

August 22, 2014

Mr. Pat Hallinan  
Washington Department of Ecology  
4601 N Monroe Street  
Spokane, WA 99205-1295

RECEIVED

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Department of Ecology  
Eastern Regional Office

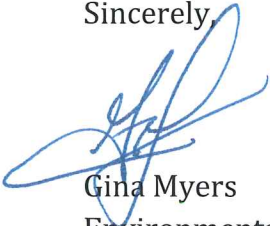
Re: Mill Permit Renewal Application Update

Dear Pat,

Please find attached an update to Echo Bay Minerals' application for renewal of State Waste Discharge Permit ST8033 for our Mill facility. The enclosed document updates Echo Bay contact information and process description, and therefore only includes those pages of the application.

Please contact me at 509-775-3157 x175 if you have any questions or require additional information.

Sincerely,



Gina Myers  
Environmental Manager





# Application for a State Waste Discharge Permit to Discharge Industrial Wastewater to Ground Water by Land Treatment or Application

This application is for a state waste discharge permit as required by Chapter 90.48 RCW and Chapter 173-216 WAC. Permit applications provide Ecology with information on pollutants in the waste stream, materials that may enter the waste stream, the flow characteristics of the discharge, and the site characteristics at the point of discharge.

Ecology may request additional information to clarify the conditions of this discharge. The applicant should reference information previously submitted to Ecology that applies to this application in the appropriate section.

## SECTION A. GENERAL INFORMATION

1. Applicant name: Echo Bay Minerals Company
  
2. Facility name: Key Mill - Kettle River Operations  
(if different from applicant)
  
3. Applicant mail address: 363 Fish Hatchery Road  
Street  
  
Republic, WA 99166  
City/State Zip
  
4. Facility location address: (same as #3 above)  
(if different from above) Street  
  
City/State Zip
  
5. UBI No. 6010500 58 Sometimes called a registration, tax, "C," or resale number, the Unified Business Identifier (UBI) number is a nine-digit number used to identify persons engaging in business activities. The number is assigned when a person completes a [Master Business Application](#) to register with or obtain a license from state agencies. The Departments of Revenue, Licensing, Employment Security, Labor and Industries, and the Corporations Division of the Secretary of State are among the state agencies participating in the UBI program.
  
6. Latitude/longitude of the processing facility as decimal degrees (NAD83/WGS84):  
48.67N / 118.61W

<b>FOR ECOLOGY USE ONLY</b>	<b>Check One</b>	New/Renewal <input type="checkbox"/>	Modification <input type="checkbox"/>	
Date application received				Application/Permit no.
Date application accepted				Date fee paid

7. Person to contact who is familiar with the information contained in this application:

<u>Shannon Daugherty</u> Name	<u>Environmental Engineer</u> Title
<u>509-775-3157 ext. 240</u> Telephone number	<u>509-775-3447</u> Fax number

8. Check One:


**Permit renewal** (including renewal of temporary permits authorized by RCW 90.48.200)

Does this application request a greater amount of wastewater discharge, a greater amount of pollutant discharge, or a discharge of different pollutants than specified in the last permit application for this facility?  YES  NO

For permit renewals, the current permit is an attachment, by reference, to this application.

**Permit modification**       **Existing unpermitted discharge**       **Proposed discharge**  
**Anticipated date of discharge:** \_\_\_\_\_


*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and/or imprisonment for knowing violations.*

 Signature	<u>8/22/2014</u> Date	<u>Vice President and General Manager</u> Title
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Mark N. Ioli  
Printed name

\*Applications must be signed as follows: Corporations, by a principal executive officer of at least the level of vice-president; partnership, by a general partner; sole proprietorship, by the proprietor. If these titles do not apply to your organization, the person who makes budget decisions for this facility must sign the application.

The application signatory may delegate signature authority for submittals required by the permit, such as monthly reports, to a suitable employee. You can delegate this authority to a qualified individual or to a position, which you expect to fill with a qualified individual. If you wish to delegate signature authority, please complete the following:

 Signature of delegated employee	<u>8/22/2014</u> Date	<u>Environmental Manager</u> Title or function at the facility
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Gina Myers  
Printed name

## SECTION B. PRODUCT INFORMATION

1. Briefly describe all manufacturing processes and products, and/or commercial activities at this facility. Provide the applicable Standard Industrial Category (SIC) and the North American Industry Classification System (NAICS) Code(s) for each activity (see *North American Industrial Classification System*, 2007 ed.). You can find the 1997 NAICS codes and the corresponding 1987 Standard Industry Category (SIC) codes at (<http://www.census.gov/epcd/naics/frames3.htm>).

Description:

### Manufacturing Processes and Products

#### Key Mill – Kettle River Operations

The Key Mill is a precious metals processing facility to which ore is trucked for processing from operating mine sites in the United States and Canada. Ore is crushed and then mixed with water and pulverized in the grinding circuit to form a slurry. Gold and silver recovery involves a carbon-in-leach (CIL) process, where cyanide is added to the slurry and pumped through a series of tanks containing activated carbon. Gold and silver are stripped from the carbon using a hot caustic solution and recovered on stainless steel cathodes within electrowinning cells. The precipitate from the cathodes is refined on-site into doré bars,

Tailings are finely ground rock materials that remain after precious metals have been extracted in the mill. Prior to pumping tailings via a pipeline to the synthetically-lined tailings storage facility, they are treated to reduce the cyanide levels in the storage facility. Water used in the processing and transport of the tailings is collected and recycled to the mill for reuse in the milling process. The tailings facility is operated as a closed circuit system with respect to water.

These activities are covered under the Standard Industrial Category (SIC) number 1041 and the North American Industrial Classification (NAICS) code number 212221.

