

Gas Pipeline to Nifty Copper Operations, Great Sandy Desert, Change to Conditions

Birla (Nifty) Pty Ltd

**Section 46 Report and Recommendations
of the Environmental Protection Authority**

**Environmental Protection Authority
Perth, Western Australia
Bulletin 1198
October 2005**

Section 46 Report Timelines

Date	Actions
6 Sept	Section 46(1) report request from Minister
19 Sept	Advertised by EPA
29 Sept	Section 46(1) report to Minister
3 Oct	EPA bulletin released
17 Oct	End of two week comment period

Summary and recommendations

GAS PIPELINE TO NIFTY COPPER OPERATIONS, GREAT SANDY DESERT – S46 REPORT (ASSESSMENT NO. 1591)

1.1 Introduction

On 6 September 2005, you wrote to the Environmental Protection Authority (EPA) requesting an inquiry, under section 46 of the *Environmental Protection Act 1986* (EP Act), into the conditions for fauna management for the construction of the gas pipeline to the Nifty Copper Operations post-October, should construction not be completed. The proponent, Birla (Nifty) Pty Ltd, has approval under statement 676, and construction commenced in September, and trenching and laying of the pipeline is planned to be completed by 31 October 2005.

Condition 8-1 permits open trench work to be undertaken only from April to October (inclusive), which was designed to assist in minimising fauna mortality, along with other conditions that required shade shelters and “fauna clearing persons”. However, from experience with the construction of the Telfer gas pipeline, these measures were not sufficient in the hotter conditions outside the months of April to October to avoid massive fauna mortality.

Due to delays in obtaining approvals to be able to commence construction, Birla has proposed a contingency plan in case of further delays due, for example, to inclement weather or fires, to allow the pipeline to be completed post-October. A different construction technique is proposed, which involves backfilling the trench at the end of every day.

The EPA has assessed whether this measure, in conjunction with fauna clearing persons patrolling the open trench during the day, would alleviate the risk of massive fauna mortality.

1.2 Discussion

Open trenches function to trap fauna, particularly at night, and many fauna are unable to escape and subsequently die of heat exhaustion and predation. In the Great Sandy Desert, temperatures in summer are such that many fauna cannot survive overnight in the trench. Hence, the EPA considers that the proposal to backfill the trench at the end of every day will greatly minimise the risk of fauna mortality.

Birla (Nifty) Pty Ltd has submitted a Construction Execution Procedure, prepared by its contractor McConnell Dowell, which describes the dig-and-lay technique. This technique has been used for a pipeline that traversed a conservation reserve in Victoria and was successful in minimising fauna deaths.

The Department of Conservation and Land Management has advised the EPA that the procedure for the dig-and-lay pipeline construction is acceptable subject to the fauna clearing persons being present during the day to identify, retrieve and relocate fauna from the trench. Any bell holes at the pipe end need to be securely cordoned off and the pipe itself plugged to prevent fauna entry. An inspection at the end of every day is required to ensure that there are no trench or pipe openings.

1.3 Recommendations

The EPA has concluded that it would be acceptable for the trenching and laying of the pipeline to be completed post-October using the dig-and-lay technique.

The EPA recommends that the fauna management conditions 8-1, 8-6 and 8-7 of statement 676 be amended, and that an additional condition (8-12) be inserted that specifies the dig-and-lay technique be used post-October.

The recommended environmental conditions to amend statement 676 are attached.

Recommended Environmental Conditions

GAS PIPELINE TO NIFTY COPPER OPERATIONS GREAT SANDY DESERT

Proposal: The construction of a gas pipeline to supply natural gas for on-site power generation at Nifty Copper Operations located in the eastern Pilbara region. The gas pipeline is a 46 kilometre spur line from the Port Hedland - Telfer Pipeline to Nifty Copper Operations, as documented in schedule 1 of this statement.

Proponent: Birla (Nifty) Pty Ltd

Proponent Address: Level 2, 23 Ventnor Avenue, WEST PERTH WA 6005

Assessment Number: 1591

Previous Assessment Number: 1549

Previous Statement Number: Statement No. 676 (published on 15 April 2005)

Report of the Environmental Protection Authority: Bulletin 1198

Previous Report of the Environmental Protection Authority: Bulletin 1164.

The implementation of the proposal to which the above reports of the Environmental Protection Authority relate is subject to the conditions and procedures contained in Ministerial Statement No. 676 (15 April 2005), as amended by the following:

Conditions 8-1, 8-6 and 8-7 (Fauna Management – Open Trench) of Statement No. 676 are deleted and replaced by the following conditions:

8-1 To minimise fauna deaths during construction, the proponent shall undertake open trench work from April to October (inclusive). In the event that open trench work cannot be completed by 31 October 2005 using construction methods outlined in the Assessment on Referral Information document dated January 2005, the proponent shall comply with the requirements of condition 8-12.

The proponent shall notify the Department of Environment prior to 24 October 2005 on construction progress and expected time required to completion of open trench work.

8-6 “Shade shelters” shall be installed in open trenches at intervals not exceeding 100 metres, except where a dig-and-lay construction method is used, as required by condition 8-12.

8-7 “Trench plugs” shall be installed at intervals not exceeding 1000 metres in open trenches to allow fauna to exit, except where a dig-and-lay construction method is used, as required by condition 8-12.

A new condition is inserted immediately following condition 8-11 (Fauna Management – Open Trench) of Statement No. 676 as follows:

8-12 The proponent shall backfill the entire trench every day in accordance with the dig-and-lay construction methodology for all trenching conducted after 31 October 2005, as described in the McConnell Dowell Constructors (Aust) Pty Ltd, Construction Execution Procedure V014-600-1826, Revision B, 1 August 2005.