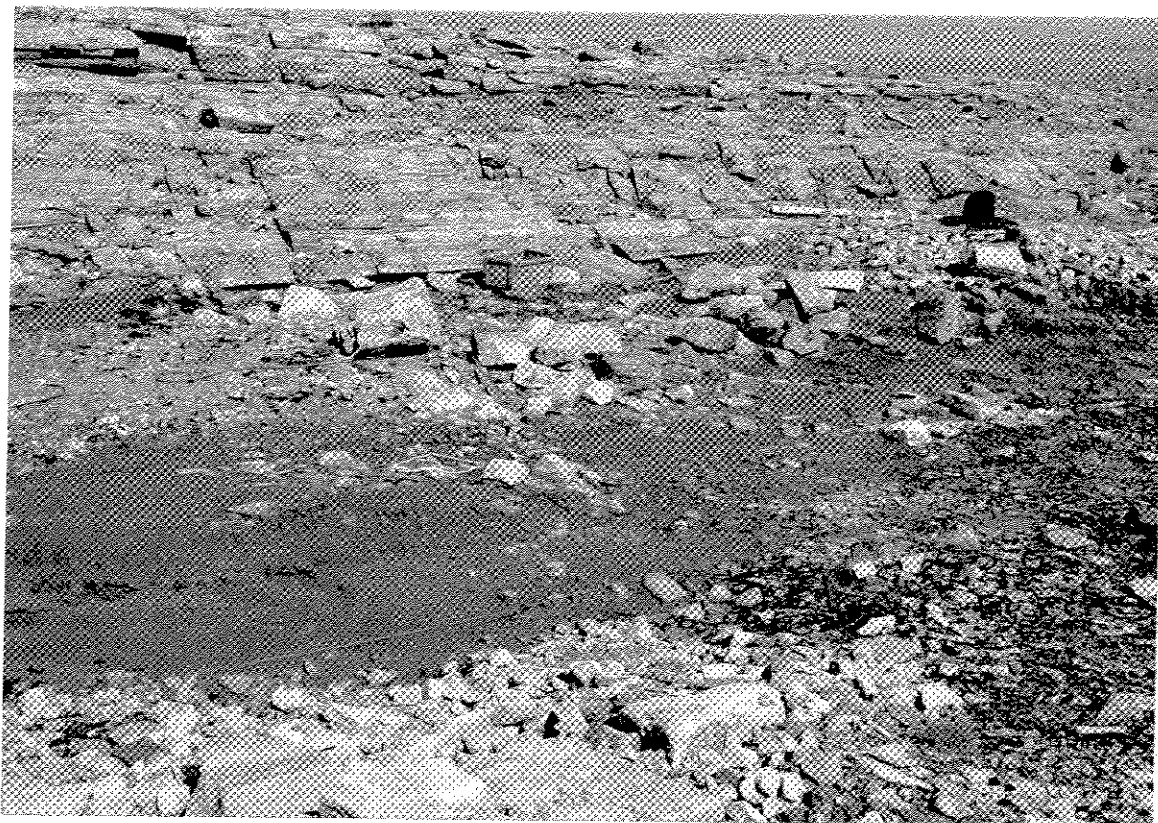




Photograph II-16: Excavating the Debris From the PCL Dump



Photograph II-17: The Drainage Pathway of the PCL Dump Was Long and Narrow With Little Soil That Could be Excavated



Table II-3: PCB Concentrations in Soil Samples Collected Prior to Excavation at the PCL Dump

Sample (prefix RI05-)	Sampling Date	PCB Concentration (ppm)
041	29-Jun-05	5.0
042	29-Jun-05	3.2
043	29-Jun-05	<1.0
044	29-Jun-05	1.9
045	29-Jun-05	1.1
074	03-Jul-05	<1.0
075	03-Jul-05	<1.0
076	03-Jul-05	<1.0
077	03-Jul-05	<1.0

F. North Slope Dump

1. Background

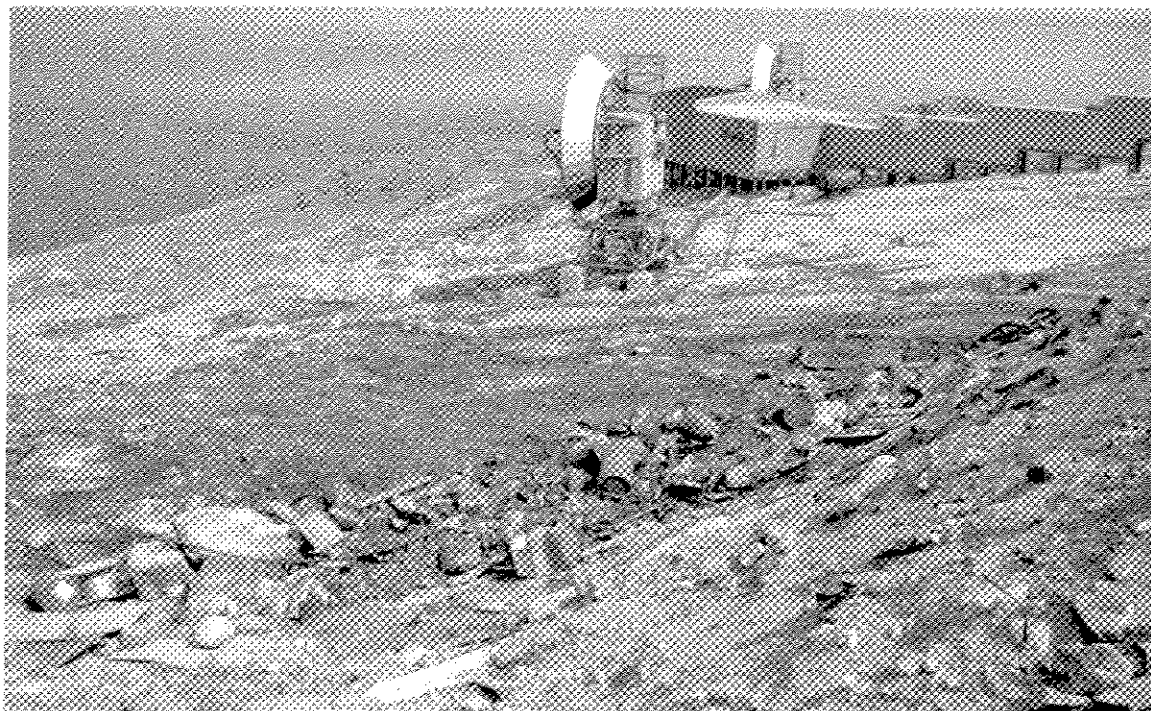
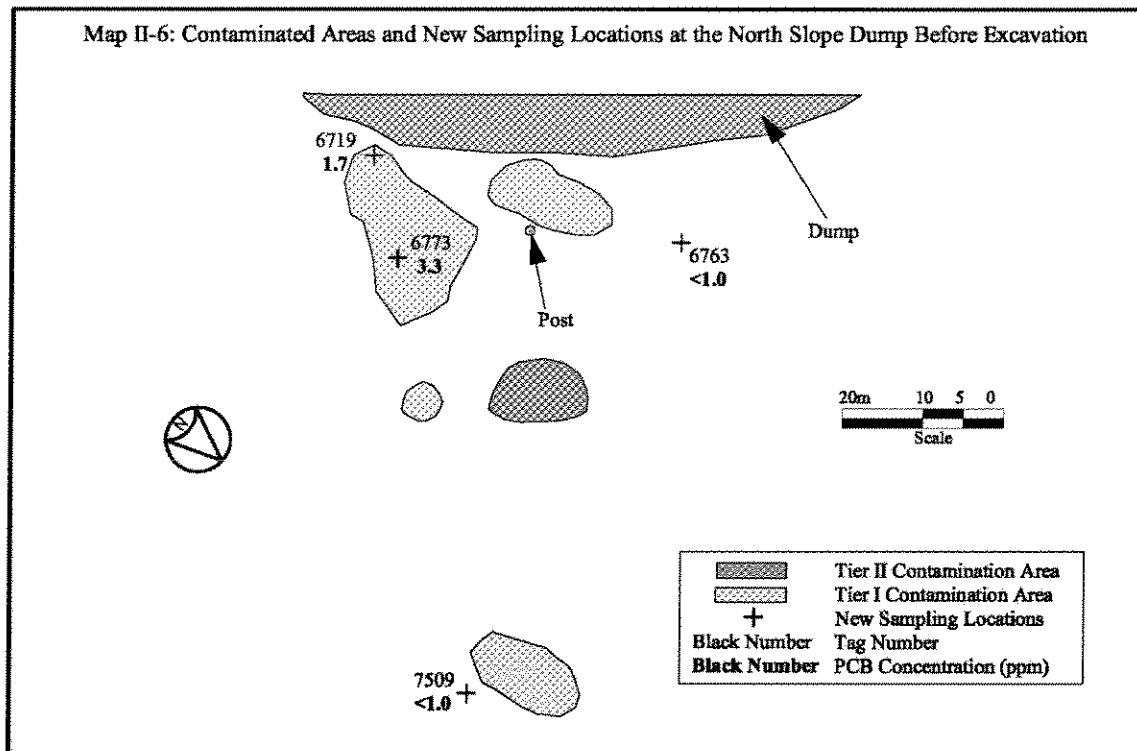
This dump which lies beside the road to the main camp was delineated in 1994. It contained a small area contaminated with copper and some debris and thin Tier I soil patches as shown on Map II-6. No work has been carried out at this location since 1994.

2. Soil Excavation

The small area contaminated with copper was excavated to bedrock and the resultant soil taken to the Tier II landfill. Four additional samples were taken in the PCB contaminated areas and these areas were then roped accordingly. Results given in Table II-4 and Map II-6 show low PCB levels which is consistent with the 1994 work. Any loose soil was then scraped and removed to the landfill. Remaining debris was scraped and placed at the toe of the dump (Photograph II-18). It was then covered with clean fill.

Table II-4: PCB Concentrations in Soil Samples Collected Prior to Excavation at the North Slope Dump

Sample (prefix RI05-)	Tag Number	Sampling Date	PCB Concentration (ppm)
046	6719	29-Jun-05	1.7
047	6773	29-Jun-05	3.3
048	6763	29-Jun-05	<1.0
049	7509	29-Jun-05	<1.0



Photograph II-18: Debris in the North Slope Dump Was Scraped to the Toe Of the Dump After the Contaminated Soil Was Excavated and Removed



G. DND Helipad

1. Background

In 1999, the road system around the camp was investigated for PCB contamination. One area was found near the road leading to the DND Helipad. The area was delineated in 2000 and the small CEPA area excavated in 2003.

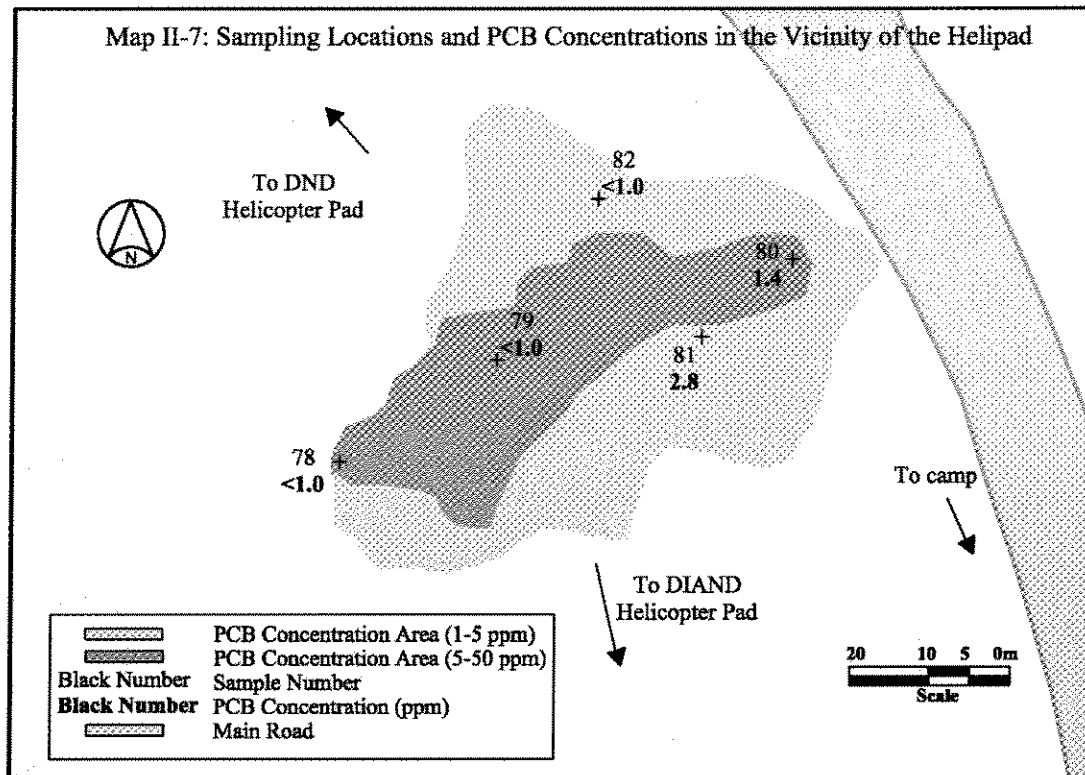
2. Soil Excavation

Initial work this year involved the roping off of the Tier I and Tier II areas and Tier 2 levels were roped off. Additional sampling was required to re-establish the Tier I and Tier II soils at this location. The locations of these sampling points have been superimposed on the map of the delineated areas established previously as shown on Map II-7. Analytical results are given in Table II-5. The DND helipad area was then excavated for Tier I and Tier II soils by scraping to bedrock (Photograph II-19); no confirmatory samples were necessary. Clean fill was then placed in the excavated area to allow vehicular access.

Table II-5: PCB Concentrations in Additional Delineation Soil Samples at the DND Helipad Area

Sample (prefix RI05-)	Sampling Date	PCB Concentration (ppm)
078	03-Jul-05	<1.0
079	03-Jul-05	<1.0
080	03-Jul-05	1.4
081	03-Jul-05	2.8
082	03-Jul-05	<1.0





Photograph II-19: Excavating the PCB Contaminated Soil at the DND Helipad Site



H. Maintenance Dump

1. Background

This dump contains a small well defined drainage pathway which is contaminated with cobalt at levels less than ten times the DEW Line Clean Up Criteria of 50 ppm. The drainage pathway is approximately 50 m long. The area was delineated in 1994 and additional samples taken in 1999. Exposed debris from the dump and near a small pond at its toe were removed in 2001.

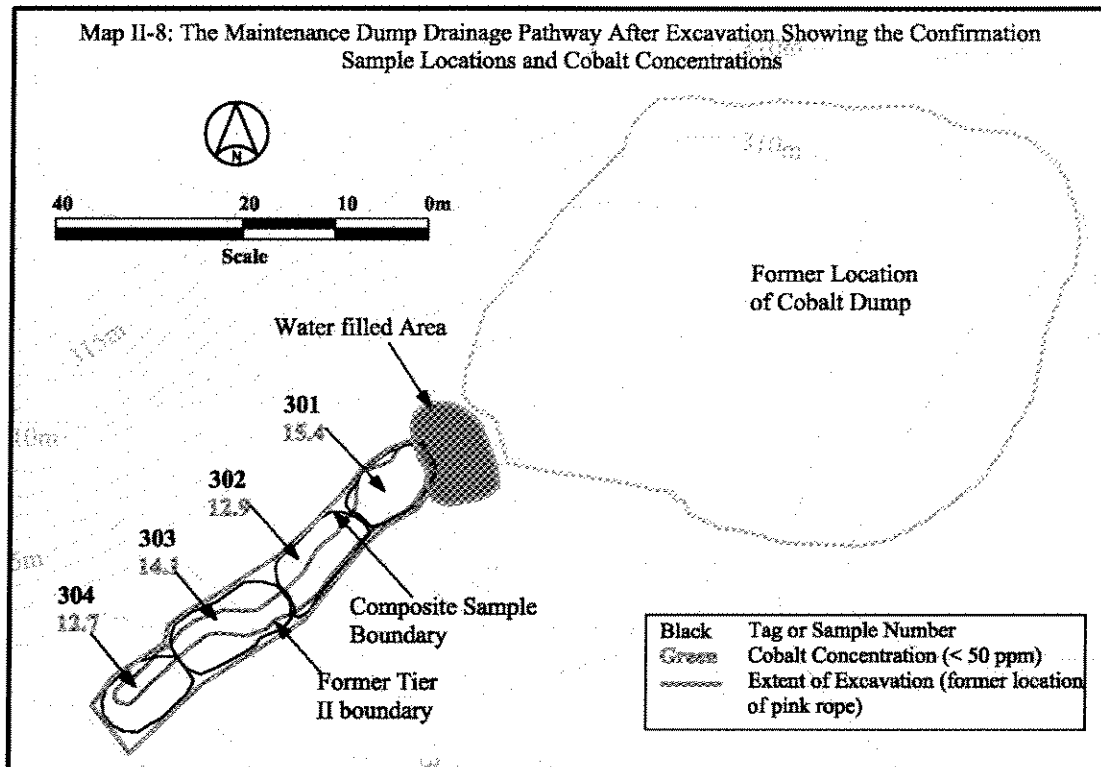
2. Soil Excavation

As per the excavation protocol, 30 cm of cobalt contaminated soil was removed from the roped Tier II area comprising the drainage pathway from the maintenance dump (Photograph II-20). Samples from the excavated area were collected and sent to the ASU laboratory for analysis. Results of these confirmatory analyses are given in Table II-6 and Map II-8 and show that the excavation was complete. Two monitoring wells were installed as described in Chapter III, Section E.

Table II-6: Cobalt Concentrations in Soil Samples Collected After Excavation at the Maintenance Dump

Sample (prefix RI05-)	Cobalt (ppm)	Comments
301	15.4	Top end of channel
302	12.8	Below sample 301 in channel
303	14.1	Below sample 302 in channel
304	12.7	Bottom end of channel





Photograph II-20: The Maintenance Dump Drainage Pathway Roped Off For Excavation



I. Beach Dump

1. Background

The beach dump was excavated in 1999 and 2001. This involved the removal of a large volume of debris and many rusty barrels which contained waste oil. The soil remaining from these excavations was delineated in 2001 (Map II-9) and showed some areas where contamination was in the Tier II (copper, lead and zinc) and Tier I (PCBs) categories. Some debris was removed in 2002 but some remained partially buried frozen in the ground.

2. Soil Excavation

No work was carried out at the dump in 2004 and by 2005, debris within the area had become more exposed. Initial work therefore involved removal of all remaining physical debris from the area. Twelve soil samples were then taken to determine if the boundaries of the contaminated areas had altered; these analyses were conducted on site using a portable XRF instrument. Results given in Table II-7 showed that the contaminated area was largely unchanged. The area was then clearly roped around each contaminated zone. Excavation of the Tier II soil in the dump was then completed followed by excavation of the Tier I soils (Photograph II-21). All excavated soils were transported to the Tier II landfill. Table II-8 gives the analytical results taken during the excavation in order to determine when all the soil containing copper, lead and zinc above the DCC criteria had been removed. Much of the area was excavated to bedrock (Photograph II-22). Map II-9 shows the grid zones from which the samples were taken.



Map II-9: The Contaminated Areas in the Beach Dump Showing the Grid Zones Established for Sampling Before and During Excavation

