

# **Yava Technologies Inc. Silver Mines Project Project Information Bulletin**

## **Project Overview**

Yava Technologies Inc. (YTI) is proposing to recover lead, zinc, manganese and calcium as value added products from the Yava sandstone mineral deposit in Cape Breton. The proposed Project is approximately centred on the former Silver Mine settlement situated along the Salmon River Road (refer to Figure 1 on reverse). The total YTI claim block is approximately 1,092 hectares, although the proposed Project will be restricted to areas south of the Salmon River and will comprise 611 hectares. Subject to regulatory approval, the Project will commence with the demonstration project in mid to late 2007 followed by full scale production around 2009. The anticipated Project operating life, based on a full scale design extraction rate is approximately 25 years.

YTI will be using an innovative in-situ leach mining (ISLM) technology which will allow YTI to recover the minerals at a lower cost and with significantly less potential for environmental impacts as compared to conventional mining techniques. Specifically, the benefits of ISLM include: elimination of mining waste piles and associated acid mine drainage; no substantial ground disturbance (except for processing plant construction), elimination of mining hazards; and the ability to recover minerals that are too low grade for conventional mining methods.

ISLM involves drilling a series of wells into the ore body. A specific chemical solution consisting of acetic acid and hydrogen peroxide is injected into the ore body via some of the wells to dissolve the minerals. This solution is transported to the well field via a system of a double walled above ground pipeline system. The dissolved minerals are extracted through adjacent wells and returned to the processing plant via the above ground pipeline system. Guard wells and monitor wells ensure that the chemicals and minerals do not travel outside of the target area of operation and surrounding groundwater and surface water bodies are not affected. Water supply wells in the region will not be affected by the Project.

Proposed project activities will be in accordance with the Nova Scotia *Mineral Resources Act* and Regulations and the Nova Scotia *Environment Act* and Regulations. The Project components include mineral extraction and associated facilities (e.g., pipelines, wells) and a centralized plant for chemical processing and product management (storage, handling and shipping). YTI currently holds a Special Mining License for mineral exploration within the claim block and is currently pursuing a Special Lease to recover the mineral resources. The Lease requires an agreement with land owners within the areas to be mined.

## **Environmental Assessment Process**

YTI is required to register this Project as a Class I Undertaking with Nova Scotia Department of Environment and Labour (NSEL) pursuant to the Nova Scotia *Environment Act* and Environmental Assessment Regulations. The environmental registration is currently being prepared by environmental consultants Jacques Whitford Limited, on behalf of YTI, to fulfill these regulatory requirements. Other relevant provincial regulations include the Activities Designation Regulations, which require an Industrial Approval NSEL for the Project operation. The environmental assessment registration will evaluate potential environmental effects of the Project and identify appropriate mitigation and monitoring to minimize these effects. The registration document will be available for public review and comment once it is filed with the NSEL.

## **Environmental Assessment Components**

The environmental registration document focuses on those aspects of the environment of most concern. Components to be evaluated include:

- rare and sensitive flora;
- wildlife;
- surface water resources;
- groundwater resources;
- wetlands;
- archaeological and heritage resources;
- atmospheric environment; and
- socioeconomic environment.

Potential effects of Project activities on these components will be addressed in the registration document. In addition to a variety of Project design measures to reduce the potential for environmental impacts (e.g., spill prevention), YTI will also develop the Project to avoid environmentally sensitive areas such as wetlands and watercourses. Project activities will maintain a 30 metre buffer zone from the Salmon River. Assuming the implementation of standard mitigative measures and government guidelines and approvals, no significant adverse environmental or socioeconomic effects are considered likely.

## **Contacts**

If you have any questions or concerns about this project please contact:

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