Nos. MRA082-13 EPA083-13

BETWEEN:

HANCOCK COAL PTY LTD

and

KATHRYN KELLY, PAUL AND JANEICE ANDERSON, COAST AND COUNTRY ASSOCIATION OF QUEENSLAND INC, MACKAY CONSERVATION GROUP, FIORELLA PAOLA CASSONI, BRUCE AND ANNETTE CURRIE

Respondents

Applicant

and

THE CHIEF EXECUTIVE, DEPARTMENT OF ENVIRONMENT AND HERITAGE PROTECTION

Statutory Party

OVERVIEW OF SUBMISSIONS

COAST AND COUNTRY ASSOCIATION OF QUEENSLAND INC.

 This overview is prepared on behalf of the Coast and Country Association of Queensland Inc (CCAQ) in relation to applications by Hancock Coal Pty Ltd (Hancock) for an environmental authority under the *Environmental Protection Act 1994* (Qld) (EPA) and a mining lease under the *Mineral Resources Act 1989* (Qld) (MRA) for the Alpha coal project (Alpha).

INTRODUCTION1

- 2. In deciding the applications, the Court needs to be affirmatively satisfied that the applications will produce a net benefit to Queensland before it can properly recommend approval:
 - (a) In making a decision whether to recommend approval or refusal of the applications, the Court is acting in an administrative capacity.² The task of an administrative decision-maker is to make the correct or preferable decision on the facts and material before them.³
 - (b) The subject matter of these cases is concerned with valuable public rights and assets, in the form not only of the coal which Hancock seeks to mine, which is the property of the Crown in right of Queensland,⁴ but also the environment in which every living thing in Queensland exists and thrives. The consequence of granting Hancock's application is to degrade these rights and assets. If that is to be allowed, then it ought only to be allowed in circumstances where the Court can be confident that, despite this degradation, there will be a net benefit to Queensland.
 - (c) Such a view is consistent with the terms of both the MRA and the EPA:
 - (i) In Sinclair v Maryborough Mining Warden, Barwick CJ observed that a mining lease should not be granted simply because an objector had not succeeded. In that case, his Honour emphasised the decisionmaker must form an 'affirmative conclusion ... that the recommendations should be made' before a recommendation could

¹ For more detail on the matters canvased in this section, see CCAQ Closing Submissions ('Submissions'), [10] – [16].

² Dunn v Burtenshaw & Anor [2010] QLAC 5 at [47].

³ See, e.g., *Drake v Minister for Immigration and Ethnic Affairs* (1979) 24 ALR 577, at 589. *Drake* was concerned with merits review proceedings, but the same test has been said to apply to first instance decision-makers: see *Bushell v Repatriation Commission* (1992) 175 CLR 408, at 425 per Brennan J. ⁴ Section 8, *Mineral Resources Act* 1989 (Qld).

be made.⁵

- (ii) The same point was made by the Court of Appeal in Armstrong v Brown⁶ and Queensland Conservation Council Inc. v Xstrata Coal Queensland Pty Ltd.⁷ In particular, in Xstrata, the Court of Appeal treated the observations in Sinclair as applicable to decision-making under the EPA.⁸
- (iii) In fact, the need for this Court to be affirmatively satisfied that it is appropriate to grant approval is particularly important within the framework of the EPA, as that Act imposes a duty on the Court to act in the way that best protects the environment while allowing ecologically sustainable development (**ESD**).⁹
- (d) The need to be satisfied does not impose any legal onus on any party to this hearing, as such concepts are inapplicable in administrative proceedings.¹⁰ It does mean, however, that if this Court is not certain that the grant of the applications will result in a net benefit, it should recommend refusal.
- 3. A necessary step to attaining the required state of satisfaction is that the Court must have sufficient information to be able to say, with some confidence, what the impacts positive and negative will be.
- 4. In the absence of adequate information, it is not possible for this Court to incorporate the principles of ESD into its decision making, as it is required to do under the EPA.¹¹ In this context, not having reliable information is the same

⁵ (1975) 132 CLR 473, at 481 per Barwick CJ (with whom Murphy J agreed).

⁶ [2004] 2 Qd R 345, [15].

^{7 (2007) 155} LGERA 322, [53].

⁸ (2007) 155 LGERA 322, [53].

⁹ Section 5, Environmental Protection Act 1994 (Qld).

¹⁰ See, e.g., *Re Minister for Immigration and Multicultural Affairs; ex parte S20/2002* (2003) 77 ALJR 1165, at [134] per Kirby J.

¹¹ Sections 5 and 223(c) and standard criteria (a), *Environmental Protection Act* 1994 (Qld). See also *Gray v Minister for Planning* (2006) 152 LGERA 258, [118], [126] and [135] and *Bentley v BGP Properties Pty Ltd* (2006) 145 LGERA 234, [67] – [70] per Preston CJ.

as not having any information.

- 5. Unfortunately, in this case, Hancock's evidence is not adequate to enable the Court to be satisfied that the grant of the applications will result in a net benefit. CCAQ's case focusses on three areas of inadequacy:
 - (a) groundwater impacts;
 - (b) climate change impacts; and
 - (c) economic impacts.
- 6. In each of these areas, Hancock's evidence is deficient, although for different reasons.

GROUNDWATER

- The critical issue in relation to groundwater in this case is the inherent unreliability of Hancock's predictions about the likely groundwater impacts of Alpha.
- 8. In any groundwater analysis, absolute scientific certainty is unlikely to be achievable. That said, there is sufficient scientific understanding of groundwater, and modern technology available, to provide a reasonably accurate assessment of possible and likely impacts.
- 9. The accuracy of such predictions, and thus the faith that can be had in them, depends critically on the veracity of the assumptions underpinning them and the rigour with which the analysis and modelling was conducted. In short, if the assumptions are wrong or if the analysis and modelling is sloppy, what confidence can this Court have in the predictions?
- 10. Hancock has provided modelling which it contends demonstrate the 'worst case' impact of Alpha on groundwater supplies. This cannot be accepted:
 - (a) The validity of the modelling depends on a particular conception of the

hydrogeology of the area.

- (b) The conception relied upon by Hancock is internally inconsistent and unable to plausibly explain observed groundwater flows.¹²
- (c) Independently of the conceptualisation, there are also real concerns about the amount of recharge and the mechanism by which it occurs.¹³
- (d) Dr Webb's hypothesis of folding provides a plausible explanation for the observed behaviour, but cannot, without further analysis and modelling to address these and other inadequacies in the modelling, provide an estimate of the likely groundwater impacts of Alpha.
- The EPA requires this Court to apply the precautionary principle in making decisions.¹⁴
- 12. The precautionary principle applies where:
 - (a) there is a risk of serious or irreversible environmental harm; and
 - (b) there is uncertainty regarding the nature or scope of the environmental harm.¹⁵
- 13. In this case, those criteria are clearly satisfied:
 - (a) dewatering, including interception of groundwater by the 24km long final void, is a form of environmental harm which is both serious and irreversible, with potential impacts on people and communities which rely on that water; and

¹² Submissions, [30] – [32] and [39].

¹³ Submissions, [33] - [37] and [68] - [79].

¹⁴ De Lacey v Kagara Pty Ltd [2009] QLC 77, [172] – [177].

¹⁵ *Telstra Corp Ltd v Hornsby Shire Council* (2006) 67 NSWLR 256, [128] ("Telstra"). The operation of the precautionary principle, where it applies, has not been expressly considered by the Supreme Court of Queensland. That said, the principle has been taken into account in a number of recent decisions of this Court including *De Lacey v Kagara Pty Ltd* [2009] QLC 77, [172] – [177]; *Dunn v Burtenshaw* [2010] QLC 70, [33]; *Xstrata Coal Qld Pty Ltd v Friends of the Earth, Brisbane Co-op Ltd* [2012] QLC 13, [253] and [256]; and *Gregcarbil Pty Ltd v Backus & Ors* (*No.* 2) [2013] QLC 46, [192].

- (b) the state of the evidence on groundwater can only leave this Court with uncertainty regarding likely future impacts.
- 14. The only appropriate precautionary response is to recommend that the application be refused:
 - (a) Once the precautionary principle is engaged, the decision-maker should take steps to avoid the feared environmental harm.¹⁶
 - (b) Whatever steps are taken should be proportionate to the risk feared.¹⁷
 - (c) Given the lack of credible information on impacts, refusal is the appropriate response here:
 - uncertainty is 'part and parcel' of groundwater impact assessment.
 Nonetheless, there are degrees of uncertainty;¹⁸
 - (ii) here, the nature of extent of the inadequacies of the predictive modelling and consequential uncertainties regarding groundwater impacts mean that the Court simply cannot assess what the impacts from Alpha will be; and
 - (iii) in those circumstances, the only appropriate response is to recommend refusal.
 - (d) There is no satisfactory alternative to recommending refusal:
 - (i) In this case, an adaptive management approach is unsuitable:
 - (A) In some cases, an adaptive management approach can be used to address uncertainty, by providing for monitoring of impacts and responding if problems are detected as part of the

¹⁶ Telstra, [128].

¹⁷ Telstra, [166] - [167].

¹⁸ Cox v Southern Rural Water [2009] VCAT 1001, [39].

conditions attaching to any approval.¹⁹

- (B) That approach is inappropriate in this case:
 - (1) To be effective, an adaptive management approach must rely on baseline data that allows a decision-maker to have confidence that the desired outcome can be achieved;²⁰
 - (2) Here, there is no adequate baseline assessment of impacts and so the Court cannot have the required confidence.²¹
- (ii) Nor can the Court simply rely on the possibility of make-good agreements to address the risk of adverse impacts:
 - (A) The impacts of Alpha will effectively last forever, particularly the loss of groundwater through interception by the massive final void, which will be permanent.
 - (B) Make-good agreements under the *Water Act* may be able to mitigate some (but not all) of the harm, but those impacts still need to be considered under both the EPA and the MRA.
 - (C) Moreover, the assumption that make-good agreements can address the harm is still critically dependent on the work of Mr Stewart and Mr Hair.²²
- 15. Accordingly, the appropriate precautionary response to the lack of certainty over groundwater impacts is to recommend refusal.

¹⁹ Telstra, [163].

²⁰ Newcastle & Hunter Valley Speleological Society Inc v Upper Hunter Shire Council and Stoneco Pty Limited [2010] NSWLEC 48, [184].

²¹ Compare *SHCAG Pty Ltd v Minister for Planning and Infrastructure and Boral Cement Limited* [2013] NSWLEC 1032. In that case, the NSW Land and Environment Court refused to accept a water management plan (WMP) as creating adaptive management regime 'as there remain significant uncertainties and undefined parameters due to a lack of baseline data on the groundwater and river water quality issues': [86].

²² As evidenced by Mr Argente's reliance on the work of Mr Stewart and Mr Hair in determining with whom to enter into make-good agreements: Affidavit of Martin Argente, Exhibit [91] [AH071], page 2, paras. 9 and 10.

CLIMATE CHANGE

- The critical issue in relation to climate change is how this Court should treat Alpha's 1.86 billion tonnes of Scope 3 emissions.
- 17. In terms of the facts and science of climate change, there is very little debate.The relevant issues can be summarised in eight propositions:
 - (a) the coal resource to be mined at Alpha is thermal coal;²³
 - (b) the sole purpose for extracting the coal is for use in the production of electricity – internationally, but also potentially domestically;²⁴
 - (c) the coal extracted is intended to be burnt to generate power, and thereby result in carbon emissions to the atmosphere;²⁵
 - (d) the burning of the coal will make a contribution to harmful, greenhouse gas emissions;²⁶
 - (e) the contribution of those emissions to harmful climate change can and has been calculated and agreed at 1.86 billion tonnes of CO₂-e over the life of the mine;²⁷
 - (f) the Earth's atmosphere and climate system is a single entity;²⁸
 - (g) Queensland, along with the rest of the world, depends upon the health of the Earth's atmosphere and its climate system;²⁹ and
 - (h) the burning of the coal from the mine will affect Queensland, whether burnt in China, New South Wales or Queensland. The adverse impacts on Queensland from climate change include ocean acidification, bleaching

²³ Submissions, [97](a).

²⁴ Submissions, [97](b).

²⁵ Submissions, [97](c).

²⁶ Submissions, [97](d).

²⁷ Submissions, [97](e).

²⁸ Submissions, [97](f).

²⁹ Submissions, [97](g).

of coral reefs, sea level rise, increased temperatures and a range of other negative impacts.³⁰

- 18. Hancock does not contest these propositions. Rather, it argues that, as a matter of law, Scope 3 emissions should simply be ignored. It is CCAQ's position that, as a matter of statutory construction, those emissions are relevant considerations under both the EPA and the MRA.
 - (a) Scope 3 emissions are clearly relevant under the EPA.³¹ Consideration of such emissions is required by the subject matter, scope and purpose of the legislation;³² the central role of the concept of 'environmental harm' in the Act; and the obligation to consider ESD principles under s 223 of the EPA.³³
 - (b) Scope 3 emissions are relevant under the MRA because of the Court's obligation to consider the 'public interest'.³⁴ The concept of the 'public interest' has been held to incorporate ESD principles³⁵ and also to require a weighing up of costs and benefits.³⁶ Such an approach requires consideration of Scope 3 emissions.³⁷
- 19. Hancock's arguments against consideration of Scope 3 emissions should be rejected:
 - (a) Each of Hancock's arguments shares two features:
 - (i) they do not involve any challenge to the fact that the burning of coal from Alpha will contribute to climate change; and
 - (ii) they have no basis in the text of either the EPA or the MRA.

³⁰ Submissions, [97](h).

³¹ Submissions, [101] – [104].

³² Minister for Aboriginal Affairs v Peko-Wallsend Pty Ltd (1986) 162 CLR 24, at 40.

³³ See Gray v Minister for Planning [2006] NSWLEC 720, [124], [134] - [135].

³⁴ Section 269(4)(k), Mineral Resources Act 1989 (Qld).

³⁵ Walker v Minister for Planning [2008] NSWCA 224, [42] - [43].

³⁶ Sinclair v Maryborough Mining Warden (1975) 132 CLR 473, at 485 per Stephen J.

³⁷ Submissions, [106] – [109].

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- (b) In particular, there is nothing in the Acts that would support consideration of Hancock's argument that 'if we don't do it, somebody else will'. The task of this Court under both Acts is to assess the impact that the proposed project will have. It is not to assess the impacts that some other non-existent project might have if built.³⁸
- (c) Hancock also advances an 'accounting argument', which is based on the premise that consideration of Scope 3 emissions in environmental approvals is inconsistent with international and national carbon accounting frameworks. This premise is faulty. Neither the United Nations Framework Convention on Climate Change nor the National Greenhouse and Energy Reporting Act 2007 (Cth) provide any credible basis for this claim. In fact, the NGER Act specifically addresses the issue of inconsistency and does not exclude the operation of environmental protection statutes.³⁹
- (d) Finally, Hancock argues that, because Australian governments at different levels are favourably disposed to coal mining, the Court should not do anything that might discourage coal mining, such as making private companies bring to account emissions caused by burning of the coal they sell, whether in Australia or overseas. There are two problems with this argument:
 - (i) The coal is not private property it is a public resource. The process for obtaining approval requires consideration of whether or not granting approval to exploit that public resource is in the public interest. It follows that all possible impacts of the approval on the public interest warrant careful consideration; and
 - (ii) In substance, Hancock invites this Court to subjugate its statutory responsibility to the vicissitudes of slogans advanced by politicians

³⁸ Submissions, [114]. See also [139] – [140].

³⁹ Submissions, [115].

in the political sphere. As Mr Stanford conceded, the EPA and the MRA apply to this project⁴⁰ and this Court, as the High Court and the Court of Appeal have said, must consider its impacts without fear or favour – in short, regardless of the views of the executive branch, whatever they might be from time to time.

- 20. In fact, there is no good reason for this Court not to take into account Scope 3 emissions in its assessment. That is not to say that those emissions must be determinative;⁴¹ it is simply to say that, as a matter of law, they must be considered.
- 21. In this case, it is appropriate to give the emissions from Alpha significant weight:
 - (a) Adopting the agreed carbon budget approach, the entire world can only emit 600 billion tonnes of CO₂-e between now and 2050 if it is to have a good chance (75%) of limiting climate change to 2°C.⁴²
 - (b) Alpha's emissions, totalling 1.86 billion tonnes over the life of the mine, represent 0.3% of those total emissions.⁴³ While this may appear small in percentage terms, when applied to the massive scale of the impacts of climate change, it is an extremely large share of the impacts for a single project.
 - (c) There are other scenarios better and worse in which Alpha's percentage contribution would be smaller or larger, but on any view, its emissions remain a significant contribution to the risk of dangerous (> 2°C) climate change.
 - (d) Moreover, given the cumulative and long lasting nature of emissions, it would be an error simply to dismiss a contribution of this size as

⁴⁰ Submissions, [116].

⁴¹ Gray v Minister for Planning (2006) 152 LGERA 258, [136].

⁴² Submissions, [118] - [119].

⁴³ Submissions, [119](a)(iii).

insignificant.

22. Coupled with the uncertainty regarding Alpha's groundwater impacts, the mine's contribution to climate change constitutes a strong reason for refusal.

Economics

- 23. Hancock's projections of the economic benefits are inherently unreliable.
- 24. CCAQ contends Hancock's projections cannot be relied upon because:
 - (a) There is not adequate evidence to demonstrate sufficient coal demand over the entire life of the mine.⁴⁴
 - (b) The projected benefits are based on an economic impact analysis that:
 - (i) uses a model that is known to overstate benefits;⁴⁵ and
 - (ii) fails to take into account environmental and social costs.⁴⁶
 - (c) The impact analysis fails to in any way consider the uncertainties which might affect its projections.⁴⁷
- 25. There is inadequate evidence of demand:
 - (a) Demand is a key issue in this case because, without sufficient demand,
 Alpha will not be economically viable.⁴⁸
 - (b) As the Court of Appeal said in *Armstrong v Brown*, economic viability is a relevant consideration under the MRA because if mining is not economically viable, it will not occur.⁴⁹ By extension, if mining does not occur, it will not provide the benefits projected.
 - (c) All of the experts agreed that there was significant uncertainty regarding

⁴⁴ Submissions, [128] – [138].

⁴⁵ Submissions, [144].

⁴⁶ Submissions, [145].

⁴⁷ Submissions, [131] – [138].

⁴⁸ Submissions, [129] – [130].

⁴⁹ [2004] 2 Qd R 345, [15].

future coal demand, as did the International Energy Agency.⁵⁰ In particular, the possibility of significant multilateral or unilateral action on climate change was said to pose a 'major risk' to Alpha.⁵¹

- (d) Despite this acknowledgement:
 - none of Hancock's experts personally undertook any detailed analysis of likely future coal demand;⁵²
 - (ii) instead Hancock relied upon three documents, primarily a report prepared by Salva Report Pty Ltd:
 - (A) The Salva Report does not provide a proper basis for making findings. As Mr Offen conceded in evidence, the report does not reveal its scope, its methodology or how its conclusions were arrived at and its conclusions are incapable of being tested.⁵³
 - (B) In respect of the other two documents relied upon by Hancock, these tend to illustrate, rather than refute, the uncertainty regarding the future of coal demand. As such, they do not provide a basis for finding sufficient demand exists over the life of the mine.⁵⁴
- (e) Nor can the issue of demand be dismissed as purely a private risk. Allowing mining has public costs. In approving a mine, it is relevant to consider whether those costs will be exceeded by the benefits. Whether they will depends, in part, on the viability of the mine which in turn depends on demand. As such, the risk of failure and economic viability is not simply a private risk, but one shared between Hancock and the

⁵⁰ Submissions, [131].

⁵¹ Submissions, [131](d).

⁵² Submissions, [137](a).

⁵³ Submissions, [137](b).

⁵⁴ Submissions, [137](c) and (d).

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- 26. In addition, the economic impact analysis projects exaggerated benefits:
 - (a) Hancock's decision to use an input-output (IO) model for the analysis means that it is likely that the impacts from Alpha are exaggerated in its favour:
 - (i) The IO model is well-recognised as having significant limitations, including the use of unrealistic assumptions that, in the eyes of the ABS, make it unsuitable for use in economic impact assessments.⁵⁶
 - (ii) Nonetheless, Hancock has chosen to use this model. This is in spite of the existence of alternative models, such as computable general equilibrium (CGE) and cost-benefit analysis (CBA), which do not suffer from the same limitations and which could have been used.⁵⁷
 - (iii) The effect of the IO model's limitations is that it necessarily exaggerates impacts, because it fails to take into account anything that might limit those impacts. Given that the economic impact analysis only finds positive economic impacts,⁵⁸ the effect of these limitations is to exaggerate those impacts in Hancock's favour.⁵⁹
 - (b) The economic impact analysis also projects exaggerated benefits in that it fails to take into account any economic costs that might be imposed as a result of the environmental and social impacts of Alpha. In particular,
 - (i) The analysis (and the EIS more broadly) does not contain any consideration of the social cost of carbon. This is despite the agreement of Dr Duncan, Mr Stanford and Professor Jones that it ought to have done so. By failing to do so, the analysis implicitly

⁵⁵ Submissions, [141] – [142].

⁵⁶ Submissions, [144](b).

⁵⁷ Submissions, [144](e).

⁵⁸ Submissions, [144](b)-(c).

⁵⁹ Submissions, [144] - [145].

assumes the carbon price is \$0, which we know to be incorrect.⁶⁰

- (ii) The analysis also fails to consider the possibility that employment growth at Alpha might have an adverse impact on other industries.
 In fact, the IO model adopted by Hancock for its analysis simply assumes that this does not occur.⁶¹
- (iii) The effect of these matters is to suggest that the benefits of Alpha are likely to be greater than they are in fact likely to be.
- 27. Finally, there is a failure to take into account uncertainty:
 - (a) As the experts acknowledged, there is uncertainty regarding the likely economic impacts of Alpha.
 - (b) One way of dealing with would be to evaluate Alpha's prospects, and the likely benefits, under different scenarios.
 - (c) No such analysis was undertaken, however, meaning that this Court has simply been presented with a 'best case' analysis.
- 28. For these reasons, the economic benefits of the project are likely to be exaggerated. The Court should not accept them, or if it does accept them, it should significantly discount them, given the likelihood that they will not materialise.

MAKING THE RECOMMENDATIONS

- 29. Taken together, the evidence establishes that:
 - (a) there is a large degree of uncertainty over the likely groundwater impacts of Alpha;
 - (b) properly considered, Alpha will make a significant contribution to climate change and the consequential impacts in Queensland; and

⁶⁰ Submissions, [145](b)(ii).

⁶¹ Submissions, [145](e)(v).

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- (c) the economic benefits of Alpha are overstated, both because there is a high degree of uncertainty as to whether they will occur and because, if they do occur, they are likely to be smaller than projected.
- 30. Given these problems, around both the costs and the benefits of Alpha, CCAQ respectfully submits that this Court cannot properly be satisfied that Alpha will result in a net benefit for Queensland. Accordingly, the Court should recommend that the applications be refused.
- 31. In addition, it would be appropriate for this Court, in making its recommendations, to make a finding that, if the Minister is minded to recommend approval, then he should exercise his power under s 271A of the MRA to refer the matter back to this Court for further hearing on the issues of groundwater and economics. This will provide some comfort that, if Alpha is to proceed, its impacts will be properly assessed.
- 32. In relation to the possibility of conditions, it is CCAQ's position that, while this Court has broad powers to impose conditions on the grant of an approval, it ought not to use those powers unless it has sufficient information to determine what the impacts of Alpha will be and is satisfied that those impacts can be managed through conditions. In this case, the inadequacy of the information does not allow the Court to be so satisfied.

18 October 2013

Adrian J Finanzio Dr Chris McGrath Rupert Watters