



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

4601 N Monroe Street • Spokane, Washington 99205-1295 • (509)329-3400

May 31, 2017

Mr. Dave Holland
Project Manager
Hecla Limited
6500 N Mineral Drive, Suite 200
Coeur d'Alene, Idaho 83815-9408

RE: Hecla Republic Unit - State Waste Discharge (SWD) Permit No. ST0005270
Wastewater Inspection

Dear Mr. Holland:

Enclosed is Ecology's inspection report from our site visit on May 11, 2017. I did not have any recommendations regarding monitoring, recordkeeping, and reporting requirements of your SWD permit.

I want to thank you for your reporting efforts in our WQWebDMR system. If you have any questions on the inspection report, or need any assistance with WQWebDMR, please feel free to contact me at (509) 329-3500 or phal461@ecy.wa.gov.

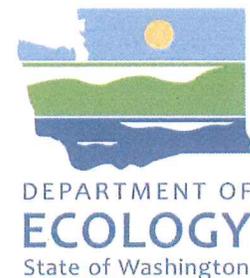
Sincerely,

Pat Hallinan
Water Quality Program

Enclosures



**WASHINGTON STATE DEPARTMENT OF ECOLOGY
WASTEWATER TREATMENT FACILITY
SITE VISIT REPORT**



Name of Entity	<u>Hecla Limited Republic Unit</u>		
Permit No.:	<u>ST0005270</u>	Date of Visit:	<u>May 11, 2107</u>
		Entry Time:	<u>1:00 pm</u> <u>Exit Time: 2:30 pm</u>
City:	<u>Republic</u>	DOE Rep. #1:	<u>Pat Hallinan</u>
County:	<u>Ferry</u>	DOE Rep. #2:	
Person Contacted:	<u>Dave Holland</u>	Phone No.:	<u>(208)769-4156</u>
Title:	<u>Project Manager</u>		
Responsible Official:	<u>Mark P. Board</u>	Phone No.:	<u>(208)769-4100</u>
Title:	<u>VP Technical Services</u>		
Facility Type:	<u>State to Ground</u>	Discharges To:	<u>Ground</u>
Type of Visit:	<u>Compliance Inspection-Without Sampling</u>		

Operation Status	S = Satisfactory	U = Unsatisfactory	M = Marginal	NA = Not Applicable	N = Not Evaluated
Permit on Site:	S	Laboratory:	NA	Self Monitoring Schedule:	S
Records/Reports:	S	Effluent/Receiving Water:	S	Operations & Maintenance:	S
Facility Site Review:	S	Pretreatment	NA	Sludge Disposal:	NA
Flow Measurement:	N	Compliance Schedule:	NA	Other:	

Announced? Yes No On ERO Inspection schedule? Yes No

Inspectors Comments:

Permit: Ecology issued State Waste Discharge (SWD) Permit #ST0005270 to Hecla Limited's Republic Unit (Hecla) with an effective date of April 1, 2010, and an expiration date of March 31, 2015. Hecla submitted an application for permit renewal on January 22, 2015. Based on the timely permit renewal application, the permit has been administratively extended. Ecology confirmed this extension in a letter dated March 18, 2015. Ecology is in the process of re-authorizing the expired permit.

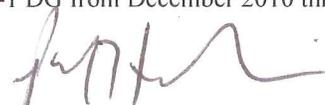
Facility Site Review: The site consists of a former gold and silver underground mine and milling site currently undergoing reclamation. The Permittee manages underground mine water and seepage water by pumping, storage and evaporation. The flooded workings consist of the Knob Hill and Golden Promise mines. The Permittee pumps mine water from the Golden Promise workings into a double lined groundwater management impoundment (GWMI), and on a non-routine basis into the unlined Aspen Pond (see attached photos). The Aspen pond also receives seepage return flow collected at the base of pond's saddle dam.

The GWMI includes an ancillary lined area where a set of sprinklers enhances evaporation. In addition, the Permittee uses big gun (atomizing type) evaporators for the Aspen Pond and GWMI waters.

During the inspection, the Permittee was re-laying a buried portion of the Golden Promise-GWMI pipeline between the Aspen pond and the GWMI. The line froze this winter and the Permittee will place the pipeline deeper to prevent future freezing.

Due to the extreme precipitation received in the region in late 2016/early 2017, the Permittee has proposed to treat the pond waters by a portable treatment plant consisting of chemical addition and settling, then applying the treated water to Hecla owned fields (land treatment). The chemical treatment includes lime addition, using an aluminum based flocculent to precipitate sulfate, and pH adjustment. The Permittee has submitted a SEPA checklist, amended permit application, and hydrogeologic report on May 22, 2017. An engineering report is in the works.

Records/Reports: The Permit requires monitoring for groundwaters, and surface, mine, pond, and seep waters. The Permittee is keeping and maintaining records according to permit conditions. We have requested that the Permittee begin reporting through the WQWebDMR system for the 2nd quarter DMR, due on June 15th. We also requested and received electronic results from monitoring well 10-1 DG from December 2010 through November 2016.

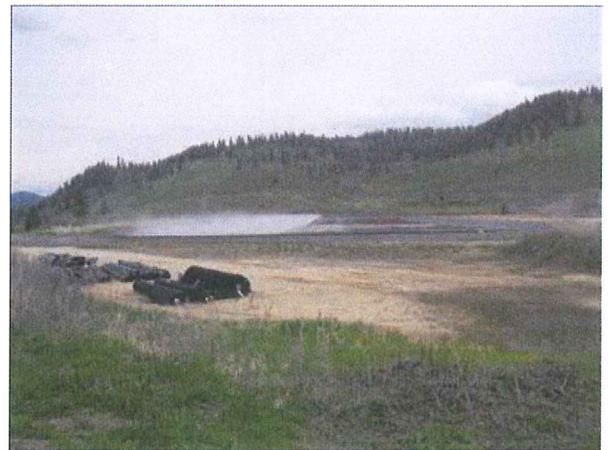
Inspectors Signature:  5/30/2017

Location: Republic
Date Photos Taken: May 11, 2017

Permit No.: ST0005270
Photographer: Pat Hallinan



Area of former ball field. The Permittee is considering this area, along with others, as a possible site for land application area for treated mine water stored in the Aspen Pond and groundwater management impoundment.



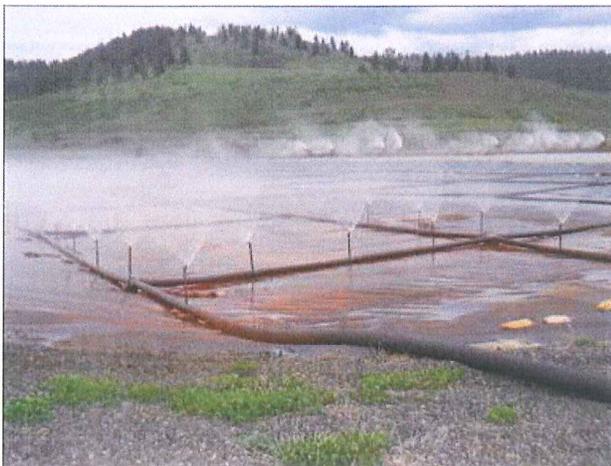
The lined enhanced evaporation area adjacent to the groundwater management impoundment.



Evaporators along the edge of the Aspen Pond.



The lined groundwater management impoundment. The liner system consists of two liners with a leak recovery collection system.



The lined enhanced evaporation area adjacent to the groundwater management impoundment. Water from this area drains back into the groundwater management impoundment.