

**Deloro Minesite Cleanup, The Community and The Media**  
**Louise Livingstone, The Community Press**  
**NOAMI Workshop on Best Practices for Orphaned and Abandoned Mines**  
**October 26-27, 2006**

Journalists tell stories and I have been telling stories about Deloro for ten years. It's a long story and although there is light at the end of the tunnel, there is no end in sight.

Tom Deline, reeve of the downstream municipality of Centre Hastings, summed up Deloro at what was the 25th Deloro Minesite Cleanup Public Liaison (PLC) meeting last month when he said, "Once we thought Deloro was a good thing, then we found it was a bad thing. I hope one day we will think it will be a good thing again." His father died prematurely of kidney failure after working at the Deloro Smelter and Refinery during the nineteen-fifties. Men and women from a wide area worked there. Tom remembers shovelling dead fish off the beach at Moira Lake, downstream from Deloro, as a teenager in the sixties. As a local politician he has been working for 30 years to get some form of closure to the Deloro minesite.

When I was thinking about what I should say I had mixed emotions. Some very good things have happened at Deloro and some bad ones. It is not black and white. There are shades of grey. I write and take pictures for The Community Press, a local weekly newspaper which goes to nearly 60,000 homes in the area. Back in 1997 we were invited to the press launch of the current cleanup. Norm Sterling, then Ontario Minister of the Environment, was to introduce the prime consultant and there was a photo op with the minister (there have been many other ministers of the environment since then) and the consultant. As we stood in the middle of the site by the Moira River looking down at the water flowing passed I asked about downstream contamination. I was firmly told the project was to concentrate on cleanup at the mine site.

Janet Fletcher of the Environmental Bureau of Investigation and Mark Mattson of Sierra Legal Defence Fund thought otherwise. They canoed upstream and tested water coming from a seep and found that extraordinary high levels of arsenic and heavy metal were entering the Moira River. They also took a Geiger counter reading and found an area in the Village of Deloro adjacent to the minesite with high levels of radioactivity. They then bought charges against the MOE.

Before going into what happened with the court case, I need to give you a short history of Deloro. It lies two hours east of Toronto where the precambrian shield dips under fracture limestone. Around 180 people now live in the village of Deloro. The Moira River runs through the 200-hectare site, flowing down to Moira Lake and Stoco Lake to Belleville, the Bay of Quinte and finally Lake Ontario.

In 1867 gold was discovered in the area and from then until 1903 a number of companies mined and processed gold on the site. The deeper they got the more the gold was mixed with arsenic rich ores. The Canadian Goldfield Company developed techniques for separating gold and arsenic and made money from both. Michael J. O'Brien, an entrepreneur from Renfrew, Ontario who has mines in Cobalt, was looking for a refinery that could deal with complex ores. He bought Deloro because he could get power from Healey's Falls on the Trent Severn Waterway, and he put in a rail link. He also had good contacts with scientists at Queen's University.

Between 1906 and 1960 the Deloro Smelting and Refining Company took complex ores and turned them into marketable products: arsenic insecticides, silver, cobalt, stellite, a cobalt alloy, and machine parts. Ores came from the Northwest Territories, Saskatchewan, Morocco and east Africa. By the nineteen-fifties demand for cobalt was so high the company took radioactive waste from the Port Hope uranium refinery.

Deloro is a traditional company village with the managers living in large houses and staff in smaller ones. Women who grew up there have happy memories of community life, the two schools and Christmas parties and musical evenings. The Village of Deloro was incorporated as the smallest municipality in Ontario. The manager was the reeve and senior staff the councillors. Life wasn't so pleasant for the transient migrant workers who came directly off the boats at Montreal. For them it has been described as a detour through hell.

In the late fifties Deloro Stellite moved to a clean site in Belleville where they still are, and finally in 1960 the Deloro Smelter and Refinery closed. After a couple of decades the MOE took over as mediator of last resort. The area on the west side of the river was the site of all the old gold mines, the industrial buildings, waste piles and an arsenic treatment plant. East of the river are the red mud tailings and Young's creek which was used as an area to dump yet more tailings.

The MoE improved the arsenic treatment plant, which considerably reduced the amount of arsenic and heavy metals entering the Moira River, and with the Ministry of Northern Mines and Development capped the old mine shafts and demolished many of the buildings.

In 1997, the MoE set up three committees: an internal ministry committee, a technical committee, and the PLC. The MoE project officer chaired the meetings and set the agenda and appointed people to sit on the committee: the former reeve, the former clerk and some of the former workers as well as downstream politicians and representatives of interested NGOs.

What happened with the court case? It ended up with the Province of Ontario Attorney General's Office, with help from Sierra Legal Defence Fund prosecuting the MoE. The MoE admitted the offsite contamination for the 18 months in question but agreed it has showed due diligence for the 18 months in question, as expert consultants were deciding what to do.

Around this time MoE announced the consultant had found off-site contamination in the village. This was ironic as MOE phytotoxicologists already had data about the levels in the village and the surrounding area. This triggered a full-blown comprehensive environmental health risk study claimed to be the most extensive of its kind. Consultants descended on the Deloro community to make measurements of soils, vegetation, air quality, urine and more. The community was worried and angry, and stress levels were high. Some people started a class-action suit because of the impact on property values. The national press flew in and out and there were dramatic articles about the valley of death. "Deloro" means valley of gold. Negative press was seen by some as bad publicity for the village, again because of the impact on property prices, which were already rock bottom.

Where was I at this time? To start with we weren't invited to the PLC meetings. My editor's view was the press show be at public meetings to tell the public what is going on, so I went. To start with everyone was wary of having the press at the meetings. As well as reporting on meetings I have told people's stories. I did this as a way of commemorating what had happened at Deloro and also getting local anecdotal evidence to the table. I followed this up with some investigative journalism to find documentary evidence to back up what people were saying. The local press is also an informal point of contact, especially for people from elsewhere wanting to find out about Deloro.

Both the Deloro Environmental Health Risk Assessment and the subsequent Moira River Health Risk Assessment concluded there were minimal risks to human health and very little impact on the environment from offsite contamination. The pockets of radioactive waste in the village were removed. A six-foot high fence was constructed around the 200-hectare minesite with signs warning people to keep out. Also any soil dug up in the village has to be taken onto the minesite to be stored. The reason given is that the soil is safe in the village but if moved elsewhere it might not be safe.

The Moira River Study concluded there was little risk to the community provided one didn't drink the water, and there was minimal effect on fish, and benthic invertebrates. There was no discussion about why such a contaminated system is buffered and whether or not conditions could change. Personally I am worried then these studies are held up to the gold standard and the results applied elsewhere as they seem to be.

Once there was no more fear of court cases and no obvious acute risk from off-site contamination MoE and the consultants made good progress on the final cleanup plan. There was an excellent consultation with the three committees coming together for a one-day workshop. Local academics and other interested people came as well. Everyone's comments were incorporated into the final plan, which came out in January 2005. It also went out for public comment. The MoE Deloro communication advisor did an excellent job in organizing the workshop and bringing everything together. Even Sierra Legal Defence Fund staff think it is a good plan but, unlike MoE, think there should be a bond to ensure money is available to carry the plan through.

The Deloro Cleanup is now in the middle of a federal environmental assessment. The Canadian Nuclear Safety Commission has to license the site as a low-level radioactive waste site. The Deloro Cleanup has been exempted from the provincial environmental assessment process, but MoE argues it has been following the process. The federal environmental assessment should be finished in the spring of 2007. At present consultants are doing a risk assessment of off-site contamination along Young's Creek, and are looking at the possible impact of the horizontal well along the west of the site designed to divert groundwater from entering the mine site.

The community have mixed feelings about the federal EA. Some see it as yet more delays. Others are pleased the federal government is finally involved at Deloro as the Deloro Smelting and Refining Company was contracted to provide cobalt for both the Canadian and U.S. governments. I welcome new eyes on the process as I am not convinced we understand the full extent of off-site ground water contamination.

The MoE communication advisor has made a video of the history of the company, the village and the cleanup which is about to be launched. The MoE also has a very good website about Deloro [www.ene.gov.on.ca/envision/deloro](http://www.ene.gov.on.ca/envision/deloro). Trent University is collecting an important archive of material, Deloro Mine Collection [www.trentu.ca/admin/library/archives/98-018.htm](http://www.trentu.ca/admin/library/archives/98-018.htm). In addition, a group of local people has formed the Deloro Local Heritage Initiative, which is working on off-site interpretation of the Deloro story. Downstream the Moira Lake Property Owners' Association keeps a close eye on the lake.

The Deloro Minesite Cleanup PLC is working well together and there is a much higher level of trust and mutual respect than there was at the beginning. Local members have made important contributions, not least with emergency preparedness planning, upgrading the arsenic treatment plant and downstream monitoring. Deloro does not make the front page at the moment. Our latest story was about the new project leader. She is a civil engineer with considerable experience managing large contracts from start to finish. Everyone is optimistic they will finally be able to get things moving on the ground.

What role does the media play in all this? First and foremost we help keep the public up to date with what is happening; we act as a watchdog or neutral observer keeping the MoE team and the consultant on their toes. We keep the project in the political spotlight and act as a sounding board.

Working with the local media is a good way of getting people involved in the cleanup. Around 75 per cent of Canadians read their community newspaper. Do remember newspapers work to fixed deadlines and get to know what they are. You can send in press releases about coming events or events that have happened. Do keep them short as they are more likely to fit in. Invite reporters

out to events and give them all the information they need. Letters to the editor are a good way of stimulating debate locally. There is great potential with e-journalism.

Finally, I have some suggestions to make based on observing the Deloro cleanup process for ten years: don't forget the small things. The PLC was told Deloro had a state-of-the-art arsenic treatment plant only to find out the chemical analysis equipment had to be replaced because it was 20 years old. Set achievable goals with firm deadlines and meet them. Consider having incremental projects rather than striving for the final perfect cleanup some time in the future.

Seen from the outside there could be better communication between the province and the federal governments and between ministries and departments.

Making the Deloro Minesite safe is a difficult task that requires everyone to work together as no one has the complete answer. One has to have patience and perseverance.