



Report and recommendations of the Environmental Protection Authority



**Roy Hill Mining Project Stage 2
– inquiry under s46 of the
Environmental Protection Act 1986
to amend Ministerial Statement 829**

Roy Hill Iron Ore Pty Ltd

Report 1520

June 2014

**ENVIRONMENTAL PROTECTION AUTHORITY
REPORT AND RECOMMENDATIONS TO THE MINISTER FOR
ENVIRONMENT**

**ROY HILL 1 IRON ORE MINING PROJECT STAGE 2 PROPOSAL -
INQUIRY UNDER SECTION 46 OF THE *ENVIRONMENTAL PROTECTION
ACT 1986* INTO THE MATTER OF CHANGING THE IMPLEMENTATION
CONDITIONS OF STATEMENT 829 (ASSESSMENT 1851)**

The Minister for Environment has requested (15 September 2010) that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing the implementation conditions relating to the Roy Hill 1 Iron Ore Mining Project Stage 2 proposal (Statement 829).

The following is the EPA's Report and Recommendations (No. 1520) to the Minister pursuant to section 46(6) of the *Environmental Protection Act 1986*.

Background

The Roy Hill 1 Iron Ore Mining Project Stage 2 proposal is to mine iron ore from the Stage 2 project area on the southern slopes of the Chichester Range and develop a remote borefield and pipeline. The EPA assessed the proposal at the level of Assessment on Referral Information and considered the following key environmental factors relevant to the proposal required detailed evaluation in its Report and Recommendations to the Minister:

- Flora and Vegetation;
- Terrestrial Fauna;
- Short Range Endemics (Invertebrates);
- Subterranean Fauna;
- Groundwater;
- Surface Water; and
- Mine Closure and Rehabilitation.

The EPA concluded that the proposal could be managed to meet the EPA's environmental objectives, provided there was satisfactory implementation by the proponent of the EPA's recommended conditions.

The Minister for Environment approved the proposal for implementation, subject to the implementation conditions of Statement 829 (31 March 2010).

Requested changes to conditions

The proponent for the proposal, Roy Hill Iron Ore Pty Ltd, has requested changes to condition 9 of Statement 829, which relates to the management of surface water diversions and the potential impacts to mulga and riparian vegetation.

The proposal is located in the foothills and upper colluvial plains of the Chichester Range, in an area drained by several ephemeral creeks which flow in a generally south-westerly direction towards the Fortescue River and Marsh. There are no permanent creeks, surface water pools or wetlands within the proposal areas, with surface water flows only occurring during and for a short time after significant rainfall events.

The proposal includes a series of temporary and permanent diversion structures that will divert surface water flows around infrastructure and mining areas. The resultant changes in surface water flows have the potential to impact on vegetation, including the mulga (*Acacia aneura*) communities regarded as having significant environmental value as they represent the northern-most extent of mulga in the Fortescue Plains sub-region.

The current condition 9 of Statement 829 restricts the proponent to constructing only those surface water diversion structures that were proposed at the time of assessment:

Condition 9-1 of Statement 829

9-1 The proponent shall ensure that surface water diversion structures do not adversely affect Mulga and riparian vegetation to be retained in the proposal area and that no diversions, other than the following are constructed:

- 1. those diversions included in Figure 15 of the Roy Hill 1 Iron Ore Mining Project, Stage 2 Environmental Referral. Prepared by ENVIRON for Roy Hill Iron Ore Pty Ltd, October 2009; and*
- 2. those diversions required around the evaporation pond to manage surface water flows.*

Since the proposal was assessed, more detailed investigations into surface water management at the mine site have been conducted, and determined that different locations for the diversion structures would better manage the surface water flows and achieve improved environmental outcomes. Roy Hill has requested that condition 9-1 of Statement 829 be changed to remove the restrictions on number and location of surface water diversion structures, allowing for surface water management to be adapted as necessary to achieve the best environmental outcome.

Roy Hill has also requested changes to the equivalent surface water management condition for the Roy Hill 1 Iron Ore Mining Project Stage 1 proposal (condition 7 of Statement 824). The EPA has addressed the matter of changing this condition in a separate report to the Minister (No. 1519).

Assessment of the requested change to conditions

The EPA considers the intent of the original condition is to ensure any changes to natural surface water flows are managed so as to minimise detrimental impacts to sensitive vegetation, particularly mulga communities, and that this can be achieved through an outcomes-based condition that does not restrict the number or location of diversion structures.

The EPA recommends condition 9 of Statement 829 is changed as specified in the attached recommended Statement to Change Conditions. The proposed new condition maintains the intent of the original condition and ensures the desired environmental outcome is achieved, but allows for flexibility in where the diversion structures are located and in how surface water is managed.

There are minor inconsistencies between the current condition 9 of Statement 829 (Roy Hill 1 Mining Project Stage 2) and the equivalent condition 7 of Statement 824 (Roy Hill 1 Iron Ore Mining Project Stage 1). As the two proposals are adjacent to each other and will be implemented concurrently, the EPA also recommends for ease of implementation and compliance monitoring that condition 9 of Statement 829 is changed to be consistent with condition 7 of Statement 824.

EPA Conclusion(s) and Recommendation(s)

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment:

1. That it is appropriate to change condition 9 of Statement 829 so that surface water diversions are required to be managed to minimise impacts to mulga and riparian vegetation, without the condition prescribing how that outcome is to be achieved; and;
2. That it is appropriate to change condition 9 of Statement 829 so that the wording of the condition is consistent with condition 7 of Ministerial Statement 824; and
3. That after complying with section 46(8) of the *Environmental Protection Act 1986*, the Minister issues a statement of decision to change condition 9 of Statement 829 in the manner provided for in the attached recommended statement.

RECOMMENDED CHANGES TO CONDITIONS

STATEMENT CHANGING THE IMPLEMENTATION CONDITIONS APPLYING TO A PROPOSAL (Section 46 of the *Environmental Protection Act 1986*)

ROY HILL 1 IRON ORE MINING PROJECT STAGE 2 110 KILOMETRES NORTH OF NEWMAN, SHIRE OF EAST PILBARA

Proposal: The proposal is to mine iron ore from the Stage 2 project area on the southern slopes of the Chichester Range and develop a remote borefield and pipeline.

Proponent: Roy Hill Iron Ore Pty Ltd (ACN:123722038)

Proponent Address: 5 Witham Road Perth Airport WA 6105

Report of the Environmental Protection Authority: 1520

Preceding Statements Relating to this Proposal: 829

Pursuant to section 45 of the *Environmental Protection Act 1986*, as applied by section 46(8), it has been agreed that the implementation conditions set out in Statement 829 be changed as specified in this Statement.

1. Condition 9 changed

Condition 9 of Statement 829 is deleted, and replaced with:

9 Surface Water Flows and Mulga

9-1 The proponent shall ensure that surface water diversions related to the implementation of the proposal are designed and managed to minimise impacts to Mulga and riparian vegetation.

9-2 To verify that the requirements of condition 9-1 are met the proponent shall:

1. undertake baseline monitoring of Mulga and riparian vegetation health and abundance in the proposal area, and adjacent areas prior to surface water diversions;
2. monitor surface water flows, including in the vicinity of Mulga and riparian vegetation; and
3. monitor the health and cover of Mulga and riparian vegetation to be retained in the proposal area and in adjacent areas.

This monitoring is to be carried out to the satisfaction of the CEO*, and is to be carried out in such a way that, should a significant decline in health or cover of Mulga or riparian vegetation be detected, it will be possible to determine whether the decline is attributable to the implementation of the proposal or to other causes.

- 9-3 The proponent shall submit annually the results of monitoring required by condition 9-2 to the CEO.
- 9-4 In the event that monitoring required by condition 9-2 indicates a decline in the health and condition of the Mulga and riparian vegetation:
1. the proponent shall report such findings to the CEO within 21 days of the decline being identified;
 2. the proponent shall provide evidence which allows determination of the cause of the decline;
 3. if determined by the CEO to be a result of activities undertaken in implementing the proposal, the proponent shall submit actions to be taken to remediate the decline within 21 days of the determination being made to the CEO; and
 4. the proponent shall implement actions to remediate the decline of Mulga and riparian vegetation upon approval of the CEO and shall continue until such time the CEO determines that the remedial actions may cease.
- 9-5 The proponent shall make the monitoring reports required by conditions 9-2 publicly available in a manner approved by the CEO.

*The Chief Executive Officer of the Department of the Public Service of the State responsible for the administration of section 48 of the *Environmental Protection Act 1986*, or his delegate.

**HON ALBERT JACOB MLA
MINISTER FOR ENVIRONMENT; HERITAGE**