



**COAL VALLEY RESOURCES INC. – *Obed Mountain Mine***  
A Subsidiary of WESTMORELAND COAL COMPANY

<b>To:</b>	Ken Dahl	<b>Project No.:</b>	EPO 2013/CR-34
	Alberta Energy Regulator	<b>Transmittal No.:</b>	SUB-REG-0075C
	Suite 1000, 250 – 5 Street SW, Calgary, Alberta T2P 0R4	<b>Date:</b>	April 23rd, 2015
<b>Attention:</b>	Ken.Dahl@aer.ca	<b>Required By:</b>	April 23 <sup>rd</sup> , 2015
<b>Subject:</b>	Questions Obed SUB REG 0075	<b>Issued By:</b>	Kari McDonald

Mr. Ken Dahl,

As requested please find our responses to the questions posed by Chris Teichreb on April 21<sup>st</sup>, 2015. Responses are provided by Al Watson (aw) and Kari McDonald (km)

“Hi Kari. Please consider the following comments from the AER Limnologist, Chris Teichreb, and provide a response. His comments are from a water quality perspective rather than a fisheries one:”(kd)

Q1 (CT). Read through this report and it looks like a good summary of what they did at the sediment traps. Only point of clarification is on page 13, they state “Two tables (Appendix 2) were generated showing the turbidity at the APC and APC-DS datasondes.”. However, Appendix 2 only contains two figures for these sites. Just want to ensure that they meant figures, not tables and that there is not data missing from the appendices.

**Q1 RESPONSE - (aw)**

We confirm that the report should have stated that Appendix 2 contained two Figures showing the turbidity at the APC and APC-DS data sondes. The tables of data that were used to generate the graphs can be provided to Mr. Teichreb if requested.

Q2 (CT) As well, in this same paragraph they state that the figures “illustrate the positive effects that the traps are having on downstream water quality.”. This is a broad statement (TSS does not encompass all water quality) and the decrease in TSS between stations can not be solely attributed to the functioning of the sediment traps, although it is likely they play some role in this.

Q2(b) I agree that it was a broad statement though it was used in relation to the sediment traps whose sole design water quality function is the reduction of TSS. I also agree there are many factors relating to TSS reduction though I do believe that the traps are positively contributing to the reduction of TSS downstream of the remediation areas.



**Q2 RESPONSE (km)**

Agreed. The statements made are specific to the sediment traps, designed for the control of TSS related to the October 31<sup>st</sup>, 2013 incident and 2014 remediation activities.

The traps as designed for the purpose of TSS management have had a positive impact in managing the TSS.

Additional information related to water quality, including but not limited to TSS, will be included in the Impact Assessment Report on May 15<sup>th</sup>, 2015.

Q3 As for retaining the sediment traps, I do think additional monitoring work needs to be done before this determination can be made. Under section 5.3, WCC states “with a larger data set the ability to determine if these traps are functioning as sustainable ecosystems can be made” (p 17) and that it would be useful to have a specialist undertake a habitat assessment. More to the point of the original intent of the traps, WCC also notes in Section 5.1 (p 15) that it “would be of value to determine if sediment deposited during the event is still mobilising” and in order to do so, an evaluation of the sediment in the traps should be conducted to determine if it is natural in origin or sourced from the original release. I would argue that if it is from the release, the traps should remain in place as they continue the function of preventing additional material from reaching the Athabasca River. If it is only trapping natural sediments, then reclamation of the traps could be considered.

Q3b No argument from me.

**RESPONSE (km)**

Agreed. As stated in Section 5.3, the larger data set which will be included in the Final Impact Report and Remediation Plan (the ‘Plans’) will be submitted to the AER on May 15<sup>th</sup>, 2015. The Plans take into consideration all information and data collected in 2014 and will present the AER with a plan for the long term use / strategy of the sediment traps.

As part of sediment trap inspection and operation plan samples will be collected during the 2015 season to determine if the material being collected by the traps / curtains is natural or remobilized material from the 2013 incident. Once this data has been received it will be submitted to the AER and a follow up meeting to discuss the data will be planned.

Q4 In the short term, it appears that dredging of the traps will be necessary along with reinstallation of silt curtains to allow functioning for 2015 while recommended follow-up monitoring and assessment be conducted. Note that this is based on the water and sediment quality results only and that the influence of the traps on fisheries and habitat and therefore recommendations from that perspective may differ.

**RESPONSE (km)**

As outline in the Solids Recovery Plan the silt curtains are required to be re installed for 2015 freshet / spring season the supporting Sediment Trap Inspection and Operation Plan



## COAL VALLEY RESOURCES INC. – *Obed Mountain Mine*

A Subsidiary of WESTMORELAND COAL COMPANY

---

includes regular inspection and dredging to maintain performance of the traps. Both the deployment, inspection and dredging were reviewed and agreed upon by various regulatory agencies, respecting water and aquatic impact. The inspection sheets are available upon request.

Questions received by ESRD and AER specific to the Sediment Traps, remediation and long term plan will be responded to when the comments / questions are considered complete to reduce redundancy.

If you have any questions or concerns regarding the responses provided please direct them to the undersigned.

**Kari McDonald, BA.Sc.**

*Mgr, Environment & Reg.Affairs*

T: +1(780) 420-5866

C: +1(780) 690.0434

**WESTMORELAND COAL COMPANY - *Canada Headquarters***

Edmonton | Alberta | Canada | T5J 3H1