Queensland Government

Mines ABN 59 020 847 551

Objection form for a mining lease application

Sections 260 and 261 *Mineral Resources Act 1989*
Form MRA-20 Version 5

This form should be used to make an objection in relation to an application for grant of a mining lease.

Please use a pen, and write neatly using **BLOCK LETTERS**. Cross where applicable ☒

When completed, this form should be forwarded to the Department at the Mines Lodgement Office in which the mining lease is located, and a copy served upon the applicant for the mining lease and environmental authority.

Date:6 December 2013

Your name:Coast and Country Association of Queensland Inc

Your contact details:

c/o Environmental Defenders Office (Qld) Inc.

30 Hardgrave Road

West End QLD 4101

Email: edoqld@edo.org.au

Ph 07 3211 4466

Fax 07 3211 4655

To: (Insert address of Mines Lodgement Office)

Mining Registrar

Department of Natural Resources and Mines

PO Box 3679

Red Hill

Rockhampton

QLD 4701

mines.rockhampton@dnrm.qld.gov.au

Attention: Debbie-Jo MacDonald, Principal Mining Registrar Assessment

(Insert contact officer's name)

I / we hereby make an objection in relation to:

- an application to grant a mining lease

The objection is as follows:

Grounds of the objection:

See attachment

Facts and circumstances relied on in support of the grounds of the objection:

See attachment

Each entity to this objection must be stated below:

(Note: This is not a petition. If you sign this page you will be required to participate in proceedings before the Land Court regarding your objection).

1	NAME Coast and Country Association of Queensland Inc Derec Davies. 6/12/13	
POSTAL ADDRESS PO Box 5064 West End, Brisbane QLD 4101		TELEPHONE: 0421835587 FACSIMILE: E-MAIL: coastandcountryqld@gmail.com
2	NAME	
POSTAL ADDRESS		TELEPHONE: FACSIMILE:

	E-MAIL:
3	NAME
POSTAL ADDRESS	TELEPHONE: FACSIMILE: E-MAIL:
4	NAME
POSTAL ADDRESS	TELEPHONE: FACSIMILE: E-MAIL:
5	NAME
POSTAL ADDRESS	TELEPHONE: FACSIMILE: E-MAIL:
6	NAME
POSTAL ADDRESS	TELEPHONE: FACSIMILE: E-MAIL:

Further information for objectors

Objection to the application

An entity may on or before the last date set for the receipt of objections lodge with the Department an objection in writing in the approved form.

An objection must state the grounds of objection and the facts and circumstances relied on by you in support of those grounds.

An objector to any application for a mining lease must serve upon the applicant, on or before the last objection day, a copy of the objection lodged by the objector.

A properly made objection to an application for the grant of a mining lease is one that:

- is in the approved form;
- states the grounds of the objection and the facts and circumstances relied on by the objector in support of those grounds; and
- is an objection lodged under section 260 that has not been withdrawn.

Withdrawal of an objection

An objection to an application for a mining lease may be withdrawn by the objector giving written notice of the withdrawal to -

a) the Chief Executive; and

b) if the objection has been referred to the Land Court under section 265 -

   i. the Land Court; and

   ii. the applicant

A withdrawal of an objection can not be revoked.

Environmental authority

To make a submission/objection about an application or amendment application for an environmental authority, please refer to the Department of Environment and Heritage Protection's website www.ehp.qld.gov.au for the appropriate forms.

ATTACHMENT

Grounds of Objection

1. The application for the mining lease (**the Lease Application**) for the Kevin's Corner Project (**the Project**) should be refused under the *Mineral Resources Act 1989* (Qld) (**MR Act**) considering:

   (a) **Groundwater**: It has not been adequately demonstrated that the Project will not have an unacceptable adverse impact on groundwater and dependant species and ecosystems considering s 269(4)(j), (l) and (m) of the MR Act. In particular:

      i. It has not been adequately demonstrated that the Project will not have an unacceptable adverse impact on the environment by changes to the quality and quantity of groundwater considering s 269(4)(j) of the MR Act;

      ii. The absence of adequate scientific information about a potential impact with severe and long term impacts is good reason to refuse Lease Application considering s 269(4)(l) of the MR Act; and

      iii. The adverse environmental impacts and potentially severe adverse environmental impacts caused by these proposed mining operations on groundwater make it an inappropriate use of the land when current land use does not pose a similar threat considering s 269(4)(m) of the MR Act.

   (b) **Surface water**: It has not been adequately demonstrated that the Project will not have unacceptable adverse impacts and potentially severe and long term adverse impacts on the quantity and quality of surface water and dependant species and ecosystems considering s 269(4)(j), (l) and (m) of the MR Act. In particular:

      i. The Project will have an unacceptable adverse impact on the environment by adverse impacts on surface water quality, quantity and dependant species and ecosystems considering s 269(4)(j) of the MR Act;

      ii. The absence of adequate information about potentially severe and long term impacts is good reason to refuse Lease Application considering s 269(4)(l) of the MR Act; and

      iii. The adverse environmental impacts and potentially severe adverse environmental impacts caused by these proposed mining operations on surface water make it an inappropriate use of the land when current land use does not pose a similar threat considering s 269(4)(m) of the MR Act.

   (c) **Climate change**: It has not been adequately demonstrated that the Project will not increase the likelihood, severity and longevity of the environmental harms that will result from climate change, considering the combined effect of s 269(4)(j) and (l) of the MR Act.

   (d) **Biodiversity:** It has not been adequately demonstrated that the Project will not have unacceptable adverse impacts on biodiversity considering s 269(4)(j), (l) and (m) of the MR Act. In particular:

6/12/13

i. The Project will have adverse impacts on the environment by adverse impacts on biodiversity considering s 269(4)(j) of the MR Act;

ii. The absence of adequate information about potentially severe and long term adverse impacts on biodiversity is good reason to refuse the Lease Application considering s 269(4)(l) of the MR Act; and

iii. The adverse environmental impacts and potentially severe adverse environmental impacts caused by these proposed mining operations on biodiversity is an inappropriate use of the land when current use does not pose a similar threat considering s 269(4)(m) of the MR Act.

(e) **Economic and social matters**: It has not been adequately demonstrated that the Project will not have adverse economic impacts, considering s 269(4)(j) and (l) of the MR Act. In particular:

i. The definition of environment in the MR Act is broad and includes, amongst other things, social and economic conditions considering s 8 of the *Environmental Protection Act 1994* (Qld).

ii. The Project will have adverse economic impacts and potentially severe adverse economic impacts caused by these proposed mining operations on local, regional, State and global economies and communities considering s 269(4)(j) of the MR Act, including:

A. Downward pressure on employment in other industries by directly competing for labour or economic pressure on other industries;

B. Economic costs of impacts on the environment through the impacts which result from the contribution of the Project to climate change.

iii. The adverse economic impacts of the Project have not been adequately assessed.

iv. The failure to demonstrate a net economic benefit from the Project, through an economic impact assessment which includes assessment of the adverse economic impacts, is a good reason to refuse the Project considering s 269(4)(l) of the MR Act.

v. the adverse economic impacts and the potentially severe adverse economic impacts caused by these proposed mining operations make it an inappropriate use of the land when current land use does not pose a similar threat.

vi. There is not sufficient economic need for the project to justify the impacts and risks set out in grounds 1(a)-1(d) above.

(f) **Public Interest**: The adverse impacts and risks of the Project to groundwater, surface water, climate change, biodiversity and the economy described in 1(a) to 1(e) above collectively outweigh the purported benefits of the Project and justify refusal on the basis that it would prejudice the public right and interest considering s 269(4)(k) of the MR Act.

2. In the alternative to 1 above, if the application is not refused, conditions should be imposed to address grounds raised in 1 above.

Facts and Circumstances

The general facts and circumstances in relation to the mine and application process to support Grounds 1-2 are:

1. The applicant applied for an environmental authority (mining lease) under the *Environmental Protection Act 1994* (Qld) (**EP Act**) and a mining lease under the *Mineral Resources Act 1989* (Qld) (**MR Act**) for the Kevin's Corner Project (**the Project**) on or about 18 December 2009.

2. The Coordinator-General declared the Project a significant project for which an environmental impact statement (**EIS**) was required under the *State Development and Public Works Organisation Act 1971* (Qld) (**SDPWO Act**) on 11 September 2009.

3. The Applicant released an EIS in October 2011, a supplementary EIS in November 2012 and additional supplementary documentation for the Project released with the Coordinator-General's report in May 2013, for approval under the SDPWO Act (**EIS documents**).

4. According to the EIS documents, the Project is a proposed open-cut and underground coal mine north west of the township of Alpha, approximately 340km south west of Mackay in the Galilee Basin, Queensland.

5. According to the EIS documents, the area of the proposed Project and its surroundings is predominantly used for grazing of cattle, but with approximately 1670 ha also overlapping Cudmore Resources Reserve, a protected area under the *Nature Conservation Act 1994* (Qld).

6. The proposed mine is situated in the Galilee Basin in the catchment of the Burdekin River which flows into wetlands and the Great Barrier Reef.

7. According to the EIS documents and the application documents, thermal coal resources for the Project is estimated at 4.269 billion tonnes (Bt), of which 229 million tonnes (Mt) are Measured and 1.040 Bt are Indicated within Mining Lease Application 70425 (**MLA**), which comprises approximately 37,380 hectares.

8. According to the EIS documents and the Coordinator-General's report, approximately 6,661 hectares of the mining lease area is proposed to be disturbed by mining operations and associated infrastructure, with an additional 632 hectares of high ecological value habitat to be disturbed by subsidence.

9. According to the Lease Application, the mining lease application is for 40 years with an annual extraction rate of around 45 million tonnes per annum Run of Mine (**ROM**) coal.

10. The Independent Expert Scientific Committee on Coal Seam Gas and Coal Mining provided advice to the 'federal and Qld regulator' on 7 February 2013 in relation to the Project.

11. The Coordinator-General's report on the mine under the SDPWO Act was delivered on 30 May 2013. The Coordinator-General recommended that the mine be approved subject to conditions.

12. The Certificate of Public Notice for the application for the Mining Lease and Environmental Authority was issued on 11 July 2013.

The facts and circumstances to support Ground 1(a) (Groundwater) are:

13. According to the EIS documents, the proposed mine is 10-15km from the eastern margin of the Great Artesian Basin.

14. According to the EIS documents, without conceding its accuracy, the mine will lead to a decline in groundwater levels of 5m or greater within a 10km radius of mining areas, and cause land subsidence.

15. According to the EIS documents, the existing quantity and quality of groundwater in and near the mine area has high environmental values for agricultural purposes, surface water features and other values that may receive baseflow from groundwater.

16. The detail of information provided on the scale and likelihood of the impacts that this project will have on groundwater resources are not commensurate with the scale of the Project and risks to the environmental values.

17. The groundwater studies that have been done are inadequate to establish the likely extent of the impact of the mine.

18. The regional cumulative impacts covering surface water, groundwater, geomorphological, hydrological and ecological impacts, has not been adequately assessed.

19. A regional water balance has not been undertaken.

20. There is insufficient information to assess the impact that this Project's groundwater drawdown could have on the Great Artesian Basin and protected areas.

21. The final void, which will cover approximately 897 hectares, will impact on groundwater equilibrium and may lead to groundwater contamination. There has been minimal assessment of the expected water quality of the final void and as such, the extent of these impacts is unknown.

22. Lowered groundwater levels (drawdown) will interfere with groundwater dependent agriculture and may affect spring and surface water features and related species, ecology and cultural values in the area of, and surrounding, the MLA.

23. Any potential contamination of groundwater will interfere with groundwater dependent agriculture and may affect spring and surface water features and related species, ecology and cultural values in the area of, and surrounding, the MLA.

24. The proposed monitoring and management of groundwater quantity and quality is inadequate, given the risks referred to above and the scale of the Project.

The facts and circumstances to support Ground 1(b) (Surface Water) are:

25. The proposed mine is situated in the Galilee Basin in the catchment of the Burdekin River which flows into wetlands and the Great Barrier Reef.

26. The existing quantity and quality of surface water in and near the mine area is suitable for biological integrity, other values and primary industry uses.

27. The surface water studies of the quantity, quality and alteration of surface water that have been done are inadequate to establish the likely extent of the impact of the mine.

28. The region's hydrology, water quality and related species and ecosystems will be adversely affected by the scale of the proposed Project through:

    (a) acid water drainage, especially after water quality in the final void deteriorates;

    (b) the diversion of watercourses;

    (c) discharges of contaminated water;

    (d) land subsidence; and

    (e) leachate from the onsite landfill; and the use of overburden to backfill open-cut pits.

29. There is insufficient information to assess the extent of the impact that acid water drainage from the final void or increasing salinity in the final void will have on the water quality of the Burdekin Catchment.

30. The regional cumulative impacts covering surface water, groundwater, geomorphological, hydrological and ecological impacts, has not been adequately assessed.

31. A regional water balance has not been undertaken.

32. As specific risks cannot be quantified without an adequate water balance, surface water cumulative impact study, or solute balance, it is difficult to assess the adequacy of mitigation measures to reduce impacts to an acceptable level, including acid water drainage which may impact on the water quality of the Burdekin Catchment.

33. The final void, which will cover approximately 897 hectares, will impact on surface water flow and potentially impact on surface water quality. There has been minimal assessment of the expected water quality of the final void and as such, the extent of these impacts is unknown.

34. The proposed Tailings Dam and other waste storage features may leak contaminants into the local environment.

35. The draft environmental authority does not adequately provide for pollutant monitoring of water, sediment, wildlife and vegetation.

36. The bioaccumulation of pollutants from the Project will harm local and Great Barrier Reef ecology.

37. The Project fails to adequately assess the cumulative impacts on local ecology from interferences with watercourses.

38. The final void alienates 897 hectares of land from a more productive future use.

39. The proposed monitoring and management of surface water quantity, quality and ecology is inadequate, given the risks referred to above and the scale of the Project.

The facts and circumstances relied on in support of Ground 1(c) (Climate Change) are as follows:

Climate change

40. Anthropogenic emissions of greenhouse gases, principally carbon dioxide, trap heat and warm the planet in a process termed the greenhouse effect.

41. Anthropogenic emissions of carbon dioxide mix with sea water, increasing the acidity of the oceans in a process termed ocean acidification.

42. The greenhouse effect and ocean acidification form part of climate change.

43. Anthropogenic carbon dioxide emissions elevate carbon dioxide concentrations in the atmosphere for at least 300 years, such that further emissions within this period accumulate in the atmosphere.

44. Since the Industrial Revolution carbon dioxide has accumulated in the atmosphere, increasing concentrations from approximately 280 parts per million (ppm) to around 395 ppm.

45. The resilience of the receiving environment to accept emissions while maintaining conditions similar to those on which human civilisation developed, and to which life on Earth is adapted (that at approximately 350 ppm or less of carbon dioxide), was exceeded in about 1990. Any further emissions will exacerbate the severity and longevity of climate change impacts.

46. The resilience of the receiving environment to accept further emissions with a reasonable (approximately 80%) likelihood of not causing dangerous anthropogenic climate change (that is exceeding 2 degrees warming above pre-industrial times which would occur at approximately 450ppm of carbon dioxide) is approximately 529 billion tonnes of carbon dioxide between 2011 and 2050. To have a 50% chance of avoiding dangerous anthropogenic climate change the 'carbon budget' is 1080 billion tonnes. Any further emissions will increase the likelihood of dangerous anthropogenic climate change.

47. If not mitigated, the environmental harm caused by climate change includes:
    (a) Globally:
        (i) increased global temperatures;
        (ii) increased sea levels;
        (iii) increase in frequency of hot extremes, heat waves, heavy precipitation and flooding – all with concomitant increased risks to property and human health and safety;
        (iv) costs of approximately $8 per tonne of carbon dioxide emitted, rising 2% each year; and

(v) total costs of approximately 5% of Global GDP each year (approximately $3.5 trillion in 2011 and rising each year after that);

(b) In Australia:

(i) increased sea levels;

(ii) increased average surface temperature;

(iii) more frequent heatwaves and droughts;

(iv) an increase in the proportion of severe tropical cyclones

(v) change in rainfall patterns across Australia, with more intense rainfall in many areas;

(vi) costs to the Australian economy rising to about 3% of GDP per annum in 2050; and

(c) In Queensland:

(i) increased flooding, erosion and damage in coastal areas due to increased numbers of severe tropical cyclones;

(ii) increased numbers of hot days and warm nights, placing increased stress on the population and infrastructure;

(iii) changes to terrestrial biodiversity with a potential loss of half the existing high-altitude Wet Tropics rainforest from a 1 °C increase in temperature;

(iv) changes to marine biodiversity particularly in the Great Barrier Reef due to increased acidification of oceans annual bleaching of up to 97 per cent of the Great Barrier Reef and associated large-scale mortality, if the average sea-surface temperature increases by 2 °C – with concomitant costs to Queensland of approximately $1 billion per annum over the next century;

(v) changes to marine species distribution, with potential impact on the fishing industry, due to changes in currents;

(vi) reduced breeding habitat of seabirds and turtles due to sea level rise

(vii) increased spread of disease due to changed conditions for vectors; and

(viii) increased heat-related illnesses.

<u>Contribution of project to climate change</u>

48. Without conceding the accuracy of the calculation, estimates provided by the EIS documents of the total emissions from the fugitive emissions, diesel combustion, explosives and electricity consumption within the mine for the life of Project are approximately 59 million tonnes of carbon dioxide equivalents.

49. By failing to also estimate emissions from transport and use of the product coal produced by the Project, the proponent fails to estimate the total direct and indirect emissions that will occur as a result of approval of the Project.

50. The EIS documents state a number of different estimates and methods of calculating the volume of coal expected to result from the project. Estimates range from 700 to 856 million tonnes of product coal. Based on these estimates the emissions from the transport and use of the coal would be approximately 1.6 to 2 billion tonnes of carbon dioxide equivalents, using calculations from the *National Greenhouse Energy and Reporting Act 2007* (Cth).

51. Regardless of which of those estimates and methods used, there will be significant emissions from the burning of the coal that will result from the approval of the Project.

52. The total emissions that will result from the approval of the project will increase the severity, longevity and likelihood of the environmental harms of climate change mentioned in paragraph 47 above with a significant cost to the global environment over the life of the project.

53. The emissions of the mine will significantly further exceed the resilience of the receiving environment to maintain conditions similar to those on which human civilisation developed and to which life on Earth is adapted.

54. The emissions of the mine will be a significant step towards exceeding the resilience of the environment to dangerous anthropogenic climate change.

55. By failing to assess the contribution of all of the emissions from the Project to climate change the proponent failed to provide adequate information to allow the Project to be properly assessed.

The facts and circumstances relied on in support of Ground 1(d) (Biodiversity) are:

56. The Project involves the permanent removal of a substantial area of vegetation of significant biodiversity value and that is habitat, including potential habitat, for fauna and flora. Clearing will also directly cause the mortality of fauna and flora.

57. Land subsidence, contamination of surface and ground water, changes to existing hydrology, fragmentation, and increased weeds and pests caused by the Project will adversely impact existing regional fauna and flora habitat, including potential habitat.

58. Noise, light, vehicle traffic and dust will also adversely affect existing fauna and flora habitat, including potential habitat.

59. There is insufficient information to support the proposed environmental management plans, species management plans, rehabilitation management plan, interim subsidence management plan and habitat offset measures as being adequate in preventing significant adverse effects on biodiversity.

The facts and circumstances to support Ground 1(e) (Economics) are:

60. The applicant asserts that the Project will be of economic benefit to Queensland however this is based on input output modelling and assesses only the positive impact on economic activity rather than the positive and negative impacts on the economy more broadly and on community welfare.

61. To determine if the project provides a net economic benefit to Queensland and the local community an economic impact assessment must be undertaken which assesses the negative economic impacts of the Project. Such an economic analysis has not been carried out.

62. The applicant is ultimately largely foreign owned. Profits or benefits sent outside Queensland, for example to owners or foreign workers or importation of goods, should not be included as benefits to Queensland in any economic impact assessment.

63. The economic impact assessment by the applicant overstates the employment impacts by failing to incorporate any negative impacts which may occur on net employment. A more appropriate

analysis would show any negative impacts on total employment such as in agriculture and manufacturing. Burning of coal overseas will create greenhouse gas emissions that will have a negative economic impact on the world, Australia and Queensland including on the ecology and economy of Queensland.

64. There is no need for this coal. The world has many other energy sources. Over the life of this mine coal use will become increasingly constrained by policies to limit climate change. Over the life of this mine wind and solar will continue to become cheaper. It cannot be assumed that the same amount of coal would be obtained from other sources and burnt to create the same amount of greenhouse gas emissions over the life of the mine.

Objection form

Environmental Protection Act 1994

Objection to an application or amendment application for environmental authority (mining lease or mining claim)

This form should be used to make an objection under ss. 216 and 217 of the Environmental Protection Act 1994 *in relation to:*

- *an environmental authority (mining lease or mining claim) application*
- *a draft environmental authority for an environmental authority (mining lease or mining claim) application*
- *a condition included in a draft environmental authority for an environmental authority (mining lease or mining claim) application.*

When completed, this form should be forwarded to the Mining Registrar, Department of Natural Resources and Mines district in which the mining tenement is located.

***Note**: for objections to the mining tenure, you must use the objection form for a mining lease application (MRA-20 Version Number 5), available at **www.dnrm.qld.gov.au** using 'MRA-20' as the search term.*

Date: 6 December 2013
Objector name:Coast and Country Association of Queensland Inc.
Objector contact details: C/o Environmental Defenders Office (Qld) Inc. 30 Hardgrave Road West End QLD 4101 Email: edoqld@edo.org.au Ph 07 3211 4466 Fax 07 3211 4655

ABN 46 640 294 485

Objection to an application or amendment application for environmental authority (mining lease or mining claim)

To: (Insert address of Department of Environment and Heritage Protection)

Department of Environment and Heritage Protection

99 Hospital Road

Emerald QLD 4720

Attention:

Christopher Loveday

Delegate

Manager, Environmental Services - Mining

Environmental Services & Regulation Division

(Insert contact officer's name)

Objection to an application or amendment application for environmental authority (mining lease or mining claim)

Application for (tick 1 or more of the options below):

☒ environmental authority (mining lease)

☐ environmental authority (mining claim)

☐ amendment to an environmental authority (mining lease)

☐ amendment to an environmental authority (mining claim)

Tenure type and number:	ML70425
Environmental authority number or application reference number:	MIN101016810
By (applicant's name):	Hancock Galilee Pty Ltd
For the proposed (description of activity):	Kevin's Corner Coal Mine, an open cut and underground longwall thermal coal mine, with a proposed production rate of 30 million tonnes of black coal per annum with 45 million tonnes per annum run of mine coal to be extracted. The mining lease period applied for is 40 years.
On land described as (description of operational land):	The land within Mining Lease Application (MLA70425), 50km north west of Alpha in the Galilee Basin, comprising approximately 37 380 hectares.

I/we hereby give notice of an objection in relation to (tick 1 or more of the options below):

Note: You can object to the environmental authority application or amendment application, draft environmental authority and/or condition(s) included in the draft environmental authority.

(1) ☒ the environmental authority application or amendment application

(2) ☒ the draft environmental authority for the application or amendment application

(3) ☒ a condition(s) included in the draft environmental authority for the application or amendment application.

Describe the grounds of the objection

Note: Where the objector has ticked more than 1 option (1–3) above, the objector must identify which type of objection (1–3) each of the grounds described below relate.

Objection to an application or amendment application for environmental authority (mining lease or mining claim)

Grounds of the objection:

See attachment

Facts and circumstances relied on in support of the grounds:

See attachment.

Each entity/signatory to this objection must be stated below

(Note: This is not a petition. If you sign this page you will be required to participate in proceedings before the Land Court regarding your objection).

1	Name Coast and Country Association of Queensland Inc	Signature DEREK DAVIES.	Date 6/12/13
Postal address PO Box 5064 West End, Brisbane QLD 4101		Telephone: 0421835587 Facsimile: E-mail: coastandcountryqld@gmail.com	
2	Name	Signature	Date
Postal address		Telephone: Facsimile: E-mail:	
3	Name	Signature	Date
Postal address		Telephone: Facsimile: E-mail:	
4	Name	Signature	Date
Postal address		Telephone:	

		Facsimile: E-mail:	
5	Name	Signature	Date
Postal address		Telephone: Facsimile: E-mail:	
6	Name	Signature	Date
Postal address		Telephone: Facsimile: E-mail:	
7	Name	Signature	Date
Postal address		Telephone: Facsimile: E-mail:	

ATTACHMENT

Grounds of Objection

1. The application for environmental authority (**the EA Application**) for the Kevin's Corner Project (**the Project**) should be refused under the *Environmental Protection Act 1994* (Qld) (**EP Act**) considering:

   (a) **Groundwater**: It has not been adequately demonstrated that the Project will not have an unacceptable adverse impact on groundwater having regard to the considerations stated in s 3 and s 223(a) and (c) of the EP Act. In particular:

      i. The impacts on ground water present a threat of serious and irreversible environmental harm, yet full scientific certainty regarding those impacts is absent due to inadequate provision of information. Given the scale of the Project, the EA Application should be refused considering s 223(c) of the EP Act and the principles of ecologically sustainable development as set out in the 'National Strategy for Ecologically Sustainable Development';

      ii. It has not been adequately demonstrated that the Project will not have an unacceptable adverse impact on the character, resilience and values of the receiving environment by changes to the quality and quantity of groundwater considering s 223(c) and standard criteria (e) of the EP Act;

      iii. The EA Application fails to adequately comply with the relevant regulatory requirements to, considering ss 223(a) and 223(b) of the EP Act:

         A. provide enough supporting information in respect of ground water to allow the administering authority to decide the application considering s 154(2) of the EP Act; or

         B. describe the adverse impacts of the mining activities on groundwater values considering s 203 of the EP Act.

   (b) **Surface water**: It has not been adequately demonstrated that the Project will not have unacceptable adverse impacts and potentially severe and long term adverse impacts on the quantity, quality and ecology of surface water having regard to the considerations stated in ss 3, 223(a) and 223(c) of the EP Act. In particular:

      i. The impacts on surface water present a threat of serious and irreversible environmental harm, yet full scientific certainty regarding those impacts is absent due to inadequate provision of information. Given the scale of the Project, the EA Application should be refused considering s 223(c) of the EP Act and the principles of ecologically sustainable development as set out in the 'National Strategy for Ecologically Sustainable Development';

      ii. It has not been adequately demonstrated that the Project will not have an unacceptable adverse impact on the character, resilience and values of the receiving environment by changes to, and contamination of, surface water as required by s 223(c) and standard criteria (e) of the EP Act;

6/12/13.

(c) **Climate change**: It has not been adequately demonstrated that the Project will not increase the likelihood, severity and longevity of the environmental harms that will result from climate change, considering the combined effect of ss 3, 14, 223, 493A and Schedule 4 (Dictionary) of the EP Act. In particular:

i. The environmental authority applied for would authorise environmental harm that would otherwise be unlawful under ss 437, 438 and 493A of the EP Act.

ii. The environmental harm that would be authorised is defined in s 14 of the EP Act to include "any adverse effect, or potential adverse effect (whether temporary or permanent and of whatever magnitude, duration or frequency) on an environmental value, and includes environmental nuisance" caused by an activity:

"(a) whether the harm is a direct or indirect result of the activity; or

(b) whether the harm results from the activity alone or from the combined effects of the activity and other activities or factors".

iii. The criteria the Land Court must consider, under s 223(c) of the EP Act, in making the objection decision for the application are necessarily with respect to the amount of environmental harm that would be authorised by the grant of the environmental authority applied for, defined to include these indirect and combined effects.

iv. In respect of the EA Application this includes:

A. the harm from emissions from the transport and use of the coal which are a result of the mining activity; and

B. the harm from climate change resulting from the combined effect of the mining activity and other activities and factors.

v. The emissions from the mining, transportation and use of the coal will increase the likelihood, severity and longevity of climate change with significant and long term adverse impacts on the environment, which warrant refusal considering the combined effect of ss 3, 14, 223, 437, 438, 493A and Schedule 4 (Dictionary) of the EP Act.

(d) **Biodiversity:** It has not been adequately demonstrated that the Project will not have unacceptable adverse impacts on biodiversity considering ss 3, 14, 223(a) and 223(c) of the EP Act. In particular:

i. The environmental authority applied for would authorise environmental harm to biodiversity that would otherwise be unlawful under ss 437, 438 and 493A of the EP Act;

ii. The proposed mining operations will present a threat of serious and irreversible adverse environmental impacts on biodiversity, considering s 223(c) of the EP Act.

iii. There is inadequate information about potentially severe and long term adverse impacts on biodiversity considering s 223(a) and 223(c) of the EP Act; and

(e) **Economics:** It has not been adequately demonstrated that the Project will not have adverse economic impacts, considering s 3 and s 223(a) and (c) of the EP Act. In particular:

i. The definition of environment in the EP Act is broad and includes, amongst other things, social and economic conditions considering s 8 of the EP Act.

ii. The Project will have adverse economic impacts and potentially severe adverse economic impacts caused by these proposed mining operations on local, regional, State and global economies and communities considering s 223 (c) and standard criteria (a) and (e) of the EP Act, including:

A. Downward pressure on employment in other industries by directly competing for labour or economic pressure on other industries;

B. Economic costs of impacts on the environment through the impacts which result from the contribution of the Project to climate change.

iii. A net economic benefit from the Project has not been demonstrated through an economic impact analysis which includes assessment of the adverse economic impacts.

iv. Because of the failure to assess negative economic impacts referred to above, the EA Application fails to adequately comply with the relevant regulatory requirements to, considering ss 223(a) and 223(b) of the EP Act:

A. provide enough supporting information in respect of economics to allow the administering authority to decide the application considering s 154(2) of the EP Act; or

B. describe the adverse impacts of the mining activities on economic values considering s 203 of the EP Act.

v. There is not sufficient economic need for the project to justify the impacts and risks set out in grounds 2(a)-2(d) above.

(f) **Public Interest:** The adverse impacts and risks of the Project to groundwater, surface water, the climate, biodiversity, and the economy described in 2(a) to 2 (e) above collectively outweigh the purported benefits of the Project and justify refusal on the basis that it is not in the public interest considering s 223(c) and standard criteria (i) of the EP Act.

2. In the alternative to 1 above, if the application is not refused, conditions included in the draft environmental authority for the application should be varied to address grounds raised in 1 above.

Facts and Circumstances

The general facts and circumstances in relation to the mine and application process to support Grounds 1-2 are:

1. The applicant applied for an environmental authority (mining lease) under the *Environmental Protection Act 1994* (Qld) (**EP Act**) and a mining lease under the *Mineral Resources Act 1989* (Qld) (**MR Act**) for the Kevin's Corner Project (**the Project**) on or about 18 December 2009.

2. The Coordinator-General declared the Project a significant project for which an environmental impact statement (**EIS**) was required under the *State Development and Public Works Organisation Act 1971* (Qld) (**SDPWO Act**) on 11 September 2009.

3. The Applicant released an EIS in October 2011, a supplementary EIS in November 2012 and additional supplementary documentation for the Project released with the Coordinator-General's report in May 2013, for approval under the SDPWO Act (**EIS documents**).

4. According to the EIS documents, the Project is a proposed open-cut and underground coal mine north west of the township of Alpha, approximately 340km south west of Mackay in the Galilee Basin, Queensland.

5. According to the EIS documents, the area of the proposed Project and its surroundings is predominantly used for grazing of cattle, but with approximately 1670 ha also overlapping Cudmore Resources Reserve, a protected area under the *Nature Conservation Act 1994* (Qld).

6. The proposed mine is situated in the Galilee Basin in the catchment of the Burdekin River which flows into wetlands and the Great Barrier Reef.

7. According to the EIS documents and the application documents, thermal coal resources for the Project is estimated at 4.269 billion tonnes (Bt), of which 229 million tonnes (Mt) are Measured and 1.040 Bt are Indicated within Mining Lease Application 70425 (**MLA**), which comprises approximately 37,380 hectares.

8. According to the EIS documents and the Coordinator-General's report, approximately 6,661 hectares of the mining lease area is proposed to be disturbed by mining operations and associated infrastructure, with an additional 632 hectares of high ecological value habitat to be disturbed by subsidence.

9. According to the Lease Application, the mining lease application is for 40 years with an annual extraction rate of around 45 million tonnes per annum Run of Mine (**ROM**) coal.

10. The Independent Expert Scientific Committee on Coal Seam Gas and Coal Mining provided advice to the 'federal and Qld regulator' on 7 February 2013 in relation to the Project.

11. The Coordinator-General's report on the mine under the SDPWO Act was delivered on 30 May 2013. The Coordinator-General recommended that the mine be approved subject to conditions.

12. The Certificate of Public Notice for the application for the Mining Lease and Environmental Authority was issued on 11 July 2013.

13. The public notice of the EA Application was published in the Central Queensland News on 7 August 2013 (**notice**).

14. The notice states: "The application documents for the application for the environmental authority consist of the Application for Mining Lease together with an application for Environmental Authority."

15. The notice did not state that the draft EA, EM Plan, EIS prepared for the Project and the Coordinator-General's report evaluating the EIS for the Project are application documents for the EA Application.

16. A revised public notice of the EA Application was published in the Central Queensland News on 6 November 2013 (**notice**).

The facts and circumstances to support Ground 1(a) (Groundwater) are:

17. According to the EIS documents, the proposed mine is 10-15km from the eastern margin of the Great Artesian Basin.

18. According to the EIS documents, without conceding its accuracy, the mine will lead to a decline in groundwater levels of 5m or greater within a 10km radius of mining areas, and cause land subsidence.

19. According to the EIS documents, the existing quantity and quality of groundwater in and near the mine area has high environmental values for agricultural purposes, surface water features and other values that may receive baseflow from groundwater.

20. The detail of information provided on the scale and likelihood of the impacts that this project will have on groundwater resources are not commensurate with the scale of the Project and risks to the environmental values.

21. The groundwater studies that have been done are inadequate to establish the likely extent of the impact of the mine.

22. The regional cumulative impacts covering surface water, groundwater, geomorphological, hydrological and ecological impacts, has not been adequately assessed.

23. A regional water balance has not been undertaken.

24. There is insufficient information to assess the impact that this Project's groundwater drawdown could have on the Great Artesian Basin and protected areas.

25. The final void, which will cover approximately 897 hectares, will impact on groundwater equilibrium and may lead to groundwater contamination. There has been minimal assessment of the expected water quality of the final void and as such, the extent of these impacts is unknown.

26. Lowered groundwater levels (drawdown) will interfere with groundwater dependent agriculture and may affect spring and surface water features and related species, ecology and cultural values in the area of, and surrounding, the MLA.

27. Any potential contamination of groundwater will interfere with groundwater dependent agriculture and may affect spring and surface water features and related species, ecology and cultural values in the area of, and surrounding, the MLA.

28. The proposed monitoring and management of groundwater quantity and quality is inadequate, given the risks referred to above and the scale of the Project.

The facts and circumstances to support Ground 1(b) (Surface Water) are:

29. The proposed mine is situated in the Galilee Basin in the catchment of the Burdekin River which flows into wetlands and the Great Barrier Reef.

30. The existing quantity and quality of surface water in and near the mine area is suitable for biological integrity, other values and primary industry uses.

31. The surface water studies of the quantity, quality and alteration of surface water that have been done are inadequate to establish the likely extent of the impact of the mine.

32. The region's hydrology, water quality and related species and ecosystems will be adversely affected by the scale of the proposed Project through:

    (a) acid water drainage, especially after water quality in the final void deteriorates;

    (b) the diversion of watercourses;

    (c) discharges of contaminated water;

    (d) land subsidence; and

    (e) leachate from the onsite landfill; and the use of overburden to backfill open-cut pits.

33. There is insufficient information to assess the extent of the impact that acid water drainage from the final void or increasing salinity in the final void will have on the water quality of the Burdekin Catchment.

34. The regional cumulative impacts covering surface water, groundwater, geomorphological, hydrological and ecological impacts, has not been adequately assessed.

35. A regional water balance has not been undertaken.

36. As specific risks cannot be quantified without an adequate water balance, surface water cumulative impact study, or solute balance, it is difficult to assess the adequacy of mitigation

measures to reduce impacts to an acceptable level, including acid water drainage which may impact on the water quality of the Burdekin Catchment.

37. The final void, which will cover approximately 897 hectares, will impact on surface water flow and potentially impact on surface water quality. There has been minimal assessment of the expected water quality of the final void and as such, the extent of these impacts is unknown.

38. The proposed Tailings Dam and other waste storage features may leak contaminants into the local environment.

39. The draft environmental authority does not adequately provide for pollutant monitoring of water, sediment, wildlife and vegetation.

40. The bioaccumulation of pollutants from the Project will harm local and Great Barrier Reef ecology.

41. The Project fails to adequately assess the cumulative impacts on local ecology from interference with watercourses.

42. The final void alienates 897 hectares of land from a more productive future use.

43. The proposed monitoring and management of surface water quantity, quality and ecology is inadequate, given the risks referred to above and the scale of the Project.

The facts and circumstances relied on in support of Ground 1(c) (Climate Change) are as follows:

Climate change

44. Anthropogenic emissions of greenhouse gases, principally carbon dioxide, trap heat and warm the planet in a process termed the greenhouse effect.

45. Anthropogenic emissions of carbon dioxide mix with sea water, increasing the acidity of the oceans in a process termed ocean acidification.

46. The greenhouse effect and ocean acidification form part of climate change.

47. Anthropogenic carbon dioxide emissions elevate carbon dioxide concentrations in the atmosphere for at least 300 years, such that further emissions within this period accumulate in the atmosphere.

48. Since the Industrial Revolution carbon dioxide has accumulated in the atmosphere, increasing concentrations from approximately 280 parts per million (ppm) to around 395 ppm.

49. The resilience of the receiving environment to accept emissions while maintaining conditions similar to those on which human civilisation developed, and to which life on Earth is adapted (that at approximately 350 ppm or less of carbon dioxide), was exceeded in about 1990. Any further emissions will exacerbate the severity and longevity of climate change impacts.

50. The resilience of the receiving environment to accept further emissions with a reasonable (approximately 80%) likelihood of not causing dangerous anthropogenic climate change (that is exceeding 2 degrees warming above pre-industrial times which would occur at approximately

450ppm of carbon dioxide) is approximately 529 billion tonnes of carbon dioxide between 2011 and 2050. To have a 50% chance of avoiding dangerous anthropogenic climate change the 'carbon budget' is 1080 billion tonnes. Any further emissions will increase the likelihood of dangerous anthropogenic climate change.

51. If not mitigated, the environmental harm caused by climate change includes:
    (a) Globally:
        (i) increased global temperatures;
        (ii) increased sea levels;
        (iii) increase in frequency of hot extremes, heat waves, heavy precipitation and flooding – all with concomitant increased risks to property and human health and safety;
        (iv) costs of approximately $8 per tonne of carbon dioxide emitted, rising 2% each year; and
        (v) total costs of approximately 5% of Global GDP each year (approximately $3.5 trillion in 2011 and rising each year after that);
    (b) In Australia:
        (i) increased sea levels;
        (ii) increased average surface temperature;
        (iii) more frequent heatwaves and droughts;
        (iv) an increase in the proportion of severe tropical cyclones;
        (v) change in rainfall patterns across Australia, with more intense rainfall in many areas;
        (vi) costs to the Australian economy rising to about 3% of GDP per annum in 2050; and
    (c) In Queensland:
        (i) increased flooding, erosion and damage in coastal areas due to increased numbers of severe tropical cyclones;
        (ii) increased numbers of hot days and warm nights, placing increased stress on the population and infrastructure;
        (iii) changes to terrestrial biodiversity with a potential loss of half the existing high-altitude Wet Tropics rainforest from a 1 °C increase in temperature;
        (iv) changes to marine biodiversity particularly in the Great Barrier Reef due to increased acidification of oceans annual bleaching of up to 97 per cent of the Great Barrier Reef and associated large-scale mortality, if the average sea-surface temperature increases by 2 °C – with concomitant costs to Queensland of approximately $1 billion per annum over the next century;
        (v) changes to marine species distribution, with potential impact on the fishing industry, due to changes in currents;
        (vi) reduced breeding habitat of seabirds and turtles due to sea level rise
        (vii) increased spread of disease due to changed conditions for vectors; and
        (viii) increased heat-related illnesses.

<u>Contribution of project to climate change</u>

52. Without conceding the accuracy of the calculation, estimates provided by the EIS documents of the total emissions from the fugitive emissions, diesel combustion, explosives and electricity consumption within the mine for the life of Project are approximately 59 million tonnes of carbon dioxide equivalents.

53. By failing to also estimate emissions from transport and use of the product coal produced by the Project, the proponent fails to estimate the total direct and indirect emissions that will occur as a result of approval of the Project.

54. The EIS documents state a number of different estimates and methods of calculating the volume of coal expected to result from the project. Estimates range from 700 to 856 million tonnes of product coal. Based on these estimates the emissions from the transport and use of the coal would be approximately 1.6 to 2 billion tonnes of carbon dioxide equivalents, using calculations from the *National Greenhouse Energy and Reporting Act 2007* (Cth). Regardless of which of those estimates and methods used, there will be significant emissions from the burning of the coal that will result from the approval of the Project.

55. The total emissions that will result from the approval of the project will increase the severity, longevity and likelihood of the environmental harms of climate change mentioned in paragraph 51 above with a significant cost to the global environment over the life of the project.

56. The emissions of the mine will significantly further exceed the resilience of the receiving environment to maintain conditions similar to those on which human civilisation developed and to which life on Earth is adapted.

57. The emissions of the mine will be a significant step towards exceeding the resilience of the environment to dangerous anthropogenic climate change.

58. By failing to assess the contribution of all of the emissions from the Project to climate change the proponent failed to provide adequate information to allow the Project to be properly assessed.

The facts and circumstances relied in in support of Ground 1d) (Biodiversity) are:

59. The Project involves the permanent removal of a substantial area of vegetation of significant biodiversity value and that is habitat, including potential habitat, for fauna and flora. Clearing will also directly cause the mortality of fauna and flora.

60. Land subsidence, contamination of surface and ground water, changes to existing hydrology, fragmentation, and increased weeds and pests caused by the Project will adversely impact existing regional fauna and flora habitat, including potential habitat.

61. Noise, light, vehicle traffic and dust will also adversely affect existing fauna and flora habitat, including potential habitat.

62. There is insufficient information to support the proposed environmental management plans, species management plans, rehabilitation management plan, interim subsidence management plan and habitat offset measures as being adequate in preventing significant adverse effects on biodiversity.

The facts and circumstances to support Ground 1(e) (Economics) are:

63. The applicant asserts that the Project will be of economic benefit to Queensland however this is based on input output modelling and assesses only the positive impact on economic activity rather than the positive and negative impacts on the economy more broadly and on community welfare.

64. To determine if the project provides a net economic benefit to Queensland and the local community an economic impact assessment must be undertaken which assesses the negative economic impacts of the Project. Such an economic analysis has not been carried out.

65. The applicant is ultimately largely foreign owned. Profits or benefits sent outside Queensland, for example to owners or foreign workers or importation of goods, should not be included as benefits to Queensland in any economic impact assessment.

66. The economic impact assessment by the applicant overstates the employment impacts by failing to incorporate any negative impacts which may occur on net employment. A more appropriate analysis would show any negative impacts on total employment such as in agriculture and manufacturing.

67. Burning of coal overseas will create greenhouse gas emissions that will have a negative economic impact on the world, Australia and Queensland including on the ecology and economy of Queensland.

68. There is no need for this coal. The world has many other energy sources. Over the life of this mine coal use will become increasingly constrained by policies to limit climate change. Over the life of this mine wind and solar will continue to become cheaper. It cannot be assumed that the same amount of coal would be obtained from other sources and burnt to create the same amount of greenhouse gas emissions over the life of the mine.