

**“Reclaiming the Abandoned Uranium Tailings  
at  
Gunnar Mines, Uranium City, Saskatchewan”**

a

Public Talk by Dr. Dennis W. Lawson (P.Geo., P.Eng.)  
Environmental Mining Specialist, Environment Canada (Retired)  
Thursday, April 16, 2009  
7 PM, Frances Morrison Library, 311-23<sup>rd</sup> Street East, Saskatoon

Dr. Lawson had responsibilities with Environment Canada for research and investigations at and near the abandoned Gunnar uranium tailings for close to 20 years over the period 1981 to 1999. In this lay yet scientific PowerPoint presentation, Dennis will introduce citizens to the Gunnar mine, mill, waste-rock piles, tailings and northern environment using diagrams and historical photographs. The environmental issues will come to be revealed and tentative alternative solutions will be outlined.

The mine operated for some 10 years from 1955 to 1964, with the mill tailings being contained in a nearby small lake, Mudford Lake, until the control structure at the lake outlet failed catastrophically (and was never replaced or fully repaired). At failure, and thereafter at a diminishing rate up to the present, tailings and tailings runoff flowed into a shallow bay of Lake Athabasca, Langley Bay, and beyond the Bay into the deeper Lake.

The situation is currently undergoing a Canada/Saskatchewan environmental impact assessment as part of a proposed joint federal/provincial reclamation of the site. Leading the study on behalf of the province of Saskatchewan is the Saskatchewan Research Council.

Under preliminary casual analysis, the difficult issues to resolve appear to be (1) how to best use the flooded open-pit mine to dispose of the most radioactive tailings, (2) how to optimally dispose of the contaminated waste rock, (3) how to adequately cover the residual tailings in Mudford Lake and (4) if and how to rehabilitate the tailings covered bottom of Langley Bay. Public discussion of all such issues is welcomed and encouraged.

In retirement, Dennis is becoming a naturalist and lectures in environmental health and science at the First Nations University of Canada, delivers the “Living by Water” program for Nature Saskatchewan and is involved with watershed planning for the Saskatchewan Watershed Authority.

Event sponsored by the Saskatchewan Environmental Society. For more information, contact 306-665-1915.