-146681-000-00-CO



VICINITY MAP



SITE PLAN

DRAWING LIST	
03-113K-T1	COVER SHEET W/ VICINITY MAP, SITE PLAN, & LEGEND
03-113K-G01	GENERAL ARRANGEMENT PLAN
03-113K-G02	GENERAL ARRANGEMENT SECTION
03-113K-S1	STRUCTURAL NOTES
03-113K-S2	STRUCTURAL NOTES
03-113K-S3	DECK FRAMING & WALKWAY PLANS (WEST)
03-113K-S4	DECK FRAMING & WALKWAY PLANS (EAST)
03-113K-S5	SLAB PLAN (WEST)
03-113K-S6	SLAB PLAN (EAST)
03-113K-S7	SECTION
03-113K-S8	SECTION
03-113K-S9	SECTION
03-113K-S10	DECK DETAILS
03-113K-S11	DECK DETAILS
03-113K-S12	DECK DETAILS
03-113K-S13	CRANE RAIL DETAILS
03-113K-S14	MOORING PLATFORM & APPROACH SLAB PATCHING
03-113K-S15	WALKWAY DETAILS
03-113K-S16	WALKWAY DETAILS
03-113K-S17	SQUARES AND TRIANGLE DETAILS
03-113K-C1	DRAINAGE & PIPING PLAN (WEST) & NOTES
03-113K-C2	DRAINAGE & PIPING PLAN (EAST) & DETAILS
03-113K-C3	DRAINAGE/PIPING SECTION

LEGEND

(X'-XX")

(X'-XX")

XX

FIELD DRAW DIMENSION DEPTHS ON FILE DRAWING BASED ON THE DRY SURVEY PROVIDED BY DONELL/MORRIS SURVEYORS INC., DATED JANUARY 19, 2000, ADJUSTED TO THE NEAREST 0.5-INCH.

REFERENCE DIMENSION:
USE OF REFERENCE FIELD VERIFICATION

TOTAL NUMBER OF A/V/W DOCK CONNECTORS TO BE TAKEN ESTIMATED ALONG THE LENGTH OF THE DOCK ON SECTION SHEET. BUMS WITHOUT INDICATED DIMENSIONS SHALL HAVE DOCK CONNECTORS AT 12" O.C. (OLD LENGTH INDICATED & AFTER MODIFIED).

SEE DRAWING G02 FOR ABBREVIATIONS

SITE ADDRESS
12005 N BURGARD RD, PORTLAND, OREGON 97203

LEGAL DESCRIPTION
TAX LOT 300
SECTION 3N, T2N, R1W, WM
CITY OF PORTLAND
MULTNOMAH COUNTY
OREGON

ZONING
HEAVY INDUSTRIAL (IH)

OCCUPANCY GROUP
U2

CONSTRUCTION
II-B

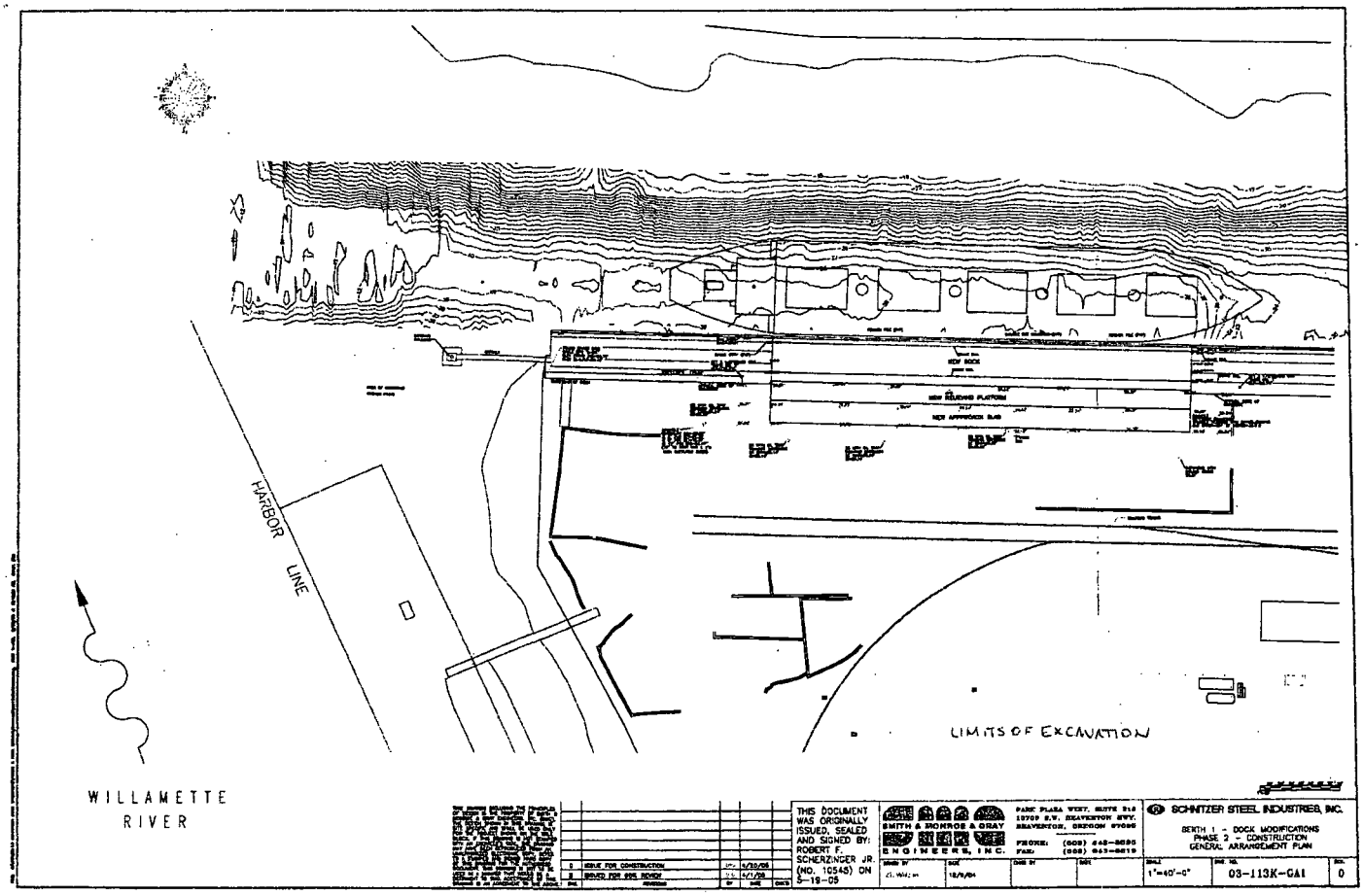
REV.	REVISIONS	BY	CHK'D	DATE
A	ISSUED FOR CONSTRUCTION	[illegible]	[illegible]	4/26/02
B	ISSUED FOR ASB REVIEW	[illegible]	[illegible]	4/1/03
A	ISSUED FOR RE REVIEW	[illegible]	[illegible]	3/11/03

THIS DOCUMENT WAS ORIGINALLY ISSUED, SEALED AND SIGNED BY, ROBERT F. SCHENZINGER JR. (NO. 10345) ON 5-19-03

SMITH & MONROE & GRAY ENGINEERS, INC.
PARK PLAZA WEST, SUITE 210
18700 S.W. BEAVERTON HWY.
BEAVERTON, OREGON 97006
PHONE: (503) 643-8003
FAX: (503) 643-8819

SCHNITZER STEEL INDUSTRIES, INC.
BERTH 1 - DOCK MODIFICATIONS
PHASE 2 - CONSTRUCTION
VICINITY MAP, SITE PLAN & LEGEND

DRAWN BY	SIZE	CHK'D BY	DATE	SCALE	DWG. NO.	REV.
[illegible]	1/4/99			AS NOTED	03-113K-T1	0



0	ISSUE FOR CONSTRUCTION	JPC	4/30/05
3	ISSUED FOR 90% REVIEW	JPC	4/1/05
REV.	REVISION	BY	DATE

THIS DOCUMENT WAS ORIGINALLY ISSUED, SEALED AND SIGNED BY: ROBERT F. SCHERZINGER JR. (NO. 10545) ON 5-19-05

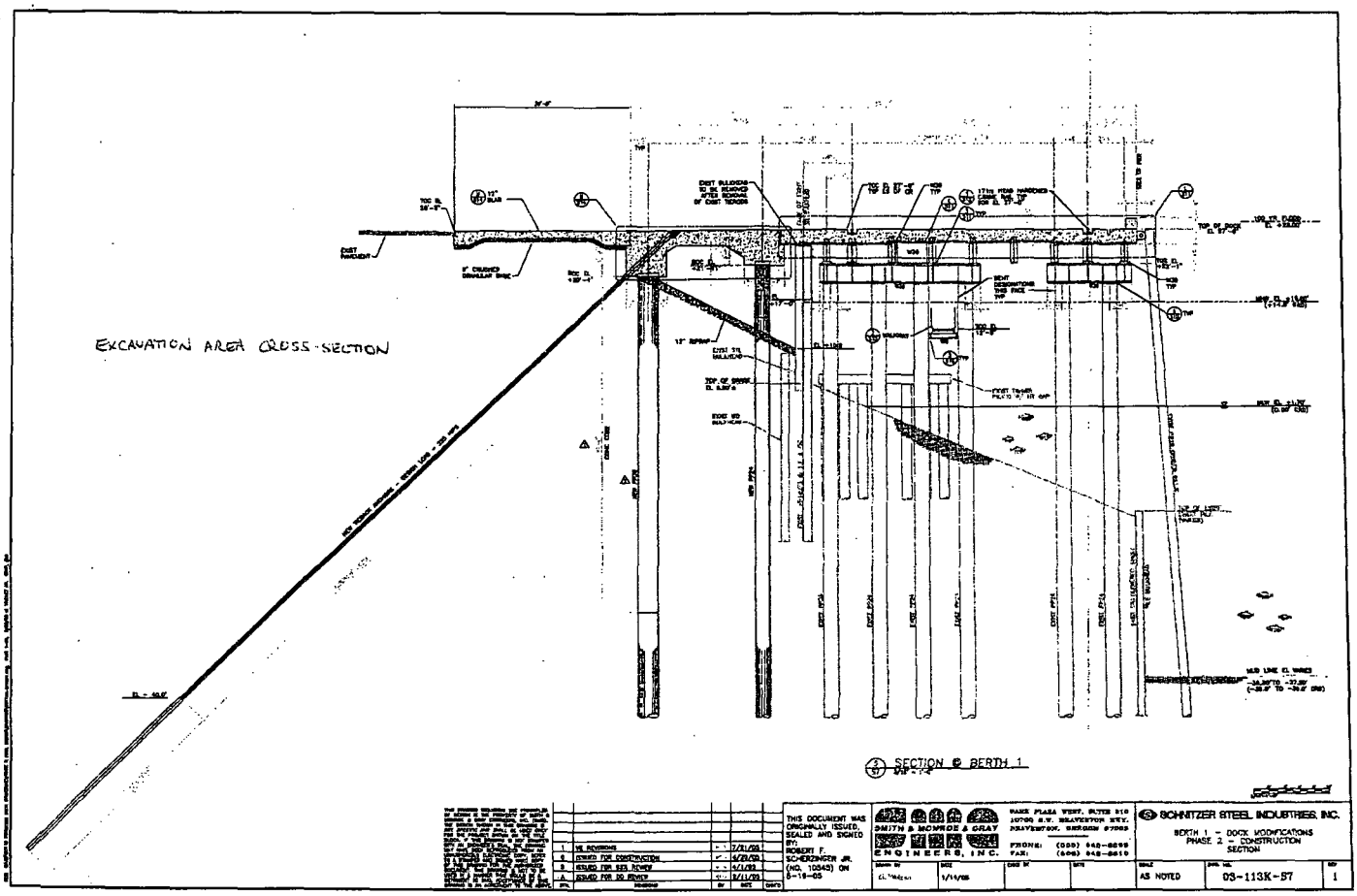
SMITH & MORROS & GRAY ENGINEERS, INC.
PARK PLAZA WEST, SUITE 210
10700 S.W. BEAVERTON HWY.
BEAVERTON, OREGON 97005
PHONE: (503) 643-8090
FAX: (503) 643-8619

SCHNITZER STEEL INDUSTRIES, INC.

BERTH 1 - DOCK MODIFICATIONS
PHASE 2 - CONSTRUCTION
GENERAL ARRANGEMENT PLAN

DRAWN BY	DATE	CHKD BY	DATE	SCALE	DWG NO.	REV.
J.L. WALSH	12/9/04			1"=40'-0"	03-113K-GA1	0

SCHN00243305



SCHN00243306

Dragna

SCHNITZER STEEL INDUSTRIES, INC.

12005 N Burgard Road, Portland, Oregon 97203
P.O. Box 10047, Portland, Oregon 97296-0047
(503) 224-9900 FAX (503) 286-6948

August 15, 2005

Alicia Voss
Voluntary Cleanup Program
Northwest Region
2020 SW Fourth Ave. Suite 400
Portland, OR 97204

SUBJECT: SCHNITZER INTERNATIONAL TERMINAL: NOTICE OF FUTURE DOCK CONSTRUCTION AND SOIL SAMPLING

Dear Ms. Voss:

Schnitzer Steel Inc. has retained Advanced American Diving of Portland, Oregon to construct a new dock structure at the International Terminal located in Portland. As part of this project, the contractor will excavate an estimated 5,000 cubic yards of upland soil near the dock and stockpile the soil on-site. Once stockpiled, the soil will be sampled and profiled and appropriate disposal options will be evaluated.

This excavation activity is scheduled to begin sometime during the week of August 22, 2005. Stockpile soil sampling will occur sometime in September 2005.

We would be happy to answer any questions you have related to this project. Please contact me at (503) 519-4795 or Mat Cusma at (503) 286-6944.

Sincerely yours,
Schnitzer Steel Industries, Inc.

Jim Jakubiak

Schnitzer Steel – International Terminals

Excavated Soil Sampling and Analysis Plan
September 6, 2005

I. Introduction

Schnitzer Steel is constructing a new dock at International Terminal facility at 12005 North Burgard. The project was undertaken to upgrade and make safe the deteriorating dock structure.

As part of the project several thousand cubic yards of upland soil from behind the existing bulkhead was removed and placed on plastic prior to removing from the site. The contractor for the project, Advanced American Diving has estimated 2,700 cubic yards of soil was excavated. The purpose of this document is to outline a sampling approach for profiling the soil for upland disposal. Once analytical results are available, disposal options will be evaluated.

II. Responsibility

A. It is the responsibility of the Project Manager and field sampler to insure that the sampling, storage, and shipping requirements of the plan are maintained.

B. It is the responsibility of Columbia Inspection, Inc. to insure that the analytical testing and reporting requirements of this program are maintained.

II. Procedures

A. Soil Sampling

1. The sampling event will be done the week of ~~September 5~~ (?), 2005

2. Sample collection personnel must wear safety equipment required for workers at the facility

3. Sample collection:

   a. Thirty random discrete samples will be collected from the stockpiled soil. Samples will be collected from various depths and locations. Representative samples will be collected. Approximately eight ounces of soil will be collected at each location.

   b. Sampling will be conducted using X clean stainless steel spoons. A Clean shovel~~s~~ or a hand auger will be used to obtain the appropriate depths prior to using the spoon. The first ten discrete

samples will placed in a clean stainless steel bowl and homogenized prior to placing into laboratory prepared jars or containers. The same will be done for the second and third ten sample intervals. Three composite samples will be submitted for analysis of PCBs, PAHs and metals.

At three locations, discrete samples will be collected and placed directly into laboratory containers for VOC analysis

c. The sampler must maintain custody of the sample containers at all times until shipment to the lab. The names of the sampler must be recorded on the chain of custody form.

d. Immediately after collection, all samples are to be placed into a chilled cooler for storage and shipment to the laboratory.

B. Preparing the Sample for Shipment.

1. Identify the sample as follows:
   Prefix – SSI.
   Sample Identifier - Number
   Suffix – Date, month, and year collected.

   The following is an example for a sample collected on September 5, 2005.
   SSI-1- 5 Sep05.

   Record the sample identity and other sampling details on the chain of custody form. Retain a copy of the original form for SSI files. Secure the sample and form in a sturdy-shipping container. Ship the container via courier to:

   Columbia Inspection, Inc.
   7133 N. Lombard
   Portland, Oregon 97203

C. Receipt and Analysis of Sample by Columbia Inspection, Inc.

1. After inspecting the sample container to verify proper shipping and packaging, Columbia Inspection, Inc. will complete the chain of custody form and mail a copy to:

   Jim Jakubiak
   Schnitzer Steel Industries, Inc.
   PO Box 10047
   Portland, Oregon 97296-0047

D. Analysis of Sample.

(?) 1. Three representative discrete samples will be analyzed for volatile organic compounds by EPA Method 624.

(?) 2. Three representative composite samples will be analyzed for PCBs (US EPA Method 8082), Total Petroleum Hydrocarbons (NWTPH-HCID), Polyaromatic Hydrocarbons (US EPA Method 8270), and eight RCRA metals using U.S. Environmental Protection Agency TCLP methods.

E. Laboratory Reports.

1. A laboratory report summarizing analytical and quality assurance and control data will be prepared and mailed to:

   Jim Jakubiak
   Schnitzer Steel Industries, Inc.
   PO Box 10047
   Portland, Oregon 97296-0047

   A preliminary report should be prepared as soon as available and faxed to:

   Jim Jakubiak
   Schnitzer Steel Industries
   (503) 286-6960

   Invoices should be mailed to Jim Jakubiak at the address listed above.

F. Sample Disposal.

The soil sample and associated wastes will be disposed after 30 days of receipt by Columbia Inspection, Inc. in accordance with applicable regulations.

G. Test Results

SSI will maintain test results on site and will release the information as necessary.

COLUMBIA INSPECTION, INC.

CHAIN OF CUSTODY RECORD
AND
NON-COMMERCIAL BILL OF LADING

☒ 7133 N. Lombard, Portland, OR 97203 — Ph: (503) 286-9464 Fax: (503) 285-7831
☐ 4901 E. 20th Street, Fife, WA 98424 — Ph: (253) 922-8781 Fax: (253) 922-8957
☐ 4592 E 2nd Street, Ste 'A', Benicia, CA 94510 — Ph: (707) 748-7587 Fax: (707) 748-7764
☐ 797 Channel Street, San Pedro, CA 90731 — Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name: Schnitzer Steel
Attention: Jim Jakobsik
Address: PO Box 10047 Portland OR 97296-0017
Phone: (503) 286-6976
Fax: (503) 286-6960
Sampler: [signature] ☒ Submitted

Project Name: SSI-J.T.
Project Number:
P.O. Number:
Testing Priority: ☐ Normal ☒ Rush
Due Date:
Notification Method(s): ☐ Telephone ☐ Email ☐ Mail

Analysis To Be Performed

Sample id#	Sample Description/UN Number	Sample Matrix	Sample Date	Sample Time	NWTPH-HCID	PCBs (EPA 8082)	PAHs (EPA 8270)	RCRA Metals, TCLP	VOCs (EPA 624)
SSI-HL01-13&205		Soil	9/13	1625	X	X	X	X	X

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]			
Relinquished By:	Date/Time	Received By:	Date/Time
		[signature]	9/14/05 1330

FOR LABORATORY USE ONLY
Inspection Job Number: _____ PO# _____
Laboratory Project Number: _____ Cash/check # _____
Due Date: _____ Amount Paid: $ _____

SCHN00243312

Sample Acceptance Policy

All samples must meet the following requirements:

- **Chain of Custody:** The COC list of samples must match the number and type of sample containers received, and sample descriptions on the COC must match the sample bottles. The requested tests and where possible, specific methods are shown on the COC.
- **Appropriate Container:** The correct sample containers must be used for the requested analyses.
- **Sample Volume:** There must be sufficient sample volume for the test(s) requested.
- **Holding Time:** The holding times for the requested analyses must not be expired.

Environmental samples must meet the following additional requirements:

- **Sample Temperature:** Samples that require refrigeration shall be considered acceptable if the temperature as measured upon receipt is either within 2° C of the required temperature or the method specified range. For samples with a specified temperature of 4° C, samples received at temperatures ranging from just above freezing to 6° C shall be acceptable.

  NOTE: **Samples that are delivered to the laboratory shortly after sampling may not meet this criterion. However, the samples shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice, or if the samples were taken within the hour.**

- **Sample Preservation:** Where possible without sacrificing the integrity of the sample, determine whether the sample bottle has been preserved correctly.

Discrepancies:

If there is any doubt as to the suitability for testing such as the **sample does not conform to the sample description**, the sample containers are **damaged**, **leaking**, or **may be contaminated from other damaged or leaking sample containers**, or where **testing is not specified**, further instructions from the client are required. If the issue cannot be resolved and the sample does not meet sample acceptance criteria the laboratory shall either.

- Fully document any decision to proceed with the analysis and note the condition of the sample on the COC and work order; or
- Retain correspondence and/or records of conversations regarding the final disposition of rejected samples.

Rejected Samples:

- Should the client choose to proceed with testing on questionable samples, the Work Order must be clearly marked with the nature of the problem so that the final report data may be appropriately qualified.
- Rejected samples must still be logged into LIMS to obtain a unique sample identification number to track sample disposition. However, for rejected samples, no testing is assigned. Instead, the sample status is set to "Rejected" by editing the work order status using the Update Status function of the Laboratory menu in LIMS.

Refer to the Columbia Inspection, Inc. Laboratory Policy, LP00.01, Sample Acceptance Policy and SOP15.01 Sample Receipt for complete details.

Sample Disposal:

- Samples are disposed of after 45 days unless prior arrangements have been made with the laboratory.
- Samples that are deemed hazardous may be returned to the client for proper disposal.

COLUMBIA INSPECTION, INC.

CHAIN OF CUSTODY RECORD
AND
NON-COMMERCIAL BILL OF LADING

☒ 7133 N. Lombard, Portland, OR 97203 — Ph: (503) 286-9464 Fax: (503) 285-7831
☐ 4901 E. 20th Street, Fife, WA 98424 — Ph: (253) 922-8781 Fax: (253) 922-8957
☐ 4592 E 2nd Street, Ste 'A', Benicia, CA 94510 — Ph: (707) 748-7587 Fax: (707) 748-7764
☐ 797 Channel Street, San Pedro, CA 90731 — Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name: Schnitzer Steel
Attention: Jim Jaikowski
Address: PO Box 10047, Portland
Phone: Oregon 97296-0047 (503) 786-6776
Fax: (503) 786-8948
Sampler: [signature] ☒ Submitted

Project Name: SSI-IT
Project Number:
P.O. Number:
Testing Priority: ☐ Normal ☒ Rush
Due Date:
Notification Method(s): ☐ Telephone ☐ Email ☐ Mail

Analysis To Be Performed

Sample id#	Sample Description/UN Number	Sample Matrix	Sample Date	Sample Time	HWTPH-HCID	PCBs (EPA 8082)	PAHs (EPA 8270)	RCRA Metals-TCLP	VOCs (EPA 624)								
SSI-DP04	-13Sep05	Soil	9/13	1548	X	X	X	X									
SSI-DP03	-13Sep05	Soil	9/13	1540	X	X	X	X									
SSI-DP02	-13Sep05	Soil	9/13	1530	X	X	X	X									
SSI-DP01	-13Sep05	Soil	9/13	1525					X								

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]			
Relinquished By:	Date/Time	Received By:	Date/Time
		[signature]	9/14/05 1330

FOR LABORATORY USE ONLY
Inspection Job Number: _____ PO# _____
Laboratory Project Number: _____ Cash/check # _____
Due Date: _____ Amount Paid: $ _____

SCHN00243314

Sample Acceptance Policy

All samples must meet the following requirements:

- **Chain of Custody:** The COC list of samples must match the number and type of sample containers received, and sample descriptions on the COC must match the sample bottles. The requested tests and where possible, specific methods are shown on the COC.
- **Appropriate Container:** The correct sample containers must be used for the requested analyses.
- **Sample Volume:** There must be sufficient sample volume for the test(s) requested.
- **Holding Time:** The holding times for the requested analyses must not be expired.

Environmental samples must meet the following additional requirements:

- **Sample Temperature:** Samples that require refrigeration shall be considered acceptable if the temperature as measured upon receipt is either within 2° C of the required temperature or the method specified range. For samples with a specified temperature of 4° C, samples received at temperatures ranging from just above freezing to 6° C shall be acceptable.

  NOTE: **Samples that are delivered to the laboratory shortly after sampling may not meet this criterion. However, the samples shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice, or if the samples were taken within the hour.**

- **Sample Preservation:** Where possible without sacrificing the integrity of the sample, determine whether the sample bottle has been preserved correctly.

Discrepancies:

If there is any doubt as to the suitability for testing such as the **sample does not conform to the sample description**, the sample containers are **damaged**, **leaking**, or **may be contaminated from other damaged or leaking sample containers**, or where **testing is not specified**, further instructions from the client are required. If the issue cannot be resolved and the sample does not meet sample acceptance criteria the laboratory shall either.

- Fully document any decision to proceed with the analysis and note the condition of the sample on the COC and work order; or
- Retain correspondence and/or records of conversations regarding the final disposition of rejected samples.

Rejected Samples:

- Should the client choose to proceed with testing on questionable samples, the Work Order must be clearly marked with the nature of the problem so that the final report data may be appropriately qualified.
- Rejected samples must still be logged into LIMS to obtain a unique sample identification number to track sample disposition. However, for rejected samples, no testing is assigned. Instead, the sample status is set to "Rejected" by editing the work order status using the Update Status function of the Laboratory menu in LIMS.

Refer to the Columbia Inspection, Inc. Laboratory Policy, LP00.01, Sample Acceptance Policy and SOP15.01 Sample Receipt for complete details.

Sample Disposal:

- Samples are disposed of after 45 days unless prior arrangements have been made with the laboratory.
- Samples that are deemed hazardous may be returned to the client for proper disposal.

SOIL PILE - NEAR Gate 5

CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PROJECT NAME: SSI-IT

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 09/14/05 13:30

REPORT DATE: 10/03/05 15:29 **REPORT NUMBER:** 5091402

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5091402-01	SSI-DP04-13Sep05	09/13/2005	1548	Soil
5091402-02	SSI-DP03-13Sep05	09/13/2005	1540	Soil
5091402-03	SSI-DP02-13Sep05	09/13/2005	1530	Soil
5091402-04	SSI-DP01-13Sep05	09/13/2005	1525	Soil

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5091402-01	**SAMPLE ID: SSI-DP04-13Sep05**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.090	DM	09/17/2005 11:51
BARIUM, TCLP - ICP		BARIUM	0.74	mg/L	0.020	DM	09/17/2005 13:56
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.020	DM	09/17/2005 12:08
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.20	DM	09/17/2005 12:08
LEAD, TCLP - ICP		LEAD	ND	mg/L	0.040	DM	09/17/2005 13:42
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	DM	09/17/2005 11:51
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.090	DM	09/17/2005 13:56
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000300	MRP	09/16/2005 14:16
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
PNAH 8270	EPA 8270M (SIM)	ACENAPHTHENE	ND	mg/kg	0.03	DM	09/17/2005 17:10
		ACENAPHTHYLENE	ND	mg/kg	0.03		
		ANTHRACENE	ND	mg/kg	0.03		
		BENZO(a)ANTHRACENE	ND	mg/kg	0.03		
		BENZO(a)PYRENE	0.04	mg/kg	0.03		
		BENZO(b)FLUORANTHENE	0.04	mg/kg	0.03		
		BENZO(g,h,i)PERYLENE	0.07	mg/kg	0.03		
		BENZO(k)FLUORANTHENE	0.03	mg/kg	0.03		
		CHRYSENE	0.03	mg/kg	0.03		
		DIBENZO(a,h)ANTHRACENE	ND	mg/kg	0.03		
		FLUORANTHENE	0.03	mg/kg	0.03		
		FLUORENE	ND	mg/kg	0.03		
		INDENO(1,2,3-cd)PYRENE	ND	mg/kg	0.03		
		NAPHTHALENE	ND	mg/kg	0.03		
		PYRENE	0.04	mg/kg	0.03		
		Surrogate: 2-Fluorobiphenyl	85.9 %	%RECOVERY	70-155		
		Surrogate: Nitrobenzene-D5	57.2 %	%RECOVERY	70-155		
		Surrogate: p-terphenyl-D14	86.3 %	%RECOVERY	70-155		
Semi-Volatile Organics by Gas Chromatography/ECD							
PCBs 8082	EPA 8082	Dibutyl Chlorendate	0.00	mg/kg		DM	09/19/2005 13:11
		AROCHLOR 1016	ND	mg/kg	5.03		09/19/2005 13:16
		AROCHLOR 1221	ND	mg/kg	5.03		
		AROCHLOR 1232	ND	mg/kg	5.03		
		AROCHLOR 1242	ND	mg/kg	5.03		
		AROCHLOR 1248	ND	mg/kg	5.03		

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Richard D. Reid - Laboratory Director

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CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5091402-01	**SAMPLE ID: SSI-DP04-13Sep05**						
Semi-Volatile Organics by Gas Chromatography/ECD							
PCBs 8082	EPA 8082	AROCHLOR 1254	ND	mg/kg	5.03	DM	09/19/2005 13:16
		AROCHLOR 1260	ND	mg/kg	5.03		
		Surrogate: 2,4,5,6-Tetrachloro-m-xylene	%	%RECOVERY	50-150		
		Surrogate: DECACHLOROBIPHENYL	64.9 %	%RECOVERY	0-200		
General Gas Chromatography Analysis							
NWTPH-HCID (soil)	NWTPH-HCID	GASOLINE	ND	mg/kg	11	PA	09/16/2005 14:14
		DIESEL	ND	mg/kg	27		
		OIL/GREASE	ND	mg/kg	54		
		Surrogate: p-terphenyl-D14	128 %	%RECOVERY	50-150		
5091402-02	**SAMPLE ID: SSI-DP03-13Sep05**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.090	DM	09/17/2005 11:51
BARIUM, TCLP - ICP		BARIUM	0.69	mg/L	0.020	DM	09/17/2005 13:56
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.020	DM	09/17/2005 12:08
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.20	DM	09/17/2005 12:08
LEAD, TCLP - ICP		LEAD	0.066	mg/L	0.040	DM	09/17/2005 13:42
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	DM	09/17/2005 11:51
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.090	DM	09/17/2005 13:56
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000300	MRP	09/16/2005 14:16
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
PNAH 8270	EPA 8270M (SIM)	ACENAPHTHENE	ND	mg/kg	0.03	DM	09/17/2005 17:54
		ACENAPHTHYLENE	ND	mg/kg	0.03		
		ANTHRACENE	ND	mg/kg	0.03		
		BENZO(a)ANTHRACENE	0.09	mg/kg	0.03		
		BENZO(a)PYRENE	0.2	mg/kg	0.03		
		BENZO(b)FLUORANTHENE	0.1	mg/kg	0.03		
		BENZO(g,h,i)PERYLENE	0.2	mg/kg	0.03		
		BENZO(k)FLUORANTHENE	0.2	mg/kg	0.03		
		CHRYSENE	0.2	mg/kg	0.03		
		DIBENZO(a,h)ANTHRACENE	0.03	mg/kg	0.03		
		FLUORANTHENE	0.09	mg/kg	0.03		
		FLUORENE	ND	mg/kg	0.03		
		INDENO(1,2,3-cd)PYRENE	0.09	mg/kg	0.03		
		NAPHTHALENE	ND	mg/kg	0.03		
		PHENANTHRENE	ND	mg/kg	0.03		
		PYRENE	0.1	mg/kg	0.03		
		Surrogate: 2-Fluorobiphenyl	92.5 %	%RECOVERY	70-155		
		Surrogate: Nitrobenzene-D5	55.6 %	%RECOVERY	70-155		
		Surrogate: p-terphenyl-D14	90.9 %	%RECOVERY	70-155		
Semi-Volatile Organics by Gas Chromatography/ECD							
PCBs 8082	EPA 8082	Dibutyl Chlorendate	0.00	mg/kg		DM	09/19/2005 13:11
		AROCHLOR 1016	ND	mg/kg	4.97		09/19/2005 13:16
		AROCHLOR 1221	ND	mg/kg	4.97		
		AROCHLOR 1232	ND	mg/kg	4.97		
		AROCHLOR 1242	ND	mg/kg	4.97		
		AROCHLOR 1248	ND	mg/kg	4.97		
		AROCHLOR 1254	ND	mg/kg	4.97		

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CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5091402-02	**SAMPLE ID: SSI-DP03-13Sep05**						
Semi-Volatile Organics by Gas Chromatography/ECD							
PCBs 8082	EPA 8082	AROCHLOR 1260	ND	mg/kg	4.97	DM	09/19/2005 13:16
		Surrogate: 2,4,5,6-Tetrachloro-m-xylene	%	%RECOVERY	50-150		
		Surrogate: DECACHLOROBIPHENYL	69.1 %	%RECOVERY	0-200		
General Gas Chromatography Analysis							
NWTPH-HCID (soil)	NWTPH-HCID	GASOLINE	ND	mg/kg	10	PA	09/16/2005 14:14
		DIESEL	ND	mg/kg	25		
		OIL/GREASE	ND	mg/kg	50		
		Surrogate: p-terphenyl-D14	133 %	%RECOVERY	50-150		
5091402-03	**SAMPLE ID: SSI-DP02-13Sep05**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.090	DM	09/17/2005 11:51
BARIUM, TCLP - ICP		BARIUM	0.95	mg/L	0.020	DM	09/17/2005 13:56
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.020	DM	09/17/2005 12:08
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.20	DM	09/17/2005 12:08
LEAD, TCLP - ICP		LEAD	0.42	mg/L	0.040	DM	09/17/2005 13:42
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	DM	09/17/2005 11:51
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.090	DM	09/17/2005 13:56
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000300	MRP	09/16/2005 14:16
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
PNAH 8270	EPA 8270M (SIM)	ACENAPHTHENE	ND	mg/kg	0.04	DM	09/17/2005 18:38
		ACENAPHTHYLENE	ND	mg/kg	0.04		
		ANTHRACENE	ND	mg/kg	0.04		
		BENZO(a)ANTHRACENE	0.06	mg/kg	0.04		
		BENZO(a)PYRENE	0.2	mg/kg	0.04		
		BENZO(b)FLUORANTHENE	0.1	mg/kg	0.04		
		BENZO(g,h,i)PERYLENE	0.3	mg/kg	0.04		
		BENZO(k)FLUORANTHENE	0.2	mg/kg	0.04		
		CHRYSENE	0.1	mg/kg	0.04		
		DIBENZO(a,h)ANTHRACENE	0.05	mg/kg	0.04		
		FLUORANTHENE	0.1	mg/kg	0.04		
		FLUORENE	ND	mg/kg	0.04		
		INDENO(1,2,3-cd)PYRENE	0.2	mg/kg	0.04		
		NAPHTHALENE	ND	mg/kg	0.04		
		PHENANTHRENE	ND	mg/kg	0.04		
		PYRENE	0.2	mg/kg	0.04		
		Surrogate: 2-Fluorobiphenyl	104 %	%RECOVERY	70-155		
		Surrogate: Nitrobenzene-D5	62.9 %	%RECOVERY	70-155		
		Surrogate: p-terphenyl-D14	103 %	%RECOVERY	70-155		
Semi-Volatile Organics by Gas Chromatography/ECD							
PCBs 8082	EPA 8082	Dibutyl Chlorendate	0.00	mg/kg		DM	09/19/2005 13:11
		AROCHLOR 1016	ND	mg/kg	5.03		09/19/2005 13:16
		AROCHLOR 1221	ND	mg/kg	5.03		
		AROCHLOR 1232	ND	mg/kg	5.03		
		AROCHLOR 1242	ND	mg/kg	5.03		
		AROCHLOR 1248	ND	mg/kg	5.03		
		AROCHLOR 1254	ND	mg/kg	5.03		
		AROCHLOR 1260	ND	mg/kg	5.03		

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CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5091402-03	**SAMPLE ID: SSI-DP02-13Sep05**						
Semi-Volatile Organics by Gas Chromatography/ECD							
		Surrogate: 2,4,5,6-Tetrachloro-m-xylene	%	%RECOVERY	50-150		
		Surrogate: DECACHLOROBIPHENYL	102 %	%RECOVERY	0-200		
General Gas Chromatography Analysis							
NWTPH-HCID (soil)	NWTPH-HCID	GASOLINE	ND	mg/kg	11	PA	09/16/2005 14:14
		DIESEL	ND	mg/kg	27		
		OIL/GREASE	ND	mg/kg	53		
		Surrogate: p-terphenyl-D14	121 %	%RECOVERY	50-150		
5091402-04	**SAMPLE ID: SSI-DP01-13Sep05**						
Volatile Organics by Gas Chromatography/Mass Spectroscopy							
VOC 8260	EPA 8260	BENZENE	ND	ug/L	356	PA	09/16/2005 14:02
		BROMOBENZENE	ND	ug/L	356		
		BROMOCHLOROMETHANE	ND	ug/L	356		
		BROMODICHLOROMETHANE	ND	ug/L	356		
		BROMOFORM	ND	ug/L	356		
		BROMOMETHANE	ND	ug/L	356		
		N-BUTYLBENZENE	ND	ug/L	356		
		sec-BUTYLBENZENE	ND	ug/L	356		
		tert-BUTYLBENZENE	ND	ug/L	356		
		CARBON TETRACHLORIDE	ND	ug/L	356		
		CHLOROBENZENE	ND	ug/L	356		
		CHLOROETHANE	ND	ug/L	356		
		CHLOROFORM	ND	ug/L	356		
		CHLOROMETHANE	ND	ug/L	356		
		2-CHLOROTOLUENE	ND	ug/L	356		
		4-CHLOROTOLUENE	ND	ug/L	356		
		DIBROMOCHLOROMETHANE	ND	ug/L	356		
		1,2-DIBROMO-3-CHLOROPROPANE	ND	ug/L	356		
		1,2-DIBROMOETHANE	ND	ug/L	356		
		DIBROMOMETHANE	ND	ug/L	356		
		1,2-DICHLOROBENZENE	ND	ug/L	356		
		1,3-DICHLOROBENZENE	ND	ug/L	356		
		1,4-DICHLOROBENZENE	ND	ug/L	356		
		DICHLORODIFLUOROMETHANE	ND	ug/L	356		
		1,1-DICHLOROETHANE	ND	ug/L	356		
		1,1-DICHLOROETHENE	ND	ug/L	356		
		CIS-1,2-DICHLOROETHENE	ND	ug/L	356		
		TRANS-1,2-DICHLOROETHENE	ND	ug/L	356		
		1,2-DICHLOROPROPANE	ND	ug/L	356		
		1,3-DICHLOROPROPANE	ND	ug/L	356		
		2,2-DICHLOROPROPANE	ND	ug/L	356		
		1,1-DICHLOROPROPENE	ND	ug/L	356		
		1,2-DICHLOROETHANE	ND	ug/L	356		
		CIS-1,3-DICHLOROPROPENE	ND	ug/L	356		
		TRANS-1,3-DICHLOROPROPENE	ND	ug/L	356		
		ETHYLBENZENE	ND	ug/L	356		
		HEXACHLOROBUTADIENE	ND	ug/L	356		
		ISOPROPYLBENZENE	ND	ug/L	356		
		P-ISOPROPYLTOLUENE	ND	ug/L	356		
		METHYLENE CHLORIDE	ND	ug/L	356		
		NAPHTHALENE	ND	ug/L	356		
		N-PROPYLBENZENE	ND	ug/L	356		
		STYRENE	ND	ug/L	356		
		1,1,1,2-TETRACHLOROETHANE	ND	ug/L	356		
		1,1,2,2-TETRACHLOROETHANE	ND	ug/L	356		
		TETRACHLOROETHENE	ND	ug/L	356		

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CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5091402-04	SAMPLE ID: SSI-DP01-13Sep05						
Volatile Organics by Gas Chromatography/Mass Spectroscopy							
VOC 8260	EPA 8260	TOLUENE	ND	ug/L	356	PA	09/16/2005 14:02
		1,2,3-TRICHLOROBENZENE	ND	ug/L	356		
		1,2,4-TRICHLOROBENZENE	ND	ug/L	356		
		1,1,1-TRICHLOROETHANE	ND	ug/L	356		
		1,1,2-TRICHLOROETHANE	ND	ug/L	356		
		TRICHLOROETHENE	ND	ug/L	356		
		TRICHLOROFLUORMETHANE	ND	ug/L	356		
		1,2,3-TRICHLOROPROPANE	ND	ug/L	356		
		1,2,4-TRIMETHYLBENZENE	ND	ug/L	356		
		1,3,5-TRIMETHYLBENZENE	ND	ug/L	356		
		VINYL CHLORIDE	ND	ug/L	356		
		M- & P-XYLENE	ND	ug/L	356		
		O-XYLENE	ND	ug/L	356		
		Surrogate: Dibromofluoromethane	102 %	%RECOVERY	50-150		
		Surrogate: Fluorobenzene	76.4 %	%RECOVERY	50-150		
		Surrogate: Chlorobenzene-d5	72.4 %	%RECOVERY	50-150		
		Surrogate: 1,4-Dichlorobenzene-d4	70.0 %	%RECOVERY	50-150		

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CHAIN OF CUSTODY

SR#:_____

PAGE 1 OF 1 COC #_____

PROJECT NAME: SSI - IT

PROJECT NUMBER:

PROJECT MANAGER: J. Jakubiak

COMPANY/ADDRESS: Po Box 10047, Portland, OR

PHONE #: (503) 286-6976 FAX #: 503-286-6960

SAMPLER'S SIGNATURE: J. Jakubiak

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☒ 8270LL ☐	Volatile Organics 624 ☐ 8260 ☒ 8021 ☐ BTEX ☐	Hydrocarbons (*see below) Gas ☐ Diesel ☐ Oil ☐	☐ Fuel Fingerprint (FIQ) ☒ NW-HCID Screen Quantify & Detect	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors ☒ EPA 8082 Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☐	Metals, Total or Dissolved (See list below) ICLP	Cyanide ☐ Hex-Chrom ☐	pH, Cond., Cl, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐					REMARKS
SSI-Bldg-01	9/23	0715		S	2	X	X		X		X				X										

REPORT REQUIREMENTS

- X I. Routine Report: Method Blank, Surrogate, as required
- ___ II. Report Dup., MS, MSD as required
- ___ III. Data Validation Report (includes all raw data)
- ___ IV. CLP Deliverable Report
- ___ V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.

X 5 Day

___ Standard (10-15 working days)

___ Provide FAX Results

_____ Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al (As) Sb (Ba) Be B Ca (Cd) Co (Cr) Cu Fe (Pb) Mg Mn Mo Ni K (Ag) Na (Se) Sr Tl Sn V Zn (Hg)

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORHTWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

Detection Limits:
NWTPH-HCID
Gas - 10 mg/L
Diesel - 25
O/G - 50
PCBs - 5 mg/L

As - 0.09 mg/L
Ba - 0.02
Cd - 0.02
Cr - 0.02
Pb - 0.04
Ag - 0.7
SE - 0.09
Hg - 0.0003

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature	Date/Time	Signature	Date/Time	Signature	Date/Time	Signature	Date/Time
Printed Name	Firm	Printed Name	Firm	Printed Name	Firm	Printed Name	Firm

RCOC #1 04/02

SCHN00243321

10/17/05

This is the sample for the MOLDLOFT Building soil. I recommend it goes to an approved Landfill accepting "Special Waste". Please let me know where it goes and get copies of the disposal tickets.

Thanks,
gi

FICATE OF ANALYSIS

PROJECT NAME: SSI-IT

PROJECT NUMBER: 5092601

SUBMITTED: 09/26/05 10:29

EPORT NUMBER: 5092601

DATE	TIME	MATRIX
09/23/2005	0715	Soil

			RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.010	DR	09/29/2005 15:41
BARIUM, TCLP - ICP		BARIUM	0.48	mg/L	0.020	DR	09/29/2005 16:10
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.020	DR	09/29/2005 15:41
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.010	DR	09/29/2005 15:41
LEAD, TCLP - ICP		LEAD	0.18	mg/L	0.040	DR	09/29/2005 15:41
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	DR	09/29/2005 15:41
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.080	DR	09/29/2005 16:10
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000010	DR	10/06/2005 16:38
Volatile Organics by Gas Chromatography/Mass Spectroscopy							
VOC 8260	EPA 8260	BENZENE	ND	mg/kg	0.0273	PA	09/28/2005 11:10
		BROMOBENZENE	ND	mg/kg	0.0273		
		BROMOCHLOROMETHANE	ND	mg/kg	0.0273		
		BROMODICHLOROMETHANE	ND	mg/kg	0.0273		
		BROMOFORM	ND	mg/kg	0.0273		
		BROMOMETHANE	ND	mg/kg	0.0273		
		N-BUTYLBENZENE	ND	mg/kg	0.0273		
		sec-BUTYLBENZENE	ND	mg/kg	0.0273		
		tert-BUTYLBENZENE	ND	mg/kg	0.0273		
		CARBON TETRACHLORIDE	ND	mg/kg	0.0273		
		CHLOROBENZENE	ND	mg/kg	0.0273		
		CHLOROETHANE	ND	mg/kg	0.0273		
		CHLOROFORM	ND	mg/kg	0.0273		
		CHLOROMETHANE	ND	mg/kg	0.0273		
		2-CHLOROTOLUENE	ND	mg/kg	0.0273		
		4-CHLOROTOLUENE	ND	mg/kg	0.0273		
		DIBROMOCHLOROMETHANE	ND	mg/kg	0.0273		
		1,2-DIBROMO-3-CHLOROPROPANE	ND	mg/kg	0.0273		
		1,2-DIBROMOETHANE	ND	mg/kg	0.0273		
		DIBROMOMETHANE	ND	mg/kg	0.0273		
		1,2-DICHLOROBENZENE	ND	mg/kg	0.0273		
		1,3-DICHLOROBENZENE	ND	mg/kg	0.0273		
		1,4-DICHLOROBENZENE	ND	mg/kg	0.0273		
		DICHLORODIFLUOROMETHANE	ND	mg/kg	0.0273		
		1,1-DICHLOROETHANE	ND	mg/kg	0.0273		
		1,1-DICHLOROETHENE	ND	mg/kg	0.0273		
		CIS-1,2-DICHLOROETHENE	ND	mg/kg	0.0273		
		TRANS-1,2-DICHLOROETHENE	ND	mg/kg	0.0273		
		1,2-DICHLOROPROPANE	ND	mg/kg	0.0273		
		1,3-DICHLOROPROPANE	ND	mg/kg	0.0273		

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Authorized for Release By:

Richard D. Reid - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PHONE: (503) 286-6976
FAX: (503) 286-6948

PROJECT NAME: SSI-IT
PROJECT NUMBER: 5092601

SUBMITTED: 09/26/05 10:29

REPORT DATE: 10/10/05 08:45 **REPORT NUMBER:** 5092601

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5092601-01	SSI-Bldg-01	09/23/2005	0715	Soil

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5092601-01	**SAMPLE ID: SSI-Bldg-01**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.010	DR	09/29/2005 15:41
BARIUM, TCLP - ICP		BARIUM	0.48	mg/L	0.020	DR	09/29/2005 16:10
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.020	DR	09/29/2005 15:41
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.010	DR	09/29/2005 15:41
LEAD, TCLP - ICP		LEAD	0.18	mg/L	0.040	DR	09/29/2005 15:41
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	DR	09/29/2005 15:41
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.080	DR	09/29/2005 16:10
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000010	DR	10/06/2005 16:38
Volatile Organics by Gas Chromatography/Mass Spectroscopy							
VOC 8260	EPA 8260	BENZENE	ND	mg/kg	0.0273	PA	09/28/2005 11:10
		BROMOBENZENE	ND	mg/kg	0.0273		
		BROMOCHLOROMETHANE	ND	mg/kg	0.0273		
		BROMODICHLOROMETHANE	ND	mg/kg	0.0273		
		BROMOFORM	ND	mg/kg	0.0273		
		BROMOMETHANE	ND	mg/kg	0.0273		
		N-BUTYLBENZENE	ND	mg/kg	0.0273		
		sec-BUTYLBENZENE	ND	mg/kg	0.0273		
		tert-BUTYLBENZENE	ND	mg/kg	0.0273		
		CARBON TETRACHLORIDE	ND	mg/kg	0.0273		
		CHLOROBENZENE	ND	mg/kg	0.0273		
		CHLOROETHANE	ND	mg/kg	0.0273		
		CHLOROFORM	ND	mg/kg	0.0273		
		CHLOROMETHANE	ND	mg/kg	0.0273		
		2-CHLOROTOLUENE	ND	mg/kg	0.0273		
		4-CHLOROTOLUENE	ND	mg/kg	0.0273		
		DIBROMOCHLOROMETHANE	ND	mg/kg	0.0273		
		1,2-DIBROMO-3-CHLOROPROPANE	ND	mg/kg	0.0273		
		1,2-DIBROMOETHANE	ND	mg/kg	0.0273		
		DIBROMOMETHANE	ND	mg/kg	0.0273		
		1,2-DICHLOROBENZENE	ND	mg/kg	0.0273		
		1,3-DICHLOROBENZENE	ND	mg/kg	0.0273		
		1,4-DICHLOROBENZENE	ND	mg/kg	0.0273		
		DICHLORODIFLUOROMETHANE	ND	mg/kg	0.0273		
		1,1-DICHLOROETHANE	ND	mg/kg	0.0273		
		1,1-DICHLOROETHENE	ND	mg/kg	0.0273		
		CIS-1,2-DICHLOROETHENE	ND	mg/kg	0.0273		
		TRANS-1,2-DICHLOROETHENE	ND	mg/kg	0.0273		
		1,2-DICHLOROPROPANE	ND	mg/kg	0.0273		
		1,3-DICHLOROPROPANE	ND	mg/kg	0.0273		

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Authorized for Release By:
Richard D. Reid - Laboratory Director

CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5092601-01	SAMPLE ID: SSI-Bldg-01						
Volatile Organics by Gas Chromatography/Mass Spectroscopy							
VOC 8260	EPA 8260	2,2-DICHLOROPROPANE	ND	mg/kg	0.0273	PA	09/28/2005 11:10
		1,1-DICHLOROPROPENE	ND	mg/kg	0.0273		
		1,2-DICHLOROETHANE	ND	mg/kg	0.0273		
		CIS-1,3-DICHLOROPROPENE	ND	mg/kg	0.0273		
		TRANS-1,3-DICHLOROPROPENE	ND	mg/kg	0.0273		
		ETHYLBENZENE	ND	mg/kg	0.0273		
		HEXACHLOROBUTADIENE	ND	mg/kg	0.0273		
		ISOPROPYLBENZENE	ND	mg/kg	0.0273		
		P-ISOPROPYLTOLUENE	ND	mg/kg	0.0273		
		METHYLENE CHLORIDE	ND	mg/kg	0.0273		
		NAPHTHALENE	ND	mg/kg	0.0273		
		N-PROPYLBENZENE	ND	mg/kg	0.0273		
		STYRENE	0.0573	mg/kg	0.0273		
		1,1,1,2-TETRACHLOROETHANE	ND	mg/kg	0.0273		
		1,1,2,2-TETRACHLOROETHANE	ND	mg/kg	0.0273		
		TETRACHLOROETHENE	ND	mg/kg	0.0273		
		TOLUENE	ND	mg/kg	0.109		
		1,2,3-TRICHLOROBENZENE	ND	mg/kg	0.0273		
		1,2,4-TRICHLOROBENZENE	ND	mg/kg	0.0273		
		1,1,1-TRICHLOROETHANE	ND	mg/kg	0.0273		
		1,1,2-TRICHLOROETHANE	ND	mg/kg	0.0273		
		TRICHLOROETHENE	ND	mg/kg	0.0273		
		TRICHLOROFLUORMETHANE	ND	mg/kg	0.0273		
		1,2,3-TRICHLOROPROPANE	ND	mg/kg	0.0273		
		1,2,4-TRIMETHYLBENZENE	ND	mg/kg	0.0273		
		1,3,5-TRIMETHYLBENZENE	ND	mg/kg	0.0273		
		VINYL CHLORIDE	ND	mg/kg	0.0273		
		M- & P-XYLENE	ND	mg/kg	0.0273		
		O-XYLENE	ND	mg/kg	0.0273		
		Surrogate: Dibromofluoromethane	101 %	%RECOVERY	50-150		
		Surrogate: Fluorobenzene	114 %	%RECOVERY	50-150		
		Surrogate: Chlorobenzene-d5	101 %	%RECOVERY	50-150		
		Surrogate: 1,4-Dichlorobenzene-d4	96.4 %	%RECOVERY	50-150		
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
PNAH 8270	EPA 8270M (SIM)	ACENAPHTHENE	ND	mg/kg	0.2	DM	10/05/2005 15:55
		ACENAPHTHYLENE	ND	mg/kg	0.2		
		ANTHRACENE	ND	mg/kg	0.2		
		BENZO(a)ANTHRACENE	ND	mg/kg	0.2		
		BENZO(a)PYRENE	ND	mg/kg	0.2		
		BENZO(b)FLUORANTHENE	ND	mg/kg	0.2		
		BENZO(g,h,i)PERYLENE	ND	mg/kg	0.2		
		BENZO(k)FLUORANTHENE	ND	mg/kg	0.2		
		CHRYSENE	ND	mg/kg	0.2		
		DIBENZO(a,h)ANTHRACENE	ND	mg/kg	0.2		
		FLUORANTHENE	ND	mg/kg	0.2		
		FLUORENE	ND	mg/kg	0.2		
		INDENO(1,2,3-cd)PYRENE	ND	mg/kg	0.2		
		NAPHTHALENE	ND	mg/kg	0.2		
		PHENANTHRENE	ND	mg/kg	0.2		
		PYRENE	ND	mg/kg	0.2		
		Surrogate: 2-Fluorobiphenyl	112 %	%RECOVERY	50-150		
		Surrogate: Nitrobenzene-D5	64.2 %	%RECOVERY	50-150		
		Surrogate: p-terphenyl-D14	102 %	%RECOVERY	50-150		
Semi-Volatile Organics by Gas Chromatography/ECD							
PCBs 8082	EPA 8082	DECACHLOROBIPHENYL	0.00	mg/kg		DM	10/07/2005 17:35

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Authorized for Release By:Richard D. Reid - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5092601-01	**SAMPLE ID: SSI-Bldg-01**						
Semi-Volatile Organics by Gas Chromatography/ECD							
PCBs 8082	EPA 8082	AROCHLOR 1016	ND	mg/kg	0.187	DM	10/07/2005 17:53
		AROCHLOR 1221	ND	mg/kg	0.187		
		AROCHLOR 1232	ND	mg/kg	0.187		10/07/2005 17:35
		AROCHLOR 1242	ND	mg/kg	0.187		
		AROCHLOR 1248	ND	mg/kg	0.187		
		AROCHLOR 1254	ND	mg/kg	0.187		
		AROCHLOR 1260	3.32	mg/kg	0.187		
		Surrogate: 2,4,5,6-Tetrachloro-m-xylene	130 %	%RECOVERY	50-150		
General Gas Chromatography Analysis							
NWTPH-HCID (soil)	NWTPH-HCID	GASOLINE	ND	mg/kg	11	PA	09/28/2005 13:24
		DIESEL	ND	mg/kg	26		
		OIL/GREASE	ND	mg/kg	53		
		Surrogate: p-terphenyl-D14	126 %	%RECOVERY	50-150		

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COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

Schnitzer Steel Industries, Inc.

Letter of Transmittal

To: Operations Division, Regulatory Branch-Permits Section

From: Jim Jakubiak **Date:** 4/21/2004

Re: Signed Permit Submittals

CC:

☐ Urgent • ☑ For Use ☐ Please Comment ☑ Please Reply ☐ Please Recycle

Attached are four signed copies of dredge permits (Corps No.: 199200812 and 199100099) for the Schnitzer Steel facility located at 12005 North Burgard Road in Portland Oregon. Also attached are two checks (each for $100.00) as requested in your letter dated February 13, 2004. We look forward to receiving a fully executed permit from the Corp. at your earliest convenience. If you have any questions regarding this submittal, please contact Jim Jakubiak at (503)286-6976.

CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PHONE: (503) 286-6976
FAX: (503) 286-6948

PROJECT NAME: SSP- Water

SUBMITTED: 10/19/05 09:30

REPORT DATE: 10/21/05 15:22 REPORT NUMBER: 5101902

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5101902-01	TW-1	10/13/2005	1900	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5101902-01	SAMPLE ID: TW-1						
Total Metals by Inductively Coupled Plasma							
LEAD - ICP	EPA 200.7/6010B	LEAD	0.011	mg/L	0.005	KEL	10/20/2005 13:44

ORIGINAL

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Richard D. Reid - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PHONE: (503) 286-6976
FAX: (503) 286-6948

PROJECT NAME: SSP- Water

SUBMITTED: 10/19/05 09:30

REPORT DATE: 10/21/05 15:22 REPORT NUMBER: 5101902 PAGE: 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5101902-01	TW-1	10/13/2005	1900	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5101902-01	SAMPLE ID: TW-1						
Total Metals by Inductively Coupled Plasma							
LEAD - ICP	EPA 200.7/6010B	LEAD	0.011	mg/L	0.005	KEL	10/20/2005 13:44

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Authorized for Release By:
Richard D. Reid - Laboratory Director

Mold Loft
Building -
Demo Project

ATC ASSOCIATES INC.

11825 SW Greenburg Rd., Ste 2B Tigard, OR 97223
Phone (503) 684-0525 Fax (503) 624-0415

September 23, 2005

Mr. Josh Philip
Schnitzer Steel
P.O. Box 10047
Portland, OR 97296

RE: Proposal for Pre-Demolition Asbestos Survey
Approximately 38,440 Square Foot Warehouse
ATC Proposal No. 38.090406p

Dear Mr. Philip:

ATC is pleased to respond to your request for proposal for a pre-demolition asbestos survey at the Schnitzer Steel facility described above. The proposal was prepared based on your request by telephone on September 23, 2005. Per the information provided by you the building is approximately 38,440 square feet and consists mainly of warehouse space with some office space and a single restroom.

The ACM Survey will include the following:

An ATC AHERA certified inspector will conduct sampling of suspect asbestos containing materials. Three samples will be collected of each suspect ACM per OSHA regulation (1926.1101) to determine the asbestos content of suspect ACMs prior to demolition. ATC estimates up to 30 samples may be collected.

Laboratory analysis uses polarized light microscopy methodology (PLM) to determine the asbestos content. Any material with greater than one-percent asbestos fibers is considered asbestos containing material.

A written report will present the sample location, condition, quantity and applicable analytical results of the sampled building material and asbestos abatement estimates.

In addition to the ACM Survey a visual inspection of the facility for other potential hazardous materials that may affect building demolition activities will be conducted.

The estimated cost to complete the ACM Survey is $2,000.00

Note: If additional ACM samples above the estimate are necessary, the unit cost is $25/sample. The estimated cost is based on the provided building description. Per our conversation Schnitzer Steel will provide appropriate means to access roofing material at the facility.

If you have any questions or comments, please contact Bob Burns at (503) 684-0525.

Sincerely,
ATC Associates Inc.

Bob Burns
Senior Project Manager

PDF created with pdfFactory trial version www.pdffactory.com

ATC ASSOCIATES INC.
PROPOSAL ACCEPTANCE SHEET

Description of Services:	*PRE-DEMOLITION ASBESTOS SURVEY*
Project Location(s):	**Portland, Oregon**
Proposal Number & Date:	38.090406p (September 23, 2005)

Conduct an asbestos survey and visual inspection in preparation for the demolition of the described building to meet EPA-NESHAP, Oregon-DEQ and Oregon-OHSA requirements.

Charge Invoice to the Account of:

Firm: Schnitzer Steel

Mailing Address: P.O. Box 10047
Portland, OR 972296

Attention: Mr. Josh Philip ph. (503) 286-6906

This AGREEMENT together with the proposal (including Scope of Work and Estimated Cost) and General and Environmental Terms and Conditions constitute the entire agreement between client and ATC and supersedes all prior written or oral understandings.

This AGREEMENT is accepted by:

	ATC Associates Inc.
Client	
By (Signature)	By (Signature)
	Bob Burns
By (Type/Print)	By (Type/Print)
	Senior Project Manager
Title	Title
Accepted _____, 2005	Accepted September 23, 2005
Acknowledging the Terms and Conditions	Acknowledging the Terms and Conditions

ATC ASSOCIATES INC.
11825 S.W. GREENBURG ROAD, SUITE 2B, TIGARD, OR 97223
PHONE: 503.684.0525 FAX: 503.624.0415

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ATC ASSOCIATES INC.

11825 SW Greenburg Rd., Ste 2B Tigard, OR 97223
Phone (503) 684-0525 Fax (503) 624-0415

September 23, 2005

Mr. Josh Philip
Schnitzer Steel
P.O. Box 10047
Portland, OR 97296

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Approximately 38,440 Square Foot Warehouse
ATC Proposal No. 38.090406p

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Sincerely,
ATC Associates Inc.

Bob Burns
Senior Project Manager

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ATC ASSOCIATES INC.
PROPOSAL ACCEPTANCE SHEET

Description of Services:	*PRE-DEMOLITION ASBESTOS SURVEY*
Project Location(s):	**Portland, Oregon**
Proposal Number & Date:	38.090406p (September 23, 2005)

Conduct an asbestos survey and visual inspection in preparation for the demolition of the described building to meet EPA-NESHAP, Oregon-DEQ and Oregon-OHSA requirements.

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Firm: Schnitzer Steel

Mailing Address: P.O. Box 10047
Portland, OR 972296

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This AGREEMENT is accepted by:

	ATC Associates Inc.
Client	
By (Signature)	By (Signature)
	Bob Burns
By (Type/Print)	By (Type/Print)
	Senior Project Manager
Title	Title
Accepted _____, 2005	Accepted September 23, 2005
Acknowledging the Terms and Conditions	Acknowledging the Terms and Conditions

ATC ASSOCIATES INC.
11825 S.W. GREENBURG ROAD, SUITE 2B, TIGARD, OR 97223
PHONE: 503.684.0525 FAX: 503.624.0415

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ATC ASSOCIATES INC.

11825 SW Greenburg Rd., Ste 2B Tigard, OR 97223
Phone (503) 684-0525 Fax (503) 624-0415

September 23, 2005

Mr. Josh Philip
Schnitzer Steel
P.O. Box 10047
Portland, OR 97296

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Approximately 38,440 Square Foot Warehouse
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Sincerely,
ATC Associates Inc.

Bob Burns
Senior Project Manager

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ATC ASSOCIATES INC.
PROPOSAL ACCEPTANCE SHEET

Description of Services:	*PRE-DEMOLITION ASBESTOS SURVEY*
Project Location(s):	**Portland, Oregon**
Proposal Number & Date:	38.090406p (September 23, 2005)

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Portland, OR 972296

Attention: Mr. Josh Philip ph. (503) 286-6906

This AGREEMENT together with the proposal (including Scope of Work and Estimated Cost) and General and Environmental Terms and Conditions constitute the entire agreement between client and ATC and supersedes all prior written or oral understandings.

This AGREEMENT is accepted by:

	ATC Associates Inc.
Client	
By (Signature)	By (Signature)
	Bob Burns
By (Type/Print)	By (Type/Print)
	Senior Project Manager
Title	Title
Accepted _____, 2005	Accepted September 23, 2005
Acknowledging the Terms and Conditions	Acknowledging the Terms and Conditions

ATC ASSOCIATES INC.
11825 S.W. GREENBURG ROAD, SUITE 2B, TIGARD, OR 97223
PHONE: 503.684.0525 FAX: 503.624.0415

PDF created with pdfFactory trial version www.pdffactory.com

jjakubiak

Microsoft Word – FLYER–8 20 pt.doc
10/06/05 07:32 AM

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Investment Corp.
ATTN: James Jakubiak
3200 NW Yeon
Portland OR, 97296

PROJECT NAME: Burgard Catch Basins

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 12/23/05 11:52

REPORT DATE: 01/12/06 07:45 **REPORT NUMBER:** 5122306 **PAGE:** 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5122306-01	SIC-B-1	12/23/2005	1130	Soil

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5122306-01	**SAMPLE ID: SIC-B-1**						
Total Mercury by Cold Vapor Atomic Fluorescence							
MERCURY CV AF	EPA 245.7/1631	MERCURY	0.0521	mg/kg	0.00164	KEL	12/28/2005 14:04
Total Metals by Inductively Coupled Plasma							
ARSENIC - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/kg	10.7	KEL	12/27/2005 11:56
BARIUM - ICP		BARIUM	76	mg/kg	0.14	KEL	12/27/2005 13:01
CADMIUM - ICP		CADMIUM	0.938	mg/kg	0.071	KEL	12/27/2005 11:56
CHROMIUM - ICP		CHROMIUM	119	mg/kg	0.071	KEL	12/27/2005 11:56
LEAD - ICP		LEAD	34.2	mg/kg	0.0710	KEL	12/27/2005 11:56
SELENIUM - ICP		SELENIUM	ND	mg/kg	0.57	KEL	12/27/2005 11:56
SILVER - ICP		SILVER	ND	mg/kg	0.710	KEL	12/27/2005 13:13
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.19	mg/L	0.010	KEL	01/05/2006 13:06
BARIUM, TCLP - ICP		BARIUM	2.5	mg/L	0.020	KEL	01/05/2006 13:20
CADMIUM, TCLP - ICP		CADMIUM	0.032	mg/L	0.020	KEL	01/05/2006 13:06
CHROMIUM, TCLP - ICP		CHROMIUM	2.5	mg/L	0.010	KEL	01/05/2006 13:06
LEAD, TCLP - ICP		LEAD	0.69	mg/L	0.040	KEL	01/05/2006 13:06
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	KEL	01/05/2006 13:06
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.080	KEL	01/05/2006 13:23
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.250	KEL	01/11/2006 13:30

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Authorized for Release By:
Richard D. Reid - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Investment Corp.
ATTN: James Jakubiak
3200 NW Yeon
Portland OR, 97296

PROJECT NAME: Burgard Catch Basins

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 12/23/05 11:52

REPORT DATE: 01/12/06 08:34 **REPORT NUMBER:** 5122306 **PAGE:** 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5122306-01	SIC-B-1	12/23/2005	1130	Soil

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5122306-01	SAMPLE ID: SIC-B-1						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.19	mg/L	0.010	KEL	01/05/2006 13:06
BARIUM, TCLP - ICP		BARIUM	2.5	mg/L	0.020	KEL	01/05/2006 13:20
CADMIUM, TCLP - ICP		CADMIUM	0.032	mg/L	0.020	KEL	01/05/2006 13:06
CHROMIUM, TCLP - ICP		CHROMIUM	2.5	mg/L	0.010	KEL	01/05/2006 13:06
LEAD, TCLP - ICP		LEAD	0.89	mg/L	0.040	KEL	01/05/2006 13:06
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	KEL	01/05/2006 13:06
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.080	KEL	01/05/2006 13:23
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.250	KEL	01/11/2006 13:30

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Authorized for Release By:

Richard D. Reid - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

MULT 70272

STATE OF OREGON
MONITORING WELL REPORT
(as required by ORS 537.765 & OAR 690-240-095)
Instructions for completing this report are on the last page of this form.

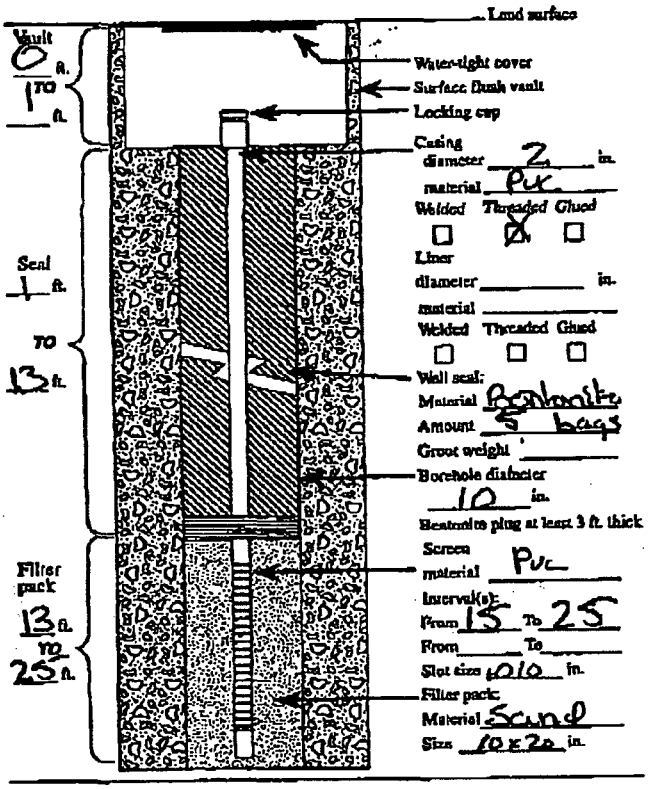
Well ID# 158982
Start Card # 1526646

(1) OWNER/PROJECT WELL NO. MW-1
Name Schnitzer Corp
Address 12005 N Burgard Rd
City Portland State OR Zip 97203

(2) TYPE OF WORK
☒ New construction ☐ Alteration (Repair/Recondition)
☐ Conversion ☐ Deepening ☐ Abandonment

(3) DRILLING METHOD
☐ Rotary Air ☐ Rotary Mud ☐ Cable
☒ Hollow Stem Auger ☐ Other

(4) BORE HOLE CONSTRUCTION:
Special Standards Yes ☐ No ☐ Depth of Completed Well 25 ft.



(5) WELL TESTS:
☐ Pump ☐ Bailer ☐ Air ☐ Flowing Artesian
Permeability Yield GPM
Conductivity PH
Temperature of water 54 °F/C Depth artesian flow found ft.
Was water analysis done? ☐ Yes ☒ No
By whom?
Depth of strata to be analyzed. From ft. to ft.
Remarks
Name of supervising Geologist/Engineer

(6) LOCATION OF WELL By legal description:
County Hull Latitude Longitude
Township 2 (N or S) Range 1 (E or W) Section 35
SW 1/4 of SE 1/4 of above section.
Street address of well location
12005 N Burgard Way
Tax lot number of well location 500
ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:
13 Ft. below land surface. Date 7/24/03
Artesian Pressure lb/sq. in. Date

(8) WATER BEARING ZONES:
Depth at which water was first found 13

From	To	Est. Flow Rate	SWL
13	25		13

(9) WELL LOG:
Ground Elevation

Material	From	To	SWL
Sand	0	25	13

RECEIVED
AUG 22 2003
WATER RESOURCES DEPT.
SALEM, OREGON

Date started 7/23/03 Completed 7/24/03

(unbonded) Monitor Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
Signed MWC Number 1051
Date 8/21/03

(bonded) Monitor Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
MWC Number 1014
Signed Date 8/21/03

ORIGINAL COPY – WATER RESOURCES DEPARTMENT FIRST COPY – CONSTRUCTOR SECOND COPY – OWNER

SCHN00243457

MULT 70273

STATE OF OREGON
MONITORING WELL REPORT
(as required by ORS 537.765 & OAR 690-240-095)
Instructions for completing this report are on the last page of this form.

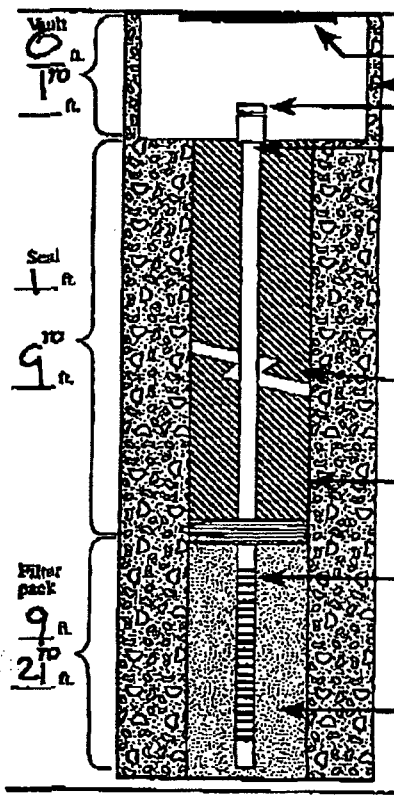
Well ID# 158983
Start Card # 156604

(1) OWNER/PROJECT WELL NO. MW-2
Name Schnitzer Corp
Address 12005 N Burgard Rd
City Portland State OR Zip 97203

(2) TYPE OF WORK
[X] New construction [ ] Alteration (Repair/Reconditioning)
[ ] Conversion [ ] Deepening [ ] Abandonment

(3) DRILLING METHOD
[ ] Rotary Air [ ] Rotary Mud [ ] Cable
[X] Hollow Stem Auger [ ] Other

(4) BORE HOLE CONSTRUCTION:
Special Standards Yes [ ] No [ ] Depth of Completed Well 21 ft.



Water-tight cover
Surface flush vault
Locking cap
Casing diameter 2 in. material PVC
Welded [ ] Threaded [X] Glued [ ]
Liner diameter ____ in. material ____
Welded [ ] Threaded [ ] Glued [ ]
Well seal: Material Bentonite Amount 4 bags Grout weight ____
Borehole diameter 10 in.
Bentonite plug at least 3 ft. thick
Screen material PVC interval(s): From 11 To 21 From ____ To ____ Slot size .010 in.
Filter pack: Material Sand Size 10x20 in.

(5) WELL TESTS:
[ ] Pump [ ] Bailer [ ] Air [ ] Flowing Artesian
Permeability ____ Yield ____ GPM
Conductivity ____ PH ____
Temperature of water 54 °F/C Depth artesian flow found ____ ft.
Was water analysis done? [ ] Yes [X] No
By whom? ____
Depth of strata to be analyzed. From ____ ft. to ____ ft.
Remarks: ____

Name of supervising Geologist/Engineer ____

(6) LOCATION OF WELL By legal description:
County Multnomah Latitude ____ Longitude ____
Township 2 (N or S) Range 1 (E or W) Section 35
SW 1/4 of SE 1/4 of above section.
Street address of well location 12005 N Burgard Way
Tax lot number of well location 500
ATTACH MAP WITH LOCATION IDENTIFIED. Map shall include approximate scale and north arrow.

(7) STATIC WATER LEVEL:
13 ft. below land surface. Date 7/24/03
Artesian Pressure ____ lb/sq. in. Date ____

(8) WATER BEARING ZONES:
Depth at which water was first found 13

From	To	Est. Flow Rate	SWL
13	21		13

(9) WELL LOG:
Ground Elevation ____

Material	From	To	SWL
Sand	0	21	13

RECEIVED
AUG 22 2003
WATER RESOURCES DEPT
SALEM, OREGON

Date started 7/23/03 Completed 7/24/03

(unbonded) Monitor Well Constructor Certification:
I certify that the work I performed on the construction, alteration, or abandonment of this well is in compliance with Oregon water supply well construction standards. Materials used and information reported above are true to the best of my knowledge and belief.
Signed [signature] MWC Number 10511 Date 8/21/03

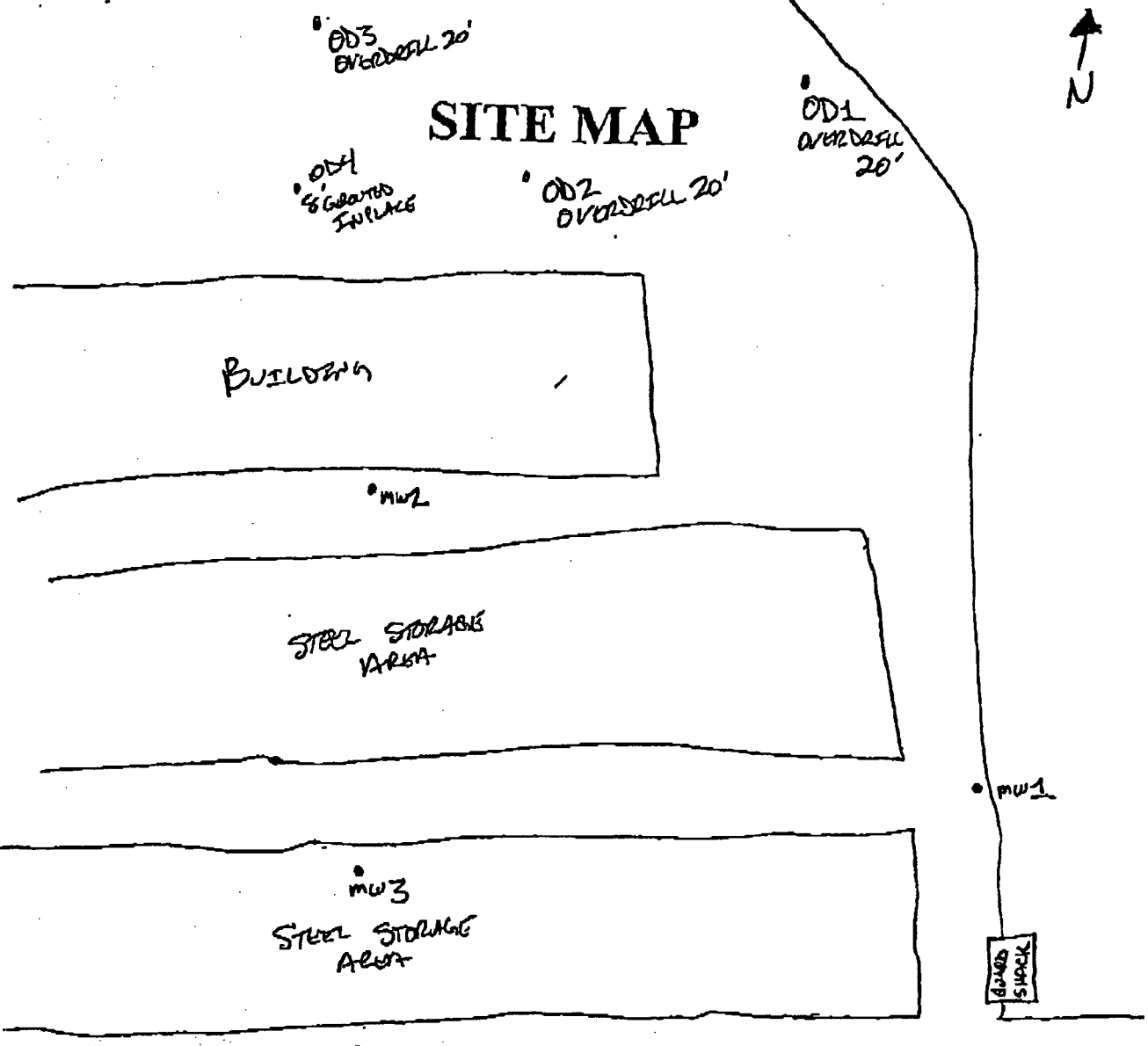
(bonded) Monitor Well Constructor Certification:
I accept responsibility for the construction, alteration, or abandonment work performed on this well during the construction dates reported above. All work performed during this time is in compliance with Oregon water supply well construction standards. This report is true to the best of my knowledge and belief.
Signed [signature] MWC Number 10011 Date 8/21/03

ORIGINAL COPY – WATER RESOURCES DEPARTMENT FIRST COPY – CONSTRUCTOR SECOND COPY – CUSTOMER

SCHN00243458

MULT 70273

SITE MAP



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AUG 2 2 2003
WATER RESOURCES DEPT.
SALEM, OREGON

Oregon
Theodore R. Kulongoski, Governor

Water Resources Department
Commerce Building
158 12th Street NE
Salem, OR 97301-4172
503-378-3739
FAX 503-378-8130

September 4, 2003

Jim Jakubiak, R.G.
P.O. Box 10047
Portland, OR 97296-0047

Dear Mr. Jakubiak,

I would like to request an appointment to make a routine inspection of monitoring wells at the Schnitzer Corporation property at 12005 N. Burgaard Ave. in Portland, Oregon. The wells to be inspected were constructed in January 2002 and July 2003 by Geo-Tech Explorations.

The Oregon Water Resources Department (Department) oversees the protection of the groundwater resource under authority vested in the Water Resources Commission through the Ground Water Act of 1955, ORS 537.505. Rules governing the construction and maintenance of monitoring wells are found in OAR 690-240. The Department routinely selects a percentage of monitoring wells in the state to be inspected, in order to determine whether they have been constructed and maintained in compliance with state construction standards, and to verify that the location and identification information in the driller's reports is accurate. This information from the driller's reports is the basis of the GRID database which is available to the public through the Department's website.

Monitor well inspections consist of noting the identifying numbers and tag on the well and the casing diameter, checking that the well is properly sealed to prevent entry of contamination through surface water, and that it is locked and protected in accordance with state rules. In addition, the township, range, section, ¼ ¼ and tax lot are verified, and gps locational coordinates are obtained.

I look forward to arranging a monitor well inspection visit at Schnitzer Corporation, 12005 N. Burgaard in the near future.

You may contact me by phone at (503) 378-8455, ext. 244, by mail at 158 12th St. NE, Salem, OR 97301-4172 or by email: Dorothy.I.PEDERSEN@wrd.state.or.us. if you have questions.

Sincerely,

Dorothy I. Pedersen

Dorothy I. Pedersen
Monitoring Well Inspector, Northwest Region

00071DIP

COLUMBIA INSPECTION, INC.

CHAIN OF CUSTODY RECORD
AND
NON-COMMERCIAL BILL OF LADING

☒ 7133 N. Lombard, Portland, OR 97203 — Ph: (503) 286-9464 Fax: (503) 285-7831
☐ 4901 E. 20th Street, Fife, WA 98424 — Ph: (253) 922-8781 Fax: (253) 922-8957
☐ 4592 E 2nd Street, Ste 'A', Benicia, CA 94510 — Ph: (707) 748-7587 Fax: (707) 748-7764
☐ 797 Channel Street, San Pedro, CA 90731 — Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name: SSP
Attention: Jim Jakubiak
Address: PO Box 10017 Portland, OR 97296
Phone: (503) 286-6976
Fax: (503) 286-6970
Sampler: [signature] ☒ Submitted

Project Name: SSP Pickle 2
Project Number:
P.O. Number:
Testing Priority: ☐ Normal ☒ Rush
Due Date:
Notification Method(s): ☐ Telephone ☐ Email ☐ Mail

Analysis To Be Performed: TCLP RCRA Metals; ARSENIC, BARIUM, CADMIUM, CHROMIUM, LEAD, SELENIUM

Sample id#	Sample Description/UN Number	Sample Matrix	Sample Date	Sample Time	TCLP RCRA Metals / ARSENIC, BARIUM, CADMIUM, CHROMIUM, LEAD, SELENIUM
SD-1		Solid	6/10/04	0715	X

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	6/10/04 1115AM		
Relinquished By:	Date/Time	Received By: [signature]	Date/Time 6/10/04 1130

FOR LABORATORY USE ONLY
Inspection Job Number: _____ PO# _____
Laboratory Project Number: _____ Cash/check # _____
Due Date: _____ Amount Paid: $ _____

SCHN00243465

Sample Acceptance Policy

All samples must meet the following requirements:

- **Chain of Custody:** The COC list of samples must match the number and type of sample containers received, and sample descriptions on the COC must match the sample bottles. The requested tests and where possible, specific methods are shown on the COC.
- ***Appropriate Container:*** *The correct sample containers must be used for the requested analyses.*
- **Sample Volume:** There must be sufficient sample volume for the test(s) requested.
- **Holding Time:** The holding times for the requested analyses must not be expired.

Environmental samples must meet the following additional requirements:

- **Sample Temperature:** Samples that require refrigeration shall be considered acceptable if the temperature as measured upon receipt is either within 2° C of the required temperature or the method specified range. For samples with a specified temperature of 4° C, samples received at temperatures ranging from just above freezing to 6° C shall be acceptable.

  NOTE: **Samples that are delivered to the laboratory shortly after sampling may not meet this criterion. However, the samples shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice, or if the samples were taken within the hour.**

- **Sample Preservation:** Where possible without sacrificing the integrity of the sample, determine whether the sample bottle has been preserved correctly.

Discrepancies:

If there is any doubt as to the suitability for testing such as the **sample does not conform to the sample description**, the sample containers are **damaged, leaking**, or **may be contaminated from other damaged or leaking sample containers**, or where **testing is not specified**, further instructions from the client are required. If the issue cannot be resolved and the sample does not meet sample acceptance criteria the laboratory shall either.

- Fully document any decision to proceed with the analysis and note the condition of the sample on the COC and work order; or
- Retain correspondence and/or records of conversations regarding the final disposition of rejected samples.

Rejected Samples:

- Should the client choose to proceed with testing on questionable samples, the Work Order must be clearly *marked with the nature of the problem so that the final report data may be appropriately qualified.*
- Rejected samples must still be logged into LIMS to obtain a unique sample identification number to track sample disposition. However, for rejected samples, no testing is assigned. Instead, the sample status is set to "Rejected" by editing the work order status using the Update Status function of the Laboratory menu in LIMS.

Refer to the Columbia Inspection, Inc. Laboratory Policy, LP00.01, Sample Acceptance Policy and SOP15.01 Sample Receipt for complete details.

Sample Disposal:

- Samples are disposed of after 45 days unless prior arrangements have been made with the laboratory.
- Samples that are deemed hazardous may be returned to the client for proper disposal.

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PHONE: (503) 286-6976
FAX: (503) 286-6948

PROJECT NAME: SSP Profile

SUBMITTED: 06/10/04 13:35

REPORT DATE: 06/14/04 11:11 REPORT NUMBER: 4061006 PAGE: 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
4061006-01	Profile 2 SD-1	06/10/2004	0715	Other(Sld)

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
4061006-01	**SAMPLE ID: Profile 2 SD-1**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
5.0 ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.032	mg/L	0.010	BKB	06/11/2004 11:17
100 BARIUM, TCLP - ICP		BARIUM	0.98	mg/L	0.020	BKB	06/11/2004 11:17
1.0 CADMIUM, TCLP - ICP		CADMIUM	0.084	mg/L	0.020	BKB	06/11/2004 11:17
5.0 CHROMIUM, TCLP - ICP		CHROMIUM	0.025	mg/L	0.010	BKB	06/11/2004 11:17
5.0 LEAD, TCLP - ICP		LEAD	0.54	mg/L	0.040	BKB	06/11/2004 11:17
1.0 SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	BKB	06/11/2004 11:17

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Richard D. Reid - Laboratory Director

CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PHONE: (503) 286-6976
FAX: (503) 286-6948

PROJECT NAME: SSP Profile

SUBMITTED: 06/10/04 13:35

REPORT DATE: 06/14/04 11:11 REPORT NUMBER: 4061006

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
4061006-01	Profile 2 SD-1	06/10/2004	0715	Other(Sld)

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
4061006-01	**SAMPLE ID: Profile 2 SD-1**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.032	mg/L	0.010	BKB	06/11/2004 11:17
BARIUM, TCLP - ICP		BARIUM	0.98	mg/L	0.020	BKB	06/11/2004 11:17
CADMIUM, TCLP - ICP		CADMIUM	0.084	mg/L	0.020	BKB	06/11/2004 11:17
CHROMIUM, TCLP - ICP		CHROMIUM	0.025	mg/L	0.010	BKB	06/11/2004 11:17
LEAD, TCLP - ICP		LEAD	0.54	mg/L	0.040	BKB	06/11/2004 11:17
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	BKB	06/11/2004 11:17

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Richard D. Reid - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PROJECT NAME: SSP Profile

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 06/10/04 13:35

REPORT DATE: 06/14/04 11:11 REPORT NUMBER: 4061006 PAGE: 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
4061006-01	Profile 2 SD-1	06/10/2004	0715	Other(Sld)

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
4061006-01	**SAMPLE ID: Profile 2 SD-1**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.032	mg/L	0.010	BKB	06/11/2004 11:17
BARIUM, TCLP - ICP		BARIUM	0.98	mg/L	0.020	BKB	06/11/2004 11:17
CADMIUM, TCLP - ICP		CADMIUM	0.084	mg/L	0.020	BKB	06/11/2004 11:17
CHROMIUM, TCLP - ICP		CHROMIUM	0.025	mg/L	0.010	BKB	06/11/2004 11:17
LEAD, TCLP - ICP		LEAD	0.54	mg/L	0.040	BKB	06/11/2004 11:17
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	BKB	06/11/2004 11:17

COPY

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Authorized for Release By:
Richard D. Reid - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
☎ 503-378-3805

Permit No.:	**30897-RP Renewal**
Permit Type:	**Removal**
Waterway:	**Willamette River**
County:	**Multnomah**
Expiration Date:	**January 14, 2008**
Corps No.:	**1991-00099**

SCHNITZER STEEL INDUSTRIES, INC.

IS AUTHORIZED IN ACCORDANCE WITH ORS 196.800 TO 196.990 TO PERFORM THE OPERATIONS DESCRIBED IN THE ATTACHED COPY OF THE APPLICATION, SUBJECT TO THE SPECIAL CONDITIONS LISTED ON ATTACHMENT A AND TO THE FOLLOWING GENERAL CONDITIONS:

1. This permit does not authorize trespass on the lands of others. The permit holder shall obtain all necessary access permits or rights-of-way before entering lands owned by another.
2. This permit does not authorize any work that is not in compliance with local zoning or other local, state, or federal regulation pertaining to the operations authorized by this permit. The permit holder is responsible for obtaining the necessary approvals and permits before proceeding under this permit.
3. All work done under this permit must comply with Oregon Administrative Rules, Chapter 340; Standards of Quality for Public Waters of Oregon. Specific water quality provisions for this project are set forth on Attachment A.
4. Violations of the terms and conditions of this permit are subject to administrative and/or legal action which may result in revocation of the permit or damages. The permit holder is responsible for the activities of all contractors or other operators involved in work done at the site or under this permit.
5. A copy of the permit shall be available at the work site whenever operations authorized by the permit are being conducted.
6. Employees of the Department of State Lands and all duly authorized representatives of the Director shall be permitted access to the project area at all reasonable times for the purpose of inspecting work performed under this permit.
7. Any permit holder who objects to the conditions of this permit may request a hearing from the Director, in writing, within twenty-one (21) calendar days of the date this permit was issued.
8. In issuing this permit, the Department of State Lands makes no representation regarding the quality or adequacy of the permitted project design, materials, construction, or maintenance, except to approve the project's design and materials, as set forth in the permit application, as satisfying the resource protection, scenic, safety, recreation, and public access requirements of ORS Chapters 196, 390 and related administrative rules.
9. Permittee shall defend and hold harmless the State of Oregon, and its officers, agents, and employees from any claim, suit, or action for property damage or personal injury or death arising out of the design, material, construction, or maintenance of the permitted improvements.

NOTICE: If removal is from state-owned submerged and submersible land, the applicant must comply with leasing and royalty provisions of ORS 274.530. If the project involves creation of new lands by filling on state-owned submerged or submersible lands, you must comply with ORS 274.905 - 274.940. This permit does not relieve the permittee of an obligation to secure appropriate leases from the Department of State Lands, to conduct activities on state-owned submerged or submersible lands. Failure to comply with these requirements may result in civil or criminal liability. For more information about these requirements, please contact the Department of State Lands, 503-378-3805.

Michael Morales, W Region Manager
Wetlands & Waterways Conservation Div
Oregon Department of State Lands

Michael Morales — January 23, 2007
Authorized Signature — **Date Issued**

ATTACHMENT A

Permittee: Schnitzer Steel Industries, Inc.

Special Conditions for Removal/Fill Permit No. 30897-RP. <u>PLEASE READ AND BECOME FAMILIAR WITH CONDITIONS OF YOUR PERMIT.</u> This project may be site inspected by the Department of State Lands as part of our monitoring program. The Department has the right to stop or modify the project at any time if you are not in compliance with these conditions. A copy of this permit shall be available at the work site whenever authorized operations are being conducted.

1. This permit authorizes the removal of up to 127,000 cubic yards (total project) of sand and silt at International Terminals, Berths 1, 2 and 3 located at T2N, R1W, Section 35, tax lot 500, at Willamette River, mile 3.8, Portland, Multnomah County for maintenance dredging as outlined in the attached permit application, map and drawings, dated July 9, 2003.

2. No removal activities shall commence within waters of the State without first obtaining any required authorization from the City of Portland for upland disposal. If the local permit(s) results in any modifications in this project relative to this permit, the permit holder shall contact the Department and request adjustments to this authorization.

3. Removal activities in Willamette River, mile 3.8, International Terminal Berths 1, 2 and 3, shall be conducted between July 1 and October 31 unless otherwise coordinated with ODFW and approved in writing by ODSL. The recommended in-water work timing may be modified prior to July 1, 2007. Contact the Department prior to starting work to verify in-water work timing.

4. The dimensions and depth of the berths shall be no greater than described in Application, Sheets 2 of 3 and 3 of 3. Any alteration of the plan requires Department of State Lands approval.

5. Dredging activity shall be conducted by clamshell bucket from a floating crane and as described in Application. In the closed position, the bucket shall be sealed so as to minimize sediment re-suspension. The barge shall be positioned so as to avoid grounding on the riverbed or banks at any time.

6. All dredge materials shall be placed in barges equipped such that no material shall discharge to waters of the State during loading, transfer and unloading activity.

7. Any return waters generated during transfer and disposal activity shall be provided adequate settling time so that return waters meet water quality requirements of the Department of Environmental Quality.

8. Dredged materials shall be disposed of in appropriately permitted, upland disposal site(s). The selected disposal facility(ies), and any changes thereafter, shall be submitted to the Department for approval prior to use.

9. Any beneficial reuse of dredged materials is subject to a license from, and royalty payments to, the Department of State Lands.

10. An annual report shall be submitted to the Department no later than 30 days after the end of the in-water work period each year. The report shall include the amount of material dredged, the final dredge material disposal site and an approximation of the new basin depth.

Water Quality Conditions

11. TURBIDITY/EROSION CONTROLS. The authorized work shall not cause turbidity of affected waters to exceed 10% over natural background turbidity 100 feet downstream of the fill point. For projects proposed in areas with no discernible gradient break (gradient of 2% or less), monitoring shall take place at 4 hour intervals and the turbidity standard may be exceeded for a maximum of one monitoring interval per 24 hour work period provided all practicable control measures have been implemented. This turbidity standard exceedance interval applies only to coastal lowlands and floodplains, valley bottoms and other low-lying and/or relatively flat land.

    For projects in all other areas, the turbidity standard can be exceeded for a maximum of 2 hours (limited duration) provided all practicable erosion control measures have been implemented. These projects may also be subject to additional reporting requirements.

    Turbidity shall be monitored during active in-water work periods. Monitoring points shall be at an undisturbed site (representative background) 100 feet upstream from the turbidity causing activity (i.e., fill or discharge point), 100 feet downstream from the fill point, and at the point of fill. A turbidimeter is recommended, however, visual gauging is acceptable. Turbidity that is visible over background is considered an exceedance of the standard.

    The following erosion control measures (and others as appropriate) shall be observed:

    a. Filter bags, sediment fences, sediment traps or catch basins, leave strips or berms, or other measures shall be used sufficient to prevent movement of soil from uplands into waterways or wetlands.

b. To prevent erosion, use of compost berms, impervious materials or other equally effective methods, shall be used to protect soil stockpiled during rain events or when the stockpile site is not moved or reshaped for more than 48 hours.
c. Erosion control measures shall be inspected and maintained daily, or more frequently as necessary, to ensure their continued effectiveness and shall remain in place until all exposed soil is stabilized.
d. Unless part of the authorized permanent fill, all construction access points through, and staging areas in, riparian or wetland areas shall use removable pads or mats to prevent soil compaction. However, in some wetland areas under dry summer conditions, this requirement may be waived upon approval by DSL. At project completion, disturbed areas with soil exposed by construction activities shall be stabilized by mulching and native vegetative plantings/seeding. Sterile grass may be used instead of native vegetation for temporary sediment control. If soils are to remain exposed more than seven days after completion of the permitted work, they shall be covered with erosion control pads, mats or similar erosion control devices until vegetative stabilization is installed.
e. Where vegetative erosion control is being done on cut slopes steeper than 1H:2V, a tackified seed mulch shall be used so the seed does not wash away before germination and rooting.
f. Dredged or other excavated material shall be placed on upland areas having stable slopes and shall be prevented from eroding back into waterways or wetlands

Erosion control measures shall be maintained as necessary to ensure their continued effectiveness, until soils become stabilized. All erosion control structures shall be removed when project is complete and soils are stabilized and vegetated.

12. Petroleum products, chemicals, fresh cement, sandblasted material and chipped paint or other deleterious waste materials shall not be allowed to enter waters of the state. No wood treated with leachable preservatives shall be placed in the waterway. Machinery refueling is to occur off-site or in a confined designated area to prevent spillage into waters of the state. Project-related spills into water of the state or onto land with a potential to enter waters of the state shall be reported to the Oregon Emergency Response System at 800-452-0311.

Contingencies

13. If any archaeological resources and/or artifacts are uncovered during excavation, all construction activity shall immediately cease. The State Historic Preservation Office shall be contacted (phone: 503-378-4168).

14. When listed species are present, the permit holder must comply with the federal Endangered Species Act. If previously unknown listed species are encountered during the project, the permit holder shall contact the appropriate agency as soon as possible.

15. The permittee is responsible for carrying-out the terms and conditions of this permit unless the permit is transferred to another party using forms provided by the Department.

16. The Department of State Lands retains the authority to temporarily halt or modify the project in case of unforeseen damage to natural resources.

Lower Willamette River Management Plan Consistency

The proposed activity at Willamette River, mile 3.8, is located within a designated "Open Water" area of the Lower Willamette River Management Plan (Plan). Maintenance dredging is identified in the Plan as an allowable activity in designated open waters, subject to the following additional conditions.

17. Schedule project development and maintenance to avoid peak public use periods for recreation activities present in the project area.

18. Schedule project development and maintenance to assure, as much as possible, that commercial navigational uses (barge, ship, tug traffic) remain unimpeded.

19. Strictly adhere to all public health, safety, and water quality standards, building and zoning codes required by the appropriate local government agencies, the Oregon Water Resources Department, the Oregon Department of Environmental Quality, and U.S. Environmental Protection Agency. Obtain all necessary permits and comply with all permit conditions.

20. There shall be no significant adverse effect to the riparian and aquatic life and habitat by any activity within shallow water (-15 feet Columbia River datum) or Rank 1 and 2 wildlife habitat areas.

21. The area dredged shall be the minimum necessary to accomplish the intended use and comply with these standards.

22. For access dredging, normal removal shall be sufficient to provide access for a period no less than 24 months.

23. Levels of pollutants released into waters by dredging and disposal shall conform to standards approved by DEQ.

24. Sides of dredged channels and basins should be sloped to facilitate physical stabilization. Slopes shall be no steeper than 3:1.

25. Critical periods of fish and wildlife activity as determined by Oregon Department of Fish and Wildlife (ODFW) (spawning, passage, nesting, etc.) shall be avoided.

26. Dredging will not be allowed from public beach areas.

27. *All dredging operations must use disposal sites acceptable to the* U.S. Army Corps of Engineers, the Department of State Lands, and local land use regulations.

28. Dredging shall be timed so that equipment stays clear of recreational and commercial navigation users of the river, especially during the recreation use season (March – October).

Renewed & Modified: January 23, 2007

G:\WWC\AttachmentAwestLAS\RP Removal Permits\30897-RP 07.doc

US Army Corps of Engineers
Portland District

JOINT PERMIT APPLICATION FORM

THIS APPLICATION WILL MEET THE REQUIREMENTS OF BOTH AGENCIES

AGENCIES WILL ASSIGN NUMBERS

Corps Action ID Number _____ Oregon Division of State Lands Number 30897-RP

RECEIVED
JUL 09 2003
DIVISION OF STATE LANDS

SEND ONE SIGNED COPY OF YOUR APPLICATION TO EACH AGENCY

District Engineer	State of Oregon
ATTN: CENWP-OP-GP	Division of State Lands
P.O. Box 2946	775 Summer Street N.E.
Portland, OR 97208-2946	Salem, OR 97310
503-808-4373	503-378-3805

1. APPLICANT NAME: Schnitzer Steel Industries, Inc.
Address: PO Box 10047
Portland, OR 97296-0047
Attn: Jim Jakubiak

Business Phone #: (503) 224-9900
Home Phone #: N/A
FAX #: (503) 286-6948

[ ] Co-Applicant [x] Authorized Agent [ ] Contractor

Name: Jerald Ramsden
Address: Parsons Brinckerhoff Quade & Douglas, Inc.
400 SW 6th Ave., Suite 802
Portland, OR 97204

Business Phone #: (503) 274-8772
Home Phone #: N/A
FAX #: (503) 274-1412

Property Owner *(if different than applicant)*
Name: Schnitzer Investment Corporation
Address: P.O. Box 10047
Portland, OR 97296-0047

Business Phone #: (503) 224-9900
Home Phone #: N/A
FAX #: N/A

2. PROJECT LOCATION

Street, road or other descriptive location
International Terminals
12005 N. Burgard Rd.

Legal Description			
Quarter	Section	Township	Range
SW	35	[2] North [ ] South	[ ] East [1] West

In or Near (City or Town) Portland County Multnomah Tax Map # 2N1W35 Tax Lot # 500
Waterway Willamette River River Mile 3.6 Latitude 45° 36' 41" N Longitude 122° 46' 42" W

Is consent to enter property granted to the Corps and the Division of State Lands? [x] Yes [ ] No

3. PROPOSED PROJECT INFORMATION

Activity Type: [ ] Fill [x] Excavation (removal) [ ] In-Water Structure [ ] Maintain/Repair an Existing Structure

Brief Description: Maintenance dredging to provide safe navigation access to and berthing within the International Terminals slip (Berths 1, 2 and 3)

Fill will involve N/A cubic yards annually and/or _____ cubic yards for the total project
_____ cubic yards in a wetland or below the ordinary high water or high tide line

Fill will be: [ ] Riprap [ ] Rock [ ] Gravel [ ] Sand [ ] Silt [ ] Clay [ ] Organics [ ] Other _____

Fill Impact Area is _____ Acres; _____ length; _____ width; _____ depth

Removal will involve 25,000 every other year on average cubic yards annually and/or 127,000 (i.e. 77,000 initially and 50,000 thereafter) cubic yards for the total project
127,000 cubic yards below the ordinary high water or high tide line

SCHN00243489

Removal will be: [ ] Riprap [ ] Rock [ ] Gravel [x] Sand [x] Silt [ ] Clay [ ] Organics [ ] Other _____

Removal Impact Area is 9.6 first year, 6.0 thereafter Acres; 2250 ft length; 120 ft typical (270 ft max.) width; Varies: max between -42 ft CRD and -24 ft CRD depth

Is the Disposal area: Upland? [x] Yes [ ] No Wetland/Waterway? [ ] Yes [x] No

	Yes	No
Are you aware of any Endangered Species on the project site?	x	
Are you aware of any Cultural Resources on the project site?		x
Is the project site near a Wild and Scenic River?		x

If Yes, please explain in the project description (on page 2, block 4).

4. PROPOSED PROJECT PURPOSE AND DESCRIPTION

Project Purpose and Need: Presented in attached supplemental sheets.

Project Description: Presented in attached supplemental sheets.

How many project drawing sheets are included with this application? 3

NOTE: A complete application must include drawings and a location map submitted on separate 8-1/2 x 11 sheets.

Will any material, construction debris, runoff, etc. enter a wetland or waterway? [ ] Yes [x] No

If yes, describe the type of discharge (above) and show the discharge location on the site plan.

Estimated Start Date August 15, 2003 Estimated Completion Date August 14, 2008

5. PROJECT IMPACTS AND ALTERNATIVES

Describe alternative sites and project designs that were considered to avoid impacts to the waterway or wetland.

Presented in attached supplemental sheets.

Describe what measures you will use (before and after construction) to minimize impacts to the waterway or wetland.

Presented in attached supplemental sheets.

NOTE: If necessary, use additional sheets.

6. ADDITIONAL INFORMATION

Adjoining Property Owners and Their Addresses and Phone Numbers.

Port of Portland
121 NW Everett
Portland, OR 97209
(503) 944-7000

Northwest Terminal Company
P.O. Box 99007
Seattle, WA 98199-0007

Has the proposed activity or any related activity received the attention of the Corps of Engineers or the State of Oregon in the past, e.g., wetland delineation, violation, permit, lease request, etc.? [x] Yes [ ] No

If yes, what identification number(s) were assigned by the respective agencies?

Corps # 199100099 State of Oregon# 1055

7. CITY/COUNTY PLANNING DEPARTMENT AFFIDAVIT (to be completed by local planning official)

☐ This project is not regulated by the local comprehensive plan and zoning ordinance.

☒ This project has been reviewed and is consistent with the local comprehensive plan and zoning ordinance.
(not approving upland disposal site)

☐ This project has been reviewed and is **not** consistent with the local comprehensive plan and zoning ordinance.

☐ Consistency of this project with the local planning ordinance cannot be determined until the following local approval(s) are obtained:

- ☐ Conditional Use Approval
- ☐ Development Permit
- ☐ Plan Amendment
- ☐ Zone Change
- ☐ Other _____

An application ☐ has ☐ has not been made for local approvals checked above.

Signature (of local planning official)	Title	City/County	Date
[signature]	City Planner	Portland	6/27/03

8. COASTAL ZONE CERTIFICATION

If the proposed activity described in your permit application is within the Oregon coastal zone, the following certification is required before your application can be processed. A public notice will be issued with the certification statement which will be forwarded to the Oregon Department of Land Conservation and Development (DLCD) for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program, contact the department at 1175 Court Street N.E., Salem, Oregon 97310 or call 503-373-0050.

Certification Statement

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

Print/Type Name	Title
Applicant Signature	Date

9. SIGNATURE FOR JOINT APPLICATION (REQUIRED)

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and, to the best of my knowledge and belief, this information is true, complete, and accurate. I further certify that I possess the authority including the necessary requisite property interests to undertake the proposed activities. I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirements of obtaining the permits requested before commencing the project. I understand that local permits may be required before the state removal-fill permit is issued. I understand that payment of the required state processing fee does not guarantee permit issuance.

Print/Type Name (applicant)	Title
James L. Jakobick	Environmental Administrator
Applicant Signature (applicant)	Date
[signature]	June 27, 2003

I certify that I may act as the duly authorized agent of the applicant.

Print/Type Name	Title
Jerald D. Ramsden	Lead Coastal Engineer
Authorized Agent Signature)	Date
[signature]	June 27, 2003

SUPPLEMENTAL WETLAND IMPACT INFORMATION*
(FOR WETLAND FILLS ONLY)

Site Conditions of impact area

Impact area is: [ ] Ocean [ ] Estuary [X] River [ ] Lake [ ] Stream [ ] Freshwater Wetland

Note: Estuarian Resource Replacement is required by state law for projects involving intertidal or tidal marsh alterations. A separate Wetlands Resource Compensation Plan may be appended to the application.

Has a wetland delineation been completed for this site? [ ] Yes [X] No

If yes, by whom:

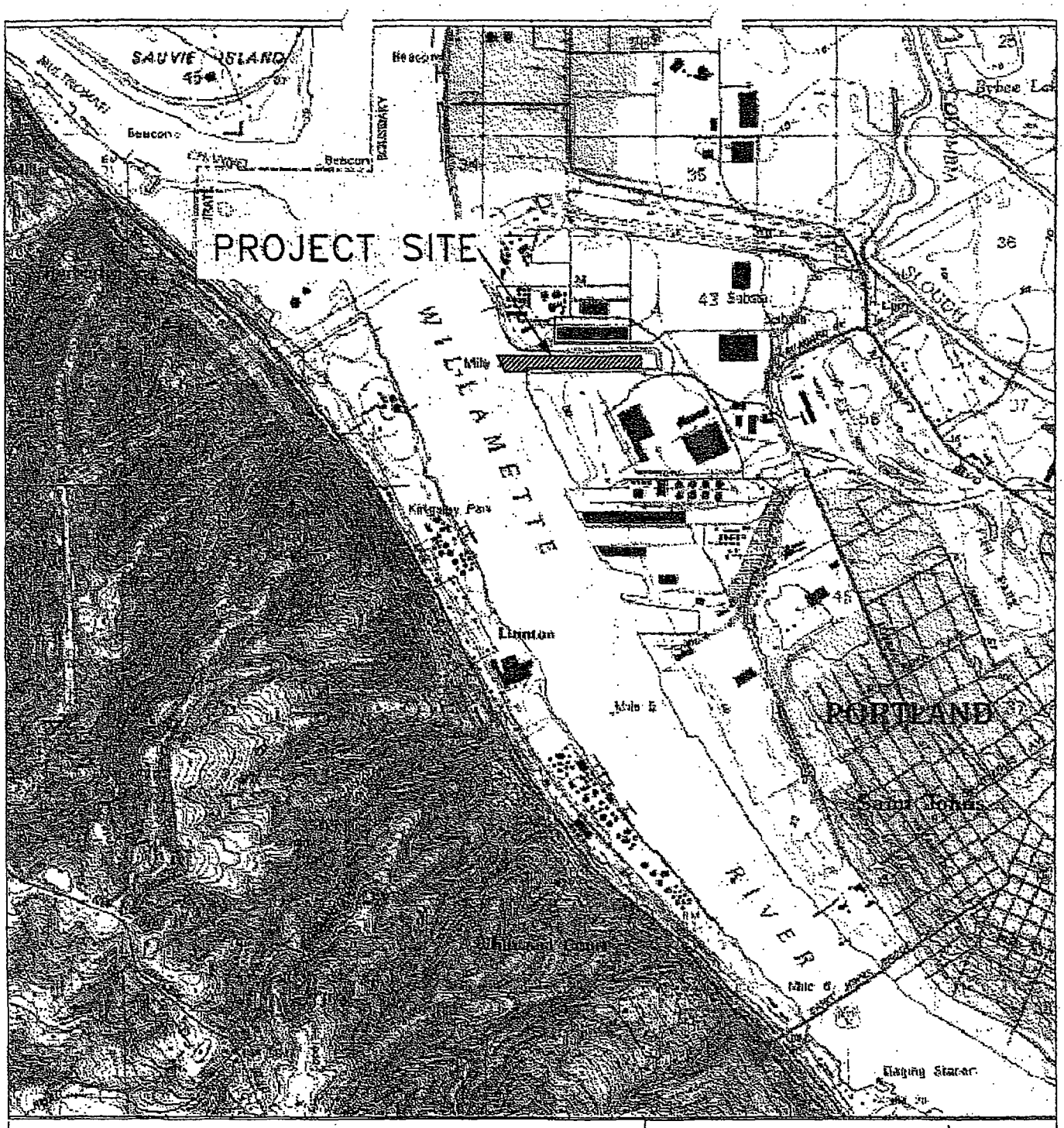
Describe the existing physical and biological character of the wetland/waterway site by area and type of resource (use separate sheets and photos, if necessary).

Presented in the attached Biological Assessment

Resource Replacement Mitigation
Describe measures to be taken to replace unavoidably impacted wetland resources.

No wetland resources are affected by the proposed work. Therefore, no mitigation is proposed.

* Because this information is not necessary for a complete application, you may submit this sheet and other environmental information after submitting your application.



NOTE 1. LOCATION MAP OBTAINED FROM US GEOLOGICAL SURVEY QUAD SHEET FOR LINNTON, OR

Scale In Feet
0 1000 2000

PURPOSE: MAINTAIN NAVIGATION ACCESS AND BERTHS FOR SHIPS AND BARGES

VERTICAL DATUM: COLUMBIA RIVER DATUM (CRD). CRD IS 1.6' ABOVE NGVD AT WILLAMETTE RIVER MILE 3.6

ADJACENT PROPERTY OWNERS:
1. NORTHWEST TERMINAL COMPANY
2. PORT OF PORTLAND

LATITUDE: 45° 36' 41" N
LONGITUDE: 122° 46' 42" W

PROPOSED MAINTENANCE DREDGING AT INTERNATIONAL TERMINALS

IN: WILLAMETTE RIVER
AT: RIVER MILE 3.6
COUNTY OF: MULTNOMAH
APPLICATION BY: SCHNITZER STEEL INDUSTRIES, INC.
SHEET 1 OF 3 DATE: 5/29/03

SCHN00243494

SUPPLEMENTAL DATA

Joint Application for Maintenance Dredging
International Terminals Slip (Berths 1, 2 and 3), Portland, Oregon

4. PROPOSED PROJECT PURPOSE AND DESCRIPTION

Project Purpose and Need

The project purpose is to maintain safe navigation access and berthing for the dock facilities at the International Terminals slip (as shown in Sketch 1 of 3, attached) by conducting periodic maintenance dredging as needed. The slip and associated berths are an existing facility and have been maintained under previous maintenance dredging permits (U.S. Army Corps of Engineers Section 10/404 Permit #199100099 and Oregon Division of State Lands Removal-Fill Permit No. 1055).

The docks and berths at the International Terminals slip currently support metal recycling operations as well as barge and ship dismantling operations. The facility is also used to import bulk cargo such as manganese, pig iron, steel coils and steel slabs. The slip contains three berths and 1,680 feet of docking facilities. The site was originally developed in the early 1940's for military ship construction. Over the past three decades, the site has been primarily used to support metal recycling and vessel dismantling operations.

Due to shoaling at the mouth of the slip and within the berths, there is a critical and urgent need to maintain these facilities. In the fall of 2002 an incoming ship was required to dock and offload several thousand tons of cargo prior to arrival at the International Terminals slip. Subsequent to that event, a meeting was held with the Columbia River Pilots (Pilots) to determine the minimum acceptable conditions needed for safe navigation access and berthing in the slip given the draft, length and width of vessels that will use this facility over the next five years. A letter summarizing the Pilots' suggestions from these meetings is attached to this application. The proposed dredge prism shown in the attached sketches was developed based on the suggestions from the Pilots in addition to other engineering considerations such as slope stability.

Project Description

The project involves dredging the area to a maximum depth of –42 ft Columbia River Datum (CRD), -38 ft CRD or –24 ft CRD depending on location within the slip as shown in Sketches 2 and 3 of 3, attached. The proposed dredge footprint covers an area of approximately 9.6 acres with a maximum length of 2250 ft and maximum width of 270 ft. The proposed dredge footprint lies entirely within the previously permitted dredge area shown in Sketch 2 of 3 by the dashed-dot line. The initial dredge volume associated with the proposed dredge prism is 77,000 cy. Authorization for an additional 50,000 cy is requested for the remainder of the permit duration (i.e. 25,000 cy every other year on average in years two through five, based on a five year permit). Dredging will be by clamshell bucket with transport to approved upland facilities and/or locations by barge, truck and/or rail.

SCHN00243495

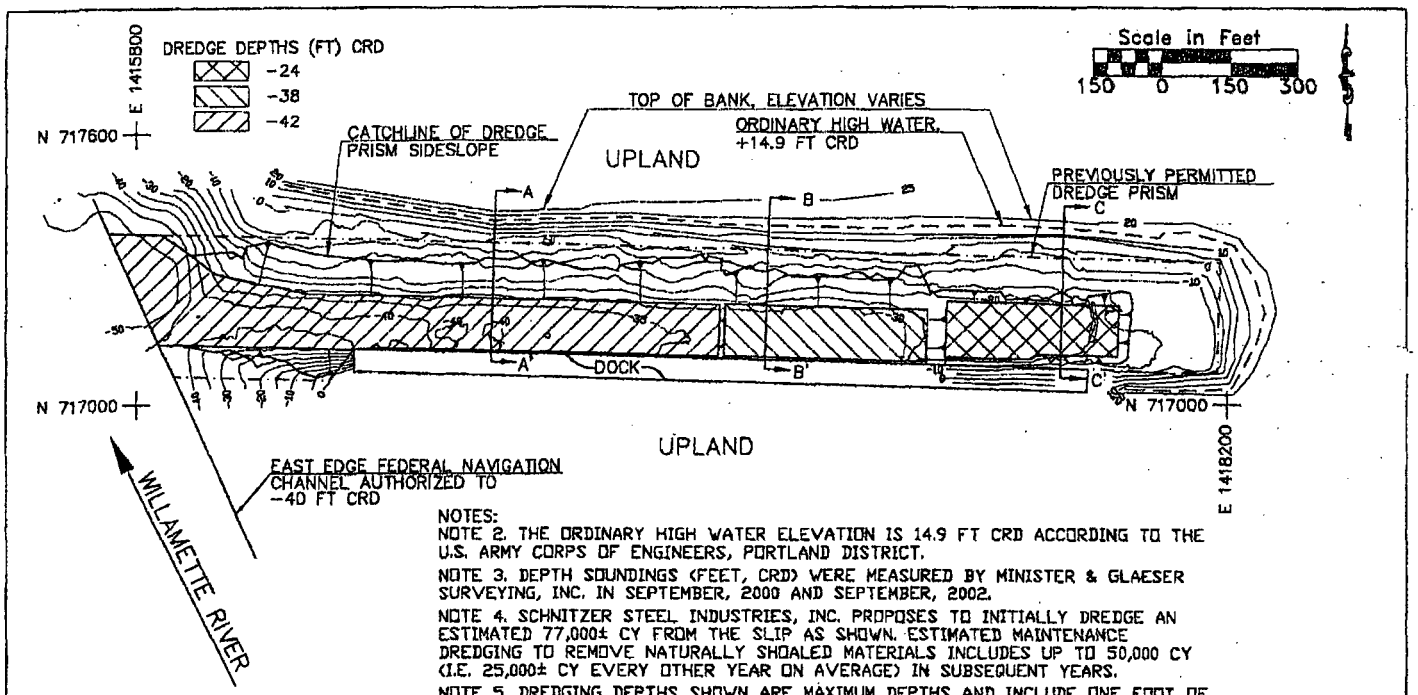
Recent sediment sampling results are attached to this application and have been utilized in development of the Biological Assessment.

5. PROJECT IMPACTS AND ALTERNATIVES

Describe alternative sites and project designs that were considered to avoid impacts to the waterway or wetland.
No alternatives were considered for maintenance dredging in the existing entrance channel and berths since this slip is an existing and previously permitted facility. As outlined in the attached letter from the Pilots, the proposed dredge prism is the minimum needed to provide safe navigation access and berthing. The proposed dredge prism covers less area than authorized in previous permits. The site is designated for marine industrial use by the Lower Willamette River Management Plan, which recognizes the important need to protect and fully utilize the limited areas of Portland Harbor so designated.

Describe what measures you will use (before and after construction) to minimize impacts to the waterway or wetland.
Construction will be conducted during an allowable fish-related inwater work period, although the emergency need and permitting time frame may require extension of the regularly scheduled Oct. 31 and/or Jan. 31 closure to allow completion of the project. Best management practices will be utilized during maintenance dredging as outlined in the Programmatic Biological Opinion (National Marine Fisheries Service dated June 14, 2002 that covers maintenance dredging of existing port terminals) and the Corps of Engineers Nationwide Permit (that includes maintenance dredging) to protect water quality and benthic resources. The proposed dredging will provide one foot of advanced maintenance (already accounted for in the maximum proposed dredge depths) to reduce to the extent practicable the frequency of maintenance dredging events.

SCHN00243496



NOTES:

NOTE 2. THE ORDINARY HIGH WATER ELEVATION IS 14.9 FT CRD ACCORDING TO THE U.S. ARMY CORPS OF ENGINEERS, PORTLAND DISTRICT.

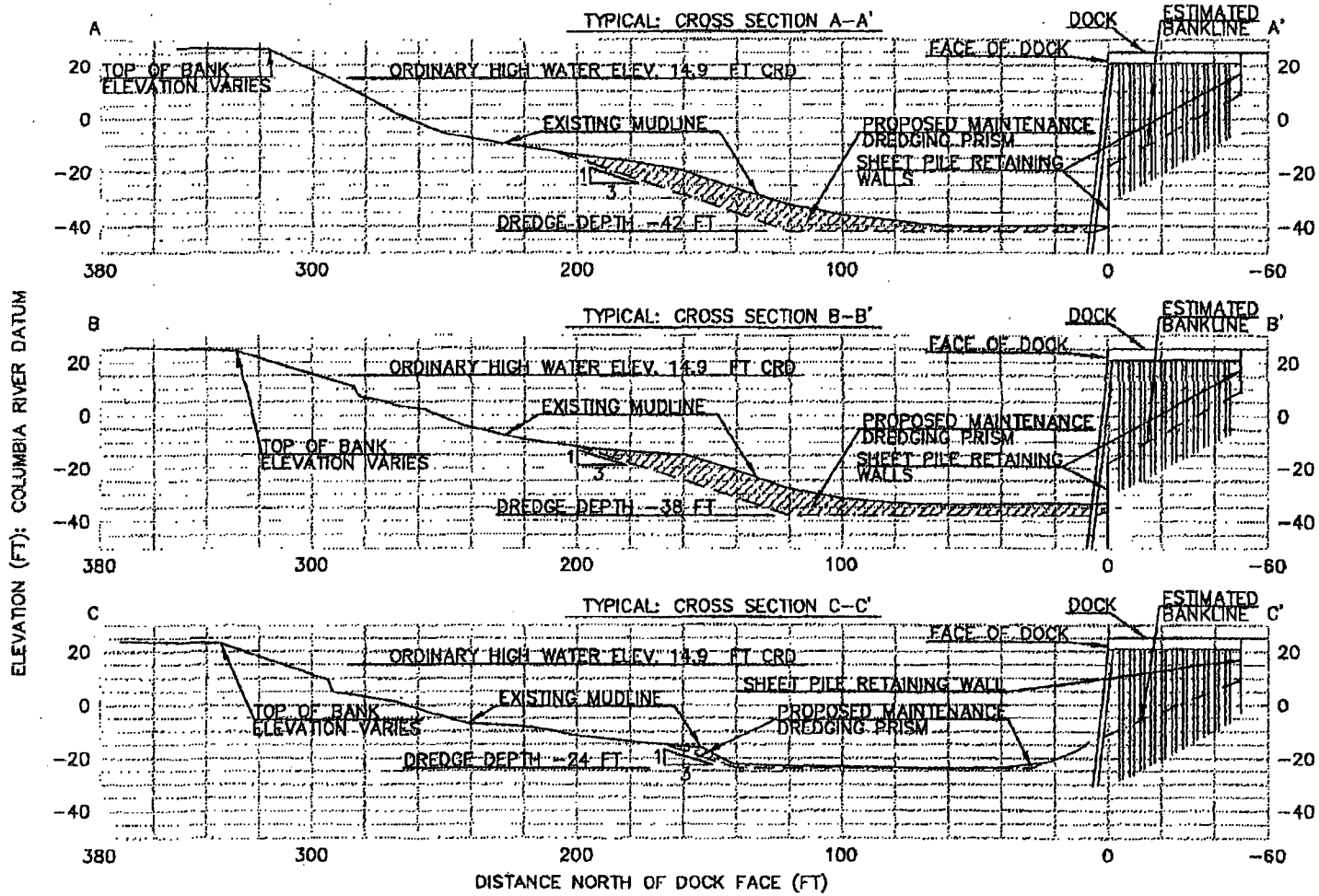
NOTE 3. DEPTH SOUNDINGS (FEET, CRD) WERE MEASURED BY MINISTER & GLAESER SURVEYING, INC. IN SEPTEMBER, 2000 AND SEPTEMBER, 2002.

NOTE 4. SCHNITZER STEEL INDUSTRIES, INC. PROPOSES TO INITIALLY DREDGE AN ESTIMATED 77,000± CY FROM THE SLIP AS SHOWN. ESTIMATED MAINTENANCE DREDGING TO REMOVE NATURALLY SHOALED MATERIALS INCLUDES UP TO 50,000 CY (I.E. 25,000± CY EVERY OTHER YEAR ON AVERAGE) IN SUBSEQUENT YEARS.

NOTE 5. DREDGING DEPTHS SHOWN ARE MAXIMUM DEPTHS AND INCLUDE ONE FOOT OF ADVANCED MAINTENANCE AND ONE FOOT OF ALLOWABLE OVERDEPTH DUE TO DREDGING INACCURACY.

NOTE 6. SCHNITZER STEEL INDUSTRIES, INC. PROPOSES TO DREDGE THE MATERIAL USING A CLAMSHELL BUCKET OPERATED FROM A FLOATING CRANE. DREDGED MATERIAL WILL BE PLACED IN APPROVED UPLAND LOCATIONS.

	PURPOSE: MAINTAIN NAVIGATION ACCESS AND BERTHS FOR SHIPS AND BARGES VERTICAL DATUM: COLUMBIA RIVER DATUM (CRD), CRD IS 1.6' ABOVE NGVD AT WILLAMETTE RIVER MILE 3.6 ADJACENT PROPERTY OWNERS: 1. NORTHWEST TERMINAL COMPANY 2. PORT OF PORTLAND	LATITUDE: 45° 36' 41" N LONGITUDE: 122° 46' 42" W HORIZONTAL DATUM: OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (NAD-27), U.S. SURVEY FEET	PROPOSED MAINTENANCE DREDGING AT INTERNATIONAL TERMINALS IN: WILLAMETTE RIVER AT: RIVER MILE 3.6 COUNTY OF: MULTNOMAH APPLICATION BY: SCHNITZER STEEL INDUSTRIES, INC. SHEET 2 OF 3 DATE: 5/29/03



PURPOSE: MAINTAIN NAVIGATION ACCESS AND BERTHS FOR SHIPS AND BARGES

VERTICAL DATUM: COLUMBIA RIVER DATUM (CRD). CRD IS 1.6' ABOVE NGVD AT WILLAMETTE RIVER MILE 3.6

ADJACENT PROPERTY OWNERS:
1. NORTHWEST TERMINAL COMPANY
2. PORT OF PORTLAND

LATITUDE: 45° 36' 41" N
LONGITUDE: 122° 46' 42" W

SCALE: AS SHOWN

PROPOSED MAINTENANCE DREDGING AT INTERNATIONAL TERMINALS

IN: WILLAMETTE RIVER
AT: RIVER MILE 3.6
COUNTY OF: MULTNOMAH
APPLICATION BY: SCHNITZER STEEL INDUSTRIES, INC.

SHEET 3 OF 3 DATE: 5/29/03

SCHN00243498

COLUMBIA RIVER PILOTS
1[illegible] N. LOMBARD
PORTLAND, OREGON 97203
503-289-9922
FAX 503-289-9955

PARSONS BRINCKERHOFF

MAR 06 2003

5582

January 8, 2003

Jerald D. Ramsden
PB Ports & Marine
400 SW 6th Ave., Suite 802
Portland OR 97204

Dear Jerry,

A few weeks ago we met to discuss navigation safety for vessel operations as it relates to maintenance dredging at the International Terminals slip. To recap our thoughts on the subject:

> The berth should be maintained to a minimum depth of forty (40) feet (at zero gauge) for a distance of eight hundred (800) feet long and one hundred twenty to one hundred forty (140) feet wide.
>
> There are some pilings in the Willamette River just off the upstream corner of the slip. We suggest the project owner consider removal of these piling which would make it possible for tugs to maneuver in this area when assisting a ship into or out of the berth.
>
> Ideally a ship entering the dock from downstream should be able to approach the dock from an oblique angle, cutting across the downstream entrance to the slip. The entrance to the berth (the area between the start of the berth and the Willamette River) should be dredged to allow this. A vessel attempting to enter the berth should not have to position itself perpendicular to the river and in a straight line with the berth in order to enter the berth.

If you have any questions do not hesitate to call me at 503-289-9924.

Very truly yours,

Lonny Rodgers

Capt. Lonny Rodgers
Treasurer

\\Server3\Manager\COLRIP\PILOTING\Tdock_1.doc

INTERNATIONAL TERMINALS (BERTHS 1, 2, AND 3)
MAINTENANCE DREDGING
BIOLOGICAL ASSESSMENT
Portland, Oregon

Prepared for

Parsons Brinckerhoff

400 SW Sixth Street, Suite 802
Portland, OR 97204

Prepared by

MCS Environmental, Inc.

6505 – 216th Street SW, Suite 100
Mountlake Terrace, WA 98043

July 8, 2003
34088-001

SCHN00243500

CONTENTS

1.0 INTRODUCTION 1

2.0 PROJECT DESCRIPTION 2
2.1 PROJECT AND ACTION AREAS 2
2.2 PROPOSED ACTION DESCRIPTION 2
2.3 CONSERVATION MEASURES 3

3.0 EXISTING ENVIRONMENTAL CONDITIONS AND EFFECTS OF THE ACTION 5
3.1 GENERAL 5
3.1.1 Existing Conditions 5
3.1.2 Effects of the Action 5
3.2 WATER QUALITY AND STORMWATER 6
3.2.1 Existing Conditions 6
3.2.2 Effects of the Action 6
3.3 FLOW AND CURRENT PATTERNS 7
3.3.1 Existing Conditions 7
3.3.2 Effects of the Action 7
3.4 SEDIMENTS, SUBSTRATE, AND BATHEMETRY 8
3.4.1 Existing Conditions 8
3.4.2 Effects of the Action 8
3.5 SHORELINE CONDITIONS 9
3.5.1 Existing Conditions 9
3.5.2 Effects of the Action 9
3.6 ACCESS AND REFUGIA 10
3.6.1 Existing Conditions 10
3.6.2 Effects of the Action 10
3.7 BIOTA CONDITIONS 10
3.7.1 Existing Conditions 10
3.7.2 Effects of the Action 10

4.0 EVALUATION OF EFFECTS ON LISTED SPECIES 12
4.1 LOWER COLUMBIA AND UPPER WILLAMETTE CHINOOK 12
4.1.1 Life History and Critical Habitat 12
4.1.2 Use of the Action Area 12
4.1.3 Effects of the Action 12
4.1.4 Effect Determination 13
4.2 COLUMBIA RIVER CHUM SALMON 13
4.2.1 Life History and Critical Habitat 13
4.2.2 Use of the Action Area 13

SCHN00243501

CONTENTS (continued)

4.2.3 Effects of the Action 13
4.2.4 Effect Determination 14
4.3 LOWER COLUMBIA RIVER AND UPPER WILLAMETTE STEELHEAD TROUT. 14
4.3.1 Life History and Critical Habitat 14
4.3.2 Use of the Action Area 14
4.3.3 Effects of the Action 14
4.3.4 Effect Determination 15
4.4 BALD EAGLE 15
4.4.1 Life History and Critical Habitat 15
4.4.2 Use of the Action Area 15
4.4.3 Effects of the Action 16
4.4.4 Effect Determination 16
4.5 WATER HOWELLIA 16
4.5.1 Life History and Critical Habitat 16
4.5.2 Use of the Action Area 16
4.5.3 Effects of the Action 17
4.5.4 Effect Determination 17
4.6 COASTAL CUTTHROAT TROUT 17
4.6.1 Life History and Critical Habitat 17
4.6.2 Use of the Action Area 17
4.6.3 Effects of the Action 17
4.6.4 Effect Determination 18
4.7 LOWER COLUMBIA RIVER COHO SALMON 18
4.7.1 Life History and Critical Habitat 18
4.7.2 Use of the Action Area 18
4.7.3 Effects of the Action 19
4.7.4 Effect Determination 19

5.0 INTERRELATED, INTERDEPENDENT, AND CUMULATIVE EFFECTS 20

6.0 SUMMARY 21

7.0 REFERENCES 22

TABLES

FIGURES

SCHN00243502

CONTENTS (continued)

APPENDICES

A Agency Response Letter
B Site Photographs
C Pilot's Letter
D Essential Fish Habitat Assessment

LIST OF TABLES

Table 1 Proposed Maintenance-Dredging Schedule
Table 2 Environmental Baseline and Net Effects of the Action on Pathways and Salmon Habitat Indicators in the Willamette River

LIST OF FIGURES

Figure 1 Site Vicinity
Figure 2 Proposed Dredge Prism
Figure 3 Cross-Sections of Dredge Prism

SCHN00243503

International Terminals (Berths 1, 2, and 3) Maintenance Dredging

1.0 INTRODUCTION

Section 7 of the Endangered Species Act (ESA) requires that actions of federal agencies to ensure that any action carried out by the agency is "not likely to jeopardize the continued existence of any [listed] species or result in the destruction or adverse modification of habitat of such species...." Issuance of a federal permit is an agency action pursuant to Section 7. falls under this requirement.

Schnitzer Steel Industries, Inc. (SSI) is applying for a permit from the US Army Corps of Engineers (Corps) to conduct maintenance dredging of Berths 1, 2, and 3 of the International Terminals slip. This requires a Section 10/404 permit from the Corps, which qualifies as an action by a federal agency for purposes of and therefore must comply with Section 7 of the ESA. Pursuant to Section 7, the Corps is required to produce a biological evaluation (BE) of the potential effect of issuing the permit on listed species or their critical habitat. To help the Corps evaluate the potential effects of the proposed project on listed species, MCS Environmental, Inc. (MCS) has prepared this Biological Assessment (BA) on the behalf of SSI.

To determine if listed species or their critical habitat are in the vicinity of the proposed project, MCS consulted the National Marine Fisheries Service (NMFS), Northwest Region <http://www.nwr.noaa.gov/esalist.htm> and sent a written request to the US Fish and Wildlife Service (USFWS). Based on information from the NMFS Website and a response from USFWS (McMaster, K., USFWS, pers. com., June 12, 2003; Appendix A), the following listed species may occur in the project area and are therefore addressed in this BE:

- Lower Columbia River chinook salmon (*Oncorhynchus tshawytscha*), listed as threatened in 1999.
- Upper Willamette River chinook salmon (*O. tshawytscha*), listed as threatened in 1999.
- Columbia River run chum salmon (*O. keta*), listed as threatened in 1999.
- Lower Columbia River steelhead trout (*O. mykiss*), listed as threatened in 1998.
- Upper Willamette River steelhead trout (*O. mykiss*), listed as threatened in 1999.
- Bald eagle (*Haliaeetus leucocephalus*), listed as threatened in 1978.
- Water howellia (*Howellia aquatilis*), listed as threatened in 1994.

SCHN00243504

This BA also addresses southwestern Washington–Columbia River coastal cutthroat trout (*O. clarki clarki*), a species proposed for listing and Lower Columbia River–Southwest Washington coho salmon (*O. kisutch*), a candidate for listing. Should cutthroat trout or coho salmon become listed during the life of the proposed project, this BA could be used to aid the Corps during any subsequent Section 7 consultation with NMFS related to these species.

Golden paintbrush (*Castilleja levisecta*), Willamette daisy (*Erigeron decumbens* var. *decumbens*), Bradshaw's lomatium (*Lomatium bradshawii*), Kincaid's lupine (*Lupinus sulphureus* var. *kincaidii*), and Nelson's checker-mallow (*Sidalcea nelsoniana*) are species listed as threatened or endangered but are not addressed in this BA because the habitats required by these species are not within the action area (Federal Register Vol. 58, No. 28; Vol. 62, No. 112; and Vol. 65, No. 16).

2.0 PROJECT DESCRIPTION

2.1 PROJECT AND ACTION AREAS

The "project area" is defined as Berths 1, 2, and 3 of International Terminals slip on the Willamette River at Section 35, Township 2N, Range 1W (Figure 1). Photographs of the project area are in Appendix B.

The "action area" for fish resources is defined as the International Terminals slip, from the head of the slip to its mouth. The "action area" for avian species is defined as a one-mile radius around the project area.

2.2 PROPOSED ACTION DESCRIPTION

SSI proposes to conduct maintenance dredging of Berths 1, 2, and 3 at the International Terminals slip to maintain safe navigation access and berthing for the dock facilities by conducting periodic maintenance dredging as needed. The slip and associated berths have been maintained under previous maintenance dredging permits (US Army Corps of Engineers Section 10/404 Permit #199100099 and Oregon Division of State Lands Removal–Fill Permit No. 1055). The site is designated for marine industrial use by the Lower Willamette River Management Plan, which recognizes the need to protect and fully use the limited areas of Portland Harbor so designated. Over the past three decades, the site has been primarily used to support metal recycling and vessel dismantling operations.

Shoaling at the mouth of the slip and within the berths has created a critical and urgent need to maintain these facilities. In the fall of 2002 an incoming ship was required to dock and offload several thousand tons of cargo before docking at the International Terminals slip. Afterwards, a meeting was held with the Columbia River Pilots (Pilots) to determine the minimum acceptable

SCHN00243505

conditions needed for safe navigation access and berthing in the slip, given the draft, length and width of vessels that will use this facility over the next five years. The proposed dredge prism is based on suggestions from the Pilots (Appendix C) and engineering considerations such as slope stability (Figures 2 and 3).

The project involves dredging the area to a maximum depth of –42 feet Columbia River Datum (CRD), -38 feet CRD, or –24 feet CRD depending on location within the slip (Figures 2 and 3). The proposed dredge footprint covers about 9.6 acres with a maximum length of 2,250 feet and maximum width of 270 feet. The proposed dredge footprint lies entirely within the previously permitted dredge area and covers less area than authorized in previous permits. The initial dredge volume associated with the proposed dredge prism is 77,000 cubic yards (cy). Over the remainder of the permit duration SSI proposes to dredge another 50,000 cy as needed for ongoing maintenance (e.g. 25,000 cy every other year on average in years two through five as shown in Table 1). Dredging will be by clamshell bucket, with transport to approved upland facilities or locations by barge, truck or rail. Factors such as bucket impact, penetration, withdrawal, and dewatering have been identified as contributing to the resuspension of sediment during clamshell dredge operation (e.g., Hayes et al. 1988). Most of the dewatering will occur as the clamshell excavates and transfers the individual load, which occurs with all dredging operations. The material will have high water content, and some release is expected. The rate at which suspended sediments settle back to the bottom is generally exponential with rapid declines within 200 to 400 feet (Collins 1995). Because of this rapid resettlement, it is anticipated that the area experiencing higher turbidity levels would be relatively small.

The proposed action (i.e. maintenance dredging of an existing facility using a clamshell bucket) and site conditions (see Section 3.0) are consistent with the conditions specified in the *Programmatic Biological Assessment for Categories of Activities Requiring Department of the Army Permits* (Corps 2000b) and NMFS biological opinion of the programmatic BA (NMFS 2002).

2.3 CONSERVATION MEASURES

Construction would occur during times when chinook and chum salmon and steelhead trout are least likely to be present in the action area. All in-water work is scheduled for the in-water work window for the Willamette River (from July 1 through October 1 and December 1 through January 31). However, the urgency of the initial dredge and the permitting time frame may require some work during the regularly scheduled closure to allow completion of the initial dredge. Some construction may occur during the bald-eagle wintering season (October 31 – February 31).

In addition to timing in-water work to avoid the juvenile migration period, SSI proposes to use best management practices during maintenance dredging as outlined in NMFS (2002) and the Corps Nationwide Permit for maintenance dredging to protect water quality and benthic resources. The

SCHN00243506

proposed dredging will provide one foot of advanced maintenance (already accounted for in the maximum proposed dredge depths) to minimize maintenance dredging events.

SCHN00243507

3.0 EXISTING ENVIRONMENTAL CONDITIONS AND EFFECTS OF THE ACTION

This section discusses existing environmental conditions and any temporary and permanent effects of project activities (Section 2.2), as well as the net effects of those activities (Table 2). It discusses only those environmental attributes and associated components of habitat quality that are important to the listed species addressed, and that are likely to be affected by the project in some way.

3.1 GENERAL

3.1.1 Existing Conditions

Approximately half of the Lower Willamette River flows through forested areas, one third through agricultural areas, and five percent through urban areas, such as Portland. The International Terminals slip is located at river mile (RM) 3.5 in Portland. Land use surrounding the site is primarily industrial, and riverbanks have been heavily modified with riprap or bulkheads. Berths 1 through 3 are located in the International Terminals slip adjacent to the Burgard Yard. The docks and berths at the slip currently support metal recycling and barge and ship dismantling. The site was originally developed in the early 1940's for military ship construction. These berths are also used to import bulk cargo such as manganese, pig iron, steel coils, and steel slabs. The slip contains three berths and 1,680 feet of docks.

3.1.2 Effects of the Action

The proposed project will not result in increased boat traffic or associated noise.

A clamshell dredge will be used for the proposed project. Increased noise from dredging may cause salmonids, other fish species, and bald eagles to avoid the area during construction. Clamshell buckets are not expected to entrain juvenile, sub–adult, or adult salmonids, but may entrain demersal fish and epibenthic invertebrates.

Results of studies on the effects of waterborne sound on fish behavior have been ambiguous and do not allow for prediction of responses (Popper and Carlson 1998). The level at which fish can detect sound depends upon the level of background noise. Sound must be at least 10 dB more intense than background noise to avoid being masked by ambient noise at the same or nearby frequencies (Tavolga 1971). Popper and Carlson (1998) note that the effects of noise depend greatly on the flow field in which the noise occurs. The level of ambient or background noise can drastically reduce a fish's ability to detect other sounds. Wind and precipitation at the surface, water turbulence, animal sounds, human activity and many other factors create significant levels of underwater noise (ICES 1994, Richardson et al. 1995, and H. Cleator, pers. com. as cited in Stewart 2001). Since most

SCHN00243508

background noise is within the hearing range of fishes, the noise generated by background conditions and river flows adjacent to the project area will probably modify the reaction of fish to noise generated by the project

Above-water noise and movement of machinery at the site are much more likely to frighten away fish predators such as kingfishers, herons, grebes, and mergansers, than in–water noise is to frighten fish into areas where they might be more vulnerable to predators such as native char, cutthroat trout, and juvenile coho salmon.

The proposed maintenance dredging will allow present operations to continue, and noise generated will not differ much from existing operations at this site and many other sites along the Willamette River. Because the primary noise sources will be about 50 feet from shore, smaller juvenile salmonids moving along the shoreline would likely remain nearshore, rather than moving offshore toward the noise. Fish traveling downstream in the channel would avoid moving barges and tugs by moving away from the vessel path and diving deeper. Because of expected low densities of potential fish predators on juvenile salmonids in mid–channel, this short-term avoidance behavior is unlikely to result in increased predation losses.

3.2 WATER QUALITY AND STORMWATER

3.2.1 Existing Conditions

Urbanization has reduced water quality in the area via direct inputs of municipal and industrial discharges and indirect inputs from agricultural, silvicultural, urban, and industrial land. The Willamette River is currently on the 1998 Oregon Department of Environmental Quality (ODEQ) 303d list as impaired for temperature, bacteria, biological criteria, and toxics. However, ODEQ has been monitoring water quality in the Lower Willamette basin since 1986 with special intensive studies in the Tualatin and Lower Willamette subbasins in 1986-1990. These studies show that water quality in the Lower Willamette Basin has improved significantly (Cude 2003).

3.2.2 Effects of the Action

Because the proposed maintenance dredging will not increase impervious surfaces, stormwater runoff will not increase. The proposed maintenance dredging will not increase boat traffic, so the chance of water quality degradation from pollution from boats will not increase.

The proposed maintenance dredging will cause temporary and localized impacts on water quality in the vicinity of active dredging. Turbidity will increase slightly in a limited mixing zone downstream of active work areas. Elevated turbidity plumes that may occur in localized areas near active dredging should be dissipated relatively rapidly by tidal and river currents (e.g., FSI et al. 1999). In–

SCHN00243509

water work will be conducted during periods when few if any juvenile anadromous fish will be present.

Juvenile salmon have been shown to avoid areas of high turbidities (e.g., Servizi 1988), although they may seek out areas of moderate turbidity (10 to 80 nephelometric turbidity units [NTU]), presumably as cover against predation (Cyrus and Blaber 1987a, 1987b). Feeding efficiency of juveniles is also impaired by turbidities over 70 NTU, well below sub-lethal stress levels (Bisson and Bilby 1982). Reduced preference by adult salmon homing to spawning areas has been demonstrated where turbidities exceed 30 NTU (20 mg/L suspended sediments). However, chinook salmon exposed to 650 mg/L of suspended volcanic ash were still able to find their natal water (Whitman et al. 1982). Based on these data, it is unlikely that the locally elevated turbidities generated by the proposed action would directly affect juvenile or adult salmonids that may be present.

Short-term effects from increased turbidity are expected during dredging, but these effects from sediment resuspension should be only temporary. Dredging is not expected to result in any long-term adverse changes in levels of chemical contamination, temperature, or dissolved oxygen. Therefore, the net effects of dredging will be to maintain water quality in the project area.

3.3 FLOW AND CURRENT PATTERNS

3.3.1 Existing Conditions

Flows in the Willamette River are controlled by 13 impoundments on several of its larger tributaries and by the Willamette Falls at RM 26.5. Below the falls, the Willamette River is tidally influenced by the Pacific Ocean a hundred miles to the west as well as flow conditions in the Columbia River (Corps 2000a). The width of the Willamette River at the project site is approximately 1,700 feet wide during typical river flows with maximum depths of approximately –50 feet CRD in the vicinity of the International Terminals slip.

3.3.2 Effects of the Action

The proposed maintenance dredging is not expected to alter flow or current patterns of the river since most of the dredging is located within the slip and proposed changes in the bathymetry near the slip mouth are minor in relation to the cross sectional area of the river at this location.

SCHN00243510

3.4 SEDIMENTS, SUBSTRATE, AND BATHEMETRY

3.4.1 Existing Conditions

Currently the depth of the project area ranges from –10 to –40 feet CRD. Dredging will remove 77,000 cy of sediment in the first year of the permit, followed by an additional 25,000 cy every other year on average during the remainder of the permit duration. The sediments exposed by dredging are expected to be similar to surficial sediments present throughout the project area.

MCS collected five sediment cores in the slip during March 2003 and Floyd Snider McCarthy, Inc. evaluated them using the analyte list suggested in the Dredged Material Evaluation Framework (DMEF) (Corps 1998). Data were compared to the DMEF values, probable effects concentration (PEC) values for freshwater sediment quality developed by MacDonald et al. (2000) and Ingersoll et al. (2000), and Portland Harbor Area-Wide Sediment baseline values (ODEQ 1999).

Only one surface sample exceeded DMEF screening levels. Samples considered representative of the post-dredge surface contained few detectable chemical constuents. When detectable concentrations of chemicals occurred, they were substantially less than screening levels. No samples exceed the PEC values, and all exceedances are within the Portland Harbor Area-Wide Sediment baseline values (FSMI 2003).

3.4.2 Effects of the Action

Maintenance dredging in the project area should maintain sediment quality. Dredging will not affect sedimentation sources or rates. Because most of the sediments in the slip do not contain contaminants above DMEF screening levels, as shown by the recent sampling, resuspension of sediments is not expected to release contaminants into the water column.

Shallow water habitat (< 20 feet in water depth) provides food resources and migration routes for juvenile salmonids (Simenstad et al. 1999). Salmonid habitat may suffer a minor net decline in function due to the deepening. The proposed dredging will create steeper slopes along the edge of the dredge area and deepen the dredge area. However, 79% percent of the initial dredge prism lies below an existing mudline elevation of –20 feet CRD. In subsequent years of the permit it is expected that almost all the dredging will occur below existing mudline elevations of –20 feet CRD. Other than approximately 2.0 acres of dredging area in the first year of the permit all the remainder of the proposed dredging is expected to be at depths below –20 feet CRD (i.e. the lower limit of shallow water habitat). The contribution of epibenthic prey to salmonids from the area to be dredged should be limited by the depths within the proposed dredge prism. The adjacent Willamette River channel and associated shallow-water areas are much larger than the area being dredged, so no adverse impact is anticipated on salmonids foraging on benthic invertebrates in the spring following

SCHN00243511

dredging. By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period. Because of the limited area of dredging in depths preferred by foraging salmonids and the rapid recolonization of benthic and epibenthic biota, the proposed dredging is not expected to have any short- or long-term direct effects on the juvenile salmonid foraging habitat.

No known spawning habitat exists within the action area, therefore any potential temporary suspension of sediments is not expected to embed spawning gravels.

3.5 SHORELINE CONDITIONS

3.5.1 Existing Conditions

Historically the Willamette Falls was an impassible fish barrier to many salmonids until fish ladders were constructed in the early 1900s. The International Terminals slip does not hinder fish access in the Willamette River. Few refuge areas, such as off-channel areas, backwater areas, or sloughs, remain in the Willamette River. The International Terminals slip functions somewhat like a slough and could provide refuge for salmonids during periods of high flow in the river, although no studies have documented this.

Riparian vegetation has been greatly altered in the Lower Willamette River Basin. Little to no riparian vegetation exists in the action area along the eastern shore of the Willamette River or in the International Terminals slip. However, riparian vegetation covers a large area along the western shore of the Willamette across from the slip at Forest Park. Black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), Oregon white ash (*Franxinus latifolia*), red alder (*Alnus rubra*), and willow (*Salix* spp.) are typical trees species along the Willamette River. Typical shrub species include Himalayan blackberry (*Rubus discolor*) and Scotch broom (*Cytisus scoparius*).

3.5.2 Effects of the Action

Temporary increases in noise or turbidity from dredging activities may prevent access and refuge for salmonids and other species in the immediate vicinity of the work areas (see Sections 3.1 and 3.2).

The proposed dredging in the first year will occur below –5 feet CRD and therefore will not affect the shoreline or riparian habitat.

SCHN00243512

3.6 ACCESS AND REFUGIA

3.6.1 Existing Conditions

The International Terminals slip could provide refuge for salmonids during periods of high flow.

3.6.2 Effects of the Action

Temporary increases in noise or turbidity from dredging may prevent access and refuge for salmonids and other species in the immediate vicinity of the work areas during the period of dredging activity (see Sections 3.1 and 3.2).

3.7 BIOTA CONDITIONS

3.7.1 Existing Conditions

Benthic and epibenthic organisms in the Lower Willamette River basin include oligochaetes, mysid shrimp, amphipods, chironomid larvae, crayfish, and mollusks (Sanborn 1973 and FES 1995). Fish species include salmonids, largescale sucker (*Catostomus macrocheilus*), northern pikeminnow (*Ptychocheilus oregonesis*), perch (*Cymatogaster aggregate*), peamouth (*Mylocheilus caurinus*), sculpin (Cottidae), bluegill (*Lepomis macrochirus*), threespine stickleback (*Gasterosteus aculeatus*), and sturgeon (*Acipenser* spp.) (FES 1999).

3.7.2 Effects of the Action

Dredging will eliminate nonmobile benthos over approximately 9.6 acres of the bottom in the project area, temporarily reducing abundance and diversity. The newly exposed bottom should be quickly recolonized by infauna and epifauna (McCauley et al. 1977; Richardson et al. 1977; Romberg et al. 1995; Wilson and Romberg 1995). Diversity and health of the benthic assemblage recolonizing the dredged area should recover quickly and be similar to those of the subtidal benthic community now present. Areas adjacent to the project site will provide local larval sources for recolonization. Because of the prolonged period of planktonic larval development (several days to weeks) for most benthic species, currents will likely carry most larvae into the project area from plankton spawning outside of it.

By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period. The contribution of epibenthic prey from the small subtidal area to be dredged is limited by the area's depth. Because the adjacent Willamette River and associated

SCHN00243513

shallow-water areas are so much larger than the area to be dredged, dredging should not harm salmonids foraging on benthic invertebrates.

Repeated disturbance from current use of the action area reduces ecological diversity. Proposed dredging will not increase this disturbance and therefore is not expected to have short-term direct effects on ecological diversity in the project area.

Avian species that now use the action area or that fly over it during dredging may modify their use of the area, moving away from construction activity.

Proposed dredging will not have short-term direct effects on aquatic vegetation within the project area because there are no known macroalgae beds there.

Proposed dredging will not have short-term direct effects on the pelagic prey in the project area because it will not degrade water quality enough to affect pelagic assemblages.

SCHN00243514

4.0 EVALUATION OF EFFECTS ON LISTED SPECIES

This section discusses life histories of listed species and the use of the action area. It evaluates temporary and permanent, direct and indirect effects on listed species from project activities (Section 2.2) and includes the effects determination. Detailed life histories are discussed in Corps 2000b. This section discusses only attributes of listed species that are likely to be affected by the project in some way.

An analysis of effects on Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery and Conservation Act is described in Appendix D.

4.1 LOWER COLUMBIA AND UPPER WILLAMETTE CHINOOK

4.1.1 Life History and Critical Habitat

Chinook salmon prefer to spawn and rear in the mainstem of rivers and larger streams. Although water temperatures determine the incubation period, fry typically hatch in about eight weeks. After emergence, juvenile chinook salmon migrate to saltwater during their first year (Corps 2000b).

Critical habitat is currently being reconsidered for Lower Columbia and Upper Willamette chinook. On April 30, 2002, the US District Court for the District of Columbia approved a NMFS consent decree withdrawing a February 2000 critical-habitat designation for these and 17 other evolutionary significant units (ESUs) (NMFS 2000). Critical habitat consists of the water, substrate, and adjacent riparian zone of accessible estuarine and riverine reaches.

4.1.2 Use of the Action Area

Most chinook in the project area are likely to be migrating juveniles and adults. Juvenile chinook feed on benthic and epibenthic organisms in shallow nearshore areas. Adult chinook typically feed on other fish such as whitefish, sculpin and other trout. Therefore, adult chinook in the action area would likely be feeding on fish in the deeper water of the action area rather than the benthic and epibenthic organisms that are primary prey for juveniles.

4.1.3 Effects of the Action

No direct mortality of chinook is expected from any aspect of project construction, which will occur when few, if any, juvenile salmonids are present. Adult and juvenile chinook can avoid any proposed project conditions that would result in direct impacts (e.g. entrainment in the bucket) on them. Dredging will likely increase turbidity in the immediate vicinity. This impact will be only

SCHN00243515

temporary and the suspended sediment will dissipate quickly. Dredging will temporarily eliminate benthic organisms, an important food source for juvenile chinook. By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period (McCauley et al. 1977; Richardson et al. 1977; Romberg et al. 1995; Wilson and Romberg 1995). The contribution of epibenthic prey from the small subtidal area to be dredged is limited by the area's depth. Because the adjacent Willamette River and associated shallow-water areas are so much larger than the area to be dredged, dredging should not harm salmonids foraging on benthic invertebrates. Seventy nine percent of the area to be dredged in the first year of the permit is below -20 feet CRD, deeper than migrating juveniles prefer (Simenstad et al. 1999). In subsequent years of the permit all maintenance dredging is anticipated to be below -20 feet CRD.

4.1.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project may affect, but is not likely to adversely affect chinook.

4.2 COLUMBIA RIVER CHUM SALMON

4.2.1 Life History and Critical Habitat

Chum salmon prefer to spawn at the head of the tidewater. Although the incubation period is determined by water temperatures, fry hatch in two weeks to four months. After emerging from the gravel, fry migrate immediately to marine waters, limiting their freshwater life history to a few days. Rearing and development to adulthood occur in the marine environment (Corps 2000b).

Critical habitat is currently under development for Columbia River chum following the NMFS consent decree withdrawing critical habitat designation for this and 18 other ESUs (NMFS 2000).

4.2.2 Use of the Action Area

Like chinook salmon, the majority of chum that occur within the project area are likely to be migrating juveniles and adults. Therefore, chum in the action area may be feeding on epibenthic organisms in the action areas as well as on organisms in water deeper than the action area.

4.2.3 Effects of the Action

The effects of the proposed action on chum would be similar to those described for chinook. However, unlike juvenile chinook, juvenile chum may not feed while migrating to saltwater.

SCHN00243516

Therefore, the impacts on epibenthic prey from construction may affect chum even less than the other listed salmonids.

4.2.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project may affect, but is not likely to adversely affect chum salmon.

4.3 LOWER COLUMBIA RIVER AND UPPER WILLAMETTE STEELHEAD TROUT

4.3.1 Life History and Critical Habitat

Steelhead trout spawn in tributaries of small and large rivers in late winter through spring. Juveniles migrate to the ocean after rearing in large rivers for one to four years. Steelhead spend one to three years in the ocean before returning to their natal streams to spawn. Unlike most anadromous salmonids, steelhead trout may return to their natal streams several times to spawn before they die (Corps 2000b).

Critical habitat has not been designated for coastal cutthroat steelhead trout (NMFS 2000).

4.3.2 Use of the Action Area

Juveniles, sub–adult, or adult steelhead trout may occur within the project area. Adult and sub-adult steelhead trout are typically piscivores, feeding on other fish such as whitefish, sculpin and other trout. Therefore, the adult and sub–adult steelhead trout in the action area would likely be feeding in the deeper water of the action area on fish rather than the insects that are primary prey for juveniles.

4.3.3 Effects of the Action

No direct mortality of steelhead trout is expected from any aspect of project construction, which will occur when few, if any, juvenile salmonids are present. Adult and juvenile steelhead trout can avoid any proposed project conditions that would result in direct impacts (e.g. entrainment in the bucket) on them. Dredging will likely increase turbidity temporarily in the immediate vicinity. Suspended sediment will dissipate quickly.

Dredging will eliminate benthic organisms, an important food source for juvenile steelhead trout. By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period (McCauley et al. 1977; Richardson et al. 1977; Romberg et al. 1995;

SCHN00243517

Wilson and Romberg 1995). The contribution of epibenthic prey from the small subtidal area to be dredged is limited by the area's depth. Because the adjacent Willamette River and associated shallow-water areas are so much larger than the area to be dredged, dredging should not harm salmonids foraging on benthic invertebrates. Seventy nine percent of the area to be dredged is below -20 feet CRD, deeper than foraging juveniles prefer (Simenstad et al 1999). In subsequent years of the permit all maintenance dredging is anticipated to be below –20 feet CRD.

4.3.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project may affect, but is not likely to adversely affect steelhead trout.

4.4 BALD EAGLE

4.4.1 Life History and Critical Habitat

In Oregon, bald eagle breeding territories are mainly located in coniferous, uneven-aged stands with old-growth components. A variety of habitat characteristics influence territory size and configuration, including availability and location of perch trees for foraging, quality of foraging habitat, and distance of nests from waters supporting adequate food supplies. Bald eagles typically build nests in old-growth trees, which are generally used in successive years. Courtship and nest-building begin in January and February. Egg laying begins in March or early April, and eaglets hatch in mid-April or early May. They fledge in mid-July and often remain in the vicinity of the nest for another month (Rodrick and Milner 1991; Corps 2000b).

Eagles often depend on dead or weakened prey, and their diet may vary locally and seasonally. During the breeding season they eat anadromous and warmwater fishes, small mammals, carrion, small waterfowl, and seabirds. Various carrion, including spawned-out salmon, are important food sources during fall and winter (Rodrick and Milner 1991).

Critical habitat has not been designated for bald eagles.

4.4.2 Use of the Action Area

A species list obtained from the USFWS indicates that bald eagles may occur in the vicinity of the proposed project. No bald eagle nests are located in the action area. The closest nests are more than three 3 miles north and northwest of it (Dorsey, G., pers. comm., June 5, 2003).

SCHN00243518

The availability of suitable nest trees is often a limiting factor in the establishment of eagle territories (Carroll and Pentec 1992). Although there are no large trees in the action area for the bald eagles to roost or nest in, bald eagles occasionally fly over the area and may rest or perch on nearby pilings or cottonwood trees.

4.4.3 Effects of the Action

Construction could occur during the nesting season. However, since it would be more than 3 miles from the closest bald eagle nests, construction would not directly disrupt eagle nesting and rearing of young. No communal night roosts or perch trees are near the site, so wintering bald eagles would not be affected by construction that may occur during the wintering season. Foraging bald eagles may be displaced by the noise of heavy equipment, but the availability of prey would not be significantly disrupted by the proposed maintenance work. Given the surrounding urbanization and industrialization, eagles using the area are likely accustomed to high levels of human activity in the action area.

4.4.4 Effect Determination

Dredging will not affect nesting or wintering habitat or behaviors, and only minor disruptions to foraging may occur, so the proposed project may affect, but is not likely to adversely affect the bald eagle.

4.5 WATER HOWELLIA

4.5.1 Life History and Critical Habitat

Water howellia has historically occurred over a large area of the Pacific Northwest. Water howellia occurs in vernal ponds and shallow water edges of larger ponds, oxboughs, sloughs, or other slow-moving water bodies with fine sediment.

Critical habitat has not been designated for water howellia (Corps 2000b).

4.5.2 Use of the Action Area

There are no records of water howellia occurring in the action area and there is no habitat capable of supporting it there. Shallow–water areas in the action area are covered with riprap and do not contain the fine sediment preferred by water howellia. Additionally, boat traffic is likely to create sufficient wave action in the area to prevent establishment of water howellia, even if suitable substrate existed between riprap boulders.

SCHN00243519

4.5.3 Effects of the Action

Because water howellia is not known to exist in the action area and the action area does not contain habitat suitable for water howellia, dredging activities will not affect water howellia.

4.5.4 Effect Determination

Dredging activities will not affect potential water howellia habitat, as dredging will occur in water deeper than water howellia can tolerate. In addition, there is no suitable water howellia habitat in the action area. Thus the proposed project will have no effect on water howellia

4.6 COASTAL CUTTHROAT TROUT

4.6.1 Life History and Critical Habitat

Coastal cutthroat trout spawn in small tributaries of small and large rivers in late winter through spring. Juveniles migrate downstream between March and June and may make several freshwater migrations before migrating to the ocean. Most coastal cutthroat trout are 2 to 3 years old before migrating to the ocean. Coastal cutthroat trout spend less than one year in the ocean before migrating back to their natal streams to spawn. Unlike most anadromous salmonids, coastal cutthroat trout do not die after spawning (Corps 2000b).

Critical habitat has not been designated for coastal cutthroat trout (NMFS 2000).

4.6.2 Use of the Action Area

Most coastal cutthroat trout in the project area are likely to be adults and sub–adults from nearby basins. Adult and sub–adult coastal cutthroat trout typically feed on other fish such as whitefish, sculpin, and other trout. Therefore, the adult and sub–adult coastal cutthroat trout in the action area would likely be feeding in the deeper water of the action area on fish rather than the organisms that serve as primary prey for juveniles.

4.6.3 Effects of the Action

No direct effect on coastal cutthroat trout is expected to result from any aspect of project construction, which will occur when few, if any, juvenile salmonids are present. Adult salmonids can avoid any conditions that would result in direct impacts (e.g. entrainment in the bucket) on them. Dredging will likely increase turbidity temporarily in the immediate vicinity. Suspended sediment will dissipate quickly.

SCHN00243520

Dredging will eliminate benthic organisms, an important food source for juvenile coastal cutthroat trout. By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period (McCauley et al. 1977; Richardson et al. 1977; Romberg et al. 1995; Wilson and Romberg 1995). The contribution of epibenthic prey from the small subtidal area to be dredged is limited by the area's depth. Because the adjacent Willamette River and associated shallow-water areas are so much larger than the area to be dredged, dredging should not harm salmonids foraging on benthic invertebrates. Additionally, seventy nine percent of the area to be dredged is below -20 feet CRD, which is deeper than foraging juveniles prefer (Simenstad et al. 1999). In subsequent years of the permit all maintenance dredging is anticipated to be below -20 feet CRD.

4.6.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project will not jeopardize coastal cutthroat trout. Should coastal cutthroat trout become listed the proposed project may affect, but is not likely to adversely affect, cutthroat trout or their habitat.

4.7 LOWER COLUMBIA RIVER COHO SALMON

4.7.1 Life History and Critical Habitat

Coho spawn in small tributaries of small or large rivers in late winter through spring. Juveniles migrate downstream between April and August. Juvenile coho may spend anywhere from a few weeks to two years in freshwater before migrating to the ocean. Coho spend one to two years in the ocean before migrating back to their natal streams to spawn (Corps 2000b).

Critical habitat has not been designated for Lower Columbia River coho salmon.

4.7.2 Use of the Action Area

Most coho in the project area are likely to be adults and sub–adults from nearby basins. Adult and sub–adult coho typically feed on other fish such as whitefish, sculpin, and other trout. By the time adult coho reach the Willamette River, they probably are not feeding. Sub–adult coho in the action area would likely be feeding in the deeper water of the action area on fish rather than the benthic and epibenthic organisms that serve as primary prey for juveniles.

SCHN00243521

4.7.3 Effects of the Action

The effects of the proposed action on coho would be similar to those described for chinook. Impacts on epibenthic prey from construction could have less impact on coho than other salmonid species because coho found in the action area are likely to be less dependant on epibenthic prey than chinook.

4.7.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project will not jeopardize coho salmon. If coho are listed, the proposed project may affect, but is not likely to adversely affect, coho salmon or their habitat.

SCHN00243522

5.0 INTERRELATED, INTERDEPENDENT, AND CUMULATIVE EFFECTS

Cumulative effects are those effects of future state or private activities, not involving activities of other federal agencies that are reasonably certain to occur within the area of the federal action subject to consultation (50 CFR 402.02 Definitions). Future federal actions unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to Section 7 of the ESA. Interdependent effects are defined as actions with no independent utility apart from the proposed action. Interrelated effects include those that are part of a larger action and depend on the larger action for justification.

No interdependent or cumulative effects are known to occur that may adversely affect a listed, proposed, or candidate species within the action area. An interrelated action of the proposed action may be the occasional disturbance of the substrate from prop wash of tugs as they bring in barges or during the hauling out of barges or other vessels. Prop wash could result in small, temporary increases in turbidity. The periodic disturbance of the substrate caused by the prop wash could reduce the suitability of the substrate for colonization by benthic macroinvertebrates utilized as food by juvenile salmonids. However, these effects of prop wash being localized and temporary would have little affect on the growth or survival of juvenile salmonids.

SCHN00243523

6.0 SUMMARY

Construction activities would temporarily increase noise and turbidity, possibly causing listed species to avoid the immediate work area. Best management practices would be used to reduce these impacts. Thus, the proposed action:

- **may affect, but is not likely to adversely affect** chinook salmon,
- **may affect, but is not likely to adversely affect** chum salmon,
- **may affect, but is not likely to adversely affect** steelhead trout,
- **may affect, but is not likely to adversely affect** bald eagles, and
- will have **no effect** on water howellia.

SCHN00243524

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SCHN00243528

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DEPARTMENT
ENVIRONMEN
QUALITY

WATER QUALITY 401 CERTIFICATION
Public Notice

WHO IS THE APPLICANT: See the attached Department of State Lands (DSL) and or Corps of Engineers (COE) permit application.

WHAT IS PROPOSED: See the attached DSL and or COE permit application on the proposed project.

DESCRIPTION OF DISCHARGES: See the attached DSL and or COE permit for details.

NEED FOR CERTIFICATION: Under Section 401 of the Clean Water Act, any activity that requires a federal permit or license requires certification from the State that any discharge will meet the requirements of the Clean Water Act and State water quality standards.

PUBLIC PARTICIPATION: Written comments must be received by 5 p.m. no later than thirty days from the notice issued date at the Oregon Department of Environmental Quality, Water Quality Division, 811 S.W. 6th Ave., Portland, Oregon 97204 to be included in the official record. Public comments should specifically include new data addressing how the project would affect requirements of the Clean Water Act and Oregon water quality standards.

The applicant, any affected state, or any interested agency, person or group of persons, may request a publi hearing with respect to this certification application. If the Director determines new data would be produce a public hearing will be held prior to the director's final determination. There shall be notification of such a hearing.

HOW TO GET ADDITIONAL INFORMATION: The application and related documents are available for inspection during the public comment period, Monday through Friday, between 9:00 am to noon and 1:00 pm to 4:00 pm at DEQ's Portland office. Please call in advance for an appointment 229-5279.

People wishing to receive a copy of the DSL/COE application can call DEQ at (503) 229-5279 or toll free in Oregon at 1-800-452-4011. Public Records Act charges may apply. Persons with a hearing impairment ca receive help by calling DEQ's TDD number at (503) 229-6993.

WHAT HAPPENS NEXT: After the conclusion of the public participation period, the permit will be issued a proposed, issued with modifications, or denied, depending on comments received during the public participation process. Interested parties can request to be notified of the final determination by writing or calling the Department at the above address.

ACCESSIBILITY INFORMATION: This publication is available in alternate format (e.g. large print, braille) upon request. Please contact Ed Sale in DEQ Public Affairs at 229-5766 to request an alternate format.

811 SW Sixth
Portland, OR 9
(503) 229-5696
TDD (503) 229

DEQ-1

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
☎ 503-378-3805

Permit No.:	**30895-RP Renewal**
Permit Type:	**Removal**
Waterway:	**Willamette River**
County:	**Multnomah**
Expiration Date:	**January 23, 2008**
Corps No.:	**1992-00812**

SCHNITZER STEEL INDUSTRIES, INC.

IS AUTHORIZED IN ACCORDANCE WITH ORS 196.800 TO 196.990 TO PERFORM THE OPERATIONS DESCRIBED IN THE ATTACHED COPY OF THE APPLICATION, SUBJECT TO THE SPECIAL CONDITIONS LISTED ON ATTACHMENT A AND TO THE FOLLOWING GENERAL CONDITIONS:

1. This permit does not authorize trespass on the lands of others. The permit holder shall obtain all necessary access permits or rights-of-way before entering lands owned by another.
2. This permit does not authorize any work that is not in compliance with local zoning or other local, state, or federal regulation pertaining to the operations authorized by this permit. The permit holder is responsible for obtaining the necessary approvals and permits before proceeding under this permit.
3. All work done under this permit must comply with Oregon Administrative Rules, Chapter 340; Standards of Quality for Public Waters of Oregon. Specific water quality provisions for this project are set forth on Attachment A.
4. Violations of the terms and conditions of this permit are subject to administrative and/or legal action which may result in revocation of the permit or damages. The permit holder is responsible for the activities of all contractors or other operators involved in work done at the site or under this permit.
5. A copy of the permit shall be available at the work site whenever operations authorized by the permit are being conducted.
6. Employees of the Department of State Lands and all duly authorized representatives of the Director shall be permitted access to the project area at all reasonable times for the purpose of inspecting work performed under this permit.
7. Any permit holder who objects to the conditions of this permit may request a hearing from the Director, in writing, within twenty-one (21) calendar days of the date this permit was issued.
8. In issuing this permit, the Department of State Lands makes no representation regarding the quality or adequacy of the permitted project design, materials, construction, or maintenance, except to approve the project's design and materials, as set forth in the permit application, as satisfying the resource protection, scenic, safety, recreation, and public access requirements of ORS Chapters 196, 390 and related administrative rules.
9. Permittee shall defend and hold harmless the State of Oregon, and its officers, agents, and employees from any claim, suit, or action for property damage or personal injury or death arising out of the design, material, construction, or maintenance of the permitted improvements.

NOTICE: If removal is from state-owned submerged and submersible land, the applicant must comply with leasing and royalty provisions of ORS 274.530. If the project involves creation of new lands by filling on state-owned submerged or submersible lands, you must comply with ORS 274.905 - 274.940. This permit does not relieve the permittee of an obligation to secure appropriate leases from the Department of State Lands, to conduct activities on state-owned submerged or submersible lands. Failure to comply with these requirements may result in civil or criminal liability. For more information about these requirements, please contact the Department of State Lands, 503-378-3805.

Michael Morales, W Region Manager
Wetlands & Waterways Conservation Div
Oregon Department of State Lands

Authorized Signature

January 23, 2007
Date Issued

ATTACHMENT A

Special Conditions for Removal/Fill Permit No. 30895-RP. <u>PLEASE READ AND BECOME FAMILIAR WITH CONDITIONS OF YOUR PERMIT.</u> This project may be site inspected by the Department of State Lands as part of our monitoring program. The Department has the right to stop or modify the project at any time if you are not in compliance with these conditions. A copy of this permit shall be available at the work site whenever authorized operations are being conducted.

1. This permit authorizes the removal of up to 101,000 cubic yards (total project) of sand and silt at International Terminals Berths 4 and 5 located at T2N, R1W, Section 35, tax lot 500, at Willamette River, mile 3.8, Portland, Multnomah County for maintenance dredging as outlined in the attached permit application, map and drawings, dated July 9, 2003.

2. No removal activities shall commence within waters of the State without first obtaining any required authorization from the City of Portland for upland disposal. If the local permit(s) results in any modifications in this project relative to this permit, the permit holder shall contact the Department and request adjustments to this authorization.

3. Removal activities in Willamette River, mile 3.8, International Terminal Berths 4 and 5, shall be conducted between July 1 and October 31, unless otherwise coordinated with ODFW and approved in writing by ODSL. The recommended in-water work timing may be modified prior to July 1, 2007. Contact the Department prior to start of work to verify in-water work timing.

4. The dimensions and depth of the berths shall be no greater than described in Application, Sheets 2 of 3 and 3 of 3. Any alteration of the plan requires Department of State Lands approval.

5. Dredging activity shall be conducted by clamshell bucket from a floating crane and as described Application. In the closed position, the bucket shall be sealed so as to minimize sediment resuspension. The barge shall be positioned so as to avoid grounding on the river bed or banks at any time.

6. All dredge materials shall be placed in barges equipped such that no material shall discharge to waters of the State during loading, transfer and unloading activity.

7. Any return waters generated during transfer and disposal activity shall be provided adequate settling time so that return waters meet water quality requirements of the Department of Environmental Quality.

8. Dredged materials shall be disposed of in appropriately permitted, upland disposal site(s). The selected disposal facility(ies), and any changes thereafter, shall be submitted to the Department for approval prior to use.

9. Any beneficial reuse of dredged materials is subject to a license from, and royalty payments to, the Department of State Lands.

10. An annual report shall be submitted to the Department no later than 30 days after the end of the in-water work period each year. The report shall include the amount of material dredged, the final dredge material disposal site and an approximation of the new basin depth.

Water Quality Conditions

11. Dredging activity shall be conducted in strict compliance with the DEQ approved Water Quality Management Plan (WQMP) for the site. The approved WQMP and its contents are incorporated into and become a binding condition of this Permit. The Plan outlines: an effects-based turbidity standard; implementation of action level and stop-work level turbidity thresholds; monitoring protocols; and reporting requirements.

12. Petroleum products, chemicals, fresh cement, sandblasted material and chipped paint or other deleterious waste materials shall not be allowed to enter waters of the state. No wood treated with leach able preservatives shall be placed in the waterway. Machinery refueling is to occur off-site or in a confined designated area to prevent spillage into waters of the state. Project-related spills into water of the state or onto land with a potential to enter waters of the state shall be reported to the Oregon Emergency Response System at 800-452-0311.

Contingencies

13. If any archaeological resources and/or artifacts are uncovered during excavation, all construction activity shall immediately cease. The State Historic Preservation Office shall be contacted (phone: 503-378-4168).

14. When listed species are present, the permit holder must comply with the federal Endangered Species Act. If previously unknown listed species are encountered during the project, the permit holder shall contact the appropriate agency as soon as possible.

15. The permittee is responsible for carrying-out the terms and conditions of this permit unless the permit is transferred to another party using forms provided by the Department.

16. The Department of State Lands retains the authority to temporarily halt or modify the project in case of unforeseen damage to natural resources.

Lower Willamette River Management Plan Consistency

The proposed activity at Willamette River, mile 3.8, is located within a designated "Open Water" area of the Lower Willamette River Management Plan (Plan). Maintenance dredging is identified in the Plan as an allowable activity in designated open waters, subject to the following additional conditions.

17. Schedule project development and maintenance to avoid peak public use periods for recreation activities present in the project area.

18. Schedule project development and maintenance to assure, as much as possible, that commercial navigational uses (barge, ship, tug traffic) remain unimpeded.

19. Strictly adhere to all public health, safety, and water quality standards, building and zoning codes required by the appropriate local government agencies, the Oregon Water Resources Department, the Oregon Department of Environmental Quality, and U.S. Environmental Protection Agency. Obtain all necessary permits and comply with all permit conditions.

20. There shall be no significant adverse effect to the riparian and aquatic life and habitat by any activity within shallow water (-15 feet Columbia River datum) or Rank 1 and 2 wildlife habitat areas.

21. The area dredged shall be the minimum necessary to accomplish the intended use and comply with these standards.

22. For access dredging, normal removal shall be sufficient to provide access for a period no less than 24 months.

23. Levels of pollutants released into waters by dredging and disposal shall conform to standards approved by DEQ.

24. Sides of dredged channels and basins should be sloped to facilitate physical stabilization. Slopes shall be no steeper than 3:1.

25. Critical periods of fish and wildlife activity as determined by Oregon Department of Fish and Wildlife (ODFW) (spawning, passage, nesting, etc.) shall be avoided.

26. Dredging will not be allowed from public beach areas.

27. All dredging operations must use disposal sites acceptable to the U.S. Army Corps of Engineers, the Department of State Lands, and local land use regulations.

28. Dredging shall be timed so that equipment stays clear of recreational and commercial navigation users of the river, especially during the recreation use season (March – October).

Renewed & Modified: January 23, 2007

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US Army Corps of Engineers
Portland District

JOINT PERMIT APPLICATION FORM

THIS APPLICATION WILL MEET THE REQUIREMENTS OF BOTH AGENCIES

AGENCIES WILL ASSIGN NUMBERS

Corps Action ID Number _____ Oregon Division of State Lands Number 30895-RP

RECEIVED
JUL 09 2003
DIVISION OF STATE LANDS

SEND ONE SIGNED COPY OF YOUR APPLICATION TO EACH AGENCY

District Engineer	State of Oregon
ATTN: CENWP-OP-GP	Division of State Lands
P.O. Box 2946	775 Summer Street N.E.
Portland, OR 97208-2946	Salem, OR 97310
503-808-4373	503-378-3805

1. APPLICANT NAME: Schnitzer Steel Industries, Inc.
Address: PO Box 10047
Portland, OR 97296-0047
Attn: Jim Jakubiak

Business Phone #: (503) 224-9900
Home Phone #: N/A
FAX #: (503) 286-6948

[ ] Co-Applicant [x] Authorized Agent [ ] Contractor

Name: Jerald Ramsden
Address: Parsons Brinckerhoff Quade & Douglas, Inc.
400 SW 6th Ave., Suite 802
Portland, OR 97204

Business Phone #: (503) 274-8772
Home Phone #: N/A
FAX #: (503) 274-1412

Property Owner *(if different than applicant)*
Name: Schnitzer Investment Corporation
Address: PO Box 10047
Portland, OR 97296-0047

Business Phone #: (503) 224-9900
Home Phone #: N/A
FAX #: N/A

2. PROJECT LOCATION

Street, road or other descriptive location	Legal Description			
	Quarter	Section	Township	Range
International Terminals 12005 N. Burgard Rd.	SW	35	[2] North [ ] South	[ ] East [1] West

In or Near (City or Town) Portland County Multnomah Tax Map # 2N1W35 Tax Lot # 500
Waterway Willamette River River Mile 3.8 Latitude 45° 36' 30" N Longitude 122° 46' 52" W

Is consent to enter property granted to the Corps and the Division of State Lands? [x] Yes [ ] No

3. PROPOSED PROJECT INFORMATION

Activity Type: [ ] Fill [x] Excavation (removal) [ ] In-Water Structure [ ] Maintain/Repair an Existing Structure

Brief Description: Maintenance dredging to provide safe navigation access to and berthing within Berths 4 and 5 at International Terminals

Fill will involve N/A cubic yards annually and/or _____ cubic yards for the total project
_____ cubic yards in a wetland or below the ordinary high water or high tide line

Fill will be: [ ] Riprap [ ] Rock [ ] Gravel [ ] Sand [ ] Silt [ ] Clay [ ] Organics [ ] Other _____

Fill Impact Area is _____ Acres; _____ length; _____ width; _____ depth

Removal will involve 20,000 every other year on average cubic yards annually and/or 101,000 (i.e. 61,000 initially and 40,000 thereafter) cubic yards for the total project
101,000 cubic yards below the ordinary high water or high tide line

SCHN00243535

Removal will be: [ ] Riprap [ ] Rock [ ] Gravel [x] Sand [x] Silt [ ] Clay [ ] Organics [ ] Other _____

Removal Impact Area is 6.6 first year, 3.7 thereafter Acres; 1600 ft length; 120 ft typical (220 ft max.) width; Varies: max of -42 ft CRD in Berth 4 and -36 ft CRD in Berth 5 depth

Is the Disposal area: Upland? [x] Yes [ ] No Wetland/Waterway? [ ] Yes [x] No

	Yes	No
Are you aware of any Endangered Species on the project site?	x	
Are you aware of any Cultural Resources on the project site?		x
Is the project site near a Wild and Scenic River?		x

If Yes, please explain in the project description (on page 2, block 4).

4. PROPOSED PROJECT PURPOSE AND DESCRIPTION

Project Purpose and Need: Presented in attached supplemental sheets.

Project Description: Presented in attached supplemental sheets.

How many project drawing sheets are included with this application? 3

NOTE: A complete application must include drawings and a location map submitted on separate 8-1/2 x 11 sheets.

Will any material, construction debris, runoff, etc. enter a wetland or waterway? [ ] Yes [x] No

If yes, describe the type of discharge (above) and show the discharge location on the site plan.

Estimated Start Date: August 15, 2003 Estimated Completion Date: August 14, 2008

5. PROJECT IMPACTS AND ALTERNATIVES

Describe alternative sites and project designs that were considered to avoid impacts to the waterway or wetland.

Presented in attached supplemental sheets.

Describe what measures you will use (before and after construction) to minimize impacts to the waterway or wetland.

Presented in attached supplemental sheets.

NOTE: If necessary, use additional sheets.

6. ADDITIONAL INFORMATION

Adjoining Property Owners and Their Addresses and Phone Numbers.

Port of Portland
121 NW Everett
Portland, OR 97209
(503) 944-7000

Northwest Terminal Company
P.O. Box 99007
Seattle, WA 98199-0007

Has the proposed activity or any related activity received the attention of the Corps of Engineers or the State of Oregon in the past, e.g., wetland delineation, violation, permit, lease request, etc.? [x] Yes [ ] No

If yes, what identification number(s) were assigned by the respective agencies?

Corps # 92-00812 State of Oregon# 3701

7. CITY/COUNTY PLANNING DEPARTMENT AFFIDAVIT (to be completed by local planning official)

☐ This project is not regulated by the local comprehensive plan and zoning ordinance.

☒ This project has been reviewed and is consistent with the local comprehensive plan and zoning ordinance.
(Not approving upland disposal site)

☐ This project has been reviewed and is **not** consistent with the local comprehensive plan and zoning ordinance.

☐ Consistency of this project with the local planning ordinance cannot be determined until the following local approval(s) are obtained:

- ☐ Conditional Use Approval
- ☐ Development Permit
- ☐ Plan Amendment
- ☐ Zone Change
- ☐ Other _____

An application ☐ has ☐ has not been made for local approvals checked above.

Signature (of local planning official)	Title	City/County	Date
[signature]	City Planner	Portland	6/27/03

8. COASTAL ZONE CERTIFICATION

If the proposed activity described in your permit application is within the Oregon coastal zone, the following certification is required before your application can be processed. A public notice will be issued with the certification statement which will be forwarded to the Oregon Department of Land Conservation and Development (DLCD) for its concurrence or objection. For additional information on the Oregon Coastal Zone Management Program, contact the department at 1175 Court Street N.E., Salem, Oregon 97310 or call 503-373-0050.

Certification Statement

I certify that, to the best of my knowledge and belief, the proposed activity described in this application complies with the approved Oregon Coastal Zone Management Program and will be completed in a manner consistent with the program.

Print/Type Name	Title
Applicant Signature	Date

9. SIGNATURE FOR JOINT APPLICATION (REQUIRED)

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and, to the best of my knowledge and belief, this information is true, complete, and accurate. I further certify that I possess the authority including the necessary requisite property interests to undertake the proposed activities. I understand that the granting of other permits by local, county, state or federal agencies does not release me from the requirements of obtaining the permits requested before commencing the project. I understand that local permits may be required before the state removal-fill permit is issued. I understand that payment of the required state processing fee does not guarantee permit issuance.

Print/Type Name (applicant)	Title
James L. Jakubiak	Environmental Administrator
Applicant Signature (applicant)	Date
[signature]	June 27, 2003

I certify that I may act as the duly authorized agent of the applicant.

Print/Type Name	Title
Jerald D. Ramsden	Lead Coastal Engineer
Authorized Agent Signature)	Date
[signature]	June 27, 2003

SUPPLEMENTAL WETLAND IMPACT INFORMATION*
(FOR WETLAND FILLS ONLY)

Site Conditions of impact area

Impact area is: [ ] Ocean [ ] Estuary [X] River [ ] Lake [ ] Stream [ ] Freshwater Wetland

Note: Estuarian Resource Replacement is required by state law for projects involving intertidal or tidal marsh alterations. A separate Wetlands Resource Compensation Plan may be appended to the application.

Has a wetland delineation been completed for this site? [ ] Yes [X] No

If yes, by whom:

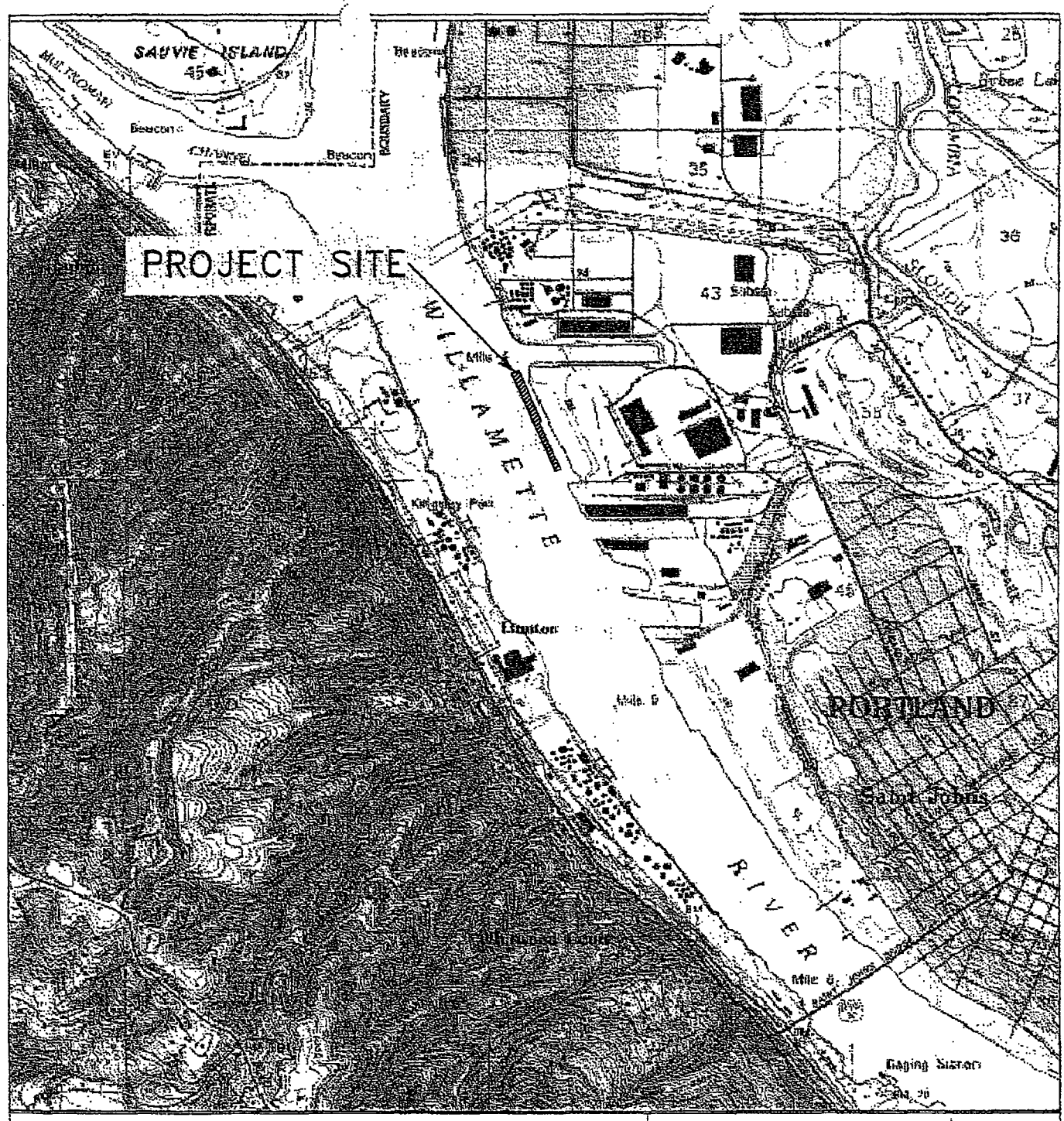
Describe the existing physical and biological character of the wetland/waterway site by area and type of resource (use separate sheets and photos, if necessary).

Presented in the attached Biological Assessment

Resource Replacement Mitigation
Describe measures to be taken to replace unavoidably impacted wetland resources.

No wetland resources are affected by the proposed work. Therefore, no mitigation is proposed.

* Because this information is not necessary for a complete application, you may submit this sheet and other environmental information after submitting your application.



NOTE 1. LOCATION MAP OBTAINED FROM US GEOLOGICAL SURVEY QUAD SHEET FOR LINNTON, OR

Scale In Feet
0 1000 2000

PURPOSE: MAINTAIN NAVIGATION ACCESS AND BERTHS FOR SHIPS AND BARGES
VERTICAL DATUM: COLUMBIA RIVER DATUM (CRD), CRD IS 1.6' ABOVE NGVD AT WILLAMETTE RIVER MILE 3.8
ADJACENT PROPERTY OWNERS:
1. NORTHWEST TERMINAL COMPANY
2. PORT OF PORTLAND

LATITUDE: 45° 36' 30" N
LONGITUDE: 122° 46' 52" W

PROPOSED MAINTENANCE DREDGING AT INTERNATIONAL TERMINALS

IN: WILLAMETTE RIVER
AT: RIVER MILE 3.8
COUNTY OF: MULTNOMAH
APPLICATION BY: SCHNITZER STEEL INDUSTRIES, INC.
SHEET 1 OF 3 DATE: 6/03/03

SUPPLEMENTAL DATA

Joint Application for Maintenance Dredging in Berths 4 and 5,
International Terminals, Portland, Oregon

4. PROPOSED PROJECT PURPOSE AND DESCRIPTION

Project Purpose and Need

The project purpose is to maintain safe navigation access and berthing for the existing facilities associated with Berths 4 and 5 at International Terminals (as shown in Sketch 1 of 3, attached) by conducting periodic maintenance dredging as needed. The two berths are existing facilities and have been maintained under previous maintenance dredging permits (U.S. Army Corps of Engineers Section 10/404 Permit #92-00812 and Oregon Division of State Lands Removal-Fill Permit No. 3701).

Berth 4 is currently used to export bulk metal products with a conveyor system. Berth 5 has a floating dock with a crane and is used for temporary moorage. The two berths combined are approximately 1600 ft long. The site was originally developed in the early 1940's for military ship construction. Over the past three decades, the site has been primarily used to support metal recycling and vessel dismantling operations.

Due to shoaling within each of the berths, there is a critical and urgent need to maintain these facilities as shown by the proposed dredge prism in sketch 3 of 3, attached.

Project Description

The project involves dredging the area to a maximum depth of –42 ft Columbia River Datum (CRD) in Berth 4 and -36 ft CRD in Berth 5 as shown in Sketches 2 and 3 of 3, attached. The proposed dredge footprint covers an area of approximately 6.6 acres with a maximum length of 1600 ft and maximum width of 220 ft. The initial dredge volume associated with the proposed dredge prism is 61,000 cy. Authorization for an additional 40,000 cy is requested for the remainder of the permit duration (i.e. 20,000 cy every other year on average in years two through five, based on a five year permit). Dredging will be by clamshell bucket with transport to approved upland facilities and/or locations by barge, truck and/or rail.

Recent sediment sampling results are attached to this application and have been utilized in development of the Biological Assessment.

5. PROJECT IMPACTS AND ALTERNATIVES

Describe alternative sites and project designs that were considered to avoid impacts to the waterway or wetland.

No alternatives were considered for maintenance dredging in the berths since they are existing, previously permitted facilities in need of maintenance. The site is designated for marine industrial use by the Lower Willamette River Management Plan, which recognizes

SCHN00243541

the important need to protect and fully utilize the limited areas of Portland Harbor so designated.

Describe what measures you will use (before and after construction) to minimize impacts to the waterway or wetland.

Construction will be conducted during an allowable fish-related inwater work period, although the emergency need and permitting time frame may require extension of the regularly scheduled Oct. 31 and/or Jan. 31 closure to allow completion of the project. Best management practices will be utilized during maintenance dredging as outlined in the Programmatic Biological Opinion (National Marine Fisheries Service dated June 14, 2002 that covers maintenance dredging of existing port terminals) and the Corps of Engineers Nationwide Permit (that includes maintenance dredging) to protect water quality and benthic resources. The proposed dredging will provide one foot of advanced maintenance (already accounted for in the maximum proposed dredge depths) to reduce to the extent practicable the frequency of maintenance dredging events.

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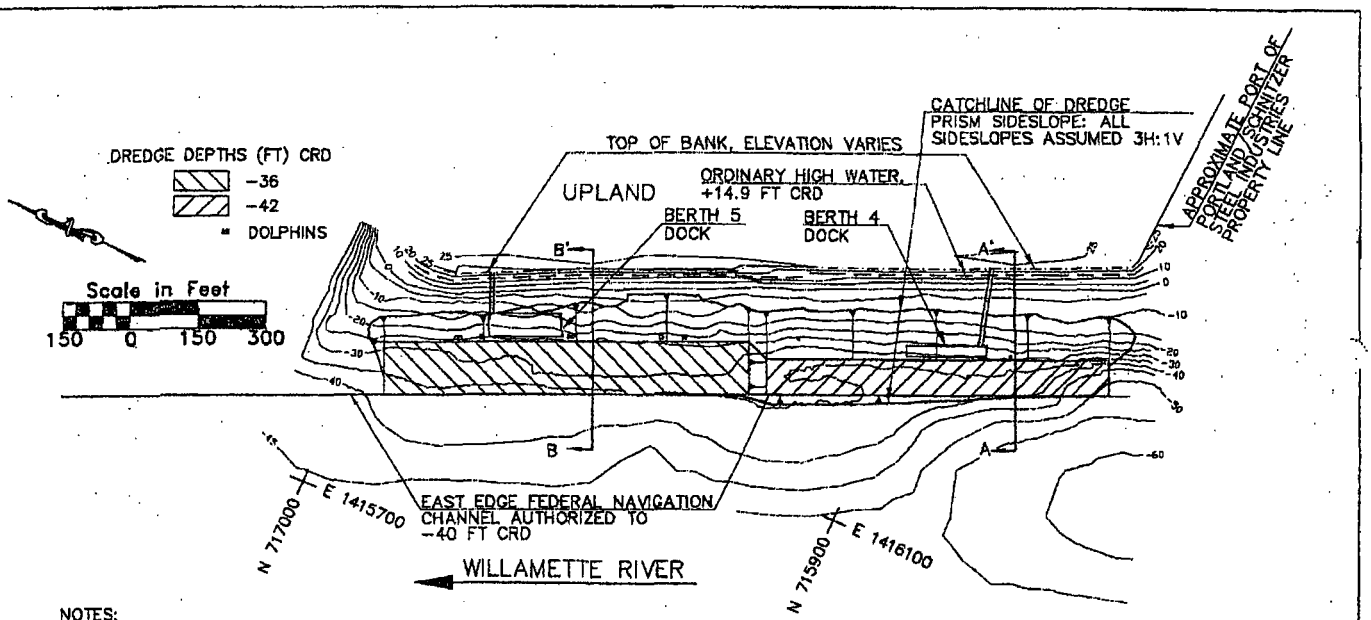


NOTES:

NOTE 2. THE ORDINARY HIGH WATER ELEVATION IS 14.9 FT CRD ACCORDING TO THE U.S. ARMY CORPS OF ENGINEERS, PORTLAND DISTRICT.

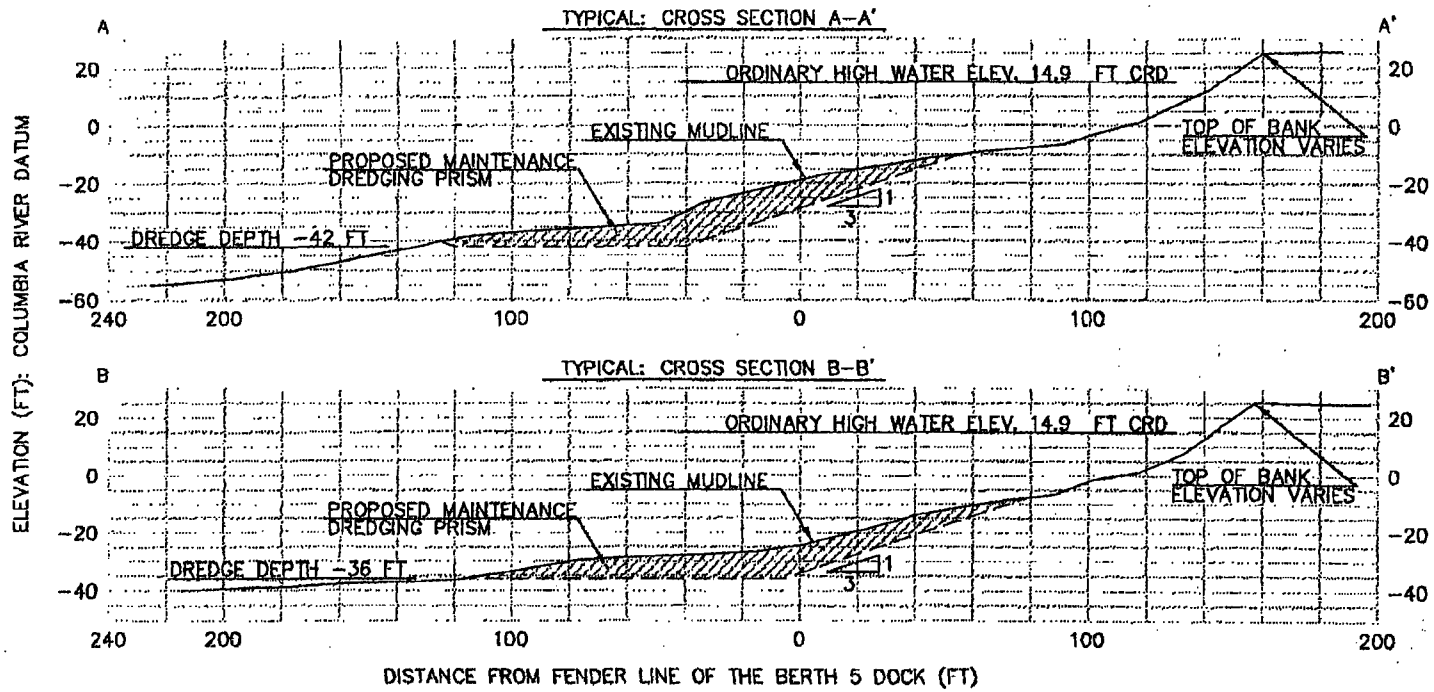
NOTE 3. DEPTH SOUNDINGS (FEET, CRD) WERE MEASURED BY MINISTER & GLAESER SURVEYING, INC. IN SEPTEMBER, 2002.

NOTE 4. SCHNITZER STEEL INDUSTRIES, INC. PROPOSES TO INITIALLY DREDGE AN ESTIMATED 61,000± CY AS SHOWN. ESTIMATED MAINTENANCE DREDGING TO REMOVE NATURALLY SHOALED MATERIALS INCLUDES UP TO 40,000 CY (I.E. 20,000± CY EVERY OTHER YEAR ON AVERAGE) IN SUBSEQUENT YEARS.

NOTE 5. DREDGING DEPTHS SHOWN ARE MAXIMUM DEPTHS AND INCLUDE ONE FOOT OF ADVANCED MAINTENANCE AND ONE FOOT OF ALLOWABLE OVERDEPTH DUE TO DREDGING INACCURACY.

NOTE 6. SCHNITZER STEEL INDUSTRIES, INC. PROPOSES TO DREDGE THE MATERIAL USING A CLAMSHELL BUCKET OPERATED FROM A FLOATING CRANE. DREDGED MATERIAL WILL BE PLACED IN APPROVED UPLAND LOCATIONS.

	PURPOSE: MAINTAIN NAVIGATION ACCESS AND BERTHS FOR SHIPS AND BARGES VERTICAL DATUM: COLUMBIA RIVER DATUM (CRD), CRD IS 1.6' ABOVE NGVD AT WILLAMETTE RIVER MILE 3.8 ADJACENT PROPERTY OWNERS: 1. NORTHWEST TERMINAL COMPANY 2. PORT OF PORTLAND	LATITUDE: 45° 38' 30" N LONGITUDE: 122° 46' 52" W HORIZONTAL DATUM: OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE (NAD-27), U.S. SURVEY FEET	PROPOSED MAINTENANCE DREDGING AT INTERNATIONAL TERMINALS IN: WILLAMETTE RIVER AT: RIVER MILE 3.8 COUNTY OF: MULTNOMAH APPLICATION BY: SCHNITZER STEEL INDUSTRIES, INC. SHEET 2 OF 3 DATE: 6/03/03



PURPOSE: MAINTAIN NAVIGATION ACCESS AND BERTHS FOR SHIPS AND BARGES

VERTICAL DATUM: COLUMBIA RIVER DATUM (CRD), CRD IS 1.6' ABOVE NGVD AT WILLAMETTE RIVER MILE 3.8

ADJACENT PROPERTY OWNERS:
1. NORTHWEST TERMINAL COMPANY
2. PORT OF PORTLAND

LATITUDE: 45° 36' 30" N
LONGITUDE: 122° 46' 52" W

SCALE: AS SHOWN

PROPOSED MAINTENANCE DREDGING AT INTERNATIONAL TERMINALS

IN: WILLAMETTE RIVER
AT: RIVER MILE 3.8
COUNTY OF: MULTNOMAH
APPLICATION BY: SCHNITZER STEEL INDUSTRIES, INC.

SHEET 3 OF 3 DATE: 6/03/03

SCHN00243544

INTERNATIONAL TERMINALS (BERTHS 4 AND 5) MAINTENANCE DREDGING
BIOLOGICAL ASSESSMENT
Portland, Oregon

Prepared for

Parsons Brinckerhoff

400 SW Sixth Street, Suite 802
Portland, OR 97204

Prepared by

MCS Environmental, Inc.

6505 – 216th Street SW, Suite 100
Mountlake Terrace, WA 98043

July 8, 2003
34088-001

CONTENTS

1.0 INTRODUCTION 1

2.0 PROJECT DESCRIPTION 2
- 2.1 PROJECT AND ACTION AREAS 2
- 2.2 PROPOSED ACTION DESCRIPTION 2
- 2.3 CONSERVATION MEASURES 3

3.0 EXISTING ENVIRONMENTAL CONDITIONS AND EFFECTS OF THE ACTION 4
- 3.1 GENERAL 4
  - 3.1.1 Existing Conditions 4
  - 3.1.2 Effects of the Action 4
- 3.2 WATER QUALITY AND STORMWATER 5
  - 3.2.1 Existing Conditions 5
  - 3.2.2 Effects of the Action 5
- 3.3 FLOW AND CURRENT PATTERNS 6
  - 3.3.1 Existing Conditions 6
  - 3.3.2 Effects of the Action 6
- 3.4 SEDIMENTS, SUBSTRATE, AND BATHEMETRY 7
  - 3.4.1 Existing Conditions 7
  - 3.4.2 Effects of the Action 7
- 3.5 SHORELINE CONDITIONS 8
  - 3.5.1 Existing Conditions 8
  - 3.5.2 Effects of the Action 8
- 3.6 ACCESS AND REFUGIA 9
  - 3.6.1 Existing Conditions 9
  - 3.6.2 Effects of the Action 9
- 3.7 BIOTA CONDITIONS 9
  - 3.7.1 Existing Conditions 9
  - 3.7.2 Effects of the Action 9

4.0 EVALUATION OF EFFECTS ON LISTED SPECIES 11
- 4.1 LOWER COLUMBIA AND UPPER WILLAMETTE CHINOOK 11
  - 4.1.1 Life History and Critical Habitat 11
  - 4.1.2 Use of the Action Area 11
  - 4.1.3 Effects of the Action 11
  - 4.1.4 Effect Determination 12
- 4.2 COLUMBIA RIVER CHUM SALMON 12
  - 4.2.1 Life History and Critical Habitat 12
  - 4.2.2 Use of the Action Area 12

SCHN00243546

CONTENTS (continued)

4.2.3 Effects of the Action....12
4.2.4 Effect Determination....13
4.3 LOWER COLUMBIA RIVER AND UPPER WILLAMETTE STEELHEAD TROUT. 13
4.3.1 Life History and Critical Habitat....13
4.3.2 Use of the Action Area....13
4.3.3 Effects of the Action....13
4.3.4 Effect Determination....14
4.4 BALD EAGLE....14
4.4.1 Life History and Critical Habitat....14
4.4.2 Use of the Action Area....14
4.4.3 Effects of the Action....15
4.4.4 Effect Determination....15
4.5 WATER HOWELLIA....15
4.5.1 Life History and Critical Habitat....15
4.5.2 Use of the Action Area....15
4.5.3 Effects of the Action....16
4.5.4 Effect Determination....16
4.6 COASTAL CUTTHROAT TROUT....16
4.6.1 Life History and Critical Habitat....16
4.6.2 Use of the Action Area....16
4.6.3 Effects of the Action....16
4.6.4 Effect Determination....17
4.7 LOWER COLUMBIA RIVER COHO SALMON....17
4.7.1 Life History and Critical Habitat....17
4.7.2 Use of the Action Area....17
4.7.3 Effects of the Action....18
4.7.4 Effect Determination....18

5.0 INTERRELATED, INTERDEPENDENT, AND CUMULATIVE EFFECTS....19

6.0 SUMMARY....20

7.0 REFERENCES....21

TABLES

FIGURES

SCHN00243547

CONTENTS (continued)

APPENDICES

A Agency Response Letter
B Site Photographs
C Essential Fish Habitat Assessment

LIST OF TABLES

Table 1 Proposed Maintenance-Dredging Schedule
Table 2 Environmental Baseline and Net Effects of the Action on Pathways and Salmon Habitat Indicators in the Willamette River

LIST OF FIGURES

Figure 1 Site Vicinity
Figure 2 Proposed Dredge Prism
Figure 3 Cross-Sections of Dredge Prism

SCHN00243548

International Terminals (Berths 4 and 5) Maintenance Dredging

1.0 INTRODUCTION

Section 7 of the Endangered Species Act (ESA) requires federal agencies to ensure that any action carried out by the agency is "not likely to jeopardize the continued existence of any [listed] species or result in the destruction or adverse modification of habitat of such species...." Issuance of a federal permit is an agency action pursuant to Section 7.

Schnitzer Steel Industries, Inc. (SSI) is applying for a permit from the US Army Corps of Engineers (Corps) to conduct maintenance dredging of Berths 4 and 5 at the International Terminals site. This requires a Section 10/404 permit from the Corps, which qualifies as an action by a federal agency for purposes of Section 7 of the ESA. Pursuant to Section 7, the Corps is required to produce a biological evaluation (BE) of the potential effect of issuing the permit on listed species or their critical habitat. To help the Corps evaluate the potential effects of the proposed project on listed species, MCS Environmental, Inc. (MCS) has prepared this Biological Assessment (BA) on the behalf of SSI.

To determine if listed species or their critical habitat are in the vicinity of the proposed project, MCS consulted the National Marine Fisheries Service (NMFS), Northwest Region <http://www.nwr.noaa.gov/esalist.htm> and sent a written request to the US Fish and Wildlife Service (USFWS). Based on information from the NMFS Website and a response from USFWS (McMaster, K., USFWS, pers. com., June 12, 2003; Appendix A), the following listed species may occur in the project area and are therefore addressed in this BA:

- Lower Columbia River chinook salmon (*Oncorhynchus tshawytscha*), listed as threatened in 1999.
- Upper Willamette River chinook salmon (*O. tshawytscha*), listed as threatened in 1999.
- Columbia River run chum salmon (*O. keta*), listed as threatened in 1999.
- Lower Columbia River steelhead trout (*O. mykiss*), listed as threatened in 1998.
- Upper Willamette River steelhead trout (*O. mykiss*), listed as threatened in 1999.
- Bald eagle (*Haliaeetus leucocephalus*), listed as threatened in 1978.
- Water howellia (*Howellia aquatilis*), listed as threatened in 1994.

SCHN00243549

This BA also addresses southwestern Washington–Columbia River coastal cutthroat trout (*O. clarki clarki*), a species proposed for listing and Lower Columbia River–Southwest Washington coho salmon (*O. kisutch*), a candidate for listing. Should cutthroat trout or coho salmon become listed during the life of the proposed project, this BA could be used to aid the Corps during any subsequent Section 7 consultation with NMFS related to these species.

Golden paintbrush (*Castilleja levisecta*), Willamette daisy (*Erigeron decumbens* var. *decumbens*), Bradshaw's lomatium (*Lomatium bradshawii*), Kincaid's lupine (*Lupinus sulphureus* var. *kincaidii*), and Nelson's checker-mallow (*Sidalcea nelsoniana*) are species listed as threatened or endangered but are not addressed in this BA because the habitats required by these species are not within the action area (Federal Register Vol. 58, No. 28; Vol. 62, No. 112; and Vol. 65, No. 16).

2.0 PROJECT DESCRIPTION

2.1 PROJECT AND ACTION AREAS

The "project area" is defined as Berths 4 and 5 at the International Terminals site on the Willamette River at Section 35, Township 2N, Range 1W (Figure 1). Photographs of the project area are in Appendix B.

The "action area" for fish resources is defined as the area potentially impacted by maintenance dredging activities. Therefore the action area is defines as the dredging area plus an additional 500 feet riverward, 1,000 feet upstream and 1,000 feet downstream of the dredging area. The "action area" for avian species is defined as a one-mile radius around the project area.

2.2 PROPOSED ACTION DESCRIPTION

SSI proposes to conduct maintenance dredging of Berths 4 and 5 at the International Terminals site to maintain safe navigation access and berthing for the dock facilities by conducting periodic maintenance dredging as needed. The berths have been maintained under previous maintenance dredging permits (US Army Corps of Engineers Section 10/404 Permit #92-00812 and Oregon Division of State Lands Removal–Fill Permit No. 3701). The site is designated for marine industrial use by the Lower Willamette River Management Plan, which recognizes the need to protect and fully use the limited areas of Portland Harbor so designated. Over the past three decades, the site has been primarily used to support metal recycling and vessel dismantling operations, as well as temporary moorage.

The project involves dredging the area to a maximum depth of –36 to –42 feet Columbia River Datum (CRD) (Figures 2 and 3). The proposed dredge footprint covers about 6.6 acres with a length

SCHN00243550

of about 1600 feet and a maximum width of 220 feet. The initial dredge volume associated with the proposed dredge prism is 61,000 cubic yards (cy).

SSI proposes to dredge another 40,000 cy as needed for ongoing maintenance (e.g. 20,000 cy every other year on average in years two through five, based on a five-year permit as shown in Table 1). Dredging will be by clamshell bucket, with transport to approved upland facilities or locations by barge, truck or rail. Factors such as bucket impact, penetration, withdrawal, and dewatering have been identified as contributing to the resuspension of sediment during clamshell dredge operation (e.g., Hayes et al. 1988). Most of the dewatering will occur as the clamshell excavates and transfers the individual load, which occurs with all dredging operations. The material will have high water content, and some release is expected. The rate at which suspended sediments settle back to the bottom is generally exponential with rapid declines within 200 to 400 feet (Collins 1995). Because of this rapid resettlement, it is anticipated that the area experiencing higher turbidity levels would be relatively small.

The proposed action (i.e. maintenance dredging of an existing facility using a clamshell bucket) and site conditions (see Section 3.0) are consistent with the conditions specified in the *Programmatic Biological Assessment for Categories of Activities Requiring Department of the Army Permits* (Corps 2000b) and NMFS biological opinion of the programmatic BA (NMFS 2002).

2.3 CONSERVATION MEASURES

Construction would occur during times when chinook and chum salmon and steelhead trout are least likely to be present in the action area. All in-water work is scheduled for the in-water work window for the Willamette River (from July 1 through October 1 and December 1 through January 31). However, the urgency of the initial dredge and the permitting time frame may require some work during the regularly scheduled closure to allow completion of the initial dredge. Some construction may occur during the bald-eagle wintering season (October 31 – February 31).

In addition to timing in-water work to avoid the juvenile migration period, SSI proposes to use best management practices during maintenance dredging as outlined in NMFS (2002) and the Corps Nationwide Permit for maintenance dredging to protect water quality and benthic resources. The proposed dredging will provide one foot of advanced maintenance (already accounted for in the maximum proposed dredge depths) to minimize maintenance dredging events.

SCHN00243551

3.0 EXISTING ENVIRONMENTAL CONDITIONS AND EFFECTS OF THE ACTION

This section discusses existing environmental conditions and any temporary and permanent effects of project activities (Section 2.2), as well as the net effects of those activities (Table 2). It discusses only those environmental attributes and associated components of habitat quality that are important to the listed species addressed, and that are likely to be affected by the project in some way.

3.1 GENERAL

3.1.1 Existing Conditions

Approximately half of the Lower Willamette River flows through forested areas, one third through agricultural areas, and five percent through urban areas, such as Portland. The International Terminals site is located at river mile (RM) 3.6 in Portland. Land use surrounding the site is primarily industrial, and riverbanks have been heavily modified with riprap or bulkheads. Berths 4 and 5 are located in the Willamette River. The site was originally developed in the early 1940's for military ship construction. Berth 4 is currently used to export bulk metal products with a conveyor system. Berth 5 has a floating dock with a crane and is used for temporary moorage.

3.1.2 Effects of the Action

The proposed project will not result in increased boat traffic or associated noise.

A clamshell dredge will be used for the proposed project. Increased noise from dredging may cause salmonids, other fish species, and bald eagles to avoid the area during construction. Clamshell buckets are not expected to entrain juvenile, sub–adult, or adult salmonids, but may entrain demersal fish and epibenthic invertebrates.

Results of studies on the effects of waterborne sound on fish behavior have been ambiguous and do not allow for prediction of responses (Popper and Carlson 1998). The level at which fish can detect sound depends upon the level of background noise. Sound must be at least 10 dB more intense than background noise to avoid being masked by ambient noise at the same or nearby frequencies (Tavolga 1971). Popper and Carlson (1998) note that the effects of noise depend greatly on the flow field in which the noise occurs. The level of ambient or background noise can drastically reduce a fish's ability to detect other sounds. Wind and precipitation at the surface, water turbulence, animal sounds, human activity and many other factors create significant levels of underwater noise with or without ice cover (ICES 1994, Richardson et al. 1995, and H. Cleator, pers. com. as in Stewart 2001). Since most background noise is within the hearing range of fishes, the noise generated by

SCHN00243552

background conditions and river flows adjacent to the project area will probably modify the reaction of fish to noise generated by the project

Above-water noise and movement of machinery at the site are much more likely to frighten away fish predators such as kingfishers, herons, grebes, and mergansers, than in–water noise is to frighten fish into areas where they might be more vulnerable to predators such as native char, cutthroat trout, and juvenile coho salmon.

Proposed maintenance dredging will allow present operations to continue, and noise generated will not differ much from existing operations at this site and many other sites along the Willamette River. Because the primary noise sources will be about 50 feet from shore, smaller juvenile salmonids moving along the shoreline would likely remain nearshore, rather than moving offshore toward the noise. Fish traveling downstream in the channel would avoid moving barges and tugs by moving away from the vessel path and diving deeper. Because of expected low densities of potential fish predators on juvenile salmonids in mid–channel, this short-term avoidance behavior is unlikely to result in increased predation losses.

3.2 WATER QUALITY AND STORMWATER

3.2.1 Existing Conditions

Urbanization has reduced water quality in the area via direct inputs of municipal and industrial discharges and indirect inputs from agricultural, silvicultural, urban, and industrial land. The Willamette River is currently on the 1998 Oregon Department of Environmental Quality (ODEQ) 303d list as impaired for temperature, bacteria, biological criteria, and toxics. However, ODEQ has been monitoring water quality in the Lower Willamette basin since 1986 with special intensive studies in the Tualatin and Lower Willamette subbasins in 1986-1990. These studies show that water quality in the Lower Willamette Basin has improved significantly (Cude 2003).

3.2.2 Effects of the Action

Because the proposed maintenance dredging will not increase impervious surfaces, stormwater runoff will not increase. The proposed maintenance dredging will not increase boat traffic, so the chance of water quality degradation from pollution from boats will not increase.

The proposed maintenance dredging will cause temporary and localized impacts on water quality in the vicinity of active dredging. Turbidity will increase slightly in a limited mixing zone downstream of active work areas. Elevated turbidity plumes that may occur in localized areas near active dredging should be dissipated relatively rapidly by tidal and river currents (e.g., FSI et al. 1999).

SCHN00243553

In-water work will be conducted during periods when few if any juvenile anadromous fish will be present.

Juvenile salmon have been shown to avoid areas of high turbidities (e.g., Servizi 1988), although they may seek out areas of moderate turbidity (10 to 80 nephelometric turbidity units [NTU]), presumably as cover against predation (Cyrus and Blaber 1987a,b). Feeding efficiency of juveniles is also impaired by turbidities over 70 NTU, well below sub-lethal stress levels (Bisson and Bilby 1982). Reduced preference by adult salmon homing to spawning areas has been demonstrated where turbidities exceed 30 NTU (20 mg/L suspended sediments). However, chinook salmon exposed to 650 mg/L of suspended volcanic ash were still able to find their natal water (Whitman et al. 1982). Based on these data, it is unlikely that the locally elevated turbidities generated by the proposed action would directly affect juvenile or adult salmonids that may be present.

Short-term effects from increased turbidity are expected during dredging, but these effects from sediment resuspension should be only temporary. Dredging is not expected to result in any long-term adverse changes in levels of chemical contamination, temperature, or dissolved oxygen. Therefore, the net effects of dredging will be to maintain water quality in the project area.

3.3 FLOW AND CURRENT PATTERNS

3.3.1 Existing Conditions

Flows in the Willamette River are controlled by 13 impoundments on several of its larger tributaries and by the Willamette Falls at RM 26.5. Below the falls, the Willamette River is tidally influenced by the Pacific Ocean a hundred miles to the west (Corps 2000a) as well as flow conditions in the Columbia River. The width of the Willamette River at the project site is approximately 1700 feet wide during typical river flows with maximum depths of approximately –50 feet to –60 feet CRD in the vicinity of berths 4 and 5 at International Terminals.

3.3.2 Effects of the Action

The proposed maintenance dredging is not expected to alter flow or current patterns of the river since the proposed changes in the bathymetry are minor in relation to the cross sectional area of the river at this location.

SCHN00243554

3.4 SEDIMENTS, SUBSTRATE, AND BATHEMETRY

3.4.1 Existing Conditions

Currently the depth within the existing berths ranges from –22 feet CRD to –51 feet CRD. Dredging will change these depths to –36 feet CRD in berth 5 and –42 feet CRD in berth 4. Dredging will remove 61,000 cy of sediment in the first year of the permit, followed by an additional 20,000 cy every other year on average over the remainder of the permit duration. The sediments exposed by dredging are expected to be similar to surficial sediments present throughout the project area.

MCS collected two sediment cores in the berths during March 2003 and Floyd Snider McCarthy, Inc. evaluated them using the analyte list suggested in the Dredged Material Evaluation Framework (DMEF) (Corps 1998). Data were compared to the DMEF values, probable effects concentration (PEC) values for freshwater sediment quality developed by MacDonald et al. (2000) and Ingersoll et al. (2000), and Portland Harbor Area-Wide Sediment baseline values (ODEQ 1999).

In general, there were very few DMEF screening level exceedances (5 total) and these occurred only in surface composites. Samples considered representative of the post-dredge surface were largely devoid of detections and when detects occurred, they were many times below screening levels. Although one surface composite had PEC exceedances for 3 PAHs, no exceedances occurred at the representative post-dredge depth. Additionally, all exceedances are within the Portland Harbor Area-Wide Sediment baseline values (FSMI 2003).

3.4.2 Effects of the Action

Maintenance dredging in the project area should maintain sediment quality. Dredging will not affect sedimentation sources or rates. Because most of the sediments do not contain contaminants above DMEF screening levels, resuspension of sediments is not expected to release contaminants into the water column.

Shallow water habitat (< 20 feet in water depth) provides food resources and migration routes for juvenile salmonids (Simenstad et al. 1999). Salmonid habitat may suffer a minor net decline in function due to the deepening. The proposed dredging will create steeper slopes along the edge of the dredge area and deepen the dredge area. However, 76% percent of the initial dredge prism lies below an existing mudline elevation of –20 feet CRD. In subsequent years of the permit it is expected that almost all the dredging will occur below existing mudline elevations of –20 feet CRD. Other than approximately 1.6 acres of dredging area in the first year of the permit all the remainder of the proposed dredging is expected to be at depths below –20 feet CRD (i.e. the lower limit of shallow water habitat). The contribution of epibenthic prey to salmonids from the small subtidal area to be dredged should be limited by the depths within the proposed dredge prism. The adjacent

SCHN00243555

Willamette River channel and associated shallow-water areas are much larger than the area being dredged, so no adverse impact is anticipated on salmonids foraging on benthic invertebrates in the spring following dredging. By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period. Because of the limited area of dredging in depths preferred by foraging salmonids and the rapid recolonization of benthic and epibenthic biota, the proposed dredging is not expected to have any short- or long-term direct effects on the juvenile salmonid foraging habitat.

No known spawning habitat exists within the action area, therefore any potential temporary suspension of sediments is not expected to embed spawning gravels.

3.5 SHORELINE CONDITIONS

3.5.1 Existing Conditions

Historically the Willamette Falls was an impassible fish barrier to many salmonids until fish ladders were constructed in the early 1900s. Berths 4 and 5 do not hinder fish access in the Willamette River.

Riparian vegetation has been greatly altered in the Lower Willamette River Basin. Little to no riparian vegetation exists in the action area along the eastern shore of the Willamette River or in the International Terminals site. However, riparian vegetation cover a large area along the western shore of the Willamette across from the slip at Forest Park. Black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), Oregon white ash (*Franxinus latifolia*), red alder (*Alnus rubra*), and willow (*Salix* spp.) are typical trees species along the Willamette River. Typical shrub species include Himalayan blackberry (*Rubus discolor*) and Scotch broom (*Cytisus scoparius*).

3.5.2 Effects of the Action

Temporary increases in noise or turbidity from dredging activities may prevent access and refuge for salmonids and other species in the immediate vicinity of the work areas (see Sections 3.1 and 3.2).

The proposed dredging will occur below -1 feet CRD and therefore will not affect the shoreline or riparian habitat.

SCHN00243556

3.6 ACCESS AND REFUGIA

3.6.1 Existing Conditions

The International Terminals slip could provide refuge for salmonids during periods of high flow.

3.6.2 Effects of the Action

Temporary increases in noise or turbidity from dredging may prevent access and refuge for salmonids and other species in the immediate vicinity of the work areas during the period of dredging activity (see Sections 3.1 and 3.2).

3.7 BIOTA CONDITIONS

3.7.1 Existing Conditions

Benthic and epibenthic organisms in the Lower Willamette River basin include oligochaetes, mysid shrimp, amphipods, chironomid larvae, crayfish, and mollusks (Sanborn 1973 and FES 1995). Fish species include salmonids, largescale sucker (*Catostomus macrocheilus*), northern pikeminnow (*Ptychocheilus oregonesis*), perch (*Cymatogaster aggregate*), peamouth (*Mylocheilus caurinus*), sculpin (Cottidae), bluegill (*Lepomis macrochirus*), threespine stickleback (*Gasterosteus aculeatus*), and sturgeon (*Acipenser* spp.) (FES 1999).

3.7.2 Effects of the Action

Dredging will eliminate nonmobile benthos over approximately 6.6 acres of the bottom in the project area, temporarily reducing abundance and diversity. The newly exposed bottom should be quickly recolonized by infauna and epifauna (McCauley et al. 1977; Richardson et al. 1977; Romberg et al. 1995; Wilson and Romberg 1995). Diversity and health of the benthic assemblage recolonizing the dredged area should recover quickly and be similar to those of the subtidal benthic community now present. Areas adjacent to the project site will provide local larval sources for recolonization. Because of the prolonged period of planktonic larval development (several days to weeks) for most benthic species, currents will likely carry most larvae into the project area from plankton spawning outside of it.

By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period. The contribution of epibenthic prey from the small subtidal area to be dredged is limited by the area's depth. Because the adjacent Willamette River and associated

SCHN00243557

shallow-water areas are so much larger than the area to be dredged, dredging should not harm salmonids foraging on benthic invertebrates.

Repeated disturbance from current use of the action area reduces ecological diversity. Proposed dredging will not increase this disturbance and therefore is not expected to have short-term direct effects on ecological diversity in the project area.

Avian species that now use the action area or that fly over it during dredging may modify their use of the area, moving away from construction activity.

Proposed dredging will not have short-term direct effects on aquatic vegetation within the project area because there are no known macroalgae beds there.

Proposed dredging will not have short-term direct effects on the pelagic prey in the project area because it will not degrade water quality enough to affect pelagic assemblages.

SCHN00243558

4.0 EVALUATION OF EFFECTS ON LISTED SPECIES

This section discusses life histories of listed species and the use of the action area. It evaluates temporary and permanent, direct and indirect effects on listed species from project activities (Section 2.2) and includes the effects determination. Detailed life histories are discussed in Corps 2000b. This section discusses only attributes of listed species that are likely to be affected by the project in some way.

An analysis of effects on Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery and Conservation Act is described in Appendix C.

4.1 LOWER COLUMBIA AND UPPER WILLAMETTE CHINOOK

4.1.1 Life History and Critical Habitat

Chinook salmon prefer to spawn and rear in the mainstem of rivers and larger streams. Although water temperatures determine the incubation period, fry typically hatch in about eight weeks. After emergence, juvenile chinook salmon migrate to saltwater during their first year (Corps 2000b).

Critical habitat is currently being reconsidered for Lower Columbia and Upper Willamette chinook. On April 30, 2002, the US District Court for the District of Columbia approved a NMFS consent decree withdrawing a February 2000 critical-habitat designation for these and 17 other evolutionary significant units (ESUs) (NMFS 2000). Critical habitat consists of the water, substrate, and adjacent riparian zone of accessible estuarine and riverine reaches.

4.1.2 Use of the Action Area

Most chinook in the project area are likely to be migrating juveniles and adults. Juvenile chinook feed on benthic and epibenthic organisms in shallow nearshore areas. Adult chinook typically feed on other fish such as whitefish, sculpin and other trout. Therefore, adult chinook in the action area would likely be feeding on fish in the deeper water of the action area rather than the benthic and epibenthic organisms that are primary prey for juveniles.

4.1.3 Effects of the Action

No direct mortality of chinook is expected from any aspect of project construction, which will occur when few, if any, juvenile salmonids are present. Adult and juvenile chinook can avoid any proposed project conditions that would result in direct impacts (e.g. entrainment in the bucket) on them. Dredging will likely increase turbidity in the immediate vicinity. This impact will be only

SCHN00243559

temporary and the suspended sediment will dissipate quickly. Dredging will temporarily eliminate benthic organisms, an important food source for juvenile chinook. By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period (McCauley et al. 1977; Richardson et al. 1977; Romberg et al. 1995; Wilson and Romberg 1995). The contribution of epibenthic prey from the small subtidal area to be dredged is limited by the area's depth. Because the adjacent Willamette River and associated shallow-water areas are so much larger than the area to be dredged, dredging should not harm salmonids foraging on benthic invertebrates. Seventy six percent of the area to be dredged in the first year of the permit is below -20 feet CRD, deeper than migrating juveniles prefer (Simenstad et al. 1999). In subsequent years of the permit all maintenance dredging is anticipated to be below -20 feet CRD.

4.1.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project may affect, but is not likely to adversely affect chinook.

4.2 COLUMBIA RIVER CHUM SALMON

4.2.1 Life History and Critical Habitat

Chum salmon prefer to spawn at the head of the tidewater. Although the incubation period is determined by water temperatures, fry hatch in two weeks to four months. After emerging from the gravel, fry migrate immediately to marine waters, limiting their freshwater life history to a few days. Rearing and development to adulthood occur in the marine environment (Corps 2000b).

Critical habitat is currently under development for Columbia River chum following the NMFS consent decree withdrawing critical habitat designation for this and 18 other ESUs (NMFS 2000).

4.2.2 Use of the Action Area

Like chinook salmon, the majority of chum that occur within the project area are likely to be migrating juveniles and adults. Therefore, chum in the action area may be feeding on epibenthic organisms in the action areas as well as on pelagic organisms in water deeper than the action area.

4.2.3 Effects of the Action

The effects of the proposed action on chum would be similar to those described for chinook. However, unlike juvenile chinook, juvenile chum may not feed while migrating to saltwater.

SCHN00243560

Therefore, the impacts on epibenthic prey from construction may affect chum even less than the other listed salmonids.

4.2.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project may affect, but is not likely to adversely affect chum salmon.

4.3 LOWER COLUMBIA RIVER AND UPPER WILLAMETTE STEELHEAD TROUT

4.3.1 Life History and Critical Habitat

Steelhead trout spawn in tributaries of small and large rivers in late winter through spring. Juveniles migrate to the ocean after rearing in large rivers for one to four years. Steelhead spend one to three years in the ocean before returning to their natal streams to spawn. Unlike most anadromous salmonids, steelhead trout may return to their natal streams several times to spawn before they die (Corps 2000b).

Critical habitat has not been designated for steelhead trout (NMFS 2000).

4.3.2 Use of the Action Area

Juveniles, sub–adult, or adult steelhead trout may occur within the project area. Adult and sub-adult steelhead trout are typically piscivores, feeding on other fish such as whitefish, sculpin and other trout. Therefore, the adult and sub–adult steelhead trout in the action area would likely be feeding in the deeper water of the action area on fish rather than the insects that are primary prey for juveniles.

4.3.3 Effects of the Action

No direct mortality of steelhead trout is expected from any aspect of project construction, which will occur when few, if any, juvenile salmonids are present. Adult and juvenile steelhead trout can avoid any proposed project conditions that would result in direct impacts (e.g. entrainment in the bucket) on them. Dredging will likely increase turbidity temporarily in the immediate vicinity. Suspended sediment will dissipate quickly.

Dredging will eliminate benthic organisms, an important food source for juvenile steelhead trout. By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period (McCauley et al. 1977; Richardson et al. 1977; Romberg et al. 1995;

SCHN00243561

Wilson and Romberg 1995). The contribution of epibenthic prey from the small subtidal area to be dredged is limited by the area's depth. Because the adjacent Willamette River and associated shallow-water areas are so much larger than the area to be dredged, dredging should not harm salmonids foraging on benthic invertebrates. Seventy six percent of the area to be dredged is below -20 feet CRD, deeper than foraging juveniles prefer (Simenstad et al 1999). In subsequent years of the permit all maintenance dredging is anticipated to be below –20 feet CRD.

4.3.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project may affect, but is not likely to adversely affect steelhead trout.

4.4 BALD EAGLE

4.4.1 Life History and Critical Habitat

In Oregon, bald eagle breeding territories are mainly located in coniferous, uneven-aged stands with old-growth components. A variety of habitat characteristics influence territory size and configuration, including availability and location of perch trees for foraging, quality of foraging habitat, and distance of nests from waters supporting adequate food supplies. Bald eagles typically build nests in old-growth trees, which are generally used in successive years. Courtship and nest-building begin in January and February. Egg laying begins in March or early April, and eaglets hatch in mid-April or early May. They fledge in mid-July and often remain in the vicinity of the nest for another month (Rodrick and Milner 1991; Corps 2000b).

Eagles often depend on dead or weakened prey, and their diet may vary locally and seasonally. During the breeding season they eat anadromous and warmwater fishes, small mammals, carrion, small waterfowl, and seabirds. Various carrion, including spawned-out salmon, are important food sources during fall and winter (Rodrick and Milner 1991).

Critical habitat has not been designated for bald eagles.

4.4.2 Use of the Action Area

A species list obtained from the USFWS indicates that bald eagles may occur in the vicinity of the proposed project. No bald eagle nests are located in the action area. The closest nests are more than three 3 miles north and northwest of it (G. Dorsey, pers. comm., June 5, 2003).

SCHN00243562

The availability of suitable nest trees is often a limiting factor in the establishment of eagle territories (Carroll and Pentec 1992). Although there are no large trees in the action area for the bald eagles to roost or nest in, bald eagles occasionally fly over the area and may rest or perch on nearby pilings or cottonwood trees.

4.4.3 Effects of the Action

Construction could occur during the nesting season. However, since it would be more than 3 miles from the closest bald eagle nests, construction would not directly disrupt eagle nesting and rearing of young. No communal night roosts or perch trees are near the site, so wintering bald eagles would not be affected by construction that may occur during the wintering season. Foraging bald eagles may be displaced by the noise of heavy equipment, but the availability of prey would not be significantly disrupted by the proposed maintenance work. Given the surrounding urbanization and industrialization, eagles using the area are likely accustomed to high levels of human activity in the action area.

4.4.4 Effect Determination

Dredging will not affect nesting or wintering habitat or behaviors, and only minor disruptions to foraging may occur, so the proposed project may affect, but is not likely to adversely affect the bald eagle.

4.5 WATER HOWELLIA

4.5.1 Life History and Critical Habitat

Water howellia has historically occurred over a large area of the Pacific Northwest. Water howellia occurs in vernal ponds and shallow water edges of larger ponds, oxboughs, sloughs, or other slow-moving water bodies with fine sediment.

Critical habitat has not been designated for water howellia (Corps 2000b).

4.5.2 Use of the Action Area

There are no records of water howellia occurring in the action area and there is no habitat capable of supporting it there. Shallow–water areas in the action area are covered with riprap and do not contain the fine sediment preferred by water howellia. Additionally, boat traffic is likely to create sufficient wave action in the area to prevent establishment of water howellia, even if suitable substrate existed between riprap boulders.

SCHN00243563

4.5.3 Effects of the Action

Because water howellia is not known to exist in the action area and the action area does not contain habitat suitable for water howellia, dredging activities will not affect water howellia.

4.5.4 Effect Determination

Dredging activities will not affect potential water howellia habitat, as dredging will occur in water deeper than water howellia can tolerate. In addition, there is no suitable water howellia habitat in the action area. Thus the proposed project will have no effect on water howellia.

4.6 COASTAL CUTTHROAT TROUT

4.6.1 Life History and Critical Habitat

Coastal cutthroat trout spawn in small tributaries of small and large rivers in late winter through spring. Juveniles migrate downstream between March and June and may make several freshwater migrations before migrating to the ocean. Most coastal cutthroat trout are 2 to 3 years old before migrating to the ocean. Coastal cutthroat trout spend less than one year in the ocean before migrating back to their natal streams to spawn. Unlike most anadromous salmonids, coastal cutthroat trout do not die after spawning (Corps 2000b).

Critical habitat has not been designated for coastal cutthroat trout (NMFS 2000).

4.6.2 Use of the Action Area

Most coastal cutthroat trout in the project area are likely to be adults and sub–adults from nearby basins. Adult and sub–adult coastal cutthroat trout typically feed on other fish such as whitefish, sculpin, and other trout. Therefore, the adult and sub–adult coastal cutthroat trout in the action area would likely be feeding in the deeper water of the action area on fish rather than the organisms that serve as primary prey for juveniles.

4.6.3 Effects of the Action

No direct effect on coastal cutthroat trout is expected to result from any aspect of project construction, which will occur when few, if any, juvenile salmonids are present. Adult salmonids can avoid any conditions that would result in direct impacts (e.g. entrainment in the bucket) on them. Dredging will likely increase turbidity temporarily in the immediate vicinity. Suspended sediment will dissipate quickly.

SCHN00243564

Dredging will eliminate benthic organisms, an important food source for juvenile coastal cutthroat trout. By the spring outmigration period after dredging, the productivity of epibenthic prey for juvenile salmonids should be recovering, but may be less than the ultimate production of the area after a 1- to 2-year recolonization period (McCauley et al. 1977; Richardson et al. 1977; Romberg et al. 1995; Wilson and Romberg 1995). The contribution of epibenthic prey from the small subtidal area to be dredged is limited by the area's depth. Because the adjacent Willamette River and associated shallow-water areas are so much larger than the area to be dredged, dredging should not harm salmonids foraging on benthic invertebrates. Additionally, seventy six percent of the area to be dredged is below –20 feet CRD, deeper than foraging juveniles prefer (Simenstad et al. 1999). In subsequent years of the permit all maintenance dredging is anticipated to be below –20 feet CRD.

4.6.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project will not jeopardize coastal cutthroat trout. Should coastal cutthroat trout become listed the proposed project may affect, but is not likely to adversely affect, cutthroat trout or their habitat.

4.7 LOWER COLUMBIA RIVER COHO SALMON

4.7.1 Life History and Critical Habitat

Coho spawn in small tributaries of small or large rivers in late winter through spring. Juveniles migrate downstream between April and August. Juvenile coho may spend anywhere from a few weeks to two years in freshwater before migrating to the ocean. Coho spend one to two years in the ocean before migrating back to their natal streams to spawn (Corps 2000b).

Critical habitat has not been designated for Lower Columbia River coho salmon.

4.7.2 Use of the Action Area

Most coho in the project area are likely to be adults and sub–adults from nearby basins. Adult and sub–adult coho typically feed on other fish such as whitefish, sculpin, and other trout. By the time adult coho reach the Willamette River, they probably are not feeding. Sub–adult coho in the action area would likely be feeding in the deeper water of the action area on fish rather than the benthic and epibenthic organisms that serve as primary prey for juveniles.

SCHN00243565

4.7.3 Effects of the Action

The effects of the proposed action on coho would be similar to those described for chinook. Impacts on epibenthic prey from construction could have less impact on coho than other salmonid species because coho found in the action area are likely to be less dependant on epibehtic prey than chinook.

4.7.4 Effect Determination

Because of the lack of significant water quality impacts, and the short-term, localized nature of any reductions in prey abundance, the proposed project will not jeopardize coho salmon. If coho are listed, the proposed project may affect, but is not likely to adversely affect, coho salmon or their habitat.

SCHN00243566

5.0 INTERRELATED, INTERDEPENDENT, AND CUMULATIVE EFFECTS

Cumulative effects are those effects of future state or private activities, not involving activities of other federal agencies that are reasonably certain to occur within the area of the federal action subject to consultation (50 CFR 402.02 Definitions). Future federal actions unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to Section 7 of the ESA. Interdependent effects are defined as actions with no independent utility apart from the proposed action. Interrelated effects include those that are part of a larger action and depend on the larger action for justification.

No interdependent or cumulative effects are known to occur that may adversely affect a listed, proposed, or candidate species within the action area. An interrelated action of the proposed action may be the occasional disturbance of the substrate from prop wash of tugs as they bring in barges or during the hauling out of barges or other vessels. Prop wash could result in small, temporary increases in turbidity. The periodic disturbance of the substrate caused by the prop wash could reduce the suitability of the substrate for colonization by benthic macroinvertebrates utilized as food by juvenile salmonids. However, these effects of prop wash being localized and temporary would have little affect on the growth or survival of juvenile salmonids.

SCHN00243567

6.0 SUMMARY

Construction activities would temporarily increase noise and turbidity, possibly causing listed species to avoid the immediate work area. Best management practices would be used to reduce these impacts. Thus, the proposed action:

- **may affect, but is not likely to adversely affect** chinook salmon,
- **may affect, but is not likely to adversely affect** chum salmon,
- **may affect, but is not likely to adversely affect** steelhead trout,
- **may affect, but is not likely to adversely affect** bald eagles, and
- will have **no effect** on water howellia.

SCHN00243568

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SCHN00243569

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SCHN00243570

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SCHN00243571

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SCHN00243572

Oregi

DEPARTMENT
ENVIRONMEI
QUALITY

WATER QUALITY 401 CERTIFICATION
Public Notice

WHO IS THE APPLICANT: See the attached Department of State Lands (DSL) and or Corps of Engineers (COE) permit application.

WHAT IS PROPOSED: See the attached DSL and or COE permit application on the proposed project.

DESCRIPTION OF DISCHARGES: See the attached DSL and or COE permit for details.

NEED FOR CERTIFICATION: Under Section 401 of the Clean Water Act, any activity that requires a federal permit or license requires certification from the State that any discharge will meet the requirements of the Clean Water Act and State water quality standards.

PUBLIC PARTICIPATION: Written comments must be received by 5 p.m. no later than thirty days from the notice issued date at the Oregon Department of Environmental Quality, Water Quality Division, 811 S.W. 6th Ave., Portland, Oregon 97204 to be included in the official record. Public comments should specifically include new data addressing how the project would affect requirements of the Clean Water Act and Oregon water quality standards.

The applicant, any affected state, or any interested agency, person or group of persons, may request a publi hearing with respect to this certification application. If the Director determines new data would be produced a public hearing will be held prior to the director's final determination. There shall be notification of such a hearing.

HOW TO GET ADDITIONAL INFORMATION: The application and related documents are available for inspection during the public comment period, Monday through Friday, between 9:00 am to noon and 1:00 pm to 4:00 pm at DEQ's Portland office. Please call in advance for an appointment 229-5279.

People wishing to receive a copy of the DSL/COE application can call DEQ at (503) 229-5279 or toll free in Oregon at 1-800-452-4011. Public Records Act charges may apply. Persons with a hearing impairment ca receive help by calling DEQ's TDD number at (503) 229-6993.

WHAT HAPPENS NEXT: After the conclusion of the public participation period, the permit will be issued a proposed, issued with modifications, or denied, depending on comments received during the public participation process. Interested parties can request to be notified of the final determination by writing or calling the Department at the above address.

ACCESSIBILITY INFORMATION: This publication is available in alternate format (e.g. large print, braille) upon request. Please contact Ed Sale in DEQ Public Affairs at 229-5766 to request an alternate format.

811 SW Sixth
Portland, OR 9
(503) 229-5696
TDD (503) 229-

DEQ-1

Oregon
Theodore R. Kulongoski, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 378-3805
FAX (503) 378-4844
www.oregonstatelands.us.

State Land Board

Theodore R. Kulongoski
Governor

Bill Bradbury
Secretary of State

Randall Edwards
State Treasurer

October 3, 2006

JMR600/30895
SCHNITZER STEEL INDUSTRIES INC
ATTN JIM JAKUBIAK
PO BOX 10047
PORTLAND OR 97296-0047

RE:	Permit No.:	30895-RP LAS App. No.: APP0030895
	Waterway:	Willamette River, Multnomah County
	Expiration Date:	January 14, 2007

Your removal-fill permit is due to expire soon. If you need to continue the activity outlined in the permit, it is necessary to renew your permit. Please mark the appropriate box below concerning the status report of the project completion and return this letter. If you wish to renew, also send the renewal fee along with the payment stub to the P.O. Box on the enclosed invoice **no later than November 17, 2006. You may fax your response to (503) 378-4844 and send your renewal fee with the copy of this billing letter.**

If you wish to renew your permit, please note: Failure to request renewal at least 45 days before permit expiration requires that you resubmit a new application for a permit.

You should also be aware that we will be revising Condition #3 of your permit, which addresses the in-water work period. If you have questions, please contact Jevra Brown at extension 297.

If you have any other questions or need additional applications, please call the Wetlands & Waterways Conservation Division at 378-3805 extension 234.

( ) **DO NOT RENEW:** (Please mark one. Do not remit payment.)
- ( ) The project has been completed.
- ( ) I/We have decided not to do this project.

(X) **PLEASE RENEW:** (please mark all that apply)
- (X) The project has **not** been completed.
- ( ) The project has not been started.
- ( ) The scope of the project has changed.

(X) **RENEWAL FEE ENCLOSED** (Please remit fee of $150. Attach the invoice payment stub.)

James L Jakubiak — November 11, 2006
Authorization Signature — Date

NOTE: If we have not received a response to this letter at least 45 days before expiration date noted above, we will consider the project complete and close the file. However, any wetland mitigation requirements (including those relating to the monitoring of wetland mitigation), regardless of the status of your permit, continue to be in force as specified by your permit.

J:\Renewal letters\2007\30895-RP.doc

Oregon
Department
of State Lands

775 Summer Street NE, Suite 100
Salem, Oregon 97301-1279
Phone: 503-378-3805
Fax: 503-378-4844

Fax Cover Sheet

From: Jackie Ross Phone: (503) 378-3805, Ext 234

To: Jim Jakubek Organization: Schnitzer Steel

Fax #: 503-286-6948 Phone #:

Re: DSL Permit # 30897-RP Renewal

Date: Time: # of pages including cover: 2

Urgent For Review Please Comment

Please Reply Please Recycle

Comments: Jim - Please send a copy of both Renewal Letters for 30895-RP & for 30897-RP along with a payment of 300.00 to P.O Box in Portland - So sorry for the confusion - Jackie

H:\Director\forms_charts\Fax cover sheet.doc

Oregon

Theodore R. Kulongoski, Governor

Department of State Lands
775 Summer Street NE, Suite 100
Salem, OR 97301-1279
(503) 378-3805
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State Land Board

Theodore R. Kulongoski
Governor

Bill Bradbury
Secretary of State

Randall Edwards
State Treasurer

November 15, 2006

JMR600/30897
SCHNITZER STEEL INDUSTRIES INC
ATTN JIM JAKUBIAK
PO BOX 10047
PORTLAND OR 97296-0047

RE: Permit No.: LAS App. No.: 30897-RP
Waterway: Willamette River, (Berths 1, 2 & 3)
Expiration Date: January 14, 2007

Your removal-fill permit is due to expire soon. If you need to continue the activity outlined in the permit, it is necessary to renew your permit. Please mark the appropriate box below concerning the status report of the project completion and return this letter. If you wish to renew, also send the renewal fee along with the payment stub to the P.O. Box on the enclosed invoice **no later than December 1, 2006. You may fax your response to (503) 378-4844 and send your renewal fee with the copy of this billing letter.**

If you wish to renew your permit, please note: Failure to request renewal at least 45 days before permit expiration requires that you resubmit a new application for a permit.

If you have any questions or need additional applications, please call the Wetlands & Waterways Conservation Division at 378-3805 extension 234.

( ) **DO NOT RENEW:** (Please mark one. Do not remit payment.)
- ( ) The project has been completed.
- ( ) I/We have decided not to do this project.

(X) **PLEASE RENEW:** (please mark all that apply)
- (X) The project has **not** been completed.
- ( ) The project has not been started.
- ( ) The scope of the project has changed.

X **RENEWAL FEE ENCLOSED** (Please remit fee of $150.00. Attach the invoice payment stub.)

James H Jakubiak
Authorization Signature

November 16, 2006
Date

NOTE: If we have not received a response to this letter at least 45 days before expiration date noted above, we will consider the project complete and close the file. However, any wetland mitigation requirements (including those relating to the monitoring of wetland mitigation), regardless of the status of your permit, continue to be in force as specified by your permit.

J:\Renewal letters\2007\30897-RP.doc

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PHONE: (503) 286-6976
FAX: (503) 286-6948

PROJECT NAME: 1200Z Stormwater Test

SUBMITTED: 03/31/05 12:15

REPORT DATE: 04/11/05 15:12 **REPORT NUMBER:** 5033110

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5033110-01	Stormwater #1	03/26/2005	0830	Water
5033110-02	Stormwater #3	03/26/2005	0835	Water
5033110-03	Stormwater #4	03/26/2005	0842	Water
5033110-04	Stormwater #5	03/26/2005	0848	Water
5033110-05	Stormwater #6	03/26/2005	0848	Water
5033110-06	Stormwater #15	03/26/2005	0858	Water
5033110-07	Stormwater #16	03/26/2005	0915	Water
5033110-08	Stormwater #20	03/26/2005	0930	Water

COPY

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5033110-01	**SAMPLE ID: Stormwater #1**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	3.7	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	4.0	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.063	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.114	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.58	mg/L	0.003	BKB	04/01/2005 14:33
5033110-02	**SAMPLE ID: Stormwater #3**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	12	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.066	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.119	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.61	mg/L	0.003	BKB	04/01/2005 14:33
5033110-03	**SAMPLE ID: Stormwater #4**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	21	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.055	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.084	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.90	mg/L	0.003	BKB	04/01/2005 14:33
5033110-04	**SAMPLE ID: Stormwater #5**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	60	mg/L	1.5	MRP	04/01/2005 12:42

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CI CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5033110-04	**SAMPLE ID: Stormwater #5**						
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.093	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.217	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.59	mg/L	0.003	BKB	04/01/2005 14:33
5033110-05	**SAMPLE ID: Stormwater #6**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	26	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.008	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.019	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.034	mg/L	0.003	BKB	04/01/2005 14:33
5033110-06	**SAMPLE ID: Stormwater #15**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	6.0	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	34	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.058	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.086	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.17	mg/L	0.003	BKB	04/01/2005 14:33
5033110-07	**SAMPLE ID: Stormwater #16**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	5.0	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.026	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.054	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.29	mg/L	0.003	BKB	04/01/2005 14:33
5033110-08	**SAMPLE ID: Stormwater #20**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	8.0	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.019	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.027	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.29	mg/L	0.003	BKB	04/01/2005 14:33

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COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PROJECT NAME: 1200Z Stormwater Test

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 12/14/04 15:39

REPORT DATE: 12/30/04 15:30 REPORT NUMBER: 4121411

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
4121411-01	Stormwater #1	12/13/2004	1800	Water
4121411-02	Stormwater #3	12/13/2004	1820	Water
4121411-03	Stormwater #4	12/13/2004	1830	Water
4121411-04	Stormwater #5	12/13/2004	1840	Water
4121411-05	Stormwater #6	12/13/2004	1850	Water
4121411-06	Stormwater #14	12/13/2004	1910	Water
4121411-07	Stormwater #16	12/13/2004	1925	Water
4121411-08	Stormwater #20	12/13/2004	1945	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
4121411-01	**SAMPLE ID: Stormwater #1**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	11.2	mg/L	2.0	PA	12/16/2004 09:57
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	280	mg/L	1.0	AKH	12/20/2004 14:18
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.20	mg/L	0.005	BKB	12/17/2004 14:17
LEAD - ICP		LEAD	0.691	mg/L	0.005	BKB	12/17/2004 14:17
ZINC - ICP		ZINC	2.2	mg/L	0.003	BKB	12/17/2004 14:17
4121411-02	**SAMPLE ID: Stormwater #3**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	9.6	mg/L	2.0	PA	12/16/2004 09:57
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	130	mg/L	1.0	AKH	12/20/2004 14:18
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.23	mg/L	0.005	BKB	12/17/2004 14:17
LEAD - ICP		LEAD	0.398	mg/L	0.005	BKB	12/17/2004 14:17
ZINC - ICP		ZINC	2.3	mg/L	0.003	BKB	12/17/2004 14:17
4121411-03	**SAMPLE ID: Stormwater #4**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	3.1	mg/L	2.0	PA	12/16/2004 09:57
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	48	mg/L	1.0	AKH	12/20/2004 14:18
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.12	mg/L	0.005	BKB	12/17/2004 14:17
LEAD - ICP		LEAD	0.210	mg/L	0.005	BKB	12/17/2004 14:17
ZINC - ICP		ZINC	0.49	mg/L	0.003	BKB	12/17/2004 14:17
4121411-04	**SAMPLE ID: Stormwater #5**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	4.4	mg/L	2.0	PA	12/16/2004 09:57
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	100	mg/L	1.0	AKH	12/20/2004 14:18
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.17	mg/L	0.005	BKB	12/17/2004 14:17
LEAD - ICP		LEAD	0.401	mg/L	0.005	BKB	12/17/2004 14:17

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Authorized for Release By:

Richard D. Reid - Laboratory Director

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COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

CI CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
4121411-04	**SAMPLE ID: Stormwater #5**						
Total Metals by Inductively Coupled Plasma							
ZINC - ICP	EPA 200.7/6010B	ZINC	0.92	mg/L	0.003	BKB	12/17/2004 14:17
4121411-05	**SAMPLE ID: Stormwater #6**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	PA	12/16/2004 09:57
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	14	mg/L	1.0	AKH	12/20/2004 14:18
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.023	mg/L	0.005	BKB	12/17/2004 14:17
LEAD - ICP		LEAD	0.040	mg/L	0.005	BKB	12/17/2004 14:17
ZINC - ICP		ZINC	0.10	mg/L	0.003	BKB	12/17/2004 14:17
4121411-06	**SAMPLE ID: Stormwater #14**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	2.4	mg/L	2.0	PA	12/16/2004 09:57
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	15	mg/L	1.0	AKH	12/20/2004 14:18
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.037	mg/L	0.005	BKB	12/17/2004 14:17
LEAD - ICP		LEAD	0.066	mg/L	0.005	BKB	12/17/2004 14:17
ZINC - ICP		ZINC	0.19	mg/L	0.003	BKB	12/17/2004 14:17
4121411-07	**SAMPLE ID: Stormwater #16**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	2.0	mg/L	2.0	PA	12/16/2004 09:57
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	12	mg/L	1.0	AKH	12/20/2004 14:18
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.033	mg/L	0.005	BKB	12/17/2004 14:17
LEAD - ICP		LEAD	0.019	mg/L	0.005	BKB	12/17/2004 14:17
ZINC - ICP		ZINC	0.20	mg/L	0.003	BKB	12/17/2004 14:17
4121411-08	**SAMPLE ID: Stormwater #20**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	PA	12/16/2004 09:57
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	18	mg/L	1.0	AKH	12/20/2004 14:18
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.009	mg/L	0.005	BKB	12/17/2004 14:17
LEAD - ICP		LEAD	ND	mg/L	0.005	BKB	12/17/2004 14:17
ZINC - ICP		ZINC	0.028	mg/L	0.003	BKB	12/17/2004 14:17

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March 26, 2005
Sampling Event

5.0 MONITORING PROGRAM

In compliance with the NPDES General Permit, stormwater samples will be collected from the site discharge twice each year, if possible. One of the sampling events will be conducted during the first month of the Fall during which stormwater discharge occurs. The second event will be conducted no less than 60 days after the first event.

Visual monitoring of the site stormwater discharge and at areas of potential pollutant contact is required during at least one storm event per month during the rainy season (approximately October through April) that results in at least one hour of continuous discharge. In addition, visual monitoring of discharge is required at least twice during the dry season (approximately May through September). These visual monitoring requirements will be met through monthly site inspections conducted as described in Section 4.0.

Collected stormwater samples must be representative of the discharge from the facility, and will be analyzed in accordance with the approved methods specified in 40 CFR 136.

Stormwater samples collected during the sampling events will be delivered to a laboratory for analysis for the parameters required by the NPDES General Permit, as summarized in Table 3.

Table 3: Stormwater Sample Analytical Requirements

PARAMETER	ANALYTICAL METHOD	EFFLUENT BENCHMARK
Total Copper	EPA 6010B	0.1 mg/l
Total Lead	EPA 7421	0.4 mg/l
Total Zinc	EPA 6010B	0.6 mg/l
pH	EPA 150.1	5.5 to 9.0 s.u.
Total Suspended Solids (TSS)	EPA 160.2	130 mg/l
Oil & Grease	EPA 413.1	10 mg/l
Floating Solids (associated with industrial activities)	Visual Observation	No Visible Discharge
Oil & Grease Sheen	Visual Observation	No Visible Sheen

The results of stormwater sample analyses will be tabulated and submitted to the DEQ's Western Region (Medford office) by July 15th for the preceding reporting period (July 1st through June 30th).

In the event that stormwater monitoring results indicate that a pollutant parameter for which the receiving water is water quality limited is being discharged in significant concentrations, a waste load allocation may be added to the permit conditions by the DEQ.

In the event that stormwater monitoring results indicate that a pollutant parameter is being discharged at a concentration that may be a threat to the water quality of the

SCHN00243592

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PROJECT NAME: 1200Z Stormwater Test

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 03/31/05 12:15

REPORT DATE: 04/11/05 16:12 **REPORT NUMBER:** 5033110 **PAGE:** 1 OF 2

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5033110-01	Stormwater #1	03/26/2005	0830	Water
5033110-02	Stormwater #3	03/26/2005	0835	Water
5033110-03	Stormwater #4	03/26/2005	0842	Water
5033110-04	Stormwater #5	03/26/2005	0848	Water
5033110-05	Stormwater #6	03/26/2005	0848	Water
5033110-06	Stormwater #15	03/26/2005	0858	Water
5033110-07	Stormwater #16	03/26/2005	0915	Water
5033110-08	Stormwater #20	03/26/2005	0930	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5033110-01	**SAMPLE ID: Stormwater #1**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	3.7	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	4.0	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.063	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.114	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.58	mg/L	0.003	BKB	04/01/2005 14:33
5033110-02	**SAMPLE ID: Stormwater #3**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	12	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.066	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.119	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.61	mg/L	0.003	BKB	04/01/2005 14:33
5033110-03	**SAMPLE ID: Stormwater #4**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	21	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.055	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.084	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.90	mg/L	0.003	BKB	04/01/2005 14:33
5033110-04	**SAMPLE ID: Stormwater #5**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	60	mg/L	1.5	MRP	04/01/2005 12:42

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REPORT DATE: 04/11/05 15:12 **REPORT NUMBER: 5033110**

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5033110-04	**SAMPLE ID: Stormwater #5**						
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.093	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.217	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.59	mg/L	0.003	BKB	04/01/2005 14:33
5033110-05	**SAMPLE ID: Stormwater #6**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	26	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.008	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.019	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.034	mg/L	0.003	BKB	04/01/2005 14:33
5033110-06	**SAMPLE ID: Stormwater #15**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	6.0	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	34	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.058	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.086	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.17	mg/L	0.003	BKB	04/01/2005 14:33
5033110-07	**SAMPLE ID: Stormwater #16**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	5.0	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.026	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.054	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.29	mg/L	0.003	BKB	04/01/2005 14:33
5033110-08	**SAMPLE ID: Stormwater #20**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	8.0	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.019	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.027	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.29	mg/L	0.003	BKB	04/01/2005 14:33

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CI CERTIFICATE OF ANALYSIS

CLIENT: SSI- Eugene
ATTN: James Jakubiak
PO Box 10047
Portland OR, 97296-0047

PROJECT NAME: 1200Z Stormwater Test

PHONE: (503) 224-9900
FAX: (503) 286-6948

SUBMITTED: 03/31/05 12:15

REPORT DATE: 04/11/05 15:11 REPORT NUMBER: 5033112 PAGE: 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5033112-01	Stormwater Site A	03/26/2005	1715	Water
5033112-02	Stormwater Site B	03/26/2005	1645	Water
5033112-03	Stormwater Site C	03/26/2005	1700	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5033112-01	**SAMPLE ID: Stormwater Site A**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	24	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.025	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.014	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.083	mg/L	0.003	BKB	04/01/2005 14:33
5033112-02	**SAMPLE ID: Stormwater Site B**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	4.5	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	12	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.018	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.010	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.068	mg/L	0.003	BKB	04/01/2005 14:33
5033112-03	**SAMPLE ID: Stormwater Site C**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	4.2	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	49	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.083	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.061	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.21	mg/L	0.003	BKB	04/01/2005 14:33

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FAX(253) 922-8957	FAX (707) 748-7764	FAX (310) 833-1585

DATE: 04/11/2005
CLIENT: SSI- Cherry City Metals
PO Box 10047
Portland OR, 97296-0047

ATTN: Richard Schultz
FAX: (503) 286-6948
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CLIENT: SSI- Cherry City Metals
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PO Box 10047
Portland OR, 97296-0047

PROJECT NAME: CCM

PHONE: (503) 224-9900
FAX: (503) 286-6948

SUBMITTED: 03/31/05 12:15

REPORT DATE: 04/11/05 15:11 REPORT NUMBER: 5033111 PAGE: 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5033111-01	CCM-1	03/26/2005	1600	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5033111-01	SAMPLE ID: CCM-1						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	2.2	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	15	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.018	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.016	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.10	mg/L	0.003	BKB	04/01/2005 14:33

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FAX(253) 922-8957	FAX (707) 748-7764	FAX (310) 833-1585

DATE: **04/11/2005**
CLIENT: **SSI- Grants Pass**
PO Box 10047
Portland OR, 97296-0047

ATTN: **James Jakubiak**
FAX: **(503) 286-6948**
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CLIENT: SSI- Grants Pass
ATTN: James Jakubiak
PO Box 10047
Portland OR, 97296-0047

PHONE: (503) 224-9900
FAX: (503) 286-6948

PROJECT NAME: Stormwater: 1200Z

SUBMITTED: 03/31/05 12:15

REPORT DATE: 04/11/05 15:07 REPORT NUMBER: 5033113 PAGE: 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5033113-01	GP-1	03/26/2005	2000	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5033113-01	SAMPLE ID: GP-1						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	5.4	mg/L	2.0	DM	04/11/2005 09:07
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	24	mg/L	1.5	MRP	04/01/2005 12:42
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.017	mg/L	0.005	BKB	04/01/2005 14:33
LEAD - ICP		LEAD	0.011	mg/L	0.005	BKB	04/01/2005 14:33
ZINC - ICP		ZINC	0.068	mg/L	0.003	BKB	04/01/2005 14:33

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☐ 797 Channel Street, San Pedro, CA 90731 — Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name: Schnitzer Steel - Portland
Attention: Jim Jakubiak
Address: P.O. Box 10017, Portland, OR.
Phone: (503) 286-6976
Fax: (503) 286-6966
Sampler: Jim Jakubiak ☒ Submitted

Project Name:
Project Number:
P.O. Number:

Testing Priority: ☒ Normal ☐ Rush
Due Date:

Notification Method(s): ☐ Telephone ☐ Email ☐ Mail

Analysis To Be Performed

Sample id#	Sample Description/UN Number	Sample Matrix	Sample ~~Date~~ Time	Sample ~~Time~~ Date	Oil & Grease EPA Method 1664	Metals: Copper Lead Zinc EPA 200.7/6010	TSS - EPA Method 160.2
#1		Water	0830	3-26-05	X	X	X
#3		Water	0835	3-26-05	X	X	X
#4		Water	0842	3-26-05	X	X	X
#5		Water	0848	3-26-05	X	X	X
#6		Water	0858	3-26-05	X	X	X
#15		Water	0915	3-26-05	X	X	X
#16		Water	0930	3-26-05	X	X	X
#20		Water	0940	3-26-05	X	X	X

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☐ 797 Channel Street, San Pedro, CA 90731 — Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name:	Schnitzer Steel
Attention:	Jim Jakobiak
Address:	P.O. Box 10017 · Portland, OR. 97296-0017
Phone:	(503) 786-6916
Fax:	(503) 786-6960
Sampler:	[signature] ☑ Submitted

Project Name:	SW Sampling
Project Number:	
P.O. Number:	
Testing Priority	Notification Method(s)
☑ Normal	☐ Telephone
☐ Rush	☐ Email
Due Date:	☐ Mail

Analysis To Be Performed

Sample id#	Sample Description/UN Number	Sample Matrix	Sample Date	Sample Time	Oil & Grease (EPA Method 1664)	Metals (Cu, Pb, Zn) (EPA 200.7)	TSS (EPA 160.2)
#1		Water	12/13/04	1800	X	X	X
#3		Water	12/13/04	1820	X	X	X
#4		Water	12/13/04	1830	X	X	X
#5		Water	12/13/04	1840	X	X	X
#6		Water	12/13/04	1850	X	X	X
#14		Water	12/13/04	1910	X	X	X
#16		Water	12/13/04	1925	X	X	X
#20		Water	12/13/04	1945	X	X	X

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[signature]	12/14/04 1539	[signature]	12-14-04 1539
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SCHN00243604

WEIGHTS, MEASURES, AND FORMULAE

Linear Equivalents

1 inch=2.54 cm(25.4 mm)
1 foot=0.30 meter
1 fathom=1.83 meters
1 yard =0.91 meter
1 nautical mile=1.15 statute miles
1 statute mile=0.87 nautical mile
1 statute mile=1.61 kilometers
1 kilometer=0.62 statute mile
1 nautical mile=1.85 kilometers
1 kilometer=0.54 nautical mile
1 cm=.39 inch 1 meter=3.28 ft
1 meter=0.55 fathom or, 1.09yds.

Tons and tonnes

1 US ton (short ton) =2000 lbs
1 British ton (long ton) =2240 lbs
1 metric tonne (1000 kg)=2205 lbs
1 metric tonne (H_2O) =264.47gal

Conversion Factor

1 bar=14.5 psi
1 US GPM=3.79 l/min.
1 dm^3/sec=2.12 cfm
1 lb(f)=4.44 N
°C=5/9(°F-32)
1 Nm=8.88 lb (f) in.
1 kw=1.34 HP
1 m/s=3.28 fps

Volume Equivalents

1 in^3=16.39 cm^3
1 ft^3=0.03 m^3
1 yd^3=0.76 m^3
1 qt (US)=0.95 liter
1 qt (US)=57.75 in^3
1 gal (US)=0.13 ft^3
1 gal (US)=3.79 liters
1 qt (US)=0.83 qt (Brit.)
1 cm^3=0.06 in^3
1 m^3=35.31 ft^3
1 m^3=1.31 yd^3
1 liter=1.06 qt (US)
1 in^3=0.02 qt (US)
1 ft^3=7.48 gal (US)
1 liter=0.26 gal (US)
1 qt (Brit)=1.20 qt (US)
55 gal drum=7.15 cu. ft.
85 gal drum=11.05 cu. ft.

To change:

Kilograms to Pounds	Multiply by 2.21
Pounds to Kilograms	Multiply by .46
Cubic M. to BBLs	Multiply by 6.28
Cubic Feet to BBLs	Multiply by .178
Litre to Gal. (US)	Multiply by .264
Gal. to Gal. (IMP)	Multiply by .833

	H_2O	Sea Water	Gasoline	Diesel	Bunker "C"	
1 gallon (US) =	8.3	8.5	6.0	6.7	7.3	=lbs

SSE-Burgard

At 1:00 PM I surveyed the corrugated pipes discharging storm water from Burgard Rd and MW Container onto the Burgard Industrial Park site.

The pipe discharging water near Lampros Steel appeared very turbid and exhibited sheen.

The pipe discharging

into the catch basin near Western Machine was coming from two seperate sources:

1) from the hill side along HW Containers property

2) from the corrugated pipe draing Burgard Road

A visual survey along Burgard Rd. observed very turbid water within roadside ditches and oil and oil sheen at numerous locations

At 1630 I sampled storm water coming from the HW Container hillside and labelled the sample NB-1. A second sample was collected (NB-2) from the corrugated pipe draining Burgard Road.

Pictures were taken of the sample locations and the ditches along Burgard Rd.

Sample NB-3 was collected at 1645 from a connection leaking from the corrugated pipe located along the hillside near Lampros.

All storm water sampled discharged to on-site catch basins and drained to Outfall #18.

	lbs/cu. ft.	kg/cu. m.
Construction Materials		
Cement — Portland	94	1,505
Concrete — Stone	144	2,340
— Reinforced	150	2,400
Earth — Loose, Dry	76	1,220
— Wet, Packed	96	1,540
Gravel — Dry, Loose	110	1,760
— Wet, Packed	113	1,810
Granite	167	2,675
Limestone	165	2,645
Liquids		
Gasoline	42	675
Oils	58	930
Water	62.5	1,000

Miscellaneous Useful Information

Area of circle: Multiply square of diameter by .7854.
Area of rectangle: Multiply length by breadth.
Area of triangle: Multiply base by 1/2 perpendicular height.
Area of ellipse: Multiply product of both diameters by .7834.
Area of sector of circle: Multiply arc by 1/2 radius.
Area of segment of circle: Subtract area of triangle from area of sector of equal angle.
Surface area of cylinder: Area of both ends plus length by circumference.
Surface area of cone: Add area of base to cirumference of base multiplied by 1/2 slant height.
Surface area of sphere : Multiply diameter^3 by 3.1416.
Circumference of Circle: Multiply diameter by 3.1416.
Cubic inches in ball or sphere: Multiply cube of diameter by 1/3 the altitude.
Cubic contents of cylinder or pipe: Multiply area of one end by length.
Cubic contents of wedge: Multiply area of rectangular base by 1/2 height.
Diameter of circle: Multiply circumference by .31831.

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☐ 797 Channel Street, San Pedro, CA 90731 — Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name: SSI
Attention: Jim Jakubiak
Address: PO Box 10047
Portland, OR 97296-0047
Phone:
Fax: 503-286-6948
Sampler: [signature] ☒ Submitted

Project Name: Marble Burgard
Project Number: Storm Water
P.O. Number:
Testing Priority: ☐ Normal ☐ Rush
Due Date:
Notification Method(s): ☐ Telephone ☐ Email ☐ Mail

Analysis To Be Performed

Sample id#	Sample Description/UN Number	Sample Matrix	Sample Date	Sample Time	COD - SM 5220 (5mg/L)	ODG - EPA 1664 (5mg/L)	TSS - SM 2540D (2mg/L)	Copper/Zinc/Lead EPA 200.8 (0.005mg/L)	Mercury EPA 1631 0.00005mg/L								
MB-1		Water	5-9-05	1630	X	X	X	X	X								
MB-2		Water	5-9-05	1635	X	X	X	X	X								
MB-3		Water	5-9-05	1615	X	X	X	X	X								

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	5/9/05 1725	[signature]	5/9/05 1725
Relinquished By:	Date/Time	Received By:	Date/Time

FOR LABORATORY USE ONLY

Inspection Job Number: _____ PO# _____
Laboratory Project Number: _____ Cash/check # _____
Due Date: _____ Amount Paid: $ _____

SCHN00243610

Sample Acceptance Policy

All samples must meet the following requirements:

- **Chain of Custody:** The COC list of samples must match the number and type of sample containers received, and sample descriptions on the COC must match the sample bottles. The requested tests and where possible, specific methods are shown on the COC.
- **Appropriate Container:** The correct sample containers must be used for the requested analyses.
- **Sample Volume:** There must be sufficient sample volume for the test(s) requested.
- **Holding Time:** The holding times for the requested analyses must not be expired.

Environmental samples must meet the following additional requirements:

- **Sample Temperature:** Samples that require refrigeration shall be considered acceptable if the temperature as measured upon receipt is either within 2° C of the required temperature or the method specified range. For samples with a specified temperature of 4° C, samples received at temperatures ranging from just above freezing to 6° C shall be acceptable.

  NOTE: **Samples that are delivered to the laboratory shortly after sampling may not meet this criterion. However, the samples shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice, or if the samples were taken within the hour.**

- **Sample Preservation:** Where possible without sacrificing the integrity of the sample, determine whether the sample bottle has been preserved correctly.

Discrepancies:

If there is any doubt as to the suitability for testing such as the **sample does not conform to the sample description**, the sample containers are **damaged, leaking**, or **may be contaminated from other damaged or leaking sample containers**, or where **testing is not specified**, further instructions from the client are required. If the issue cannot be resolved and the sample does not meet sample acceptance criteria the laboratory shall either.

- Fully document any decision to proceed with the analysis and note the condition of the sample on the COC and work order; or
- Retain correspondence and/or records of conversations regarding the final disposition of rejected samples.

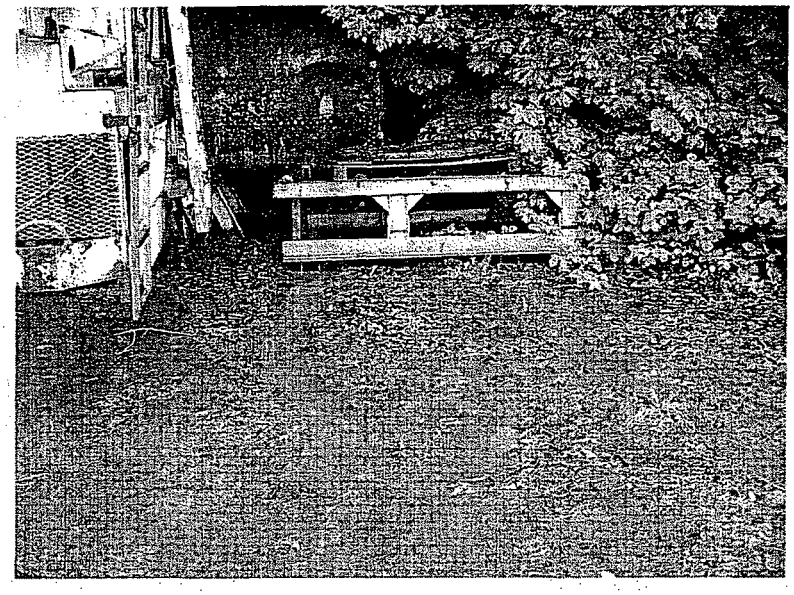
Rejected Samples:

- Should the client choose to proceed with testing on questionable samples, the Work Order must be clearly marked with the nature of the problem so that the final report data may be appropriately qualified.
- Rejected samples must still be logged into LIMS to obtain a unique sample identification number to track sample disposition. However, for rejected samples, no testing is assigned. Instead, the sample status is set to "Rejected" by editing the work order status using the Update Status function of the Laboratory menu in LIMS.

Refer to the Columbia Inspection, Inc. Laboratory Policy, LP00.01, Sample Acceptance Policy and SOP15.01 Sample Receipt for complete details.

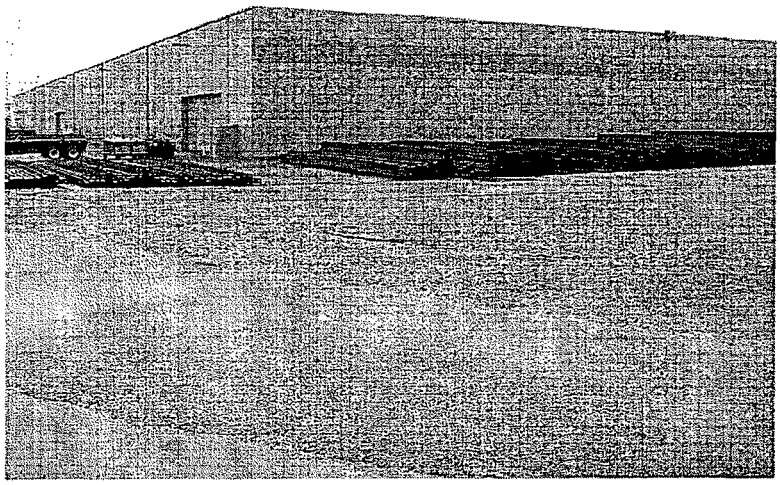
Sample Disposal:

- Samples are disposed of after 45 days unless prior arrangements have been made with the laboratory.
- Samples that are deemed hazardous may be returned to the client for proper disposal.



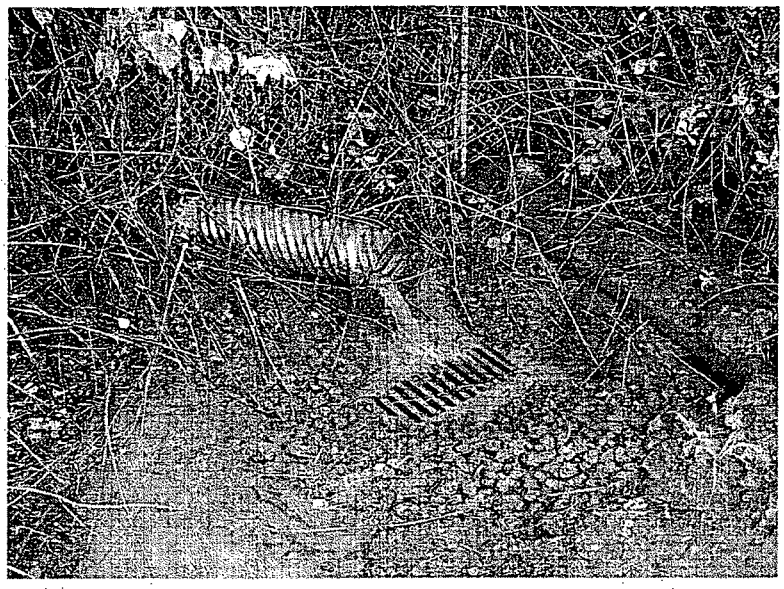
5-9-05

5-9-05



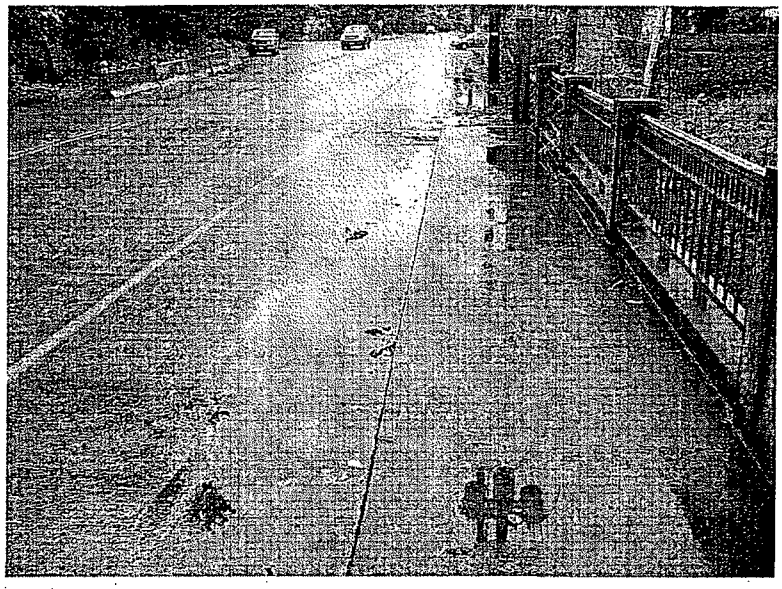
5-8-05

5-9-05



5-9-05

5-9-05



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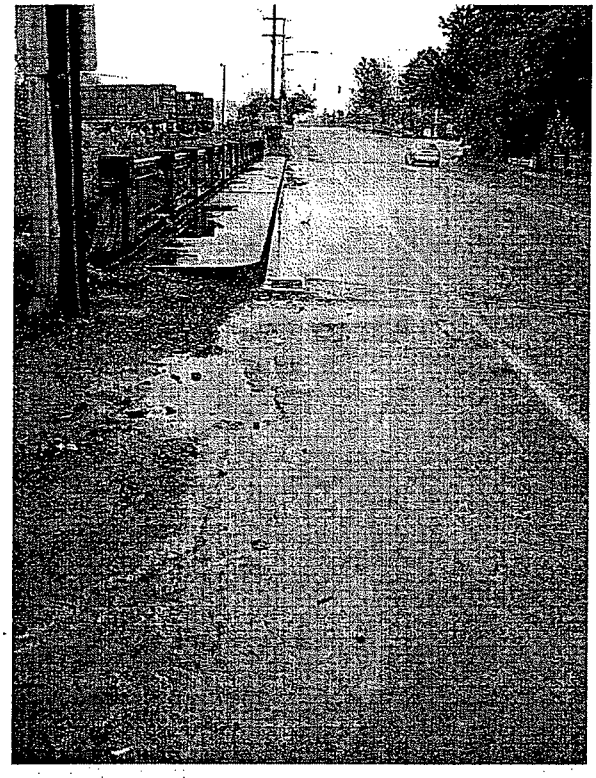
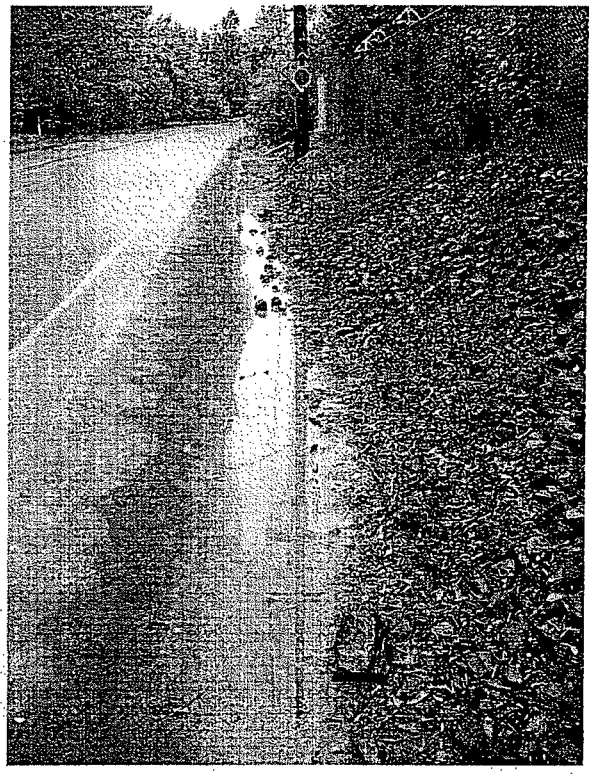
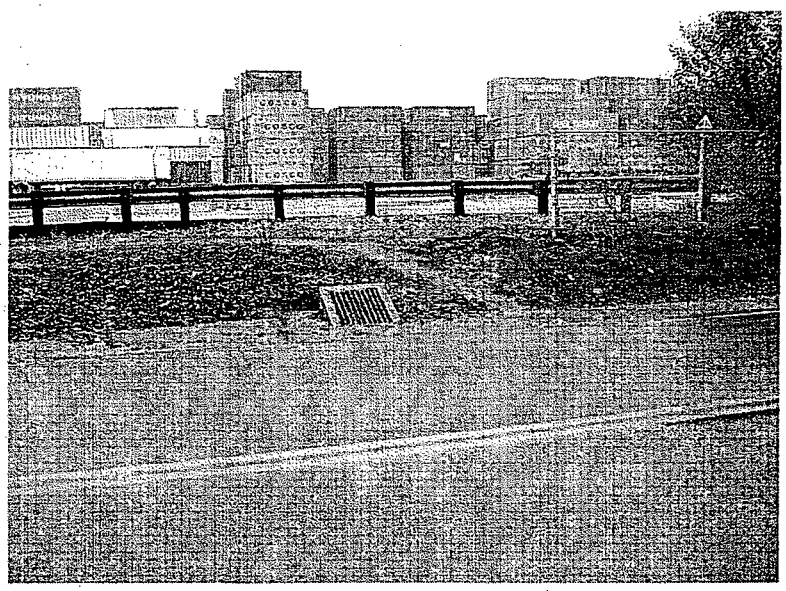


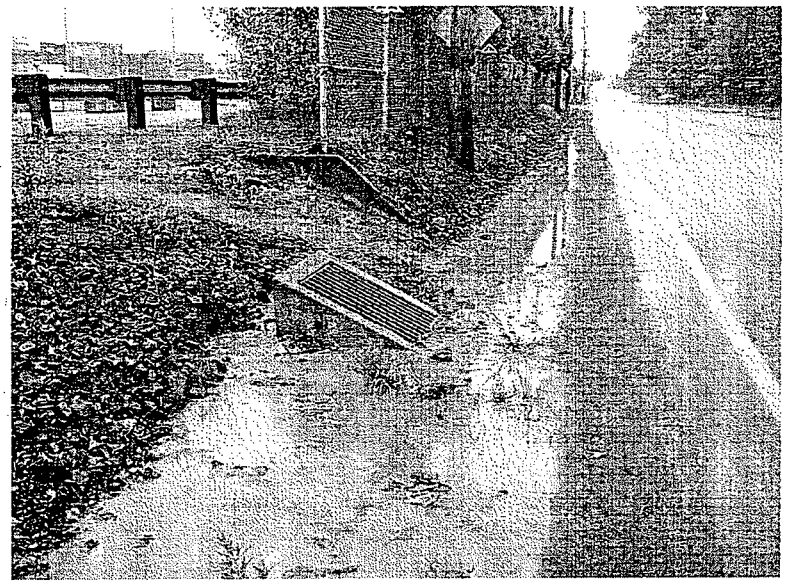
5-9-05



5-8-05



5-8-05



5-8-05

NPDES 1200-Z General Permit for Storm Water Runoff

Discharge Monitoring Report

Complete report and send once a year by July 15 to:
Oregon DEQ

Legal Name:

Site/File ID #:

Common Name: SCHNITZER STEEL

County:

Facility Location:

Reporting period: July 1, _____ to June 30, ____

Twice a Year Sampling

Monitor for the following pollutants at the monitoring points specified in your Storm Water Pollution Control Plan (SWPCP). Add more sheets if you have more than three monitoring points.

Pollutant Sample 2/Year, Each Monitoring Point[1]	Date of Sample	Monitoring Points # _____	 # _____	 # _____
Total copper – If value exceeds 0.1 mg/l, review/revision of SWPCP required				
Total lead – If value exceeds 0.4 mg/l, review/revision of SWPCP required				
Total zinc – If value exceeds 0.6 mg/l, review/revision of SWPCP required				
pH – If value is outside of 5.5 to 9.0 S.U., review/revision of SWPCP required[2]				
Total suspended solids – If value exceeds 130 mg/l, review/revision of SWPCP required[2]				
Oil and grease – If value exceeds 10 mg/l, review/revision of SWPCP required[2]				
E. coli – If value exceeds 406 counts/100 ml, review/revision of SWPCP required. Only applies to landfills accepting septage/biosolids and sewage treatment plants.				

See reverse side for additional visual monitoring and signature for report.

[1]Monitoring frequency may be reduced under some circumstances – refer to page 10 of your permit. If monitoring requirements have been waived, please write in "WAIVED" for that pollutant.
[2] Separate effluent limits for these pollutants apply for coal fired power plants, cement plants, and/or roofing or asphalt paving operations.

Monthly Visual Observations

Parameter and Requirements	Monitoring #		Monitoring #		Monitoring #	
	Sample Date	Results	Sample Date	Results	Sample Date	Results
Oil and Grease Sheen - No visible sheen allowed. Monthly observation when discharging. For months when no discharges occur, please write in "No Discharge" for that month.						
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
Floating Solids (associated with industrial activities) – No visible discharge allowed. Monthly observation when discharging. For months when no discharges occur, please write in "No Discharge" for that month.						
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

Note – If there are any monitored results that exceed the benchmark values, you must review and revise as necessary your SWPCP within 60 days of exceeding the benchmark. SWPCP revisions must be submitted to DEQ within 14 days of completion.

Signature Requirement

I certify, under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature of Responsible Official: _____

Name and Title (Please Print): _____

Date of Signature: _____ **Telephone:** _____

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☐ 797 Channel Street, San Pedro, CA 90731 — Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name:	Schnitzer Steel
Attention:	Jim Jakubik
Address:	PO Box 10947
Phone:	(503) 286-6976
Fax:	(503) 286-6748
Sampler:	[illegible] ☒ Submitted

Project Name:	Storm Water
Project Number:	Sampling
P.O. Number:	
Testing Priority	Notification Method(s)
☒ Normal	☐ Telephone
☐ Rush	☐ Email
Due Date:	☐ Mail

Analysis To Be Performed

Sample id#	Sample Description/UN Number	Sample Matrix	Sample Date	Sample Time	COD - SM 5220B	Oil & Grease - EPA 1664	TSS - SM 2540D	EPA 2008 Copper, Lead & Zinc	Mercury - EPA 1631	pH								
#6		Water	5-10-05	0900	X	X	X	X	X	X								
#5		Water	5-10-05	0915	X	X	X	X	X	X								
		~~Water~~	~~5-10-05~~	~~0914~~														

Relinquished By:	Date/Time	Received By:	Date/Time
[illegible]	5/10/05 1625	[illegible]	5/10/05 1625
Relinquished By:	Date/Time	Received By:	Date/Time

FOR LABORATORY USE ONLY

Inspection Job Number: _____ PO# _____
Laboratory Project Number: _____ Cash/check # _____
Due Date: _____ Amount Paid: $ _____

SCHN00243625

Sample Acceptance Policy

All samples must meet the following requirements:

- **Chain of Custody:** The COC list of samples must match the number and type of sample containers received, and sample descriptions on the COC must match the sample bottles. The requested tests and where possible, specific methods are shown on the COC.
- **Appropriate Container:** The correct sample containers must be used for the requested analyses.
- **Sample Volume:** There must be sufficient sample volume for the test(s) requested.
- **Holding Time:** The holding times for the requested analyses must not be expired.

Environmental samples must meet the following additional requirements:

- **Sample Temperature:** Samples that require refrigeration shall be considered acceptable if the temperature as measured upon receipt is either within 2° C of the required temperature or the method specified range. For samples with a specified temperature of 4° C, samples received at temperatures ranging from just above freezing to 6° C shall be acceptable.

  NOTE: **Samples that are delivered to the laboratory shortly after sampling may not meet this criterion. However, the samples shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice, or if the samples were taken within the hour.**

- **Sample Preservation:** Where possible without sacrificing the integrity of the sample, determine whether the sample bottle has been preserved correctly.

Discrepancies:

If there is any doubt as to the suitability for testing such as the **sample does not conform to the sample description**, the sample containers are **damaged**, **leaking**, or **may be contaminated from other damaged or leaking sample containers**, or where **testing is not specified**, further instructions from the client are required. If the issue cannot be resolved and the sample does not meet sample acceptance criteria the laboratory shall either.

- Fully document any decision to proceed with the analysis and note the condition of the sample on the COC and work order; or
- Retain correspondence and/or records of conversations regarding the final disposition of rejected samples.

Rejected Samples:

- Should the client choose to proceed with testing on questionable samples, the Work Order must be clearly marked with the nature of the problem so that the final report data may be appropriately qualified.
- Rejected samples must still be logged into LIMS to obtain a unique sample identification number to track sample disposition. However, for rejected samples, no testing is assigned. Instead, the sample status is set to "Rejected" by editing the work order status using the Update Status function of the Laboratory menu in LIMS.

Refer to the Columbia Inspection, Inc. Laboratory Policy, LP00.01, Sample Acceptance Policy and SOP15.01 Sample Receipt for complete details.

Sample Disposal:

- Samples are disposed of after 45 days unless prior arrangements have been made with the laboratory.
- Samples that are deemed hazardous may be returned to the client for proper disposal.

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☐ 797 Channel Street, San Pedro, CA 90731 — Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name: Schnitzer Steel
Attention: Jim Jakubiak
Address: PO Box 10047
Phone: (503) 286-6976
Fax: (503) 286-6948
Sampler: [signature] ☒ Submitted

Project Name: Storm Water
Project Number: Sampling
P.O. Number:
Testing Priority: ☒ Normal ☐ Rush
Notification Method(s): ☐ Telephone ☐ Email ☐ Mail
Due Date:

Analysis To Be Performed

Sample id#	Sample Description/UN Number	Sample Matrix	Sample Date	Sample Time	COD - SM 5220D	Oil & Grease - EPA 1664	TSS - SM 2540D	EPA 200.8 Copper/Lead/Zinc	Manganese EPA 1631	pH								
#3		Water	5-10-05	0930	X	X	X	X	X	X								

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	5/10/05 1625	[signature]	5/10/05 1625
Relinquished By:	Date/Time	Received By:	Date/Time

FOR LABORATORY USE ONLY

Inspection Job Number: _____ PO# _____
Laboratory Project Number: _____ Cash/check # _____
Due Date: _____ Amount Paid: $ _____

SCHN00243627

Sample Acceptance Policy

All samples must meet the following requirements:

- **Chain of Custody:** The COC list of samples must match the number and type of sample containers received, and sample descriptions on the COC must match the sample bottles. The requested tests and where possible, specific methods are shown on the COC.
- **Appropriate Container:** The correct sample containers must be used for the requested analyses.
- **Sample Volume:** There must be sufficient sample volume for the test(s) requested.
- **Holding Time:** The holding times for the requested analyses must not be expired.

Environmental samples must meet the following additional requirements:

- **Sample Temperature:** Samples that require refrigeration shall be considered acceptable if the temperature as measured upon receipt is either within 2° C of the required temperature or the method specified range. For samples with a specified temperature of 4° C, samples received at temperatures ranging from just above freezing to 6° C shall be acceptable.

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- **Sample Preservation:** Where possible without sacrificing the integrity of the sample, determine whether the sample bottle has been preserved correctly.

Discrepancies:

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- Fully document any decision to proceed with the analysis and note the condition of the sample on the COC and work order; or
- Retain correspondence and/or records of conversations regarding the final disposition of rejected samples.

Rejected Samples:

- Should the client choose to proceed with testing on questionable samples, the Work Order must be clearly marked with the nature of the problem so that the final report data may be appropriately qualified.
- Rejected samples must still be logged into LIMS to obtain a unique sample identification number to track sample disposition. However, for rejected samples, no testing is assigned. Instead, the sample status is set to "Rejected" by editing the work order status using the Update Status function of the Laboratory menu in LIMS.

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Sample Disposal:

- Samples are disposed of after 45 days unless prior arrangements have been made with the laboratory.
- Samples that are deemed hazardous may be returned to the client for proper disposal.

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Investment Corp.
ATTN: James Jakubiak
3200 NW Yeon
Portland OR, 97296

PROJECT NAME: 1200Z Stormwater - Extended Test

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 05/09/05 17:25

REPORT DATE: 05/23/05 15:52 **REPORT NUMBER:** 5051001 **PAGE:** 1 OF 2

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5051001-01	NB-1 Stormwater Grab	05/09/2005	1630	Water
5051001-02	NB-2 Stormwater Grab	05/09/2005	1635	Water
5051001-03	NB-3 Stormwater Grab	05/09/2005	1645	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5051001-01	**SAMPLE ID: NB-1 Stormwater Grab**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	120	mg/L	5.0	DM	05/20/2005 14:29
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	25.7	mg/L	2.0	MRP	05/13/2005 14:35
PH	EPA 150.1/9040	pH	7.61	SU		DM	05/10/2005 17:14
		TEMPERATURE (C)	15.1	SU			
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	440	mg/L	1.0	MRP	05/16/2005 13:52
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000005	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.049	mg/L	0.0005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.019	mg/L	0.0005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	0.42	mg/L	0.0005	BKB	05/11/2005 14:01
5051001-02	**SAMPLE ID: NB-2 Stormwater Grab**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	11	mg/L	5.0	DM	05/20/2005 14:29
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	9.5	mg/L	2.0	MRP	05/13/2005 14:35
PH	EPA 150.1/9040	pH	8.71	SU		DM	05/10/2005 17:14
		TEMPERATURE (C)	15.5	SU			
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	940	mg/L	1.0	MRP	05/16/2005 13:52
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000005	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.073	mg/L	0.0005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.062	mg/L	0.0005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	0.55	mg/L	0.0005	BKB	05/11/2005 14:01
5051001-03	**SAMPLE ID: NB-3 Stormwater Grab**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	49	mg/L	5.0	DM	05/20/2005 14:29
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	14.3	mg/L	2.0	MRP	05/13/2005 14:35
PH	EPA 150.1/9040	pH	7.83	SU		DM	05/10/2005 17:14
		TEMPERATURE (C)	16.3	SU			
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	420	mg/L	1.0	MRP	05/16/2005 13:52
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	0.000005	mg/L	0.000005	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							

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CI CERTIFICATE OF ANALYSIS

REPORT DATE: 05/23/05 15:52 REPORT NUMBER: 5051001

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5051001-03	**SAMPLE ID: NB-3 Stormwater Grab**						
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.084	mg/L	0.0005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.139	mg/L	0.0005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	0.74	mg/L	0.0005	BKB	05/11/2005 14:01

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COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PHONE: (503) 286-6976
FAX: (503) 286-6948

PROJECT NAME: 1200Z Stormwater Test

SUBMITTED: 05/10/05 16:25

REPORT DATE: 07/18/05 10:33 REPORT NUMBER: 5051014

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5051014-01	#5	05/10/2005	0915	Water
5051014-02	# 6	05/10/2005	0900	Water
5051014-03	# 3	05/10/2005	0930	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5051014-01	**SAMPLE ID: #5**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	19	mg/L	5.0	DM	05/20/2005 14:29
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	MRP	05/19/2005 08:47
PH	EPA 150.1/9040	pH	7.55	SU		DM	05/10/2005 17:26
		TEMPERATURE (C)	17.8	SU			
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	120	mg/L	1.0	MRP	05/16/2005 13:52
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	0.000057	mg/L	0.000050	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.15	mg/L	0.0005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.199	mg/L	0.0005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	0.60	mg/L	0.0005	BKB	05/11/2005 14:01
5051014-02	**SAMPLE ID: # 6**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	ND	mg/L	5.0	DM	05/20/2005 14:29
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	MRP	05/19/2005 08:47
PH	EPA 150.1/9040	pH	6.99	SU		DM	05/10/2005 17:26
		TEMPERATURE (C)	18.5	SU			
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	1.3	mg/L	1.0	MRP	05/16/2005 13:52
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.004	mg/L	0.0005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.006	mg/L	0.0005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	0.005	mg/L	0.0005	BKB	05/11/2005 14:01
5051014-03	**SAMPLE ID: # 3**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	6.0	mg/L	5.0	DR	07/18/2005 10:10
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	3.6	mg/L	2.0	MRP	05/19/2005 08:47
PH	EPA 150.1/9040	pH	7.92	SU		DR	05/10/2005 17:26
		TEMPERATURE (C)	18.4	SU			07/18/2005 10:31
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	120	mg/L	1.0	DR	07/18/2005 10:25
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	0.000068	mg/L	0.000050	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							

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Richard D. Reid - Laboratory Director

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CI CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5051014-03	SAMPLE ID: # 3						
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.11	mg/L	0.005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.360	mg/L	0.005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	1.7	mg/L	0.003	BKB	05/11/2005 14:01

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GENERAL CONTRACTOR
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Steve Jabusch
Senior Vice-President

Cell: (360) 957-1885
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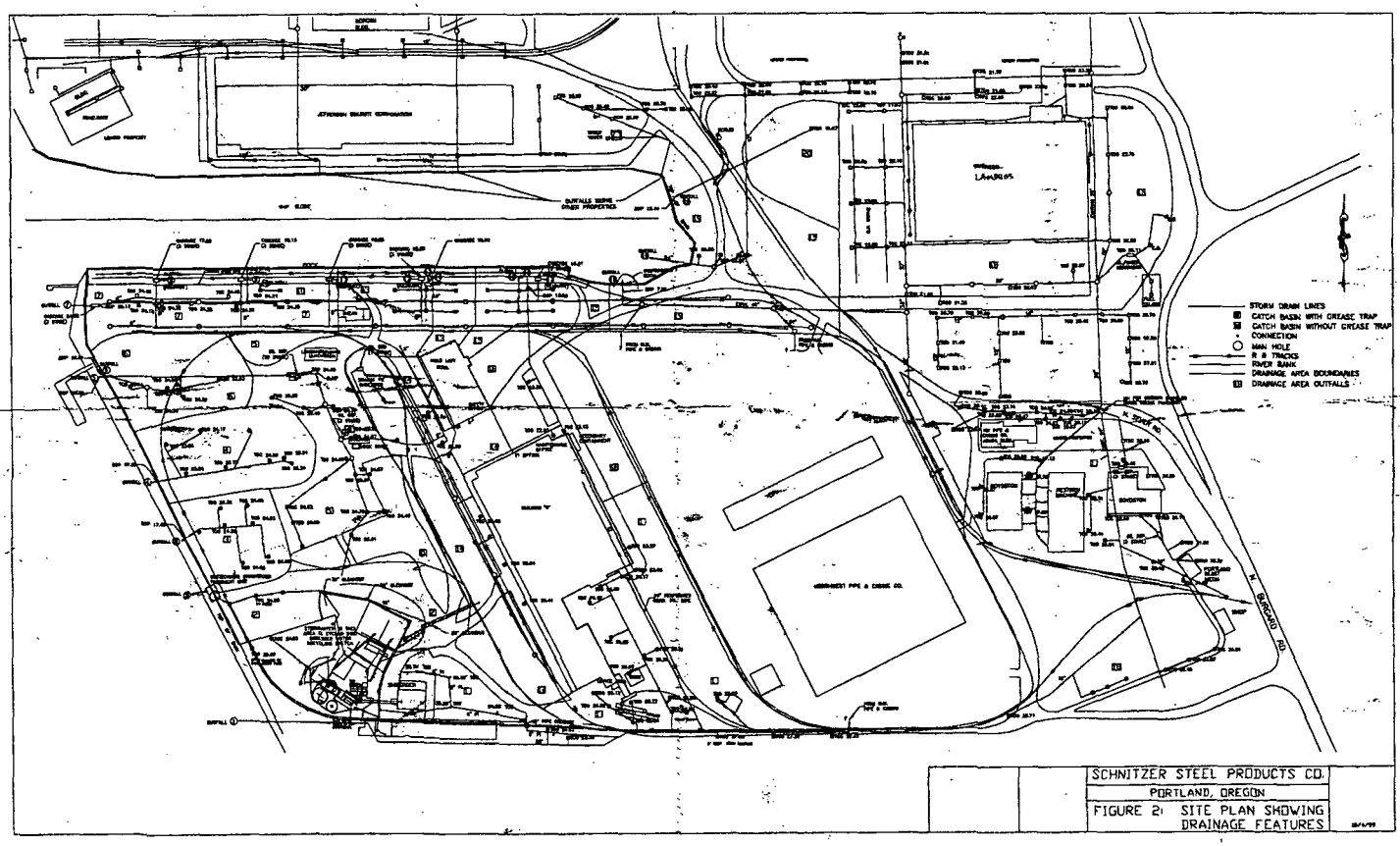
WA: PACIFNE022MH OR CCB: 78140



SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON
FIGURE 2: SITE PLAN SHOWING DRAINAGE FEATURES

SCHN00243730

SCHNITZER STEEL INDUSTRIES, INC.

12005 N Burgard Road, Portland, Oregon 97203
P.O. Box 10047, Portland, Oregon 97210-0047

Memorandum

To: File

From: Jim Jakubiak

Date: July 18, 2005

Re: SSI Portland Storm Water Results – 2004/2005

Attached is a summary table (Table 1) of the sample analytical results for samples collected at SSI Portland in the last half of 2004 and the first half of 2005. Also attached are analytical laboratory reports for the data shown on Table 1. Attachment 4 contains a letter from Aaron Wieting of the City of Portland Environmental Services.

December 13, 2004 Sample Data

Storm water samples were collected at the SSI Portland site on December 13, 2004 to comply with 1200 Z permit requirements (see Attachment 1). Samples were collected from the end of pipe at 8 outfalls from the facility. Benchmark permit values were exceeded at outfalls 1, 3, 4 and 5. Outfall 4 only exceeded copper results slightly above the benchmark value. Outfalls 1, 3, and 5 exceeded several benchmark values. The remaining 4 outfalls have reported laboratory sample analytical results below benchmark levels. All samples were analyzed by Columbia Inspection of Portland, Oregon.

March 26, 2005 Sample Data

Storm water samples were collected at the SSI Portland site on March 26, 2005 to comply with 1200 Z permit requirements (see Attachment 1). Samples were collected from the end of pipe at 8 outfalls from the facility. Samples collected from outfalls 3 and 4 slightly exceeded zinc benchmark values. The remaining samples collected for the other six outfalls had reported analytical results below benchmark permit levels. All samples were analyzed by Columbia Inspection of Portland, Oregon.

Sample analytical results were typically reported at significantly lower values than what was observed during the December 2004 sampling event.

April 1, 2005 Sample Data

On April 1, 2005, the City of Portland Environmental Services inspected the SSI Portland facility. During the inspection the City had Jim Jakubiak collect storm water samples from Outfalls 3, 5, 6 and 20 (Attachment 2). These samples were collected 5 days after the previously collected samples. Samples collected were analyzed by the City of Portland Water Pollution Control Laboratory. In addition to analyzing for normal permit parameters, the City inspector also analyzed for mercury and chemical oxygen demand parameters.

Analytical results for outfall samples 3, 5, and 6 had reported elevated concentrations above benchmark permit values for total suspended solids, oil and grease and metals. A sample collected from outfall 20 was reported at levels below benchmark values.

Reported analytical results were not consistent with analytical results obtained 5 days previously from the same outfalls. Results were also not consistent with results obtained historically at outfalls 3, 5 and 6. No quality control/quality assurance data was submitted with the reports obtained to verify sample validity. No data validation information or validation data was provided with the laboratory reports to assess analytical quality.

May 10, 2005 Sample Data

On May 10, 2005, storm water samples were collected from outfalls 3, 5 and 6 to verify the accuracy of the data collected by the City of Portland. Samples collected from outfalls were analyzed for mercury and COD in addition to normal permit parameters. Samples were submitted to Columbia Inspection for analysis. An additional duplicate sample (#6D) was submitted to Columbia Analytical Services, Inc. of Longview, Washington to check data quality and reproducibility.

All samples were collected by placing laboratory provided sample bottles directly beneath outfall discharge until each bottle was completely filled. The field duplicate sample (#6D) was collected in the same manner and at the same time as sample #6. Storm water samples were also collected in the same manner as previously collected samples, including those collected on April 1, 2005.

Sample results were reported at significantly lower levels than those reported by the City's Water Pollution Control Laboratory Results reported were consistent with results reported during the March 26, 2005 sampling report.

During the verification sampling event conducted on May 10, permit benchmark values were at or exceeded at Outfall 3 and 5 for copper and zinc parameters. All other sample data were reported well below permit benchmark values.

Table 1
Storm Water Sampling Results
2004-2005
Schnitzer Steel - Portland

			Laboratory Results							
Outfall	Date	Laboratory	pH	TSS	O&G	COD	Copper	Lead	Zinc	Mercury
1	12/13/2004	CI	7.29	280	11.2	NA	0.20	0.691	2.2	NA
	3/26/2005	CI	7.02	4.0	3.7	NA	0.063	0.114	0.58	NA
3	12/13/2004	CI	7.21	130	9.6	NA	0.23	0.398	2.3	NA
	3/26/2005	CI	6.81	12	ND	NA	0.066	0.119	0.61	NA
	4/1/2005	**BES**	**7.3**	**216**	**5.1**	**820**	**0.343**	**0.791**	**4.10**	**0.00189**
	5/10/2005	CI	7.92	120	3.6	6.0	0.11	0.360	1.7	0.000068
4	12/13/2004	CI	6.76	48	3.1	NA	0.12	0.210	0.49	NA
	3/26/2005	CI	7.13	21	ND	NA	0.055	0.084	0.90	NA
5	12/13/2004	CI	7.05	100	4.4	NA	0.17	0.401	0.92	NA
	3/26/2005	CI	7.01	60	ND	NA	0.093	0.217	0.59	NA
	4/1/2005	**BES**	**7.2**	**132**	**5.1**	**88**	**0.183**	**0.420**	**1.47**	**0.000831**
	5/10/2005	CI	7.55	120	ND	19	0.15	0.199	0.60	0.000057
6	12/13/2004	CI	7.55	14	ND	NA	0.023	0.040	0.10	NA
	3/26/2005	CI	7.58	26	ND	NA	0.008	0.019	0.034	NA
	4/1/2005	**BES**	**6.3**	**8**	**24.1**	**<5**	**0.010**	**0.022**	**0.06**	**0.0000386**
	5/10/2005	CI	6.99	1.3	ND	ND	0.004	0.006	0.005	ND
Dulpicate	5/10/2005	CAS	7.01	ND	ND	ND	0.0025	0.006	0.01	0.0000099
14	12/13/2004	CI	7.71	15	2.4	NA	0.037	0.066	0.19	NA
15	3/26/2005	CI	8.10	34	6.0	NA	0.058	0.086	0.17	NA
16	12/13/2004	CI	7.45	12	2.0	NA	0.033	0.019	0.20	NA
	3/26/2005	CI	7.93	5.0	ND	NA	0.026	0.054	0.29	NA
20	12/13/2004	CI	7.38	18	ND	NA	0.009	ND	0.028	NA
	3/26/2005	CI	7.92	8.0	ND	NA	0.019	0.027	0.29	NA
	4/1/2005	**BES**	**6.3**	**44**	**5.3**	**38**	**0.0383**	**0.0555**	**0.264**	**0.0000833**
Permit Benchmarks			**5.5-9**	**130**	**10.0**		**0.1**	**0.4**	**0.6**	

Notes:

All analytical results reported in mg/L (ppm) except pH which is reported in SU units.
pH data collected in the field.

ND - Not detected. O&G - Oil and Grease COD-Chemical Oxygen Demand
NA - Not analyzed. TSS - Total suspended solids
CI - Columbia Inspection BES - City of Portland CAS - Columbia Analytical Services
No floating solids or oil and grease sheen were noted during monthly monitoring.

ATTACHMENT 1

Columbia Inspection, Inc.
Laboratory Results

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
ATTN: James Jakubiak
P.O. BOX 10047
Portland OR, 97296

PROJECT NAME: 1200Z Stormwater Test

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 05/10/05 16:25

REPORT DATE: 07/18/05 10:33 **REPORT NUMBER:** 5051014

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5051014-01	#5	05/10/2005	0915	Water
5051014-02	# 6	05/10/2005	0900	Water
5051014-03	# 3	05/10/2005	0930	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5051014-01	**SAMPLE ID: #5**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	19	mg/L	5.0	DM	05/20/2005 14:29
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	MRP	05/19/2005 08:47
PH	EPA 150.1/9040	pH	7.55	SU		DM	05/10/2005 17:26
		TEMPERATURE (C)	17.8	SU			
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	120	mg/L	1.0	MRP	05/16/2005 13:52
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	0.000057	mg/L	0.000050	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.15	mg/L	0.0005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.199	mg/L	0.0005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	0.60	mg/L	0.0005	BKB	05/11/2005 14:01
5051014-02	**SAMPLE ID: # 6**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	ND	mg/L	5.0	DM	05/20/2005 14:29
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	MRP	05/19/2005 08:47
PH	EPA 150.1/9040	pH	6.99	SU		DM	05/10/2005 17:26
		TEMPERATURE (C)	18.5	SU			
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	1.3	mg/L	1.0	MRP	05/16/2005 13:52
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.000050	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.004	mg/L	0.0005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.006	mg/L	0.0005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	0.005	mg/L	0.0005	BKB	05/11/2005 14:01
5051014-03	**SAMPLE ID: # 3**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	6.0	mg/L	5.0	DR	07/18/2005 10:10
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	3.6	mg/L	2.0	MRP	05/19/2005 08:47
PH	EPA 150.1/9040	pH	7.92	SU		DR	05/10/2005 17:26
		TEMPERATURE (C)	18.4	SU			07/18/2005 10:31
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	120	mg/L	1.0	DR	07/18/2005 10:25
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	0.000068	mg/L	0.000050	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							

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ORIGINAL

SCHN00243738

CI CERTIFICATE OF ANALYSIS

REPORT DATE: 07/18/05 10:33 REPORT NUMBER: 5051014

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5051014-03	SAMPLE ID: # 3						
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.11	mg/L	0.005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.360	mg/L	0.005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	1.7	mg/L	0.003	BKB	05/11/2005 14:01

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ORIGINAL

SCHN00243739

ATTACHMENT 2

City of Portland
Water Pollution Control Laboratory
Laboratory Results

City of Portland
Water Pollution Control Laboratory
Laboratory Analysis Report

C

Sample Date/Time 04/01/05 9:15	**System ID** AJ02928	**Sample ID**	**SWM050005**

		Page No.:	1
Proj./Company Name:	SCHNITZER STEEL INTERNATIONAL	**Date Received:**	04/01/05
Address/Location:	12005 N BURGARD		
		Sample Status:	COMPLETE AND VALIDATED
Proj Subcategory:	INDUSTRIAL STORMWATER SAMPLING	**Sample Type:**	GRAB
Sample Point Code:	03	**Sample Matrix:**	STORMWTR
IMS File # / LCODE:	3060.001 SCHNITZS	**Collected By:**	ABW

Comments:

Test Parameter	Result	Units	MRL	Method
FIELD				
pH (FIELD)	7.3	pH Units	0.1	SM 4500-H B
GENERAL				
COD	820	mg/L	5	SM 5220 D
OIL & GREASE, TOTAL	5.1	mg/L	5	EPA 1664
TOTAL SUSPENDED SOLIDS	216	mg/L	2	SM 2540 D
METALS BY ICP-MS (TOTAL) - 3				
COPPER	0.343	mg/L	0.0002	EPA 200.8
LEAD	0.791	mg/L	0.0001	EPA 200.8
ZINC	4.10	mg/L	0.0005	EPA 200.8
OUTSIDE				
MERCURY	0.00189	mg/L	0.000500	EPA 1631

End of Report for Sample ID: SWM050005

6543 N. Burlington Ave. / Portland OR 97203 (503) 823-5600 fax (503) 823-5656

Report Date: 04/20/05

Validated By:

City of Portland
Water Pollution Control Laboratory
Laboratory Analysis Report

C

Sample Date/Time	04/01/05 9:05	System ID	AJ02927	Sample ID	SWM050004

		Page No.:	1
Proj./Company Name:	SCHNITZER STEEL INTERNATIONAL	Date Received:	04/01/05
Address/Location:	12005 N BURGARD		
		Sample Status:	COMPLETE AND VALIDATED
Proj Subcategory:	INDUSTRIAL STORMWATER SAMPLING	Sample Type:	GRAB
Sample Point Code:	05	Sample Matrix:	STORMWTR
IMS File # / LCODE:	3060.001 SCHNITZS	Collected By:	ABW

Comments:

Test Parameter	Result	Units	MRL	Method
FIELD				
pH (FIELD)	7.2	pH Units	0.1	SM 4500-H B
GENERAL				
COD	88	mg/L	5	SM 5220 D
OIL & GREASE, TOTAL	5.1	mg/L	5	EPA 1664
TOTAL SUSPENDED SOLIDS	132	mg/L	2	SM 2540 D
METALS BY ICP-MS (TOTAL) - 3				
COPPER	0.183	mg/L	0.0002	EPA 200.8
LEAD	0.420	mg/L	0.0001	EPA 200.8
ZINC	1.47	mg/L	0.0005	EPA 200.8
OUTSIDE				
MERCURY	0.000831	mg/L	0.000100	EPA 1631

End of Report for Sample ID: SWM050004

6543 N. Burlington Ave. / Portland OR 97203 (503) 823-5600 fax (503) 823-5656

Report Date: 04/20/05

Validated By:

City of Portland
Water Pollution Control Laboratory
Laboratory Analysis Report

Sample Date/Time	04/01/05 8:50	**System ID**	AJ02926	**Sample ID**	**SWM050003**

		Page No.:	1
Proj./Company Name:	SCHNITZER STEEL INTERNATIONAL	**Date Received:**	04/01/05
Address/Location:	12005 N BURGARD		
		Sample Status:	COMPLETE AND VALIDATED
Proj Subcategory:	INDUSTRIAL STORMWATER SAMPLING	**Sample Type:**	GRAB
Sample Point Code:	06	**Sample Matrix:**	STORMWTR
IMS File # / LCODE:	3060.001 SCHNITZS	**Collected By:**	ABW

Comments:

Test Parameter	Result	Units	MRL	Method
FIELD				
pH (FIELD)	6.3	pH Units	0.1	SM 4500-H B
GENERAL				
COD	<5	mg/L	5	SM 5220 D
OIL & GREASE, TOTAL	24.1	mg/L	5	EPA 1664
TOTAL SUSPENDED SOLIDS	8	mg/L	2	SM 2540 D
METALS BY ICP-MS (TOTAL) - 3				
COPPER	0.0104	mg/L	0.0002	EPA 200.8
LEAD	0.0220	mg/L	0.0001	EPA 200.8
ZINC	0.0594	mg/L	0.0005	EPA 200.8
OUTSIDE				
MERCURY	0.0000386	mg/L	0.000005	EPA 1631

End of Report for Sample ID: SWM050003

6543 N. Burlington Ave. / Portland OR 97203 (503) 823-5600 fax (503) 823-5656

Report Date: 04/20/05

Validated By:

City of Portland
Water Pollution Control Laboratory
Laboratory Analysis Report

C

Sample Date/Time	04/01/05 9:30	System ID	AJ02929	Sample ID	SWM050006

		Page No.:	1
Proj./Company Name:	SCHNITZER STEEL INTERNATIONAL	Date Received:	04/01/05
Address/Location:	12005 N BURGARD		
		Sample Status:	COMPLETE AND VALIDATED
Proj Subcategory:	INDUSTRIAL STORMWATER SAMPLING	Sample Type:	GRAB
Sample Point Code:	20	Sample Matrix:	STORMWTR
IMS File # / LCODE:	3060.001 SCHNITZS	Collected By:	ABW

Comments:

Test Parameter	Result	Units	MRL	Method
FIELD				
pH (FIELD)	6.3	pH Units	0.1	SM 4500-H B
GENERAL				
COD	38	mg/L	5	SM 5220 D
OIL & GREASE, TOTAL	5.3	mg/L	5	EPA 1664
TOTAL SUSPENDED SOLIDS	44	mg/L	2	SM 2540 D
METALS BY ICP-MS (TOTAL) - 3				
COPPER	0.0383	mg/L	0.0002	EPA 200.8
LEAD	0.0555	mg/L	0.0001	EPA 200.8
ZINC	0.264	mg/L	0.0005	EPA 200.8
OUTSIDE				
MERCURY	0.0000833	mg/L	0.000005	EPA 1631

End of Report for Sample ID: SWM050006

6543 N. Burlington Ave. / Portland OR 97203 (503) 823-5600 fax (503) 823-5656

Report Date: 04/20/05

Validated By:

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Investment Corp. (Steel)
ATTN: James Jakubiak
3200 NW Yeon
Portland OR, 97296

PHONE: (503) 286-6976
FAX: (503) 286-6948

PROJECT NAME: 1200Z Stormwater - Extended Test

SUBMITTED: 05/10/05 16:25

REPORT DATE: 05/23/05 16:09 REPORT NUMBER: 5051014 PAGE: 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5051014-01	#6	05/10/2005	0900	Water
5051014-02	#5	05/10/2005	0915	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5051014-01	**SAMPLE ID: #6**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	19	mg/L	5.0	DM	05/20/2005 14:29
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	MRP	05/19/2005 08:47
PH	EPA 150.1/9040	pH	7.55	SU		DM	05/10/2005 17:26
		TEMPERATURE (C)	17.8	SU			
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	120	mg/L	1.0	MRP	05/16/2005 13:52
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	0.000057	mg/L	0.000005	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.15	mg/L	0.0005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.199	mg/L	0.0005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	0.60	mg/L	0.0005	BKB	05/11/2005 14:01
5051014-02	**SAMPLE ID: #5**						
General Bench Analysis							
COD	EPA 410.4	CHEMICAL OXYGEN DEMAND	ND	mg/L	5.0	DM	05/20/2005 14:29
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	MRP	05/19/2005 08:47
PH	EPA 150.1/9040	pH	6.99	SU		DM	05/10/2005 17:26
		TEMPERATURE (C)	18.5	SU			
SUSPENDED SOLIDS	EPA 160.2	TOTAL SUSPENDED SOLIDS	1.3	mg/L	1.0	MRP	05/16/2005 13:52
Total Mercury by Cold Vapor Atomic Absorption							
MERCURY CV AF	EPA 245.7/1631	MERCURY	0.000005	mg/L	0.000005	BKB	05/11/2005 10:52
Total Metals by Inductively Coupled Plasma							
COPPER - ICP	EPA 200.7/6010B	COPPER	0.004	mg/L	0.0005	BKB	05/11/2005 14:01
LEAD - ICP		LEAD	0.006	mg/L	0.0005	BKB	05/11/2005 14:01
ZINC - ICP		ZINC	0.005	mg/L	0.0005	BKB	05/11/2005 14:01

This report may not be reproduced except in full.

Authorized for Release By: Richard D. Reid - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

ATTACHMENT 3

Columbia Analytical Services Inc.
Laboratory Results

1317 South 13th Avenue P.O. Box 479 Kelso, Washington 98626 (360) 577-7222 ph (360) 636-1068 fax

Columbia Analytical Services INC.
An Employee - Owned Company

June 21, 2005

Service Request No: K2503397

Jim Jakubiak
Schnitzer Steel
P.O. Box 10047
Portland, OR 97210

Dear Jim:

Enclosed are the results of the sample(s) submitted to our laboratory on May 13, 2005. For your reference, these analyses have been assigned our service request number K2503397.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAC standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3260.

Respectfully submitted,

Columbia Analytical Services, Inc.

Harvey Jacky
Project Chemist

HJ/jeb

NELAP Accredited ACIL Seal of Excellence Award

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
B	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL has been elevated due to a matrix interference.
X	See case narrative.
*	The duplicate analysis not within control limits. See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated concentration that is less than the MRL but greater than or equal to the MDL.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results (25% for CLP Pesticides).
U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
i	The MRL/MDL has been elevated due to a chromatographic interference.
X	See case narrative.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Case Narrative

SCHN00243750

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Schnitzer Steel	**Service Request No.:**	K2503397
Project:	NA	**Date Received:**	5/13/05
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Matrix/Duplicate Matrix Spike (MS/DMS), and Laboratory Control Sample (LCS).

Sample Receipt

One water sample was received for analysis at Columbia Analytical Services on 5/13/05. The sample was received in good condition and consistent with the accompanying chain of custody form. The sample was stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Total Metals

No anomalies associated with the analysis of these samples were observed.

Oil and Grease by EPA Method 1664

No anomalies associated with the analysis of these samples were observed.

Approved by HS Date 6/21/05

Chain of Custody Documentation

SCHN00243752

Columbia Analytical Services INC.
An Employee-Owned Company

CHAIN OF CUSTODY

SR#: KR503397

1317 South 13th Ave. • Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

PAGE 1 OF 1 COC #

PROJECT NAME: Schnitzer Steel
PROJECT NUMBER:
PROJECT MANAGER: Jim Jakubiak
COMPANY/ADDRESS: PO Box 10047, Portland, OR. 97296-0047
PHONE #: (503) 286-6976 FAX #: (503) 286-6948
SAMPLER'S SIGNATURE:

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625☐ 8270☐ 8270LL☐	Volatile Organics 624☐ 8260☐	Hydrocarbons (*see below) Gas☐ 8021☐ BTEX☐ Diesel☐ Oil☐ ☐ Fuel Fingerprint (FIQ) ☐ NW-HCID	Oil & Grease/TRPH 1664 HEM☐ 1664 SGT☐	PCB's Aroclors☐ Congeners☐	Pesticides/Herbicides 608☐ 8081A☐ 8141A☐ 8151A☐	Chlorophenolics - 8151M Tri☐ Tetra☐ PCP☐	PAHS 8310☐ SIM☐	Metals, Total or Dissolved (See list below) Copper Lead Zinc	Cyanide☐ Hex-Chrom☐	pH, Cond, Cl, SO_4, PO_4, F, NO_2, NO_3, BOD, TSS, TDS (circle) NH_3-N, COD, Total-P, TKN, TOC, DOC (circle) NO_2+NO_3	TOX 9020☐ AOX 1650☐ 506☐	Mercury - EPA 1631	TSS - SM 2540D	COD - SM 5220D			REMARKS
#6D	5-10-05	0900		W	3					X					X					X	X	X		

REPORT REQUIREMENTS

- X I. Routine Report: Method Blank, Surrogate, as required
- ___ II. Report Dup., MS, MSD as required
- ___ III. Data Validation Report (includes all raw data)
- ___ IV. CLP Deliverable Report
- ___ V. EDD

INVOICE INFORMATION

P.O. #
Bill To: SSI

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr (Cu) Fe (Pb) Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V (Zn) (Hg)

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORHTWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

COD - SM 5220D 5mg/L MRL
O&G - EPA 1664 5mg/L MRL
TSS - SM 2540D 2mg/L MRL
Copper/Lead/Zinc 200.8 0.0002mg/L MRL
Mercury - EPA 1631 0.000005 mg/L MRL

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY:
Signature: 5/13/05 0900 Date/Time	Signature: 5/13/05 1400 Date/Time	Signature Date/Time	Signature Date/Time
Printed Name: Jim Jakubiak Firm: SSI	Printed Name Firm: CAS	Printed Name Firm	Printed Name Firm

RCOC #1 04/02

SCHN00243753

Columbia Analytical Services Inc.
Cooler Receipt and Preservation Form

PC MARV

Project/Client Schnitzer Work Order K250 K2503397

Cooler received on 5-13-05 and opened on 5-13-05 by A. Jwell

1. Were custody seals on outside of coolers? Y (N)
   If yes, how many and where?
2. Were custody seals intact? ~~Y N~~
3. Were signature and date present on the custody seals? ~~Y N~~
4. Is the shipper's airbill available and filed? If no, record airbill number: C. Courier Y N
5. COC#
   Temperature of cooler(s) upon receipt: (°C) 10.6
   Temperature Blank: (°C) NA
   Were samples hand delivered on the same day as collection? Y (N)
6. Were custody papers properly filled out (ink, signed, etc.)? (Y) N
7. Type of packing material present Ice
8. **Did all bottles arrive in good condition (unbroken)?** (Y) N
9. Were all bottle labels complete (i.e analysis, preservation, etc.)? (Y) N
10. Did all bottle labels and tags agree with custody papers? (Y) N
11. **Were the correct types of bottles used for the tests indicated?** Y (N)
12. Were all of the preserved bottles received at the lab with the appropriate pH? (Y) & (N)
13. Were VOA vials checked for absence of air bubbles, and if present, noted below? ~~Y N~~
14. Did the bottles originate from CAS/K or a branch laboratory? Y (N)
15. **Are CWA Microbiology samples received with >1/2 the 24hr. hold time remaining from collection?** ~~Y N~~
16. Was C12/Res negative? ~~Y N~~

Explain any discrepancies: did not Rec'd bottle for COD test. Aliquoted & preserved a portion of 1 Liter unpreserved bottle

RESOLUTION:

Samples that required preservation or received out of temperature:

Sample ID	Reagent	Volume	Lot Number	Bottle Type	Rec'd out of Temperature	Initials
Aliquoted Portion	H_2SO_4	1/2 ml	EMK2571320Z	250 ml y.		AJ

00008

SCHN00243754

General Chemistry Parameters

SCHN00243755

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Schnitzer Steel
Project Name : NA
Project Number : NA
Sample Matrix : WATER

Service Request : K2503397
Date Collected : 05/10/05
Date Received : 05/13/05

Chemical Oxygen Demand

Analysis Method : 410.2
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
#6D	K2503397-001	5	1	05/18/05	ND	
Method Blank	K2503397-MB	5	1	05/18/05	ND	

00010

Report By:PWiest

SCHN00243756

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Schnitzer Steel
Project Name : NA
Project Number : NA
Sample Matrix : WATER

Service Request : K2503397
Date Collected : 05/10/05
Date Received : 05/13/05
Date Extracted : NA
Date Analyzed : 05/18/05

Duplicate Summary
Inorganic Parameters

Sample Name : #6D
Lab Code : K2503397-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chemical Oxygen Demand	410.2	5	ND	ND	ND	-	

00011

Report By:PWiest

SCHN00243757

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Schnitzer Steel
Project Name : NA
Project Number : NA
Sample Matrix : WATER

Service Request : K2503397
Date Collected : 05/10/05
Date Received : 05/13/05
Date Extracted : NA
Date Analyzed : 05/18/05

Matrix Spike Summary
Inorganic Parameters

Sample Name : #6D
Lab Code : K2503397-001MS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chemical Oxygen Demand	410.2	13	100	ND	101	101	75-125	

00012

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Schnitzer Steel	**Service Request :**	K2503397
Project Name :	NA	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	05/18/05

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L (ppm)
Lab Code :	K2503397-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chemical Oxygen Demand	None	410.2	82	87	106	85-115	

00013

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Schnitzer Steel
Project Name : NA
Project Number : NA
Sample Matrix : WATER

Service Request : K2503397
Date Collected : 05/10/05
Date Received : 05/13/05

Solids, Total Suspended (TSS)

Units : mg/L (ppm)
Basis : NA

Analysis Method : 160.2
Test Notes :

Sample Name	Lab Code	MRL	Dilution Factor	Date Analyzed	Result	Result Notes
#6D	K2503397-001	5	1	05/14/05	ND	
Method Blank	K2503397-MB	5	1	05/14/05	ND	

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Schnitzer Steel
Project Name : NA
Project Number : NA
Sample Matrix : WATER

Service Request : K2503397
Date Collected : 05/10/05
Date Received : 05/13/05
Date Extracted : NA
Date Analyzed : 05/14/05

Duplicate Summary
Inorganic Parameters

Sample Name : #6D
Lab Code : K2503397-001DUP
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Solids, Total Suspended (TSS)	160.2	5	ND	ND	ND	-	

00015

Report By:PWiest

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Schnitzer Steel	**Service Request :**	K2503397
Project Name :	NA	**Date Collected :**	NA
Project Number :	NA	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	05/14/05

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L (ppm)
Lab Code :	K2503397-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Solids, Total Suspended (TSS)	None	160.2	304	260	86	85-115	

00016

Report By:PWiest

SCHN00243762

Metals

SCHN00243763

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Schnitzer Steel Products Co.	**Service Request:**	K2503397
Project:	NA	**Date Collected:**	5/10/05
Sample Matrix:	Water	**Date Received:**	5/13/05

Mercury, Total

Prep Method:	METHOD	Units:	ng/L
Analysis Method:	1631E	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
#6D	K2503397-001	1.0	1	5/23/05	5/23/05	9.9	
Method Blank 1	K2503397-MB1	1.0	1	5/23/05	5/23/05	ND	
Method Blank 2	K2503397-MB2	1.0	1	5/23/05	5/23/05	ND	
Method Blank 3	K2503397-MB3	1.0	1	5/23/05	5/23/05	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Schnitzer Steel Products Co.	**Service Request:**	K2503397
Project:	NA	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	5/23/05
		Date Analyzed:	5/23/05

Matrix Spike/Duplicate Matrix Spike Summary
Total Metals

Sample Name:	Batch QCS	Units:	ng/L
Lab Code:	K2503426-001S, K2503426-001SD	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Percent Recovery MS	Percent Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Mercury	METHOD	1631E	1.0	25	25	1.1	20.7	21.8	78	83	71-125	5	

K2503397ICP.rml - DMS 6/9/05

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Schnitzer Steel Products Co.
Project: NA
LCS Matrix: Water

Service Request: K2503397
Date Collected: NA
Date Received: NA
Date Extracted: 5/23/05
Date Analyzed: 5/23/05

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Initial)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.59	92	77-123	

K2503397ICP.rml - OPR (lcsw) 6/9/05

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Schnitzer Steel Products Co.	**Service Request:**	K2503397
Project:	NA	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	5/23/05
		Date Analyzed:	5/23/05

Ongoing Precision and Recovery (OPR) Sample Summary
Total Metals

Sample Name: Ongoing Precision and Recovery (Final)

Units: ng/L
Basis: NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	4.89	98	77-123	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Schnitzer Steel Products Co.	**Service Request:**	K2503397
Project:	NA	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	5/23/05
		Date Analyzed:	5/23/05

Quality Control Sample (QCS) Summary
Total Metals

Sample Name:	Quality Control Sample	Units:	ng/L
Lab Code:	K2503397-QCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Mercury	METHOD	1631E	5.00	5.29	106	77-123	

Columbia Analytical Services

METALS

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Schnitzer Steel Products Co. Service Request: K2503397

Project No.:

Project Name:

Sample No.	Lab Sample ID.
#6D	K2503397-001
#6DD	K2503397-001D
#6DS	K2503397-001S
Method Blank	K2503397-MB

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES

If yes-were raw data generated before application of background corrections? Yes/No NO

Comments:

Signature: Date: 6/9/05

COVER PAGE - IN

00023

SCHN00243769

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Schnitzer Steel Products Co.
Project No.: NA
Project Name: NA
Matrix: WATER

Service Request: K2503397
Date Collected: 05/10/05
Date Received: 05/13/05
Units: µG/L
Basis: NA

Sample Name: #6D
Lab Code: K2503397-001

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Copper	200.8	0.1	1	5/24/05	5/27/05	2.5		
Lead	200.8	0.02	1	5/24/05	5/27/05	2.61		
Zinc	200.8	0.5	1	5/24/05	5/27/05	8.0		

% Solids: 0.0

Comments:

METALS

-1-

INORGANIC ANALYSIS DATA SHEET

Client: Schnitzer Steel Products Co.
Project No.: NA
Project Name: NA
Matrix: WATER

Service Request: K2503397
Date Collected:
Date Received:
Units: µG/L
Basis: NA

Sample Name: Method Blank
Lab Code: K2503397-MB

Analyte	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Copper	200.8	0.1	1	5/24/05	5/27/05	0.1	U	
Lead	200.8	0.02	1	5/24/05	5/27/05	0.02	U	
Zinc	200.8	0.5	1	5/24/05	5/27/05	0.5	U	

% Solids: 0.0

Comments:

METALS
- 5a -
SPIKE SAMPLE RECOVERY

Client: Schnitzer Steel Products Co.
Service Request: K2503397
Project No.:
Units: µg/L
Project Name:
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: #6DS
Lab Code: K2503397-001S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Copper	70 - 130	21.5		2.5		20.0	95		200.8
Lead	70 - 130	21.9		2.61		20.0	96		200.8
Zinc	70 - 130	27.6		8.0		20.0	98		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

METALS
-6-
DUPLICATES

Client: Schnitzer Steel Products Co.
Service Request: K2503397
Project No.:
Units: µg/L
Project Name:
Basis: NA
Matrix: WATER
% Solids: 0.0

Sample Name: #6DD
Lab Code: K2503397-001D

Analyte	Control Limit(%)	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Copper	20	2.5		2.5		2		200.8
Lead	20	2.61		2.76		6		200.8
Zinc	20	8.0		8.4		5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable. 00027

Form VI - IN

METALS
-7-
LABORATORY CONTROL SAMPLE

Client: Schnitzer Steel Products Co. Service Request: K2503397

Project No.:

Project Name:

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous ug/L True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Copper	20.0	19.4	97						
Lead	20.0	18.7	94						
Zinc	20.0	19.9	100						

00028

Oil & Grease
EPA Method 1664

SCHN00243775

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Schnitzer Steel	**Service Request:**	K2503397
Project:	NA	**Date Collected:**	5/10/2005
Sample Matrix:	Water	**Date Received:**	5/13/2005

Oil and Grease

Sample Name:	#6D	Units:	mg/L (ppm)
Lab Code:	K2503397-001	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1	5/19/2005	5/20/2005	ND	

Approved By: _____ Date: 060205

1S22/020597p

K2503397PHC.cq1 - 1 6/2/2005

SCHN00243776

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Schnitzer Steel	**Service Request:**	K2503397
Project:	NA	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Oil and Grease

Sample Name:	Method Blank	Units:	mg/L (ppm)
Lab Code:	K050519-WB	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	1	5/19/2005	5/20/2005	ND	

Approved By: _____ Date: 060205

1S22/020597p

K2503397PHC.cq1 - MB 6/2/2005

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Schnitzer Steel	**Service Request:**	K2503397
Project:	NA	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	5/19/2005
		Date Analyzed:	5/20/2005

Matrix Spike Summary
Oil and Grease

Sample Name:	Batch QC	Units:	mg/L (ppm)
Lab Code:	K0500339-002MS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	5.0	40	ND	37.2	93	78-114	

Approved By: _____ Date: 06/02/05

MS/072898p
K2503397PHC.cq1 - MS 6/2/2005

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Schnitzer Steel	**Service Request:**	K2503397
Project:	NA	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	5/19/2005
		Date Analyzed:	5/20/2005

Laboratory Control Sample/Duplicate Laboratory Control Sample Summary
Oil and Grease

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K050519-WL1, K050519-WL2	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value LCS	True Value DLCS	Result LCS	Result DLCS	Percent Recovery LCS	Percent Recovery DLCS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Oil and Grease, Total (HEM)	METHOD	1664	40	40	39.9	38.4	100	96	78-114	4	

Approved By: _____ Date: 060205

DLCS/072898p
K2503397PHC.cql - DLCS 6/2/2005

ATTACHMENT 4

City of Portland
July 13, 2005
Correspondance

CITY OF PORTLAND
ENVIRONMENTAL SERVICES

Water Pollution Control Laboratory
6543 N. Burlington Ave., Portland, Oregon 97203-5452
(503) 823-5600

July 13, 2005

Mr. Jim Jakubiak
Schnitzer Steel Industries, Inc.
PO Box 10047
Portland, OR 97296-0047

Subject: Stormwater Sampling Results

Dear Mr. Jakubiak:

As part of the Industrial Stormwater Program, City staff perform routine sampling at industries within the City of Portland that have general stormwater permits.

Enclosed are the results of a stormwater sample, collected on April 1, 2005, from your facility located on 12005 N Burgard. The samples were collected from monitoring points 03, 05, 06, and 20 which discharge into the Willamette River. Please note that the following parameters exceeded the benchmarks contained in your company's NPDES 1200-Z Stormwater Permit.

SAMPLE LOCATION: 03

CONSTITUENT	RESULT	BENCHMARK
Chemical oxygen demand (COD)	820 mg/l	n/a
Total Suspended Solids (TSS)	216 mg/l	130 mg/l
Copper	0.343 mg/l	0.1 mg/l
Lead	0.791 mg/l	0.4 mg/l
Zinc	4.1 mg/l	0.6 mg/l

SAMPLE LOCATION: 05

CONSTITUENT	RESULT	BENCHMARK
Total Suspended Solids (TSS)	132 mg/l	130 mg/l
Copper	0.183 mg/l	0.1 mg/l
Lead	0.42 mg/l	0.4 mg/l
Zinc	1.47 mg/l	0.6 mg/l

SAMPLE LOCATION: 06

CONSTITUENT	RESULT	BENCHMARK
Oil & Grease	24.1 mg/l	10 mg/l

When benchmarks are not achieved, Schedule A(8) of the permit requires the Permittee to review their Storm Water Pollution Control Plan within sixty (60) days of receiving sample results. Results of this review are to be submitted to DEQ and the City in accordance with Schedule B(3). Please note that sampling conducted by the City may not be used to satisfy your permit-required self-monitoring.

The City collects additional samples for COD analysis as a screening process to evaluate whether or not other pollutant sources may be present that would not be detected through the standard 1200-Z permit suite of parameters. Please note that COD at sample point 03 was much higher than COD at the other three sample points. COD is a measurement of the amount of oxygen that can be oxidized by organic and inorganic compounds in a sample. Thus, it may represent a broad range of potential pollutants such as organic materials, chemicals, dissolved solids, etc. As part of your SWPCP review, you should also evaluate the drainage basin above sample point 03 to identify potential sources of elevated COD in stormwater.

If you have any questions regarding this letter, please feel free to contact me at 503-823-7383. Thank you.

Sincerely,

Aaron B. Wieting, R.G., C.H.M.M.
Environmental Technician
Industrial Stormwater Program

Enclosures

City of Portland
Water Pollution Control Laboratory
Laboratory Analysis Report

Sample Date/Time 04/01/05 9:15 **System ID** AJ02928 **Sample ID** SWM050005

Page No.: 1

Proj./Company Name: SCHNITZER STEEL INTERNATIONAL
Address/Location: 12005 N BURGARD

Date Received: 04/01/05

Sample Status: COMPLETE AND VALIDATED

Proj Subcategory: INDUSTRIAL STORMWATER SAMPLING
Sample Point Code: 03
IMS File # / LCODE: 3060.001 SCHNITZSW

Sample Type: GRAB
Sample Matrix: STORMWTR
Collected By: ABW

Comments:

Test Parameter	Result	Units	MRL	Method
FIELD				
pH (FIELD)	7.3	pH Units	0.1	SM 4500-H B
GENERAL				
COD	820	mg/L	5	SM 5220 D
OIL & GREASE, TOTAL	5.1	mg/L	5	EPA 1664
TOTAL SUSPENDED SOLIDS	216	mg/L	2	SM 2540 D
METALS BY ICP-MS (TOTAL) - 3				
COPPER	0.343	mg/L	0.0002	EPA 200.8
LEAD	0.791	mg/L	0.0001	EPA 200.8
ZINC	4.10	mg/L	0.0005	EPA 200.8
OUTSIDE				
MERCURY	0.00189	mg/L	0.000500	EPA 1631

End of Report for Sample ID: SWM050005

6543 N. Burlington Ave. / Portland OR 97203 (503) 823-5600 fax (503) 823-5656

Report Date: 06/27/05
Validated By:

City of Portland
Water Pollution Control Laboratory
Laboratory Analysis Report

Sample Date/Time 04/01/05 9:05 **System ID** AJ02927 **Sample ID** SWM050004

Page No.: 1

Proj./Company Name: SCHNITZER STEEL INTERNATIONAL
Address/Location: 12005 N BURGARD

Date Received: 04/01/05

Sample Status: COMPLETE AND VALIDATED

Proj Subcategory: INDUSTRIAL STORMWATER SAMPLING
Sample Point Code: 05
IMS File # / LCODE: 3060.001 SCHNITZSW

Sample Type: GRAB
Sample Matrix: STORMWTR
Collected By: ABW

Comments:

Test Parameter	Result	Units	MRL	Method
FIELD				
pH (FIELD)	7.2	pH Units	0.1	SM 4500-H B
GENERAL				
COD	88	mg/L	5	SM 5220 D
OIL & GREASE, TOTAL	5.1	mg/L	5	EPA 1664
TOTAL SUSPENDED SOLIDS	132	mg/L	2	SM 2540 D
METALS BY ICP-MS (TOTAL) - 3				
COPPER	0.183	mg/L	0.0002	EPA 200.8
LEAD	0.420	mg/L	0.0001	EPA 200.8
ZINC	1.47	mg/L	0.0005	EPA 200.8
OUTSIDE				
MERCURY	0.000831	mg/L	0.000100	EPA 1631

End of Report for Sample ID: SWM050004

6543 N. Burlington Ave. / Portland OR 97203 (503) 823-5600 fax (503) 823-5656

Report Date: 06/27/05
Validated By:

City of Portland
Water Pollution Control Laboratory
Laboratory Analysis Report

Sample Date/Time 04/01/05 8:50 **System ID** AJ02926 **Sample ID** **SWM050003**

Page No.: 1

Proj./Company Name: SCHNITZER STEEL INTERNATIONAL
Address/Location: 12005 N BURGARD

Date Received: 04/01/05

Sample Status: COMPLETE AND VALIDATED

Proj Subcategory: INDUSTRIAL STORMWATER SAMPLING
Sample Point Code: 06
IMS File # / LCODE: 3060.001 SCHNITZSW

Sample Type: GRAB
Sample Matrix: STORMWTR
Collected By: ABW

Comments:

Test Parameter	Result	Units	MRL	Method
FIELD				
pH (FIELD)	6.3	pH Units	0.1	SM 4500-H B
GENERAL				
COD	<5	mg/L	5	SM 5220 D
OIL & GREASE, TOTAL	24.1	mg/L	5	EPA 1664
TOTAL SUSPENDED SOLIDS	8	mg/L	2	SM 2540 D
METALS BY ICP-MS (TOTAL) - 3				
COPPER	0.0104	mg/L	0.0002	EPA 200.8
LEAD	0.0220	mg/L	0.0001	EPA 200.8
ZINC	0.0594	mg/L	0.0005	EPA 200.8
OUTSIDE				
MERCURY	0.0000386	mg/L	0.000005	EPA 1631

End of Report for Sample ID: **SWM050003**

6543 N. Burlington Ave. / Portland OR 97203 (503) 823-5600 fax (503) 823-5656

Report Date: 06/27/05
Validated By:

City of Portland
Water Pollution Control Laboratory
Laboratory Analysis Report

Sample Date/Time 04/01/05 9:30 **System ID** AJ02929 **Sample ID** **SWM050006**

Page No.: 1

Proj./Company Name: SCHNITZER STEEL INTERNATIONAL
Address/Location: 12005 N BURGARD

Date Received: 04/01/05

Sample Status: COMPLETE AND VALIDATED

Proj Subcategory: INDUSTRIAL STORMWATER SAMPLING
Sample Point Code: 20
IMS File # / LCODE: 3060.001 SCHNITZSW

Sample Type: GRAB
Sample Matrix: STORMWTR
Collected By: ABW

Comments:

Test Parameter	Result	Units	MRL	Method
FIELD				
pH (FIELD)	6.3	pH Units	0.1	SM 4500-H B
GENERAL				
COD	38	mg/L	5	SM 5220 D
OIL & GREASE, TOTAL	5.3	mg/L	5	EPA 1664
TOTAL SUSPENDED SOLIDS	44	mg/L	2	SM 2540 D
METALS BY ICP-MS (TOTAL) - 3				
COPPER	0.0383	mg/L	0.0002	EPA 200.8
LEAD	0.0555	mg/L	0.0001	EPA 200.8
ZINC	0.264	mg/L	0.0005	EPA 200.8
OUTSIDE				
MERCURY	0.0000833	mg/L	0.000005	EPA 1631

End of Report for Sample ID: SWM050006

6543 N. Burlington Ave. / Portland OR 97203 (503) 823-5600 fax (503) 823-5656

Report Date: 06/27/05
Validated By:

MUNITOR CONSTRUCTION, L.L.C.
CONSTRUCTION CONTRACT

This Contract is made this 13th day of September 2006 by and between Munitor Construction, L.L.C. (Munitor) and Schnitzer Steel Industries, ("SSI"):

For and in consideration of the mutual convenants contained herein, the parties agree:

ARTICLE I. SERVICES BY MUNITOR CONSTRUCTION, L.L.C.

1.0 Scope of Work

Munitor, at the direction of SSI will provide personnel, equipment, and materials for the cleaning of storm system as provided in quote attached at SSI's facility located at 12005 North Burgard Road in Portland, Oregon

1.1 Type of Services

As SSI may direct Munitor, will provide the following services (the "Services"):

Munitor to provide vacuum trucks, laborer, other equipment and materials to perform cleaning of sand filters, catch basins, oil water separators at SSI's facility in Portland, Oregon.

1.2 Method of Performance

1.2.1 Munitor shall mobilize such personnel, equipment, and materials as described above starting September 2006 weather pending.

1.2.2 Munitor shall comply in all respects with all applicable federal, state, and local laws and regulations in its performance of the Services.

1.2.3 Munitor will make its personnel and authorized subcontractors available to confer with SSI to review the status of and to review and establish procedures for the efficient delivery of Services hereunder.

1.2.4 Neither Munitor, its authorized subcontractors, nor any of their employees shall supervise, directly or indirectly, any temporary or permanent employee of SSI.

ARTICLE II. COMPENSATION

2.1 Compensation

SSI shall reimburse Munitor for services rendered at a fixed price, not-to-exceed basis, in accordance with Munitor's bid dated August 23, 2006(Attached).

2.2 Invoice

Munitor Construction, L.L.C. shall invoice SSI monthly or upon project completion for Services performed hereunder. SSI shall make payment within thirty (30) days of receiving such invoice. A late fee will be added to accounts 30 days in arrears at the rate of one and one half percent (1.5%) of the amount due for each month of delinquency.

SCHN00243794

ARTICLE III. MUNITOR CONSTRUCTION, L.L.C. – LIABILITY INSURANCE

Until the Services are completed, Munitor agrees to provide and maintain at its own expense the following insurance coverage:

(a) Workers' Compensation at the statutory limits for the state or states in which the work is to be performed.
(b) Commercial Liability insurance in the amount of $2,000,000 combined single limit for bodily injury and property damage, including product liability, completed operations, contractual liability and, where applicable, coverage for damage caused by blasting, collapse or structural injury, and/or damage to underground utilities.
(c) Automobile Public Liability in the amount of $1,000,000 per occurrence for bodily injury and property damage, including non-owned automobiles. In the event that "Client" desires additional insurance,"Client" will notify Munitor of such request in writing and Munitor will obtain a quote from its insurance carrier regarding the cost of obtaining the requested coverage. The cost of such additional insurance will be borne by SSI. Munitor will not procure this additional coverage without the written approval of SSI.
(d) Munitor shall make SSI an additional insured party to their insurance policy.

ARTICLE IV. PROJECT PERFORMANCE

4.1 Performance of Services

Munitor will perform all Services under this Contract in accordance with generally accepted professional standards that apply in the community where the Services are performed for the type of work involved.

ARTICLE V. MISCELLANEOUS

5.1 Access to Property

SSI has the responsibility of obtaining a right of entry to property where the Services are to be performed. The right of entry shall allow Munitor, its agents, subcontractors, and employees to enter the property from time to time, as necessary to perform all acts, studies, and research pursuant to the agreed services within the scope of work. Munitor does not assume control of or responsibility for the property, the person in charge of the property, nor the safety of persons not in Munitor, employ.

5.2 Unforeseen Conditions or Occurrences

If any unforeseen conditions or occurrences, including, but not limited to, hazardous substances or pollutants, are encountered, which, in Munitor, reasonable judgment, significantly affect or may affect the recommended scope of the Services, then Munitor will notify SSI. After such notification, Munitor will complete the original scope of Services, if appropriate, or agree with SSI to modify the Agreement, or terminate this Agreement with respect to the Services pursuant to Section 6.11 hereof. Changes to the original scope of work that will result in increased compensation for the project must be approved by SSI in writing.

SCHN00243795

ARTICLE VI. GENERAL PROVISIONS

6.1 Indemnification

To the fullest extent permitted by law, each party shall defend, Indemnify and hold harmless the other party, its consultants, and the agents and employees of any of them from and against claims, damages, losses, and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from performance of services hereunder, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the indemnitor, anyone directly or indirectly employed by it, or anyone for whose acts it may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by any other person.

6.2 Permits and Access

Munitor will assist SSI in securing necessary permits required by authorities having jurisdiction over the project area.

6.3 Force Majeure

Delay or failure of Munitor in the performance of services hereunder shall be excused if caused by circumstances beyond the control of Munitor, including, without limitation, acts of God, strikes, fire, flood, windstorm, action or request of governmental authority, and inability to obtain material, equipment, or services, provided that a prompt notice of such delay or failure is given and Munitor diligently attempts to remove the cause.

6.4 Independent Client

Munitor is and shall perform all Services as an independent contractor and as such shall have and maintain exclusive control and direction over all of its employees, agents, and operations.

6.5 Subcontracts

Munitor may not, without SSI consent in writing, delegate the performance of Services hereunder, or any portion thereof. If approved, subcontractors will be required to sign a Munitor, subcontract agreement prior to the start of work.

6.6 Survival

Section 6.1 and all other provisions of this Contract that may reasonably be construed as surviving the term of this Contract shall survive the term of this Contract.

6.7 Applicable Law

Exclusively the laws of the State of Oregon shall govern this Contract. Venue for any dispute hereunder shall be in the federal or state courts sitting in Multnomah county, and each party hereby consents to the jurisdiction of such courts for any dispute hereunder, provided, however, that nothing herein shall preclude Munitor from excising its mechanics' or materialmen's lien rights under the laws of any jurisdiction where the Services are performed.

6.8 Severability

If any provision of this Contract if found to be illegal, invalid, or unenforceable for any reason, such findings shall not affect the other provisions hereof.

SCHN00243796

6.9 Taxes

SSI shall pay all state and local sales, use, or excise taxes of any kind assessed and/or arising out of the sale or use of the Services and shall, upon demand, reimburse Munitor for any sums it has expended for such taxes. It is assumed all taxes have been included in Munitor's attached cost proposal.

6.10 Term and Termination

The term of this Contract shall expire upon written notice by either party; provided, however, that neither party shall have the right to terminate this Contract except pursuant to the following provisions of this Section 6.11

(a) Either party may, for its sole convenience, terminate the performance of the Services in whole or in part at any time, or from time to time, by giving thirty (30) days written notice of intent to terminate.

(b) SSI will pay Munitor all time and materials costs (and any fee) which have accrued as of the effective date of termination and, in addition, those time and materials costs incurred or earned in good faith by Munitor after the effective date of termination in connection with (1) demobilization of equipment and personnel and (2) any necessary subcontract and/or vendor settlements.

(c) The rights and remedies of the parties provided in the section 6.10 are in addition to any other rights and remedies provided by law or under this Contract.

6.11 Entire Agreement

This Contract contains the entire and only agreement between SSI and Munitor respecting the subject matter hereof. It supersedes all prior or conflicting agreement, representation, promises, or conditions. Any modification of this Contract must be in writing and signed by both parties and must expressly indicate intent to modify this contract.

James L. Jakobiak	HARLEY MESERVEY
Name of Authorized Representative Of SSI(Printed)	Name of Munitor Rep.(Printed)
James L. Jakobiak	Harley Meservey
Authorized Signature	Authorized Signature
Title Environmental Administrator	Title Member
Date 9/25/06	Date 9/25/06
Schnitzer Steel Industries, Inc. 12005 North Burgard Road Portland, Oregon 97203 (503) 224-9900	Munitor Construction, L.L.C. 206 N Tomahawk Island Drive Portland, OR 97217 (503) 702-6542

Munitor Construction, LLC
Portland, Oregon
CCB 148811

August 23, 2006

To: Mr. Jim Jakubiak
Schnitzer Steel, Inc.
Portland, Oregon

From: Mr. Harley Meservey
Munitor Construction, LLC
Portland, Oregon

Re. Storm Water System Maintenance
Schnitzer Steel
Portland, Oregon
Project #529

Mr. Jim Jakubiak:

Munitor Construction, LLC (Munitor) is pleased to present this cost estimate for Storm Water System Maintenance. Below is a scope of work, cost estimate, and assumptions.

Scope of Work- Cleaning with complete sand removal
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems-remove and replace sand
  - Outfall #3 Sandfilter
  - Outfall #4 Sandfilter
  - Outfall #5 Sandfilter
  - Outfall #6 Sandfilter
  - Oil/Water Seperators at outfall #1, #14, #16
  - Oil/Water Seperator at former outfall #7
  - Oil/Water Seperator at outfall #13 and #15
  - Remove plates in oil/water separator and steam clean
  - Steam Clean sand filters interior
  - Includes Jet rodding lines to outfall from sand filters
  - Jet Rodding Catch Basins with access
  - Replace filter fabric and piping in sand filters
  - Sand replacement and removal
  - Supply catch basin inserts
  - Install new storm water management filters

Cost Estimate
Munitor Construction is providing the following bid for the project.

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$7440.00	$7440.00
Clean Sandfilter #4	1	LS	$9290.00	$9290.00
Clean Sandfilter #5	1	LS	$17110.00	$17110.00
Clean Sandfilter #6	1	LS	$8215.00	$8215.00
Oil/Water Seperators at outfall #1, #14, #16	1	LS	$5665.00	$5665.00
Oil/Water Seperator at former outfall #7	1	LS	$1800.00	$1800.00
Oil/Water Seperator at outfall #13 and #15	1	LS	$3770.00	$3770.00
Catch Basin cleaning	1	LS	$2100.00	$2100.00
Catch Basin jet rodding	1	LS	$2250.00	$2250.00
Catch Basin inserts	125	EA	$36.80	$4680.00
			Total	**$62320.00**

SCHN00243798

Assumptions

The following assumptions have been made in the development of this bid.

- Work will not be performed during rain events.
- All liquids removed will be recycled onsite at water treatment system and sand disposal at Columbia Ridge Landfill.

Munitor would like to thank you for the opportunity to provide services to you. If you have any questions or would like to schedule work please contact me anytime at (503) 702-6542. We look forward to providing professional services to you and any future needs.

Regards,

Harley Meservey

Harley Meservey
President

MUNITOR CONSTRUCTION, L.L.C.
CONSTRUCTION CONTRACT

This Contract is made this 13th day of September 2006 by and between Munitor Construction, L.L.C. (Munitor) and Schnitzer Investment Corp, ("SIC"):

For and in consideration of the mutual convenants contained herein, the parties agree:

ARTICLE I. SERVICES BY MUNITOR CONSTRUCTION, L.L.C.

1.0 Scope of Work

Munitor, at the direction of SIC will provide personnel, equipment, and materials for the cleaning of storm system as provided in quote attached at SIC's facility located at Burgard Industrial Park in Portland, Oregon

1.1 Type of Services

As SIC may direct Munitor, will provide the following services (the "Services"):

Munitor to provide vacuum trucks, laborer, other equipment and materials to perform cleaning of sand filters, catch basins, oil water separators at SIC's facility in Portland, Oregon.

1.2 Method of Performance

1.2.1 Munitor shall mobilize such personnel, equipment, and materials as described above starting September 2006 weather pending.

1.2.2 Munitor shall comply in all respects with all applicable federal, state, and local laws and regulations in its performance of the Services.

1.2.3 Munitor will make its personnel and authorized subcontractors available to confer with SIC to review the status of and to review and establish procedures for the efficient delivery of Services hereunder.

1.2.4 Neither Munitor, its authorized subcontractors, nor any of their employees shall supervise, directly or indirectly, any temporary or permanent employee of SIC.

ARTICLE II. COMPENSATION

2.1 Compensation

SIC shall reimburse Munitor for services rendered at a fixed price, not-to-exceed basis, in accordance with Munitor's bid dated August 23, 2006(Attached).

2.2 Invoice

Munitor Construction, L.L.C. shall invoice SIC monthly or upon project completion for Services performed hereunder. SIC shall make payment within thirty (30) days of receiving such invoice. A late fee will be added to accounts 30 days in arrears at the rate of one and one half percent (1.5%) of the amount due for each month of delinquency.

ARTICLE III. MUNITOR CONSTRUCTION, L.L.C. – LIABILITY INSURANCE

Until the Services are completed, Munitor agrees to provide and maintain at its own expense the following insurance coverage:

(a) Workers' Compensation at the statutory limits for the state or states in which the work is to be performed.
(b) Commercial Liability insurance in the amount of $2,000,000 combined single limit for bodily injury and property damage, including product liability, completed operations, contractual liability and, where applicable, coverage for damage caused by blasting, collapse or structural injury, and/or damage to underground utilities.
(c) Automobile Public Liability in the amount of $1,000,000 per occurrence for bodily injury and property damage, including non-owned automobiles. In the event that "Client" desires additional insurance,"Client" will notify Munitor of such request in writing and Munitor will obtain a quote from its insurance carrier regarding the cost of obtaining the requested coverage. The cost of such additional insurance will be borne by SIC. Munitor will not procure this additional coverage without the written approval of SIC.
(d) Munitor shall make SIC an additional insured party to their insurance policy.

ARTICLE IV. PROJECT PERFORMANCE

4.1 Performance of Services

Munitor will perform all Services under this Contract in accordance with generally accepted professional standards that apply in the community where the Services are performed for the type of work involved.

ARTICLE V. MISCELLANEOUS

5.1 Access to Property

SIC has the responsibility of obtaining a right of entry to property where the Services are to be performed. The right of entry shall allow Munitor, its agents, subcontractors, and employees to enter the property from time to time, as necessary to perform all acts, studies, and research pursuant to the agreed services within the scope of work. Munitor does not assume control of or responsibility for the property, the person in charge of the property, nor the safety of persons not in Munitor, employ.

5.2 Unforeseen Conditions or Occurrences

If any unforeseen conditions or occurrences, including, but not limited to, hazardous substances or pollutants, are encountered, which, in Munitor, reasonable judgment, significantly affect or may affect the recommended scope of the Services, then Munitor will notify SIC. After such notification, Munitor will complete the original scope of Services, if appropriate, or agree with SIC to modify the Agreement, or terminate this Agreement with respect to the Services pursuant to Section 6.11 hereof. Changes to the original scope of work that will result in increased compensation for the project must be approved by SIC in writing.

SCHN00243801

ARTICLE VI. GENERAL PROVISIONS

6.1 Indemnification

To the fullest extent permitted by law, each party shall defend, Indemnify and hold harmless the other party, its consultants, and the agents and employees of any of them from and against claims, damages, losses, and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from performance of services hereunder, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the indemnitor, anyone directly or indirectly employed by it, or anyone for whose acts it may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by any other person.

6.2 Permits and Access

Munitor will assist SIC in securing necessary permits required by authorities having jurisdiction over the project area.

6.3 Force Majeure

Delay or failure of Munitor in the performance of services hereunder shall be excused if caused by circumstances beyond the control of Munitor, including, without limitation, acts of God, strikes, fire, flood, windstorm, action or request of governmental authority, and inability to obtain material, equipment, or services, provided that a prompt notice of such delay or failure is given and Munitor diligently attempts to remove the cause.

6.4 Independent Client

Munitor is and shall perform all Services as an independent contractor and as such shall have and maintain exclusive control and direction over all of its employees, agents, and operations.

6.5 Subcontracts

Munitor may not, without SIC consent in writing, delegate the performance of Services hereunder, or any portion thereof. If approved, subcontractors will be required to sign a Munitor, subcontract agreement prior to the start of work.

6.6 Survival

Section 6.1 and all other provisions of this Contract that may reasonably be construed as surviving the term of this Contract shall survive the term of this Contract.

6.7 Applicable Law

Exclusively the laws of the State of Oregon shall govern this Contract. Venue for any dispute hereunder shall be in the federal or state courts sitting in Multnomah county, and each party hereby consents to the jurisdiction of such courts for any dispute hereunder, provided, however, that nothing herein shall preclude Munitor from excising its mechanics' or materialmen's lien rights under the laws of any jurisdiction where the Services are performed.

6.8 Severability

If any provision of this Contract if found to be illegal, invalid, or unenforceable for any reason, such findings shall not affect the other provisions hereof.

SCHN00243802

6.9 Taxes

SIC shall pay all state and local sales, use, or excise taxes of any kind assessed and/or arising out of the sale or use of the Services and shall, upon demand, reimburse Munitor for any sums it has expended for such taxes. It is assumed all taxes have been included in Munitor's attached cost proposal.

6.10 Term and Termination

The term of this Contract shall expire upon written notice by either party; provided, however, that neither party shall have the right to terminate this Contract except pursuant to the following provisions of this Section 6.11

(a) Either party may, for its sole convenience, terminate the performance of the Services in whole or in part at any time, or from time to time, by giving thirty (30) days written notice of intent to terminate.

(b) SIC will pay Munitor all time and materials costs (and any fee) which have accrued as of the effective date of termination and, in addition, those time and materials costs incurred or earned in good faith by Munitor after the effective date of termination in connection with (1) demobilization of equipment and personnel and (2) any necessary subcontract and/or vendor settlements.

(c) The rights and remedies of the parties provided in the section 6.10 are in addition to any other rights and remedies provided by law or under this Contract.

6.11 Entire Agreement

This Contract contains the entire and only agreement between SIC and Munitor respecting the subject matter hereof. It supersedes all prior or conflicting agreement, representation, promises, or conditions. Any modification of this Contract must be in writing and signed by both parties and must expressly indicate intent to modify this contract.

James L. Jakobsik	HARLEY MESERVEY
Name of Authorized Representative Of SIC (Printed)	Name of Munitor Rep.(Printed)
James L. Jakobsik	Harley Meservey
Authorized Signature	Authorized Signature
Title Environmental Administrator	Title Member
Date 9/25/06	Date 9/25/06
Schnitzer Investment Corp. 1211 SW 5th Ave. Suite 2250 Portland, Oregon 97204 (503) 224-9900	Munitor Construction, L.L.C. 206 N Tomahawk Island Drive Portland, OR 97217 (503) 702-6542

Munitor Construction, LLC
Portland, Oregon
CCB 148811

August 23, 2006

To: Mr. Jim Jakubiak
Schnitzer Investment Corp.
Portland, Oregon

From: Mr. Harley Meservey
Munitor Construction, LLC
Portland, Oregon

Re. Storm Water System Maintenance
Schnitzer Investment Corp.
Portland, Oregon
Project #534

Mr. Jim Jakubiak:

Munitor Construction, LLC (Munitor) is pleased to present this cost estimate for Storm Water System Maintenance. Below is a scope of work, cost estimate, and assumptions.

Scope of Work- Cleaning with complete sand removal
Munitor understands that Schnitzer Investment Corp is requesting the following work be performed at subject site:

- Clean the following systems
  - Jet Rodding Catch Basins with access
  - Supply catch basin inserts
  - Install new storm water management filters

Cost Estimate
Munitor Construction is providing the following bid for the project.

Item	Qty	Unit	Rate	Total
Catch Basin cleaning	1	LS	$1300.00	$1300.00
Catch Basin jet rodding	1	LS	$1710.00	$1710.00
Catch Basin inserts	75	EA	$36.80	$2760.00
Storm Water Management Filters w/install	3	EA	$825.00	$825.00
			Total	**$6595.00**

Assumptions

The following assumptions have been made in the development of this bid.

- Work will not be performed during rain events.
- All liquids removed will be recycled onsite at water treatment system.

Munitor would like to thank you for the opportunity to provide services to you. If you have any questions or would like to schedule work please contact me anytime at (503) 702-6542. We look forward to providing professional services to you and any future needs.

Regards,

Harley Meservey

Harley Meservey
President

SCHN00243804

FAX

STORMWATER MANAGEMENT INC.

12021-B NE Airport Way, Portland OR, 97220
800.548.4667 800.561.1271 stormwaterinc.com

TO: Jim Jakubiak

FROM: Rick Donnelly

COMPANY: Spencer Environmental

PAGES: 2 Including Cover

FAX #: 503-286-6978

RE: Maintenance Quote

DATE: May 6, 2002

TIME: 10:44 AM

COMMENTS:

Jim,

Please sign and return to me at your convenience. We will then arrange for the cartridges to be picked up.

Thank you,

Rick Donnelly
Field Operations Manager
Stormwater Management Inc.
800-548-4667
rickd@stormwaterinc.com

FAX
(503) 258-3190

Sorry for the wrong number

Call Rick Donnelly
(b) (6) [redacted]

33rd Marine

9646 NE 33rd Ave
Portland OR 97211

Yard

Marine Drive
Nat'l Guard
1 mile

Need billing address

COME RAIN, WE SHINE. STORMWATER MANAGEMENT

12021-B NE Airport Way
Portland, OR 97220
Phone: 503-240-3393 Fax: 503-240-9553

Maintenance
SHIPPER/RECEIVER

SHIP DATE _____

Ship To:
Will Call - SMI Yard

Bill To:
Spencer Environmental
Jim Jakubiak 503-286-6976

Project Name: **Schnitzer Steel**
Serial Number:

Quantity	Unit	Description	
4	EA	ZPG Cartridges	Initial: DS
4	EA	CSF Cartridges	Initial: DS
0	EA	Restrictor discs	Initial:
0	EA	2" plugs	Initial:
0	EA	Energy dissapators (4')	Initial:
0	EA	3" 90's(upturned)	Initial:

Quality Control Check _____

Received By [signature] Date Received 5/10/02

Additional Materials Used. Cost $3,310.00

Quantity	Unit	Description

SCHN00243809

COME RAIN, WE SHINE. STORMWATER MANAGEMENT

12021-B NE Airport Way
Portland, OR 97220
Phone: 503-240-3393 Fax: 503-240-9553

Maintenance SHIPPER/RECEIVER

SHIP DATE _____

Ship To:
Wil Call - SMI Yard

Bill To:
Spencer Environmental
Jim Jakubiak 503-286-6976

Project Name: **Schnitzer Steel**
Serial Number:

Quantity	Unit	Description	
4	EA	ZPG Cartridges	Initial: DS
4	EA	CSF Cartridges	Initial: DS
0	EA	Restrictor discs	Initial:
0	EA	2" plugs	Initial:
0	EA	Energy dissapators (4')	Initial:
0	EA	3" 90's(upturned)	Initial:

Quality Control Check _____

Received By [signature] Date Received 5/10/02

Additional Materials Used Cost $3,310.00

Quantity	Description

SCHN00243810

CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
P.O. BOX 10047
Portland OR, 97296
ATTN: James Jakubiak

PROJECT NAME: SOIL PILE

F2

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 11/19/03 17:12

ORT DATE: 12/09/03 09:22 **REPORT NUMBER:** 3111921 **PAGE:** 1 OF 2

ORIGINAL

MPLE	CLIENTS ID#	DATE	TIME	MATRIX
21-01	SS-1	11/18/2003	0750	Soil
21-02	SS-2	11/18/2003	0755	Soil
21-03	SS-3	11/18/2003	0800	Soil

LE/ YSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
21-01	**SAMPLE ID: SS-1**						
ity Characteristics Leachate Procedure (TCLP) Metals							
NIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.057	mg/L	0.018	BKB	11/25/2003 16:01
M, TCLP - ICP		BARIUM	ND	mg/L	0.018	BKB	11/25/2003 16:01
IUM, TCLP -		CADMIUM	ND	mg/L	0.018	BKB	11/25/2003 16:01
MIUM, TCLP -		CHROMIUM	0.011	mg/L	0.0090	BKB	11/25/2003 16:01
TCLP - ICP		LEAD	ND	mg/L	0.036	BKB	11/25/2003 16:01
IUM, TCLP -		SELENIUM	ND	mg/L	0.063	BKB	11/25/2003 16:01
R, TCLP - ICP		SILVER	ND	mg/L	0.072	BKB	11/25/2003 16:01
ral Gas Chromatography Analysis							
H-HCID (soil)	NWTPH-HCID	GASOLINE	ND	mg/kg	20	PA	11/25/2003 09:54
		DIESEL	ND	mg/kg	50		
		OIL/GREASE	ND	mg/kg	100		
		Surrogate: p-terphenyl-D14	120 %	%RECOVERY	50-150		
21-02	**SAMPLE ID: SS-2**						
ity Characteristics Leachate Procedure (TCLP) Metals							
NIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.064	mg/L	0.018	BKB	11/25/2003 16:01
M, TCLP - ICP		BARIUM	ND	mg/L	0.018	BKB	11/25/2003 16:01
IUM, TCLP -		CADMIUM	ND	mg/L	0.018	BKB	11/25/2003 16:01
MIUM, TCLP -		CHROMIUM	ND	mg/L	0.0090	BKB	11/25/2003 16:01
TCLP - ICP		LEAD	ND	mg/L	0.036	BKB	11/25/2003 16:01
IUM, TCLP -		SELENIUM	ND	mg/L	0.063	BKB	11/25/2003 16:01
R, TCLP - ICP		SILVER	ND	mg/L	0.072	BKB	11/25/2003 16:01
ral Gas Chromatography Analysis							
H-HCID (soil)	NWTPH-HCID	GASOLINE	ND	mg/kg	20	PA	11/25/2003 09:54
		DIESEL	ND	mg/kg	50		
		OIL/GREASE	ND	mg/kg	100		
		Surrogate: p-terphenyl-D14	140 %	%RECOVERY	50-150		
21-03	**SAMPLE ID: SS-3**						
ity Characteristics Leachate Procedure (TCLP) Metals							
NIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.018	BKB	11/25/2003 16:01
M, TCLP - ICP		BARIUM	0.037	mg/L	0.018	BKB	11/25/2003 16:01

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Richard D. Reid - Laboratory Director

OLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Steel
P.O. BOX 10047
Portland OR, 97296
ATTN: James Jakubiak

PROJECT NAME: SOIL PILE

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 11/19/03 17:12

REPORT DATE: 12/09/03 09:22 **REPORT NUMBER:** 3111921

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
3111921-01	SS-1	11/18/2003	0750	Soil
3111921-02	SS-2	11/18/2003	0755	Soil
3111921-03	SS-3	11/18/2003	0800	Soil

COPY

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
3111921-01	**SAMPLE ID: SS-1**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.057	mg/L	0.018	BKB	11/25/2003 16:01
BARIUM, TCLP - ICP		BARIUM	ND	mg/L	0.018	BKB	11/25/2003 16:01
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.018	BKB	11/25/2003 16:01
CHROMIUM, TCLP - ICP		CHROMIUM	0.011	mg/L	0.0090	BKB	11/25/2003 16:01
LEAD, TCLP - ICP		LEAD	ND	mg/L	0.036	BKB	11/25/2003 16:01
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.063	BKB	11/25/2003 16:01
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.072	BKB	11/25/2003 16:01
General Gas Chromatography Analysis							
NWTPH-HCID (soil)	NWTPH-HCID	GASOLINE	ND	mg/kg	20	PA	11/25/2003 09:54
		DIESEL	ND	mg/kg	50		
		OIL/GREASE	ND	mg/kg	100		
		Surrogate: p-terphenyl-D14	120 %	%RECOVERY	50-150		
3111921-02	**SAMPLE ID: SS-2**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.064	mg/L	0.018	BKB	11/25/2003 16:01
BARIUM, TCLP - ICP		BARIUM	ND	mg/L	0.018	BKB	11/25/2003 16:01
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.018	BKB	11/25/2003 16:01
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.0090	BKB	11/25/2003 16:01
LEAD, TCLP - ICP		LEAD	ND	mg/L	0.036	BKB	11/25/2003 16:01
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.063	BKB	11/25/2003 16:01
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.072	BKB	11/25/2003 16:01
General Gas Chromatography Analysis							
NWTPH-HCID (soil)	NWTPH-HCID	GASOLINE	ND	mg/kg	20	PA	11/25/2003 09:54
		DIESEL	ND	mg/kg	50		
		OIL/GREASE	ND	mg/kg	100		
		Surrogate: p-terphenyl-D14	140 %	%RECOVERY	50-150		
3111921-03	**SAMPLE ID: SS-3**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.018	BKB	11/25/2003 16:01
BARIUM, TCLP - ICP		BARIUM	0.037	mg/L	0.018	BKB	11/25/2003 16:01

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CI CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
3111921-03	SAMPLE ID: SS-3						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
CADMIUM, TCLP - ICP	EPA 200.7/6010B	CADMIUM	ND	mg/L	0.018	BKB	11/25/2003 16:01
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.0090	BKB	11/25/2003 16:01
LEAD, TCLP - ICP		LEAD	ND	mg/L	0.036	BKB	11/25/2003 16:01
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.063	BKB	11/25/2003 16:01
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.072	BKB	11/25/2003 16:01
General Gas Chromatography Analysis							
NWTPH-HCID (soil)	NWTPH-HCID	GASOLINE	ND	mg/kg	20	PA	11/25/2003 09:54
		DIESEL	ND	mg/kg	50		
		OIL/GREASE	ND	mg/kg	100		
		Surrogate: p-terphenyl-D14	115 %	%RECOVERY	50-150		

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CERTIFICATE OF ANALYSIS

CLIENT: Columbia Business Center
PO Box 10047
Portland OR, 97296
ATTN: James Jakubiak

PROJECT NAME: WATER

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 11/19/03 16:56

REPORT DATE: 12/09/03 09:21 **REPORT NUMBER:** 3111920

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
3111920-01	ICB-21	11/15/2003	0445	Water
3111920-02	ICB-21	11/15/2003	0445	Water
3111920-03	ICB-21	11/15/2003	0445	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
3111920-01	**SAMPLE ID: ICB-21**						
General Bench Analysis							
TURBIDITY	EPA 180.1	TURBIDITY	1.6	NTU	0.10	DR	11/28/2003 07:49
3111920-02	**SAMPLE ID: ICB-21**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	PA	12/02/2003 12:32
3111920-03	**SAMPLE ID: ICB-21**						
Total Metals by Inductively Coupled Plasma							
ZINC - ICP	EPA 200.7/6010B	ZINC	0.25	mg/L	0.001	BKB	12/05/2003 15:05

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CERTIFICATE OF ANALYSIS

CLIENT: Columbia Business Center
PO Box 10047
Portland OR, 97296
ATTN: James Jakubiak

PROJECT NAME: WATER

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 11/19/03 16:56

REPORT DATE: 12/09/03 09:21 **REPORT NUMBER:** 3111920

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
3111920-01	ICB-21	11/15/2003	0445	Water
3111920-02	ICB-21	11/15/2003	0445	Water
3111920-03	ICB-21	11/15/2003	0445	Water

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
3111920-01	**SAMPLE ID: ICB-21**						
General Bench Analysis							
TURBIDITY	EPA 180.1	TURBIDITY	1.6	NTU	0.10	DR	11/28/2003 07:49
3111920-02	**SAMPLE ID: ICB-21**						
General Bench Analysis							
O & G, TOTAL (HEM)	EPA 1664	TOTAL OIL AND GREASE	ND	mg/L	2.0	PA	12/02/2003 12:32
3111920-03	**SAMPLE ID: ICB-21**						
Total Metals by Inductively Coupled Plasma							
ZINC - ICP	EPA 200.7/6010B	ZINC	0.25	mg/L	0.001	BKB	12/05/2003 15:05

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COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

COLUMBIA INSPECTION, INC.

CHAIN OF CUSTODY RECORD
AND
NON-COMMERCIAL BILL OF LADING

☒ 7133 N. Lombard, Portland, OR 97203 — Ph: (503) 286-9464 Fax: (503) 285-7831
☐ 4901 E. 20th Street, Fife, WA 98424 — Ph: (253) 922-8781 Fax: (253) 922-8957
☐ 4592 E 2nd Street, Ste 'A', Benicia, CA 94510 — Ph: (707) 748-7587 Fax: (707) 748-7764
☐ 797 Channel Street, San Pedro, CA 90731 — Ph: (310) 833-1557 Fax: (310) 833-1585

Customer Name: Schnitzer Steel
Attention: Tim Jelinski
Address: P.O. Box 10047 · Portland, OR 97296
Phone: (503) 786-6976
Fax: (503) 286-6948
Sampler: [signature] ☒ Submitted

Project Name: Soil Pile
Project Number: —
P.O. Number: —
Testing Priority: ☒ Normal ☐ Rush
Due Date:
Notification Method(s): ☐ Telephone ☐ Email ☐ Mail

Analysis To Be Performed

Sample id#	Sample Description/UN Number	Sample Matrix	Sample Date	Sample Time	1311/1800 TCLP Metals (8 EPA)	NWTPH-HCID (TPH) (OE)
SS-1		Soil	11/19/03	0750	X	X
SS-2		Soil	11/19/03	0755	X	X
SS-3		Soil	11/19/03	0800	X	X

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	11/19/03		
Relinquished By:	Date/Time	Received By: [signature]	Date/Time 11/19 1605

FOR LABORATORY USE ONLY

Inspection Job Number: _____ PO# _____
Laboratory Project Number: _____ Cash/check # _____
Due Date: _____ Amount Paid: $ _____

SCHN00243818

Sample Acceptance Policy

All samples must meet the following requirements:

- **Chain of Custody:** The COC list of samples must match the number and type of sample containers received, and sample descriptions on the COC must match the sample bottles. The requested tests and where possible, specific methods are shown on the COC.
- **Appropriate Container:** The correct sample containers must be used for the requested analyses.
- **Sample Volume:** There must be sufficient sample volume for the test(s) requested.
- **Holding Time:** The holding times for the requested analyses must not be expired.

Environmental samples must meet the following additional requirements:

- **Sample Temperature:** Samples that require refrigeration shall be considered acceptable if the temperature as measured upon receipt is either within 2° C of the required temperature or the method specified range. For samples with a specified temperature of 4° C, samples received at temperatures ranging from just above freezing to 6° C shall be acceptable.

  NOTE: **Samples that are delivered to the laboratory shortly after sampling may not meet this criterion. However, the samples shall be considered acceptable if there is evidence that the chilling process has begun such as arrival on ice, or if the samples were taken within the hour.**

- **Sample Preservation:** Where possible without sacrificing the integrity of the sample, determine whether the sample bottle has been preserved correctly.

Discrepancies:

If there is any doubt as to the suitability for testing such as the **sample does not conform to the sample description**, the sample containers are **damaged, leaking**, or **may be contaminated from other damaged or leaking sample containers**, or where **testing is not specified**, further instructions from the client are required. If the issue cannot be resolved and the sample does not meet sample acceptance criteria the laboratory shall either.

- Fully document any decision to proceed with the analysis and note the condition of the sample on the COC and work order; or
- Retain correspondence and/or records of conversations regarding the final disposition of rejected samples.

Rejected Samples:

- Should the client choose to proceed with testing on questionable samples, the Work Order must be clearly marked with the nature of the problem so that the final report data may be appropriately qualified.
- Rejected samples must still be logged into LIMS to obtain a unique sample identification number to track sample disposition. However, for rejected samples, no testing is assigned. Instead, the sample status is set to "Rejected" by editing the work order status using the Update Status function of the Laboratory menu in LIMS.

Refer to the Columbia Inspection, Inc. Laboratory Policy, LP00.01, Sample Acceptance Policy and SOP15.01 Sample Receipt for complete details.

Sample Disposal:

- Samples are disposed of after 45 days unless prior arrangements have been made with the laboratory.
- Samples that are deemed hazardous may be returned to the client for proper disposal.

FAX

STORMWATER MANAGEMENT INC.

TO: JIM JAKUBIAK	FROM: JAMES SMITH
COMPANY: SCHNITZER STEEL	PAGES: 9
FAX: 503-286-6948	DATE: 6-25-03
PHONE: 503-286-6976	TIME: 10:40AM
RE:	CC:

X FOR APPROVAL ☐ FOR REVIEW AND COMMENT ☐ FOR YOUR USE ☐ AS REQUESTED

COMMENTS:

Jim,
Here is the service agreements for the locations we discussed please feel free to call me if you have any questions.

Thanks,

James Smith
Field Operations Supervisor
Stormwater Management Inc.
jamess@stormwaterinc.com
1-800-548-4667 ext.121

COME RAIN, WE SHINE. STORMWATER MANAGEMENT

Service Agreement

12021-B NE Airport Way Portland, OR 97220
T: 800.549.4667 F: 800.561.1371

SMI Project Name:	Term:	
Schnitzer Steel - Terminal 4 - Phase II	From: 6/25/2003	To: 6/25/2004

Owner:			Contact Name:
Schnitzer Steel Industries			Jim Jakubink
Phone: (503)286-6976	Fax:	Agency: City	Federal Tax Identification Number:

Street / Mailing Address:

Site Address: 12005 North Burgard Portland, OR 97203-6432

Serial Number:	Vault Size:	Cartridges:	Media Type:	Annual Maintenance Estimate*:
3983.02	CB-S	1	CSF	220.00
3983.03	CB-S	1	CSF	220.00
3983.04	CB-S	1	CSF	220.00
3983.05	CB-S	1	CSF	220.00
3983.06	CB-S	1	CSF	-
			Total Estimated Maintenance Cost:	$880.00

* See reverse for information regarding price increase.

Stormwater Management, Inc. (SMI) does not establish credit accounts for contracts totaling $1,000 or less. SMI will require payment prior to performing maintenance services. SMI accepts Visa and Mastercard.

Services provided by Stormwater Management, Inc:

1. Mid-season inspection: test/evaluate the filter media for hazardous constituents. (regional composite annually)
2. Evaluate the condition of mechanical filter components.
3. Remove and replace exhausted cartridges and remove accumulated sediment from the vault as necessary.
4. Notify regulatory agency and owner, via written confirmation, that maintenance has been preformed.

Services not provided by Stormwater Management, Inc:

1. Maintenance of other stormwater treatment devices or appurtenances, except as noted in Attachment A if applicable.
   NOTE: the owner is encouraged to maintain these facilities as needed.

The services to be preformed and the related charges have been based upon the assumption of unrestricted access, reasonable sedimentation loading, dry conditions, non-hazardous materials and no inappropriate discharges. Work arising from the presence of regulated materials in excess of permitted levels will be billed as extra services. Regulated materials include but are not limited to: Pesticides, Herbicides, Insecticides, Solvents, Fuels, Strong Acids or Bases, Free Oils and/or Greases. Maintenance services will be performed during the dry months (typically July through September). This contract must be signed and returned no later than May 31st to guarantee maintenance in the current calendar year. Price not to exceed estimate without prior approval from owner.

This agreement is subject to and includes the Service Agreement Terms and Conditions printed on the reverse side of this sheet.

This section to be updated/completed by owner or authorized representative:

Site	Site Phone

This is a legally binding contract. Stormwater Management, Inc. agrees to provide and Customer agrees to accept the specified services.

CUSTOMER

Title

Name (please print)

Authorized Signature Date

STORMWATER MANAGEMENT, INC.

Representative's Signature

Date

SCHN00243826

SERVICE AGREEMENT TERMS AND CONDITIONS

The provision of services by SMI is expressly conditional on OWNER's acceptance of SMI'S terms and conditions as stated herein. Provided that SMI'S terms and conditions have not been previously accepted by Buyer, Buyer's receipt of services under this Agreement constitutes acceptance of these terms and conditions. Upon acceptance, this quotation shall become the binding agreement between the parties. OWNER certifies that it has examined, and is fully familiar with all terms and conditions of this CONTRACT, and that OWNER enters into this agreement with full knowledge of said terms and conditions. Additional or different terms of OWNER's purchase order or other form of acceptance or any other form of OWNER are rejected in advance and shall not become a part hereof.

1. **Period of Service:** Stormwater Management, Inc. (SMI) will commence work within the standard maintenance cycle outlined by the executed Agreement and will proceed with said work in a diligent manner until completion. SMI will not be responsible for delays caused by factors beyond SMI's control and will not be responsible for delays caused by factors which could not reasonably have been foreseen at the time this Agreement was executed.

2. **Term of Agreement:** The term of Agreement shall be automatically renewed for like terms after the expiration of the initial term hereof, unless either party gives written notice at least 60 days prior to date of termination via certified mail. Upon termination of agreement, any outstanding invoices and/ or unbilled balances for services actually performed will be immediately due and payable.

3. **Terms of Payment:** Fees for Services will be billed upon completion of work performed. If OWNER objects to any invoice submitted by SMI, OWNER shall so advise SMI in writing, giving reasons therefor, within fourteen days of the date on said invoice. If OWNER fails to make any payment due SMI for services and expenses within thirty days of the date on the invoice, the amounts not paid will be considered past due. A delinquency charge of 1.5% per month shall be added to the past due amount, or such lesser amount as shall equal the maximum rate allowed by law, and in addition, SMI may suspend services under this Agreement without liability for delay or for consequential or other damages which may result therefrom, upon delivery of written notice of its intention thereof. If invoices remain outstanding past sixty days, SMI may pursue all legal and equitable remedies to collect outstanding balances owned to SMI. OWNER agrees to pay all reasonable attorney's fees and costs of collection incurred by SMI thereof, whether or not a lawsuit is instituted.

4. **Changes and Cost Increases:** SMI may adjust the price annually to reflect increases in the Federal Consumer Price Index (CPI). It is also possible that increases in the cost of media disposal may require an adjustment to the price and SMI reserves the right to include such increases in the cost of services performed. Increases that are not related to an increase in the CPI or disposal costs, notice of which shall be given at least 15 days in advance to OWNER, are subject to the approval of the OWNER.

5. **Payments in Event of Termination:** In the event this Agreement is terminated prior to the expiration of the then current term, SMI will be compensated for services performed under this Agreement to the date of termination in accordance with the above Term of Agreement and Terms of Payment provisions.

6. **Standard of Performance:** SMI shall perform its services in accordance with generally accepted standards presently maintained by other practicing professionals engaged in the same type of work in the general location of the Project. SMI makes no other warranty, expressed or implied, and SMI hereby disclaims all other warranties, express or implied, including implied warranties of merchantability or fitness for a particular purpose. In no event shall SMI be liable for cost of procurement of substitute services, goods, loss of profits, or for any other special, consequential, or incidental damages, however caused.

7. **Limitation of Liability:** SMI'S total liability for any and all losses and damages arising out of any and all causes whatsoever including, without limitation, defects in services supplied under this Agreement or on account of any injury or damage to persons or property or arising out of any error, omission or professional negligence, shall in no event exceed a sum of Ten Thousand Dollars ($10,000.00) or the amount of its fees hereunder, whichever is less.

8. **Attorney's Fees and Expenses:** In the event suit or action is instituted to enforce any of the terms or conditions of this Agreement, the losing party shall pay to the prevailing party, in addition to the costs and disbursements allowed by statutes, such sum as the court may adjudge reasonable as attorney's fees in such suit or action, in both trial court and appellate courts.

9. **Waiver:** No waiver of a breach of any covenant, term or condition of this Agreement shall be a waiver of any other or subsequent breach of the same or any other covenant, term or condition or a waiver of the covenant, term or condition itself.

10. **Controlling Law, Jurisdiction and Venue:** All disputes in any way relating to, arising under, connected with or incident to this agreement shall be litigated, if at all, solely and exclusively in the State Circuit Court of Oregon for the County of Multnomah, or, if applicable, in the Federal District Court for the District of Oregon, and, if necessary, their respective corresponding appellate courts. Each party agrees to forebear from filing a claim in any other county or jurisdiction and expressly submits itself to the personal jurisdiction of the State of Oregon. The performance and construction of this Agreement shall be governed by the substantive laws of the State of Oregon without regard to conflict of law provisions.

11. **Successors and Assigns:** The covenants, agreements and obligations of this Agreement shall extend to and be binding upon and inure to the benefit of the partners, heirs, personal representatives and assigns of the parties hereto. Neither OWNER nor SMI shall assign, sublet or transfer any rights under or interest in this Agreement without the written consent of the other. Nothing contained in this paragraph shall prevent SMI from employing such independent professional associates and consultants, as SMI may deem appropriate to assist in the performance of services hereunder.

COME RAIN, WE SHINE. STORMWATER MANAGEMENT

Service Agreement

12021-B NE Airport Way Portland, OR 97220
T: 800.549.4667 F: 800.561.1271

SMI Project Name:	Term:
Schnitzer Steel - Port Terminal 4	From: 6/25/2003 To: 6/25/2004

Owner:			Contact Name:
C.E. Heath			
Phone: (503)329-0591	Fax: (503)538-2600	Agency: Port of Portland	Federal Tax Identification Number:

Street / Mailing Address:
P.O. Box 1054 Newberg, OR 97132

Site Address:
12005 N. Burgard Rd.-Schnitzer Steel Portland, OR 97296

Serial Number:	Vault Size:	Cartridges:	Media Type:	Annual Maintenance Estimate*:
2925.01	CB-S	1	CSF	220.00
2925.02	CB-S	1	CSF	220.00
2925.03	CB-S	1	CSF	220.00
			Total Estimated Maintenance Cost:	$660.00

* See reverse for information regarding price increases.

Stormwater Management, Inc. (SMI) does not establish credit accounts for contracts totaling $1,000 or less. SMI will require payment prior to performing maintenance services. SMI accepts Visa and Mastercard.

Services provided by Stormwater Management, Inc:
1. Mid-season inspection: test/evaluate the filter media for hazardous constituents. (regional composite annually)
2. Evaluate the condition of mechanical filter components.
3. Remove and replace exhausted cartridges and remove accumulated sediment from the vault as necessary.
4. Notify regulatory agency and owner, via written confirmation, that maintenance has been preformed.

Services not provided by Stormwater Management, Inc:
1. Maintenance of other stormwater treatment devices or appurtenances, except as noted in Attachment A if applicable.
   NOTE: the owner is encouraged to maintain these facilities as needed.

The services to be preformed and the related charges have been based upon the assumption of unrestricted access, reasonable sedimentation loading, dry conditions, non-hazardous materials and no inappropriate discharges. Work arising from the presence of regulated materials in excess of permitted levels will be billed as extra services. Regulated materials include but are not limited to: Pesticides, Herbicides, Insecticides, Solvents, Fuels, Strong Acids or Bases, Free Oils and/or Greases. Maintenance services will be performed during the dry months (typically July through September). This contract must be signed and returned no later than May 31st to guarantee maintenance in the current calendar year. Price not to exceed estimate without prior approval from owner.

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This section to be updated/completed by owner or Authorized representative

Site	Site Phone

This is a legally binding contract. Stormwater Management, Inc. agrees to provide and Customer agrees to accept the specified services.

CUSTOMER

Title

Name (please print)

Authorized Signature Date

STORMWATER MANAGEMENT, INC.

Representative's Signature

Date

SERVICE AGREEMENT TERMS AND CONDITIONS

The provision of services by SMI is expressly conditional on OWNER's acceptance of SMI'S terms and conditions as stated herein. Provided that SMI'S terms and conditions have not been previously accepted by Buyer, Buyer's receipt of services under this Agreement constitutes acceptance of these terms and conditions. Upon acceptance, this quotation shall become the binding agreement between the parties. OWNER certifies that it has examined, and is fully familiar with all terms and conditions of this CONTRACT, and that OWNER enters into this agreement with full knowledge of said terms and conditions. Additional or different terms of OWNER's purchase order or other form of acceptance or any other form of OWNER are rejected in advance and shall not become a part hereof.

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6. **Standard of Performance:** SMI shall perform its services in accordance with generally accepted standards presently maintained by other practicing professionals engaged in the same type of work in the general location of the Project. SMI makes no other warranty, expressed or implied, and SMI hereby disclaims all other warranties, express or implied, including implied warranties of merchantability or fitness for a particular purpose. In no event shall SMI be liable for cost of procurement of substitute services, goods, loss of profits, or for any other special, consequential, or incidental damages, however caused.

7. **Limitation of Liability:** SMI'S total liability for any and all losses and damages arising out of any and all causes whatsoever including, without limitation, defects in services supplied under this Agreement or on account of any injury or damage to persons or property or arising out of any error, omission or professional negligence, shall in no event exceed a sum of Ten Thousand Dollars ($10,000.00) or the amount of its fees hereunder, whichever is less.

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COME RAIN, WE SHINE. STORMWATER MANAGEMENT

Service Agreement

12021-B NE Airport Way Portland, OR 97220
T: 800.549.4667 F: 800.561.1271

SMI Project Name:	Term:	
Schnitzer Steel - CBSF	From: 6/25/2003	To: 6/25/2004

Owner:			Contact Name:
Schnitzer Steel Industries			Jim Jakubiak
Phone:	Fax:	Agency:	Federal Tax Identification Number:
(503)286-6976	(503)286-6948	DEQ - indirectly	

Street/Mailing Address:
P.O. Box 10047 Portland, OR 97296-0047

Site Address:
12005 N. Burgard Rd. Portland, OR 97296

Serial Number:	Vault Size:	Cartridges:	Media Type:	Annual Maintenance Estimate*:
2594.01	CB-S	1	CSF	220.00
			Total Estimated Maintenance Cost:	$220.00

* See reverse for information regarding price increases.

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Site	Site Phone

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CUSTOMER

Title

Name (please print)

Authorized Signature Date

STORMWATER MANAGEMENT, INC.

Representative's Signature

Date

SERVICE AGREEMENT TERMS AND CONDITIONS

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COME RAIN, WE SHINE. STORMWATER MANAGEMENT

Service Agreement

12021-B NE Airport Way Portland, OR 97220
T: 800.549.4667 F: 800.561.1271

SMI Project Name:	Term
Schnitzer Steel - Grants Pass	From: 6/25/2003 To: 6/25/2004

Owner:	Contact Name:
Schnitzer Steel Industries, In	Jim Jakubiak

Phone:	Fax:	Agency:	Federal Tax Identification Number:
(503)286-6976	(503)286-6948		

Street / Mailing Address:
P.O. Box 10047 Portland, OR 97296-0047

Site Address:
257 NE Agness Grants Pass, OR 97526

Serial Number:	Vault Size:	Cartridges:	Media Type:	Annual Maintenance Estimate*:
3087.01	CB-S	1	ZPG	220.00
3087.02	CB-S	1	ZPG	220.00
3087.03	CB-S	1	ZPG	220.00
3087.04	CB-S	1	ZPG	220.00
			Total Estimated Maintenance Cost:	$880.00

* See reverse for information regarding price increases.

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1. Mid-season inspection: test/evaluate the filter media for hazardous constituents. (regional composite annually)
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This section to be updated/completed by owner or authorized representative:

Site	Site Phone

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CUSTOMER

Title

Name (please print)

Authorized Signature Date

STORMWATER MANAGEMENT, INC.

Representative's Signature

Date

SERVICE AGREEMENT TERMS AND CONDITIONS

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4. **Changes and Cost Increases:** SMI may adjust the price annually to reflect increases in the Federal Consumer Price Index (CPI). It is also possible that increases in the cost of media disposal may require an adjustment to the price and SMI reserves the right to include such increases in the cost of services performed. Increases that are not related to an increase in the CPI or disposal costs, notice of which shall be given at least 15 days in advance to OWNER, are subject to the approval of the OWNER.

5. **Payments in Event of Termination:** In the event this Agreement is terminated prior to the expiration of the then current term, SMI will be compensated for services performed under this Agreement to the date of termination in accordance with the above Term of Agreement and Terms of Payment provisions.

6. **Standard of Performance:** SMI shall perform its services in accordance with generally accepted standards presently maintained by other practicing professionals engaged in the same type of work in the general location of the Project. SMI makes no other warranty, expressed or implied, and SMI hereby disclaims all other warranties, express or implied, including implied warranties of merchantability or fitness for a particular purpose. In no event shall SMI be liable for cost of procurement of substitute services, goods, loss of profits, or for any other special, consequential, or incidental damages, however caused.

7. **Limitation of Liability:** SMI'S total liability for any and all losses and damages arising out of any and all causes whatsoever including, without limitation, defects in services supplied under this Agreement or on account of any injury or damage to persons or property or arising out of any error, omission or professional negligence, shall in no event exceed a sum of Ten Thousand Dollars ($10,000.00) or the amount of its fees hereunder, whichever is less.

8. **Attorney's Fees and Expenses:** In the event suit or action is instituted to enforce any of the terms or conditions of this Agreement, the losing party shall pay to the prevailing party, in addition to the costs and disbursements allowed by statutes, such sum as the court may adjudge reasonable as attorney's fees in such suit or action, in both trial court and appellate courts.

9. **Waiver:** No waiver of a breach of any covenant, term or condition of this Agreement shall be a waiver of any other or subsequent breach of the same or any other covenant, term or condition or a waiver of the covenant, term or condition itself.

10. **Controlling Law, Jurisdiction and Venue:** All disputes in any way relating to, arising under, connected with or incident to this agreement shall be litigated, if at all, solely and exclusively in the State Circuit Court of Oregon for the County of Multnomah, or, if applicable, in the Federal District Court for the District of Oregon, and, if necessary, their respective corresponding appellate courts. Each party agrees to forebear from filing a claim in any other county or jurisdiction and expressly submits itself to the personal jurisdiction of the State of Oregon. The performance and construction of this Agreement shall be governed by the substantive laws of the State of Oregon without regard to conflict of law provisions.

11. **Successors and Assigns:** The covenants, agreements and obligations of this Agreement shall extend to and be binding upon and inure to the benefit of the partners, heirs, personal representatives and assigns of the parties hereto. Neither OWNER nor SMI shall assign, sublet or transfer any rights under or interest in this Agreement without the written consent of the other. Nothing contained in this paragraph shall prevent SMI from employing such independent professional associates and consultants, as SMI may deem appropriate to assist in the performance of services hereunder.

COME RAIN, WE SHINE. STORMWATER MANAGEMENT

Service Agreement

12021-B NE Airport Way Portland, OR 97220
T: 800.549.4667 F: 800.561.1271

SMI Project Name:	Term:
Schnitzer Steel - CBSF	From: 6/25/2003 To: 6/25/2004

Owner:			Contact Name:
Schnitzer Steel Industries			Jim Jakubiak
Phone:	Fax:	Agency:	Federal Tax Identification Number:
(503)286-6976	(503)286-6948	DEQ - indirectly	
Street / Mailing Address:			
P.O. Box 10047 Portland, OR 97296-0047			
Site Address:			
12005 N. Burgard Rd. Portland, OR 97296			

Serial Number:	Vault Size:	Cartridges:	Media Type:	Annual Maintenance Estimate*:
2594.01	CB-S	1	CSF	220.00
			Total Estimated Maintenance Cost:	$220.00

* See reverse for information regarding price increases.

Stormwater Management, Inc. (SMI) does not establish credit accounts for contracts totaling $1,000 or less. SMI will require payment prior to performing maintenance services. SMI accepts Visa and Mastercard.

Services provided by Stormwater Management, Inc:

1. Mid-season inspection: test/evaluate the filter media for hazardous constituents. (regional composite annually)
2. Evaluate the condition of mechanical filter components.
3. Remove and replace exhausted cartridges and remove accumulated sediment from the vault as necessary.
4. Notify regulatory agency and owner, via written confirmation, that maintenance has been preformed.

Services not provided by Stormwater Management, Inc:

1. Maintenance of other stormwater treatment devices or appurtenances, except as noted in Attachment A if applicable.
   NOTE: the owner is encouraged to maintain these facilities as needed.

The services to be preformed and the related charges have been based upon the assumption of unrestricted access, reasonable sedimentation loading, dry conditions, non-hazardous materials and no inappropriate discharges. Work arising from the presence of regulated materials in excess of permitted levels will be billed as extra services. Regulated materials include but are not limited to: Pesticides, Herbicides, Insecticides, Solvents, Fuels, Strong Acids or Bases, Free Oils and/or Greases. Maintenance services will be performed during the dry months (typically July through September). This contract must be signed and returned no later than May 31st to guarantee maintenance in the current calendar year. Price not to exceed estimate without prior approval from owner.

This agreement is subject to and includes the Service Agreement Terms and Conditions printed on the reverse side of this sheet.

This section to be updated/completed by owner or authorized representative:	
Site	Site Phone

This is a legally binding contract. Stormwater Management, Inc. agrees to provide and Customer agrees to accept the specified services.

CUSTOMER

Title

Name (please print)

Authorized Signature Date

STORMWATER MANAGEMENT, INC.

Representative's Signature

Date

COME RAIN, WE SHINE. STORMWATER MANAGEMENT

Service Agreement

12021-B NE Airport Way Portland, OR 97220
T: 800.549.4657 F: 800.561.1271

SMI Project Name:	Term
Schnitzer Steel - Port Terminal 4	From: 6/25/2003 To: 6/25/2004

Owner:			Contact Name:
C.E. Heath			
Phone:	Fax:	Agency:	Federal Tax Identification Number:
(503)329-0591	(503)538-2600	Port of Portland	

Street / Mailing Address:
P.O. Box 1054 Newberg, OR 97132

Site Address:
12005 N. Burgard Rd.-Schnitzer Steel Portland, OR 97296

Serial Number:	Vault Size:	Cartridges:	Media Type:	Annual Maintenance Estimate*:
2925.01	CB-S	1	CSF	220.00
Serial Number:	Vault Size:	Cartridges:	Media Type:	Annual Maintenance Estimate*:
2925.02	CB-S	1	CSF	220.00
Serial Number:	Vault Size:	Cartridges:	Media Type:	Annual Maintenance Estimate*:
2925.03	CB-S	1	CSF	220.00
			Total Estimated Maintenance Cost:	**$660.00**

* See reverse for information regarding price increases

Stormwater Management, Inc. (SMI) does not establish credit accounts for contracts totaling $1,000 or less. SMI will require payment prior to performing maintenance services. SMI accepts Visa and Mastercard.

Services provided by Stormwater Management, Inc:
1. Mid-season inspection: test/evaluate the filter media for hazardous constituents. (regional composite annually)
2. Evaluate the condition of mechanical filter components.
3. Remove and replace exhausted cartridges and remove accumulated sediment from the vault as necessary.
4. Notify regulatory agency and owner, via written confirmation, that maintenance has been preformed.

Services not provided by Stormwater Management, Inc:
1. Maintenance of other stormwater treatment devices or appurtenances, except as noted in Attachment A if applicable.
   NOTE: the owner is encouraged to maintain these facilities as needed.

The services to be preformed and the related charges have been based upon the assumption of unrestricted access, reasonable sedimentation loading, dry conditions, non-hazardous materials and no inappropriate discharges. Work arising from the presence of regulated materials in excess of permitted levels will be billed as extra services. Regulated materials include but are not limited to: Pesticides, Herbicides, Insecticides, Solvents, Fuels, Strong Acids or Bases, Free Oils and/or Greases. Maintenance services will be performed during the dry months (typically July through September). This contract must be signed and returned no later than May 31st to guarantee maintenance in the current calendar year. Price not to exceed estimate without prior approval from owner.

This agreement is subject to and includes the Service Agreement Terms and Conditions printed on the reverse side of this sheet.

This section to be updated/completed by owner or authorized representative:	
Site	Site Phone

This is a legally binding contract. Stormwater Management, Inc. agrees to provide and Customer agrees to accept the specified services.

CUSTOMER

Title

Name (please print)

Authorized Signature Date

STORMWATER MANAGEMENT, INC.

Representative's Signature

Date

COME RAIN, WE SHINE. STORMWATER MANAGEMENT

Service Agreement

12021-B NE Airport Way Portland, OR 97220
T: 800.549.4667 F: 800.561.1271

SMI Project Name:	Term:	
Schnitzer Steel - Terminal 4 - Phase II	From: 6/25/2003	To: 6/25/2004

Owner:			Contact Name:
Schnitzer Steel Industries			Jim Jakubiak
Phone: (503)286-6976	Fax:	Agency: City	Federal Tax Identification Number:

Street / Mailing Address:

Site Address:
12005 North Burgard Portland, OR 97203-6432

Serial Number:	Vault Size:	Cartridges:	Media Type:	Annual Maintenance Estimate*:
3983.02	CB-S	1	CSF	220.00
3983.03	CB-S	1	CSF	220.00
3983.04	CB-S	1	CSF	220.00
3983.05	CB-S	1	CSF	220.00
3983.06	CB-S	1	CSF	-
			Total Estimated Maintenance Cost:	$880.00

* See reverse for information regarding price increases.

Stormwater Management, Inc. (SMI) does not establish credit accounts for contracts totaling $1,000 or less. SMI will require payment prior to performing maintenance services. SMI accepts Visa and Mastercard.

Services provided by Stormwater Management, Inc:

1. Mid-season inspection: test/evaluate the filter media for hazardous constituents. (regional composite annually)
2. Evaluate the condition of mechanical filter components.
3. Remove and replace exhausted cartridges and remove accumulated sediment from the vault as necessary.
4. Notify regulatory agency and owner, via written confirmation, that maintenance has been preformed.

Services not provided by Stormwater Management, Inc:

1. Maintenance of other stormwater treatment devices or appurtenances, except as noted in Attachment A if applicable.
   NOTE: the owner is encouraged to maintain these facilities as needed.

The services to be preformed and the related charges have been based upon the assumption of unrestricted access, reasonable sedimentation loading, dry conditions, non-hazardous materials and no inappropriate discharges. Work arising from the presence of regulated materials in excess of permitted levels will be billed as extra services. Regulated materials include but are not limited to: Pesticides, Herbicides, Insecticides, Solvents, Fuels, Strong Acids or Bases, Free Oils and/or Greases. Maintenance services will be performed during the dry months (typically July through September). This contract must be signed and returned no later than May 31st to guarantee maintenance in the current calendar year. Price not to exceed estimate without prior approval from owner.

This agreement is subject to and includes the Service Agreement Terms and Conditions printed on the reverse side of this sheet.

This section to be updated/completed by owner or authorized representative:

Site	Site Phone

This is a legally binding contract. Stormwater Management, Inc. agrees to provide and Customer agrees to accept the specified services.

CUSTOMER

Title

Name (please print)

Authorized Signature Date

STORMWATER MANAGEMENT, INC.

Representative's Signature

Date

SERVICE AGREEMENT TERMS AND CONDITIONS

1. Period of Service: Stormwater Management, Inc. (SMI) will commence work within the standard maintenance cycle outlined by the executed Agreement and will proceed with said work in a diligent manner until completion. SMI will not be responsible for delays caused by factors beyond SMI's control and will not be responsible for delays caused by factors which could not reasonably have been foreseen at the time this Agreement was executed.

2. Term of Agreement: The term of Agreement shall be automatically renewed for like terms thereafter unless either party gives written notice 60 days prior to date of termination via certified mail. Upon termination of agreement, any outstanding invoices and/ or unbilled balances for services actually performed will be immediately due and payable.

3. Terms of Payment: Fees for Services will be billed upon completion of work performed. If OWNER objects to any invoice submitted by SMI, OWNER shall so advise SMI in writing, giving reasons therefore, within fourteen days of the date on said invoice. If OWNER fails to make any payment due SMI for services and expenses within thirty days of the date on the invoice, the amounts not paid will be considered past due. A delinquency charge of 1-1/2% per month shall be added to the past due amount, and in addition, SMI may suspend services under this Agreement without liability for delay or for consequential or other damages which may result there from, upon delivery of written notice of its intention thereof. If invoices remain outstanding past sixty days, SMI shall pursue legal and equitable means to collect the outstanding balance. OWNER agrees to pay all reasonable attorney's fees, court costs and collection fees incurred by SMI in the collection thereof.

4. Changes and Cost Increases: SMI may adjust the price occasionally to reflect increases in the consumer price index. It is possible that increases in the cost of media disposal may also require an adjustment to the price. Increases that are not related to an increase in the consumer price index, such as disposal costs, are subject to the approval of the customer.

5. Payments in Event of Termination: In the event this Agreement is terminated, SMI will be compensated for services performed under this Agreement to the date of termination in accordance with the above Term of Agreement and Terms of Payment provisions. If this Agreement is terminated by OWNER, SMI will also be compensated for all reasonable costs and expenses incurred to assemble and close project files and records.

6. Standard of Performance: SMI shall perform its services in accordance with generally accepted standards presently maintained by other practicing professionals engaged in the same type of work in the general location of the Project. SMI makes no other warranty, expressed or implied.

7. Limitation of Liability: Any and all liability, claim for damages, cost of defense, or expenses to be levied against SMI will be limited to a sum not to exceed Ten Thousand Dollars ($10,000.00) or the amount of its fee, whichever is lesser, on account of any injury or damage to persons or property or arising out of any error, omission or professional negligence.

8. Attorney's Fees and Expenses: In the event suit or action is instituted to enforce any of the terms or conditions of this Agreement, the losing party shall pay to the prevailing party, in addition to the costs and disbursements allowed by statutes, such sum as the court may adjudge reasonable as attorney's fees in such suit or action, in both trial court and appellate courts.

9. Waiver: No waiver of a breach of any covenant, term or condition of this Agreement shall be a waiver of any other or subsequent breach of the same or any other covenant, term or condition or a waiver of the covenant, term or condition itself.

10. Controlling Law, Jurisdiction and Venue: The laws of the State of Oregon shall govern this Agreement. Jurisdiction and venue of any dispute hereunder shall be in Multnomah County, State of Oregon.

11. Successors and Assigns: The covenants, agreements and obligations of this Agreement shall extend to and be binding upon and inure to the benefit of the partners, heirs, personal representatives and assigns of the parties hereto. Neither OWNER nor SMI shall assign, sublet or transfer any rights under or interest in this Agreement without the written consent of the other. Nothing contained in this paragraph shall prevent SMI from employing, with prior consent of OWNER, such independent professional associates and consultants, as SMI may deem appropriate to assist in the performance of services hereunder.

12. Warranties: SMI warranties the ***StormFilter™*** components and their designed function only. SMI does not guarantee any specified level of pollutant removal.

STORMWATER MANAGEMENT, INC.
CONFIDENTIALITY PROVISION

Schnitzer Steel Industries Confidentiality. Any and all information, reports or data, including the results of any analysis performed by Stormwater for Customer ("Work Product"), shall, upon payment as agreed, be and become the property of the Customer. Stormwater may retain copies of the Work Product for its records.

Work Product shall be used by Stormwater only for the purpose of completing performance of the work to be provided by Stormwater for Customer and shall not be used for any other purpose by Stormwater, without the prior written consent of Customer.

Except as otherwise required by law, Stormwater shall not publish or otherwise make the Work Product available to third parties, other than employees, agents and representatives of Stormwater who need access to the Work Product to perform their duties, without the prior written consent of Customer, unless and until Customer first releases the Work Product to third parties.

BRIDGEWATER GROUP, INC.

Phase I RI Conclusions
Burgard Industrial Park

TO: Alicia Voss/DEQ

COPY: Mat Cusma/Schnitzer

FROM: Ross Rieke/Bridgewater Group

DATE: August 8, 2002

This memorandum presents conclusions of the Phase I Remedial Investigation (RI) at the Burgard Industrial Park in Portland, Oregon. The results of the Phase I RI are presented in a May 16, 2002, *Phase I Remedial Investigation Report*. This memorandum discusses the results relative to the potential pathways from each Feature of Concern (FOC) assessed in the Phase I RI to the Willamette River. The FOCs and pathways were assessed through the Phase I RI sampling and analysis in accordance with the October 29, 2001, Phase I RI Work Plan, which was approved by DEQ in a November 1, 2001, email.

The specific FOCs addressed by the Phase I RI were:

- Former Northwest Oil Company Oil Tanks
- Former Shipyard Sanitary Sewer and Storm Water Discharges
- Former Shipyard Shipways
- ASR Staging Area
- Southeast Area
- Outfall 1 Plug Area

The Phase I RI also included an assessment of the storm water discharge areas. A catch basin soil sample was also collected in the Northwest Pipe area in the Southeast Area.

Former Northwest Oil Company Tanks

As noted in the Phase I RI Work Plan, any releases that may have occurred from the former Northwest Oil Tanks would have occurred below the current ground surface. Dredge fill has been placed over this area since the tanks were removed in the early 1940s. Thus, migration of contaminants from surface soils to the river, either through surface water or air, is not a relevant contaminant migration pathway for this FOC.

Groundwater samples from monitoring wells MW-1 and MW-2 and push probe PP-5 assessed the groundwater in the area of, and down gradient from, the Former Northwest Oil Company tanks. PCBs and semi-volatile organic compounds (SVOCs), including PAHs, were not detected in any of the groundwater samples from the area of the Former Northwest Oil Company tanks. Tetrachloroethene (PCE) was detected in a groundwater sample from MW-1, located near the center of the Former Northwest Oil Tanks area, at a concentration exceeding the EPA ambient water quality criteria. It is our understanding that

SCHN00243849

DEQ has suggested using this criterion as a measure of whether discharge of groundwater to the river could pose a threat. However, the PCE the concentration in the groundwater sample from MW-2 was less then the EPA water quality criteria and PCE was not detected in the groundwater sample from PP-5. MW-2 and PP-5 are located between MW-1 and the river and slip, respectively. Thus, contaminants are not migrating through the groundwater pathway from the Former Northwest Oil Company tanks area to the Willamette River at concentrations greater than EPA water quality criteria.

Petroleum hydrocarbons, PAHs, and PCBs were detected at low concentrations in soil samples from depths of 7 feet or greater in the borings in the Northwest Oil Tank area. Given the depth of these soil samples, the measured concentrations are of a concern solely as potential sources to groundwater contamination. As discussed above, however, the groundwater sampling and analysis indicates that groundwater migration is not a pathway of concern. Therefore, the low contaminant concentrations in the deep soils in the area of the Former Northwest Oil Company tanks are not a potential source of contaminants to the river.

Former Shipyard Sanitary Sewer and Storm Water Discharges and Former Shipways

As was the case for the former Northwest Oil Company tanks area, any releases that may have occurred from the former shipyard sanitary sewer and storm water discharge points or from the former shipyard ways would have occurred below the current ground surface. Dredge fill has been placed over this area since the shipyard was abandoned in 1944. Thus, migration of contaminants from surface soils to the river, either through surface water or air, is not a relevant contaminant migration pathway for this FOC.

Groundwater samples from monitoring wells MW-2, MW-3, MW-4, and MW-5 assessed the groundwater at, and down gradient from, the discharge points for the former shipyard sanitary sewers and storm water system and from the former shipways. Neither volatile organic compounds (VOCs) nor PAHs were detected in groundwater samples from any of these wells. Concentrations of metals measured in groundwater samples from MW-2. MW-3, and MW-4 were greater than the EPA ambient water quality criteria. However, the measured concentrations are similar to background concentrations measured in other areas of Portland. In particular, total metal concentrations in groundwater samples collected along a 5-mile length of the Willamette River for the City of Portland Combined Sewer Overflow project were about the same or greater than the concentrations measured in the groundwater samples from monitoring wells MW-2, MW-3, MW-4, and MW-5. Thus, the presence of total metals in the groundwater samples from these wells likely represents naturally occurring concentrations.

Diesel and heavy oil petroleum hydrocarbons, PAHs, and PCBs were detected at low concentrations in soil samples from depths of 7 feet or greater in the borings in the northern portion of the former shipyard sanitary sewer and storm water discharge/shipways area. Some metals were also detected at concentrations greater than the Portland Harbor sediment baseline concentrations in these deep soil samples. Given the depth of these soil samples, the measured concentrations are of a concern solely as potential sources to groundwater contamination. As discussed above, however, the groundwater sampling and analysis indicates that groundwater migration is not a pathway of concern. Therefore, the low contaminant concentrations in the deep soils in the area of the former shipyard sanitary sewer and storm water discharge/shipways do not pose a threat to the river.

SCHN00243850

ASR on Ground Surface in Southwest Area

Low concentrations of diesel and heavy oil petroleum hydrocarbons and PAHs were detected in the near surface soil samples from the former ASR staging area. Concentrations of some metals were also noted at levels greater than Portland Harbor sediment baseline concentrations. However, the depth of contamination was limited, and subsequent to Phase I sampling, this area was excavated (approximately18 to 24-inches deep) for construction of a concrete pad. Surface water runoff from this area is captured and directed to the closed loop treatment system for use as make-up cooling water for the shredder. This surface water runoff is not discharged to the river. Thus, the former ASR staging area does not pose a threat to the river through the surface water pathway. The presence of the pad also prevents migration from the surface soil to the river through the air pathway.

The concentrations of petroleum hydrocarbons and PAHs decreased dramatically with depth. PAHs were not detected in the soil sample from a depth of 9 feet. Petroleum hydrocarbons were not detected in the soil sample from a depth of 13 feet and were detected at a concentration only slightly greater than the detection limit in the soil sample from a depth of 9 feet. Groundwater was encountered in the push probe exploration at a depth of about 20 feet. Given the lack of contaminants at the groundwater table and the relative insolubility of the near surface contaminants, groundwater is not a contaminant migration pathway from the former ASR staging area to the river. In addition, the presence of the concrete pad prevents infiltration of surface water into the subsurface. The lack of contaminants in the groundwater sample from MW-4, located down gradient from the ASR area, also indicates that contaminants are not migrating from the former ASR staging area to the river through the groundwater pathway.

Southeast Area

Heavy oil petroleum hydrocarbons and PAHs were detected in near surface soil samples at the PBM wash pad and at the Western Machine Works compressor. Several metals were detected at concentrations greater than Portland Harbor sediment baseline concentrations in the PBM wash pad area. However, the area of unpaved soil represented by these samples is small, and little, if any, surface water runoff occurs from these areas. As a consequence of the area size and location, incident rainfall is more likely to infiltrate into the soil rather than running off to the storm water collection system. Notwithstanding the lack of potential surface water runoff from these areas, Schnitzer will remove the contaminated near surface soil in the PBM wash pad and Western Machine Works compressor areas to further prevent any potential migration of contaminants from this area.

Lead was detected at a concentration greater than its Portland Harbor sediment baseline concentration in a soil sample from a depth of 2 feet in MW-7 in the Southeast Area. However, pavement in this area prevents surface water from contacting this soil and, thus, the surface water pathway is not a pathway of concern.

Tetrachloroethene and 1,1,1-trichloroethane were detected in groundwater samples from MW-7 and PP-4, located in the southeast area. These concentrations are less than the EPA ambient water quality criteria. It is our understanding that DEQ uses this criterion as a measure of whether discharge of groundwater to the river could pose a threat. Based on this criterion, these contaminants do not pose a threat to the river. In addition, the river slip is about ¼ mile away from MW-7 and PP-4.

Arsenic was detected in the groundwater sample from MW-7 at a concentration greater than the EPA ambient water quality criteria. However, the measured concentration is similar

to arsenic concentrations measured throughout the Portland area indicating that the presence of arsenic in the groundwater samples from this well likely represents naturally occurring concentrations. In addition, the sample location is over ¼ mile distant from the slip and approximately ½ mile from the river, indicating this low concentration of arsenic does not pose a threat to the river.

Outfall 1 Plug Area

As noted in the Phase I RI Work Plan, any releases that may have occurred in the Outfall 1 plug area would have occurred below the current ground surface. The storm drain line is buried by about 8 feet of dredge fill that was placed over this area in the early 1940s. Thus, migration of contaminants from surface soils to the river, either through surface water or air, is not a relevant contaminant migration pathway for this FOC.

A groundwater sample from monitoring well MW-6 assessed the groundwater in the area of the Outfall 1 plug. Petroleum hydrocarbons, VOCs, and SVOCs were not detected in the groundwater sample from MW-6. Thus, petroleum hydrocarbons, VOCs, and SVOCs do not pose a threat to the river through the groundwater migration pathway. Arsenic was detected in the groundwater sample from MW-6 at a concentration greater than the EPA ambient water quality criteria. However, the measured concentration is similar to concentrations measured throughout the Portland area indicating that the presence of arsenic in the groundwater sample from this well likely represents naturally occurring concentrations.

Petroleum hydrocarbons, PAHs, and PCBs were not detected in soil samples collected from the MW-6 boring. The metal concentrations in the soil samples from MW-6 were near, or less than, the Portland Harbor sediment baseline concentrations. Given the lack of contaminants in the soil samples from MW-6, the soil in the area of the Outfall 1 plug is not a source of groundwater contamination and does not pose a threat to the river.

General Storm Water Discharge

In accordance with the Phase I RI work plan, the storm water discharges at the Site were assessed to develop a storm water outfall soil sampling program. The purpose of the storm water outfall soil sampling program was to assess whether storm water runoff from the current site is a contaminant migration pathway to the river. As noted in a January 11, 2002 memorandum, Outfall 7 was found to be the only outfall where representative soil samples could be collected. Concentrations of several metals were detected in the Outfall 7 soil sample at concentrations greater than typical background concentrations and greater than the Portland Harbor sediment baseline concentrations. SIC is currently preparing a BMP-based plan that will show how the potential for releases of contaminants through the site storm water pathway will be addressed.

Northwest Pipe Catch Basin Sediment Sample

The Phase I RI work plan proposed collection of sediment samples from several catch basins located in the Southeast Area. Sediment was present in only one of the catch basins at the time of the RI sampling (due to the regular catch basin maintenance program). The one catch basin (CB-7) where sediment was present was located in the far southeast corner of the Burgard site, on property leased by Northwest Pipe.

Heavy oil petroleum hydrocarbons and PAHs were detected in the sediment sample. Several metals were detected at concentrations greater than the Portland Harbor Sediment baseline concentrations. The presence of the contaminants in the catch basin sediments

SCHN00243852

indicates that the catch basin is functioning properly, but that the sediments should be regularly cleaned out. SIC has notified Northwest Pipe of the presence of the contaminants in the catch basin sediments and recommended this catch basin be added to NW Pipe's regular maintenance program.

Please call if you have any questions.

SCHN00243853

Table 1
Storm Water Sampling Results
2004-2005
Schnitzer Steel - Portland

			Laboratory Results							
Outfall	Date	Laboratory	pH	TSS	O&G	COD	Copper	Lead	Zinc	Mercury
1	12/13/2004	CI	7.29	280	11.2	NA	0.20	0.691	2.2	NA
	3/26/2005	CI	7.02	4.0	3.7	NA	0.063	0.114	0.58	NA
3	12/13/2004	CI	7.21	130	9.6	NA	0.23	0.398	2.3	NA
	3/26/2005	CI	6.81	12	ND	NA	0.066	0.119	0.61	NA
	4/1/2005	**BES**	**7.3**	**216**	**5.1**	**820**	**0.343**	**0.791**	**4.10**	**0.00189**
	5/10/2005	CI	7.92	120	3.6	6.0	0.11	0.360	1.7	0.000068
4	12/13/2004	CI	6.76	48	3.1	NA	0.12	0.210	0.49	NA
	3/26/2005	CI	7.13	21	ND	NA	0.055	0.084	0.90	NA
5	12/13/2004	CI	7.05	100	4.4	NA	0.17	0.401	0.92	NA
	3/26/2005	CI	7.01	60	ND	NA	0.093	0.217	0.59	NA
	4/1/2005	**BES**	**7.2**	**132**	**5.1**	**88**	**0.183**	**0.420**	**1.47**	**0.000831**
	5/10/2005	CI	7.55	120	ND	19	0.15	0.199	0.60	0.000057
6	12/13/2004	CI	7.55	14	ND	NA	0.023	0.040	0.10	NA
	3/26/2005	CI	7.58	26	ND	NA	0.008	0.019	0.034	NA
	4/1/2005	**BES**	**6.3**	**8**	**24.1**	**<5**	**0.010**	**0.022**	**0.06**	**0.0000386**
	5/10/2005	CI	6.99	1.3	ND	ND	0.004	0.006	0.005	ND
Dulpicate	5/10/2005	CAS	7.01	ND	ND	ND	0.0025	0.006	0.01	0.0000099
14	12/13/2004	CI	7.71	15	2.4	NA	0.037	0.066	0.19	NA
15	3/26/2005	CI	8.10	34	6.0	NA	0.058	0.086	0.17	NA
16	12/13/2004	CI	7.45	12	2.0	NA	0.033	0.019	0.20	NA
	3/26/2005	CI	7.93	5.0	ND	NA	0.026	0.054	0.29	NA
20	12/13/2004	CI	7.38	18	ND	NA	0.009	ND	0.028	NA
	3/26/2005	CI	7.92	8.0	ND	NA	0.019	0.027	0.29	NA
	4/1/2005	**BES**	**6.3**	**44**	**5.3**	**38**	**0.0383**	**0.0555**	**0.264**	**0.0000833**
Permit Benchmarks			**5.5-9**	**130**	**10.0**		**0.1**	**0.4**	**0.6**	

Notes:

All analytical results reported in mg/L (ppm) except pH which is reported in SU units.
pH data collected in the field.

ND - Not detected. O&G - Oil and Grease COD-Chemical Oxygen Demand
NA - Not analyzed. TSS - Total suspended solids
CI - Columbia Inspection BES - City of Portland CAS - Columbia Analytical Services
No floating solids or oil and grease sheen were noted during monthly monitoring.

Table 1
Storm Water Sampling Results
2004-2005
Schnitzer Steel - Portland

			Laboratory Results							
Outfall	Date	Laboratory	pH	TSS	O&G	COD	Copper	Lead	Zinc	Mercury
1	12/13/2004	CI	7.29	280	11.2	NA	0.20	0.691	2.2	NA
	3/26/2005	CI	7.02	4.0	3.7	NA	0.063	0.114	0.58	NA
3	12/13/2004	CI	7.21	130	9.6	NA	0.23	0.398	2.3	NA
	3/26/2005	CI	6.81	12	ND	NA	0.066	0.119	0.61	NA
	4/1/2005	**BES**	**7.3**	**216**	**5.1**	**820**	**0.343**	**0.791**	**4.10**	**0.00189**
	5/10/2005	CI	7.92	120	3.6	6.0	0.11	0.360	1.7	0.000068
4	12/13/2004	CI	6.76	48	3.1	NA	0.12	0.210	0.49	NA
	3/26/2005	CI	7.13	21	ND	NA	0.055	0.084	0.90	NA
5	12/13/2004	CI	7.05	100	4.4	NA	0.17	0.401	0.92	NA
	3/26/2005	CI	7.01	60	ND	NA	0.093	0.217	0.59	NA
	4/1/2005	**BES**	**7.2**	**132**	**5.1**	**88**	**0.183**	**0.420**	**1.47**	**0.000831**
	5/10/2005	CI	7.55	120	ND	19	0.15	0.199	0.60	0.000057
6	12/13/2004	CI	7.55	14	ND	NA	0.023	0.040	0.10	NA
	3/26/2005	CI	7.58	26	ND	NA	0.008	0.019	0.034	NA
	4/1/2005	**BES**	**6.3**	**8**	**24.1**	**<5**	**0.010**	**0.022**	**0.06**	**0.0000386**
	5/10/2005	CI	6.99	1.3	ND	ND	0.004	0.006	0.005	ND
Dulpicate	5/10/2005	CAS	7.01	ND	ND	ND	0.0025	0.006	0.01	0.000099
14	12/13/2004	CI	7.71	15	2.4	NA	0.037	0.066	0.19	NA
15	3/26/2005	CI	8.10	34	6.0	NA	0.058	0.086	0.17	NA
16	12/13/2004	CI	7.45	12	2.0	NA	0.033	0.019	0.20	NA
	3/26/2005	CI	7.93	5.0	ND	NA	0.026	0.054	0.29	NA
20	12/13/2004	CI	7.38	18	ND	NA	0.009	ND	0.028	NA
	3/26/2005	CI	7.92	8.0	ND	NA	0.019	0.027	0.29	NA
	4/1/2005	**BES**	**6.3**	**44**	**5.3**	**38**	**0.0383**	**0.0555**	**0.264**	**0.0000833**
Permit Benchmarks			**5.5-9**	**130**	**10.0**		**0.1**	**0.4**	**0.6**	

Notes:

All analytical results reported in mg/L (ppm) except pH which is reported in SU units.
pH data collected in the field.

ND - Not detected. O&G - Oil and Grease COD-Chemical Oxygen Demand
NA - Not analyzed. TSS - Total suspended solids
CI - Columbia Inspection BES - City of Portland CAS - Columbia Analytical Services
No floating solids or oil and grease sheen were noted during monthly monitoring.

Munitor Construction, LLC
Portland, Oregon
CCB 148811

April 14, 2006

To: Mr. Jim Jakubiak
Schnitzer Steel, Inc.
Portland, Oregon

From: Mr. Harley Meservey
Munitor Construction, LLC
Portland, Oregon

Re. Storm Water System Maintenance
Schnitzer Steel
Portland, Oregon
Project #513

Mr. Jim Jakubiak:

Munitor Construction, LLC (Munitor) is pleased to present this cost estimate for Storm Water System Maintenance. Below is a scope of work, cost estimate, and assumptions.

Scope of Work-Phase I Surface Cleaning of Sand
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems April 2006
- Clean sand filter #3
- Jet rod plugged lines

Cost Estimate
Munitor Construction is providing the following bid for the project.
Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$4175.00	$4175.00
Jet Rod Plugged Lines	1	LS	$2850.00	$2850.00
Oil/Water Separator at former outfall #7	1	LS	$1820.00	$1820.00
			Total	$8845.00

Assumptions

The following assumptions have been made in the development of this bid.

- Work will not be performed during rain events.
- All liquids removed will be recycled onsite at water treatment system and sand disposal with auto fluff.

Munitor would like to thank you for the opportunity to provide services to you. If you have any questions or would like to schedule work please contact me anytime at (503) 702-6542. We look forward to providing professional services to you and any future needs.

Regards,

Harley Meservey

Harley Meservey
President

SCHN00243862

MUNITOR CONSTRUCTION, L.L.C.
CONSTRUCTION CONTRACT

This Contract is made this third day of August 2005 by and between Munitor Construction, L.L.C. (Munitor) and Schnitzer Steel Industries, Inc. (SSI).

For and in consideration of the mutual covenants contained herein the parties agree:

ARTICLE I. SERVICES BY MUNITOR CONSTRUCTION, L.L.C.

1.0 Scope of Work

Munitor-will provide personnel, equipment, and materials for the cleaning of storm system as provided in quote attached at SSI's facility located at 12005 North Burgard Road in Portland, Oregon.

1.1 Type of Services

Munitor will provide the following services (the "Services"):

Munitor to provide vacuum trucks, laborers, other equipment and materials to perform cleaning of sand filters, catch basins, oil water separators at SSI's facility in Portland, Oregon.

1.2 Method of Performance

1.2.1 Munitor shall mobilize such personnel, equipment, and materials as described above starting the first week of August 2005 weather pending.

1.2.2 Munitor shall comply in all respects with all applicable federal, state, and local laws and regulations in its performance of the Services.

1.2.3 Munitor will make its personnel and authorized subcontractors available to confer with SSI to review the status of and to review and establish procedures for the efficient delivery of Services hereunder.

1.2.4 Neither Munitor, its authorized subcontractors, nor any of their employees shall supervise, directly or indirectly, any temporary or permanent employee of SSI. SSI shall not direct the means and methods used by Munitor in performing its work.

ARTICLE II. COMPENSATION

2.1 Compensation

SSI shall reimburse Munitor for services rendered at a fixed price, not-to-exceed basis, in accordance with Munitor's bid dated July 20, 2005 (Phase 1 - attached).

2.2 Invoice

Munitor Construction, L.L.C. shall invoice SSI monthly or upon project completion for Services performed hereunder. SSI shall make payment within thirty (30) days of receiving such invoice. A late fee will be added to accounts 30 days in arrears at the rate of one percent (1%) of the amount due for each month of delinquency.

ARTICLE III. MUNITOR CONSTRUCTION, L.L.C. - LIABILITY INSURANCE

Until the Services are completed, Munitor agrees to provide and maintain, at its own expense, the following insurance coverage:

(a) Workers' Compensation at the statutory limits for the state or states in which the work is to be performed.

(b) Commercial Liability insurance in the amount of $2,000,000 combined single limit for bodily injury and property damage, including product liability, completed operations, contractual liability and, where applicable, coverage for damage caused by blasting, collapse or structural injury, and/or damage to underground utilities.

(c) Automobile Public Liability in the amount of $1,000,000 per occurrence for bodily injury and property damage, including non-owned automobiles. In the event that "Client" desires additional insurance, "Client" will notify Munitor of such request in writing and Munitor will obtain a quote from its insurance carrier regarding the cost of obtaining the requested coverage. The cost of such additional insurance will be borne by SSI. Munitor will not procure this additional coverage without the written approval of SSI.

(d) Munitor shall make SSI an additional insured party to their insurance policy and shall provide SSI with a certificate of insurance prior to commencing work and shall procure an endorsement prohibiting such insurance from being cancelled or changed unless the additional insured (SSI) is given the same notice of cancellation or change as the principal insured (Munitor).

ARTICLE IV. PROJECT PERFORMANCE

4.1 Performance of Services

Munitor was hired by SSI because of its experience and skill performing the work contracted for herein. Munitor's employees, agents, and subcontractors shall be properly trained, including HAZWOPPER training for personnel encountering hazardous substances. Munitor will perform all Services under this Contract in accordance with generally accepted professional standards that apply in the community where the Services are performed for the type of work involved.

ARTICLE V. MISCELLANEOUS

5.1 Access to Property

SSI has the responsibility of obtaining a right of entry to property where the Services are to be performed. The right of entry shall allow Munitor, its agents, subcontractors, and employees to enter the property from time to time, as necessary to perform all acts, studies, and research pursuant to the agreed services within the scope of work. Munitor does not assume control of or responsibility for the property, the person in charge of the property, nor the safety of persons except its agents, subcontractors and employees.

5.2 Unforeseen Conditions or Occurrences

If any unforeseen conditions or occurrences are encountered which significantly affect or may affect the recommended scope of the Services, then Munitor will notify SSI. After such notification, Munitor will complete the original scope of Services, if appropriate, or agree with SSI to modify the Agreement, or terminate this Agreement with respect to the Services pursuant to Section 6.11 hereof. Changes to the original scope of work that will result in increased compensation for the project must be approved by SSI in writing.

ARTICLE VI. GENERAL PROVISIONS

6.1 Indemnification

To the fullest extent permitted by law, each party shall defend, indemnify and hold harmless the other party, its consultants, and the agents and employees of any of them from and against claims, damages, losses, and expenses, including, but not limit to, attorneys' fees, arising out of or resulting from performance of services hereunder, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including loss of use resulting therefrom, but only to the extent solely caused by negligent acts or omissions, willful misconduct, or contractual breaches of the indemnitor, anyone directly or indirectly employed by it, or anyone for whose acts it may be liable.

6.2 Permits and Access

Munitor will assist SSI in securing necessary permits required by authorities having jurisdiction over the project area.

6.3 Force Majeure

Delay or failure of Munitor in the performance of services hereunder shall be excused if caused by circumstances beyond the control of Munitor, including, without limitation, acts of God, strikes, fire, flood, windstorm, action or request of governmental authority, and inability to obtain material, equipment, or services, provided that a prompt notice of such delay or failure is given and Munitor diligently attempts to remove the cause.

6.4 Independent Client

Munitor is and shall perform all Services as an independent contractor and as such shall have and maintain exclusive control and direction over all of its employees, agents, and operations.

6.5 Subcontracts

Munitor may not, without SSI consent in writing, delegate the performance of Services hereunder, or any portion thereof. If approved, subcontractors will be required to sign a Munitor subcontract agreement prior to the start of work, and agree to defend, indemnify and hold harmless SSI from claims arising from its negligent acts, omissions, willful misconduct or contractual breaches.

6.6 Survival

Section 6.1 and all other provisions of this Contract that may reasonably be construed as surviving the term of this Contract shall survive the term of this Contract.

6.7 Applicable Law

Exclusively the laws of the State of Oregon shall govern this Contract. Venue for any dispute hereunder shall be in the federal or state courts sitting in Multnomah County, and each party hereby consents to the jurisdiction of such courts for any dispute hereunder, provided, however, that nothing herein shall preclude Munitor from excising its mechanics' or materialmen's lien rights under the laws of any jurisdiction where the Services are performed.

6.8 Severability

If any provision of this Contract is found to be illegal, invalid, or unenforceable for any reason, such findings shall not affect the other provisions hereof

6.9 Taxes

SSI shall pay all state and local sales, use, or excise taxes of any kind assessed and/or arising out of the sale or use of the Services and shall, upon demand, reimburse Munitor for any sums it has expended for such taxes. It is assumed all taxes have been included in Munitor's attached cost proposal.

6.10 Term and Termination

The term of this Contract shall expire upon written notice by either party; provided, however, that neither party shall have the right to terminate this Contract except pursuant to the following provisions of this Section 6.10.

(a) Either party may, for its sole convenience, terminate the performance of, the Services in whole or in part at any time, or from time to time, by giving thirty (30) days written notice of intent to terminate.

(b) Should SSI terminate this contract, SSI will pay Munitor all time and material costs (and any fees) which have accrued as of the effective date of termination and, in addition, those time and materials costs incurred or earned in good faith by Munitor after the effective date of termination in connection with (1) demobilization of equipment and personnel and (2) any necessary subcontract and/or vendor settlements.

(c) The rights and remedies of the parties provided in the section 6.10 are in addition to any other rights and remedies provided by law or under this Contract.

6.11 Confidentiality

SSI may provide Munitor, and Munitor may observe during the performance of Services, certain non-public information during the evaluation for and performance of Services under this Contract. Munitor agrees that all such information shall be confidential information and treated and held as such by Munitor, its agents, employees, and subcontractors. Munitor shall not use such information for any purpose, such as advertising or any form of publicity, other than the evaluation for and performance of Services to be performed by it under this Contract.

6.12 Entire Agreement

This Contract contains the entire and only agreement between SSI and Munitor respecting the subject matter hereof. It supersedes all prior or conflicting agreement, representation, promises, or conditions. Any modification of this Contract must be in writing and signed by both parties and must expressly indicate intent to modify this contract.

	HARLEY MESERVEY
Name of Authorized Representative of SSI (Printed)	Name of Munitor Rep. (Printed)
	Harley Meservey
Authorized Signature	Authorized Signature
Title Gen. Mgr	Title President
Date 8-3-05	Date Aug. 3, 2005
Schnitzer Steel Industries, Inc. 12005 North Burgard Road Portland, Oregon 97203 (503) 224-9900	Munitor Construction, L.L.C. 206 N. Tomahawk Island Drive Portland, OR 97217 (503) 702-6542

Munitor Construction, LLC
Portland, Oregon
CCB 148811

July 20, 2005

To: Mr. Jim Jakubiak
Schnitzer Steel, Inc.
Portland, Oregon

From: Mr. Harley Meservey
Munitor Construction, LLC
Portland, Oregon

Re. Storm Water System Maintenance
Schnitzer Steel
Portland, Oregon
Project #463

Mr. Jim Jakubiak:

Munitor Construction, LLC (Munitor) is pleased to present this cost estimate for Storm Water System Maintenance. Below is a scope of work, cost estimate, and assumptions.

A Scope of Work-Phase I Cleaning with complete sand removal/replacement
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems-remove and replace sand, August 2005
  - Outfall #3 Sandfilter
  - Outfall #4 Sandfilter
  - Outfall #5 Sandfilter
  - Outfall #6 Sandfilter
  - Oil/Water Seperators at outfall #1, #14, #16
  - Oil/Water Seperator at former outfall #7
  - Oil/Water Seperator at outfall #13 and #15
  - Site catch basins (approximately 175)
  - Clean Stormwater Management units and replace filters.
  - Includes Jet rodding lines to outfall from sand filters
  - Replace filter fabric and piping in sand filters
  - Sand replacement and removal

Cost Estimate-Phase I
Munitor Construction is providing the following bid for the project.
Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$7440.00	$7440.00
Clean Sandfilter #4	1	LS	$9290.00	$9290.00
Clean Sandfilter #5	1	LS	$17110.00	$17110.00
Clean Sandfilter #6	1	LS	$8215.00	$8215.00
Oil/Water Seperators at outfall #1, #14, #16	1	LS	$5665.00	$5665.00
Oil/Water Seperator at former outfall #7	1	LS	$1420.00	$1420.00
Oil/Water Seperator at outfall #13 and #15	1	LS	$3770.00	$3770.00
Site catch basins (approximately 175)	1	LS	$2915.00	$2915.00
Clean Stormwater Management units & replace filters	1	LS	$882.00	$882.00
			Total	$56707.00

Scope of Work-Phase II Surface Cleaning of Sand
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems Oct/Nov of 2005 weather pending
  - Outfall #3 Sandfilter
  - Outfall #4 Sandfilter

Munitor Construction, LLC
Portland, Oregon
CCB 148811

- Outfall #5 Sandfilter
- Outfall #6 Sandfilter
- Oil/Water Seperators at outfall #1, #14, #16
- Oil/Water Seperator at former outfall #7
- Oil/Water Seperator at outfall #13 and #15
- Site catch basins (approximately 175)
- Clean Stormwater Management units and replace filters.

Cost Estimate-Phase II

Munitor Coustruction is providing the following bid for the project.

Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$4175.00	$4175.00
Clean Sandfilter #4	1	LS	$4175.00	$4175.00
Clean Sandfilter #5	1	LS	$5300.00	$5300.00
Clean Sandfilter #6	1	LS	$4830.00	$4830.00
Oil/Water Seperators at outfall #1, #14, #16	1	LS	$5665.00	$5665.00
Oil/Water Seperator at former outfall #7	1	LS	$1420.00	$1420.00
Oil/Water Seperator at outfall #13 and #15	1	LS	$3770.00	$3770.00
Site catch basins (approximately 175)	1	LS	$2915.00	$2915.00
Clean Stormwater Management units & replace filters	1	LS	$882.00	$882.00
			Total	$33132.00

Scope of Work-Phase III Surface Cleaning of Sand

Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems March of 2005
  - Outfall #3 Sandfilter
  - Outfall #4 Sandfilter
  - Outfall #5 Sandfilter
  - Outfall #6 Sandfilter
  - Oil/Water Seperators at outfall #1, #14, #16
  - Oil/Water Seperator at former outfall #7
  - Oil/Water Seperator at outfall #13 and #15
  - Site catch basins (approximately 175)
  - Clean Stormwater Management units and replace filters.

Cost Estimate-Phase III

Munitor Construction is providing the following bid for the project.

Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$4175.00	$4175.00
Clean Sandfilter #4	1	LS	$4175.00	$4175.00
Clean Sandfilter #5	1	LS	$5300.00	$5300.00
Clean Sandfilter #6	1	LS	$4830.00	$4830.00
Oil/Water Seperators at outfall #1, #14, #16	1	LS	$5665.00	$5665.00
Oil/Water Seperator at former outfall #7	1	LS	$1420.00	$1420.00
Oil/Water Seperator at outfall #13 and #15	1	LS	$3770.00	$3770.00
Site catch basins (approximately 175)	1	LS	$2915.00	$2915.00
Clean Stormwater Management units & replace filters	1	LS	$882.00	$882.00
			Total	$33132.00

Assumptions

The following assumptions have been made in the development of this bid.

- Work will not be performed during rain events.
- All liquids removed will be dumped onsite at water treatment system and sand disposal with auto fluff.

Munitor Construction, LLC
Portland, Oregon
CCB 148811

Munitor would like to thank you for the opportunity to provide services to you. If you have any questions or would like to schedule work please contact me anytime at (503) 702-6542. We look forward to providing professional services to you and any future needs.

Regards,

Harley Mcservey

Harley Mcservey
President

MUNITOR CONSTRUCTION, L.L.C.
CONSTRUCTION CONTRACT

This Contract is made this third day of August 2005 by and between Munitor Construction, L.L.C. (Munitor) and Schnitzer Steel Industries, Inc. (SSI).

For and in consideration of the mutual covenants contained herein the parties agree:

ARTICLE I. SERVICES BY MUNITOR CONSTRUCTION, L.L.C.

1.0 Scope of Work

Munitor-will provide personnel, equipment, and materials for the cleaning of storm system as provided in quote attached at SSI's facility located at 12005 North Burgard Road in Portland, Oregon.

1.1 Type of Services

Munitor will provide the following services (the "Services"):

Munitor to provide vacuum trucks, laborers, other equipment and materials to perform cleaning of sand filters, catch basins, oil water separators at SSI's facility in Portland, Oregon.

1.2 Method of Performance

1.2.1 Munitor shall mobilize such personnel, equipment, and materials as described above starting the first week of August 2005 weather pending.

1.2.2 Munitor shall comply in all respects with all applicable federal, state, and local laws and regulations in its performance of the Services.

1.2.3 Munitor will make its personnel and authorized subcontractors available to confer with SSI to review the status of and to review and establish procedures for the efficient delivery of Services hereunder.

1.2.4 Neither Munitor, its authorized subcontractors, nor any of their employees shall supervise, directly or indirectly, any temporary or permanent employee of SSI. SSI shall not direct the means and methods used by Munitor in performing its work.

ARTICLE II. COMPENSATION

2.1 Compensation

SSI shall reimburse Munitor for services rendered at a fixed price, not-to-exceed basis, in accordance with Munitor's bid dated July 20, 2005 (Phase 1 - attached).

2.2 Invoice

Munitor Construction, L.L.C. shall invoice SSI monthly or upon project completion for Services performed hereunder. SSI shall make payment within thirty (30) days of receiving such invoice. A late fee will be added to accounts 30 days in arrears at the rate of one percent (1%) of the amount due for each month of delinquency.

ARTICLE III. MUNITOR CONSTRUCTION, L.L.C. - LIABILITY INSURANCE

Until the Services are completed, Munitor agrees to provide and maintain, at its own expense, the following insurance coverage:

(a) Workers' Compensation at the statutory limits for the state or states in which the work is to be performed.

(b) Commercial Liability insurance in the amount of $2,000,000 combined single limit for bodily injury and property damage, including product liability, completed operations, contractual liability and, where applicable, coverage for damage caused by blasting, collapse or structural injury, and/or damage to underground utilities.

(c) Automobile Public Liability in the amount of $1,000,000 per occurrence for bodily injury and property damage, including non-owned automobiles. In the event that "Client" desires additional insurance, "Client" will notify Munitor of such request in writing and Munitor will obtain a quote from its insurance carrier regarding the cost of obtaining the requested coverage. The cost of such additional insurance will be borne by SSI. Munitor will not procure this additional coverage without the written approval of SSI.

(d) Munitor shall make SSI an additional insured party to their insurance policy and shall provide SSI with a certificate of insurance prior to commencing work and shall procure an endorsement prohibiting such insurance from being cancelled or changed unless the additional insured (SSI) is given the same notice of cancellation or change as the principal insured (Munitor).

ARTICLE IV. PROJECT PERFORMANCE

4.1 Performance of Services

Munitor was hired by SSI because of its experience and skill performing the work contracted for herein. Munitor's employees, agents, and subcontractors shall be properly trained, including HAZWOPPER training for personnel encountering hazardous substances. Munitor will perform all Services under this Contract in accordance with generally accepted professional standards that apply in the community where the Services are performed for the type of work involved.

ARTICLE V. MISCELLANEOUS

5.1 Access to Property

SSI has the responsibility of obtaining a right of entry to property where the Services are to be performed. The right of entry shall allow Munitor, its agents, subcontractors, and employees to enter the property from time to time, as necessary to perform all acts, studies, and research pursuant to the agreed services within the scope of work. Munitor does not assume control of or responsibility for the property, the person in charge of the property, nor the safety of persons except its agents, subcontractors and employees.

5.2 Unforeseen Conditions or Occurrences

If any unforeseen conditions or occurrences are encountered which significantly affect or may affect the recommended scope of the Services, then Munitor will notify SSI. After such notification, Munitor will complete the original scope of Services, if appropriate, or agree with SSI to modify the Agreement, or terminate this Agreement with respect to the Services pursuant to Section 6.11 hereof. Changes to the original scope of work that will result in increased compensation for the project must be approved by SSI in writing.

ARTICLE VI. GENERAL PROVISIONS

6.1 Indemnification

To the fullest extent permitted by law, each party shall defend, indemnify and hold harmless the other party, its consultants, and the agents and employees of any of them from and against claims, damages, losses, and expenses, including, but not limit to, attorneys' fees, arising out of or resulting from performance of services hereunder, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including loss of use resulting therefrom, but only to the extent solely caused by negligent acts or omissions, willful misconduct, or contractual breaches of the indemnitor, anyone directly or indirectly employed by it, or anyone for whose acts it may be liable.

6.2 Permits and Access

Munitor will assist SSI in securing necessary permits required by authorities having jurisdiction over the project area.

6.3 Force Majeure

Delay or failure of Munitor in the performance of services hereunder shall be excused if caused by circumstances beyond the control of Munitor, including, without limitation, acts of God, strikes, fire, flood, windstorm, action or request of governmental authority, and inability to obtain material, equipment, or services, provided that a prompt notice of such delay or failure is given and Munitor diligently attempts to remove the cause.

6.4 Independent Client

Munitor is and shall perform all Services as an independent contractor and as such shall have and maintain exclusive control and direction over all of its employees, agents, and operations.

6.5 Subcontracts

Munitor may not, without SSI consent in writing, delegate the performance of Services hereunder, or any portion thereof. If approved, subcontractors will be required to sign a Munitor subcontract agreement prior to the start of work, and agree to defend, indemnify and hold harmless SSI from claims arising from its negligent acts, omissions, willful misconduct or contractual breaches.

6.6 Survival

Section 6.1 and all other provisions of this Contract that may reasonably be construed as surviving the term of this Contract shall survive the term of this Contract.

6.7 Applicable Law

Exclusively the laws of the State of Oregon shall govern this Contract. Venue for any dispute hereunder shall be in the federal or state courts sitting in Multnomah County, and each party hereby consents to the jurisdiction of such courts for any dispute hereunder, provided, however, that nothing herein shall preclude Munitor from excising its mechanics' or materialmen's lien rights under the laws of any jurisdiction where the Services are performed.

6.8 Severability

If any provision of this Contract is found to be illegal, invalid, or unenforceable for any reason, such findings shall not affect the other provisions hereof

6.9 Taxes

SSI shall pay all state and local sales, use, or excise taxes of any kind assessed and/or arising out of the sale or use of the Services and shall, upon demand, reimburse Munitor for any sums it has expended for such taxes. It is assumed all taxes have been included in Munitor's attached cost proposal.

6.10 Term and Termination

The term of this Contract shall expire upon written notice by either party; provided, however, that neither party shall have the right to terminate this Contract except pursuant to the following provisions of this Section 6.10.

(a) Either party may, for its sole convenience, terminate the performance of, the Services in whole or in part at any time, or from time to time, by giving thirty (30) days written notice of intent to terminate.

(b) Should SSI terminate this contract, SSI will pay Munitor all time and material costs (and any fees) which have accrued as of the effective date of termination and, in addition, those time and materials costs incurred or earned in good faith by Munitor after the effective date of termination in connection with (1) demobilization of equipment and personnel and (2) any necessary subcontract and/or vendor settlements.

(c) The rights and remedies of the parties provided in the section 6.10 are in addition to any other rights and remedies provided by law or under this Contract.

6.11 Confidentiality

SSI may provide Munitor, and Munitor may observe during the performance of Services, certain non-public information during the evaluation for and performance of Services under this Contract. Munitor agrees that all such information shall be confidential information and treated and held as such by Munitor, its agents, employees, and subcontractors. Munitor shall not use such information for any purpose, such as advertising or any form of publicity, other than the evaluation for and performance of Services to be performed by it under this Contract.

6.12 Entire Agreement

This Contract contains the entire and only agreement between SSI and Munitor respecting the subject matter hereof. It supersedes all prior or conflicting agreement, representation, promises, or conditions. Any modification of this Contract must be in writing and signed by both parties and must expressly indicate intent to modify this contract.

	HARLEY MESERVEY
Name of Authorized Representative of SSI (Printed)	Name of Munitor Rep. (Printed)
	Harley Meservey
Authorized Signature	Authorized Signature
Title Gen. Mgr.	Title President
Date 8-3-05	Date Aug. 3, 2005
Schnitzer Steel Industries, Inc. 12005 North Burgard Road Portland, Oregon 97203 (503) 224-9900	Munitor Construction, L.L.C. 206 N. Tomahawk Island Drive Portland, OR 97217 (503) 702-6542

Munitor Construction, LLC
Portland, Oregon
CCB #88811

April 27, 2005

To: Mr. Jim Jakubiak
Schnitzer Steel, Inc.
Portland, Oregon

From: Mr. Harley Meservey
Munitor Construction, LLC
Portland, Oregon

Re. Storm Water System Maintenance
Schnitzer Steel
Portland, Oregon
Project #463

Mr. Jim Jakubiak:

Munitor Construction, LLC (Munitor) is pleased to present this cost estimate for Storm Water System Maintenance. Below is a scope of work, cost estimate, and assumptions.

Scope of Work-Phase I Surface Cleaning of Sand
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems May of 2005
  - Outfall #3 Sandfilter
  - Outfall #4 Sandfilter
  - Outfall #5 Sandfilter
  - Outfall #6 Sandfilter
  - Oil/Water Seperators at outfall #1, #14, #16
  - Oil/Water Seperator at former outfall #7
  - Oil/Water Seperator at outfall #13 and #15
  - Site catch basins (approximately 175)
  - Clean Stormwater Management units and replace filters.

Cost Estimate
Munitor Construction is providing the following bid for the project.
Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$4175.00	$4175.00
Clean Sandfilter #4	1	LS	$4175.00	$4175.00
Clean Sandfilter #5	1	LS	$5300.00	$5300.00
Clean Sandfilter #6	1	LS	$4830.00	$4830.00
Oil/Water Seperators at outfall #1, #14, #16	1	LS	$5665.00	$5665.00
Oil/Water Seperator at former outfall #7	1	LS	$1420.00	$1420.00
Oil/Water Seperator at outfall #13 and #15	1	LS	$3770.00	$3770.00
Site catch basins (approximately 175)	1	LS	$2915.00	$2915.00
Clean Stormwater Management units & replace filters	1	LS	$882.00	$882.00
			Total	$33132.00

A Scope of Work-Phase II Cleaning with complete sand removal/replacement
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems-remove and replace sand, September 2005
  - Outfall #3 Sandfilter
  - Outfall #4 Sandfilter
  - Outfall #5 Sandfilter
  - Outfall #6 Sandfilter
  - Oil/Water Seperators at outfall #1, #14, #16

Munitor Construction, LLC
Portland, Oregon
CCB 148811

- Oil/Water Seperator at former outfall #7
- Oil/Water Seperator at outfall #13 and #15
- Site catch basins (approximately 175)
- Clean Stormwater Management units and replace filters.
- Includes Jet rodding lines to outfall from sand filters
- Replace filter fabric and piping in sand filters
- Sand replacement and removal

Cost Estimate-Phase II

Munitor Construction is providing the following bid for the project.

Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$7440.00	$7440.00
Clean Sandfilter #4	1	LS	$9290.00	$9290.00
Clean Sandfilter #5	1	LS	$17110.00	$17110.00
Clean Sandfilter #6	1	LS	$8215.00	$8215.00
Oil/Water Seperators at outfall #1, #14, #16	1	LS	$5665.00	$5665.00
Oil/Water Seperator at former outfall #7	1	LS	$1420.00	$1420.00
Oil/Water Seperator at outfall #13 and #15	1	LS	$3770.00	$3770.00
Site catch basins (approximately 175)	1	LS	$2915.00	$2915.00
Clean Stormwater Management units & replace filters	1	LS	$882.00	$882.00
			Total	$56707.00

Assumptions

The following assumptions have been made in the development of this bid.

- Work will not be performed during rain events.
- All liquids removed will be dumped onsite at water treatment system and sand disposal with auto fluff.

Munitor would like to thank you for the opportunity to provide services to you. If you have any questions or would like to schedule work please contact me anytime at (503) 702-6542. We look forward to providing professional services to you and any future needs.

Regards,

Harley Meservey

Harley Meservey
President

CI CERTIFICATE OF ANALYSIS

CLIENT: Schnitzer Investment Corp.
ATTN: James Jakubiak
3200 NW Yeon
Portland OR, 97296

PROJECT NAME: Burgard Catch Basins

PHONE: (503) 286-6976
FAX: (503) 286-6948

SUBMITTED: 12/23/05 11:52

REPORT DATE: 01/12/06 08:34 REPORT NUMBER: 5122306 PAGE: 1 OF 1

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
5122306-01	SIC-B-1	12/23/2005	1130	Soil

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
5122306-01	**SAMPLE ID: SIC-B-1**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	0.19	mg/L	0.010	KEL	01/05/2006 13:06
BARIUM, TCLP - ICP		BARIUM	2.5	mg/L	0.020	KEL	01/05/2006 13:20
CADMIUM, TCLP - ICP		CADMIUM	0.032	mg/L	0.020	KEL	01/05/2006 13:06
CHROMIUM, TCLP - ICP		CHROMIUM	2.5	mg/L	0.010	KEL	01/05/2006 13:06
LEAD, TCLP - ICP		LEAD	0.69	mg/L	0.040	KEL	01/05/2006 13:06
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	KEL	01/05/2006 13:06
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.080	KEL	01/05/2006 13:23
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP CV AF	EPA 245.7/1631	MERCURY	ND	mg/L	0.250	KEL	01/11/2006 13:30

This report may not be reproduced except in full.

Authorized for Release By:

Richard D. Reid - Laboratory Director

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Ph:(503) 286-9464 Fax:(503) 286-5355 E-mail:cilabqa@ColumbiaInspection.com

WASTE MANAGEMENT, INC ....NON HAZARDOUS WASTE DISPOSAL SOLUTIONS FOR THE PACIFIC NORTHWEST

Hillsboro Landfill, Inc.

3205 SE MINTER BRIDGE ROAD HILLSBORO, OR 97123

PERMIT # 9769

PERMIT TO DISPOSE OF NON-HAZARDOUS MATERIALS

This permit authorizes disposal of Customer's waste materials in accordance with the Industrial Waste & Disposal Services Agreement dated *11/05*.

EXPIRES: 8/10/06

GENERATOR: BURGARD INDUSTRIAL PARK

DESCRIPTION: *CATCH BASIN SEDIMENTS*	**TONS:** *15*
☐ SPECIAL WASTE ☒ CS ☐ C&D ☐ CLEAN-UP	
LOCATION: *PORTLAND, OREGON* *9945 N. BURGARD ROAD*	**COUNTY:** *Multnomah*
CONTACT: *JIM JAKUBIAK*	**PHONE:** *503-286-6976*
	FAX: *503-286-6948*

BILLING: *Landfill account WASTE MANAGEMENT OF PDX*	**PO#:** *N/A*	**JOB#:** *N/A*

We accept business checks, cash, VISA / Mastercard or charge(with prior approval)

SPECIAL HANDLING : *NOTE: NO FREE LIQUIDS*

MK **TyT**

APPROVED: KC *KRISTIN CASTNER* **DATE:** *05/10/06 9:28:30 AM*

A COPY OF THIS PERMIT MUST BE SHOWN BY EACH DRIVER

THERE IS A MINIMUM CHARGE OF $50-$60 FOR EACH LOAD OF SPECIAL WASTE

WASTE MANAGEMENT

HAZARDOUS WASTE IS STRICTLY PROHIBITED

Valley Landfills, Inc.

29872 COFFIN BUTTE ROAD
CORVALLIS, OR 97330
PHONE: (541) 745-2018
FAX: (541) 745-3826

FAX COVER SHEET

TO: Jim Jakubiak

FROM: Roberta

RE: Waste Manifest for Profile #F32432900

DATE: 4/4/03

PAGES: 2

FAX: 503-286-6948

Could you sign line 14 and fax us back a copy of this for our records. A copy of this manifest should come with each load to the landfill.

*If transmission is incomplete, please call_____at (541) 745-2018

AN EQUAL OPPORTUNITY EMPLOYER M/F/D/V

ALLIED WASTE INDUSTRIES INC.

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

GENERATOR

3. Generator's Name and Mailing Address
Schnitzer Steel Products Company
12005 North Burgard Road
Portland, OR 97203

4. Generator's Phone (503) 286-6976

F32Y32900

5. Transporter 1 Company Name
United Disposal Service

6. US EPA ID Number

A. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address
COFFIN BUTTE LANDFILL
29175 COFFIN BUTTE ROAD
CORVALLIS OR 97330

10. US EPA ID Number
DEQ/EPA ID
ORD990751950

C. Facility's Phone
541-745-7144

11. Waste Shipping Name and Description	12. Containers No	Type	13. Total Quantity	14. Unit Wt/Vol
a. Soil(Miner asphalt and concrete-road debris)				
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

TRANSPORTER

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed / Typed Name: Jim Jakubiak
Signature
Month 04 Day 18 Year 03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed / Typed Name
Signature
Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed / Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Valley Landfills, Inc

Printed / Typed Name
Signature
Month Day Year

ORIGINAL – RETURN TO GENERATOR

Apr 04 03 01:56p LINDA ANDERSON 1 541 745 3826 p.2

SCHN00243892

WASTE MANAGEMENT, INC ....NON HAZARDOUS WASTE DISPOSAL SOLUTIONS FOR THE PACIFIC NORTHWEST

Columbia Ridge Landfill

18177 Cedar Springs Lane, Arlington Oregon 97812

Profile # 090302

PERMIT TO DISPOSE OF NON-HAZARDOUS MATERIALS

This permit authorizes disposal of Customer's waste materials in accordance with the Industrial Waste & Disposal Services Agreement dated ___*Contract*_____.

EXPIRES: 5/10/07

GENERATOR: SCHNITZER STEEL PRODUCTS, INC.

DESCRIPTION: *AUTO SHREDDER FLUFF*	**VOLUME:** *42000 pounds yr*
☒ **SPECIAL WASTE** ☐ **PCS** ☐ **CLEAN-UP MATERIAL**	
LOCATION: *PORTLAND, OREGON*	**COUNTY:** *Multnomah*
CONTACT: *JIM JAKUBIAK*	**PHONE:** *503-286-6976*
Recertification: ☐ **Yes** ☐ **No**	

BILLING: *SCHNITZER*	**PO#:** *N/A*	**JOB#:** *N/A*

TYPE OF DISPOSAL/ SPECIAL HANDLING/LOAD TYPE:
BULK, MATERIAL MAY BE USED AS ADC. ANALYTICAL SAMPLING MUST BE SUBMITTED BY SCHNITZER ON A FREQUENCY DETERMINED BY DEQ
****

ALL LOADS MUST BE SCHEDULED 24 HOURS IN ADVANCE.
CONTACT GREG AT 541-454-3220 OR JULIE AT 541-454-3310

SALES PERSON: MK TT TyT BR MH KN FD MW

APPROVED: KC ***KRISTIN CASTNER*** DATE: ***05/10/06 2:33:10 PM***

A COPY OF THIS PERMIT MUST BE SHOWN BY EACH DRIVER

WASTE MANAGEMENT

Mat,

Our annual spring cleaning/maintenance is once again needs to be done. TRT has sent me the bid spec drawing I've requested so we can bid the O&M project. I also found the list of all the units we need to clean on a regular basis. What I need done while I'm on vacation is:

- Review Tim's bid specs and finalize as needed
- Identify and submit to qualified contractors (Munitor, MRP, CCS, ?)

PNE or PNE & Munitor

I appreciate your help with this. We need to do this quickly because the systems need cleaning and we need to collect our last round of sw samples for IT for the 2003/2004 permit year.

Because we have several systems to clean, I propose we do the following:

- Have the selected contractors change out and clean the Strom Water Management units at Building B, by Maintenance and by the Mold Loft Building.
- Have the selected contractor skim with a vac truck all the sand filters (except Basin 2) to remove buildup silt and the top 2-6 inches of sand. Have them clean (remove sediment and wash) the oil/water separator and flow control settling manholes. They should also clean the PVC piping to the end of each pipe (scum may build up at outfall pipe that needs to be cleaned)
- Basin 2 Sand filter will need to be cleaned by IT folks likely with the help of CCS
- Have the Plate O/W separators thoroughly cleaned including removing plates and washing them.
- Have the contractor wash and remove sediments from the #13 and #15 cascade systems.
- All catch basins will need to be washed and sediment removed. New filter socks will be placed in each catch basin (we will provide filters)
- The flow control concrete vaults for outfall #1 will all need to be washed and vacuumed.
- The Basin #6 o/w separator (in the bin by the Longshoreman's Trailer) will need to be washed and vacuumed.

This will be our first major all in one cleaning of all the storm water treatment units. I expect the cost to be significant (more than $40,000). It may take up to two weeks to perform. Special care will need to be taken or rain events may require double cleaning. I suspect this task will need to be done twice per year. The contractor should know this will be a long-term twice per year project, forever!

Vacuum Truck Cleaning Needs – IT Schnitzer Steel

LOCATION	LAST CLEANED (DATE)
Cascade System – Outfall #13	April 30, 2004
Cascade System – Outfall #15	May 1, 2004
Plate O/W Separator – Outfall #14	April 30, 2004 Monitor
Wet Well – Outfall #1	April 29, 2004
Plate O/W Separator – Outfall #1	April 29-30, 2004
Vortechnics – Basin #2	April 30, 2004
Sandfilter – Basin #2	NA
Sandfilter – Basin #3	May 3-4, 2004
Sandfilter – Basin #4	April 30, 2004
Sandfilter – Basin #5	April 29, 2004
Sandfilter – Basin #6	April 30, 2004
O/W Separator – Basin 6	May 1
Catch Basins	May 1 - May 5
Stormfilter Unit – Maintenance	May 5, 2004
Stormfilter Units – Building B (3)	
Stormfilter Unit – Mold Loft Building	May 5
Plate O/W Separator – Outfall #16	April 30, 2004 Monitor

Work started on April 29 and continued through May __, 2004. Monitor worked on SATURDAY from 6:00AM until 2:30PM. At one point in the project, 3 vacuum trucks were working.

MUNITOR CONSTRUCTION, L.L.C.
CONSTRUCTION CONTRACT

This Contract is made this 27th day of April 2004 by and between Munitor Construction, L.L.C. (Munitor) and Schnitzer Steel Industries, ("SSI"):

For and in consideration of the mutual convenants contained herein, the parties agree:

ARTICLE I. SERVICES BY MUNITOR CONSTRUCTION, L.L.C.

1.0 Scope of Work

Munitor, at the direction of SSI will provide personnel, equipment, and materials to clean storm drain systems with oil water separator at SSI's facility located at 12005 North Burgard Road in Portland, Oregon as specified in the original bid package.

1.1 Type of Services

As SSI may direct Munitor, will provide the following services (the "Services"):

Cleaning and maintenance of storm drain system units at SSI's facility in Portland, Oregon. The installation will be completed in accordance with TRT Engineering drawings and specifications, dated April 15, 2004.

1.2 Method of Performance

1.2.1 Munitor shall mobilize such personnel, equipment, and materials as described above starting the week of April 26, 2004.

1.2.2 Munitor shall comply in all respects with all applicable federal, state, and local laws and regulations in its performance of the Services.

1.2.3 Munitor will make its personnel and authorized subcontractors available to confer with SSI to review the status of and to review and establish procedures for the efficient delivery of Services hereunder.

1.2.4 Neither Munitor, its authorized subcontractors, nor any of their employees shall supervise, directly or indirectly, any temporary or permanent employee of SSI.

ARTICLE II. COMPENSATION

2.1 Compensation

SSI shall reimburse Munitor for services rendered at a fixed price, not-to-exceed basis, in accordance with Munitor's bid dated April 26, 2004(Attached).

2.2 Invoice

Munitor Construction, L.L.C. shall invoice SSI monthly or upon project completion for Services performed hereunder. SSI shall make payment within thirty (30) days of receiving such invoice. A late fee will be added to accounts 30 days in arrears at the rate of one and one half percent (1.5%) of the amount due for each month of delinquency.

ARTICLE III. MUNITOR CONSTRUCTION, L.L.C. – LIABILITY INSURANCE

Until the Services are completed, Munitor agrees to provide and maintain at its own expense the following insurance coverage:

(a) Workers' Compensation at the statutory limits for the state or states in which the work is to be performed.
(b) Commercial Liability insurance in the amount of $1,000,000 combined single limit for bodily injury and property damage, including product liability, completed operations, contractual liability and, where applicable, coverage for damage caused by blasting, collapse or structural injury, and/or damage to underground utilities.
(c) Automobile Public Liability in the amount of $1,000,000 per occurrence for bodily injury and property damage, including non-owned automobiles. In the event that "Client" desires additional insurance,"Client" will notify Munitor of such request in writing and Munitor will obtain a quote from its insurance carrier regarding the cost of obtaining the requested coverage. The cost of such additional insurance will be borne by SSI. Munitor will not procure this additional coverage without the written approval of SSI.
(d) Munitor shall make SSI an additional insured party to their insurance policy.

ARTICLE IV. PROJECT PERFORMANCE

4.1 Performance of Services

Munitor will perform all Services under this Contract in accordance with generally accepted professional standards that apply in the community where the Services are performed for the type of work involved.

ARTICLE V. MISCELLANEOUS

5.1 Access to Property

SSI has the responsibility of obtaining a right of entry to property where the Services are to be performed. The right of entry shall allow Munitor, its agents, subcontractors, and employees to enter the property from time to time, as necessary to perform all acts, studies, and research pursuant to the agreed services within the scope of work. Munitor does not assume control of or responsibility for the property, the person in charge of the property, nor the safety of persons not in Munitor, employ.

5.2 Unforeseen Conditions or Occurrences

If any unforeseen conditions or occurrences, including, but not limited to, hazardous substances or pollutants, are encountered, which, in Munitor, reasonable judgment, significantly affect or may affect the recommended scope of the Services, then Munitor will notify SSI. After such notification, Munitor will complete the original scope of Services, if appropriate, or agree with SSI to modify the Agreement, or terminate this Agreement with respect to the Services pursuant to Section 6.11 hereof. Changes to the original scope of work that will result in increased compensation for the project must be approved by SSI in writing.

SCHN00243899

ARTICLE VI. GENERAL PROVISIONS

6.1 Indemnification

To the fullest extent permitted by law, each party shall defend, Indemnify and hold harmless the other party, its consultants, and the agents and employees of any of them from and against claims, damages, losses, and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from performance of services hereunder, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the indemnitor, anyone directly or indirectly employed by it, or anyone for whose acts it may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by any other person.

6.2 Permits and Access

Munitor will assist SSI in securing necessary permits required by authorities having jurisdiction over the project area.

6.3 Force Majeure

Delay or failure of Munitor in the performance of services hereunder shall be excused if caused by circumstances beyond the control of Munitor, including, without limitation, acts of God, strikes, fire, flood, windstorm, action or request of governmental authority, and inability to obtain material, equipment, or services, provided that a prompt notice of such delay or failure is given and Munitor diligently attempts to remove the cause.

6.4 Independent Client

Munitor is and shall perform all Services as an independent contractor and as such shall have and maintain exclusive control and direction over all of its employees, agents, and operations.

6.5 Subcontracts

Munitor may not, without SSI consent in writing, delegate the performance of Services hereunder, or any portion thereof. If approved, subcontractors will be required to sign a Munitor, subcontract agreement prior to the start of work.

6.6 Survival

Section 6.1 and all other provisions of this Contract that may reasonably be construed as surviving the term of this Contract shall survive the term of this Contract.

6.7 Applicable Law

Exclusively the laws of the State of Oregon shall govern this Contract. Venue for any dispute hereunder shall be in the federal or state courts sitting in Multnomah county, and each party hereby consents to the jurisdiction of such courts for any dispute hereunder, provided, however, that nothing herein shall preclude Munitor from excising its mechanics' or materialmen's lien rights under the laws of any jurisdiction where the Services are performed.

SCHN00243900

6.8 Severability

If any provision of this Contract if found to be illegal, invalid, or unenforceable for any reason, such findings shall not affect the other provisions hereof.

6.9 Taxes

SSI shall pay all state and local sales, use, or excise taxes of any kind assessed and/or arising out of the sale or use of the Services and shall, upon demand, reimburse Munitor for any sums it has expended for such taxes. It is assumed all taxes have been included in Munitor's attached cost proposal.

6.10 Term and Termination

The term of this Contract shall expire upon written notice by either party; provided, however, that neither party shall have the right to terminate this Contract except pursuant to the following provisions of this Section 6.11

(a) Either party may, for its sole convenience, terminate the performance of the Services in whole or in part at any time, or from time to time, by giving thirty (30) days written notice of intent to terminate.

(b) SSI will pay Munitor all time and materials costs (and any fee) which have accrued as of the effective date of termination and, in addition, those time and materials costs incurred or earned in good faith by Munitor after the effective date of termination in connection with (1) demobilization of equipment and personnel and (2) any necessary subcontract and/or vendor settlements.

(c) The rights and remedies of the parties provided in the section 6.10 are in addition to any other rights and remedies provided by law or under this Contract.

6.11 Entire Agreement

This Contract contains the entire and only agreement between SSI and Munitor respecting the subject matter hereof. It supersedes all prior or conflicting agreement, representation, promises, or conditions. Any modification of this Contract must be in writing and signed by both parties and must expressly indicate intent to modify this contract.

James L. Jakubiak	Harley Meservey
Name of Authorized Representative Of SSI(Printed)	Name of Munitor Rep.(Printed)
James L. Jakubiak	Harley Meservey
Authorized Signature	Authorized Signature
Title Environmental Administrator	Title President
Date April 29, 2004	Date Apr. 29, 2004
Schnitzer Steel Industries, Inc. 12005 North Burgard Road Portland, Oregon 97203 (503) 224-9900	Munitor Construction, L.L.C. 206 N Tomahawk Island Drive Portland, OR 97217 (503) 702-6542

Munitor Construction, LLC
Portland, Oregon
CCB 148811

April 26, 2004

To: Mr. Jim Jakubiak
Schnitzer Steel, Inc.
Portland, Oregon

From: Mr. Harley Meservey
Munitor Construction, LLC
Portland, Oregon

Re. Storm Water System Maintenance
Schnitzer Steel
Portland, Oregon
Project #401

Mr. Jim Jakubiak:

Munitor Construction, LLC (Munitor) is pleased to present this cost estimate for Storm Water System Maintenance as described in the bid package dated April 15, 2004. Below is a scope of work, cost estimate, and assumptions:

Scope of Work
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems
  - Outfall #3 Sandfilter
  - Outfall #4 Sandfilter
  - Outfall #5 Sandfilter
  - Outfall #6 Sandfilter
  - Oil/Water Seperators at outfall #1, #14, #16
  - Oil/Water Seperator at former outfall #7
  - Oil/Water Seperator at outfall #13 and #15
  - Site catch basins (approximately 175)
  - Clean Stormwater Management units and replace filters.

Cost Estimate
Munitor Construction is providing the following bid for the project.
Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$4175.00	$4175.00
Clean Sandfilter #4	1	LS	$4175.00	$4175.00
Clean Sandfilter #5	1	LS	$5300.00	$5300.00
Clean Sandfilter #6	1	LS	$4830.00	$4830.00
Oil/Water Seperators at outfall #1, #14, #16	1	LS	$5665.00	$5665.00
Oil/Water Seperator at former outfall #7	1	LS	$1420.00	$1420.00
Oil/Water Seperator at outfall #13 and #15	1	LS	$3770.00	$3770.00
Site catch basins (approximately 175)	1	LS	$2915.00	$2915.00
Clean Stormwater Management units & replace filters	1	LS	$882.00	$882.00
			Total	$33132.00

Assumptions

The following assumptions have been made in the development of this bid. ** Taxes included in bid price.

- Work will not be performed during rain events
- Schnitzer to provide site map with all catch basin locations
- All liquids removed will be dumped onsite and water treatment system

Munitor Construction, LLC
Portland, Oregon
CCB #188811

Munitor would like to thank you for the opportunity to provide services to you. If you have any questions or would like to schedule work please contact me anytime at (503) 702-6542. We look forward to providing professional services to you and any future needs.

Regards,

Harley Meservey
President

CCS

Cowlitz Clean Sweep

ALL ABOUT *Solutions*

N. Oregon Operations
9420 NW St. Helens Rd.
Portland, OR 97231
Phone (503) 247.9466
Fax (503) 247.1002

A division of PNE

- Industrial Cleaning Services
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FAX

To:	Jim Jakubiak	From:	Scott Gilfillan
Fax:	503-286-6960	Pages:	2
Phone:	286-6976	Date:	4/26/04
Re:		CC:	

☐ | Urgent ☐ | For Review ☐ | Please Comment ☐ | Please Reply ☐ | Please Recycle

Comments:

Jim -
I'm really guessing on time to do sand-filter units. I'll work with you anyway we can if we're the successful bidder.
Thank-you!
Scott

Please call immediately if all pages were not received. This fax may contain confidential information. Only the person whose name appears above should receive this information.

COWLITZ CLEAN SWEEP
DIVISION OF PNE CORP.

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Fax (360) 423-3409
Toll Free 1-888-423-6316

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Astoria, OR 97103
Phone (503) 338-0173
Fax (503) 338-4410

OREGON OPERATIONS
9420 NW St. Helens Rd.
Portland, OR 97231
Phone (503) 247-9466
Fax (503) 247-1002

April 26, 2004

Mr. Jim Jakubiak
Schnitzer Steel Products
12005 N. Burgard Road
Portland, Oregon 97296

Subject: Sand Filter, Catch Basin and Separator Cleaning

Dear Mr. Jakubiak:

Cowlitz Clean Sweep is pleased to provide the following proposal to clean the Sandfilters, catch basins and Oil/Water Separators at your N. Portland facility, as outlined in the request for proposal dated April 15, 2004.

Clean outfall #3 Sandfilter: $ 3600.00
Clean outfall #4 Sandfilter: $ 3900.00
Clean outfall #5 Sandfilter: $ 7500.00
Clean outfall #6 Sandfilter: $ 4900.00
Clean oil/water separators: $ 1200.00 per separator
Clean site catch basins: $ 60.00 each x 175 = 10,500
Pull and replace filter units (filters provided by SSP): $ 500.00 each 6 x 500 = $3000
Transportation and Disposal of solids as non-hazardous, to Hillsboro Landfill: $ 40.00 per ton

CCS appreciates the opportunity to submit this proposal to SSP. If you should have any questions, please do not hesitate to contact me at (503)247-9466.

Respectfully,

Scott Gilfillan
Division Manager
CCS-Portland

DIVISION OF:

Munitor Construction, LLC
Portland, Oregon
CCB 148811

April 26, 2005

To: Mr. Jim Jakubiak
Schnitzer Steel, Inc.
Portland, Oregon

From: Mr. Harley Meservey
Munitor Construction, LLC
Portland, Oregon

Re. Storm Water System Maintenance
Schnitzer Steel
Portland, Oregon
Project #463

Mr. Jim Jakubiak:

Munitor Construction, LLC (Munitor) is pleased to present this cost estimate for Storm Water System Maintenance. Below is a scope of work, cost estimate, and assumptions.

Scope of Work- Outfall 3 Sand Removal
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems-remove and replace sand
  - Outfall #3 Sandfilter

Cost Estimate
Munitor Construction is providing the following bid for the project.
Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$2850.00	$2850.00
			Total	$2850.00

Assumptions

The following assumptions have been made in the development of this bid.

- Work will not be performed during rain events.
- All liquids removed will be dumped onsite and water treatment system and sand disposal with auto fluff.

Munitor would like to thank you for the opportunity to provide services to you. If you have any questions or would like to schedule work please contact me anytime at (503) 702-6542. We look forward to providing professional services to you and any future needs.

Regards,

Harley Meservey

Harley Meservey
President

Munitor Construction, LLC
Portland, Oregon
CCB 14881

April 27, 2005

To: Mr. Jim Jakubiak
Schnitzer Steel, Inc.
Portland, Oregon

From: Mr. Harley Meservey
Munitor Construction, LLC
Portland, Oregon

Re. Storm Water System Maintenance
Schnitzer Steel
Portland, Oregon
Project #463

Mr. Jim Jakubiak:

Munitor Construction, LLC (Munitor) is pleased to present this cost estimate for Storm Water System Maintenance. Below is a scope of work, cost estimate, and assumptions.

Scope of Work-Phase I Surface Cleaning of Sand
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems May of 2005
  - Outfall #4 Sandfilter
  - Outfall #5 Sandfilter
  - Outfall #6 Sandfilter
  - Oil/Water Seperators at outfall #1, #14, #16
  - Oil/Water Seperator at former outfall #7
  - Oil/Water Seperator at outfall #13 and #15
  - Site catch basins (approximately 175)
  - Clean Stormwater Management units and replace filters.

Cost Estimate
Munitor Construction is providing the following bid for the project.
Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #4	1	LS	$4175.00	$4175.00
Clean Sandfilter #5	1	LS	$5300.00	$5300.00
Clean Sandfilter #6	1	LS	$4830.00	$4830.00
Oil/Water Seperators at outfall #1, #14, #16	1	LS	$5665.00	$5665.00
Oil/Water Seperator at former outfall #7	1	LS	$1420.00	$1420.00
Oil/Water Seperator at outfall #13 and #15	1	LS	$3770.00	$3770.00
Site catch basins (approximately 175)	1	LS	$2915.00	$2915.00
Clean Stormwater Management units & replace filters	1	LS	$882.00	$882.00
			Total	**$28957.00**

A Scope of Work-Phase II Cleaning with complete sand removal/replacement
Munitor understands that Schnitzer Steel is requesting the following work be performed at subject site:

- Clean the following systems-remove and replace sand, September 2005
  - Outfall #3 Sandfilter
  - Outfall #4 Sandfilter
  - Outfall #5 Sandfilter
  - Outfall #6 Sandfilter
  - Oil/Water Seperators at outfall #1, #14, #16
  - Oil/Water Seperator at former outfall #7
  - Oil/Water Seperator at outfall #13 and #15

Munitor Construction, LLC
Portland, Oregon
CCB 148811

- Site catch basins (approximately 175)
- Clean Stormwater Management units and replace filters.
- Includes Jet rodding lines to outfall from sand filters
- Replace filter fabric and piping in sand filters
- Sand replacement and removal

Cost Estimate-Phase II
Munitor Construction is providing the following bid for the project.
Estimate

Item	Qty	Unit	Rate	Total
Clean Sandfilter #3	1	LS	$7440.00	$7440.00
Clean Sandfilter #4	1	LS	$9290.00	$9290.00
Clean Sandfilter #5	1	LS	$17110.00	$17110.00
Clean Sandfilter #6	1	LS	$8215.00	$8215.00
Oil/Water Seperators at outfall #1, #14, #16	1	LS	$5665.00	$5665.00
Oil/Water Seperator at former outfall #7	1	LS	$1420.00	$1420.00
Oil/Water Seperator at outfall #13 and #15	1	LS	$3770.00	$3770.00
Site catch basins (approximately 175)	1	LS	$2915.00	$2915.00
Clean Stormwater Management units & replace filters	1	LS	$882.00	$882.00
			Total	$56707.00

Assumptions

The following assumptions have been made in the development of this bid.

- Work will not be performed during rain events.
- All liquids removed will be dumped onsite at water treatment system and sand disposal with auto fluff.

Munitor would like to thank you for the opportunity to provide services to you. If you have any questions or would like to schedule work please contact me anytime at (503) 702-6542. We look forward to providing professional services to you and any future needs.

Regards,

Harley Meservey

Harley Meservey
President

Munitor Construction, LLC

PO Box 55575
Portland, Oregon 97238
Phone (503) 335-0260
Fax (503) 335-0259

Send to: Jim Jakubiak	**From: Harley**
Attention:	**Date:**
Office Location:	**Office Location:**
Fax Number: 286-6910	**Phone Number:**

- ❑ Urgent
- ❑ Reply ASAP
- ❑ Please comment
- ❑ Please Review
- ❑ For your Information

Total pages, including cover:

Comments:

MUNITOR CONSTRUCTION, L.L.C.
CONSTRUCTION CONTRACT

This Contract is made this 26th day of April 2005 by and between Munitor Construction, L.L.C. (Munitor) and Schnitzer Steel Industries, ("SSI"):

For and in consideration of the mutual convenants contained herein, the parties agree:

ARTICLE I. SERVICES BY MUNITOR CONSTRUCTION, L.L.C.

1.0 Scope of Work

Munitor, at the direction of SSI will provide personnel, equipment, and materials for the cleaning of storm system as provided in quote attached at SSI's facility located at 12005 North Burgard Road in Portland, Oregon

1.1 Type of Services

As SSI may direct Munitor, will provide the following services (the "Services"):

Munitor to provide vacuum trucks, laborer, other equipment and materials to perform cleaning of sand filter 3 at SSI's facility in Portland, Oregon.

1.2 Method of Performance

1.2.1 Munitor shall mobilize such personnel, equipment, and materials as described above starting the week of April 26, 2005 weather pending.

1.2.2 Munitor shall comply in all respects with all applicable federal, state, and local laws and regulations in its performance of the Services.

1.2.3 Munitor will make its personnel and authorized subcontractors available to confer with SSI to review the status of and to review and establish procedures for the efficient delivery of Services hereunder.

1.2.4 Neither Munitor, its authorized subcontractors, nor any of their employees shall supervise, directly or indirectly, any temporary or permanent employee of SSI.

ARTICLE II. COMPENSATION

2.1 Compensation

SSI shall reimburse Munitor for services rendered at a fixed price, not-to-exceed basis, in accordance with Munitor's bid dated April 26, 2005(Attached).

2.2 Invoice

Munitor Construction, L.L.C. shall invoice SSI monthly or upon project completion for Services performed hereunder. SSI shall make payment within thirty (30) days of receiving such invoice. A late fee will be added to accounts 30 days in arrears at the rate of one and one half percent (1.5%) of the amount due for each month of delinquency.

ARTICLE III. MUNITOR CONSTRUCTION, L.L.C. – LIABILITY INSURANCE

Until the Services are completed, Munitor agrees to provide and maintain at its own expense the following insurance coverage:

(a) Workers' Compensation at the statutory limits for the state or states in which the work is to be performed.
(b) Commercial Liability insurance in the amount of $2,000,000 combined single limit for bodily injury and property damage, including product liability, completed operations, contractual liability and, where applicable, coverage for damage caused by blasting, collapse or structural injury, and/or damage to underground utilities.
(c) Automobile Public Liability in the amount of $1,000,000 per occurrence for bodily injury and property damage, including non-owned automobiles. In the event that "Client" desires additional insurance,"Client" will notify Munitor of such request in writing and Munitor will obtain a quote from its insurance carrier regarding the cost of obtaining the requested coverage. The cost of such additional insurance will be borne by SSI. Munitor will not procure this additional coverage without the written approval of SSI.
(d) Munitor shall make SSI an additional insured party to their insurance policy.

ARTICLE IV. PROJECT PERFORMANCE

4.1 Performance of Services

Munitor will perform all Services under this Contract in accordance with generally accepted professional standards that apply in the community where the Services are performed for the type of work involved.

ARTICLE V. MISCELLANEOUS

5.1 Access to Property

SSI has the responsibility of obtaining a right of entry to property where the Services are to be performed. The right of entry shall allow Munitor, its agents, subcontractors, and employees to enter the property from time to time, as necessary to perform all acts, studies, and research pursuant to the agreed services within the scope of work. Munitor does not assume control of or responsibility for the property, the person in charge of the property, nor the safety of persons not in Munitor, employ.

5.2 Unforeseen Conditions or Occurrences

If any unforeseen conditions or occurrences, including, but not limited to, hazardous substances or pollutants, are encountered, which, in Munitor, reasonable judgment, significantly affect or may affect the recommended scope of the Services, then Munitor will notify SSI. After such notification, Munitor will complete the original scope of Services, if appropriate, or agree with SSI to modify the Agreement, or terminate this Agreement with respect to the Services pursuant to Section 6.11 hereof. Changes to the original scope of work that will result in increased compensation for the project must be approved by SSI in writing.

ARTICLE VI. GENERAL PROVISIONS

6.1 Indemnification

To the fullest extent permitted by law, each party shall defend, Indemnify and hold harmless the other party, its consultants, and the agents and employees of any of them from and against claims, damages, losses, and expenses, including, but not limited to, attorneys' fees, arising out of or resulting from performance of services hereunder, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property, including loss of use resulting therefrom, but only to the extent caused in whole or in part by negligent acts or omissions of the indemnitor, anyone directly or indirectly employed by it, or anyone for whose acts it may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by any other person.

6.2 Permits and Access

Munitor will assist SSI in securing necessary permits required by authorities having jurisdiction over the project area.

6.3 Force Majeure

Delay or failure of Munitor in the performance of services hereunder shall be excused if caused by circumstances beyond the control of Munitor, including, without limitation, acts of God, strikes, fire, flood, windstorm, action or request of governmental authority, and inability to obtain material, equipment, or services, provided that a prompt notice of such delay or failure is given and Munitor diligently attempts to remove the cause.

6.4 Independent Client

Munitor is and shall perform all Services as an independent contractor and as such shall have and maintain exclusive control and direction over all of its employees, agents, and operations.

6.5 Subcontracts

Munitor may not, without SSI consent in writing, delegate the performance of Services hereunder, or any portion thereof. If approved, subcontractors will be required to sign a Munitor, subcontract agreement prior to the start of work.

6.6 Survival

Section 6.1 and all other provisions of this Contract that may reasonably be construed as surviving the term of this Contract shall survive the term of this Contract.

6.7 Applicable Law

Exclusively the laws of the State of Oregon shall govern this Contract. Venue for any dispute hereunder shall be in the federal or state courts sitting in Multnomah county, and each party hereby consents to the jurisdiction of such courts for any dispute hereunder, provided, however, that nothing herein shall preclude Munitor from excising its mechanics' or materialmen's lien rights under the laws of any jurisdiction where the Services are performed.

6.8 Severability

If any provision of this Contract if found to be illegal, invalid, or unenforceable for any reason, such findings shall not affect the other provisions hereof.

6.9 Taxes

SSI shall pay all state and local sales, use, or excise taxes of any kind assessed and/or arising out of the sale or use of the Services and shall, upon demand, reimburse Munitor for any sums it has expended for such taxes. It is assumed all taxes have been included in Munitor's attached cost proposal.

6.10 Term and Termination

The term of this Contract shall expire upon written notice by either party; provided, however, that neither party shall have the right to terminate this Contract except pursuant to the following provisions of this Section 6.11

(a) Either party may, for its sole convenience, terminate the performance of the Services in whole or in part at any time, or from time to time, by giving thirty (30) days written notice of intent to terminate.
(b) SSI will pay Munitor all time and materials costs (and any fee) which have accrued as of the effective date of termination and, in addition, those time and materials costs incurred or earned in good faith by Munitor after the effective date of termination in connection with (1) demobilization of equipment and personnel and (2) any necessary subcontract and/or vendor settlements.
(c) The rights and remedies of the parties provided in the section 6.10 are in addition to any other rights and remedies provided by law or under this Contract.

6.11 Entire Agreement

This Contract contains the entire and only agreement between SSI and Munitor respecting the subject matter hereof. It supersedes all prior or conflicting agreement, representation, promises, or conditions. Any modification of this Contract must be in writing and signed by both parties and must expressly indicate intent to modify this contract.

Name of Authorized Representative Of SSI(Printed)	Name of Munitor Rep.(Printed)
Authorized Signature	Authorized Signature
Title	Title
Date	Date
Schnitzer Steel Industries, Inc. 12005 North Burgard Road Portland, Oregon 97203 (503) 224-9900	Munitor Construction, L.L.C. 206 N Tomahawk Island Drive Portland, OR 97217 (503) 702-6542

Oregon

DEPARTMENT OF ENVIRONMENTAL QUALITY

EASTERN REGION
Bend Office

September 18, 1995

Samir M. Jiries
Facility Environmental Manager
Columbia Ridge Landfill & Recycling Center
18177 Cedar Springs Lane
Arlington, OR 97812

Re: Columbia Ridge Landfill & Recycling Center
Gilliam County
SW Permit No. 391

Dear Mr. Jiries:

The Department has completed its evaluation of your letter requesting long term authorization to use automobile shredder residue (residue) as Alternative Daily Cover (ADC) at the Columbia Ridge Landfill and Recycling Center (CRLRC). Your other request for authorization to use residue as a foundation layer under the intermediate soil cover layer and to delay placement of the intermediate soil layer for a period of up to two weeks has also been reviewed and evaluated. Our detailed comments pertaining to these requests are contained in the attached Review Reports.

Waste Management Disposal Services of Oregon, Inc. is therefore authorized to continue use of residue as ADC subject to the following conditions:

1. The permittee is authorized to use only residue from the Schnitzer Steel Industries, Inc. wet shredding facility located in North Portland, as ADC at the CRLRC.

2. The permittee is authorized to use residue as ADC on the sloped working face of the active disposal area at the CRLRC. Residue material may also be used to construct a foundation layer for the intermediate soil cover, however, the residue foundation layer must be covered with six inches (6") (minimum thickness) of compacted soil within forty-eight (48) hours of the time when the residue foundation layer material is placed.

3. At least once during each and every three week period, the permittee must install a fire barrier in the active waste lift. This requirement does not apply to the initial thin lift of uncompacted solid waste placed directly above the protective soil layer on the floor of the disposal Modules. The fire barriers must be at least six inches (6") thick and may be constructed from compacted soil, properly processed petroleum contaminated soil, or a similar non-combustible mineral material. (Residue is not an acceptable material to construct the fire barrier.)

4. Prior to December 31, 1995, the permittee must submit an amendment to the Facility Operational Plan. The amendment must address control of accidental fires which involve combustion of residue ADC and stockpiles of residue.

2146 NE 4th Street
Suite 104
Bend, OR 97701
(503) 388-6146
DEQ/CR-101

5. As required by Condition 34 of Schedule D of Solid Waste Disposal Permit No. 391, the permittee must immediately notify the Department's Eastern Region Office in Pendleton at 276-4063 of any fire which involves combustion of residue ADC or stockpiled residue. The permittee must submit a written report to the Department within seven calendar days of the fire. The report must describe the procedures used to extinguish the fire and to properly dispose of the combustion residue. The report must also describe any operational procedure revisions (such as construction of additional fire barriers in the waste lifts or increasing the thickness of the fire barrier layer) which will be implemented to reduce the possibility of future fires. In the event of a fire involving combustion of significant quantities of residue, the permittee must suspend use of residue until such time as the Department approves the revised fire control procedures. The permittee is not required to suspend use of residue as ADC in the event of a quickly-extinguished surface fire involving combustion of incidental quantities of residue.

6. The permittee must continue to analyze the residue according to Schnitzer Steel's sampling and analysis plan dated May, 1995 and EPA's guidance document. Results must be submitted to the Department for review on a semi-annual basis for the previous 2 year sampling period.

7. The Department may revoke this authorization if, in the Department's opinion, continued use or residue as ADC would present unacceptable environmental risks.

8. Additional information obtained by the permittee or by the Department describing residue use as ADC at other municipal solid waste landfills should be shared as soon as it becomes available.

If the Department develops a formal policy on ADC or the Commission adopts rules that address ADC, please be advised that if any adjustments are made to the criteria we currently use to make our ADC determinations, such adjustments will also apply to this determination.

If you have any questions regarding this approval or if we may be of further assistance, please contact Tim Davison at (503) 278-4611.

Sincerely,

Henry T Preston

for Stephanie Hallock
Administrator
Eastern Region, DEQ

Enc: Memo - Schnitzer's Auto Shredder Fluff as Alternative Daily Cover at OWS
Review Report - Special Waste Analysis of Auto Shredder Residue
Review Report - Evaluation of Automobile Shredder Residue Suitability for Use as Alternative Daily Cover

cc: Stephen H. Seed, General Manager, CRLRC
E. Pat Vernon, Manager SW Policy & Programs, WM&CD, DEQ
Bob Danko, Senior Policy Analyst, WM&CD, DEQ
Gerry Preston, Manager Solid Waste & Tanks, ER, DEQ
Ken Lucas, SW Section, The Dalles Office, ER, DEQ
Tim Davison, SW Section, Pendleton Office, ER, DEQ
Mary Wahl, DEQ Administrator

ATTACHMENT I

State of Oregon
Department of Environmental Quality — Memorandum

Date: August 14, 1995

To: Stephanie Hallock, Administrator, Eastern Region, DEQ, through:
Gerry Preston, Manager Solid Waste & Tanks, Eastern Region, DEQ

From: Ken Lucas, Solid Waste, The Dalles, DEQ

Subject: Special Waste Analysis of Auto Shredder Residue

INFORMATION:

The analysis of the special waste, auto shredder residue (fluff), is a more detailed process than the day-to-day special waste analysis performed on waste such as petroleum contaminated soil. The major criteria investigated was whether or not the fluff is a hazardous waste. There have been rulings from other states and opinions from within the DEQ that raise the question of hazardous waste or not. Also, the difficulty in obtaining a representative sample in the field added to the need for a detailed investigation.

BACKGROUND:

The initial information gathered included:

- Submittal from CRLRC dated 6/13/95 which included:
  - Cover letter from Schnitzer Steel dated 6/6/95;
  - Sample analytical results;
  - Schnitzer hazardous material information letter sent to customers;
  - Schnitzer's Sampling and Analysis Plan dated 5/95; and
  - EPA's Guidance Document on sampling of fluff.
- Package of information from State of California on using fluff as ADC.

The information gathered above was sufficient to determine if Schnitzer's claim that the fluff is non-hazardous was correct. In addition, the information gathered was submitted for review to the DEQ's Northwest Region hazardous waste program and the DEQ's Eastern Region hazardous waste program. The additional reviews were conducted as part of the responsibility of the generating region (NWR) and the final disposal region (ER) to determine if the waste is a hazardous waste or a solid waste.

The DEQ's concerted effort (Jeff Ingalls and Susan Yarbrough) included correspondence with Schnitzer's Daniel Lee, EPA hazardous waste program's Bruce Long, and the EPA TOSCA program's Dan Heister and Bill Hedgebeth. The investigation from all sides was showing that the fluff is not a hazardous waste and it is not a TOSCA (PCBs) waste.

CONCLUSIONS:

Schnitzer Steel is using the proper sampling techniques per Schnitzer's Sampling and Analysis Plan and the EPA's Guidance Document on sampling fluff.

The analytical results of the fluff from Schnitzer Steel show that the fluff has levels of contamination (namely: lead, cadmium, and PCB). Upon evaluation using EPA prescribed statistics, the levels are below the regulatory limits. The fluff is non hazardous and non TOSCA regulated. The fluff can be received by a Subtitle D solid waste landfill.

RECOMMENDATIONS:

The analytical results show that the fluff is below regulatory levels, now. Schnitzer should continue the composite sampling according to Schnitzer's Sampling & Analysis Plan and EPA's Guidance Document. Results will be submitted to the DEQ for review on a semi-annual basis for the previous 2 year sampling period.

State of Oregon
Department of Environmental Quality — Memorandum

Date: August 23, 1995

To: Stephanie Hallock, ER Administrator

From: Gerry Preston, ER Manager Solid Waste & Tanks GP

Subject: Schnitzer's Auto Shredder Fluff as Alternative Daily Cover at OWS

Stephanie, as you are aware, the Department has been in the process of reviewing the issue of Auto Shredder Residue (residue) being used as alternative daily cover (ADC) at OWS. The Department has now completed its review.

We recommend that the Department issue long-term authorization to use the Schnitzer residue as ADC at OWS. As with all such long-term ADC recommendations, the authorization must be preceded by a trial period (This has been done in this case). Also, as with every other long-term ADC approval recommendation, the authorization would be subject to several conditions, including the ability to revoke the authorization. The chief concerns with this particular ADC proposal are whether the material is a hazardous waste or not and the ability of the residue to perform as ADC.

The Department's comments concerning the hazardous waste characterization is shown in Attachment #1 which is generally DEQ's typical Special Waste analysis/process. The Department's comments on the ability of the residue to conform to performance specifications is shown in Attachment #2 which is generally DEQ's typical ADC analysis/process.

I am available to discuss this at your convenience Stephanie.

==========

The remainder of this memo depicts the background by listing the various meetings and submittals since the fall of 1993 until today.

==========

9/16/93 Oregon Waste Systems, Inc. (OWS) submitted a letter to the Department requesting long term authorization to use geosynthetic tarps and petroleum contaminated soil (PCS) as Alternative Daily Cover (ADC) at the Columbia Ridge Landfill and Recycling Center (CRLRC). OWS also requested authorization to conduct a test program to use automobile shredder residue (residue) as ADC. Department staff met with OWS officials on September 22, 1993 to discuss these requests. The automobile shredder residue caused concern to DEQ that we voiced to OWS during this meeting. In particular we were concerned with hazardous waste constituents and how well the material would control blowing litter and work as a fire break.

10/8/93 Given the above concerns, authorization was granted for a trial period with the conditions that OWS provide information to the Department pertaining to the use of residue as ADC at other disposal facilities. This information was to be included as part of an interim summary report, due March 1, 1994, discussing the permittee's initial experience using residue as ADC. The October 8, 1993 authorization allowed OWS to use residue as ADC on the sloping working face of the active disposal area until July 1, 1994. In addition to the interim report due in March, the October 8, 1993 letter also required submission of a final residue ADC summary report prior to July 1, 1994.

3/1/94 Residue deliveries were delayed, and only three loads of residue were delivered to CRLRC by March 1, 1994. OWS officials discussed this delay with Department staff and requested deletion of the requirement for a summary report by March 1, 1994.

4/18/94 The Department received a letter requesting authorization to use residue to construct a foundation layer for the interim soil cover on the top surface of the waste lift. OWS also requested approval to delay placement of the interim soil cover over the residue foundation layer for up to two weeks, and to reduce the thickness of the interim soil cover layer.

5/17/94 As part of "responsiveness" in meeting all the different issues that OWS needed DEQ approval on, OWS responded with a May, 1994 outline of all the issues that were on their plate. The issues included such things as the alternative base liner design approval. The automobile shredder residue issue was considered important by both DEQ and OWS but lower in priority than several other issues.

9/14/94 The Department received a letter from OWS which summarized the results of the residue evaluation program. In this September, 1994 letter, OWS concluded, based on observations during the five months of experience since more regular deliveries began in May, 1994, that the residue satisfies the performance criteria for ADC listed in Section 258.21(b) of 40 CFR Parts 257 and 258 Solid Waste Disposal Facility Criteria; Final Rule. The letter requested Department authorization for long term use of residue as ADC at the CRLRC. This letter also requested authorization to use residue to construct a foundation layer for the intermediate soil cover, in accordance with the procedures described in OWS' April, 1994 letter.

Note: Neither the April, 1994 letter, nor the September, 1994 letter included any information pertaining to residue use as ADC at other facilities, as was requested by the Department in the September, 1993 meeting and in the Department's October, 1993 letter authorizing trial use of residue as ADC. As such, Department staff began a literature search. In the meantime, DEQ contacted OWS to make them aware that we were awaiting more information from our search. Several reports pertaining to use of residue as ADC at other disposal facilities were then sent to DEQ prior to the meeting discussed directly below.

5/19/95 Department staff then met with representatives from Schnitzer Steel Industries, Inc. and OWS to review reports obtained during the Department's literature search related to residue ADC use at other landfills and the Department's draft response to the September 14, 1994 OWS letter requesting long term use of residue as ADC.

6/13/95 The Department received a letter from OWS transmitting information submitted by Schnitzer Steel related to residue sampling protocols and results of analytical tests of residue from the Schnitzer Portland shredding facility.

(e:\wp51\GPAUTO2)

ATTACHMENT II

State of Oregon
Department of Environmental Quality

Memorandum

Date: August 22, 1995

REVIEW REPORT

To: Gerry Preston, Manager Solid Waste & Tanks, Eastern Region, DEQ

From: Tim Davison, SW Section, Pendleton Office, Eastern Region, DEQ

Subject: Columbia Ridge Landfill and Recycling Center
Gilliam County
SW Permit No. 391

Re: Evaluation of Automobile Shredder Residue Suitability for Use as Alternative Daily Cover

INTRODUCTION:

The purpose of this report is to determine whether use of automobile shredder residue (residue) from the Schnitzer Steel Industries, Inc. (SSII) facility in Portland satisfies the Alternative Daily Cover (ADC) criteria specified in the U.S. Environmental Protection Agency (EPA) rules for municipal solid waste landfills and should be approved for long term use at the Columbia Ridge Landfill & Recycling Center (CRLRC).

BACKGROUND:

See August 23, 1995 memo from Gerry Preston to Stephanie Hallock.

EVALUATION OF PROPOSAL:

The U.S. Environmental Protection Agency (EPA) rules for municipal solid waste (MSW) landfills published in 40 CFR Parts 257 and 258 Solid Waste Disposal Facility Criteria; Final Rule address daily cover requirements. Section 258.21 (b) allows approval of alternative materials as daily cover, provided that the alternative material control:

- Disease vectors,
- Fires,
- Odors,
- Blowing litter, and
- Scavenging

without presenting a threat to human health and the environment. Department staff conducted a literature search during the trial use period and obtained a number of reports pertaining to use of residue as ADC at other disposal facilities. Results contained in several of these reports raised Department concerns regarding air contaminant emissions released during combustion of residue.

Results presented in one report, EPA-600/R-93-044 "CHARACTERIZATION OF EMISSIONS FROM THE SIMULATED OPEN-BURNING OF NON-METALLIC AUTOMOBILE SHREDDER RESIDUE", dated March 1993, suggest that fires are of special concern when considering use of residue as ADC. This study was designed to qualitatively and quantitatively characterize organic and inorganic emissions from combustion of residue material under uncontrolled conditions, such as might occur if

a residue stockpile or residue ADC on a landfill working face caught fire. The results reported in this document indicate that substantial quantities (up to 200 grams of volatile and semi-volatile organic compounds and metals per kilogram of residue burned) of air pollutants may be emitted when residue material is open burned. Organic compounds detected in emissions during these tests included alkanes, alkenes, cycloalkanes, alkyl substituted aromatics, aldehydes, ketones, alcohols, nitriles, chlorinated aromatics and polycyclic aromatic hydrocarbons. One example of volatile organic compounds, benzene, was emitted at a rate of approximately ten grams of benzene per kilogram of residue consumed during combustion. The types of volatile organic compounds identified during the tests are consistent with compounds identified during thermal decomposition studies of individual plastics. Metal aerosols emissions were also investigated during this study. Appreciable quantities of lead, cadmium, copper and zinc were also measured in the emissions during these test burns.

The maximum burn rate occurred within twenty minutes of ignition. (The burn rate is determined by relating the mass of residue combusted to the length of time the mass was burned.) Slightly under half of the residue mass was consumed within three hours of ignition. These results suggest that residue is readily combustible. The results obtained during this test program were compared to emissions measured during a residue stockpile fire at Montvale, Virginia. Emissions data from the test program were similar to measurement taken during the stockpile fire.

Reports pertaining to use of residue as ADC were also obtained from the Integrated Waste Management Board in California. Several of these reports discussed emissions from burning residue. These studies support the Department's decision to pursue a conservative approach in authorizing use of this material as ADC. The requirements incorporated in California authorizations to use residue as ADC are similar that those proposed by the Department, including construction of fire barriers in landfills using residue ADC. IWMB officials emphasized that residue from automobile shredder facilities must be treated prior to being disposed of or used as ADC at MSW landfills in California. One of the reports presented the results of combustion tests at the Schnitzer Steel Plant in Oakland designed to demonstrate the non-combustibility of treated residue. The test results indicate that treated residue will not support combustion.

Department staff provided copies of these reports to OWS and expressed concerns that the residue material might not satisfy the requirement that ADC must control fires. During a meeting of representatives from OWS, SSII and DEQ on May 19, 1995, the SSII representatives explained that the SSII Portland shredder facility differs from the facilities referenced in the EPA report and in several other reports reviewed by the Department. The Portland shredder facility uses a wet shredding process, rather than the dry shredding process used at the facilities described in the reports. OWS and SSII officials explained that residue arriving at the landfill contains moisture added during the shredding process and added that the moisture reduces the potential for fires to occur in stockpiled residue. OWS officials stated that the risk of fires occurring in the residue ADC is minimal because daily cover placed at each operating day is covered by additional waste the next day. The CRLRC General Manager added that the landfill had not had any fires involving residue material during the trial use period. Based on this information, inclusion of a requirement to treat the residue to render it incapable of sustaining combustion prior to disposal or for use as ADC does not appear warranted at this time. It does, however, appear reasonable to include other conditions designed to minimize the potential for fires in the long term authorization for use of residue as ADC at the CRLRC.

CONCLUSIONS:

Based on observations by both OWS and Department staff during the trial use period, residue ADC appears to adequately control four of the five parameters (disease vectors, odors, windblown litter and scavenging) listed in Section 258.21(b) of 40 CFR Parts 257 and 258. The fifth parameter (fires) is still of concern to the Department. Although the residue contains some moisture when it is delivered to the landfill, the arid climate at the landfill may result in a decrease in residue moisture content if the residue is not covered. This potential drying effect indicates that the residue should not be left uncovered for extended periods. The absence of fires involving combustion of residue during the trial period does not, of itself, guarantee that fires will not occur in the future. Authorization for long term residue use as ADC should therefore include conditions designed to reduce the possibility of fires.

RECOMMENDATIONS:

The Department should authorize long term use of residue as ADC at the CRLRC, subject to the following conditions:

1. The permittee is authorized to use only residue from the Schnitzer Steel Industries, Inc. wet shredding facility located in North Portland, as ADC at the CRLRC.

2. The permittee is authorized to use residue as ADC on the sloped working face of the active disposal area at the CRLRC. Residue material may also be used to construct a foundation layer for the intermediate soil cover, however, the residue foundation layer must be covered with six inches (6") (minimum thickness) of compacted soil within forty-eight (48) hours of the time when the residue foundation layer material is placed.

3. At least once during each and every three week period, the permittee must install a fire barrier in the active waste lift. This requirement does not apply to the initial thin lift of uncompacted solid waste placed directly above the protective soil layer on the floor of the disposal Modules. The fire barriers must be at least six-inches (6") thick and may be constructed from compacted soil, properly processed petroleum contaminated soil, or a similar non-combustible mineral material. (Residue is not an acceptable material to construct the fire barrier.)

4. Prior to December 31, 1995, the permittee must submit an amendment to the Facility Operational Plan. The amendment must address control of accidental fires which involve combustion of residue ADC and stockpiles of residue.

5. As required by Condition 34 of Schedule D of Solid Waste Disposal Permit No. 391, the permittee must immediately notify the Department's Eastern Region Office in Pendleton at 276-4063 of any fire which involves combustion of residue ADC or stockpiled residue. The permittee must submit a written report to the Department within seven calendar days of the fire. The report must describe the procedures used to extinguish the fire and to properly dispose of the combustion residue. The report must also describe any operational procedure revisions (such as construction of additional fire barriers in the waste lifts or increasing the thickness of the fire barrier layer) which will be implemented to reduce the possibility of

future fires. In the event of a fire involving combustion of significant quantities of residue, the permittee must suspend use of residue until such time as the Department approves the revised fire control procedures. The permittee is not required to suspend use of residue as ADC in the event of a quickly-extinguished surface fire involving combustion of incidental quantities of residue.

6. The Department may revoke this authorization if, in the Department's opinion, continued use of residue as ADC would present unacceptable environmental risks.

7. Additional information obtained by the permittee or by the Department describing residue use as ADC at other municipal solid waste landfills should be shared as soon as it becomes available.

(e:\wp51\CRRESADC.RPT)

SCHNITZER STEEL PRODUCTS CO.

3200 N.W. Yeon Ave. P.O. Box 10047 Portland, Oregon 97210
Phone 503/224-9900 Telex/W.U.36-0144 FAX 503/323-2793

September 15, 1995

Ms. Tamara Gordy
Waste Management of North America, Inc.
4020 Lake Washington BLVD. NE
Suite 310
Kirkland, WA 98033

SENT VIA FAX: (206) 814-7868

Dear Ms. Gordy:

Enclosed is a report of shredder residue sample analytical results. Sampling was conducted on Sept. 1, 1995. Following is a summary table of the sampling results:

Auto Shredder Residue TCLP Analysis:

		Samples:						
Date	Parameter	ASR #1	ASR #2	ASR # 3	ASR # 4	Average	EPA Limit	Unit
1-Sep-95	Arsenic	nd	nd	nd	nd	nd	5	mg/l
	Barium	1.2	1.6	1.2	0.97	1.2425	100	mg/l
	Cadmium	0.2	0.18	0.37	0.24	0.2475	1	mg/l
	Chromium	0.18	0.1	0.07	2.6	0.7375	5	mg/l
	Lead	1.6	0.7	1.6	7.5	2.85	5	mg/l
	Mercury	nd	nd	nd	nd	nd	0.2	mg/l
	Selenium	nd	nd	nd	nd	nd	1	mg/l
	Silver	nd	nd	nd	nd	nd	5	mg/l

The average PCB concentration was 5.9 mg/l.

Should you have any questions or need further information, please contact either Daniel Lee at (503) 434-3324 or me at (503) 286-5771.

Sincerely,

Daniel Lee
Environmental Specialist

cc: Ken Irish, OWS

Amended Report Date: September 14, 1995
Job Number: 950905BY
PO Number: 24599
Project No: None Provided
Project Name: ASR 9-1-95

Keith Lawson
Schnitzer Steel Industries,Inc
12005 N. Burgard Rd.
Portland, OR 97203

Analytical Narrative

The samples were received on 09/05/95 by Coffey Laboratories, Inc. (CLI) Sample Reception personnel under strict chain of custody protocol. The following information was provided at the time of sample reception:

Laboratory Sample ID	Field Identification	Matrix	Collection Date	Collection Time
950905BY-1	ASR #1	Solid	09/01/95	NP
950905BY-2	ASR #2	Solid	09/01/95	NP
950905BY-3	ASR #3	Solid	09/01/95	NP
950905BY-4	ASR #4	Solid	09/01/95	NP

The recommended holding time for each batch of analyses was in accordance with the data quality objectives as specified in the CLI Quality Assurance Plan unless otherwise noted.

Acceptable precision and accuracy were achieved for all analyses associated with this work order as demonstrated by the recoveries of the quality control samples analyzed concurrently with each batch.

The data submitted in this report is for the sole and exclusive use of the above-named client. All samples associated with the work order will be retained a maximum of 15 days from the report date or until the maximum holding time expires. All results pertain only to samples submitted.

Thank you for allowing Coffey Laboratories to be of service to you. If you have questions or need further assistance, please do not hesitate to call our Customer Services Department.

Sincerely,

Harry L. Jacky for
Susan M. Coffey
President

SMC/atc

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Analytical Data

Schnitzer Steel Industries,Inc

Job Number: 950905BY
Page Number: 2 of 5

Lab Sample ID: 950905BY-1
Field ID: ASR #1
Date/Time: 09/01/95
Matrix: Solid

EPA Category: TCLP Metals

Parameter	Method	Detection Limit	Analytical Result	Units	EPA Limit
Arsenic	*	0.1	ND	mg/L	5.0
Barium	*	0.01	1.2	mg/L	100
Cadmium	*	0.02	0.20	mg/L	1.0
Chromium	*	0.02	0.18	mg/L	5.0
Lead	*	0.1	1.6	mg/L	5.0
Mercury	*, 7470	0.05	ND	mg/L	0.20
Selenium	*	0.2	ND	mg/L	1.0
Silver	*	0.1	ND	mg/L	5.0

ND means none detected at or above the detection limit listed.
* Leachate preparation by EPA SW-846 Method 1311. Analysis by EPA SW-846 Method 6010, ICP, unless otherwise noted.

COFFEY LABORATORIES, INC.
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Analytical Data

Schnitzer Steel Industries,Inc

Job Number: 950905BY
Page Number: 3 of 5

Lab Sample ID: 950905BY-2
Field ID: ASR #2
Date/Time: 09/01/95
Matrix: Solid

EPA Category: TCLP Metals

Parameter	Method	Detection Limit	Analytical Result	Units	EPA Limit
Arsenic	*	0.1	ND	mg/L	5.0
Barium	*	0.01	1.6	mg/L	100
Cadmium	*	0.02	0.18	mg/L	1.0
Chromium	*	0.02	0.10	mg/L	5.0
Lead	*	0.1	0.7	mg/L	5.0
Mercury	*, 7470	0.05	ND	mg/L	0.20
Selenium	*	0.2	ND	mg/L	1.0
Silver	*	0.1	ND	mg/L	5.0

ND means none detected at or above the detection limit listed.
* Leachate preparation by EPA SW-846 Method 1311. Analysis by EPA SW-846 Method 6010, ICP, unless otherwise noted.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Analytical Data

Schnitzer Steel Industries, Inc

Job Number: 950905BY
Page Number: 4 of 5

Lab Sample ID: 950905BY-3
Field ID: ASR #3
Date/Time: 09/01/95
Matrix: Solid

EPA Category: TCLP Metals

Parameter	Method	Detection Limit	Analytical Result	Units	EPA Limit
Arsenic	*	0.1	ND	mg/L	5.0
Barium	*	0.01	1.2	mg/L	100
Cadmium	*	0.02	0.37	mg/L	1.0
Chromium	*	0.02	0.07	mg/L	5.0
Lead	*	0.1	1.6	mg/L	5.0
Mercury	*, 7470	0.05	ND	mg/L	0.20
Selenium	*	0.2	ND	mg/L	1.0
Silver	*	0.1	ND	mg/L	5.0

ND means none detected at or above the detection limit listed.
* Leachate preparation by EPA SW-846 Method 1311. Analysis by EPA SW-846 Method 6010, ICP, unless otherwise noted.

COFFEY LABORATORIES, INC.
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Analytical Data

Schnitzer Steel Industries,Inc

Job Number: 950905BY
Page Number: 5 of 5

Lab Sample ID: 950905BY-4
Field ID: ASR #4
Date/Time: 09/01/95
Matrix: Solid

EPA Category: TCLP Metals

Parameter	Method	Detection Limit	Analytical Result	Units	EPA Limit
Arsenic	*	0.1	ND	mg/L	5.0
Barium	*	0.01	0.97	mg/L	100
Cadmium	*	0.02	0.24	mg/L	1.0
Chromium	*	0.02	2.6	mg/L	5.0
Lead	*	0.1	7.5	mg/L	5.0
Mercury	*, 7470	0.05	ND	mg/L	0.20
Selenium	*	0.2	ND	mg/L	1.0
Silver	*	0.1	ND	mg/L	5.0

ND means none detected at or above the detection limit listed.
* Leachate preparation by EPA SW-846 Method 1311. Analysis by EPA SW-846 Method 6010, ICP, unless otherwise noted.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Report Date: September 14, 1995
Job#: GE-950905CU-2
PO#: 24642
Project#: None Provided
Project: ASR 9-1-95

Keith Lawson
Schnitzer Steel Industries,Inc
12005 N. Burgard Rd.
Portland, OR 97203

SAMPLE INFORMATION:
Date Samples Were Received By Laboratory: 09/05/95

Lab No.	Field Identification	Sample Matrix	Date	Time
1	ASR #5	Solid	09-01-95	NP
2	ASR #6	Solid	09-01-95	NP

Analytical results are on the following page(s):

Sincerely,

Susan M. Coffey
President

SMC/gle

This report is for the sole and exclusive use of the above-named client. Samples are retained 15 days from the report date, or until holding time expires. Results pertain only to samples submitted.

COFFEY LABORATORIES, INC.
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Analytical Data

Schnitzer Steel Industries,Inc

Job Number: 950905CU
Page Number: 2 of 3

Lab Sample ID: 950905CU-1
Field ID: ASR #5
Date/Time: 09/01/95
Matrix: Solid

EPA Category: Extractable Organics
Analysis Performed: PCB's by EPA 8080, GC/ECD.
Analysis Date: 09/06/95
Analyst: JAG

Parameter	Detection Limit	Laboratory Blank	Analytical Result
Aroclor 1242	0.825	ND	5.4
Aroclor 1248	0.825	ND	ND
Aroclor 1254	0.825	ND	ND
Aroclor 1260	0.825	ND	ND
Aroclor 1262	0.825	ND	ND
Aroclor 1268	0.825	ND	ND

Results expressed as mg/kg unless otherwise noted.
ND means none detected at or above the detection limit listed.

COFFEY LABORATORIES, INC.
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Analytical Data

Schnitzer Steel Industries,Inc

Job Number: 950905CU
Page Number: 3 of 3

Lab Sample ID: 950905CU-2
Field ID: ASR #6
Date/Time: 09/01/95
Matrix: Solid

EPA Category: Extractable Organics
Analysis Performed: PCB's by EPA 8080, GC/ECD.
Analysis Date: 09/06/95
Analyst: JAG

Parameter	Detection Limit	Laboratory Blank	Analytical Result
Aroclor 1242	0.825	ND	6.3
Aroclor 1248	0.825	ND	ND
Aroclor 1254	0.825	ND	ND
Aroclor 1260	0.825	ND	ND
Aroclor 1262	0.825	ND	ND
Aroclor 1268	0.825	ND	ND

Results expressed as mg/kg unless otherwise noted.
ND means none detected at or above the detection limit listed.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

TABLE OF CONTENTS

Fluff Sample Analysis

1.	Exhibit No. 1-10: TCLP Metals Exhibit No. 1: PCB	March 1993
2.	Volatile & Semi-Volatile Organics: Exhibit No. 1: TCLP Concentration Exhibit No. 2: Spike Matrix Recovery	April 1993
3.	Priority Pollutants Analysis Inorganics Volatile Organics Semi-Volatile Organics Base/Neutral Compounds Pesticides Herbicides PCB	April 1993
4.	Hillsboro Landfill TCLP Metals BTEX Oil & Grease PCB Surrogate Recoveries (%)	September 1993
5.	TCLP & PCB Analysis Exhibit No. 1: TCLP Exhibit No. 2: Spike Matrix Recovery Exhibit No. 3: PCB Exhibit No. 4: TCLP - Individual Results Exhibit No. 5: PCB - Individual Results	March 1994
6.	TCLP & PCB Exhibit No. 1: TCLP Exhibit No. 2: Individual TCLP Metals Exhibit No. 3: Spike Matrix Recovery Exhibit No. 4: Individual PCB	August 1994
7.	TCLP & PCB	September 1994
8.	Correspondance RE September 1994 Sample	October 1994
9.	TCLP & PCB PCB Leachability Total PCB Concentration TCLP Metals	October 1994

10.	TCLP & PCB Total PCB Concentration PCB Leachability TCLP Metals Total PCB Concentration PCB Leachability TCLP Metals Total PCB Concentration PCB Leachability TCLP Metals Total PCB Concentration PCB Leachability TCLP Metals	October 1994
11.	TCLP & PCB	October 26 1994
12.	TCLP & PCB	November 2 1994
13.	TCLP & PCB	Novmeber 3 1994
14.	Correspondence RE Sept. 1994 Sample & meeting on Nov. 7 1994	November 11 1994
15.	TCLP & PCB (with a cover letter)	December 21 1994
16.	TCLP & PCB (with a cover letter)	January 6 1995
17.	TCLP (with a cover letter)	February 8 1995
18.	TCLP & PCB (with a cover letter)	March 7 1995
19.	Sampling Protocols	
20.	Sampling Guidance for Scrap Metal Shredders (EPA 747-R 93-009)	
21.	Statistical Analysis	
22.	Gate Policy	

W. Z. BAUMGARTNER & ASSOCIATES, INC.

CONSULTING ENGINEERS

P.O. BOX 786 • BRENTWOOD, TN 37024
110 WESTWOOD PLACE • SUITE 101 • BRENTWOOD, TN 37027
615-373-1572 • FAX: 615-370-9292

LETTER OF TRANSMITTAL

TO: Mr. Daniel Lee 3200 North Highway 99W McMinnville, Oregon 97128	DATE July , 1992 PROJECT NO. 93031 RE: Special Sample Analysis

WE ARE SENDING YOU: ☒ Attached ☒ Previously faxed ☐ Under separate cover
VIA: ☒ Overnight ☐ 2nd Day ☐ Regular

THE FOLLOWING ITEMS: ☒ Exhibits ☐ Shop Drawings ☐ Permit Applications
☐ Reports ☐ Survey ☐ Change Order
☐ Plans ☐ Specifications ☐ Other

COPIES	DATE	NO.	DESCRIPTION
1	03-30-93		Exhibit No. 1-10: Special Sample Analysis TCLP Metals
1	03-30-93		Exhibit No. 1: Special Sample Analysis PCB Metals

THESE ARE TRANSMITTED as checked below:

☐ For Approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☒ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____

REMARKS:

COPY TO:

SIGNED: W. H. Tucker III
W. H. Tucker III
Project Manager

s

If enclosures are not as noted, kindly notify us at once.

EXHIBIT NO. 1

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28046)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	1.02	100.0
Cadmium	0.68	1.0
Chromium (T)	<0.50	5.0
Lead	3.76	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

s\93031

WZB

EXHIBIT NO. 2

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28047)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	<1.0	100.0
Cadmium	0.33	1.0
Chromium (T)	<0.50	5.0
Lead	<0.50	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

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WZB

EXHIBIT NO. 3

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28048)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	2.98	100.0
Cadmium	0.61	1.0
Chromium (T)	<0.50	5.0
Lead	1.54	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

s\93031

WZB

EXHIBIT NO. 4

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28049)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	1.02	100.0
Cadmium	0.42	1.0
Chromium (T)	<0.50	5.0
Lead	2.34	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

s\93031

WZB

EXHIBIT NO. 5

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28058)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	1.03	100.0
Cadmium	0.17	1.0
Chromium (T)	<0.50	5.0
Lead	2.11	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

s\93031

WZB

EXHIBIT NO. 6

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28059)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	1.41	100.0
Cadmium	0.56	1.0
Chromium (T)	<0.50	5.0
Lead	1.75	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

s\93031

WZB

EXHIBIT NO. 7

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28060)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	1.48	100.0
Cadmium	0.22	1.0
Chromium (T)	<0.50	5.0
Lead	<0.50	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

s\93031

WZB

EXHIBIT NO. 8

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28061)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	2.05	100.0
Cadmium	0.30	1.0
Chromium (T)	<0.50	5.0
Lead	0.77	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

s\93031

WZB

EXHIBIT NO. 9

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28062)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	1.49	100.0
Cadmium	0.33	1.0
Chromium (T)	<0.50	5.0
Lead	0.80	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

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EXHIBIT NO. 10

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS

MARCH 30, 1993

PARAMETER	CONCENTRATION (28063)	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	1.17	100.0
Cadmium	0.24	1.0
Chromium (T)	<0.50	5.0
Lead	1.02	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

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EXHIBIT NO. 1

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SPECIAL SAMPLE ANALYSIS
CONSTITUENT ANALYSIS (mg/kg)

MARCH 30, 1993

SAMPLE ID	% MOISTURE	PCB[1]
SS - 1 (28016)	52.3	<2.0
SS -2 (28017)	50.8	<2.0
SS - 3 (28018)	62.2	<2.0
SS - 4 (28019)	38.3	<2.0
SS - 5 (28020)	17.6	<2.0
SS - 6 (28021)	25.0	12.0
SS - 7 (28022)	40.5	20.8
SS - 8 (28023)	23.9	6.4
SS - 9 (28024)	31.6	36.5
SS - 10 (28025)	40.5	12.3

[1]Reported as "Dry Weight" - EPA Method 8080

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

s\93031

WZB

W. ZBAMGARTNER & ASSOCIATES, INC.
CONSULTING ENGINEERS

P.O. BOX 786 • BRENTWOOD, TN 37024
110 WESTWOOD PLACE • SUITE 101 • BRENTWOOD, TN 37027
615-373-1572 • FAX: 615-370-9292

LETTER OF TRANSMITTAL

TO: Mr. Daniel Lee Cascade Steel / Schnitzer Steel 3200 N. Highway 99 W McMinnville, OR 97128	DATE: May 7, 1993 PROJECT NO. ~~93031~~ 94010 & W RE: Shredder Residue Analysis

WE ARE SENDING YOU: ☒ Attached ☒ Previously faxed ☐ Under separate cover
VIA: ☐ Overnight ☐ 2nd Day ☒ Regular

THE FOLLOWING ITEMS: ☒ Exhibits ☐ Shop Drawings ☐ Permit Applications
☐ Reports ☐ Survey ☐ Change Order
☐ Plans ☐ Specifications ☐ Other

COPIES	DATE	NO.	DESCRIPTION
1	4-13-93		Exhibit No. 1 - TCLP - Concentration
1	4-13-93		Exhibit No. 2 - Spike Matrix Recovery

THESE ARE TRANSMITTED as checked below:
☐ For Approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval
☒ For your use ☐ Approved as noted . . ☐ Submit _____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____

REMARKS:

COPY TO:

SIGNED: W. H. Tucker III
W. H. Tucker III
Project Manager

p

If enclosures are not as noted, kindly notify us at once.

EXHIBIT NO. 1

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

SHREDDER RESIDUE ANALYSIS
TOXIC CHARACTERISTIC LEACHING PROCEDURE[1]

APRIL 13, 1993

PARAMETER	CONCENTRATION (ppm) (28277)	EPA LIMIT
TCLP VOLATILE ORGANICS[2]		
Benzene	0.16	0.5
Carbon Tetrachloride	<0.10	0.5
Chlorobenzene	<0.10	100.0
Chloroform	<0.10	6.0
1,2-Dichloroethane	<0.10	0.5
1,1-Dichloroethylene	<0.10	0.7
2-Butanone (MEK)	<1.0	200.0
Tetrachloroethylene	<0.10	0.7
Trichloroethylene	<0.10	0.5
Vinyl Chloride	<0.10	0.2
TCLP SEMI-VOLATILE ORGANICS[3]		
Pyridine	<0.10	5.0
O-Cresol	<0.10	200.0
M-Cresol	<0.10	200.0
P-Cresol	<0.10	200.0
1,4-Dichlorobenzene	<0.10	7.5
2,4-Dinitrotoluene	<0.10	0.13
Hexachlorobutadiene	<0.10	0.5
Hexachloroethane	<0.10	3.0
Nitrobenzene	<0.10	2.0
Pentachlorophenol	<0.10	100.0
2,4,5-Trichlorophenol	<0.10	2.0
2,4,6-Trichlorophenol	<0.10	400.0
Hexachlorobenzene	<0.10	0.13

[1]EPA Method 1311
[2]Method Number 8240; Quantitation Limit - 0.10 ppm
[3]Method Number 8270; Quantitation Limit - 0.10 ppm

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P.O. Box 786
Brentwood, TN 37024-0786

p\93031

WZB

EXHIBIT NO. 2

SCHNITZER STEEL
PORTLAND, OREGON

SHREDDER RESIDUE ANALYSIS
SPIKE MATRIX RECOVERY

APRIL 13, 1993

PARAMETER	% RECOVERY (28277)
TCLP VOLATILE ORGANICS	
Benzene	135%
Carbon Tetrachloride	97%
Chlorobenzene	133%
Chloroform	151%
1,2-Dichloroethane	143%
1,1-Dichloroethylene	158%
2-Butanone (MEK)	60%
Tetrachloroethylene	141%
Trichloroethylene	130%
Vinyl Chloride	72%
TCLP SEMI-VOLATILE ORGANICS	
Pyridine	30%
O-Cresol	43%
M-Cresol	37%
P-Cresol	37%
1,4-Dichlorobenzene	51%
2,4-Dinitrotoluene	34%
Hexachlorobutadiene	30%
Hexachloroethane	41%
Nitrobenzene	34%
Pentachlorophenol	45%

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P.O. Box 786
Brentwood, TN 37024-0786

p\93031

WZB

W. Z. BLUMGARTNER & ASSOCIATES, INC.
CONSULTING ENGINEERS

P.O. BOX 786 • BRENTWOOD, TN 37024
110 WESTWOOD PLACE • SUITE 101 • BRENTWOOD, TN 37027
615-373-1572 • FAX: 615-370-9292

LETTER OF TRANSMITTAL

TO: Mr. Daniel Lee Cascade Steel / Schnitzer Steel 3200 N. Highway 99 W McMinnville, OR 97128	DATE April 27, 1993 PROJECT NO. 93031 RE: Debris Sample

WE ARE SENDING YOU: ☒ Attached ☒ Previously faxed ☐ Under separate cover
VIA: ☐ Overnight ☐ 2nd Day ☒ Regular

THE FOLLOWING ITEMS: ☒ Exhibits ☐ Shop Drawings ☐ Permit Applications
☐ Reports ☐ Survey ☐ Change Order
☐ Plans ☐ Specifications ☐ Other

COPIES	DATE	NO.	DESCRIPTION
1	04-93		Priority Pollutants Analysis

THESE ARE TRANSMITTED as checked below:
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☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints
☐ For review and comment ☐ _____

REMARKS:

COPY TO:

SIGNED: W. H. Tucker III
Project Manager

p *If enclosures are not as noted, kindly notify us at once.*

W. Z. BAUMGARTNER & ASSOCIATES, INC.

CONSULTING ENGINEERS

SUITE 101
R.E.M.110 WESTWOOD PLACE
P.O. Box 786
Brentwood, Tennessee 37024-0786

W.Z.BAUMGARTNER, JR., P.E., C.H.M.M.,
MICHAEL E. TANT, P.E.
J. CLAIBORNE THORNTON, III, P.E.

WILLIAM H. TUCKER, III, P.E.
RICHARD L. WILLIAMS, P.E.
KEVIN B. WOLFE, P.E.
T.M.DUBLIN, E.T.

(615) 373-1572
FAX (615) 370-9292

FACSIMILE TRANSMITTAL
FACSIMILE EQUIPMENT: MURATA F-45

DATE: April 28, 1993

TO: Schnitzer Steel Products

ATTENTION: Mr. Daniel Lee

FAX NO.: 503-494-5739

FROM: W. H. Tucker, III

RE: Exhibit for Schnitzer Steel

NUMBER OF PAGES 7 INCLUDING COVER LETTER

PLEASE CONTACT US AT (615) 373-1572 IF YOU DO NOT RECEIVE ALL PAGES PROPERLY. THANK YOU.

COMMENTS:

PROJECT NO. ~~93031~~ 94010 C

Transmit Confirmation Report

No.	:	005
Receiver	:	1503434573993031
Transmitter	:	WZ BAUMGARTNER & ASSOC
Date	:	Apr 28,93 8:48
Time	:	02'53
Mode	:	Norm
Pages	:	07
Result	:	OK

EXHIBIT NO. 1

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

DEBRIS SAMPLE
PRIORITY POLLUTANTS ANALYSIS

APRIL, 1993

PARAMETER	CONCENTRATION (ppm) (28224)
INORGANICS	
Antimony	16.5
Arsenic	5.82
Beryllium	<1.0
Cadmium	12.6
Chromium, Total	120
Copper	376
Lead	977
Mercury	1.72
Nickel	136
Selenium	<1.0
Silver	1.70
Thallium	<1.0
Zinc	4840
VOLATILE ORGANICS[1]	
Benzene	0.083
Bromoform	ND
Carbon Tetrachloride	ND
Chlorobenzene	ND
Chlorodibromo - Methane	ND
Chloroethane	ND
2-Chloroethyl vinyl ether	ND
Chloroform	ND
Dichlorobromomethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethene	ND

WZB

EXHIBIT NO. 1 - CONTINUED

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

DEBRIS SAMPLE
PRIORITY POLLUTANTS ANALYSIS

APRIL, 1993

PARAMETER	CONCENTRATION (ppm) (28224)
1,2-Dichloropropane	ND
1,3-Dichloropropene	ND
Ethylbenzene	0.091
Methylene Chloride	ND
1,1,1,2-Tetrachloroethane	ND
Tetrachloroethene	ND
Toluene	0.58
1,2-Dichloroethylene	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethene	ND
Trichlorofluoromethane	ND
Vinyl Chloride	ND
Xylene	0.50
SEMI-VOLATILE ORGANICS[2]	
Acid Compounds	
2-Chlorophenol	ND
2,4-Dichlorophenol	ND
2,4-Dimethylphenol	ND
2,4-Dinitrophenol	ND
2-Nitrophenol	ND
4-Nitrophenol	ND
P-Chloro-M-Cresol	ND
Pentachlorophenol	ND
Phenol	ND
2,4,6-Trichlorophenol	ND

WZB

EXHIBIT NO. 1 - CONTINUED

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

DEBRIS SAMPLE
PRIORITY POLLUTANTS ANALYSIS

APRIL, 1993

PARAMETER	CONCENTRATION (ppm) (28224)
Base/Neutral Compounds	
Acenapthene	ND
Acenapthtylene	ND
Anthracene	16
Benzidine	ND
Benzo(A)Anthracene	ND
Benzo(A)Pyrene	ND
Benzo(B)Fluoranthene	ND
Benzo(GHI)Perylene	ND
Benzo(K)Fluoranthene	ND
Bis(2-Chloroethoxy)Methane	ND
Bis(2-Chloroethyl)Ether	ND
Bis(2-Chloroisopropyl)Ether	ND
Bis(2-Ethylhexyl)Phthalate	ND
4-Bromophenyl-Phenyl-Ether	ND
Butylbenzyl Pthalate	17
2-Chloronapthalene	ND
4-Chlorophenyl Phenyl Ether	ND
Chrysene	ND
Dibenz(A,H)Anthracene	ND
1,2-Dichlorobenzene	ND
1,3-Dichlorobenzene	ND
1,4-Dichlorobenzene	ND
3,3'-Dichlorobenzidine	ND
Diethyl Phthalate	ND
Dimethyl Phthalate	ND
Benzo (E) Pyrene	ND
Di-N-Butyl Phthalate	ND
2,4-Dinitrotoluene	ND
2,6-Dinitrotoluene	ND
Di-N-Octyl Phthalate	170
1,2-Diphenylhydrazine	ND
Fluoranthene	ND
Fluorene	ND

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EXHIBIT NO. 1 - CONTINUED

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

DEBRIS SAMPLE
PRIORITY POLLUTANTS ANALYSIS

APRIL, 1993

PARAMETER	CONCENTRATION (ppm) (28224)
Hexachlorobenzene	ND
Hexachlorobutadiene	ND
Hexclcyclopentadiene	ND
Hexachloroethane	ND
Indeno(1,2,3-Cd)Pyrene	ND
Isophorone	ND
Napthalene	ND
Nitrobenzene	ND
N-Nitrosodimethylamine	ND
N-Nitrosodi-n-propylamine	ND
N-Nitrosodiphenylamine	ND
Phenanthrene	ND
Pyrene	ND
1,2,4-Trichlorobenzene	ND
PESTICIDES/HERBICIDES/PCB[3]	
Aldrin	ND
Alpha BHC	ND
Belta BHC	ND
Gamma BHC	ND
Delta BHC	ND
Chlordane	ND
4,4'DDT	ND
4,4"DDE	ND
4,4'DDD	ND

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P.O. Box 786
Brentwood, Tennessee 37024

WZB

EXHIBIT NO. 1 - CONTINUED

SCHNITZER STEEL PRODUCTS
PORTLAND, OREGON

DEBRIS SAMPLE
PRIORITY POLLUTANTS ANALYSIS

APRIL, 1993

PARAMETER	CONCENTRATION (ppm) (28224)
Dieldrin	ND
Alpha Endosulfan	ND
Beta Endosulfan	ND
Endosulfan Sulfate	ND
Endrin	ND
Endrin Aldehyde	ND
Heptachlor	ND
Heptachlorepoxide	ND
Methoxychlor	ND
PCB 1242	ND
PCB 1254	ND
PCB 1221	ND
PCB 1232	ND
PCB 1248	ND
PCB 1260	ND
PCB 1016	ND
Toxaphene	ND

[1]Method #8240; Quantitation Limit of 0.010 ppm
[2]Method #8270; Quantitation Limit of 3.3 ppm
[3]Method #8080; Quantitation Limit of 5.0 ppm

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P.O. Box 786
Brentwood, Tennessee 37024

p/93031/Prior Pol

WZB

CC: Daniel Lee
Terry Glucoft
Shredder

Oregon

November 1, 1993

DEPARTMENT OF
ENVIRONMENTAL
QUALITY

WESTERN REGION
Solid Waste

Mr. Charles H. Gray
Waste Acceptance Supervisor
Hillsboro Landfill, Inc.
3205 SE Minter Bridge Road
Hillsboro, OR 97123

Re: Hillsboro Landfill
Solid Waste Permit No. 112
Washington County

Dear Mr. Gray:

We have reviewed your October 20, 1993 request for approval to use auto fluff as alternative daily cover (ADC) in lieu of the six inches of daily soil cover required under Subtitle D.

As described, Hillsboro Landfill, Inc. has been using auto fluff as daily cover for approximately five years. The material contains primarily non-metallic auto parts which cannot be recycled. Several samples of this material were analyzed to show that the chemical constituents are below any RCRA or TSCA hazardous waste limits. Your letter included test results for TCLP metals (EPA Method 1311), PCB's (EPA Method 8080) and BTEX (EPA method 8020) to substantiate that the material tested is non-hazardous.

Based on information contained in your letter we agree that the auto fluff ADC may be an acceptable alternative to the six-inch daily cover required under 40 CFR Part 258.21. Your request to use this material is hereby approved on a trial basis until November 1, 1994. Our approval is subject to the following conditions:

1) Auto fluff may be used as alternative daily cover only on geosynthetic-lined portions of your landfill.

2) Test results performed by Schnitzer Steel facility show that the PCB content of auto fluff materials may vary significantly, ranging from less than 2.0 mg/kg to 36.5 mg/kg (reported as "Dry Weight" - EPA Method 8080). You must develop a program to conduct random sampling of this material to ensure that PCB levels will not exceed the regulatory standards.

3) Results on TCLP metals (EPA Method 1311) show that the levels of Cadmium and Lead are high in select samples. During the trial period, you must conduct random testing of this material to re-establish that the material used is not hazardous.

As requested, you may continue to use petroleum contaminated soils (PCS) as

811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5733
FAX (503) 229-6954

daily cover during the drier, late spring and summer months of the year. PCS cover material must meet or exceed the performance criteria of Subtitle D daily cover material and be protective of human health and the environment. This material may only be applied in geomembrane-lined portions of your landfill.

At the end of the trial period, you must submit a written report to the Department summarizing your working experience with the ADC materials. Your report must include an evaluation of the effectiveness of the ADC's to control blowing litter, odors, disease vectors, landfill fires and scavenging. The Department will consider allowing use of ADC's beyond the trial period only if you demonstrate that the material meets the performance criteria of a six-inch thickness daily soil cover under Subtitle D.

If you have any questions concerning this matter, please contact Monty Morshed at 229-5102.

Sincerely,

Tom Bispham, Administrator
Northwest Region

TB:cwd:mm
SW\LTR\SJ18
cc: Bruce McIntosh, N.W. District Manager, Sanifill, Inc.
Northwest Region/DEQ
B. Dessellier, M. Morshed/WR-Portland:DEQ

SCHNITZER STEEL PRODUCTS CO.

3200 N.W. Yeon Ave. P.O. Box 10047 Portland, Oregon 97210
Phone 503/224-9900 Telex WU 36-0144 FAX 503/323-2793

RECEIVED
SEP 16 1993
HILLSBORO LANDFILL

Sept. 14 1993

Mr. Joe Cassin
Hillsboro Landfill, Inc
3205 S.E. Minter Bridge Rd.
Hillsboro, OR 97123

Dear Mr. Cassin:

As per request of Peter Kramer, Schnitzer Steel Products, enclosed please find the TCLP analysis of the fluff.

If you have any questions, please give me a call at (503) 472-4181.

Sincerely,

Daniel Lee

Daniel Lee
Environmental Specialist

cc: Peter Kramer, SSP

PACIFIC
ENVIRONMENTAL
LABORATORY INC.

September 29, 1993

Hillsboro Landfill, Inc.
3205 S.E. Minter Bridge Road
Hillsboro, OR 97123

Attention: Charlie Gray

RE: JOB #
P.O.#
PROJECT - SCHNITZER AUTO FLUFF

Enclosed are test results for your samples received in this lab on Sep. 20, 1993. For your reference, these analyses have been assigned our PEL # 93-2763.

Solid samples are reported on a dry weight basis except for Oregon DEQ Fuels Methods and where otherwise noted.

Please call if you have any questions.

Respectfully,

Howard Holmes
Project Manager

Rob May
Project Manager

9405 S.W. Nimbus Ave. ■ Beaverton, OR 97005 ■ (503) 644-0660 ■ FAX # (503) 644-2202

PACIFIC ENVIRONMENTAL LABORATORY INC.

TCLP per EPA 1311, 6010, 7000 series
Results in mg/L (ppm)

Client: Hillsboro Landfill, Inc.
Project: SCHNITZER AUTO FLUFF
Received: 09/20/1993

PEL Number: 93-2763
Matrix: solid

Sample Name	Analyte	Result	MRL	Date Extracted	Date Prepped	Date Analyzed
#1	Arsenic	ND	0.50	09/21/93	09/23/93	09/27/93
	Barium	1.9	0.50			
	Cadmium	0.56	0.020			
	Chromium	0.087	0.020			
	Lead	3.6	0.20			
	Mercury	ND	0.0020			
	Selenium	ND	0.50			
	Silver	ND	0.020			
#2	Arsenic	ND	0.50	09/21/93	09/23/93	09/27/93
	Barium	1.9	0.50			
	Cadmium	0.76	0.020			
	Chromium	0.087	0.020			
	Lead	2.0	0.20			
	Mercury	ND	0.0020			
	Selenium	ND	0.50			
	Silver	ND	0.020			
Method Blank	Arsenic	ND	0.50			
	Barium	ND	0.50			
	Cadmium	ND	0.020			
	Chromium	ND	0.020			
	Lead	ND	0.20			
	Mercury	ND	0.00050			
	Selenium	ND	0.50			
	Silver	ND	0.020			

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report

9405 S.W. Nimbus Ave. ■ Beaverton, OR 97005 ■ (503) 644-0660 ■ FAX # (503) 644-2202

PACIFIC
ENVIRONMENTAL
LABORATORY INC

BTEX per EPA 8020
Results In ug/kg (ppb)

Client: Hillsboro Landfill, Inc.
Project: SCHNITZER AUTO FLUFF
Received: 09/20/1993

PEL Number: 93-2763
Matrix: soil

Sample Name	Analyte	Result	MRL	Date Prepped	Date Analyzed
#1	Benzene	ND	100	09/22/93	09/22/93
	Ethylbenzene	2100	100		
	Toluene	3300	100		
	Xylenes (total)	14000	100		
#2	Benzene	ND	100	09/22/93	09/22/93
	Ethylbenzene	2000	100		
	Toluene	3300	100		
	Xylenes (total)	12000	100		
Method Blank	Benzene	ND	13		
	Ethylbenzene	ND	13		
	Toluene	ND	13		
	Xylenes (total)	ND	13		

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report

9405 S.W. Nimbus Ave. ■ Beaverton, OR 97005 ■ (503) 644-0660 ■ FAX # (503) 644-2202

PACIFIC
ENVIRONMENTAL
LABORATORY INC.

Oil and Grease per EPA 413.2
Results in mg/kg (ppm)

Client: Hillsboro Landfill, Inc.
Project: SCHNITZER AUTO FLUFF
Received: 09/20/1993

PEL Number: 93-2763
Matrix: solid

Sample Name	Analyte	Result	MRL	Date Prepped	Date Analyzed
#1	Oil & Grease	36000	20	09/21/93	09/22/93
#2	Oil & Grease	36000	20	09/21/93	09/22/93
Method Blank	Oil & Grease	ND	20		

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report

9405 S.W. Nimbus Ave. ■ Beaverton, OR 97005 ■ (503) 644-0660 ■ FAX # (503) 644-2202

PACIFIC ENVIRONMENTAL LABORATORY INC.

PCB's per EPA 8080, 3550
Results In mg/kg (ppm)

Client: Hillsboro Landfill, Inc.
Project: SCHNITZER AUTO FLUFF
Received: 09/20/1993

PEL Number: 93-2763
Matrix: solid

Sample Name	Analyte	Result	MRL	Date Prepped	Date Analyzed
#1	PCB 1016	ND	3.0	09/24/93	09/27/93
	PCB 1221	ND	6.0		
	PCB 1232	ND	3.0		
	PCB 1242	ND	3.0		
	PCB 1248	7.4	3.0		
	PCB 1254	5.7	3.0		
	PCB 1260	ND	3.0		
#2	PCB 1016	ND	3.0	09/24/93	09/27/93
	PCB 1221	ND	6.0		
	PCB 1232	ND	3.0		
	PCB 1242	ND	3.0		
	PCB 1248	16	3.0		
	PCB 1254	9.0	3.0		
	PCB 1260	ND	3.0		
Method Blank	PCB 1016	ND	0.10		
	PCB 1221	ND	0.20		
	PCB 1232	ND	0.10		
	PCB 1242	ND	0.10		
	PCB 1248	ND	0.10		
	PCB 1254	ND	0.10		
	PCB 1260	ND	0.10		

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report

9405 S.W. Nimbus Ave. ■ Beaverton, OR 97005 ■ (503) 644-0660 ■ FAX # (503) 644-2202

PACIFIC ENVIRONMENTAL LABORATORY INC.

SURROGATE RECOVERIES (%)

Client: Hillsboro Landfill, Inc.
Project: SCHNITZER AUTO FLUFF

PEL Number: 93-2763
Received: 09/20/1993

Sample Name	Analyte	Result	Control Limits
BTEX per EPA 8020			
#1	4-Bromofluorobenzene	98	63-126
#2	4-Bromofluorobenzene	101	63-126
PCB's per EPA 8080, 3550			
#1	Decachlorobiphenyl	– *[1]	60-140
	2,4,5,6-Tetrachloro-m-xylene	– *[1]	60-140
#2	Decachlorobiphenyl	– *[1]	60-140
	2,4,5,6-Tetrachloro-m-xylene	– *[1]	60-140

MRL Method Reporting Level
ND None Detected at or above the method reporting level
* See Comment Section at end of report

9405 S.W. Nimbus Ave. ■ Beaverton, OR 97005 ■ (503) 644-0660 ■ FAX # (503) 644-2202

PACIFIC ENVIRONMENTAL LABORATORY INC.

COMMENTS

Client: Hillsboro Landfill, Inc.
Project: SCHNITZER AUTO FLUFF

PEL Number: 93-2763
Received: 09/20/1993

1. Unable to calculate surrogate recovery due to dilution necessary for analysis.

9405 S.W. Nimbus Ave. ■ Beaverton, OR 97005 ■ (503) 644-0660 ■ FAX # (503) 644-2202

W. Z. BAUMGARTNER & ASSOCIATES, INC.
CONSULTING ENGINEERS

P.O. BOX 786 • BRENTWOOD, TN 37024
500 WILSON PIKE CIRCLE • SUITE 206 • BRENTWOOD, TN 37027
615-373-1572 • FAX: 615-370-9292

LETTER OF TRANSMITTAL

TO: Mr. Peter Kramer Schnitzer Steel Products Co. P.O. Box 10047 Portland, OR 97210	DATE: March 16, 1994 PROJECT NO.: 94010C RE: Shredder Waste Monitoring - Portland, OR

WE ARE SENDING YOU: ☒ Attached ☐ Previously faxed ☐ Under separate cover
VIA: ☐ Overnight ☐ 2nd Day ☒ Regular

THE FOLLOWING ITEMS: ☒ Exhibits ☐ Shop Drawings ☐ Permit Applications
☐ Reports ☐ Survey ☐ Change Order
☐ Plans ☐ Specifications ☐ Other

COPIES	DATE	NO.	DESCRIPTION
1	3/94		Exhibit No. 1: TCLP Concentration
1	3/94		Exhibit No. 2: Spike Matrix Recovery
1	3/94		Exhibit No. 3: Constituent Analysis - Concentration
1	3/94		Exhibit No. 4: TCLP Individual Results
1	3/94		Exhibit No. 5: Constituent Analysis - Individual Sample Results

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit ____ copies for approval
☒ For your use ☐ Approved as noted ☐ Submit ____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return ____ corrected prints
☐ For review and comment ☐ _____

REMARKS:

COPY TO:

SIGNED: W. Z. Baumgartner / [illegible]
W. Z. Baumgartner, Jr., P.E., R.E.M.
President
Certified Hazardous Materials Manager

p

If enclosures are not as noted, kindly notify us at once.

EXHIBIT NO. 1

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SHREDDER RESIDUE MONITORING
TOXICITY CHARACTERISTIC LEACHING PROCEDURE

MARCH, 1994

PARAMETER	CONCENTRATION	EPA LIMIT
TCLP METALS (mg/l)[1]		
Arsenic	<0.10	5.0
Barium	1.03	100.0
Cadmium	0.28	1.0
Chromium (T)	<0.50	5.0
Lead	1.77	5.0
Mercury	<0.010	0.2
Selenium	<0.10	1.0
Silver	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW846*

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Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

p\94010

WZB

EXHIBIT NO. 2

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPIKE MATRIX RECOVERY

MARCH, 1994

PARAMETER	% RECOVERY (32395)
TCLP METALS	
Arsenic	97%
Barium	90%
Cadmium	82%
Chromium, Total	84%
Lead	83%
Mercury	87%
Selenium	93%
Silver	77%

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EXHIBIT NO. 3

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SHREDDER RESIDUE MONITORING
CONSTITUENT ANALYSIS (mg/kg)

MARCH, 1994

PARAMETER	CONCENTRATION	EPA LIMIT
PCB[1]	6.86	50
% Moisture	39.7	N.S.

[1]Reported as "Dry Weight" - EPA Method 8080
N.S. - No Standard

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Consulting Engineers
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EXHIBIT NO. 4

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SHREDDER WASTE MONITORING
TOXICITY CHARACTERISTIC LEACHING PROCEDURE

MARCH, 1994

PARAMETER	SS - 1 (32395)	SS - 3 (32396)	SS - 9 (32397)	CONCEN-TRATION	EPA LIMIT
TCLP METALS (mg/l)[1]					
Arsenic	<0.10	---	---	<0.10	5.0
Barium	1.03	---	---	1.03	100.0
Cadmium	0.37	0.33	0.15	0.28	1.0
Chromium, Total	<0.50	---	---	<0.50	5.0
Lead	2.48	1.76	1.07	1.77	5.0
Mercury	<0.010	---	---	<0.010	0.2
Selenium	<0.10	---	---	<0.10	1.0
Silver	<0.10	---	---	<0.10	5.0

[1]EPA Method 1311; Analysis according to *SW 846*

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EXHIBIT NO. 5

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SHREDDER RESIDUE MONITORING
CONSTITUENT ANALYSIS (mg/kg)

MARCH, 1994

PARAMETER	SS - 1 (32365)	SS - 3 (32366)	SS - 9 (32367)	CONCEN-TRATION	EPA LIMIT
PCB[1]	<5.00	<4.98	10.6	6.86	50
% Moisture	38.0	36.6	44.5	39.7	N.S.

[1]Reported as "Dry Weight" - EPA Method 8080
N.S. - No Standard

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CONSULTING ENGINEERS

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615-373-1572 • FAX: 615-370-9292

LETTER OF TRANSMITTAL

TO: Mr. Peter Kramer Schnitzer Steel Products Co. P.O. Box 10047 Portland, OR 97210	DATE: August 19, 1994 PROJECT NO.: 94011 C RE: Special Soil Analysis

WE ARE SENDING YOU: ☒ Attached ☒ Previously faxed ☐ Under separate cover
VIA: ☐ Overnight ☐ 2nd Day ☒ Regular

THE FOLLOWING ITEMS: ☒ Exhibits ☐ Shop Drawings ☐ Permit Applications
☐ Reports ☐ Survey ☐ Change Order
☐ Plans ☐ Specifications ☐ Other

COPIES	DATE	NO.	DESCRIPTION
1	8/5/94	1	Exhibit No. 1: Mean Concentrations
1	8/5/94	3	Exhibit No. 2: Individual TCLP Results
1	8/5/94	1	Exhibit No. 3: Spike Matrix Recovery
1	8/5/94	2	Exhibit No. 4: Individual Constituent Anaylsis
1	8/5/94		Chain of Custody

THESE ARE TRANSMITTED as checked below:

☐ For approval ☐ Approved as submitted ☐ Resubmit ____ copies for approval
☒ For your use ☐ Approved as noted ☐ Submit ____ copies for distribution
☐ As requested ☐ Returned for corrections ☐ Return ____ corrected prints
☐ For review and comment ☐ _____

REMARKS:

COPY TO:

SIGNED: W. Z. Baumgartner Jr. P.E.
W. Z. Baumgartner, Jr., P.E.
President

p

If enclosures are not as noted, kindly notify us at once.

W. Z. BAUMGARTNER & ASSOCIATES, INC.

CONSULTING ENGINEERS

W.Z.BAUMGARTNER, JR., P.E., C.H.M.M., R.E.M.
MICHAEL E. TANT, P.E.
J. CLAIBORNE THORNTON, III, P.E.

SUITE 206
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(615) 373-1572
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WILLIAM H. TUCKER, III, P.E.
RICHARD L. WILLIAMS, P.E.
JOHN D. CONSOLETTI, E.I.T.
WAYNE PARR, E.T.

FACSIMILE TRANSMITTAL
FACSIMILE EQUIPMENT: MURATA F-45

DATE: August 19, 1994

TO: Schnitzer Steel Products Co.

ATTENTION: Mr. Keith Lawson

FAX NO.: 503-286-6956

FROM: W. Z. Baumgartner, Jr., P.E.

RE: Special Soil Analysis

NUMBER OF PAGES 9 INCLUDING COVER LETTER

PLEASE CONTACT US AT (615) 373-1572 IF YOU DO NOT RECEIVE ALL PAGES PROPERLY.
THANK YOU.

COMMENTS: Hard copy to follow by mail.

PROJECT NO. 94011

Transmit Confirmation Report

No.	:	002
Receiver	:	1503286695694011
Transmitter	:	WZ BAUMGARTNER & ASSOC
Date	:	Aug 19,94 8:29
Time	:	03'45
Mode	:	Norm
Pages	:	09
Result	:	OK

EXHIBIT NO. 1

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL SOIL ANALYSIS
MEAN CONCENTRATIONS

AUGUST 5, 1994

PARAMETER	MEAN CONCENTRATION
TCLP METALS(mg/l)[1]	
Arsenic	<0.10
Barium	1.33
Cadmium	0.13
Chromium (T)	<0.50
Lead	1.26
Mercury	<0.010
Selenium	<0.10
Silver	<0.10
PCB(mg/kg)[2]	10.7
% Moisture	12.1
TPH(mg/kg)[3]	3465

[1]EPA Method 1311
[2]Reported as "Dry Weight" - EPA Method 8080
[3]EPA Method 418.1

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

p\94011

WZB

EXHIBIT NO. 2

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL SOIL ANALYSIS
TOXICITY CHARACTERISTIC LEACHING PROCEDURE

AUGUST 5, 1994

PARAMETER	#1 (34317)	#2 (34318)	#3 (34319)	#4 (34320)	#5 (34321)	EPA LIMIT
TCLP METALS (mg/l)[1]						
Arsenic	<0.10	<0.10	<0.10	<0.10	<0.10	5.0
Barium	1.34	1.14	1.27	1.30	1.37	100
Cadmium	<0.10	0.12	0.12	0.17	0.12	1.0
Chromium (T)	<0.50	<0.50	<0.50	<0.50	<0.50	5.0
Lead	2.06	<0.50	0.64	<0.50	0.81	5.0
Mercury	<0.010	<0.010	<0.010	<0.010	<0.010	0.20
Selenium	<0.10	<0.10	<0.10	<0.10	<0.10	1.0
Silver	<0.10	<0.10	<0.10	<0.10	<0.10	5.0

[1]EPA Method 1311

WZB

EXHIBIT NO. 2 (Continued)

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL SOIL ANALYSIS
TOXICITY CHARACTERISTIC LEACHING PROCEDURE

AUGUST 5, 1994

PARAMETER	#6 (34322)	#7 (34323)	#8 (34324)	#9 (34325)	#10 (34326)	EPA LIMIT
TCLP METALS (mg/l)[1]						
Arsenic	<0.10	<0.10	<0.10	<0.10	<0.10	5.0
Barium	1.39	1.44	1.29	1.38	1.35	100
Cadmium	0.13	0.13	<0.10	0.11	0.13	1.0
Chromium (T)	<0.50	<0.50	<0.50	<0.50	<0.50	5.0
Lead	1.03	2.08	<0.50	2.16	1.25	5.0
Mercury	<0.010	<0.010	<0.010	<0.010	<0.010	0.20
Selenium	<0.10	<0.10	<0.10	<0.10	<0.10	1.0
Silver	<0.10	<0.10	<0.10	<0.10	<0.10	5.0

[1]EPA Method 1311

WZB

EXHIBIT NO. 2 (Continued)

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL SOIL ANALYSIS
TOXICITY CHARACTERISTIC LEACHING PROCEDURE

AUGUST 5, 1994

PARAMETER	#11 (34327)	#12 (34328)	#13 (34329)	#14 (34330)	#15 (34331)	EPA LIMIT
TCLP METALS (mg/l)[1]						
Arsenic	<0.10	<0.10	<0.10	<0.10	<0.10	5.0
Barium	1.32	1.36	1.47	1.20	1.30	100
Cadmium	0.11	0.14	0.14	0.16	0.16	1.0
Chromium (T)	<0.50	<0.50	<0.50	<0.50	<0.50	5.0
Lead	1.12	1.61	1.95	1.71	0.97	5.0
Mercury	<0.010	<0.010	<0.010	<0.010	<0.010	0.20
Selenium	<0.10	<0.10	<0.10	<0.10	<0.10	1.0
Silver	<0.10	<0.10	<0.10	<0.10	<0.10	5.0

[1]EPA Method 1311

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Brentwood, TN 37024-0786

p\94011

EXHIBIT NO. 3

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPIKE MATRIX RECOVERY

AUGUST 5, 1994

PARAMETER	% RECOVERY (34323)
TCLP METALS	
Arsenic	106%
Barium	90%
Cadmium	93%
Chromium, Total	100%
Lead	94%
Mercury	96%
Selenium	114%
Silver	99%

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EXHIBIT NO. 4

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL SOIL ANALYSIS
CONSTITUENT ANALYSIS (mg/kg)

AUGUST 5, 1994

PARAMETER	PCB[1]	% MOISTURE	TPH[2]
#1 (34332)	17.4	8.3	7280
#2 (34333)	19.1	7.7	6640
#3 (34334)	8.3	8.0	4140
#4 (34335)	7.7	9.3	3480
#5 (34336)	9.4	8.8	3300
#6 (34337)	9.5	9.6	3650
#7 (34338)	<5.0	8.8	4450
#8 (34339)	9.6	8.6	2860
#9 (34340)	10.9	9.9	1770
#10 (34341)	10.4	13.7	2910

WZB

EXHIBIT NO. 4 (Continued)

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL SOIL ANALYSIS
CONSTITUENT ANALYSIS (mg/kg)

AUGUST 5, 1994

PARAMETER	PCB[1]	% MOISTURE	TPH
#11 (34342)	11.1	19.0	2220
#12 (34343)	8.9	19.8	2320
#13 (34344)	10.6	14.1	2170
#14 (34345)	8.1	14.3	2590
#15 (34346)	13.9	21.2	2190

[1]Reported as "Dry Weight" - EPA Method 8080; EPA LIMIT = 5.0
[2]Petroleum Hydrocarbons - EPA Method 418.1

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

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WZB

W.C. BAUMGARTNER & ASSOCIATES, INC.
CONSULTING ENGINEERS
SUITE 208
500 WILSON PIKE CIRCLE
P.O. BOX 766
BRENTWOOD, TENNESSEE 37027
615-373-1572
FAX: 615-370-9292

CHAIN OF CUSTODY

Proj. No: 94011 Client: Schnitzer Steel

Location:

Samplers Name (Print):

Samplers Signature:

Sta. No.	Date	Time (24 Hour Notation)	Comp	Grab	Station Location	No. of Containers	TCLP 8Me	PCB % Moisture	TPH 418.1				Remarks (Include Preservatives Used)
						15	✓	✓	✓				

Intended Analysis

	Relinquished By: (Signature)	Date/Time	Received By: (Signature)		Relinquished By: (Signature)	Date/Time	Received By: (Signature)
1	W.C. Baumgartner II	8/5/94		4			
2				5			
3							

Received for Laboratory By: (Signature) W. C. Baumgartner II 8/12/94

Custody Seals Intact: ☐ Yes ☐ No Temperature: (°C) _____

8/12/94

SCHN00244006

SCHNITZER STEEL INDUSTRIES, INC.

FAX MESSAGE

3200 NW YEON AVENUE
P.O. BOX 10047
PORTLAND, OREGON 97210-0047

PHONE: (503) 224-9900
TELEX: 360144
FAX: (503) 323-2804

DATE: October 18, 1994

TO: Daniel Lee

COMPANY: CSRM

FAX NO.: 503/434-5739

FROM: Tom Zelenka

TOTAL NUMBER OF PAGES (INCLUDING COVER PAGE): 8

MESSAGE:

IF YOU DO NOT RECEIVE THIS TRANSMISSION IN ITS ENTIRETY, OR IF YOU HAVE RECEIVED THIS TRANSMISSION IN ERROR, PLEASE CALL US IMMEDIATELY AT (503) 224-9900. THIS TRANSMISSION MAY INCLUDE CONFIDENTIAL INFORMATION AND IS INTENDED ONLY FOR THE INDIVIDUAL OR ENTITY NAMED ABOVE. ANY PERSON OTHER THAN THE INTENDED RECIPIENT (OR OTHERS AUTHORIZED BY THE INTENDED RECIPIENT) IS PROHIBITED FROM READING, COPYING, OR DISTRIBUTING THIS TRANSMISSION.

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CONSULTING ENGINEERS

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MICHAEL E. TANT, P.E.
J. CLAIBORNE THORNTON, III, P.E.

SUITE 206
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WILLIAM H. TUCKER, III, P.E.
RICHARD L. WILLIAMS, P.E.
T.M. DUBLIN, S.T.

(615) 373-1572
FAX (615) 370-9292

FACSIMILE TRANSMITTAL
FACSIMILE EQUIPMENT: MURATA F-45

DATE: October 17, 1994

TO: Schnitzer Steel Products, Inc.

ATTENTION: Mr. Tom Zelenka

FAX NO.: 503-323-2793

FROM: W.Z. Baumgartner, Jr. P.E.

RE: Sample results

NUMBER OF PAGES 8 INCLUDING COVER LETTER

PLEASE CONTACT US AT (615) 373-1572 IF YOU DO NOT RECEIVE ALL PAGES PROPERLY. THANK YOU.

COMMENTS: Enclosed are the results of the original and confimation analyses.

PROJECT NO. 94011-C

EXHIBIT NO. 1

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL ANALYSIS
TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/l)[1]

SEPTEMBER 26, 1994

PARAMETER	CADMIUM	LEAD
#1 (31856)	0.71	3.76
#2 (34857)	0.40	<0.50
#3 (34858)	0.67	4.96
#4 (34859)	0.50	4.40
#5 (34860)	0.43	4.50
#6 (34861)	0.69	11.4
#6 (Confirmation Analysis) (34910)	—	10.1
#7 (34862)	0.25	2.48
#8 (34863)	0.38	3.80

W2B

EXHIBIT NO. 1 (Continued)

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL ANALYSIS
TOXICITY CHARACTERISTIC LEACHING PROCEDURE (mg/l)[1]

SEPTEMBER 26, 1994

PARAMETER	CADMIUM	LEAD
#9 (34864)	0.58	99.4
#9 (Confirmation Analysis) (34911)	---	119
#10 (34865)	0.46	1.66
#11 (34866)	0.85	88.8
#11 (Confirmation Analysis) (34912)	---	68
#12 (34867)	0.66	6.98

[1]EPA Method 1311

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

p\94011

WZB

EXHIBIT NO. 2

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPIKE MATRIX RECOVERY

SEPTEMBER 26, 1994

PARAMETER	% RECOVERY (34856)
TCLP METALS	
Cadmium	91%
Lead	92%

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

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WZB

EXHIBIT NO. 3

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL ANALYSIS
CONSTITUENT ANALYSIS (mg/kg)

SEPTEMBER 26, 1994

PARAMETER	PCB[1]	% MOISTURE
#1 (34868)	<5.00	58.2
#2 (34869)	91.1	57.3
#3 (34870)	<5.00	61.5
#4 (34871)	<5.00	58.0
#5 (34872)	152	60.2
#6 (34873)	<5.00	48.3
#7 (34874)	<5.00	60.9
#8 (34875)	<5.00	49.2
#9 (34876)	19.7	52.0

WZB

EXHIBIT NO. 3 (Continued)

SCHNITZER STEEL PRODUCTS CO.
PORTLAND, OREGON

SPECIAL ANALYSIS
CONSTITUENT ANALYSIS (mg/kg)

SEPTEMBER 26, 1994

PARAMETER	PCB[1]	% MOISTURE
#10 (34877)	65.0	49.1
#11 (34878)	<5.00	50.1
#12 (34879)	<5.00	46.1

[1]Reported as "Dry Weight" - EPA Method 8080

W. Z. BAUMGARTNER & ASSOCIATES, INC.
Consulting Engineers
P. O. Box 786
Brentwood, TN 37024-0786

p\94011

W.Z. BAUMGARTNER & ASSOCIATES, INC.

Page 1 of 1

CHAIN OF CUSTODY

Proj. No:
Client: Oregon Waste Systems
Location: SCHNITZER STEEL PROD.
Sampler Name (Print): KEITH LAWSON / Kelly IRISH
Sampler Signature: [signature]

SAMPLE Number	Date	Time (24 Hour Notation)	Comp	Grab	Station Location	No. of Containers	Intended Analysis							Remarks (Include Preservatives Used)
1	9-26	10:00			SHREDDER FLUFF PILE									1 GALLON SIZE
2	9-26	10:30			"									"
3	9-26	11:22			"									"
4	9-26	12:50			"									"
5	9-26	13:10			"									"
6	9-26	13:30			"									"
7	9-26	13:50			"									"
8	9-26	14:10			"									"
9	9-26	14:30			"									"
10	9-26	14:50			"									"
11	9-26	15:10			"									"
12	9-26	15:30			"									"

	Relinquished By: (Signature)	Date/Time	Received By: (Signature)		Relinquished By: (Signature)	Date/Time	Received By: (Signature)
1	[signature]	9/26/94		4			
2				5			
3							

Received for Laboratory By: (Signature) W C Bannon II
Custody Seals Intact: ☐ Yes ☐ No Temperature: (°C) ____ 9/27/94

10/11/94 radio
10/4/94