

MAULES CREEK COAL MINE

MOBILE COAL SIZING AND WASTE TYRE DISPOSAL MODIFICATION

SUBMISSIONS REPORT



OCTOBER 2021
Project No. WHC-21-86
Document No. 01109701

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1 INTRODUCTION

The Maules Creek Coal Mine (MCCM) is an open cut coal mining operation located within the Narrabri Local Government Area (LGA), approximately 17 kilometres (km) north-east of Boggabri in New South Wales (NSW). The MCCM is approved to extract up to 13 million tonnes per annum (Mtpa) of run-of-mine (ROM) coal to 31 December 2034. The MCCM is a joint venture between Aston Coal 2 Pty Ltd (a wholly owned subsidiary of Whitehaven Coal Limited [Whitehaven]) (75 percent [%]), ICRA MC Pty Ltd (a wholly owned subsidiary of Itochu Corporation) (15%) and J-Power Australia Pty Ltd (a wholly owned subsidiary of Electric Power Development Company) (10%).

As well as the open cut and associated waste rock emplacements, the MCCM includes water supply pipelines and pump stations, electricity transmission lines and switching substation, coal handling and processing plant (CHPP) and its associated facilities, and other infrastructure.

Maules Creek Coal Pty Ltd (MCC) is the applicant for the Maules Creek Mobile Coal Sizing and Waste Tyre Disposal Modification (the Modification). MCC (2021) prepared the *Maules Creek Coal Mine Mobile Coal Sizing and Waste Tyre Disposal Modification Report* (the Modification Report) that is being assessed under the NSW *Environmental Planning and Assessment Act 1979* (EP&A Act).

The Modification Report was placed on public exhibition by the NSW Department of Planning, Industry and Environment (DPIE) from 8 to 21 October 2021. During this period, public authorities, organisations, and members of the public were invited to provide submissions on the Modification. DPIE subsequently requested MCC prepare responses to the submissions received in a Submissions Report (this report). Accordingly, this Submissions Report responds to submissions received during and after the Modification Report exhibition period and has been prepared in accordance with the *State Significant Development Guidelines – Preparing a Submissions Report* (Appendix C) (DPIE, 2021), as follows:

- Section 1** Provides an overview of the Modification and the determination process to date (this section).
- Section 2** Provides an analysis of the submissions received during the public exhibition period.
- Section 3** Outlines actions taken since submission of the Modification Report.
- Section 4** Provides MCC's responses to submissions, as follows:
 - Section 4.1** Responses to submissions by public authorities.
 - Section 4.2** Responses to submissions by organisations.
 - Section 4.3** Responses to submissions by members of the public.
- Section 5** Provides an updated evaluation of the Modification.

2 ANALYSIS OF SUBMISSIONS

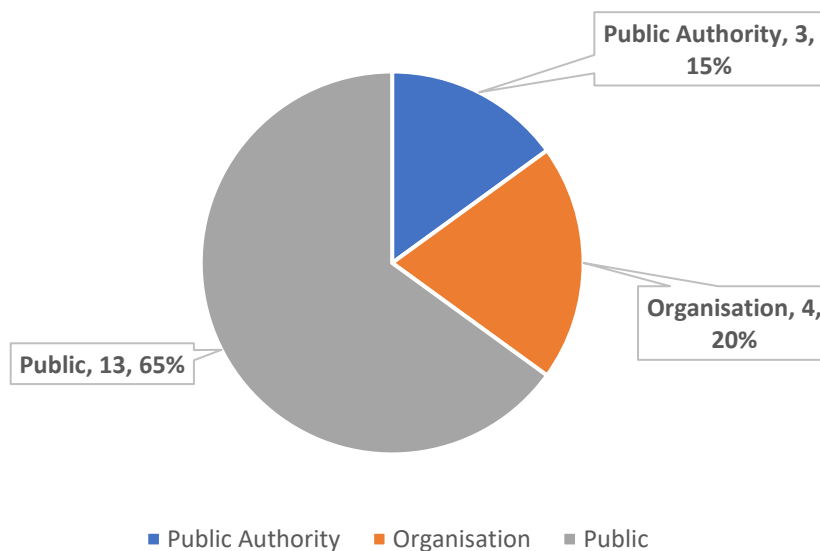
2.1 BREAKDOWN OF SUBMISSIONS

A total of 20 submissions were received on the Modification, comprising three (3) from public authorities, four (4) from organisations, and thirteen (13) from the public. A register of the submissions received during the public exhibition period is provided in Table 2-1. Chart 2-1 presents a summary of the total number of submissions by submitter category.

Table 2-1
Register of Submitters

Submitter Group	Report Section Addressing Issue	Name of Submitter
Public authority	Section 4.1	<ul style="list-style-type: none"> ■ NSW Environment Protection Authority (EPA) ■ NSW Department of Regional NSW – Resources Regulator (NSW Resources Regulator) ■ Narrabri Shire Council (NSC)
Organisation	Section 4.2	<ul style="list-style-type: none"> ■ NTS Corp on behalf of the Gomeroi People native title applicant (Gomeroi Applicant) ■ Wando Conservation and Cultural Centre (Wando CCC) ■ Country Women’s Association of NSW – Maules Creek Branch (Maules Creek CWA) ■ Leard Forest Research Node
Public	Section 4.3	<ul style="list-style-type: none"> ■ Jan Carter ■ Anthea Von Staerck ■ Anonymous ■ Anonymous ■ Anonymous ■ Anonymous ■ Bronwyn Vost ■ Keelah Lam ■ Anonymous ■ Peter Wills ■ Maria Bradley ■ Anonymous ■ Roselyn Druce

Chart 2-1
Summary of All Submissions



Form Letters and Petitions

No form-letter submissions or petitions were received during the public exhibition period.

Level of Community Interest

Of the thirteen (13) public submissions, two (2) (i.e. 15% of all public submissions) were received from the local area within 5 km of the MCCM, one (1) submission (i.e. 7% of all public submissions) was regional, located between 5 km and 100 km away from the MCCM, while the remaining ten (10) submissions (i.e. 77% of all public submissions) were from the broader community located more than 100 km from the MCCM (within NSW). All submissions from organisations were local to the MCCM (i.e. within 5 km).

Opposition and Support

Submissions from public authorities were in the form of comments on the Modification. All public and organisation submissions objected to the Modification (i.e. total of 17 objecting submissions).

2.2 CATEGORISING THE ISSUES

The following issues were raised in the submissions:

- The potential impacts of the Modification, including:
 - potential impacts of waste heavy vehicle tyre disposal on surface water and groundwater resources and landform stability;

- potential cultural impacts of waste heavy vehicle tyre disposal which is considered to be inconsistent with Aboriginal customs and cultural practices relating to sustainable land and waste management; and
 - potential noise and air quality impacts, and greenhouse gas emissions, associated with the use of mobile coal sizing and rock crushing equipment.
- The Modification itself, including:
 - the Modification justification in the context of a recent announcement of a waste heavy vehicle tyre stewardship agreement and opportunities to recycle waste heavy vehicle tyres; and
 - procedural matters relating to the requirements for modification applications under clause 115 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).
 - Issues that are beyond the scope of the Modification.

A key recommendation in the submissions from public authorities (and some organisations) is to impose conditions that require Whitehaven to regularly review local feasible recycling opportunities that may avoid the need to dispose waste heavy vehicle tyres on-site. Whitehaven does not object to such a recommendation (Section 4.1).

Responses to the key issues raised are provided in Section 4.

3 ACTIONS TAKEN SINCE PUBLIC EXHIBITION

MCC has not amended the Modification since the public exhibition period. MCC continues to engage with the local community directly and through the MCCM Community Consultative Committee (CCC).

4 RESPONSES TO SUBMISSIONS

4.1 PUBLIC AUTHORITY SUBMISSIONS

This section includes the responses to submissions from public authorities.

4.1.1 NSW Environment Protection Authority

Whitehaven notes that the EPA submission states that “the [Modification] report does provide the information required to assess the proposal”. The EPA submission includes three recommendations aimed at either reinforcing the existing MCCM development consent (PA 10_0138) or adding new conditions, including:

Air Quality Impact Assessment

Recommendation: The EPA recommends that the proponent continue applying ongoing control and mitigation measures as outlined in the Modification Report and AQIA to ensure there is no increase in adverse air quality impacts.

Noise Assessment

Recommendation: The existing noise limits in the Project Approval should continue to apply to this Modification, if approved, in accordance with Item 6 of the Implementation and transitional arrangements for the Noise Policy for Industry.

The EPA also recommends that in accordance with Item 8 of the Transitional arrangements, the Project Approval for the Modification, if approved, should be amended to assess applicable modifying factors according the Fact Sheet C of the Noise Policy for Industry.

Waste Tyre Storage and Disposal

Recommendation: The EPA recommends that the following conditions are added to the project approval should the modification be approved.

E1.1 The proponent must undertake a review of available recycling options for end of life heavy plant tyres at least once every 2 years and provide a report to the EPA that contains (but is not limited to) the following:

- (a) analysis of the current capacity of recycling facilities that can accept end of life mining heavy plant tyres for processing in NSW and other neighbouring states;
- (b) evidence of efforts made by the proponent in the previous 24 months to actively seek recycling options for end of life heavy mining plant tyres generated at the premises;
- (c) analysis of any pre-treatment options that can be performed at the premises to reduce the costs associated with the transport and recycling of end of life mining heavy plant tyres;
- (d) analysis of the specific costs to the licensee associated with the transport and delivery/acceptance of site generated end of life mining heavy plant tyres at the nearest capable recycling facilities;
- (e) the current costs associated with the continued on-site burial of end of life mining heavy plant tyres; and
- (f) a full cost benefit analysis of continued on-site burial of end of life mining tyres compared to their transport from the site and their recycling/reprocessing.

L2.4 The Proponent may dispose of up to 400 end-of-life mining heavy plant-tyres on the premises in each annual return year period up until 31 March 2023. Should the report provided in accordance with condition E1.1:

- (a) be submitted to the EPA's satisfaction at intervals of 2 years; and*
- (b) find that recycling options are not feasible; then the on-site disposal of end-of life heavy mining plant tyres may continue for the subsequent 2 annual reporting periods.*

Note: Only waste tyres generated at the premises may be disposed of in accordance with this condition.

O5.1 The Licensee is authorised to dispose of heavy plant-tyre waste generated on the premises, in the waste rock/overburden emplacements. The Licensee must:

- (a) ensure that heavy plant waste tyres are re-used on the premises as much as practical;*
- (b) ensure that any surplus heavy plant waste tyres can be emplaced by being spread out within the waste rock/overburden emplacements and buried as deep as practical, but, covered by at least 20m of inert material beneath any final rehabilitated surface;*
- (c) place heavy plant waste tyres at least 15m away from coarse reject material or tailings emplacement areas;*
- (d) not emplace any heavy plant waste tyres directly on the pit floor, or in a location that is likely to impede or contaminate saturated aquifers;*
- (e) not emplace any heavy plant waste tyres in a position that compromises the stability of the final rehabilitated landform;*
- (f) not place any heavy plant waste tyres within 15 metres of heated or potentially acid forming materials;*
- (g) not place any heavy plant waste tyres in an area likely to leach to any watercourse; and*
- (h) record the co-ordinates (easting, northing and elevation) of each disposal location.*

O5.2 Stockpiles of any heavy plant waste tyres stored at the premises awaiting disposal must:

- (a) be less than 3 metres in height;*
- (b) not cover an area of more than 200 square metres; and*
- (c) not be located within 10 metres of any other flammable or combustible materials.*

R5.5 The Proponent must provide the EPA with an Annual Heavy Plant-Tyre Disposal Report. The Report must be submitted with the licence Annual Return each year and must include:

- (a) a plan of the disposed heavy plant waste tyres on the premises for the period that includes:*
 - (i) each tyre serial number;*
 - (ii) supplier of each tyre;*
 - (iii) purchase date of each tyre;*
 - (iv) disposal date of each tyre;*
 - (v) co-ordinates (easting and northings) of the location where of each tyre was disposed of by burial in accordance with condition O5.1;*
 - (vi) the Real Level (RL) in metres AHD of each tyre emplacement location;*
 - (vii) the number of tyres buried in within each emplacement location; and*
 - (viii) the cumulative total number and tonnage of tyres disposed of at the premises each year.*

Whitehaven is open to engaging with the EPA in regards to the proposed conditions during the process to amend the Maules Creek Coal EPL (Licence number 20221).

4.1.2 NSW Resources Regulator

The NSW Resources Regulator submission provided no specific comments regarding mine safety or mine rehabilitation matters in relation to the Modification.

4.1.3 Narrabri Shire Council

Whitehaven notes that the NSC submission states that “at the current time significant financial and physical barriers exist in respect of the recycling of end-of-life heavy mining plant tyres” and that “waste tyre management options are currently limited for mining operations in NSW and across Australia, due to a general lack of available recycling technologies and transportation impediments”. The NSC submission includes the following recommendations relating to waste heavy vehicle tyre disposal:

Waste Management

In relation to tyre waste management it is therefore recommended that:

- (a) The approval authority require that the proponent undertake a review of available recycling for end of life heavy mining plant tyres at recurrent intervals throughout the remaining life of the mine.*
- (b) A limitation be imposed on the number of, and origin of tyres that can be disposed of at the premises in any one year.*
- (c) Only waste tyres generated at the premises may be disposed of on the subject site.*
- (d) No specific objections are raised to the proposed disposal of heavy vehicle tyres in spoil emplacement areas on the basis that the tyres are placed as deep as possible, but not directly on the pit or emplacement floor. Any associated placement activities should ensure that waste tyres do not impede saturated aquifers or compromise the stability of the consolidated final landform.*
- (e) Temporary tyre stockpile areas should be subject to an ongoing and robust monitoring and management program to ensure that stored tyres do not provide an environment that promotes harbourage of vermin or encourages mosquito breeding. Appropriate mitigation and management measures should be put in place in respect of potential stockpile fires.*

Council is generally supportive of the proponent’s intention to:

- (a) Maintain a comprehensive inventory of all waste heavy vehicle tyres buried on site, including within waste rock emplacement areas; and*
- (b) Undertake preliminary Environmental Risk Assessments prior to the selection of an appropriate disposal area for the waste heavy vehicle tyres.*

Noise and Air Quality Impacts

...the proponent should continue to implement existing noise mitigation measures, including real-time and proactive noise management systems, to ensure ongoing compliance with the noise limits prescribed under PA 10_0138. Where appropriate, the Noise Management Plan (NMP) and any associated approvals frameworks should be updated to incorporate the modification, if endorsed.

The proponent should continue to implement existing dust mitigation measures described in the Air Quality Management Plan (AQMP), including operational and physical mitigation measures, to ensure compliance with the dust limits prescribed in PA 10_0138. The AQMP should be updated accordingly if project approval is issued.

Whitehaven does not object to the above recommendations. Whitehaven suggests that the waste management recommendations be addressed through the additional development consent conditions proposed by the EPA (Section 4.1.1).

4.2 ORGANISATION SUBMISSIONS

4.2.1 Gomeroi Applicant

Responses to the Gomeroi Applicant submission are provided in Table 4-1.

Table 4-1
Responses to Gomeroi Applicant Submission

Comment	Response
<p><i>The Proponent has not provided an estimate of the volume of tyres presently stockpiled.</i></p> <p><i>The Gomeroi Applicant requests the Proponent provide information relating to present tyre disposal processes at Maules Creek Coal Mine and whether any tyres have already been buried at Maules Creek Coal Mine.</i></p>	<p>The Modification seeks approval for the disposal of waste heavy vehicle tyres, including waste tyres that have been stockpiled since the commencement of operations at the MCCM. Disposal of these tyres would be staggered to optimise disposal locations and volumes. MCC will maintain a register of waste tyre disposal activities and report on these activities in the MCCM annual reviews.</p>
<p><i>The Gomeroi Applicant submits that insufficient information has been provided to say with certainty that there is limited potential for contamination.</i></p> <p><i>No site-specific assessment has been made in relation to the disposal of tyres at Maules Creek Coal Mine. The Gomeroi Applicant requests a site-specific assessment is undertaken into the long-term environmental impact of the burial of waste off the road tyres at Maules Creek Coal Mine.</i></p>	<p>In preparing the Modification application, Whitehaven has reviewed available information relating to the potential environmental impacts of waste heavy vehicle tyre disposal (e.g. Tyre Stewardship Australia [2020] and ACARP (2000) cite studies demonstrating that whole buried tyres do not pose a risk to ground water). Based on this review, the potential for environmental impacts associated with burial of waste tyres is understood to be limited.</p> <p>The proposed disposal methodology has been designed to reduce the potential for environmental impacts as far as practicable, including by:</p> <ul style="list-style-type: none"> ■ re-using waste heavy vehicle tyres as much as practical; ■ spreading out waste heavy vehicle tyres within the waste rock emplacements and burying as deep as practical (or at least 20 m) beneath the final surface, and at least 15 m away from coarse reject material or tailings emplacement areas; ■ not emplacing waste heavy vehicle tyres directly on the pit floor, or in a location that is likely to impede or contaminate saturated aquifers; ■ not emplacing waste heavy vehicle tyres in a position that compromises the stability of the final rehabilitated landform; and ■ not placing waste heavy vehicle tyres within 15 m of heated or potentially acid forming materials or in areas likely to leach to any watercourse.

Table 4-1 (continued)
Responses to Gomeri Applicant Submission

Comment	Response
<i>The disposal of waste on Gomeri Country in the manner proposed the Proponent in this case offends the customs and cultural practices of Gomeri People</i>	On-site disposal of waste heavy vehicle tyres within the MCCM's waste rock emplacements is proposed as the most appropriate disposal option presently available. The proposed disposal methodology has been designed to reduce the potential for environmental impacts as far as practicable. The Modification would not change the overarching rehabilitation goal for the MCCM, which is to create a final landform that is safe, stable and non-polluting. In addition, as described in Section 4.1.1, Whitehaven does not object to the development consent conditions proposed by the EPA which would require Whitehaven to review local recycling opportunities every two years.
<i>There has been little research into the phenomenon of 'floating' as it relates to heavy vehicle tyres. The Gomeri Applicant submits further assessment is needed in relation to this risk.</i>	Whitehaven proposes to cover the waste heavy vehicle tyres by at least 20 m of inert material beneath any final rehabilitated surface, consistent with the development consent conditions proposed by the EPA (Section 4.1.1). As such, the likelihood of whole tyres floating upward and potentially surfacing overtime is considered to be low. As described in ACARP (2000), the perception that whole tyres disposed in landfill "float" upward and may surface overtime is not supported by experimental evidence and is considered unlikely due to the weight and rigidity of heavy vehicle tyres, as well as the depth of disposal.
<i>The Gomeri Applicant submits it would therefore be appropriate to require the recycling of waste tyres for Maules Creek Coal Mine and other similar projects. A condition of any approval in this matter should be that the Proponent invest in developing local recycling facilities.</i>	Recycling of waste heavy vehicle tyres is not considered to be currently feasible or viable for the MCCM and therefore on-site disposal is the proposed management strategy for this waste stream. MCC would continue to investigate feasible and reasonable opportunities for recycling waste heavy vehicle tyres from the MCCM at a local location as options become available during the remainder of the mine life. In addition, as described in Section 4.1.1, Whitehaven does not object to the development consent conditions proposed by the EPA which would require Whitehaven to review local recycling opportunities every two years.

4.2.2 Leard Forest Research Node

Responses to the key issues discussed in the Leard Forest Research Node submission are provided in Table 4-2.

Table 4-2
Responses to Leard Forest Research Node Submission

Comment	Response
<i>Given the circumstances of the highly significant announcement of Whitehaven Coal's tyre suppliers Bridgestone and Michelin through Tyre Stewardship Australia, that a product stewardship scheme is going to commence on 1 January 2022, we consider it completely inappropriate for the company to persist with this modification to bury 400 OTR tyres per annum for the remaining life of the mine.</i>	Whitehaven acknowledges the commitments of its suppliers regarding a Tyre Product Stewardship Scheme from January 2022. Whitehaven notes recent comments by Tyre Stewardship Australia (TSA) that "the current lack of large scale viable recycling solutions in Australia for mining and agriculture tyres - coupled with the tyranny of distance and complex logistics requirements to move larger tyres - has been a major impediment for this sector to advance recovery rates" and "there [is] no 'quick fix' to the OTR problem... [c]reating viable, sustainable solutions needs engagement across the OTR value chain" (TSA Media Release, October 2021). As described in Section 4.1.1, Whitehaven does not object to the development consent conditions proposed by the EPA which would require Whitehaven to review local recycling opportunities every two years.

Table 4-2 (continued)
Responses to Leard Forest Research Node Submission

Comment	Response
<i>We also consider it unacceptable that the rock crushing component of Mod 8 was amalgamated with the tyre modification without notification to the public through the Maules Creek Community Consultative Committee despite the potential severe noise impacts that will affect some residents.</i>	MCC provided an overview of the proposed waste tyre disposal activity to the CCC at the May 2021 meeting. The proposed mobile coal sizing and rock crushing activities, and supporting technical assessments were outlined to the CCC at a meeting on 8 September 2021.
<i>The actual risk of thousands of tonnes of these tyres being landfilled in an area has not been considered in detail in the Modification Report. No evidence from landfill engineers or other suitable experts has been presented.</i> <i>We would have considered the Modification Report for such a scandalous Modification to be based on more substantial evidence that the practice poses no harm to the landform stability or groundwater contamination.</i>	In preparing the Modification application, Whitehaven has reviewed available information relating to the potential environmental impacts of waste heavy vehicle tyre disposal (e.g. Tyre Stewardship Australia [2020] and ACARP [2000] cite studies demonstrating that whole buried tyres do not pose a risk to groundwater). Based on this review, the potential for environmental impacts associated with chemical leaching of waste tyres is understood to be limited. The proposed disposal methodology has been designed to reduce the potential for environmental impacts as far as practicable, including by: <ul style="list-style-type: none"> ■ re-using waste heavy vehicle tyres as much as practical; ■ spreading out waste heavy vehicle tyres within the waste rock emplacements and burying as deep as practical (or at least 20 m) beneath the final surface, and at least 15 m away from coarse reject material or tailings emplacement areas; ■ not emplacing waste heavy vehicle tyres directly on the pit floor, or in a location that is likely to impede or contaminate saturated aquifers; ■ not emplacing waste heavy vehicle tyres in a position that compromises the stability of the final rehabilitated landform; and ■ not placing waste heavy vehicle tyres within 15 m of heated or potentially acid forming materials or in areas likely to leach to any watercourse.
<i>Whitehaven Coal needs to get approval from the NSW Aboriginal Land Council in order to comply with Clause 115(8) of the Environmental Planning & Assessment Regulation 2000...</i>	The MCCM includes land that is owned by Red Chief Local Aboriginal Land Council. Whitehaven understands that the consent requirements of the NSW Aboriginal Land Council can be attended to prior to determination of the Modification.
<i>There also appear to be a number of anomalies that are not accounted for, including incomplete land ownership particulars and maps which do not show the area owned by the Red Chief Local Aboriginal Land Council.</i>	Land that is owned by Red Chief Local Aboriginal Land Council within the MCCM is denoted "355" in Appendix 4 of the MCCM development consent (PA 10_0138).

4.2.3 Wando CCC

Responses to the Wando CCC submission are provided in Table 4-3.

Table 4-3
Responses to Wando CCC Submission

Comment	Response
<i>[The Modification] does not appear to meet the regulatory requirements [Clause 115(8) of the EP&A Regulation].</i>	The MCCM includes land that is owned by Red Chief Local Aboriginal Land Council. Whitehaven understands that the consent requirements of the NSW Aboriginal Land Council can be attended to prior to determination of the Modification.
<i>Wando remains concerned that the proponent's claims that current groundwater monitoring practices are sufficient to detect (let alone prevent) leaching of contaminants into groundwater are unproven.</i>	<p>In preparing the Modification application, Whitehaven has reviewed available information relating to the potential environmental impacts of waste heavy vehicle tyre disposal (e.g. Tyre Stewardship Australia [2020] and ACARP [2000] cite studies demonstrating that whole buried tyres do not pose a risk to ground water). Based on this review, the potential for environmental impacts associated with burial of waste tyres is understood to be limited.</p> <p>The proposed disposal methodology has been designed to reduce the potential for environmental impacts as far as practicable, including by:</p> <ul style="list-style-type: none"> ■ spreading out waste heavy vehicle tyres within the waste rock emplacements and burying as deep as practical (or at least 20 m) beneath the final surface, and at least 15 m away from coarse reject material or tailings emplacement areas; ■ not emplacing waste heavy vehicle tyres directly on the pit floor, or in a location that is likely to impede or contaminate saturated aquifers; and ■ not placing waste heavy vehicle tyres within 15 m of heated or potentially acid forming materials or in areas likely to leach to any watercourse.
<i>Whitehaven Mine at Maules Creek should be encouraged to engage fully with the Tyre Stewardship of Australia and other stake-holders to develop an efficient recycling option for dealing with end-of-life mining tyres in NSW. The Tyre Stewardship Council of Australia's extended producer responsibility scheme will commence in January 2022.</i>	<p>Whitehaven acknowledges the commitments of its suppliers regarding a Tyre Product Stewardship Scheme from January 2022. Whitehaven notes the comments by Tyre Stewardship Australia that "the current lack of large scale viable recycling solutions in Australia for mining and agriculture tyres - coupled with the tyranny of distance and complex logistics requirements to move larger tyres - has been a major impediment for this sector to advance recovery rates" and "there [is] no 'quick fix' to the OTR problem... [c]reating viable, sustainable solutions needs engagement across the OTR value chain" (TSA Media Release, October 2021).</p> <p>As described in Section 4.1.1, Whitehaven does not object to the development consent conditions proposed by the EPA which would require Whitehaven to review local recycling opportunities every two years.</p>
<p><i>It is unacceptable to inflict more noise and dust into the Maules Creek population.</i></p> <p><i>Many of the locally owned properties are outside the model boundary.</i></p> <p><i>Much of the rock crushing will occur at night in an attempt to mask the dust</i></p> <p><i>Any increase [in greenhouse gas emissions], no matter what fraction of the current project is being argued, must be rejected.</i></p>	<p>The Noise Assessment prepared for the Modification concluded that the coal sizing and rock crushing activities can be undertaken in accordance with the existing noise limits for the MCCM. The Modification does not seek approval for any increase to the existing noise limits for the MCCM.</p> <p>Similarly, the Air Quality and Greenhouse Gas Assessment prepared for the Modification concluded that the incremental increase in dust emissions would not be discernable at any private receivers. The Modification does not seek approval for any increase to the existing dust limits for the MCCM.</p> <p>Both the Noise Assessment and Air Quality and Greenhouse Gas Assessment considered all relevant private receivers surrounding the MCCM.</p> <p>As described in the Modification Report, the mobile rock crusher would operate up to 7 days per week in day time hours when in use (i.e. no night time activity is proposed).</p> <p>The Modification would involve a negligible increase in annual greenhouse gas emissions.</p>

4.2.4 Maules Creek CWA

Responses to the Maules Creek CWA submission are provided in Table 4-4.

Table 4-4
Responses to Maules Creek CWA Submission

Comment	Response
<i>This [Modification] Report... lacks actual investigation and evidence of working with the recycling industry in order to include alternatives to tyre burial...</i>	<p>Recycling of waste heavy vehicle tyres is not considered to be currently feasible or viable for the MCCM and therefore on-site disposal is the preferred management strategy for this waste stream. MCC would continue to investigate feasible and reasonable opportunities for recycling waste heavy vehicle tyres from the MCCM at a local location if options become available during the remainder of the mine life.</p> <p>As described in Section 4.1.1, Whitehaven does not object to the development consent conditions proposed by the EPA which would require Whitehaven to review local recycling opportunities every two years.</p>
<i>The Waste Tyre Disposal – of many hundreds of thousands of tonnes of “special waste, tyres” are not of minimal impact.</i>	<p>The proposed disposal methodology has been designed to reduce the potential for environmental impacts as far as practicable, including by:</p> <ul style="list-style-type: none"> ■ re-using waste heavy vehicle tyres as much as practical; ■ spreading out waste heavy vehicle tyres within the waste rock emplacements and burying as deep as practical (or at least 20 m) beneath the final surface, and at least 15 m away from coarse reject material or tailings emplacement areas; ■ not emplacing waste heavy vehicle tyres directly on the pit floor, or in a location that is likely to impede or contaminate saturated aquifers; ■ not emplacing waste heavy vehicle tyres in a position that compromises the stability of the final rehabilitated landform; and ■ not placing waste heavy vehicle tyres within 15 m of heated or potentially acid forming materials or in areas likely to leach to any watercourse.
<i>The modification should be rejected for its proposed direction to avoid or delay the opportunities created by the industry; for example, the Tyre Stewardship Australia (TSA).</i>	<p>Whitehaven acknowledges the commitments of its suppliers regarding a Tyre Product Stewardship Scheme from January 2022. Whitehaven notes the comments by Tyre Stewardship Australia that “the current lack of large scale viable recycling solutions in Australia for mining and agriculture tyres - coupled with the tyranny of distance and complex logistics requirements to move larger tyres - has been a major impediment for this sector to advance recovery rates” and “there [is] no ‘quick fix’ to the OTR problem... [c]reating viable, sustainable solutions needs engagement across the OTR value chain” (TSA Media Release, October 2021).</p> <p>As described in Section 4.1.1, Whitehaven does not object to the development consent conditions proposed by the EPA which would require Whitehaven to review local recycling opportunities every two years.</p>
<i>Modification commitments to monitor groundwater by the MCCM seem unproductive for successful compliance work.</i>	<p>An existing groundwater quality monitoring program is undertaken in accordance with the MCCM Water Management Plan (MCC, 2019) and includes a suite of analytes which will assist in identifying any potential contamination from waste tyre disposal and prompt remediation actions.</p>
<i>This modification does not appear to meet the regulatory requirements [Clause 115[8] of the EP&A Regulation].</i>	<p>The MCCM includes land that is owned by Red Chief Local Aboriginal Land Council. Whitehaven understands that the consent requirements of the NSW Aboriginal Land Council can be attended to prior to determination of the Modification.</p>

Table 4-4 (continued)
Responses to Maules Creek CWA Submission

Comment	Response
<p><i>...the volume of dust and noise of this crusher operating 24x7 will be prohibitive to local community health and the environment.</i></p> <p><i>There must not be an increased GHG from the modification</i></p>	<p>The Noise Assessment prepared for the Modification concluded that the coal sizing and rock crushing activities can be undertaken in accordance with the existing noise limits for the MCCM. The Modification does not seek approval for any increase to the existing noise limits for the MCCM.</p> <p>Similarly, the Air Quality and Greenhouse Gas Assessment prepared for the Modification concluded that the incremental increase in dust emissions would not be discernable at any private receivers. The Modification does not seek approval for any increase to the existing dust limits for the MCCM.</p> <p>Both the Noise Assessment, and Air Quality and Greenhouse Gas Assessment considered all relevant private receivers surrounding the MCCM.</p> <p>As described in the Modification Report, the mobile rock crusher would operate up to 7 days per week in day time hours when in use (i.e. no night time activity is proposed).</p> <p>The Modification would involve a negligible increase in annual greenhouse gas emissions.</p>

4.3 PUBLIC SUBMISSIONS

Table 4-5 provides responses to the key issues raised in public submissions.

Table 4-5
Summary of the Issues Received Through Public Submissions

Issues Raised	Response
<p>That waste heavy vehicle tyres should be recycled and not buried, and that Whitehaven should engage with Tyre Stewardship Australia to identify recycling opportunities.</p>	<p>Whitehaven acknowledges the commitments of its suppliers regarding a Tyre Product Stewardship Scheme from January 2022. Whitehaven notes the scheme requires participants to engage to identify viable, sustainable recycling solutions. Whitehaven also notes Tyre Stewardship Australia comment that “the current lack of large scale viable recycling solutions in Australia for mining and agriculture tyres - coupled with the tyranny of distance and complex logistics requirements to move larger tyres - has been a major impediment for this sector to advance recovery rates” and “there [is] no ‘quick fix’ to the OTR problem”.</p> <p>As described in Section 4.1.1, Whitehaven does not object to the development consent conditions proposed by the EPA which would require Whitehaven to review local recycling opportunities every two years.</p>

Table 4-5 (continued)
Summary of the Issues Received Through Public Submissions

Issues Raised	Response
<p>That disposing of waste heavy vehicle tyres within the emplacement areas will result in contamination of the land and groundwater.</p> <p>That the cumulative impacts of waste heavy vehicle tyres disposal at other mine sites should be considered.</p>	<p>In preparing the Modification application, Whitehaven has reviewed available information relating to the potential environmental impacts of waste heavy vehicle tyre disposal (e.g. Tyre Stewardship Australia [2020] and ACARP [2000] cite studies demonstrating that whole buried tyres do not pose a risk to ground water). Based on this review, the potential for environmental impacts associated with burial of waste tyres is understood to be limited.</p> <p>The proposed disposal methodology has been designed to reduce the potential for environmental impacts as far as practicable, including by:</p> <ul style="list-style-type: none"> ■ re-using waste heavy vehicle tyres as much as practical; ■ spreading out waste heavy vehicle tyres within the waste rock emplacements and burying as deep as practical (or at least 20 m) beneath the final surface, and at least 15 m away from coarse reject material or tailings emplacement areas; ■ not emplacing waste heavy vehicle tyres directly on the pit floor, or in a location that is likely to impede or contaminate saturated aquifers; ■ not emplacing waste heavy vehicle tyres in a position that compromises the stability of the final rehabilitated landform; and ■ not placing waste heavy vehicle tyres within 15 m of heated or potentially acid forming materials or in areas likely to leach to any watercourse.
<p>The risk of waste heavy vehicle tyres catching fire after disposal (i.e. once buried) and releasing pollutants into the soil and groundwater which may result in human health impacts.</p>	<p>A benefit of the Modification is that disposal of waste tyres would reduce the fire risk associated with their long-term surface storage.</p> <p>The proposed disposal methodology is considered to reduce the risk of underground fire as far as practicable by:</p> <ul style="list-style-type: none"> ■ spreading out waste heavy vehicle tyres within the waste rock emplacements and burying as deep as practical (or at least 20 m) beneath the final surface, and at least 15 m away from coarse reject material or tailings emplacement areas; and ■ not placing waste heavy vehicle tyres within 15 m of heated or potentially acid forming materials or in areas likely to leach to any watercourse.
<p>That relaxing the environmental performance measures relating to light, waste, noise, dust or water would increase impacts on landholders surrounding the MCCM.</p>	<p>The Modification does not propose to change lighting or water management practices implemented at the MCCM.</p> <p>The Noise Assessment prepared for the Modification concluded that the coal sizing and rock crushing activities can be undertaken in accordance with the existing noise limits for the MCCM. The Modification does not seek approval for any increase to the existing noise limits for the MCCM.</p> <p>Similarly, the Air Quality and Greenhouse Gas Assessment prepared for the Modification concluded that the incremental increase in dust emissions would not be discernable at any private receivers. The Modification does not seek approval for any increase to the existing dust limits for the MCCM.</p>

5 EVALUATION

Submissions on the Modification were received from public authorities, including NSW Government agencies and NSC, as well as organisations and the public.

Issues raised in objecting public and organisation submissions were generally covered by the submissions received from the NSW EPA and NSC, which were in the form of comments. Key issues raised related to potential impacts of waste heavy vehicle tyre disposal on water resources, potential recycling options for waste heavy vehicles tyres, and the air quality and noise impacts associated with the coal sizing and rock crushing activities.

In particular, comments from the NSW EPA were in the form of approval conditions to be implemented following approval of the Modification (should it be approved). This Submissions Report has been prepared to support the key conclusions of the Modification Report, namely that:

- The coal sizing and rock crushing activities can be undertaken in accordance with the existing noise and air quality limits for the MCCM, and with a negligible incremental increase in greenhouse gas emissions.
- The Modification can be implemented with no increase to the previously approved disturbance footprint of the MCCM.
- A range of measures are implemented at the MCCM to extend the operational lifespan of mining equipment tyres and minimise the number of waste tyres requiring disposal.
- The proposed waste heavy vehicle tyre disposal methodology has been designed to reduce the potential for environmental impacts as far as practicable.
- MCC would continue to investigate feasible and reasonable opportunities for recycling waste heavy vehicle tyres from the MCCM at a local location as options become available during the remainder of the mine life.

Overall, in consideration of the conclusions of the Modification Report, post-approval agency recommendations and information provided in this Submissions Report, it is concluded the minor changes associated with the Modification to the approved MCCM operation can be conducted consistent with existing environmental management systems.

As described in the Modification Report, the Modification is required to:

- provide MCC an option to optimise the mix of bypass coal and washed coal transported from the site in response to coal market conditions, while maintaining currently approved ROM coal extraction and product coal transport rates;
- enable MCC to utilise crushed rock that would otherwise be emplaced for construction, road maintenance and drainage; and
- provide MCC with the ability to safely dispose of waste heavy vehicle tyres on-site and with minimal environmental impact.

The key justification for the Modification is that it provides for the efficient extraction of a significant coal resource that State and Commonwealth Governments have approved to be mined, subject to the conditions of the relevant State and Commonwealth approvals.

In weighing up the benefits and minor potential environmental impacts associated with the Modification, as assessed and described in the Modification Report and this Submissions Report, the Modification, on balance, is considered to be in the public interest.

6 REFERENCES

Australian Coal Association Research Program (2000) *Management of Waste Tyres in the Mining Industry*.

Department of Industry and Environment (2021) *State Significant Development- preparing a Submissions Report (Appendix C)*.

Maules Creek Coal Pty Ltd (2019) *Maules Creek Coal Mine Water Management Plan*.

Maules Creek Coal Pty Ltd (2021) *Maules Creek Coal Mine Mobile Coal Sizing and Waste Tyre Disposal Modification Report*.

Tyre Stewardship Australia (2020) *Mining Industry - Off-The-Road Used Tyre Analysis*.

Tyre Stewardship Australia (2021) *Media Release - Tyre importers pledge to improve recovery of used off-the-road (OTR) tyres*