

TABLE 6.1

SOIL ANALYTICAL RESULTS - FORMER CLEANING SHED AREA

Location Consultant Sample Location Sample Depth (metres)	CLEANING SHED AREA						
	CH2M HILL SB23	CH2M HILL SB23	CH2M HILL SB23	CH2M HILL SB23	CH2M HILL SB24	CH2M HILL SB24	CH2M HILL SB24
	0.00-0.10	0.50-0.60	DUP2	2.00-2.10	0.00-0.10	0.00-0.10	0.20-0.30
Analyte	Units	LOR	NEHP Level Monographs (1996)	NSW EPA Guidelines for the Assessment of Service Station Sites (1994)			
Styrene	mg/kg	1			na	na	na
1,1,1,2-Tetrachloroethane	mg/kg	1			na	na	na
1,1,2,2-Tetrachloroethane	mg/kg	1			na	na	na
Tetrachloroethene	mg/kg	1			na	na	na
Toluene	mg/kg	1		1.4	na	na	na
1,2,3-Trichlorobenzene	mg/kg	1			na	na	na
1,2,4-Trichlorobenzene	mg/kg	1			na	na	na
1,1,1-Trichloroethane	mg/kg	1			na	na	na
1,1,2-Trichloroethane	mg/kg	1			na	na	na
Trichloroethene	mg/kg	1			na	na	na
Trichlorofluoromethane	mg/kg	1			na	na	na
1,2,3-Trichloropropane	mg/kg	1			na	na	na
1,2,4-Trimethylbenzene	mg/kg	1			na	na	na
1,3,5-Trimethylbenzene	mg/kg	1			na	na	na
Vinyl chloride	mg/kg	1		1.4	na	na	na
ortho-Xylene	mg/kg	1			na	na	na
meta- & para-Xylene	mg/kg	1			na	na	na
TPH							
C6-C9	mg/kg	10		65	na	na	na
C10-C14	mg/kg	10			na	na	na
C15-C28	mg/kg	50			100	na	340
C29-C36	mg/kg	50			60	na	220
Total C10-C36	mg/kg			1000	160	na	560
BTEX							
Benzene	mg/kg	0.5		1	na	na	na
Toluene	mg/kg	1		1.4	na	na	na
Ethylbenzene	mg/kg	1		3.1	na	na	na

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	CH2M HILL SB23	CH2M HILL SB23	CH2M HILL SB23	CH2M HILL SB23	CH2M HILL SB24	CH2M HILL SB24	CH2M HILL SB24
	0.00-0.10	0.50-0.60	DUP2	2.00-2.10	0.00-0.10	0.20-0.30	
Analyte	Units	LOR	NEHT - Level 1 Monographs (1996)	NSW EPA Guidelines for the Assignment of Service Station Sites (1994)			
4-Chlorotoluene	mg/kg	1			na	na	na
Dibromochloromethane	mg/kg	1			na	na	na
1,2-Dibromo-3-Chloropropane	mg/kg	1			na	na	na
1,2-Dibromomethane (EDB)	mg/kg	1			na	na	na
Dibromomethane	mg/kg	1			na	na	na
1,2-Dichlorobenzene	mg/kg	1			na	na	na
1,3-Dichlorobenzene	mg/kg	1			na	na	na
1,4-Dichlorobenzene	mg/kg	1			na	na	na
Dichlorodifluoromethane	mg/kg	1			na	na	na
1,1-Dichloroethene	mg/kg	1			na	na	na
1,2-Dichloroethane	mg/kg	1			na	na	na
1,1-Dichloroethane	mg/kg	1			na	na	na
cis-1,2-Dichloroethene	mg/kg	1			na	na	na
trans-1,2-Dichloroethene	mg/kg	1			na	na	na
1,2-Dichloropropane	mg/kg	1			na	na	na
1,3-Dichloropropane	mg/kg	1			na	na	na
2,2-Dichloropropane	mg/kg	1			na	na	na
1,1-Dichloropropylene	mg/kg	1			na	na	na
cis-1,3-Dichloropropylene	mg/kg	1			na	na	na
trans-1,3-Dichloropropylene	mg/kg	1		3.1	na	na	na
Ethylbenzene	mg/kg	1			na	na	na
Hexachlorobutadiene	mg/kg	1			na	na	na
Isopropylene	mg/kg	1			na	na	na
p-Isopropyltoluene	mg/kg	1			na	na	na
Methylene chloride	mg/kg	1			na	na	na
Naphthalene	mg/kg	1			na	na	na
n-Propylbenzene	mg/kg	1			na	na	na

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Location		CLEANING SHED AREA							
Consultant		CH2M HILL SB23	CH2M HILL SB23	CH2M HILL SB23	CH2M HILL SB23	CH2M HILL SB24	CH2M HILL SB24	CH2M HILL SB24	CH2M HILL SB24
Sample Location		0.00-0.10	0.50-0.60	DUP2	2.00-2.10	0.00-0.10	0.00-0.10	0.00-0.10	0.20-0.30
Sample Depth (metres)									
Analyte	Units	LOR	NIEM - Level 1 Monographs	NSW EPA Guidelines for the Assessment of Service Station Sites (1994)					
HEAVY METALS									
Arsenic	mg/kg	5	500		19	8	7	15	21
Cadmium	mg/kg	0.5	100		0.5	nd	nd	nd	0.6
Chromium	mg/kg	5	500		14	7	8	49	14
Copper	mg/kg	5	5000		140	140	110	nd	200
Nickel	mg/kg	2	3000		52	18	16	nd	17
Lead	mg/kg	5	1500	300	85	140	150	26	180
Zinc	mg/kg	5	35000		91	93	110	nd	150
Mercury	mg/kg	0.05	75		0.08	0.16	0.09	nd	0.2
Total Cyanide	mg/kg	0.5	2500		na	nd	nd	nd	na
VOCs									
Benzene	mg/kg	0.5			na	na	na	na	na
Bromobenzene	mg/kg	1			na	na	na	na	na
Bromochloromethane	mg/kg	1			na	na	na	na	na
Bromodichloromethane	mg/kg	1			na	na	na	na	na
Bromoform	mg/kg	1			na	na	na	na	na
Bromomethane	mg/kg	1			na	na	na	na	na
n-Butylbenzene	mg/kg	1			na	na	na	na	na
sec-Butylbenzene	mg/kg	1			na	na	na	na	na
ter-Butylbenzene	mg/kg	1			na	na	na	na	na
Carbon Tetrachloride	mg/kg	1			na	na	na	na	na
cis-1,2-Dichloroethene	mg/kg	1			na	na	na	na	na
Chlorobenzene	mg/kg	1			na	na	na	na	na
Chloroethane	mg/kg	1			na	na	na	na	na
Chloroform	mg/kg	1			na	na	na	na	na
Chloromethane	mg/kg	1			na	na	na	na	na
2-Chlorotoluene	mg/kg	1			na	na	na	na	na

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Location
Consultant
Sample Location
Sample Depth (metres)

CLEANING SHED AREA					
CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL
TP19	BH21	BH22	BH22	BH23	BH23
0.00-0.10	0.2	0.2	0.6	0.2	0.6

Analyte	Units	LOR	NEHP Level 1 ¹	NSW EPA
			Monographs	Guidelines for the Assessment of Service Station Sites (1994)
4,4'-DDD	mg/kg	0.1		
Endosulphan: I	mg/kg	0.1		
4,4'-DDT	mg/kg	0.1	1000	
Endosulphan sulphate	mg/kg	0.1		
Methoxychlor	mg/kg	0.1		
PCBs				
Arochlor 1016	mg/kg	1		
Arochlor 1221	mg/kg	1		
Arochlor 1232	mg/kg	1		
Arochlor 1242	mg/kg	1		
Arochlor 1248	mg/kg	1		
Arochlor 1254	mg/kg	1		
Arochlor 1260	mg/kg	1		
Total PCBs			50	

NOTE:

Exceeds NEHP Level 1 (1996)

Exceeds NSW EPA Guidelines for the Assessment of Service Station Sites (1995)

n/a = not applicable

LOR = Laboratory Limits of Reporting

na = not selected for analysis

nd = not detected above laboratory LOR

* = sample required dilution

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Location		CLEANING SHED AREA									
Consultant		CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL
Sample Location		TP19	BH21	BH22	BH22	BH23	BH23	BH23	BH23	BH23	BH23
Sample Depth (metres)		0.00-0.10	0.2	0.2	0.2	0.6	0.2	0.6	0.2	0.6	0.6
Analyte		Units	LOR	NEHP Level 1 Monographs (1996)		NSW EPA Guidelines for the Assessment of Service Station Sites (1994)					
4-Chloro-3-methylphenol	mg/kg	0.5						na	na	na	na
2,4,5-Trichlorophenol	mg/kg	0.5						na	na	na	na
2,4,6-Trichlorophenol	mg/kg	0.5						na	na	na	na
2,4-Dinitrophenol	mg/kg	2						na	na	na	na
4-Nitrophenol	mg/kg	1						na	na	na	na
2,3,4,6-Tetrachlorophenol	mg/kg	1						na	na	na	na
4,6-Dinitro-2-methylphenol	mg/kg	2						na	na	na	na
Penta-chlorophenol	mg/kg	1						na	na	na	na
4,6-Dinitro-2-sec-butylphenol	mg/kg	2						na	na	na	na
Total Phenols	mg/kg							na	na	na	na
OCPs											
HCB	mg/kg	0.1						na	na	na	na
alpha-BHC	mg/kg	0.1						na	na	na	na
gamma-BHC	mg/kg	0.1						na	na	na	na
Heptachlor	mg/kg	0.1		50				na	na	na	na
Aldrin	mg/kg	0.1		50				na	na	na	na
Dieldrin	mg/kg	0.1						na	na	na	na
beta-BHC	mg/kg	0.1						na	na	na	na
deta-BHC	mg/kg	0.1						na	na	na	na
Oxychlorane	mg/kg	0.1						na	na	na	na
Heptachlor epoxide	mg/kg	0.1						na	na	na	na
Endosulphan I	mg/kg	0.1						na	na	na	na
Chlordane-trans	mg/kg	0.1		250				na	na	na	na
Chlordane-cis	mg/kg	0.1						na	na	na	na
trans-Nonachlor	mg/kg	0.1						na	na	na	na
4,4'-DDE	mg/kg	0.1						na	na	na	na
Endrin	mg/kg	0.1						na	na	na	na

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Location Consultant Sample Location Sample Depth (metres)	CLEANING SHED AREA									
	CH2M HILL FP19 0.00-0.10	CH2M HILL BH21 0.2	CH2M HILL BH22 0.2	CH2M HILL BH22 0.6	CH2M HILL BH23 0.2	CH2M HILL BH23 0.6	CH2M HILL BH23 0.2	CH2M HILL BH23 0.6	CH2M HILL BH23 0.2	CH2M HILL BH23 0.6
	na	na	na	na	na	na	na	na	na	na
Analyte	Units	LOR	NEHC - Level 1 Monographs (1996)	NSW EPA Guidelines for the Assessment of Service Station Sites (1994)						
Total Xylenes	mg/kg	3		14	na	na	na	na	na	na
PAHs										
Naphthalene	mg/kg	0.5			na	na	na	na	na	na
Acenaphthylene	mg/kg	0.5			na	na	na	na	na	na
Acenaphthene	mg/kg	0.5			na	na	na	na	na	na
Fluorene	mg/kg	0.5			na	na	na	na	na	na
Phenanthrene	mg/kg	0.5			na	na	na	na	na	na
Anthracene	mg/kg	0.5			na	na	na	na	na	na
Fluoranthene	mg/kg	0.5			na	na	na	na	na	na
Pyrene	mg/kg	0.5			na	na	na	na	na	na
Benzo(a)anthracene	mg/kg	0.5			na	na	na	na	na	na
Chrysene	mg/kg	0.5			na	na	na	na	na	na
Benzo(b)k)fluoranthene	mg/kg	1			na	na	na	na	na	na
Benzo(a)pyrene	mg/kg	0.5	5		na	na	na	na	na	na
Indeno(1,2,3-cd)pyrene	mg/kg	0.5			na	na	na	na	na	na
Dibenz(a,h)anthracene	mg/kg	0.5			na	na	na	na	na	na
Benzo(g,h,i)perylene	mg/kg	0.5			na	na	na	na	na	na
Total PAHs	mg/kg		100	20	na	na	na	na	na	na
Phenols										
Phenol	mg/kg	0.5	42500		na	na	na	na	na	na
2-Chlorophenol	mg/kg	0.5			na	na	na	na	na	na
2-Methylphenol	mg/kg	0.5			na	na	na	na	na	na
3-Methylphenol & 4-Methylphenol	mg/kg	0.5			na	na	na	na	na	na
2-Nitrophenol	mg/kg	0.5			na	na	na	na	na	na
2,4-Dimethylphenol	mg/kg	0.5			na	na	na	na	na	na
2,4-Dichlorophenol	mg/kg	0.5			na	na	na	na	na	na
2,6-Dichlorophenol	mg/kg	0.5			na	na	na	na	na	na

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Consultant		CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL	CH2M HILL
Sample Location		TP19	BH21	BH22	BH22	BH22	BH23	BH23	BH23	BH23	BH23
Sample Depth (metres)		0.00-0.10	0.2	0.2	0.2	0.6	0.2	0.2	0.6	0.6	0.6
Analyte	Units	LOR	NEHF - Level 1 Monographs Guidelines for the Assessment of Service Station Sites (1994)								
Styrene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
1,1,1,2-Tetrachloroethane	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
1,1,2,2-Tetrachloroethane	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
Tetrachloroethene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
Toluene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
1,2,3-Trichlorobenzene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
1,2,4-Trichlorobenzene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
1,1,1-Trichloroethane	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
1,1,2-Trichloroethane	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
Trichloroethene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
Trichlorofluoromethane	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
1,2,3-Trichloropropane	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
1,2,4-Trimethylbenzene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
1,3,5-Trimethylbenzene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
Vinyl chloride	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
ortho-Xylene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
meta- & para-Xylene	mg/kg	1	nd	na	nd	na	na	na	na	na	nd
TPH	mg/kg	10	na	na	na	na	na	na	na	na	na
C6-C9	mg/kg	10	na	na	na	na	na	na	na	na	na
C10-C14	mg/kg	50	na	na	na	na	na	na	na	na	na
C15-C28	mg/kg	50	na	na	na	na	na	na	na	na	na
C29-C36	mg/kg	50	na	na	na	na	na	na	na	na	na
Total C10-C36	mg/kg		na	na	na	na	na	na	na	na	na
BTEX											
Benzene	mg/kg	0.5	nd	na	nd	na	na	na	na	na	na
Toluene	mg/kg	1	nd	na	nd	na	na	na	na	na	na
Ethylbenzene	mg/kg	1	nd	na	nd	na	na	na	na	na	na