

Our reference : 282151A7:DOC07/43304:GN  
Contact : Greg Newman, (02) 4224 4100

Steelworks Cogeneration Plant Project  
BlueScope Steel (AIS) Pty Ltd  
(Attention: Steve Shaw)  
PO Box 1854  
WOLLONGONG NSW 2500

Dear Sir

**BLUESCOPE STEEL COGENERATION PLANT  
PROPOSED SALT WATER COOLING**

We are writing further to the meeting of 18 October 2007 between the Department of Environment and Climate Change (DECC) and BlueScope Steel (AIS) Pty Ltd (BSL) regarding the use of once through salt water cooling for the Steelworks Cogeneration Plant (SCP). This included consideration of the following reports:

- *Environmental Impact Assessment of Proposed Modifications to Approved Project* December 2006 CH2MHill; and
- *BSL SCP Proposed Salt Water Cooling Numerical Cooling Water Studies* dated 4 September 2007 prepared by Cardno Lawson Treloar Pty Ltd.

Earlier versions of these reports incorporated comments raised by DECC in our letter dated 21 December 2005.

The purpose of this letter is to confirm the meeting outcomes and to provide additional comments from our review of the information provided to date. These comments are included as Attachment A. Any further proposed techniques for the assessment of water impacts should be developed in consultation with DECC, for example, modeling.

As stated previously, providing rigorous environmental assessments do not identify any unacceptable impacts from the proposal, DECC supports in principle the proposed concept of once through salt water cooling for the Cogeneration Plant based on the anticipated environmental benefits it will achieve.

The Department of Environment and Conservation NSW is now known as  
the Department of Environment and Climate Change NSW

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Department of **Environment and Conservation** NSW

## Attachment A – Department of Environment and Climate Change comments on the reports submitted to date

In general, heated cooling water discharges from the Steelworks site requires further assessment.

Specifically:

1. On page 1 of the report executive summary Port Kembla Harbour is referenced as a highly modified environment. Per our previous letter of 21 December 2005 the Harbour should be considered as slightly to moderately disturbed ecosystem,

### **Level of ecosystem protection**

*The level of aquatic ecosystem condition for Port Kembla Harbour is "highly disturbed". The Guidelines state that the emphasis should be on improvement of disturbed ecosystems, not just maintenance of a degraded condition. In this regard the desired targeted level of protection in the longer term would be equivalent to a "slightly to moderately disturbed" ecosystem*

2. Sections 3.4.2 - 3.4.4 must be corrected and/ or revised per the discussions at the meeting.
3. The proportion of harbour volume pumped through the salt water pumping station in each residence time (Pm) should be presented and discussed in the report (section 3).
4. Further literature evaluation must be undertaken to assess:
  - a) the consequences of the loss of Pm proportions of plankton and larvae on Port Kembla Harbour ecology. This should distinguish the potential impacts for the Inner and Outer harbours, assuming that discharge will create a net outflow from inner to outer and thus is likely to limit recruitment and food in the inner Harbour.
  - b) the importance of planktonic components to the ecology of Port Kembla Harbour, both as a food source and as a source of recruits
  - c) whether plankton show vertical stratification in the water column and whether measures such as depth selective inlets would minimise entrainment
5. Entrainment consequences to aquatic organisms must be addressed more fully in Chapter 4 per the comments on the pages provided during the meeting (that is sections 4.1.4, 4.2.1, table 4.1 under "macroinvertebrates"), 4.3.2, 4.3.4, and 4.3.6).
6. Clarification is required on whether the assessment has addressed cumulative impacts associated with other thermal discharges from the BSL premises.
7. Clarification is required on whether the modelling has considered the modified configuration of Port Kembla Harbour based on any approved Harbour developments.
8. An assessment must be undertaken on biological controls which assesses the viability of both physical and chemical control agents. In relation to any chemical agents, an assessment must be undertaken on the ecotoxicological impacts to receiving waters including the identification of measures to minimise impacts. Justification should be documented on the preferred biological treatment option.
9. Details should be documented on a methodology to validate the modelling outcomes.

We look forward to continuing to work cooperatively through the proposal and are happy to meet to discuss any issues at a convenient time. Please call the above officer on 4224 4100 if you have any questions in relation to this issue.

Yours sincerely

*William Dove 26/10/2007*

**WILLIAM DOVE**  
**Acting Manager Illawarra**  
**Climate Change and Environment Protection**

Att: A

(N/Part 3A/EA Assessments/DOC07-43304 BSL cogen water