Indian and Northern Affairs Canada | Affaires indiennes et du Nord Canada

WHAT'S HAPPENING in the Inuvialuit Settlement Region?

Contaminated Site Remediation

2010 in Review

About the Contaminants and Remediation Directorate

Indian and Northern Affairs Canada (INAC) recognizes the importance of cleaning up contaminated sites and preventing future contamination. The Contaminants and Remediation Directorate (CARD) in the NWT currently manages over 30 contaminated sites at various stages of remediation. Many of these sites became the Government of Canada's (Crown) responsibility after private owners relinquished their properties according to the legislation of the day, or when companies went bankrupt. The properties then reverted to the Crown, and as a representative of the Crown, INAC became custodian of these properties and related remediation activities.

Canada

• This map is intended for general information only. It is neither a technical reference tool, nor a legal document. INAC will not be held liable for any errors or inaccuracies.

10 Step Process

In 1999, the Contaminated Sites Management Working Group (CSMWG) released the document *A Federal Approach to Contaminated Sites* outlining a 10 step process for addressing a federal contaminated site. These guidelines were developed to ensure that there would be a common approach to the management of contaminated sites.

For more information on the 10 step process, please visit *www.ainc-inac.gc.ca/ai/scr/nt/cnt/cln/fcsap/fcsap-10/index-eng.asp.*

Assessment Phase
Steps 1 to 7

Remediation Phase
Steps 8 and 9

Complete / Monitoring
Step 10

1. **Tununuk (BAR-C) DEW Line**
2. **Johnson Point Staging Facility**
3. **Victoria Island Mineral Exploration Sites**
4. **Horton River (BAR-E) DEW Line**
5. **Atkinson Point (BAR-D) DEW Line**
6. **Kittigazuit Bay Military Site**
7. **Pearce Point (PIN-A) DEW Line**

Sites in the ISR

A number of contaminated sites have been identified and prioritized in the Inuvialuit Settlement Region and identification and assessment is ongoing. In 2010, approximately 50 potential sites were examined. This work included confirming the location of the site and site conditions such as any potential contaminants or sources of contamination. This process is followed by site assessment and a detailed analysis to identify the nature and extent of the contamination.

1 Tununuk (BAR-C) DEW Line Site

Tununuk, or "BAR-C", was a former intermediate DEW Line site located approximately 90 km northeast of Inuvik on the Mackenzie River. The site was also used by Imperial Oil Limited as a staging area. Today, the site has the remains of two DEW Line modules and a tank farm belonging to Imperial Oil. Imperial Oil maintains a lease for the tank farm with the Inuvialuit Land Administration.

CONCERNS AT THE SITE

- Hydrocarbon contaminated soil
- Buried fuel drums
- Asbestos
- Lead-based and PCB-based paints
- Washed-out roads
- Two old sewage lagoons
- A serviceable barge dock
- An unmaintained airstrip which is unusable in its present condition

WORK COMPLETED

2001 A Phase I / Phase II Environmental Site Assessment (ESA) was completed by Imperial Oil to identify concerns.

2008 A Phase III ESA was conducted jointly by INAC and Imperial Oil to determine the presence and extent of contaminated soils, landfills, and building debris.

2010 A Supplemental Phase III investigation was conducted and was equally cost-shared between INAC and Imperial Oil. An archaeological survey was also conducted to investigate two previously recorded burial sites and a newly discovered old Inuit House.

FUTURE PLANS

The results of the Supplemental Phase III investigation by IMG Golder will be presented to the community in March 2011. Monitoring at the site will continue in the summer of 2011 and discussions of future land use will continue with Imperial Oil and Inuvialuit Lands Administration. ■

2 Johnson Point Staging Facility

The Johnson Point site is an abandoned oil and gas exploration support and staging area located approximately 270 km northeast of Sachs Harbour on Banks Island, along the Prince of Wales Strait, in the Northwest Territories. The site was used by several exploration companies from the early 1960s until the early 1980s, when the site was abandoned and responsibility for the facilities reverted to the Crown. It continues to be used as a base for mineral exploration, a fuel cache location and an alternate airstrip for traveling farther north.

CONCERNS AT THE SITE

- Hydrocarbon presence in soils
- Waste oil and other liquid wastes
- Asbestos and lead-based paints
- General debris and waste metal scattered around the area

WORK COMPLETED

2009 Remediation was completed with the consolidation of waste, dismantling of the remaining tanks and buildings at the site, and the successful treatment of about 23,000 cubic metres of hydrocarbon contaminated soil.

2010 Final demobilization from site occurred and was followed by a site closure tour and celebration for Elders and representatives from Sachs Harbour and Ulukhaktok.

FUTURE PLANS

Short-term monitoring at Johnson Point began in August 2010 and included visual inspection and periodic collection of soil samples from the non-hazardous landfills. It also included soil temperature measurements and groundwater well collections to monitor hydrocarbons and the re-establishment of permafrost in an area near the river.

The site is scheduled to be monitored again in 2012 and 2014. One indicator that the inspectors will be looking for is the return of wildlife to the area which demonstrates that remediation has been successful. ■

3 Victoria Island Mineral Exploration Sites

The six sites composing the Muskox Mine Syndicate & Grandroy Mine Exploration Area were cleaned up as a group because they were close together and had the same types of contamination. The sites were former exploration camps and airstrips located northeast of Ulukhaktok in the Shaler Mountain region of Victoria Island.

CONCERNS AT THE SITE

- Exploration waste materials
- Fuel
- Approximately 400 fuel drums
- A Nodwell snow cat frame

WORK COMPLETED

2009 All waste materials from the six sites were consolidated and grouped into two locations so they could easily be picked up by airplane.

2010 All waste materials were picked up by airplane and shipped to Ulukhaktok and then on to Yellowknife for disposal in a licensed facility. Everything but a small area of hydrocarbon-stained soils and the Nodwell snow cat frame was removed from the sites. Tests from the abandoned vehicle indicated that it is not a risk to human health or wildlife. Risk assessment studies determined that the Nodwell frame and the small area of hydrocarbon-stained soils can be safely left in place.

FUTURE PLANS

The concerns at the six sites have been addressed and full remediation has been completed. No monitoring is required. ■

4 Atkinson Point (BAR-D) DEW Line

(completed 2008)

5 Horton River (BAR-E) DEW Line

(completed 1994)

6 Kittigazuit Bay Military Site

(completed 2005)

7 Pearce Point (PIN-A) DEW Line

(completed 1996)

For more information on these sites, please visit: **www.ainc-inac.com/ai/scr/nt/cnt/cln/csr/index-eng.asp** ■

SUBMITTED BY Catherine Navaluk Cockney

Growing up at a DEW Line Site

Catherine Navaluk Cockney was born at Tununuk (BAR-C) to Winnie and Walter Cockney on a beautiful day in July by midwife, Mary Dillon. Catherine is the seventh of nine children and is named after her parent's friend who lived in Tuktoyaktuk.

Catherine's birthplace was a traditional Inuvialuit gathering place prior to the building of the DEW Line site in the 1950s and then Imperial Oil's base in the 1970s. Winnie and Walter built a cabin at Tununuk and lived there in the summer months. Catherine's mother, Winnie, would set up a tent by the riverbank and make dry fish for the coming winter months. She also picked berries. When Winnie picked berries, she packed Catherine on her back inside her atikłuk (parka cover) but as Catherine grew older, Winnie would put Catherine in a homemade packsack that was attached to a dog that followed Winnie around. This assured Winnie that her child was safe as she picked berries on the tundra.

In the fall, Catherine's siblings Rudy Cockney and Rosa Kisoun left to attend school in Inuvik. Father Franche would take them by boat in summer and by bombardier in winter to visit their parents and younger siblings at Bar-C. In 1962, Walter got a job with the DEW Line and moved his family to Bar 2 for two years. The family moved back to Bar-C in 1964. When Bar-C closed, Walter worked at a number of other DEW Line sites and the family eventually moved to Inuvik in 1969. Catherine is now the Manager of the Inuvialuit Cultural Resource Centre in Inuvik. ■

Remediation Completion Celebrations

2010 marked the end of remedial activities at both the Johnson Point site and the Victoria Island sites. In celebration of these successful efforts, Elders from Sachs Harbour and Ulukhaktuk were invited to tour the sites and join in an evening feast and celebration in Ulukhaktuk on August 12, 2010.

”It was exciting to be part of the closure celebrations for Johnson Point and Victoria Island Sites. All workers involved in the projects should be proud of their accomplishments. The place was packed with a very wide age group and it is great to know that the people of Sachs and Ulukhaktok are satisfied with the quality of clean-up in their backyard. The next day, the tour group had a breakfast meeting which presented an opportunity to gain perspective, and consider future roles of the community in the post-closure monitoring phase of Johnson Point.” – Bill Coedy, Project Manager, Contaminants and Remediation Directorate. ■

Northern Contaminants Program

photo credit: Paul Vecsei

The Northern Contaminants Program (NCP) was established in 1991 in response to concerns about human exposure to elevated levels of contaminants in wildlife species that are important to the traditional diets of northern Aboriginal peoples. Early studies found a wide variety of substances, many of which had no arctic or Canadian sources, but which were, nevertheless, reaching unexpectedly high levels in the arctic ecosystem.

The NCP is represented in the Northwest Territories by a regional committee called the Northwest Territories Regional Contaminants Committee. The committee develops and coordinates research priorities for the NWT and its membership includes Aboriginal organizations, government departments and health boards. It provides information to the public about the presence and possible effects of contaminants and, in association with the Government of the NWT - Department of Health, information is also provided to the public on the risks and benefits of consuming traditional foods.

The NCP allocates funds for research and related activities in five main areas:

1. Human Health
2. Environmental Monitoring and Research
3. Community Based Monitoring and Research
4. Communications, Capacity, and Outreach
5. National/Regional/International Coordination and Aboriginal Partnerships.

Research in the ISR has included:

- Contaminant levels (Mercury, PCBs, Persistent Organic Pollutants) in ringed seals near Ulukhaktok and Sachs Harbour, NT
- Contaminant levels (Mercury, PCB, DDT) in beluga whales near Hendrikson Island
- Communication project – to communicate contaminants information on beluga whales to the public
- Effective and appropriate communications between researchers and Inuvialuit communities about contaminants – What do the community members want to know about contaminants?
- Mercury in the food chains of the Beaufort Sea – Where is it coming from?
- Predicting mercury concentrations in water, particles and plankton in order to predict mercury in predatory mammals
- Sources of mercury in arctic marine food chains

For results or additional information on these subjects, contact the INAC NT Region NCP representative at (867) 669-2416. ■

If you see a contaminated site, or have questions about sites in your area, contact us:

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