CASE STUDY: BATEA AND THE IMPLICATIONS FOR NOISE POLLUTION CONTROL

A Cost Comparison of Maules Creek CHPP and Boggabri Coal CHPP
INTRODUCTION

Publicly available information has been used to compare the level of investment that was made by (then) Aston Resources Ltd (now Whitehaven Coal) on designing and constructing the Maules Creek Coal Handling and Processing Plant (CHPP) vs the investment by Idemitsu Resources in the design and construction of the Boggabri Coal CHPP, which is nearby in the Leard State Forest Coal Mining Precinct.

PURPOSE OF COMPARISON

This Case Study is to examine the costs of Whitehaven’s low-cost CHPP, extensive exceedances which was included in an EPA ordered Mandatory Noise Audit. Noise Condition 12(a) of the Maules Creek Mine Conditions of Approval, which reads:

"Attenuation of Plant  12. The Proponent shall:

(a) ensure ... all equipment and noise control measures deliver sound power levels that are equal to or better than the sound power levels identified in the EA, and correspond to best practice or the application of the best available technology economically achievable"

The intention of the Planning Assessment Commission in inserting this Condition is to require Maules Creek mine to implement continuous improvement. The use of the term “best available technology economically achievable” – or BATEA - is an explicit requirement that was not accidentally inserted, and aims to ensure that as the mine evolves, the company continues to improve its environmental performance.

In 2017, following the Mandatory Noise Audit, Whitehaven Coal attempted a Modification (MOD4) to remove Condition 12(a) but after a flood of submissions by the community arguing against such Modification, it was subsequently withdrawn.

Whitehaven Coal has regularly told its shareholders that it aspires to be “Australia’s lowest cost coal producer”.

In the hearing conducted by the NSW Independent Planning Commission (Dec 2018) with Whitehaven Coal and its consultants, noise consultant John Wasserman of Wilkinson Murray said the modelling for the Vickery Extension Project used an assumption of technology being “reasonably feasible”.

The LFRN argues “reasonably feasible” is not in the public interest and a higher standard, being BATEA, should be used in noise modelling of Vickery Extension Project.

We are concerned that the lower standard of technology used in the modelling is having a misleading effect on the noise impacts modelled for the Vickery Extension Project.

We call on the IPC to instruct the Applicant to re-model the noise impacts using a different assumption, being that of BATEA.
COMPARISON OF DESIGN AND CONSTRUCTION COSTS

We used publicly available information to ascertain the relative investment made in the CHPP’s of Maules Creek and Boggabri Coal mines compared with their production over the lifetime of the mines.

Here is the comparison of design and construction costs:

<table>
<thead>
<tr>
<th>PROJECT CHPP</th>
<th>DESIGN</th>
<th>CONSTRUCTION</th>
<th>TOTAL $M</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCM</td>
<td>$18.5M (Sedgman)</td>
<td>$100M (Downer)</td>
<td>$118.5M</td>
</tr>
<tr>
<td>BOGGABRI</td>
<td>$186M (Thiess-Sedgman JV)</td>
<td>$186M</td>
<td>$186M</td>
</tr>
</tbody>
</table>

COMPARISON OF TOTAL CHPP COST PER LIFE OF MINE PRODUCTION

The lifetime production of the Maules Creek mine is known to be 362M tonnes compared with Boggabri Coal’s 200M tonnes of recoverable coal, making Maules Creek

<table>
<thead>
<tr>
<th>PROJECT CHPP</th>
<th>COAL RESERVES</th>
<th>TOTAL $M</th>
<th>CHPP COST/MILLION TONNES</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCCM</td>
<td>362M tonnes</td>
<td>$118.5M</td>
<td>$0.33M</td>
</tr>
<tr>
<td>BOGGABRI</td>
<td>200M tonnes</td>
<td>$186M</td>
<td>$0.93M</td>
</tr>
</tbody>
</table>

Conclusion: The investment by Idemitsu Resources in the Boggabri Coal CHPP is almost 3 x times per million tonnes of recoverable coal produced over the life of the mine, than the similar investment by Whitehaven Coal in Maules Creek CHPP.

The difference between the investment made at Boggabri CHPP vs Maules Creek CHPP is clearly of a very high order, reflecting Whitehaven’s stated goal of being “one of Australia’s lowest cost coal producers”.

We submit that this goal of being low-cost has had a demonstrable effect on the company’s ability to mitigate the noise impacts of its Maules Creek CHPP, which is a significant source of the mine’s noise problems.

SOURCES:

Maules Creek

Sedgman wins $18.5 million contract for Aston Resources’ Maules Creek Project

“Leading resource sector services company Sedgman Limited (ASX Code: SDM) today announced it has been awarded an $18.5 million design contract for a Coal Handling and Preparation Plant (CHPP) at Aston Resources Limited’s (ASX Code: AZT) Maules Creek Project.

The $18.5 million design contract is with Maules Creek Coal Pty Ltd, an Aston Resources Limited subsidiary, which is the manager of the Maules Creek Project.”
EVIDENCE THAT MAULES CREEK COAL MINE CHPP IS NOT “BATEA”

The Maules Creek mine Mandatory Noise Audit was imposed upon Maules Creek mine by the NSW EPA in February, 2016. Throughout 2015 (the second year of operation of MCCM) over 100 exceedances had been recorded by the EPA at one neighbouring property causing the EPA to form the view that it “reasonably suspected” further exceedances. The Mandatory Noise Audit was imposed because:

“(a) the licensee has, on one or more occasion, contravened the conditions of the licence in relation to noise; and

(b) the alleged contraventions have caused, or are likely to cause, harm to the environment;

(c ) activities at the premises have been and are being carried out in an environmentally unsatisfactory manner within the meaning of section 95 of the Act”

According to the Maules Creek Mine Mandatory Noise Audit (section 3.8. p 40):

“The site inspection confirmed that the Coal Processing Plant is not enclosed and is essentially open on all sides with a partial roof cover ...No physical noise control mitigation was therefore evident. **We were advised that the building structure could not support an enclosure retrospectively.**” [Emphasis added]

Since then some minor modifications have been made to screen the train load out facility which according to the GM MCCM, resulted in a 4 dB reduction at source, but he would not answer questions from the Maules Creek CCC about how this might have translated into a reduction at the receiver. He told the CCC the company did not have the capability to tell, which at the given time is unlikely, as the company had real-time noise monitoring with audio capacity.

In any case, cladding and screens are not Best Practice. The Mandatory Noise Audit recommends (at p. 42) some more sophisticated, engineering based solutions to the noise problem, not just screens. However, Whitehaven has never adopted such measures.
APPENDIX A – LEARD FOREST RESEARCH NODE SUPPLEMENTARY SUBMISSION
VICKERY COAL PROJECT

The fact that the CHPP was under-engineered and cannot be rectified obviously contradicts the standard of “Best Available Technology Economically Achievable.” Whitehaven is a profitable company that earned over $525M profit last financial year (2018) and prides itself on being one of the lowest-cost coal producers in Australia.

The Maules Creek Community Consultative Committee (CCC) was informed that the CHPP is not the same design as the one which was originally modelled in the EA, which was merely an “indicative” design. This was disclosed to the CCC by way of explanation as to why the sound power levels are not the same as the EA.

This raised the question of why the Department of Planning approved a CHPP substantially different to the EA design that it had changed the sound power levels so significantly.

We do not want to see a recurrence of this at Vickery.

WHITEHAVEN COAL’S RESPONSE TO SUBMISSIONS TO ORIGINAL MAULES CREEK PROJECT

In the Response to Submissions “Acoustics”, Whitehaven (then referred to as “Aston”) stated¹:

“A number of submissions were received in relation to the Project changing the quiet rural community to be a giant industrial zone. Further, OEH submits that they do not agree with the commitment to meet the predicted noise levels within Table 23 of the EA and disagree that feasible and reasonable noise mitigation and management measures have been applied to operations.” [Emphasis added]

Whitehaven/Aston went on to state: “As described in Section 7.3.4 of the EA, Aston has demonstrated that feasible and reasonable noise control and mitigation measures have been incorporated into the noise modelling for the Project.”

This suggests that Whitehaven are not taking their noise mitigation seriously and we fear the same thing could happen with the Vickery Extension Project.

Despite the OEH’s submission that it did not agree with the Proponent’s “commitment” to meet the predicted noise levels, and disagreed that feasible and reasonable noise mitigation and management measures had been applied to operations, the Maules Creek mine was nevertheless approved, and exceedances commenced almost immediately despite only being in Year 1 of production.

¹ At 4.3