

# **Report of the Contact Group of the Committee for Environmental Protection to Consider the Draft Comprehensive Environmental Evaluation for Recovering a Deep Ice Core in Dronning Maud Land, Antarctica**

## **New Zealand Working Paper**

### **1. Background**

The Contact Group to consider the draft Comprehensive Environmental Evaluation (CEE) for Recovering a Deep Ice Core in Dronning Maud Land (DML) was set up in accordance with procedures set out in guidelines for the Committee for Environmental Protection (CEP) consideration of CEEs (Annex 4 to the Final Report of CEP II). The CEP chair received proposals from two parties to establish such a group. The group was formally established through a message sent by the CEP to National Contact Points on June 23, 2000. The message contained two general and two specific issues to be considered by the contact group which formed the terms of reference for the group as follows:

#### *Issues for consideration*

##### *General Issues:*

- i) Is the draft CEE consistent with the provisions of Article 3 of Annex 1 of the Environmental Protocol? (Comment: As a first example of a CEE submitted for consideration by the CEP, there could be merit in also commenting on its clarity and presentation, and on whether this activity is a clear-cut case for a CEE, or a borderline case for an IEE.)
- ii) Are the conclusions in the document adequately supported; specifically that the predicted environmental impacts are outweighed by the scientific gain?

##### *Specific Issues:*

- i) The CEE records that certain materials will be left behind on completion of the project and dismantling of the camp. These include materials from the camp infrastructure such as timber and steel leg supports (Chapter 3, Section 3.4, pages 30-31 refer), as well as the drilling fluid in the borehole (Chapter 3, Section 3.6.2 pages 37 - 42). Has the CEE adequately addressed and presented the alternative options as justification for leaving these materials in situ?
- ii) Has sufficient information been provided regarding fuel handling procedures including fuel spill response procedures and associated equipment? Specifically there are at least three questions:
  - a) Has sufficient information been provided about fuel storage at the base (for example, this is not shown in Figure 7).
  - b) Chapter 8, Section 8.1.2 refers to an Emergency Procedures Manual. Is there merit in appending the Manual (or at least a summary of it) to the CEE?

- c) No details are provided on the fuel spill equipment to be used. Should this be included in the document?

The contact group convener, Professor Peter Barrett from New Zealand, circulated a timetable for the group's work, on July 26. A first draft of the report of the group was circulated on August 1. Seven responses were received and a second draft of the report was circulated on August 19 with the responses attached. Nine responses were received following the circulation of the second draft, and a final draft prepared and circulated with these comments attached. Two further brief comments were received and following amendment the report was submitted as a working paper to provide a basis for discussion of the draft CEE at CEP III.

This report identifies the main points raised during the contact group's work. Some differences of views are outlined. Five draft recommendations dealing with general and specific issues detailed in the terms of reference are provided after each point of discussion for the consideration of the CEP in developing its advice on the draft CEE to the ATCM.

Participants in the contact group are listed in Appendix I. It was suggested that the two sets of responses to the draft report to CEP, and its revised version, be passed on to assist the proponent in the preparation of the final CEE. However some members considered that the responses were for the work of the group and not appropriate for this different purpose. In addition it was noted that points of concern could be addressed through national submissions to Germany. This issue might be given further consideration by CEP.

## **2. General Issues**

### **2.1 Consistency with the provisions of Article 3 of Annex I of the Protocol on Environmental Protection**

The document is well structured, with the points set out in paragraph 2 of Article 3, specifying what a CEE shall include, matched by separate sections in the report. The scientific and support activities, along with the initial reference state, are described in sufficient detail to indicate possible impacts and consequences.

While the methodology for assessment is set out in detail, one member of the contact group noted that the impact assessment methodology is insufficiently supported and does not enable the reader to reproduce the assessment process applied through the draft CEE. In particular it was noted that there was no explanation of the way significance is assigned to each impact and the relationship to the three levels of assessment required by the Protocol. There were also concerns expressed regarding the lack of integration of the three assessment attributes used (i.e. extent, impact duration and intensity) and about the lack of clarity on how probability is weighed in the impact assessment process.

It was further noted that relevant data are presented as needed, measures to mitigate are specified and alternatives for the proposed activities are considered. One contact group member further noted that the section on monitoring (8.2 of the draft CEE) was vague and does not propose any monitoring strategy.

With regard to the level of EIA that is appropriate, the contact group notes that it is the responsibility of appropriate national authorities to decide the level that is undertaken and that this may be on a site by site

basis. It is further noted that Article 3 para 1 of the Protocol states "... if the proposed activity is likely to have more than a minor or transitory impact, a Comprehensive Environmental Evaluation shall be prepared".

Most of the consequences of the activity considered in this draft CEE, such as the disturbance of the inland snow, and emissions from fuel are less than minor, though possibly not transitory. However, while the abandonment of construction material buried in the snow might also be considered less than minor, it is plainly not transitory. Efforts to plan for and mitigate these consequences are well described in the draft CEE. The document also notes that the drilling fluid to be left in the drill hole, a 60 tonne mix of petroleum and a fluorocarbon, is expected to be in the ice for around 100,000 years, indicating an impact that is more than transitory.

An area of difference in the contact group related to whether the appropriate level of EIA for the project was a CEE. Four members of the contact group took the view that a draft CEE is the appropriate level. However, three members took the view that the activity could be considered as a borderline case between a CEE and an IEE.

***Draft Recommendation 1:***

***That the authors of the DML draft CEE be congratulated on the production of a well structured and informative document. In view of the need for analysis to determine the likelihood of greater than minor or transitory effects, the CEP considers the draft CEE to have provided a worthwhile basis for consideration of the project.***

**2.2 Adequacy of supporting information for the conclusion in the document**

There was agreement that the information contained in the draft CEE is adequate for making a decision on whether the consequences from predicted impacts are likely to be so limited as to allow the activity to proceed. However, a number of specific points raised in the responses could usefully be addressed to improve the clarity and consistency of the final CEE, and perhaps reduce the impact of the activity even further.

Although the contact group members recognized that there were issues that could be further clarified (and useful information added in the final CEE) they were also of the view that these issues did not appear to be of a nature that would be likely to impede the progress of the proposed activity.

***Draft Recommendation 2:***

***That significant suggestions arising from the work of the contact group be made available to the proponents for consideration in the preparation of the Final CEE.***

***Draft Recommendation 3:***

***That Treaty Parties note that future Draft CEEs should include the word "DRAFT" in the title.***

**3. Specific Issues**

**3.1 Materials will be left behind on completion of the project and dismantling of the camp**

Materials proposed to be left behind include from the camp infrastructure (such as timber and steel leg supports (Chapter 3, Section 3.4, pages 30-31)). While there was thoughtful discussion on the justification for leaving behind specified material, several members of the contact group suggested further consideration of alternative approaches or styles of construction that would reduce the amount of abandoned material.

Materials to be left behind also include the drilling fluid that will be left in the borehole (Chapter 3, Section 3.6.2 pages 37 - 42). It was noted that this was an important issue and well scoped, though some contact group members felt that there could be a deeper consideration of alternative options for reducing the amount of material to be left in situ. Two members of the contact group felt that in particular more consideration should be given to minimising the amount of drilling fluid not recovered. One member also suggested that the timeframe for future borehole measurements be specified as they represent the main reason why the whole casing structure is left in the ice.

***Draft Recommendation 4:***

***That further consideration be given to alternative approaches to camp construction and drilling operations in order to further reduce materials (including drilling fluid) left in situ on completion of the project.***

**3.2 Fuel handling procedures including fuel spill response procedures and associated equipment**

The terms of reference for the contact group note three specific questions in relation to fuel handling procedures (refer section 1 above). While most members of the contact group indicated a wish for more information on these three items, they did not want to see the bulk of the document greatly increased. A suggested compromise is for a summary of the types of information available on all three issues be considered for inclusion in the final CEE, along with references that could lead the reader to documents containing the detailed information.

***Draft Recommendation 5:***

***That the importance of having detailed and site specific fuel storage, handling and emergency procedures in relation to the project be noted and that summaries and sources for information on these procedures including for fuel spill contingency be included in the Final CEE.***

## Appendix I: Members of the Contact Group

Argentina:	Jose Acero	<a href="mailto:jmacero@abaconet.com.ar">jmacero@abaconet.com.ar</a>
	Rodolfo Sanchez	<a href="mailto:rodolf@abaconet.com.ar">rodolf@abaconet.com.ar</a>
Australia	Belinda Harding	<a href="mailto:belinda.harding@aad.gov.au">belinda.harding@aad.gov.au</a>
France	Paul Trehen	<a href="mailto:paul.trehen@univ-rennes1.fr">paul.trehen@univ-rennes1.fr</a>
	Alain Megret	<a href="mailto:alain.megret@environnement.gouv.fr">alain.megret@environnement.gouv.fr</a>
Italy	Pietro Giuliani	<a href="mailto:internazio@enea.pnra.it">internazio@enea.pnra.it</a>
Japan	Tomoo Mizutani	<a href="mailto:TOMOO_MIZUTANI@eanet.go.jp">TOMOO_MIZUTANI@eanet.go.jp</a>
NZ	Emma Waterhouse	<a href="mailto:e.waterhouse@antarcticanz.govt.nz">e.waterhouse@antarcticanz.govt.nz</a>
	Harry Keys	<a href="mailto:hkeys@doc.govt.nz">hkeys@doc.govt.nz</a>
Norway	Birgit Njaasted	<a href="mailto:njaasted@npolar.no">njaasted@npolar.no</a>
Peru	Fernando Jimenez	<a href="mailto:ojimene@pucp.edu.pe">ojimene@pucp.edu.pe</a>
UK	Neil Gilbert	<a href="mailto:prs.fco@gtnet.gov.uk">prs.fco@gtnet.gov.uk</a>
	John Shears	<a href="mailto:jrs@bas.ac.uk">jrs@bas.ac.uk</a>
USA	Joyce Jatko	<a href="mailto:jjatko@nsf.gov">jjatko@nsf.gov</a>
Uruguay	Aldo Felici	<a href="mailto:ambiente@iau.gub.uy">ambiente@iau.gub.uy</a>
IAATO		<a href="mailto:iaato@iaato.org">iaato@iaato.org</a>