Table III-3A: Results of Analyses of Water Samples Taken From MW 1A

Sample (Prefix RI05-)	Units	W027	W044	W040	W041	W053	W062
Date Sampled		27Jul05	8Aug05	13Aug05	13Aug05	21Aug05	26Aug05
As	ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Cd	ppm	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Co	ppm	0.015	0.005	<0.003	<0.003	<0.003	<0.003
Cr	ppm	<0.005	<0.005	0.367	<0.005	<0.005	<0.005
Cu	ppm	0.005	<0.005	0.009	<0.005	<0.005	<0.005
Ni	ppm	0.028	0.014	0.188	<0.005	<0.005	<0.005
Pb	ppm	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zn	ppm	0.018	<0.010	<0.010	<0.010	<0.010	<0.010
PCBs	ppb	0.12	0.047	0.42	<0.020	0.028	<0.020
TPH (lube)	ppm	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH (fuel)	ppm	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table III-3B: Results of Analyses of Water Samples Taken From MW-2

Sample (Prefix RI05-)	Units	W0041	W0015	W028	W042	W039	W055	W064
Date Sampled		9July05	19July05	27Jul05	8Aug05	13Aug05	21Aug05	26Aug05
As	ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Cd	ppm	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Co	ppm	0.007	<0.003	0.041	0.058	0.048	0.032	0.033
Cr	ppm	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cu	ppm	<0.005	<0.005	<0.005	<0.005	0.005	<0.005	<0.005
Ni	ppm	0.038	0.018	0.191	0.266	0.220	0.147	0.142
Pb	ppm	<0.010	<0.010	<0.010	<0.010	0.019	<0.010	<0.010
Zn	ppm	0.012	0.016	0.060	0.138	0.125	0.084	0.088
PCBs	ppb	<0.020	0.021	0.031	0.37	0.09	<0.020	<0.020
TPH (lube)	ppm	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH (fuel)	ppm	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Table III-3C: Results of Analyses of Water Samples Taken From MW-3A

Sample (Prefix RI05-)	Units	W0021	W008	W026	W031	W051	W052	W065
Date Sampled		9July05	19July05	27Jul05	8Aug05	13Aug05	21Aug05	26Aug05
As	ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Cd	ppm	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Co	ppm	0.005	0.008	0.009	0.022	0.030	0.044	0.049
Cr	ppm	<0.005	<0.005	<0.005	<0.005	<0.005	0.013	<0.005
Cu	ppm	<0.005	<0.005	<0.005	<0.005	0.009	<0.005	<0.005
Ni	ppm	0.010	0.008	0.012	0.020	0.022	0.045	0.032
Pb	ppm	<0.010	<0.010	<0.010	<0.010	0.012	<0.010	<0.010
Zn	ppm	0.013	<0.010	0.035	<0.010	0.021	0.017	0.010
PCBs	ppb	<0.020	<0.020	<0.020	0.15	0.050	0.024	<0.020
TPH (lube)	ppm	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH (fuel)	ppm	<1.0	<1.0	<1.0	<1.0	1.0	1.8	1.4

Table III-3D: Results of Analyses of Water Samples Taken From MW-4

Sample (Prefix RI05-)	Units	W0011	W007	W024	W045	W038	W047	W063
Date Sampled		9July05	19July05	27Jul05	8Aug05	13Aug05	21Aug05	26Aug05
As	ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Cd	ppm	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Co	ppm	0.063	0.051	0.055	0.066	0.073	0.052	0.041
Cr	ppm	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cu	ppm	0.009	<0.005	<0.005	<0.005	<0.005	0.009	0.014
Ni	ppm	0.074	0.064	0.067	0.080	0.092	0.078	0.059
Pb	ppm	<0.010	<0.010	<0.010	<0.010	0.022	<0.010	0.015
Zn	ppm	0.038	0.028	0.027	0.023	0.037	0.017	0.014
PCBs	ppb	<0.020	<0.020	0.036	0.040	0.041	<0.020	0.041
TPH (lube)	ppm	<1.0	<1.0	<1.0	-	<1.0	<1.0	<1.0
TPH (fuel)	ppm	<1.0	<1.0	<1.0	-	1.5	1.2	<1.0

Table III-3E: Results of Analyses of Water Samples Taken From MW-5A

Sample (Prefix RI05-)	Units	W049	W057	W059
Date Sampled		13Aug05	21Aug05	26Aug05
As	ppm	<0.003	<0.003	<0.003
Cd	ppm	<0.001	<0.001	<0.001
Co	ppm	0.020	0.044	0.046
Cr	ppm	<0.005	<0.005	<0.005
Cu	ppm	0.007	0.007	0.008
Ni	ppm	0.036	0.044	0.042
Pb	ppm	<0.010	<0.010	<0.010
Zn	ppm	0.286	0.045	0.045
PCBs	ppb	<0.020	<0.020	0.15
TPH (lube)	ppm	<1.0	<1.0	<1.0
TPH (fuel)	ppm	<1.0	1.2	1.0

Table III-3F: Results of Analyses of Water Samples Taken From MW-5B

Sample (Prefix RI05-)	Units	W0031	W009	W030	W043	W048	W056	W060
Date Sampled		9Jul05	19Jul05	27Jul05	8Aug05	13Aug05	21Aug05	26Aug05
As	ppm	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Cd	ppm	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Co	ppm	0.058	<0.003	0.019	0.019	0.018	0.022	0.013
Cr	ppm	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Cu	ppm	<0.005	<0.005	<0.005	<0.005	0.006	<0.005	<0.005
Ni	ppm	0.132	0.010	0.051	0.038	0.037	0.047	0.035
Pb	ppm	<0.010	<0.010	<0.010	<0.010	0.014	0.011	<0.010
Zn	ppm	0.048	<0.010	0.035	0.051	0.071	0.038	<0.010
PCBs	ppb	0.051	0.11	0.17	0.15	<0.020	<0.020	0.14
TPH (lube)	ppm	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
TPH (fuel)	ppm	<1.0	2.0	<1.0	1.5	1.1	<1.0	1.2

Table III-3G: Results of Analyses of Water Samples Taken From MW-6

Sample (Prefix RI05-)	Units	W0061	W046	W054
Date Sampled		9July05	13Aug05	22Aug05
As	ppm	<0.003	<0.003	<0.003
Cd	ppm	<0.001	<0.001	<0.001
Co	ppm	0.017	<0.003	<0.003
Cr	ppm	<0.005	<0.005	<0.005
Cu	ppm	<0.005	<0.005	<0.005
Ni	ppm	0.103	0.006	<0.005
Pb	ppm	<0.010	<0.010	<0.010
Zn	ppm	<0.010	<0.010	<0.010
PCBs	ppb	<0.020	0.20	0.07
TPH (lube oil)	ppm	<1.0	<1.0	<1.0
TPH (fuel)	ppm	<1.0	<1.0	<1.0

2. Soil Samples

The soil monitoring points have been clearly marked this year with 4 stakes and rope to ensure that samples will be taken from the same area each year. A single soil monitoring location served wells 1A/1B, 3A/3B and 5A/5B. The soil was sampled twice during the season to give the results shown in Table III-4.

Table III-4 : Results of Analyses of Soil Samples Taken From Close to the Monitoring Wells at the Tier II Landfill Site

Location	Unit	MW 1		MW 2		MW 3	
Sample Prefix RI05-		054/1009	333/1064	055/1011	334/1106	053/1008	336/1062
Arsenic	ppm	<1.0	<1.0	1.1	1.2	<1.0	<1.0
Cadmium	ppm	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	ppm	33	39	40	33	37	33
Cobalt	ppm	9.4	7.1	10	9.5	11	10.6
Copper	ppm	64	42	74	59	58	43
Lead	ppm	<10	<10	<10	<10	32	30
Nickel	ppm	66	37	52	45	48	41
Zinc	ppm	57	42	49	45	69	82
PCBs	ppb	12	5	27	<3	168	110
TPH (lube)	ppm	<40	<40	<40	<40	400	540
TPH (fuel)	ppm	<40	<40	<40	<40	180	870

Location	Unit	MW 4		MW 5		MW 6	
Sample Prefix RI05-		052/1007	338/1107	051/1006	337/1091	040/1005	335/1065
Arsenic	ppm	1.0	<1.0	1.3	1.6	1.3	1.0
Cadmium	ppm	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	ppm	43	37	70	50	36	44
Cobalt	ppm	14.0	13.8	25	18.8	6.1	6.9
Copper	ppm	52	56	118	93	63	72
Lead	ppm	10	<10	20	35	<10	<10
Nickel	ppm	58	61	106	80	30	31
Zinc	ppm	57	57	103	83	37	41
PCBs	ppb	12	15	132	63	27	<3
TPH (lube)	ppm	<40	<40	180	175	<40	<40
TPH (fuel)	ppm	1230	500	90	90	50	70

3. *Discussion of Analytical Results*

The objective of the monitoring wells and associated soils program is to establish baseline values. Any increases in the levels of these parameters might be then attributed to failure of the landfill to have contained the contaminants placed within it. Unfortunately the Tier II landfill site is contaminated at levels that one might expect at an industrial site and the variability of some of these initial levels is larger than desirable.

a) Metals

For the soil samples, arsenic, cadmium and lead in 2004 and 2005 all gave low results as summarized in Table III-5. No cadmium was detected in any of the 28 samples while the maximum arsenic concentration found was only twice the detection limit. Lead contamination was observed in 11 of the samples but the highest level was only 63 ppm.

All the other five metals were detected in all 28 samples. Table III-5 shows that for chromium, cobalt, and zinc all results show reasonable precision (standard deviation) and range with all results well below the DCC. One nickel result and two copper results were above the DCC or Tier II level of 100 ppm. Because there is so much rusty material and small particles of metal around, the soil samples are heterogeneous and therefore variable results are expected for some elements. These high levels of copper and nickel were associated with monitoring point 5 this year.

Table III-5: Summary of Elemental Levels at the 28 Soil Samples Collected From the Tier II Landfill Soil Monitoring Points in 2004 and 2005 (ppm)

	Arsenic	Cadmium	Chromium	Cobalt
Mean	1.1	<1.0	40.0	11.1
Standard Deviation	0.4	0.0	9.4	4.9
Range	<1.0-2.0	<1.0	32-70	5.6-25
# samples > det limit	22	0	28	28
	Copper	Lead	Nickel	Zinc
Mean	61	13.4	48	57
Standard Deviation	19	14.0	19	18
Range	35-118	<10-63	24-106	33-103
# samples > det limit	28	11	28	28

The water results for metals are summarized in Table III-6. Of the eight elements, arsenic, cadmium, chromium and lead were only detected in a few samples. Where they were detected, values were low with the exception of one sample which contained a high level of chromium; chromium was only detected in two samples. The metals are analysed as the total metal (particulate and dissolved) in these samples. Therefore any sediment in the sample may contribute to the metal levels. The water containing the high chromium value was cloudy with floating solid particles. It is expected that as the monitoring wells stabilize, they will yield water samples without significant solid fractions.

In the following discussion it should be remembered that the surface water data is for dissolved metals whereas the monitoring well data is for total metals. For copper, all values were within the normal surface water range and copper was only detected in 26 of the 86 samples above its detection limit of 0.005 ppm. For zinc, 23 samples gave results outside of the normal range but the average level was low with many samples containing less than the detection limit. For cobalt, 22 of the 86 samples analysed contained levels higher than the normal surface water range of 0.010-0.023 ppm. However, the mean value was only slightly higher than the normal surface water mean concentrations; there were no high outliers. For nickel, 12 of the 86 samples gave higher levels than expected for surface waters. Results were generally elevated and variable. For each of these elements for a particular well there was often variability with time. Wells 2 and 4 generally contained higher levels of cobalt and nickel.

Table III-6: Summary of Elemental Levels in the 86 Water Samples Collected From the Tier II Landfill Monitoring Wells in 2004 and 2005 (ppm)

	Arsenic	Cadmium	Chromium	Cobalt
Mean*	<0.003	<0.001	<0.005	0.017
Standard Deviation*	0.000	0.000	0.000	0.019
Range	<0.003-0.05	<0.001	<0.005-0.367	<0.003-0.073
# samples > det limit	1	0	2	51
	Copper	Lead	Nickel	Zinc
Mean*	0.006	0.006	0.037	0.021
Standard Deviation*	0.006	0.003	0.042	0.027
Range	<0.005-0.033	<0.010-0.022	<0.010-0.091	<0.010-0.286
# samples > det limit	26	7	71	41

* Excluding outliers

b) PCBs

PCB levels in the soil samples at the monitoring points ranged from <3 to 168 ppb this year. In 2004 the range was 9 to 490 ppb while in 2003 the range was 45 to 520 ppb. These levels are below the cleanup standard of 1.0 ppm (1000 ppb) and at levels expected at this location at the site; PCBs can be found at low levels in all surface soil near the station summit. The highest levels were found at the soil point adjacent to well 3 which in previous years has also yield high results.

Given the level of PCBs in the nearby soil, any soil contamination in the water is likely to give measurable PCB levels in the water. The water cannot be filtered since this process would remove the PCBs from the water. In the laboratory, the samples were allowed to stand for at least 24 hours and then the water to be analysed was carefully decanted. However several samples contained soil particles floating on the surface and, in others, colloidal material was present. Thus, the results where PCBs were found in the water may well be a measure of the soil contamination rather than actual levels in the water. This is particularly likely since PCB molecules tend to partition on to solid surfaces and to absorb on to particles rather than to dissolved in water.

PCB levels in the monitoring well water samples were more prevalent this year than in 2004. Last year, of the 46 samples analysed only 8 contained measurable levels of PCBs, although these levels ranged up to 0.54 ppb with an average of 0.292 ppb. This year 23 of the 40 water samples analysed contained measurable levels of PCBs. These levels were as high as 0.420 ppb with an average of 0.169 ppb. The problem of contamination is illustrated by samples W040 and W041 which were duplicates taken one after the other from Well 1 on 13 August 2005. The first sample had floating soil particles and a measured PCB level of 0.42 ppb while the second was clear and contained no detectable PCBs; levels of chromium and nickel followed this same pattern.

The monitoring wells will again be sampled during the 2006 season. It is hoped that wells will have stabilized and that less particulate and colloidal material will be present. This is likely since all the major disruption due to the construction of the landfill in 2005 will be over though heavy equipment will still be using the roadway near the wells. The PCB results are particularly important since these monitoring wells are to be used to confirm that no PCBs are escaping from the Tier II landfill over the period of many years. Particular care will be taken in sampling the wells to try to eliminate soil contamination.

c) TPH

TPH was detected both as lubricating oil and as fuel oil in some of the soil samples again this year. In 2004 both lubricating oil and fuel oil were found at Well #1A above the landfill but this year none was detected in this soil. The soils which contained TPH were from wells 3 through to well 6, with higher levels in 3 and 4 which are close to the landfill. Clearly this site has been contaminated with various fuel and lubricating oils and levels of these can be found in soils near to the summit.

Water samples obtained from the monitoring wells contained low levels of TPH. TPH was only detected in 10 of the 39 samples analysed. The fuel in these samples was found to be a mixture of gasoline and diesel fuel. These results are consistent with those found in previous years, however, this year no TPH was found in the wells above the landfill. The fuel is only found in the wells (3, 4, 5A and 5B) below the landfill. It is likely that this contamination will gradually disappear as the fuel is leached from the soil and the plume should be seen passing through well 6 in the coming years. This water in the active layer will have to pass through the imploded tank drainage barrier to reach the sea and therefore does not pose an environmental problem.

D. Airstrip Landfill Monitoring Program

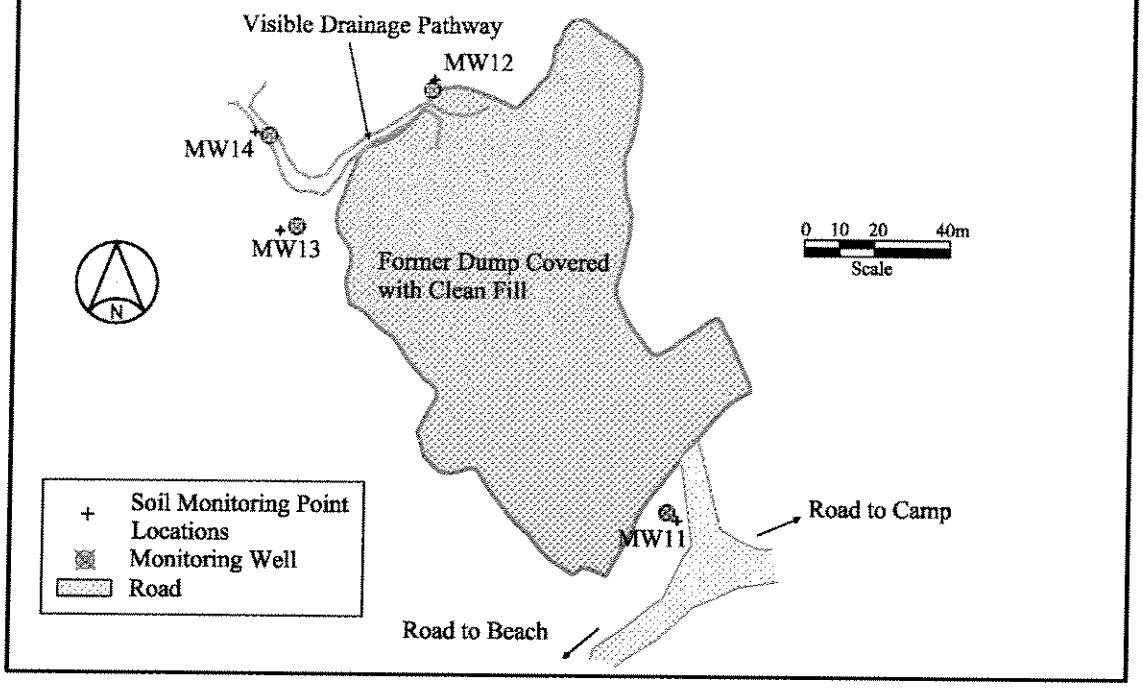
The remediation of the airstrip dump was completed in 2003 and three monitoring well sites partially developed. In 2004, a fourth well was added and each well and associated soil monitoring point sampled and analysed. The soil sample locations were slightly different than in 2003 and as a result the analytical results were different. For the eight elements of the DEW Line Cleanup criteria, results were similar to those obtained in 2003. However, no TPH was detected in 2004 in the 4 soil samples and only trace amounts of PCBs. This was due to the fact that the soil samples were taken from outside of the narrow drainage channels in 2004

This year one water sample and two soil samples were collected. The soil monitoring points have been clearly marked with 4 stakes and rope to ensure that samples are taken from the same area each year (Photograph III-10). However, it should be noted that the drainage channel for MW12, MW 13 and MW14 is very narrow and the staked area straddles the channel. The positions of the 4 wells are shown on Map III-2. Results of the analyses are shown in Table III-7 and Table III-8 for water and soil respectively.

Monitoring well 11 was dry this year. For the other 3 wells, all results for the water samples are very low. Only nickel and zinc were detected this year. The ranges for the three metals detected in the well water over the last two years are copper <0.005-0.005, nickel <0.005-0.027, and zinc <0.010-0.026.

For the soil samples this year, TPH (lubricating oil and grease) was high in MW 12 indicating that the sample came from within the channel close to the landfill. However, the PCB level in this sample was low. In contrast no TPH was found in the other soil samples but PCBs were found at higher concentrations than expected. The PCB level in MW14 furthest from the landfill of 60 ppb and 18 ppb in the two samples were surprisingly high given that very low levels had previously been found at this location. The levels of 17 ppb and 52 ppb found at MW13 are at levels that might be expected. The results show the variability of PCB levels probably due to their positions relative to the very narrow drainage channel. Metal levels in the soil samples showed good consistence both from the two samplings and from previous years. The only exception was a high lead value of 114 ppm found in 2004 in one of the samples from MW 11, the monitoring point nearest the airstrip. This is likely due to localized contamination from leaded gasoline and was not found this year.

Map III-2: Monitoring Well and Soil Monitoring Sample Locations at the Airstrip Landfill



Photograph III-10: Collecting Soil at the Soil Monitoring Point Next to Well 13 at the Airstrip Landfill: The Soil Monitoring Point is Marked by the Orange Stakes

Table III-7: Results of Analyses of Water Samples Taken From the Monitoring Wells at the Airstrip Landfill

Location	Unit	MW 11	MW12	MW13	MW14
Sample Prefix RI05		Well Dry	W036	W037	W033
Arsenic	ppm	-	<0.003	<0.003	<0.003
Cadmium	ppm	-	<0.001	<0.001	<0.001
Cobalt	ppm	-	<0.003	<0.003	<0.003
Chromium	ppm	-	<0.005	<0.005	<0.005
Copper	ppm	-	<0.005	<0.005	<0.005
Nickel	ppm	-	<0.005	0.027	0.010
Lead	ppm	-	<0.010	<0.010	<0.010
Zinc	ppm	-	<0.010	0.026	0.011
PCBs	ppb	-	<0.020	<0.020	<0.020
TPH (total)	ppm	-	<1.0	<1.0	<1.0

Table III-8: Results of Analyses of Soil Samples Taken From Close to the Monitoring Wells at the Airstrip Landfill

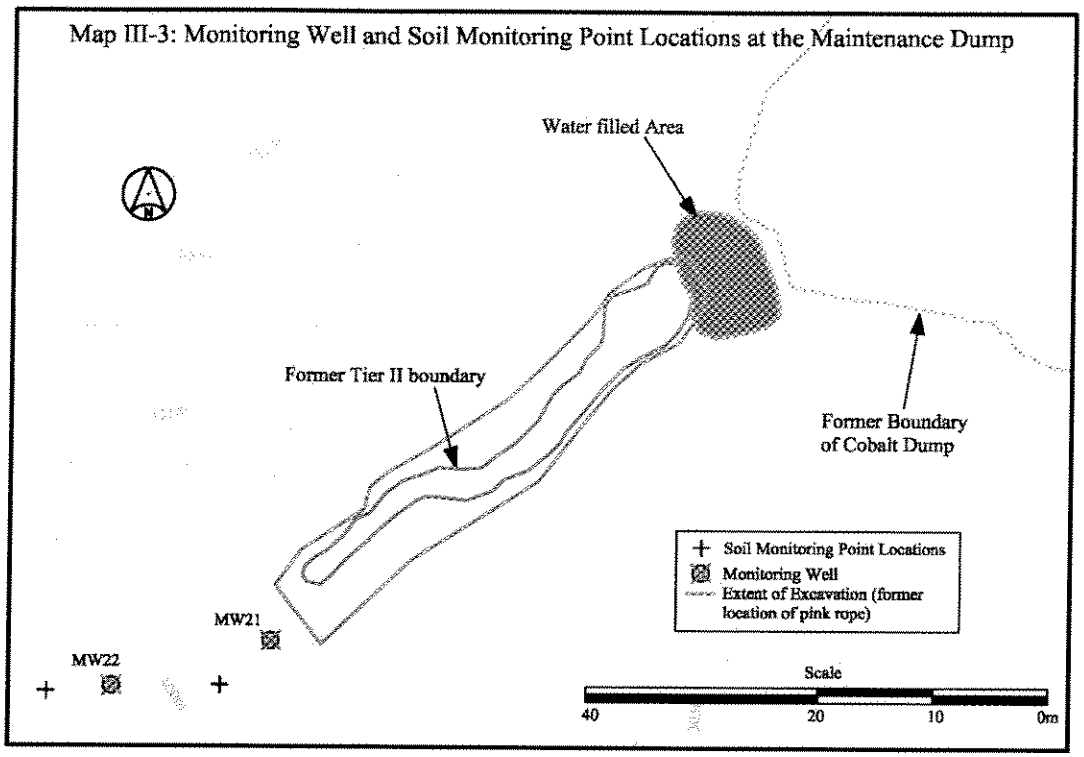
Location	Unit	MW 11		MW12		MW13		MW14	
Sample Prefix RI05		039/1004	340/1063	033/1001	350/1114	034/1002	358/1116	035/1003	359/1115
Arsenic	ppm	1.1	<1.0	1.4	1.1	2.3	2.8	1.1	1.1
Cadmium	ppm	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	ppm	46	41	43	48	45	48	45	43
Cobalt	ppm	16	15.6	23	21	11	13.8	17	15.6
Copper	ppm	69	75	65	75	71	85	83	75
Lead	ppm	<10	16	31	<10	14	26	14	<10
Nickel	ppm	65	72	66	103	59	68	86	85
Zinc	ppm	65	79	122	102	143	210	167	114
PCBs	ppb	13	13	<3	5	17	52	60	18
TPH (lube)	ppm	<40	<40	8310	3220	<40	<40	<40	<40
TPH (fuel)	ppm	<40	<40	<40	<40	<40	<40	<40	<40

E. Maintenance Dump Monitoring Program

The remediation of the maintenance dump was completed this year as reported in Chapter II Section H. Two monitoring wells MW 21 and MW 22 were installed and two soil monitoring points established as shown on Map III-3. One water sample was collected from MW 21 on 8 August 2005. MW 22 was constructed on 5 September 2005 but was dry when sampling was attempted on 6 September. Soil samples were collected once from each of the soil sampling locations.

Results of the analyses are shown in Tables III-9 and III-10 for water and soil respectively.

For the water sample, all eight elements were present at concentrations below the analytical detection limits. The metal concentrations in the two soil samples were at levels that are typical of the site. The zinc levels of 105 ppm and 211 ppm were slightly higher than normal. No TPH was found in either sample. The PCB levels of 9 ppb and 39 ppb are in the range one would expect at this location near the summit.



Photograph III-11: Collecting Water at the Maintenance Dump Newly Installed Monitoring Well After Purging

Table III-9: Results of Analyses of Water Samples Taken From the Monitoring Wells at the Maintenance Dump

Location	Units	MW 21	MW 22
Sample Prefix RI05-		W034	Well dry
Arsenic	ppm	<0.003	-
Cadmium	ppm	<0.001	-
Cobalt	ppm	<0.003	-
Chromium	ppm	<0.005	-
Copper	ppm	<0.005	-
Nickel	ppm	<0.005	-
Lead	ppm	<0.010	-
Zinc	ppm	<0.010	-
PCBs	ppb	<0.020	-
TPH (total)	ppm	<1.0	-

Table III-10: Results of Analyses of Soil Samples Taken From Close to the Monitoring Wells at the Maintenance Dump

Location	Units	MW 21	MW 22
Sample Prefix RI05-		339/1112	1231/1235
Arsenic	ppm	1.1	<1.0
Cadmium	ppm	<1.0	<1.0
Chromium	ppm	47	41
Cobalt	ppm	15.0	23
Copper	ppm	60	75
Lead	ppm	<10	13
Nickel	ppm	72	79
Zinc	ppm	105	211
PCBs	ppb	9	39
TPH (lube)	ppm	<40	<40
TPH (fuel)	ppm	<40	<40

F. Barrels and Their Contents

This year the site was scoured for barrels and as a result 31 samples of liquid materials were sampled and analysed early this year (Photographs III-12 and III-13). The first two barrels in Tables III-11 and III-12, J001 and J002 originated from equipment in the Quonset huts in the area beyond the furniture dump near to the downed antennae. The oil was transferred from the generators into two 5 gallon pails from which the samples were taken. The material was found to have a high chlorine content and was therefore taken for off site disposal. Sample J003 was from the drum outside the laboratory which was used for solvent waste disposal. It also contained high chlorine levels and was therefore taken for off site disposal. Samples J004 and J005 were obtained from barrels found below the north slope dump. The contents were identified as water and were therefore emptied on to the land at the site. Samples J011, J012 and J057 were obtained from barrels located near the old water lake in the area above the cliff leading to the S1/S4 beach area. The first two barrels were found to contain fuel oil suitable for on site incineration, while J057 contained water. Sample numbers J013, J015-017, J020-023, J050, and J051 were all from the PCL dump. J013 which contained a trace (2.1 ppm) of PCBs, J021 and J023 which were identified as leaded gasoline and J051 which contained chlorinated solvent, were shipped south for disposal while the others were incinerated on site. Samples J018 and J019 were from Radio Hill. J018 contained fuel oil suitable for incineration while J019 was identified as water. J024 which was found near the furniture dump was found to contain only water. J025 and J026 were from below the old Officer's Mess. J025 contained leaded gasoline while J026 contained fuel oil suitable for incineration. J052-J054 and J062 were found in the S1/S4 valley area. J052 and J053 were emptied on site as they contained only water whereas the contents of the other two where incinerated on site. J055 and J059 were from the imploded tank drainage pathway. J055 contained fuel oil suitable for incineration while J059 was identified as water. J056 was from the north east side of the airstrip and its contents were incinerated on site. J061 was from the beach area and contained leaded gasoline and was therefore shipped off site.

Table III-11: Description of Barrels and Description and Identity of Barrel Contents

Barrel #	Amount	Description of Contents	Identity of Barrel Contents
J001	small can	brown oil	lubricating oil and grease
J002	small can	brown oil	lubricating oil and grease
J003	½ full	two phase clear liquid	laboratory waste solvent
J004	½ full	clear liquid	water
J005	5 gall. bucket	clear liquid	water
J011	7/8 full	2 phases: top yellow liquid; bottom clear liquid	top: fuel oil; bottom: water
J012	7/8 full	yellow liquid	fuel oil
J013	¼ full	black thick liquid and solid	fuel oil and black solid
J015	½ full	black thick liquid and solid	fuel oil and black solid
J016	-	2 phases top: black viscous liquid; bottom: brown liquid	top: fuel oil and lubricating oil & grease 1:3; bottom: water
J017	-	2 phases: top: black thick liquid; bottom clear brown liquid	top: fuel oil; bottom: 50-100% ethylene glycol
J021	-	pink liquid	gasoline
J022	-	black thick liquid	fuel oil and lubricating oil & grease 1:1
J023	-	clear liquid	gasoline
J018	¾ full	light green liquid	fuel oil
J019	-	clear liquid and sediment	water
J024	1/3 full	murky liquid and sediment	water
J025	1/5 full	2 phases: top: brown liquid; bottom: clear yellow liquid	top: gasoline ; bottom: water
J026	½ full	clear liquid and sediment	fuel oil
J020	full	2 phases: top: black oil; bottom: clear	top: fuel oil: lubricating oil & grease 1:8; bottom: water
J050	¾ full	2 phases: top: black oil; bottom: clear	top: fuel oil: lubricating oil & grease 1:1; bottom: water
J051	¼ full	black oil	lubricating oil & grease

J052	¾ full	clear liquid with an oily film	water with a trace of oil
J053	½ full	clear liquid and sediment	rusty water
J054	½ full	2 phases: top: black oil; bottom: brown liquid	top: fuel oil: lubricating oil & grease 1:15; bottom: 20-50% ethylene glycol
J055	-	clear liquid	gasoline: fuel oil 1:2
J056	-	2 phases: top: brown liquid; bottom: orange liquid	top: fuel oil; bottom: rusty water
J057	-	brown liquid	rusty water
J059	-	clear liquid and sediment	water
J061	¼ full	2 phases: top: clear pink liquid; bottom: brown liquid	top: leaded gasoline; bottom: rusty water
J062	1/3 full	2 phases: top: brown oil; bottom: clear liquid	top: lubricating oil & grease; bottom: water

Table III-12: PCB, Chlorine, and Metal Concentrations of Barrel Contents

Barrel #	PCBs	Chlorine	Chromium	Lead	Cadmium	Disposal Option
	ppm[a]					
J001	<2.0	4740	<10	<100	<2	ship south
J002	<2.0; <2.0	4700	<10	<100	<2	ship south
J003	< 2.0	c	nd	nd	nd	ship south
J004	water	water	water	water	water	on land[b]
J005	water	water	water	water	water	on land[b]
J011	<2.0	<1000	<10	<100	<2	incinerate
J012	<2.0	<1000	<10	<100	<2	incinerate
J013	2.1	is	<10	<100	<2	ship south
J015	<2.0	is	<10	<100	<2	incinerate
J016	<2.0	<1000	<10	<100	<2	incinerate
J017	<2.0	is	<10	<100	<2	incinerate
J021	<2.0	<1000	<10	171	<2	ship south

Barrel #	PCBs	Chlorine	Chromium	Lead	Cadmium	Disposal
J022	<2.0	<1000	<10	<100	<2	incinerate
J023	<2.0	<1000	<10	176	<2	ship south
J018	<2.0	<1000	<10	<100	<2	incinerate
J019	water	water	water	water	water	on land [b]
J024	water	water	water	water	water	on land [b]
J025	<2.0	<1000	<10	2300	<2	ship south
J026	<2.0	<1000	<10	<100	<2	incinerate
J020	<2.0	<1000	<10	<100	<2	incinerate
J050	<2.0	<1000	<10	<100	<2	incinerate
J051	<2.0	13000	<10	<100	<2	ship south
J052	water	water	water	water	water	water
J053	water	water	water	water	water	water
J054	<2.0	<1000	<10	<100	<2	incinerate
J055	<2.0	<1000	<10	<100	<2	incinerate
J059	water	water	water	water	water	water
J056	<2.0	is	<10	<100	<2	incinerate
J057	water	water	water	water	water	water
J061	<2.0	<1000	<10	1840	<2	ship south
J062	<2.0	<1000	<10	<100	<2	incinerate

a Top phase where there are two phases present
b Water disposal by dumping on land at least 30 m from natural water courses
c Sample known to contain dichloromethane
is Insufficient sample