

Background and History on the Metal Mining Effluent Regulations

Catherine Coumans, November 2005

The Fisheries Act (FA) is the oldest such Act in the world and it was the first Act created in Canada. Section 35 of the FA contains prohibitions against the destruction of fish habitat. Section 36 of the FA contains prohibitions against the release of “deleterious substances” into waters frequented by fish.

In 1977, the Metal Mining Liquid Effluent Regulations (MMLERs) were promulgated under the FA to define “deleterious substances” with respect to mine effluent that may be released into the environment. Whereas the FA was comprehensive – no deleterious substances – and so captured any and all substances that could be argued to be deleterious or to destroy fish habitat, the MMLERs defined deleterious very narrowly. The substances restricted by the MMLERs were: arsenic, copper, lead, nickel, zinc, radium 226, Total Suspended Solids (TSS) restricted to 25mg/L on average per liter per month, pH has to be above 6.

In 1990, EC announced it intended to update the MMLERs. On December 6th, 2002 (12 years later), the new Metal Mining Effluent Regulations (MMERs) came into force.

What was different:

- Cyanide was added as a restricted substance
- TSS was lowered further to 15 mg/L per on average per month
- Upper limit set on pH of 9.5
- Requirement to produce effluent that is non-acutely lethal to Rainbow Trout (only means that in a 24 hour test if one less than 50% of trout die the effluent is ok !!)
- Requirement to monitor for acute lethality in Rainbow Trout and Daphnia species (water fleas)
- Requirement to conduct Environmental Effects Monitoring (EEM)
- MMERs pertained to gold mines while MMLERs had not and pertained to 93 operating mines while MMERs had only pertained to 30 mines in 1998.

What remained unchanged:

- Most amazingly – NONE of the limits set on the restricted metals were lowered, all stayed exactly the same, in spite of the fact that studies showed toxicity at lower levels, many other countries have lower levels, and EC’s own consultants said that Best Available Technology allowed for testing for lower levels.
- Still no requirement that effluent not be lethal to Daphnia
- Cadmium and Mercury were not added to the list of restricted metals even though both are listed as toxics under CEPA and control technologies for these metals are available
- Metal level limits continued to be based on concentrations in the environment (can be diluted) not total loadings going into the environment
- There was still no feedback trigger to improve regulatory requirements based on data coming from the EEM

Civil society groups involved in the MMLER review process focused on these issues in our comments. However, at the very end of the MMLER review process a schedule was added, Schedule 2, which has now become very significant. According to the Environment Canada (EC) representatives at the time, Schedule 2 was necessary for legal reasons to “deal with” historic cases where lakes had been used as tailings impoundments. This schedule would allow these lakes to be re-defined as tailings impoundments, so that there would be no exceptions to the new MMERs. When questioned about this, and in particular whether this schedule could be used to permit more lake dumping of tailings, Patrick Finlay (Director of the Minerals and Metals Branch at EC) argued that for any more lakes to be added to Schedule 2, the regulations would have to be amended again, there would have to be public consultation, and the regulations would have to go through Gazette again (the process of publishing proposed regulations for public consultation through the Privy Council Office) and gain approval of Governor in Council again. He implied that this would not happen anytime soon. And it seemed like a plausible argument at the time. Nevertheless, two years later, the government announced that they were going to amend the MMERs again.

In November of 2004, EC said that they were going to amend the regulations and wanted a public consultation. No mention was made at that time that a brand new mine project would seek inclusion of a lake in Schedule 2. Between November 2004 and February 2005, the Canadian Environmental Network (RCEN) put in a proposal for the MMER Multi-stakeholder Advisory Group (MMER-MAG). Four ENGO representatives were chosen (Judy Parkman [Recycling Organization Against Rubbish], Maggie Paquet [Citizens' Stewardship Coalition], Catherine Coumans [MiningWatch Canada] and Sharon Mascher [Saskatchewan Environmental Society] – now replaced by Randy Fleming [Inter Church Uranium Committee Education Co-operative]). Other participants came from aboriginal organizations, the Mining Association of Canada (MAC), industry and government.

At the 1st conference call of the MMER–MAG, held on February 17, 2005, Environment Canada announced that the MMER review process would be sped up, because Aur Resources wanted to start a new copper lead zinc mine called the Duck Pond Project, using Trout Lake as a tailings dump as early as the summer of 2006. EC claimed that they had only just been alerted to the existence of this project. The destruction of Trout Lake affects both Trout and Atlantic Salmon. While still focusing on other aspects of the regulations that needed to be improved, the CEN ENGO delegates began to concentrate on opposing the inclusion of a new lake on Schedule 2.

The only face-to-face meeting took place June 16-17, 2005, where ENGO delegates lobbied strongly against inclusion of a new lake on to Schedule 2. This focus somehow caught Patrick Finlay and Chris Doiron (Senior Specialist at the Minerals and Metals Branch of EC) off guard. They admitted that they had not supplied any documentation regarding the project. They recognized that they had to do this to meet the policy requirements for consultation around amended regulations. At the end of the meeting Chris Doiron said the information would be made available soon. By July 6, 2005, the environmental assessment was finally found and sent out (in hard copy only). It was over

400 pages long, and EC asked for feedback from ENGOs within a week. ENGOs pushed back and did get a review in, in September. The ENGO review focuses on two things: 1) EC's obligation to do a thorough review of alternatives to the destruction of a lake (this is not evident in the EIA), 2) Failure to consult adequately locally. The ENGO review also takes issue with the fact that the Department of Fisheries and Oceans (DFO) can ask EC to include a lake in Schedule 2 before a compensation arrangement has been made for the loss of fish habitat.

ENGOs next focused on the failure to consult locally on the part of EC. A draft letter and a one-page backgrounder were sent out to NL and about 7 people from NL have signed and sent the letter to Barry Stemshorn (Assistant Deputy Minister, Environmental Protection Service at EC). Following this letter campaign, Patrick Finlay has expressed anger to both Catherine Coumans and Joan Kuyek (MiningWatch Canada) about the letter campaign and has insisted the ENGOs go after DFO instead of EC. The point was made to Finlay that EC was responsible for reviewing alternatives to the destruction of the lake and it is not evident that EC did this.

The next step is to get this issue before a House of Commons or Senate Committee.