

# ASSESSMENT REPORT

## IVANHOE NORTH REHABILITATION PROJECT CONSENT EXTENSION MODIFICATION (05\_0103 MOD 1)

### 1 BACKGROUND

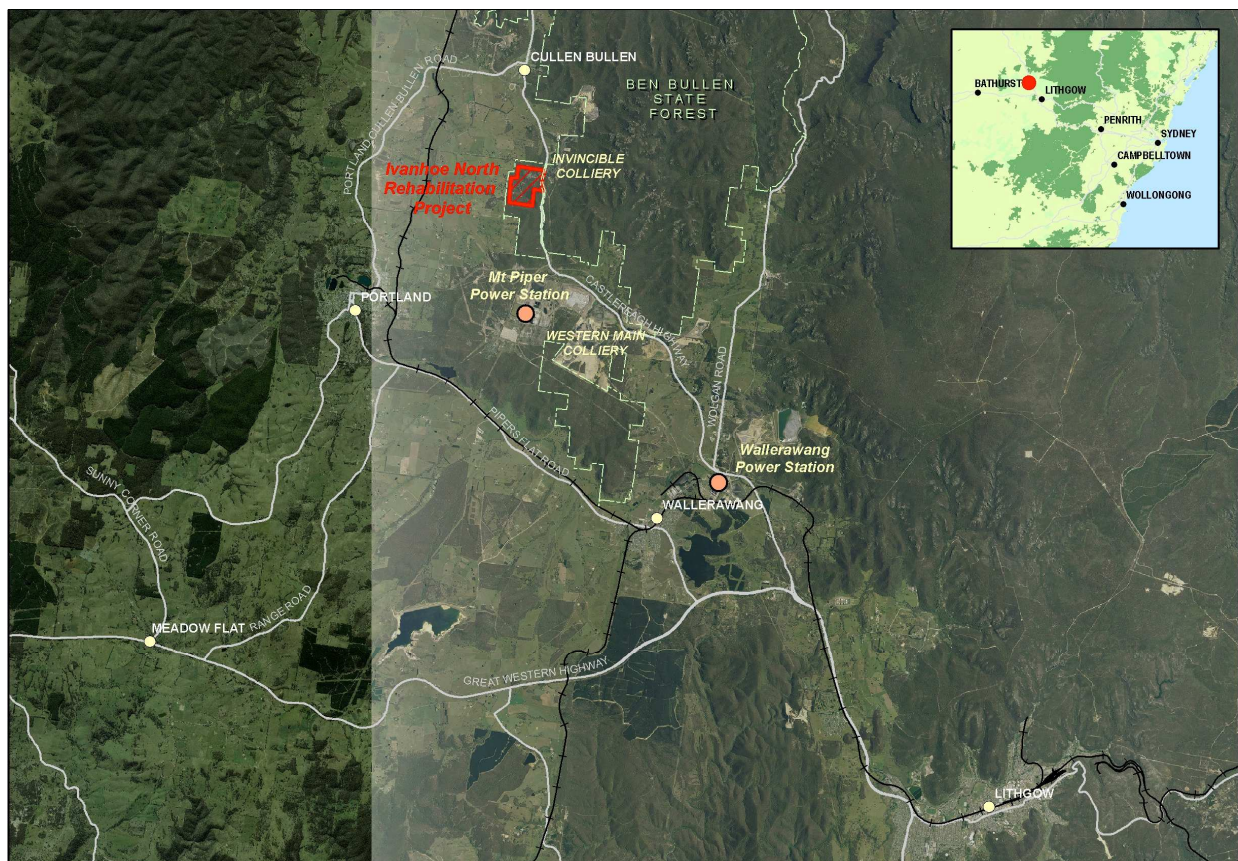
Ivanhoe Coal Pty Limited (Ivanhoe), a wholly owned subsidiary of Centennial Coal Company Limited (Centennial), owns and operates the Ivanhoe North Rehabilitation Project, located 22 kilometres northwest of Lithgow within the Ben Bullen State Forest.

The Ivanhoe North Rehabilitation Project comprises two key components:

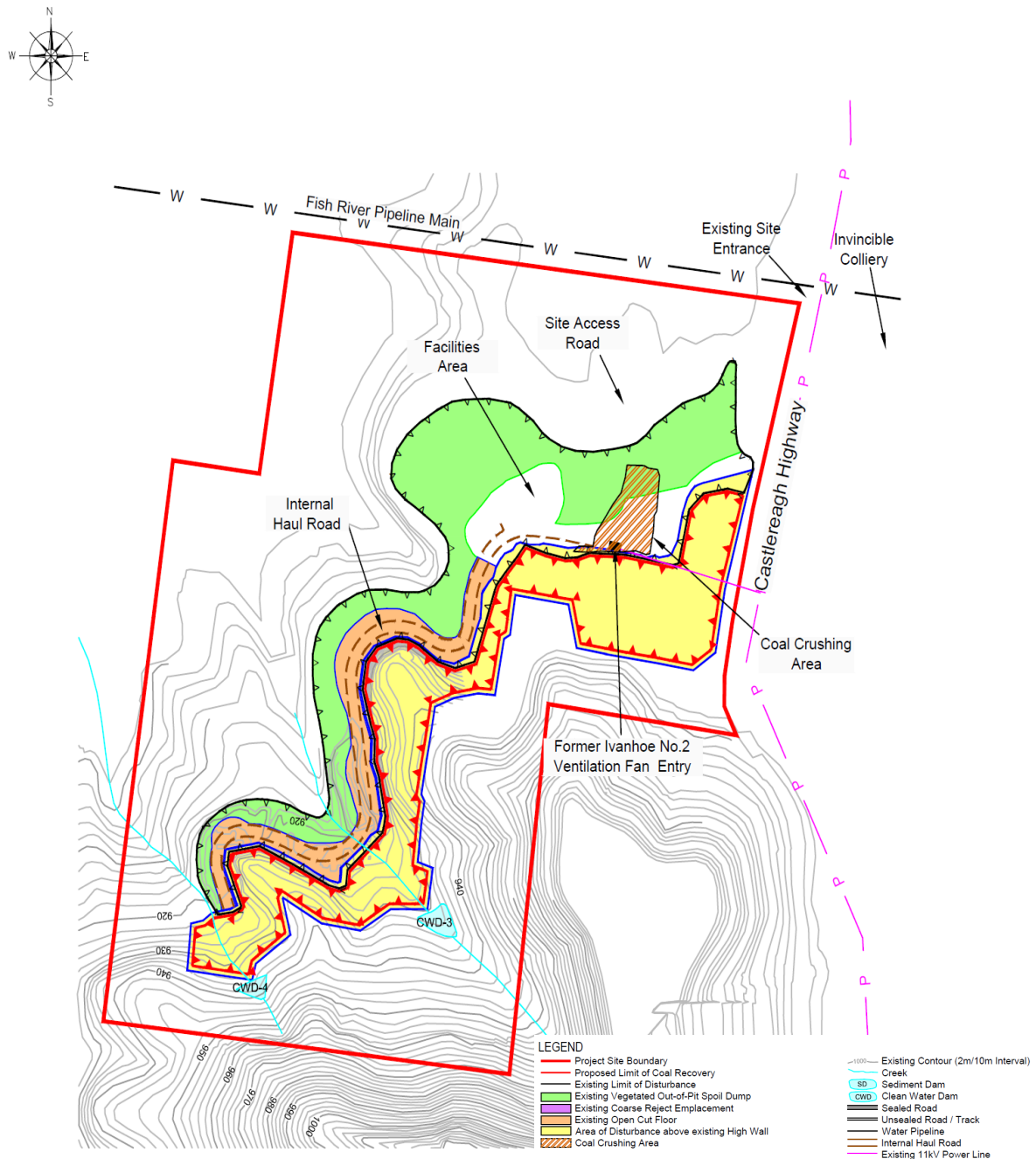
- extraction of coal from a remnant resource located between an abandoned open cut mine (Cullen Main West) and an underground mine (Ivanhoe Colliery); and
- rehabilitation of the entire mine site.

The mine is approved to extract up to 300,000 tonnes per annum (tpa) of run-of-mine (ROM) coal under project approval 05\_0103, granted by the then Minister for Planning in 2007 under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Figure 1 shows the location of the Ivanhoe North Rehabilitation Project, while Figure 2 shows the general layout of the mine.

Extracted coal is transferred via internal haul roads to an on-site crushing plant. Coal is then transported by truck along the Castlereagh Highway to the Mt Piper and Wallerawang Power Stations. A small amount of coal is transported to the Western Main Colliery for washing and the Lidsdale Siding for rail transport to export markets. Waste rock and coarse rejects are deposited into the mined out voids on site.



**Figure 1:** Location of the Ivanhoe North Rehabilitation Project



**Figure 2: Site Layout**

Mining was expected to be completed within a three year period, with approval to conduct mining operations due to cease on 2 February 2012. However, this timetable has not been able to be met, and a limited amount of coal remains to be extracted.

## 2 PROPOSED MODIFICATION

Ivanhoe proposes to extend mining operations for a further three months, from 2 February 2012 to 2 May 2012. The extension would enable mining and trucking to be completed in a safe and efficient manner. It is expected that mining would be completed by the end of March 2012 and trucking of the coal completed by May 2012. The remaining coal to be mined is in the order of 100,000 tonnes.

The time extension is required due to a five month delay in commencement of mining and due to a slower than expected rate of mining in parts of the site. The delay in commencement of mining resulted from completion of road works required at the mine entrance on the Castlereagh Highway. The slower rate of mining is due to safety implications associated with mining over old underground workings.

### 3 STATUTORY CONTEXT

#### ***Approval Authority***

Under section 75W of the EP&A Act, the Minister for Planning and Infrastructure is the approval authority for this modification application. However, under the Minister's delegation of 14 September 2011, the Planning Assessment Commission must determine the modification application, as Centennial has made reportable political donations.

#### ***Modification***

The proposed modification involves a three month extension to the approved project. The modification does not involve changes to any of the mine's approved mining methods or extraction volume. Consequently, the Department is satisfied that it can be properly characterised as a modification to the original project approval, rather than a new project in its own right, and can therefore be assessed and determined under section 75W of the EP&A Act.

### 4 CONSULTATION

Under section 75W of the EP&A Act, the Department is not required to exhibit the modification application or associated environmental assessment (EA) or to undertake consultation. However, the modification application was referred to a number of relevant public agencies for comment.

Lithgow City Council, the Office of Environment and Heritage and the Division of Resources and Energy (part of the Department of Trade and Investment, Regional Infrastructure and Services) did not object to the proposed modification. The agencies did not raise any issues for consideration in the assessment, see Appendix D.

### 5 ASSESSMENT

The Department considers that a continuation of existing traffic impacts is the primary assessment issue relating to the modification. Other issues are considered in Table 1.

#### **5.1 Traffic Impacts**

A traffic impact assessment was undertaken by Barnson Pty Ltd to assess the effect of continuing truck haulage for a further three months. The assessment considered existing and predicted traffic volumes on the Castlereagh Highway, the interaction with the neighbouring Invincible Colliery and heavy vehicle traffic from other mining activity in the region.

As part of the project approval, Ivanhoe was required to upgrade the site intersection with the Castlereagh Highway to safely accommodate project-related truck movements. The works were completed in 2009 to the then RTA's satisfaction. Trucks exiting the Ivanhoe site are required to use the neighbouring site entrance of Invincible Colliery to avoid turning right across the Castlereagh Highway. Ivanhoe manages vehicle movements via an approved Traffic Management Plan. Ivanhoe consulted with the neighbouring Invincible Colliery with regard to the time extension and no objections were raised. Coordination of truck movements to and from the site would continue to be managed via the approved Traffic Management Plan.

The project approval limits truck despatches from the Ivanhoe site to a maximum of 50 per day. Ivanhoe reports that current despatches average approximately 27 per day, or around 10,000 per year. However truck movements are not undertaken every day, with coal despatched in campaigns, therefore truck movements from the site can vary between 0 and 50 per day. Hours of operation are restricted to the day time, from 7am to 6pm Monday to Saturday. The assessment concluded that the modification would not increase these traffic volumes and would not require any additional traffic management measures. The restrictions on vehicle movements, maximum number of trucks per day and operating hours would remain in place for the duration of the modification.

The assessment also considered total vehicle volumes on the Castlereagh Highway and the cumulative effect of traffic from other developments in the area, including the recently-approved increase in trucking from Invincible Colliery. The assessment concluded that there would be a 6% cumulative increase in heavy vehicles per day on the Castlereagh Highway (when compared to traffic counts when the original project was first assessed) but this increase derives from other mining activity in the area, rather than the proposed modification.

The Department is satisfied that the modification would have a negligible impact on existing traffic volumes and traffic safety and can be appropriately managed via the existing Traffic Management Plan and continued coordination with Invincible Colliery. No additional conditions are recommended.

## 5.2 Other Issues

Other environmental impacts considered in the EA are addressed in Table 1 below.

**Table 1: Consideration of Other Issues**

<b>Issue</b>	<b>Impact and Consideration</b>	<b>Conclusion and Recommendation</b>
<i>Rehabilitation</i>	<ul style="list-style-type: none"><li>The three month extension would not affect the on-going rehabilitation works or the approved final landform. The existing project approval continues to have effect until rehabilitation is completed (ie the only element of the project approval to expire in either February or May 2012 is the right to conduct mining operations).</li></ul>	<ul style="list-style-type: none"><li>Rehabilitation of the site would occur in accordance with the approved Rehabilitation Management Plan. No change is required as a result of the modification.</li></ul>
<i>Noise</i>	<ul style="list-style-type: none"><li>Noise from continued mining and trucking would be consistent with existing noise levels from the site.</li><li>Routine monitoring undertaken at three private residences in 2010 indicated compliance with relevant noise criteria.</li></ul>	<ul style="list-style-type: none"><li>Noise criteria and monitoring requirements of the project approval and Environment Protection Licence (EPL) would continue to apply for the duration of the modification.</li><li>No additional conditions are recommended.</li></ul>
<i>Surface Water Quality</i>	<ul style="list-style-type: none"><li>There would be no change to surface water management or monitoring for the three month extension period.</li><li>There would be no change to the approved Rehabilitation Management Plan, including the reinstatement of streams that traverse the site.</li></ul>	<ul style="list-style-type: none"><li>The Department is satisfied that the approved Surface Water Management Plan and EPL are adequate for managing surface water impacts and discharges associated with the modification.</li><li>No change is required due to the modification.</li></ul>
<i>Air Quality</i>	<ul style="list-style-type: none"><li>Dust emissions from continued mining and trucking would be consistent with existing emissions.</li><li>Routine monitoring has demonstrated compliance with criteria in the project approval.</li></ul>	<ul style="list-style-type: none"><li>Air quality criteria and monitoring requirements of the project approval and EPL would continue to apply for the duration of the modification.</li><li>No additional conditions are recommended.</li></ul>
<i>Greenhouse Gas Emissions</i>	<ul style="list-style-type: none"><li>There would be no change to overall greenhouse gas emissions, as there is no change to projected coal extraction volumes.</li><li>Emissions associated with a three month continuation of trucking are offset by the five month delay in commencement of operations.</li></ul>	<ul style="list-style-type: none"><li>The Department is satisfied that there would be no increase in emissions and no further management measures are recommended.</li></ul>
<i>Flora and Fauna</i>	<ul style="list-style-type: none"><li>There would be no change to the approved mining footprint and therefore no additional impacts on flora and fauna.</li></ul>	<ul style="list-style-type: none"><li>Remnant vegetation on site is managed in accordance with the approved Rehabilitation Management Plan. No additional conditions are required for the modification.</li></ul>

## 6 RECOMMENDED CONDITIONS

The Department has drafted the attached notice of modification to the project approval (see **Appendix A**). The primary change proposed is the extension of time to conduct mining operations, until 2 May 2012. A number of other administrative amendments have been proposed. Centennial has reviewed and accepted the recommended conditions. The notice of modification would vary the existing approval to the form shown in **Appendix B** (the "consolidated consent").

## 7 CONCLUSION

The Department has assessed the modification request in accordance with the relevant requirements of the EP&A Act. The Department is satisfied that the proposed modification would allow Ivanhoe to complete mining and trucking in a safe and efficient manner with negligible change to the project's approved impacts.

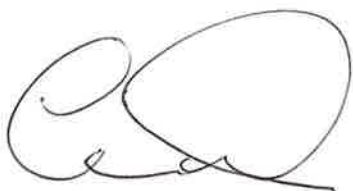
The Department is satisfied that the proposed modification is in the public interest and should be approved, subject to conditions.



## 8 RECOMMENDATION

It is RECOMMENDED that the Planning Assessment Commission, as delegate of the Minister:

- **consider** the findings and recommendations of this report;
- **determine** that the proposed modification is within the scope of section 75W of the EP&A Act;
- **approve** the modification application, subject to conditions, under section 75W of the EP&A Act; and
- **sign** the attached notice of modification (**Appendix A**).



Chris Wilson  
Executive Director  
Major Development Assessment

12.1.12



Richard Pearson  
Deputy Director General  
Development Assessment & Systems Performance



Howard Reed  
A/Director Mining & Industry Projects  
13.1.12

17/1/12