

**Obed Mountain Mine  
Wastewater Release  
Monthly Status Report for March 2014**

**April 7, 2014**



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## **1.0 MONTHLY STATUS REPORT – MARCH 2014**

On November 19, 2013, Alberta Environment and Sustainable Resource Development ("ESRD") issued Environmental Protection Order No. EPO-2013/34-CR, as amended (the "EPO"), to Coal Valley Resources Inc. ("CVRI") and Sherritt International Corporation in respect of the Obed Mountain Mine (the "Mine"). This Monthly Status Report has been prepared in accordance with clauses 39 and 40 of the EPO, which state the following:

*39. In addition to any other reporting required by this Order, the Parties shall submit to the Director on the first day of each month, commencing on December 1, 2013, a status report in writing that contains a summary of all activities undertaken in accordance with this Order in the previous month, and all activities that are planned for the next month (the "Monthly Status Reports").*

*40. The Monthly Status Reports shall be submitted to the Director until the Director advises otherwise.*

The reporting requirement for this Monthly Status Report was amended in an email from Jim Steele to CVRI dated December 5, 2013, which stated:

*Additionally, ESRD is in agreement with the company's request to adjust the due date for the monthly reports from the first day of the month to "no later than the 7th day of the month following the reporting period".*

## **2.0 EPO ACTIVITIES IN MARCH 2014**

### **2.1 Clause 3 – Immediate and Short-Term Sampling and Monitoring Plan**

CVRI submitted a revised version of the Immediate and Short-Term Sampling and Monitoring Plan on January 23, 2014. Included in the submission was a reply to the second round of ESRD's regulatory feedback. ESRD provided further regulatory feedback on January 31, 2014. CVRI's response, along with an updated plan, was submitted to ESRD on February 3, 2014. CVRI received ESRD approval of the Immediate and Short-Term Sampling and Monitoring Plan on February 7, 2014. The approval included contingencies and revisions that required the Immediate

and Short-Term Sampling and Monitoring Plan to be updated and resubmitted to ESRD by February 14, 2014. The amendments were made and the plan was resubmitted to ESRD on February 14, 2014. As described below, CVRI continues to monitor, collect and report on samples to ESRD on a weekly basis.

### **Surface Water Quality Sampling – February 2014**

- A rigorous surface water sampling program was completed weekly in accordance with the Immediate and Short-Term Sampling and Monitoring Plan (clause 5 of the EPO). The sampling program was completed by CVRI and Backwoods personnel. Training and QA/QC was conducted by Hatfield Consultants to ensure quality standards were being maintained. The sampling program included:
  - Near field surface water quality sampling at APC (Apetowun Creek), ATR-D1 (Downstream Athabasca at entrance of Sundance Provincial Park), ATR-CON (Athabasca River 1.5 km DS of Plante Creek), ATR-PLC (Athabasca River immediately downstream of Plante Creek), ATR-US (Athabasca River Upstream site at bridge), PLC-DS (Plante Creek downstream site) PLC-US (Plante Creek Upstream site), PLC-DS2 (Plante Creek immediately upstream of confluence with Athabasca), ATR-D2 (Athabasca River approximately 31.5 km downstream of its confluence with Plante Creek) until unsafe ice conditions prevented sampling.
- CVRI performed water sampling on the Mine site as required under the Mine's EPEA Approval.

## **2.2 Clauses 6-8 – Solids Recovery Plan**

The Solids Recovery Plan was first submitted to ESRD on November 29, 2013. CVRI submitted a revised version of the Solids Recovery Plan and a response to ESRD's regulatory feedback on January 29, 2014. ESRD provided a second round of regulatory feedback on January 31, 2014. CVRI's response, along with an updated Solids Recovery Plan, was submitted to ESRD on February 3, 2014. As requested, the February 3, 2014 submission of the Solids Recovery Plan included an additional soils table in Excel format. CVRI received ESRD approval of the Solids Recovery Plan on February 7, 2014. The approval of the Solids Recovery Plan included

contingencies and revisions that required the Solids Recovery Plan to be updated and resubmitted to ESRD by February 14, 2014. The amended Solids Recovery Plan was resubmitted to ESRD on February 14, 2014.

CVRI has received a request from the Department of Fisheries and Oceans ("DFO") and ESRD's Fisheries biologist identifying concerns related to sediment trap design, effectiveness of the traps and a contingency plan if the sediment traps are deemed to not be effective. The response was due March 10, 2014. CVRI submitted the additional information to DFO on March 10, 2014 and has not yet received a response from DFO. CVRI received approval under the *Water Act* on March 10, 2014, to construct the sediment traps as outlined in the approved Solids Recovery Plan.

CVRI is nearing completion of all sediment traps with an estimated completion date of April 12, 2014. The completion date will allow CVRI to establish monitoring and QA/QC procedures at all sediment traps well in advance of the Spring freshet.

### **2.3 Clause 15 – Interim Report**

As required under the EPO, CVRI submitted an interim report on visual observations and data recorded and collected, including preliminary data interpretations and conclusions (the "Interim Impacts Report"), regarding the impacts to receptors and habitats from the release of Mine wastewater as identified during implementation of the Impacts Assessment Plan. The Interim Impacts Report was submitted on January 17, 2014. No updates as of April 7<sup>th</sup>, 2014.

### **2.4 Clauses 11, 17 and 22**

CVRI developed and submitted a combined report on December 13, 2013 that responded to clauses 11, 17 and 22 of the EPO. ESRD provided comments on the combined report on February 10, 2014. The regulatory comments provided by ESRD requested that the Impact Assessment Plan, the Long-Term Sampling and Monitoring Plan and the Wildlife Mitigation Plan be resubmitted as individual plans by February 28, 2014.

On February 20, 2014, CVRI requested a seven day extension to the submission deadline to ensure the documents submitted met the individual plan requirements. The extension was granted by ESRD and the individual plans were submitted to ESRD on March 7, 2014.

CVRI submitted the Long-Term Sampling and Monitoring Plan, Wildlife Mitigation Plan and Impact Assessment Plan to ESRD on March 7, 2014. Supplementary Information Requests ("SIRs") were received from ESRD on March 25, 2014, with a response deadline of April 3, 2014. CVRI compiled the SIR responses and submitted the updated plans to the Alberta Energy Regulator ("AER") on April 3, 2014. No comments or feedback have been received as of April 7, 2014.

## **2.5 Clause 34 – Waste Management Plan**

On December 24, 2013, CVRI submitted a revision to the November 29, 2013 Waste Management Plan. The revision was completed based on feedback provided by ESRD. CVRI submitted a response to ESRD's regulatory feedback concerning the original version of the Waste Management Plan on December 24, 2013.

CVRI received approval of the Waste Management Plan on February 11, 2014. Included in the ESRD approval of the Waste Management Plan was a request to respond to outstanding questions and resubmit the plan by February 14, 2014. CVRI addressed the concerns and resubmitted the plan.

CVRI has collected and disposed of 3638 m<sup>3</sup> of recovered sediment to date. Based on field estimates, approximately 10% of the calculated volume is composed of ice and regional material not associated with the deposited sediment. This information continues to be reported in the weekly EPO summaries.

## **2.6 Clause 37 - Wastewater Management Plan**

On December 23, 2013, CVRI submitted a revision to the November 29, 2013 Wastewater Management Plan. The revision was completed based on feedback provided by ESRD. CVRI

submitted a response to ESRD's regulatory feedback concerning the original version of Wastewater Management Plan on December 23, 2013.

CVRI received approval for the Wastewater Management Plan on February 11, 2014. Included in the approval was a request to update ESRD as to the expected completion of the Medium Term Plan. CVRI provided an update to ESRD and submitted the Medium Term Plan (clause 36 of the EPO) to ESRD on February 28, 2014.

In accordance with the Medium Term Plan, CVRI completed the following submissions:

1. Geotechnical Information – March 17, 2014;
2. Causation Report and required data – March 20, 2014;
3. Application under the *Water Act* to Construct Red/Green Pit Dam, March 26, 2014;
4. Application under the *Coal Conservation Act* to Amend Licence C 2009-1 (Red/Green Pit Dam), March 26, 2014; and
5. Red/Green Perimeter Assessment Report March 31, 2014.

## **2.7 Other EPO Activities for March 2014**

CVRI has submitted and received approval for the Temporary Diversion of water from the Upper Apetowun for the purpose of aggregate washing related to sediment trap development. CVRI has submitted a Code of Practice Notification under the *Water Act* related to the bridge repair. The bridge repair is expected to be completed by April 10, 2014.

## **3.0 PLANNED EPO ACTIVITIES FOR APRIL 2014**

### **3.1 EPO Activities for APRIL 2014**

The following sections outline EPO activities that are planned for the month of April 2014:

#### **Sediment Recovery**

- Approval for the Sediment Recovery Plan was received and CVRI will continue with sediment recovery activities as outlined in the approved plan.

- CVRI will complete all construction related to sediment traps 1,2 and 3 and will develop and implement monitoring and inspections related to the sediment trap operation.
- CVRI will submit a data reporting strategy to the AER during the weekly summary meeting scheduled for Thursday April 10, 2014.

### **Surface Water Quality Sampling**

- CVRI continues with the weekly surface water quality sampling program as set out in the approved Immediate and Short-Term Sampling and Monitoring Plan.
- Data sondes are currently deployed at creek sites only: APC, PLC-US, PLC-DS2. Athabasca sites are scheduled to be deployed after break-up occurs to avoid damage/loss of sondes. All deployed data sondes were serviced April 2nd and 3rd, 2014. Issue with dissolved oxygen probe at PLC-DS2 was rectified on April 2, 2014.

### **Terrestrial Assessment**

Wildlife monitoring will continue via daily observations and with the assistance of 8 active in-field wildlife cameras. The data is collected on a monthly basis and will be included in the Wildlife Mitigation Plan.

## **3.2 CLOSING**

CVRI continues to work with the AER to mitigate any effects of the incident. These operations will continue to progress and adapt as conditions change and practices are refined.