

PIN 3-2.2

**MINUTES FROM:**  
**LADY FRANKLIN POINT (PIN-3) COMMUNITY MEETING IN**  
**KUGLUKTUK ON WEDNESDAY 25 APRIL 2001**

**Summary of Presentation**

1. Introductions of DLCU Team – Pete Quinn, DCC
2. Description of a Typical DEW Line Site and a Typical DEW Line Cleanup – Pete Quinn, DCC
3. Role of ESG, Findings of PIN-3 Site Investigation – Wayne Ingham, ESG
4. Role of UMA Engineering Ltd., Engineering Work at Landfills during Cleanup – Roland Merkosky, UMA
5. Questions & Answer Period – All

**Attendees**

- Pete Quinn, DCC - DLCU Project Manager
- Maj Al Cameron, North Warning System Office
- Wayne Ingham, ESG – DLCU Project Manager
- Amy Dumoulin-Jeromel – ESG
- Roland Merkosky – UMA Engineering Ltd.
- Capt Saunders, DND – Northern Area Headquarters
- Kevin Wilson, News North – Yellowknife Office
- ~20 residents of Kugluktuk

**Summary of Question & Answer Session**

1. The main focus is on the immediate burn site. There are hunters around the area year round. Have any vegetation or soil studies been done around the burn site?

No vegetation samples were collected from around the burn site. When the fire happened in January, there was contamination in the snow. Because animals use the area, we recommended that the contaminated snow be picked up and contained. IF we did this there would be no contamination in the burn area during the melt that could enter the land or the plants. In early summer, soil samples were collected from these same areas. The analysis shows that there is no contamination in these areas. Since we picked up the contaminated snow, there was no contaminants left behind to enter the soil or plants.

2. There were high winds during the burning. Were the contaminants carried far?

Samples were collected in all directions around the module train in March to far distances. Very low concentrations of contaminants were seen farther out. All the snow with the high levels of contamination was cleaned-up.

3. How durable is the liner used in the landfills when it is frozen?

The liner is good up to  $-40^{\circ}\text{C}$ . It does get stiffer as the temperature decreases. The liner has a lifespan of 100 years – it does not deteriorate quickly. UV or sunlight speeds up the deterioration but the liner is buried in the landfill. The lines at the landfill stay frozen.

4. Permafrost can heave or crack rocks from underneath. What does this do for the landfill?

The material used in the landfills is proven to work. It has been used successfully more than once. There is also monitoring of the landfills to make sure they don't heave. Soil and water samples are collected and the temperatures inside the landfill are monitored with probes. The monitoring program will catch any movement in the landfill. The temperature probes monitor the temperature inside the landfill to see if it has frozen back. These instruments read and record the temperature two times every day. In the Tier II landfill, there is a liner above and below the waste that forms a complete seal around the waste.

5. Things are getting warmer these last few years. Does the depth of fill used in the landfills taken global warming into account?

Yes, the modeling programs used to determine the depth of fill to use take global warming into account. There is also temperature monitoring used at the landfills to ensure they freeze back and remain frozen.

6. When is the sampling done for the landfills? It should be done during the melt.

The landfill samples are typically collected during July or August at the time of maximum thaw. They are collected from deep holes along the entire depth of the hole.

7. Are you examining the sea? Ocean dumping was common when the DEW Line was running. Do you look for drums etc along the shore?

The sea was not examined at PIN-3. We did investigate the shoreline at the site in Cambridge Bay and at another site located in the Eastern Arctic. Divers collected samples at depth. We found some debris but none of it was hazardous. There was no contamination in the sediment. There was low levels of PCBs but they were below the criteria. This type of investigation is not done at every site but we did do the

detailed study at two of the sites. Since the operations of all of the sites was similar we expect that the debris in the offshore areas would also be similar. A visual inspection of the shores of lakes and the sea is conducted at each site. If debris is visible, then we get the contractor to remove it during cleanup.

8. Are you planning to build another building at PIN-3?

We would like to but we have no money to do it now.

9. How far out were the snow samples collected?

In March, snow samples were collected to a distance of 5 km in all directions from the burned down module train. Samples were also collected from points halfway between PIN-3 and Kugluktuk and at two sites between PIN-3 and Cambridge Bay. None of these samples were contaminated.

10. Is it safe to go to the site?

Yes, it was safe to go to the site after the fire. Now all of the debris is contained. It is safe to be at the site as long as you don't go inside of the fences. The site will be even safer next summer.

11. Will the cleanup happen this summer?

No, it is scheduled to start in 2002.

12. Were residents of Kugluktuk involved with the fire cleanup?

No, ATCO Frontec did the first couple of trips into the site. In August, the stabilization and covering up of the rubble was done by the Kitikmeot Corporation and Nunasi. It was a fairly small crew. I don't know if any local residents were used for this work. The 2002 cleanup work falls under the DND/NTI Economic Agreement. This agreement lays out requirements for Inuit employment. The CAM-4 tender documents follow the spirit of this agreement and require a minimum of 75% of the employees be Inuit. This number is set for each site and partly depends on the number of people in the area that can be used in the workforce and other projects that are happening in the area. Anywhere between 65-85% of the workforce may be Inuit. Whoever wins the contract must employ the minimum percent of Inuit workers as specified for that site.

13. Will Kitikmeot-Nunasi be the primary contractor for the CAM-4 clean-up work?

We don't know that yet. The tender is closing shortly.

14. How long does the clean-up of a DEW Line site take?

- That depends on the size of the site. Typically, the work will take between one and four years. You should expect the work at PIN-3 to last for two summers. The work at BAR-2 (Shingle Point), a site in the west, was completed in one year.

15. When the liner is installed in a landfill, it is expected to be good for a lifetime. If after 2 to 3 years it cracks, then what?

If the liner breaks, erodes or leaks DND will fix it. The monitoring program includes visual inspections that should catch this.

16. How long is the liner checked for?

The landfill monitoring plans last 25 years. In the early stages, we visit the sites the first year, the second year then a couple of years later. After 25 years, we will decide if we still need to come back to the site. If we see a problem, then we will visit the site more often. Typically, the timing of the visits get farther and farther apart as time passes. The results of the inspections are reviewed not just by DND but by the NTI representatives as well.

17. Was local Inuit present in the meetings with NTI for PIN-3?

No local residents of Kugluktuk were at the meeting. During the investigation at PIN-3, the NTI representative came to the site and identified areas that were pointed out. Sheila Street is a scientist identified by NTI to visit the sites. Philippe Simon, an engineer, also reviews the work on behalf of NTI. These people review the scientific information and engineering design for the site and offer their recommendations. A Kugluktuk resident did visit PIN-3 to identify areas of concern at the site during the investigation.

18. When you did the assessment after the burn, who will tell me if it is safe to drink water from lakes or use geese from the area? People have concerns with contamination in wildlife. Who will tell us what the numbers mean? Are the numbers real? We are concerned especially with a burn of this magnitude. I think to myself, are the keeping these numbers low.

Samples from the drinking water lake show that there are no contaminants at high enough concentrations to indicate that you should be worried about the water. The numbers are shared with NTI for them to look at them. The numbers are also compared to different federal and provincial drinking water regulations. NTI looks at all of our numbers to see if they are right.

19. The NTI reps should talk to the people that they represent.

True. The NTI reps may be involved with the pre-construction meeting for the site.

20. There are different regulations used in different parts of Canada. Are they OK to use in the North?

In the early 1990s, we looked at contamination at sites all across the Arctic. We found proper standards for use in the Arctic from this work. The DEW Line Cleanup Criteria was developed just for use in the Arctic. It is more rigorous than southern standards. The numbers in this criteria were developed specifically for the Arctic to ensure that contamination is not getting in the food chain or the animals.