Investigation Summary Report
2015-023: Grande Cache Coal Corporation
Licence No. C 2011-8F

May 11, 2017

<table>
<thead>
<tr>
<th>Investigation number:</th>
<th>2015-023</th>
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</thead>
<tbody>
<tr>
<td>Regulated party:</td>
<td>Grande Cache Coal Corporation, BA code 0A3C</td>
</tr>
<tr>
<td>Field centre of origin:</td>
<td>Drayton Valley</td>
</tr>
<tr>
<td>Incident location (nearest town):</td>
<td>Township 58, Range 8, West of the 6th Meridian, approximately 20 km north of Grande Cache (450 km northwest of Edmonton), Municipal District of Greenview</td>
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<tr>
<td>Contravention date:</td>
<td>September 4, 2015</td>
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Summary of Facts

Company Overview

On July 24, 2000, the Grande Cache Coal Company Inc. was incorporated under the Alberta Business Corporations Act. This Alberta-based company, headquartered in Calgary, was formed in 2000 for the purpose of reactivating coal mining near Grande Cache, Alberta. The town of Grande Cache, including its transportation infrastructure and community services, was originally established to support coal mining in the Smoky River Coalfield.

In September 2000, the Grande Cache Coal Company Inc. acquired coal lease 1300090002 (covering the no. 8 mine area) from Alberta Resource Development. The Grande Cache Coal Company Inc.’s coal leases cover over 29,000 hectares of the Smoky River Coalfield. The first surface mine developed was the no. 8 mine, which began production in 1971 under McIntyre Mines Ltd.

In October 2000, the Grande Cache Coal Company Inc. acquired various assets of the former Smoky River Coal Limited.

On November 18, 2002, the Grande Cache Coal Company Inc. changed its name to the Grande Cache Coal Corporation (GCC).

Mine History

On March 4, 2015, all surface mining activity was suspended at GCC’s Grande Cache coal mine.

On October 15, 2001, GCC submitted application 1246320 (registered on October 17, 2001) to the Alberta Energy Utilities Board (the EUB; a predecessor of the AER) requesting a mine permit for the surface development of the no. 7 and no. 8 mines, pursuant to Part 4, section 13(2), of the Coal Conservation Act.

On January 28, 2003, the EUB granted permit C 2003-1 to GCC to develop an underground and surface coal mine site, designated as mine 1810, subject to the provisions of application 1246320. Section 4 of permit C 2003-1 required that GCC advise the EUB of any technical modifications to the development plan and obtain EUB approval prior to implementing such modifications.

On March 25, 2008, GCC submitted application 1566814 requesting an amendment of its permit C 2003-1 to include the No. 8 mine extension. Under section 21 of the Coal Conservation Act, GCC was required to obtain the authorization of the Lieutenant Governor in Council to amend permit C 2003-1.

On December 2, 2009, the EUB issued permit no. C 2003-1B, granting application 1566814 and amending permit C 2003-1 for mine no. 1810 to include the no. 8 mine extension area.
On April 5, 2011, licence C 2011-8 was issued to GCC, granting approval to develop the no. 8 mine east. Condition 6 of licence 2011-8 states:

The Licensee shall advise the Board [EUB] of any technical modifications to the mining plan and obtain its approval prior to effecting such modifications.

On May 3, 2012, GCC submitted application 1726751 to amend licence C 2011-8 for the no. 8 surface operation in support of the development of the west extension of the north pit.

On August 30, 2012, licence C 2011-8C was issued to GCC, granting approval to develop the west extension of the north pit.

On January 2, 2013, GCC was issued mineral surface lease 090924, granting the company the authority to enter upon public lands for the purpose of the no. 8 mine extension project.

Incident Overview

This report contains a summary of the facts pertaining to a potential contravention that occurred at the 1475 bench of GCC’s no. 8 mine on September 1, 2015. The AER became aware of this contravention on September 4, 2015, when it was identified in GCC’s biweekly report that 1000 tonnes of coal was removed while operations at the mine were suspended.

On March 9, 2016, the AER issued a notice of follow-up to GCC, advising the company that the AER was investigating the potential contravention of section 13(1) of the Coal Conservation Act.

Investigation Findings and Potential Contraventions

On January 16, 2015, GCC submitted application 1820834 to suspend all mining activities of the no. 8 surface operation. In the application, GCC indicated that the company did not plan to abandon any of the pits and that the shutdown was considered a temporary measure.

In its biweekly report submitted to the AER for the period ending February 5, 2015, GCC indicated that preparation for temporary suspension of surface operations had been completed and that surface mining at the no. 8 mine had stopped on February 3, 2015.

In a March 4, 2015, email sent to the GCC, the AER advised the company of approval of its application 1820834 for suspending operations at the no. 8 mine. In this email, the AER advised GCC of the following:

Once the mine licence is suspended or abandoned, the AER requires an application to bring the mine into operation.

On March 5, 2015, licence C 2011-8F was issued to GCC. Clause 11 of the licence states that “operations at the No. 8 Mine are suspended.”
On April 21, 2015, GCC informed the AER (by email) of an estimated 10,000 to 20,000 tonnes of exposed coal, including stockpiles, in the north pit of the no. 8 mine and of the company’s interest in removing the coal. GCC indicated that the coal would be used to supplement underground production. In the email, GCC requested clarity in terms of how the company could remove the coal with the mine under suspension.

In a follow-up letter to the AER, dated April 23, 2015, GCC indicated that the tonnage of coal was estimated to be 5,000 to 10,000 tonnes in the pit floor and 3,000 tonnes in stockpiles already exposed in the west extension of the north pit at the no. 8 mine. In the letter, GCC proposed to use a backhoe to clean coal at grade and to excavate the sub-bench grade coal.

On May 1, 2015, the AER responded to GCC’s letter of April 23, 2015, authorizing the company to remove the stockpiled coal identified in the company’s letter. The AER also informed GCC that the AER considered any extraction of in situ coal to be a resumption of operations, which would require a licence amendment to bring the mine out of suspension.

On May 1, 2015, GCC’s manager of regulatory affairs emailed a copy of the AER’s May 1, 2015, letter to management and operational personnel with GCC, including key personnel at the mine site, advising that “we can remove the stockpiles, but cannot extract any coal without a licence amendment to resume operations.”

In GCC’s no. 8 mine biweekly report for the period ending July 10, 2015, the company indicated that 3,000 tonnes of coal was removed from stockpiles from the no. 8 mine west extension area.

On September 4, 2015, GCC provided its biweekly report, indicating that approximately 1,000 tonnes of coal was inappropriately removed at grade on the 1475 bench of the No. 8 mine west extension as a result of “a miscommunication between GCC’s operations and engineering personnel.” In this report, GCC indicated that coal removal was stopped once mine operational personnel were advised that this activity was not permitted. In the biweekly report, GCC indicated that “the incident reporting process to determine [the] root cause has been initiated.”

On September 14, 2015, the AER conducted an inspection of the no. 8 mine surface operation. This inspection confirmed that a quantity of coal had been removed from the no. 8 mine west extension area.

On September 30, 2015, the GCC provided a letter to the AER in response to inquiries related to the AER’s September 14, 2015, inspection of the no. 8 mine west extension. In the letter, GCC stated the following:

The conclusion from the root cause analysis is that the coal from No. 8 Mine was recovered due to a combination of misinterpretation of the licence conditions and a temporary breakdown in communication. Neither the person responsible for monitoring regulatory compliance of the
surface mine nor the person responsible for corporate Regulatory Affairs (the author of this letter) was included in the decision to remove the coal.

GCC also indicated that several management personnel had taken on additional responsibilities and did not fully understand the process that was implemented to avoid similar incidents.

On March 9, 2016, the AER sent a notice of follow-up to GCC, advising the company that the AER was reviewing the matter of the removal of coal from the No. 8 mine west extension area based on GCC’s September 4, 2015, biweekly report indicating that 1000 tonnes of coal was removed from the 1475 bench of the no. 8 mine.

In a March 17, 2016, supplementary information request (SIR) sent from the AER to GCC, a copy of the root cause analysis referred to in the September 4, 2015, biweekly report was requested.

On April 8, 2016, GCC provided their SIR response, which included a copy of the root cause analysis report dated September 29, 2015, in response to the no. 8 mine incident. In that report, GCC identified the following facts:

- June 2015 – Stockpiled coal was hauled out of 8 Mine. In situ coal at bench grade was also cleaned at this point; however, cleaning stopped when it was noticed by Engineering. No in-situ coal was recovered.
- August 31, 2015 – In situ coal was prepared to be hauled down September 1. Internal permission to take the in situ coal given.
- September 1, 2015 – Coal Haul starts. Regulatory Department notified that the coal is being mined. Regulatory Department issues an email notifying that the coal is not allowed to be taken.
- Mining is stopped once the information has been disseminated back to the coal haul. By this time, the majority of the coal has been recovered.
- There was a misinterpretation of the AER approval, where GCC staff were under the false impression that only in situ coal was not allowed to be mined, leading to the false belief that the in situ coal at grade would be okay to mine.
- The approval from AER was distributed to the superintendent level, but never disseminated further to the general foreman level, leading to people being unaware of what GCC is permitted to do.

On November 15, 2016, GCC provided application 1873046 to the AER to lift the suspension at the no. 8 mine. The application included a proposal to resume operations at the no. 8 mine by the end of the first quarter of 2017. The application is currently under review by the AER.
Due Diligence

Section 49(2) of the Coal Conservation Act provides a defence to certain offences. The defence requires the AER to consider whether a regulated party can establish on a balance of probabilities that the regulated party took all reasonable steps to prevent the commission of contraventions that are offences. This is what we call “due diligence.” Having established the contravention above, the AER considers whether the evidence establishes a defence.

After review of all the information available, the investigator concludes that GCC did not take all reasonable steps to prevent the commission of the contravention based on the following.

In its September 29, 2015, root cause analysis report, GCC identified the basic cause of the September 1, 2015 incident to be inadequate leadership and supervision, and the lack of adequate procedures to ensure that mine staff were informed of relevant information. More specifically, the coal haul general foreman did not have any AER or internal documentation outlining what coal could and could not be taken from no. 8 mine and lacked training and experience in the surface mining operation.

In an April 27, 2016, interview, GCC personnel indicated that the elimination of an entire surface operations department, including a superintendent of surface operations, resulted in inexperienced mining personnel being assigned to positions that they were not familiar with and they did not know the role and responsibilities of their new positions.

Compliance History

When considering how to respond to a noncompliance, the compliance history of the regulated party is taken into account by the statutory decision maker. The following is the compliance history of the GCC for the last five years.

<table>
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<tr>
<th>Date</th>
<th>Enforcement action</th>
<th>Legislation</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>November 26, 2013</td>
<td>Focus Refer</td>
<td>Coal Conservation Act</td>
<td>Failing to successfully implement its September 6, 2013, action plan</td>
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<tr>
<td>November 10, 2016</td>
<td>Administrative penalty</td>
<td>Section 13(1) Coal Conservation Act</td>
<td>Materially altering the program of operations on which GCC’s licence was granted (11 counts) $53 000</td>
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Conclusion

This investigation identified contributing factors related to an activity where GCC removed 1000 tonnes of coal from the no. 8 mine west extension without authorization and while the no. 8 mine west extension was under suspension.

On January 24, 2017, a receivership order from the Court of Queen’s Bench of Alberta appointed Deloitte Restructuring Inc. as a receiver of the property and assets of GCC and Grande Cache Coal LP.

This investigation identified a contravention of legislation under the jurisdiction of the AER. Section 70 of the Responsible Energy Development Act authorizes the imposition of an administrative penalty; however, given that GCC is currently in receivership, the AER will not be pursuing any further enforcement. The AER is closing the file at this time, and no enforcement action will be taken related to this investigation.