



Environmental Assessment Office

Inspection Record

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| Project Name: Roman Coal Mine Project | Inspection Status: |
| Certificate #: M12-02 | Inspection No: |
| Certificate Status: <u>Certified</u> | Inspection Date: 2014-06-18 |
| Region: <u>Peace</u> | Office: <u>Victoria</u> |
| Trigger: <u>Planned</u> | Incidents of Non-Compliance Observed: <u>Yes</u> |
| Non-Compliance Decision Matrix Level: <u>Level 3 - Moderate temporary impact likely</u> | Non-Compliance Decision Matrix Category: <u>Few NCs, not aware/capable to comply</u> |
| Inspector Name(s): Autumn COUSINS (EAO), Detective Sergeant Angie PALMER (COS) | |
| Audit Record(s): <u>N/A</u> | Total Non-Compliance(s): |
| Proponents Name: Peace River Coal | |
| Proponents Contact(s): Mike Patterson, Environmental Manager (Primary Contact) | |
| Mailing Address: Anglo American COAL VANCOUVER CORPORATE OFFICE 800-700 West Pender Street, Vancouver, British Columbia, V6C 1G8, Canada | |
| Phone No: 1 604 699 6693 | Fax No: |
| Contact Email: Michael.Patterson@angloamerican.com | |
| Location Description: Primary focus of inspection was to follow up on previous compliance issues identified at Babcock Creek tributary, BT 8, bridge site | |
| Lat: N | Long: W |
| Sector: <u>Mines</u> | |

Summary

| MONITORING AND REPORTING REQUIREMENTS | |
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| Inspection Period: From: 2014-06-18 To: 2014-06-18 | |
| Certificate or Act: Certificate under the Environmental Assessment Act | |
| Activity: <u>On Site</u> | |
| Inspection Summary: <p>This record details the results of an inspection against conditions attached to EAC M12-02, that occurred on June 18, 2014. The inspection was conducted by Autumn Cousins, Compliance Manager, EAO, and Detective Sergeant Angie Palmer, COS.</p> <p>Note that Palmer inspected Trend and Roman mines. Cousins accompanied Palmer on the Trend inspection and inspected the Roman project. While Trend did not require an EA Certificate, Cousins made observations at Trend that provided context for the Roman inspection and to inform compliance oversight by other agencies.</p> <p>This Roman inspection was conducted as a follow-up to sediment and erosions issues identified by a September 30, 2013 inspection by James Jacklin, RP Bio, Environmental Protection Division (EPD). EPD referred the issue to the EAO and COS.</p> <p>Inspectors met the following project personnel at Trend Mountain Hotel for a briefing and presentation by Peace River Coal (PRC):</p> <ul style="list-style-type: none">- Mike Patterson, Environmental Manager- Clarence Robertson, Mine Manager- Darren Mawhinney, Mine Production Manager- Tim Caldwell, onsite Environmental Supervisor <p>Inspectors then drove to the mine site to commence the inspection. The inspectors completed a safety orientation and test as well as the training required to drive on the mine site (Mine Traffic Rules and Operation of Vehicles/Equipment).</p> <p>Summary Results: Out of Compliance: Conditions 1,2 and 10</p> | Response: <u>Warning</u> |

| Compliance Summary | In | Out | N/A | N/D |
|-------------------------------------|----|-----|-----|-----|
| Automatically populated upon upload | | | | |

Inspection Details

Types of Compliance: Construction

Requirement Description:

Condition #2: The Proponent must retain the services of an Independent Environmental Monitor (IEM). The Monitor must be a suitably qualified, registered professional in good standing. (Note: There are additional components of this condition not verified during the inspection. See table of conditions attached to EA certificate for full condition.)

Findings:

The inspectors were introduced to the IEM. The IEM advised that she had recently been hired and she was in her first week on the job. Cousins recommended that she contact Justin Carlson, EA Compliance Officer to establish a dialogue about the project and her oversight of requirements as per condition 2 of the EAC.

After the inspection, PATTERSON did not confirm the qualifications and contact information for the IEM. There was also not confirmation date for when the IEM was hired and the company that they belong to.

Cousins did not inspect the other components of this condition, without the information requested, it is this officer's determination that PRC is out of compliance with the requirement to have an IEM. This was based on multiple requests for information with none received as of August 17, 2015.

Compliance: Out

Types of Compliance: Construction

Requirement Description:

Condition #1: The Proponent must develop and implement the following plans in accordance with Volume 1, Section 5 of the Application and any other requirements set out in this Certificate. The plans must be submitted and approved by the agencies listed next to them.

Note: The condition contains a list of various plans. This inspection focussed on the required Surface Erosion and Sediment Control Plan. For the full condition text, see condition 1 of the EAC.

Findings:

Palmer, accompanied by Cousins, inspected Trend Mine:

- Gordon Creek crossing in the area of G-2 and G-11 (No issues noted)
- areas near SP 5/6 (issues noted - see below)
- areas near SP 4 (no issues noted)
- Gordon Creek access trail to the sump located north of GT15 and south of SP 5 (issues noted - see below)

PALMER and COUSINS inspected Roman Mine at Babcock Creek tributary, BT8, bridge site (issues noted - see below)

Trend: Areas near SP 5/6

- In some areas, erosion and sediment control measures were improperly installed, non-functional or in disrepair (e.g. various ditches relating to SP-6) (EAO photos 1 and 2). As Trend is not an EA project, EAO advises PRC and MEM that additional attention to and maintenance of erosion and sediment control measures are recommended project-wide.

Trend: Gordon Creek access trail to the sump located north of GT15 and south of SP 5

- Significant slumping and movement evidence was noted (EAO photo #), including a large tension crack (EAO photo 3 and COS photo 23) with moderate to high likelihood of further failure. Concerns about potential impacts on Gordon Creek below the trail (EAO photos 4 and 5). Failing silt fences were observed. As Trend is not an EA project, EAO advises PRC and MEM of the issue.

Compliance: Not Applicable

Types of Compliance: Construction

Requirement Description:

Condition #1 continued (insufficient space in text box above)

Findings:

Roman: Babcock Creek tributary, BT8, bridge site

- Multiple measures have been employed by PRC at the site including run-off catchment pond, silt fences, straw bales, thatching, and cross-ditching (EAO photos 6, 7 and 9). Additional work is required by PRC to address the potential for sediment to flow from the bridge deck to the creek.
- While there was very little turbidity in the creek on the date of the inspection and multiple measures had been taken by PRC to address the concerns noted September 30, 2013, the site requires additional attention to prevent sediment transport issues during times of increased precipitation. There was a moderate amount of sediment over the bridge deck. With failing silt fences, the debris on the bridge deck (EAO photos 7 and 8) would likely enter Babcock Creek during periods of rain.
- Potential mitigations are referenced in the project's Integrated Surface Erosion and Sediment Control Plan (01/02/2014).
- Detailed specifications/procedures about the installation and maintenance of erosion/sediment control measures are included in the erosion and sediment control plans prepared by PRC, however on-the-ground maintenance is lacking at various sites inspected on both Trend and Roman.

Compliance: Out

Types of Compliance: Construction

Requirement Description:

Condition # 10: The Surface Erosion and Sediment Control Plan referenced in condition 1 must be prepared in accordance with Volume 1, Section 5.5 of the Application to prevent surface runoff associated with mining activities from entering the receiving environment.

Findings:

The findings noted above apply to condition 1 and 10.

Compliance: Out

ACTIONS REQUIRED BY PROPONENT(S) & ADDITIONAL COMMENTS:

Palmer and Cousins completed a verbal debrief of inspection observations with PATTERSON and CALDWELL at specific sites during the inspection and at a high level with PATTERSON and ROBERTSON prior to leaving the mine site. In addition to the concerns listed below, Cousins noted that the project site was clean with no visible wildlife attractants (e.g. food scraps, open garbage, etc). Cousins noted extensive use of secondary containment in all areas inspected.

Cousins noted multiple incidents of ineffective sediment control measures throughout the Trend and Roman sites. While the weather was hot and dry on the day of the inspection, during times of precipitation sediment from the project will likely enter watercourses, including Gordon and Babcock Creeks. While many measures are being taken by PRC to address erosion and sediment control, PRC is ADVISED of non-compliance with conditions 1 and 10 at Babcock Creek tributary, bridge site near BT8. Additional focus by PRC on consistency and maintenance of erosion/sediment control throughout the project areas is recommended. A follow-up inspection by EAO or partner agencies on the Roman project is recommended as the project progresses further into construction to ensure erosion and sediment control issues are better addressed project wide.

INSPECTION CONDUCTED BY:

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| <i>Signature</i> | <i>Date Signed :</i> |
| Autumn Cousins, Manager, Compliance | 2015-09-15 |

ENCLOSURE(S) TO PROPONENT(S) & DESCRIPTION:

Appendix A: Project Map
Appendix B: Photos accompanying the inspection report
Appendix C: COS Inspection report
Appendix D: Integrated Surface Erosion and Sediment Control Plan
Appendix E: Water Management Construction Sediment Control and Freshet Plan 2013/14

REGULATORY CONSIDERATIONS:

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