

WILDLIFE PRESERVATION SOCIETY OF  
QUEENSLAND PROSERPINE/WHITSUNDAY  
BRANCH INC  
Applicant

MINISTER FOR THE ENVIRONMENT AND HERITAGE  
First Respondent

BOWEN CENTRAL COAL MANAGEMENT PTY LTD  
Second Respondent

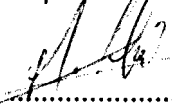
QCOAL PTY LTD  
Third Respondent

**AFFIDAVIT OF MARK FLANIGAN**

On 5 October 2005 I, Mark Flanigan of the John Gorton Building, King Edward Terrace, Parkes in the Australian Capital Territory, Assistant Secretary, Policy and Compliance Branch, in the Department of the Environment and Heritage affirm:

1. I am the Assistant Secretary, Policy and Compliance Branch, in the Australian Government Department of the Environment and Heritage (DEH), and I made the decisions to which this application relates.
2. I have worked in this capacity since January 2003.
3. I have been employed in DEH, and its predecessors, since May 1994. This employment includes periods in the Climate Change Branch and the Coastal and Marine Division. My work, amongst other things, included examining issues related to possible responses to climate change, in particular specialising in response strategies for managing the effects of possible sea level rises which might be induced by climate change. In the course of that work, I developed an

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Filed on behalf of the Respondent by:

Australian Government Solicitor  
Level 12, 340 Adelaide Street  
Brisbane QLD 4000  
DX119 Brisbane  
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Contact: Barry Cosgrove

File ref: 05103094  
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understanding of climate change issues and the possible effects of such changes.

4. I completed a Bachelor of Arts/Geography (with first class honours) at the University of Western Australia, which was conferred in 1988. The subjects and research required for completion of the degree included geomorphology, climatology and ecology. Those studies included examining the possible effects of rising sea levels and the possible effects of the accumulation of greenhouse gases in the atmosphere.
5. I have been the delegated decision maker in relation to many proposals arising for consideration under the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). Many of those decisions have related to proposed development of hydro-carbon sources in that they dealt with coal mining projects, oil and gas projects, development of loading facilities and power stations. I have made decisions on proposals relating to the Otway basin, Perth Basin, Bass Strait, and the North-West Shelf gas developments and proposed coal projects at locations including Collie in Western Australia; the Hunter Valley in NSW; and the Bowen Basin in Queensland.
6. In the course of making those decisions mentioned in paragraph 5 and my other duties and experiences as a senior officer in DEH, I have gained and maintained a sound general knowledge and understanding of the issues associated with greenhouse gas emissions and climate change.

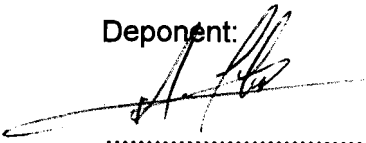
## DECISION – CONSIDERATIONS AND THOUGHT PROCESSES

### Isaac Plains Project

7. Before reaching my decision on the Isaac Plains proposal by Bowen Central Coal Management Pty Ltd (BCCM), I considered the contents of the following documents, true copies of which are annexed hereto and marked as set out respectively below:

Document Description	Date	Annexure
Referral Form for the Isaac Plains Project (including 3 one-page attachments)	1 April 2005	MF-1

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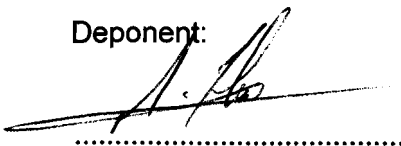
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Document Description	Date	Annexure
Isaac Plains Project Flora & Fauna Assessment - Final Report, by Ecotone Environmental Services (includes Appendices A, B and C)	17 February 2005	MF-2
Isaac Plains Project Environmental Management Overview Strategy (EMOS), by Matrix + Consulting Pty Limited	March 2005	MF-3
The public comment on the referral received from the Applicant in these proceedings (the WW Isaac Plains submissions)	7 April 2005	MF-4
DEH Minute by Steve Mercer, Director, Referrals Section, Policy and Compliance Branch (the Isaac Plains briefing paper)	4 May 2005	MF-5
The Department's 'supporting advice' relating to each of the protected matters under Part 3 of the EPBC Act	undated	MF-6

8. I considered whether there were any adverse impacts the proposed action was likely to have on each of the matters of national environmental significance protected by each provision of Part 3 of the EPBC Act. I also considered, in relation to each of the matters of national environmental significance protected by Part 3, whether, in the event that the proposed action did have some adverse impact on it, the proposed action was likely to have a significant impact on that matter.
9. In considering those issues, I took into account the content of all the documents referred to in paragraph 7 above.
10. In considering these issues, I also drew upon my own knowledge and understanding of greenhouse gas emissions, climate change processes and ecological issues that I had gained through the experiences described in paragraphs 2 to 5 above.
11. I am aware that there are multiple sources of greenhouse gas emissions and major sources include: industry; motor vehicle use; burning of fossil fuels,

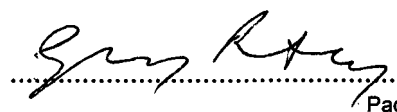
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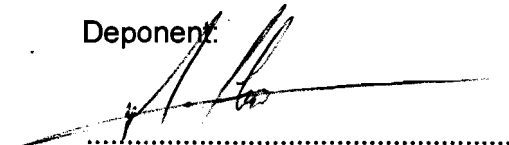
including coal, oil and natural gas; decomposition, clearing and burning of vegetation; and waste disposal.

12. When I considered the public comment submission (the WW Isaac Plains submission) made by the Whitsunday Wildlife Preservation Society, the Applicant in these proceedings, I gave consideration to all the environmental issues they raised, which related to a number of species and ecological communities and other matters of national environmental significance protected by Part 3 of the EPBC Act. However, since the present proceedings relate only to the issue of greenhouse gas emissions, I set out in detail in this affidavit only those aspects of my consideration and decision which relate to greenhouse gas emissions, climate change and the possible consequences of those processes.
13. I noted that the submission drew attention to indirect impacts needing consideration in accordance with decision of Federal Court in the *Nathan Dam* case. I noted that the submission described the greenhouse effect as being established as a phenomenon which is having or is likely to have indirect impacts on particular species, the Great Barrier Reef Marine Park World Heritage Area and other matters of national environmental significance. I noted also that the Society's argument was pitched at a general level of discussion rather than a rigorous examination of a series of demonstrated causal links from greenhouse gas emissions likely to be associated with this project to specific impacts on specific matters of national environmental significance.
14. In particular, I noted paragraph 3 on page 8 of the Wildlife Preservation Society's submission –

The burning of 18 million tones of coal will have an indirect impact on global warming, how much of an impact the production of this amount of greenhouse gases will have on global warming and, consequently, on matters of national environmental significance is more difficult to determine but must, at the very least, be considered when assessing the likely impacts of the action.

15. On the basis of my knowledge and understanding of greenhouse gas emissions, climate change and its possible consequences, I formed the view that the "Greenhouse Effect" is a genuine concern and in terms of global atmospheric

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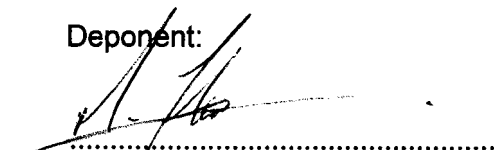


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conditions and weather patterns is having impacts, including possible impacts on matters protected under Part 3 of the EPBC Act. I went on to consider what these possible impacts are, whether they are likely to occur and whether they are likely to be significant.

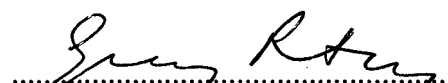
16. I turned my attention to the particular coal mining project proposed at Isaac Plains. I noted that the proposal involved extracting approximately 1.9 million tonnes per annum, with an anticipated mine life of approximately 9 years, giving a total of 18 million tonnes of coal to be processed and transported to Dalrymple Bay for export and ultimate use in a range of unspecified ways, but likely to include use in power stations and as coking coal.
17. I considered the scale of the proposed operation and the amount of coal to be extracted and used relative to the scale of other hydrocarbon exploration and development projects of which I had gained direct or indirect knowledge as described above. I then considered how the Isaac Plains mine in the above context fits within the global context. In this regard, I considered the extent to which greenhouse gases produced from the mining, shipping and use of the Isaac Plains coal would be likely to add to the volume of greenhouse gases in the atmosphere and thereby increase the concentration of those gases in the atmosphere. I took that matter into account relative to the amount and concentration of greenhouse gases currently in the atmosphere and also relative to the total annual global contributions of greenhouse gases from all global sources that add to the volume and increase the concentration of greenhouse gases in the atmosphere.
18. I considered that the scale of the proposed action is fairly typical of coal mines in Australia, of which there are many in operation at any given time. I also considered that the mining and use of coal is an important contributor to the greenhouse gas emissions currently produced by Australia, but it is only one amongst many such contributors (as mentioned in paragraph 11 above). I also considered that the Australian contribution to current annual greenhouse gas emissions, though relatively large on a per capita basis, is only one amongst many contributions that are made by all other industrialised countries. I also considered that the amount and concentration of greenhouse gases in the atmosphere, and any resultant adverse impacts on matters of national

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environmental significance, are the consequence of human activities on a global scale over a long period of time.

19. In this context I formed the view that the Isaac Plains mine was likely to represent only a relatively small contribution to total greenhouse gas load.
20. I then turned my mind to whether the contribution and potential consequential effects was likely to have a significant impact on protected matters. In that process, while giving consideration to all matters protected by Part 3 of the EPBC Act, I gave particular consideration to the possible impact of greenhouse gas emissions, and consequential climate change, on the Great Barrier Reef World Heritage Area.
21. I considered the following possible impacts of greenhouse gas induced climate change:
  - Warming of the ocean;
  - Coral bleaching (associated with warming of the ocean);
  - Ecological shift – change in the ecological character of an area due to climate change;
  - Sea level rise – including changes to erosive patterns, flooding, increased storm penetration, etc;
  - Changing storm frequency – particularly inflow of nutrients (from land) and change to marine circulation systems (particularly impacting coral and fish dispersal).
22. I formed the view that, while it is clear that, at a general global level, there is a relationship between the amount of carbon dioxide in the atmosphere and warming of the atmosphere, the climate system is complex and the processes linking specific additional greenhouse gas emissions to potential impacts on matters protected by Part 3 of the EPBC Act are uncertain and conjectural. I concluded that a possible link between the additional greenhouse gases arising from the mining, shipping and use of the coal from the proposed Isaac Plains

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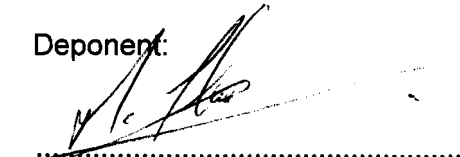
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mine and a measurable or identifiable increase in global atmospheric temperature was speculative only and was unlikely to be demonstrable.

23. I also considered that, even if such a causal link was realistically feasible, it was also necessary to consider whether that increment to the global warming process would be likely to translate into any identifiable changes in sea level, water temperature or local (ie North Queensland) climate. On the basis of my knowledge and understanding of climate change as outlined above, I concluded that any such translations associated with this particular project were matters of conjecture and speculation only. Therefore, I was not satisfied they were likely to occur.
24. I considered the cumulative contribution of greenhouse gases from the Isaac Plains mine over its projected life and concluded that the accumulated additional load of such gases was also unlikely to result in a measurable increase in global atmospheric temperature and therefore was unlikely to result in a significant impact on matters of national environmental significance.
25. In coming to this position I took account of the precautionary principle as expressed in the EPBC Act.
26. The key thing about considering whether mining, shipping and use of the Isaac Plains coal is likely to have an impact on matters protected by Part 3 of the EPBC Act is the long chain of possible causes and effects linking the emission of greenhouse gases to any impacts on matters protected, and whether the small contribution to this possible process that would be attributable to the Isaac Plains project is realistically likely to make any real difference at each or any point in the chain or in the chain as a whole.
27. Added to this was, in my view, the additional uncertainty as to how the coal would be used at its export destinations: what processes, which power stations or other furnaces, what emissions technologies would be employed, all of which is uncertain and speculative.
28. On 6 May 2005 I decided that the proposed action was not a "controlled action" for the purposes of section 75(1) of the EPBC Act. I recorded that decision by circling the word "approved" on the last page of the minute which is Annexure

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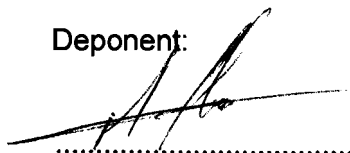


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MF-5 hereto and placing my signature and the date on that page, and I wrote in my own handwriting on that page the following words: "I regard the likelihood of significant impacts on NES arising from the marginal addition of greenhouse gases to be extremely small, in addition to speculative".

29. I made that decision because, on the basis of the material contained in Annexures MF-1 to MF-6 and on the basis of my own knowledge and understanding, as outlined in paragraphs 2 to 5 above, in relation to greenhouse gas emissions, climate change processes and models, possible sea level rises and other potential consequences of climate change, I concluded that
- (a) The mining, shipping and use of coal from the proposed coal mine at Isaac Plains would be likely to make an additional contribution of greenhouse gases to the atmosphere and thus would be likely to increase the concentration of greenhouse gases in the atmosphere.
  - (b) That additional contribution would be small relative to both
    - (i) the amount and concentration of greenhouse gases currently in the atmosphere; and
    - (ii) the additional amount of greenhouse gases that would make their way into the atmosphere from other sources during the period of operation of the proposed Isaac Plains coal mine and use of the coal from that mine and any resulting increase in the concentration of greenhouse gases in the atmosphere during and after that period.
  - (c) In relation to each of the matters of national environmental significance protected by Part 3 of the EPBC Act, there may in theory be a remote possibility that that additional contribution and increased concentration of greenhouse gases in the atmosphere associated with this project could set in train climate change processes that may have impacts on them.
  - (d) However, those possibilities are speculative only and there is no real possibility that those theoretically possible impacts will arise from the mining, shipping and use of coal from the proposed Isaac Plains coal mine.

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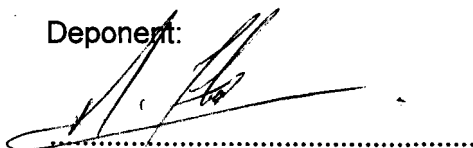
(e) Furthermore, if the additional contribution and increased concentration of greenhouse gases in the atmosphere arising from the mining, shipping and use of coal from the proposed Isaac Plains coal mine were to have an adverse impact on a matter of national environmental significance, any such impact is likely to be extremely small and is therefore unlikely to be significant.

30. The annotation I made, to which I refer in paragraph 28 above, was based on the reasoning process outlined above. I also expressed that reasoning process in a summary manner in the statement of reasons referred to in paragraph 34 below.
31. Having made the decision as described in paragraph 28 above, I further recorded that decision in a separate document and wrote to BCCM and Matrix+ Consulting forwarding them a copy of that document. That separate decision document and the correspondence forwarding it are annexed hereto and marked as set out below:

<b>Document Description</b>	<b>Date</b>	<b>Annexure</b>
Decision that Action Is Not a Controlled Action	6 May 2005	MF-7
Letter to BCCM	6 May 2005	MF-8
Letter to Matrix+ Consulting	6 May 2005	MF-9

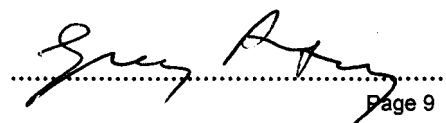
32. The decision was also notified on the DEH website in accordance with section 170A of the EPBC Act.
33. On 16 May 2005, the Minister received from the Applicant in these proceedings a request dated 11 May 2005 under section 13 of the AD(JR) Act for a statement of reasons for the decision. Annexed hereto and marked MF-10 is a true copy of that request.
34. On 21 June 2005 I signed a Statement of Reasons (the Isaac Plains Statement of Reasons). Annexed hereto and marked MF-11 is a true copy of that Statement of Reasons. That document sets out accurately but in a summary way my reasons for the decision. On 21 June 2005 I signed and caused to be sent to Mr Lee a

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letter bearing that date, a true copy of which is annexed hereto and marked MF-12 , together with the Isaac Plains Statement of Reasons.

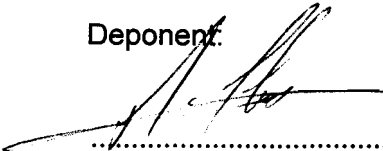
### Sonoma Project

35. Before reaching my decision on the Sonoma proposal by QCoal Pty Ltd (QCoal), I considered the contents of the following documents, true copies of which are annexed hereto and marked as set out respectively below:

Document Description	Date	Annexure
Referral Form for the Sonoma Coal Project (including Table 1 and Figures 1 to 4 and Addendum).	undated	MF-13
Fauna and Flora of the Proposed Sonoma Coal Mining Lease near Collinsville, Central Queensland - A Report to QCoal Pty Ltd by Terrestrial Ecology Programme, Central Queensland University	October 2004	MF-14
The public comment on the referral received from the Applicant in these proceedings (the WW Sonoma submissions)	14 April 2005	MF-15
DEH Minute by Steve Mercer, Director, Referrals Section, Policy and Compliance Branch (the Sonoma Project briefing paper)	6 May 2005	MF-16
The Department's 'supporting advice' relating to each of the protected matters under Part 3 of the EPBC Act	undated	MF-17

36. In making my decision on the Sonoma project I adopted essentially the same approach as for the Isaac Plains project.
37. I considered whether there were any adverse impacts the proposed action was likely to have on each of the matters of national environmental significance protected by each provision of Part 3 of the EPBC Act. I also considered, in relation to each of the matters of national environmental significance protected by Part 3, whether, in the event that the proposed action did have some adverse impact on it, the proposed action was likely to have a significant impact on that matter.

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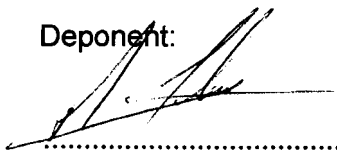


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38. In considering those issues, I took into account the content of all the documents referred to in paragraph 35 above.
39. In considering these issues, I drew upon my own knowledge and understanding of greenhouse gas emissions, climate change processes and ecological issues that I had gained through experiences described in paragraphs 2 to 5 above. I also took into account my knowledge of the sources of greenhouse gas emissions as mentioned in paragraph 11 above.
40. When I considered the public comment submission (the WW Sonoma submission) made by the Whitsunday Wildlife Preservation Society, the Applicant in these proceedings, I gave consideration to all the environmental issues they raised, which related to a number of species and ecological communities and other matters of national environmental significance protected by Part 3 of the EPBC Act. However, since the present proceedings relate only to the issue of greenhouse gas emissions, I set out in this affidavit only those aspects of my consideration and decision which relate to greenhouse gas emissions, climate change and the possible consequences of those processes.
41. I noted that the annual output anticipated from the project is 2 million tonnes, with an anticipated mine life of 15 years. This gives a total of 30 million tonnes, about 66% more than expected from the Isaac Plains project. However, the scale of operations involved in the Sonoma Project is not so different from the scale of operations involved in the Isaac Plains Project as to invalidate the application of the same sort of consideration concerning the additional amount of greenhouse gas arising from the project relative to the current amount and concentration of greenhouse gases in the atmosphere and relative to the additional amount and higher concentration of greenhouse gases contributed annually from all global sources, and the likely effects of that contribution, as outlined in paragraphs 15 and 17 to 27 above.
42. On 10 May 2005 I decided that the proposed action was not a "controlled action" for the purposes of section 75(1) of the EPBC Act. I recorded that decision by circling the word "approved" on the last page of the minute which is Annexure MF-16 hereto and placing my signature and the date on that page.

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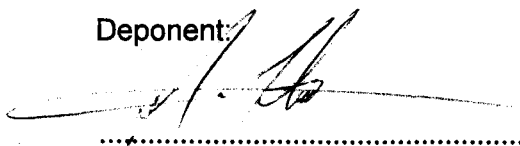
greenhouse gas emissions, climate change processes and models, possible sea level rises and other potential consequences of climate change, I came to similar conclusions to those I had reached in relation to the Isaac Plains proposal.

44. The views I had expressed in the handwritten annotation I had made on the last page of Annexure MF-5 in relation to the Isaac Plains proposal were incorporated in the last sentence of the penultimate paragraph of the Sonoma Project briefing paper at Annexure MF-16.
45. Having made the decision as described in paragraph 44 above, I further recorded that decision in a separate document and wrote to QCoal and McCollum Environmental Management Services Pty Ltd forwarding them a copy of that document. That separate decision document and the correspondence forwarding it are annexed hereto and marked as set out below:

Document Description	Date	Annexure
Decision that Action Is Not a Controlled Action	10 May 2005	MF-18
Letter to QCoal Pty Ltd	10 May 2005	MF-19
Letter to McCollum Environmental Management Services Pty Ltd	10 May 2005	MF-20

46. The decision was also notified on the DEH website in accordance with section 170A of the EPBC Act.
47. On 16 May 2005, the Minister received from the Applicant in these proceedings a request dated 12 May 2005 under section 13 of the AD(JR) Act for a statement of reasons for the decision. Annexed hereto and marked MF-21 is a true copy of that request.
48. On 21 June 2005 I signed a Statement of Reasons (the **Sonoma Statement of Reasons**). Annexed hereto and marked MF-22 is a true copy of that Statement of Reasons. That document sets out accurately but in a summary way my reasons for the decision. On 21 June 2005 I signed and caused to be sent to Mr Lee a letter bearing that date, a true copy of which is annexed hereto and marked MF-23, together with the Sonoma Statement of Reasons.

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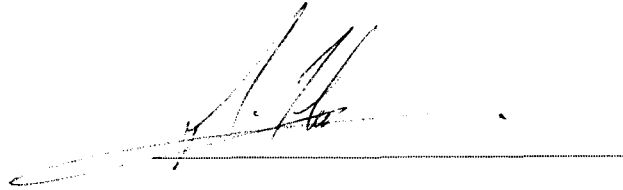


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49. All the facts and circumstances herein deposed to are within my own personal knowledge, save such as are deposed to on information and belief only and the sources of my information and the grounds for my belief appear on the face of this my affidavit.

AFFIRMED at Canberra in the Australian  
Capital Territory

Before me:



Solicitor/A Justice of the Peace

**AFFIDAVIT - CERTIFICATE OF COMPLIANCE**

I, Barry Joseph Cosgrove, certify to the Court that the affidavit of Mark Flanigan affirmed on \_\_\_\_ October 2005 filed on behalf of the Respondent complies with Order 14, rule 2 of the Federal Court Rules.

Date: \_\_\_\_ October 2005

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Barry Joseph Cosgrove  
A solicitor employed by  
Australian Government Solicitor  
Solicitor for the Respondent