

**Item No. 10.3.1**  
**Halifax Regional Council**  
**November 30, 2010**

**TO:** Mayor Kelly and Members of Halifax Regional Council

**SUBMITTED BY:** Original signed \_\_\_\_\_  
*for* Ellinor Williams, Chair, Halifax Watershed Advisory Board

**DATE:** November 17, 2010

**SUBJECT:** Transfer of Environmental Assessment Approval from Tangier Limited Partnership for Blueberry Hill Mine to Acadian Mining Corporation, 21st December, 2009.

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### **ORIGIN**

The transfer of the Environmental Assessment Approval dated March 21, 1997 for the Blueberry Hill Mine, from Tangier Limited Partnership to Acadian Mining Corporation, was approved by the Nova Scotia Department of Environment on 21<sup>st</sup> December, 2009.

### **RECOMMENDATION**

The Halifax Watershed Advisory Board recommends that the Mayor write to Minister Sterling Belliveau, Department of Environment, forwarding the comments and concerns outlined in the Discussion of this report which relate to the Environmental Registration Document for the Blueberry Hill Mine.<sup>1</sup> This document was the basis for the Environmental Assessment Approval for the Blueberry Hill Mine which was transferred from Tangier Limited Partnership to Acadian Mining Corporation, by the Nova Scotia Department of Environment on 21<sup>st</sup> December, 2009.

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<sup>1</sup> Environmental Registration Document, Blueberry Hill Mine, Tangier Limited Partnership, Tangier, Halifax County, February 1997.

## BACKGROUND

Gold may be found in quartz veins in the folded slates of the Goldenville Formation. Arsenic, which is a major concern as a proven carcinogen<sup>2</sup>, is also found in Goldenville Formation slates. On the Eastern Shore of Nova Scotia, Goldenville Formation slates are overlain by a layer of glacial till. For their drinking water supplies, local residents mostly dig shallow wells in order to avoid disturbing the arsenic-bearing bedrock below.

Typically, in the course of mining operations, Goldenville Formation slate bedrock is brought to the surface and the gold is extracted. Waste rock, which may contain arsenic, is stockpiled at the surface. Run off from these waste piles, has the potential to contaminate local water bodies, including ground water.

Acadian Mining Corporation proposes to reopen the old Tangier underground gold mine to extract 400 tonnes of gold-bearing rock per day. The site has been mined intermittently for gold since the 1860s with the most recent activity being in 1989. The 17 hectare site contains mining infrastructure, storage areas and parking lots plus waste rock stockpiles, tailings disposal areas and a tailings pond.

## DISCUSSION

### Environmental Assessment:

1. The Halifax Watershed Advisory Board is concerned about the age of the Environmental Registration Document.

This document was originally submitted in 1997 by Tangier Limited Partnership, the previous owners of the mine. However, most of the environmental assessment is copied from a previous assessment done 1987/8 for earlier owners of the mine, Coxheath Gold Holdings Limited, by Nolan, Davis & Associates.<sup>3</sup> Thus many of the environmental measurements were taken about 22 years ago and may not represent the current situation.

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<sup>2</sup> Guidelines for Canadian Drinking Water Quality: Guideline Technical Document, Arsenic, Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment, Health Canada, Ottawa Ontario, May 2006. pp. 15- 22

<sup>3</sup> Environmental Registration Document, Blueberry Hill Mine, Tangier Limited Partnership, Tangier, Halifax County, February 1997, Preface.

2. Another matter of concern to the Halifax Watershed Advisory Board is found in Appendix G of the Environmental Registration Document. Here, the standards quoted are the Guidelines for Canadian Drinking Water Quality published by Health Canada. These standards are used by Nova Scotia as its legal standard for public water supplies.

The Environmental Registration Document which was based on assessments made in 1987/8, was given environmental approval in 1997. The approval was transferred from Tangier Limited Partnership to Acadian Mining Corporation in 2009.

The number quoted in the Environmental Registration Document as the standard for arsenic is **0.5 mg/L**.<sup>4</sup>

In 1988 the federal standard was **0.05 mg/L**.<sup>5</sup>

In the early 1990s, the guideline for arsenic was reduced to **0.025 mg/L**.<sup>6</sup>

In 2006, the guideline was reduced again to the current number of **0.010 mg/L**.<sup>7</sup>

**The Halifax Watershed Advisory Board strongly suggests that the Environmental Registration Document for the Blueberry Hill Mine be updated with new water sampling to ensure that the environmental measurements represent present conditions. Standards quoted in the document should be revised to reflect current guidelines. The document should then be re-submitted to the Department of the Environment for approval.**

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<sup>4</sup> Environmental Registration Document, Blueberry Hill Mine, Tangier Limited Partnership, Tangier, Halifax County, February 1997, Appendix G. pp.1-6)

<sup>5</sup> Phone call: 4th October, 2010: with Michele Giddings, Manager, Water Quality and Science Division, Health Canada.

<sup>6</sup> Guidelines for Canadian Drinking Water Quality Summary Table prepared by the Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment, May 2008, Canada, p. 5).

<sup>7</sup> Guidelines for Canadian Drinking Water Quality Summary Table prepared by the Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment, May 2008, Canada, p. 5).

### Public Consultation

Since, in this instance, the approval of an earlier environmental assessment was transferred from one project to another, no public consultation on the Environmental Assessment Approval took place in 2009. It is the understanding of the Board that the next step for the proponent is to apply to the Department of the Environment for an Industrial Approval .

**The Board strongly suggests that, in view of the age of the Environmental Assessment Approval and increased public awareness of environmental issues related to mining, the Provincial Government exercise its option for public consultation at this stage of the process.**

### BUDGET IMPLICATIONS

Budget Implications associated with the recommendations have not been identified. Any associated budget implications would need to be determined by HRM staff and disclosed to Regional Council in a subsequent report.

### FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

### COMMUNITY ENGAGEMENT

None suggested.

### ALTERNATIVES

None suggested.

### ATTACHMENTS

None.

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A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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