



Report and recommendations of the Environmental Protection Authority



Hamersley Agriculture Project - inquiry under section 46 of the *Environmental Protection Act 1986* to amend Ministerial Statement 883

HAMERSLEY IRON PTY LIMITED

Report 1605

OCTOBER 2017

ENVIRONMENTAL PROTECTION AUTHORITY
REPORT AND RECOMMENDATIONS TO THE MINISTER FOR
ENVIRONMENT

**HAMERSLEY AGRICULTURE PROJECT – INQUIRY UNDER SECTION 46 OF
THE *ENVIRONMENTAL PROTECTION ACT 1986* TO AMEND MINISTERIAL
STATEMENT 883 (ASSESSMENT NO. 2078)**

The Minister for Environment has requested that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing the implementation conditions relating to the Hamersley Agriculture Project.

The following is the EPA's Report and Recommendations (No. 1605) to the Minister pursuant to section 46(6) of the *Environmental Protection Act 1986* (EP Act).

Section 46(6) requires the EPA Report to include:

- a) a recommendation on whether or not the implementation conditions to which the inquiry relates, or any of them, should be changed; and
- b) any other recommendations that it thinks appropriate.

Background

The Hamersley Agriculture Project (HAP) proposal involves utilising mine dewatering, surplus to other Marandoo Mine Phase 2 requirements, for irrigated agriculture. The irrigated agriculture crops grown are cut and baled for animal feed. The Project area is located approximately 6 kilometres to the west of the Marandoo Iron Ore Mine. The EPA assessed the proposal at the level of Assessment on Proponent Information, and considered the following key environmental factors relevant to the proposal required detailed evaluation in its Report and Recommendations to the Minister for Environment (Report 1416, October 2011):

- Flora (Spread of weeds);
- Water quality and quantity;
- Rehabilitation; and
- Visual amenity (proposal options).

In applying the *Statement of Environmental Principles, Factors and Objectives* (December 2016) these factors are now represented by:

- Flora and Vegetation;
- Inland Waters Environmental Quality;
- Hydrological Processes; and
- Social Surroundings.

Rehabilitation is no longer considered a key environmental factor; however, it is now addressed under *Flora and Vegetation*.

The EPA concluded in EPA Report 1416 that “it was likely that the proposal can be managed to meet the EPA’s environmental objectives, provided there is satisfactory implementation of the proposal as outlined in the referral documentation and the recommended conditions”.

The Minister for Environment approved the HAP for implementation, subject to the implementation conditions of Ministerial Statement 883 (5 December 2011).

Requested changes to conditions

In November 2015, the proponent for the proposal, Hamersley Iron Pty Limited (Hamersley), requested the following changes to the implementation conditions of Ministerial Statement 883:

- contemporise and rationalise implementation conditions relating to compliance auditing (conditions 1-4) to align the HAP reporting requirements to other Ministerial Statements for Rio Tinto’s Pilbara Iron Ore operations;
- change condition 5 (Flora-spread of weeds) to allow greater flexibility in the choice of endorsed crop species;
- change condition 6 (Water quality and quantity) to address water quality, hydrology and runoff from the HAP;
- change condition 7 (Rehabilitation) to remove restrictions relating to seed collection for rehabilitation; and
- change condition 8 (Visual amenity) which provided for two options for the location of the HAP being Option A (Eastern Agricultural area) and Option B (Southern Fortescue Borefield).

The Minister requested (30 March 2016) that the EPA inquire into and report on the matter of changing the implementation conditions of Ministerial Statement 883.

In August 2016 the Minister for Environment issued Interim Implementation Conditions under section 46A of the EP Act. The interim conditions, relating to Flora (Spread of weeds) (condition 5) and Water Quality and Quantity (condition 6), were issued to allow the proponent flexibility in the choice of crop growing species for the approaching crop growing season, and to allow time for the EPA to complete its inquiry to the Minister for Environment.

The interim conditions were developed after considering contemporary information provided by the proponent which was derived from the results of monitoring and adaptive management of the HAP since the proposal was implemented in 2012. The interim conditions continue to have effect instead of implementation conditions 5 and 6 of Ministerial Statement 883 until such time as the EPA completes its inquiry under section 46, and final conditions are issued by the Minister for Environment.

Application of relevant EPA policies and guidelines

In inquiring into the change to conditions, the EPA has given due consideration to relevant published EPA policies and guidelines, noting that a number of published policies and guidelines pertaining to this proposal were considered but not determined to be relevant.

On 13 December 2016, the EPA released a new suite of environmental impact assessment policy and guidance documents.

The Minister requested the section 46 inquiry on 30 March 2016, prior to the release of the new *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016* and environmental impact assessment policy and guidance documents.

In its assessment, the EPA has considered and given due regard to, where relevant, its current environmental impact assessment policy and guidance documents (Table 1).

Inquiry into the requested changes to conditions

The EPA has discretion as to how it conducts this inquiry. This inquiry has considered the currency of the EPA's initial assessment (Report 1416) and Ministerial Statement 883 (5 December 2011) and the Notice of Interim Implementation Conditions (24 August 2016), as these documents are instructive in determining the extent and nature of the inquiry under section 46.

In conducting this inquiry, the EPA reviewed the information provided by the proponent and advice from relevant decision making authorities.

Inquiry Findings

In considering whether it should recommend that implementation conditions of Ministerial Statement 883 should be amended, the EPA considered whether there is any new relevant information in relation to the assessment of the potential impacts of the proposal.

Administrative conditions

The EPA considers that the request to contemporise conditions 1 through 4 of Ministerial Statement 883 relating to proposal implementation (condition 1); contact details (condition 2); compliance reporting (condition 3); and public availability of plans and reports (condition 4) is appropriate. It will assist the proponent's role in implementing the proposal, as well as the Department of

Water and Environmental Regulation's role in determining compliance with the conditions.

Flora and Vegetation

The EPA's environmental objective for Flora and Vegetation is "*To protect flora and vegetation so that biological diversity and ecological integrity are maintained*".

The introduction and establishment of irrigated pivot agriculture has the potential to spread the species selected for crop development, affecting the surrounding native vegetation and the broader locality.

Under condition 5-2 of Statement 883, the proponent has developed an Environmental Management Plan, which includes a Weed Management Plan and Vegetation Monitoring Design and Management Evaluation Framework to ensure that crop species grown at the HAP are monitored and managed so that they do not spread beyond the development envelope. The *Hamersley Agriculture Project Environmental Management Plan* (the EMP) was most recently updated and approved in March 2016.

Interim implementation condition 5 *Flora (Spread of Weeds), Water Quality and Quantity* was issued in August 2016, mainly due to the concern about the proximity of the Themeda Grassland Threatened Ecological Community (TEC) to the irrigation area, as well as concerns about weed infestation in the surrounding environment.

The EPA now considers that it is unlikely there would be any significant impacts from the HAP on the Themeda Grassland, primarily due to:

- the distance (approximately 20 km); to the main strands of Themeda Grassland Threatened Ecological Communities;
- climatic conditions forming a natural barrier to the spread of crop species;
- the removal of Option B, the Southern Fortescue Borefield, from the proposed irrigation area, the closest Themeda Grassland TEC, approximately 3.5 km from the irrigation area (see also Social Surroundings, below); and
- the implementation of the EMP to manage irrigation impacts and protect the surrounding environment.

The EPA has recommended simplified condition 5 be implemented by the proponent. The condition requires that no crop species, selected in accordance with the *Hamersley Agriculture Project – Crop Species Selection Procedure* and *Endorsed Species List* for cultivation of crop species at HAP (Jun 2016), should extend beyond the HAP Development Envelope, and requires implementation of the most recently approved EMP.

The *Crop Species Selection Procedure* and *Endorsed Species List* referred to in the condition has been developed in consideration of the *Non-indigenous plant species lists for Western Australia's rangelands – Permitted (Green list) and Non*

Permitted (Red list). The State's Permitted Species List identifies plants that are rated as 'Green' are considered low risk to the environment and should be suitable for cultivation under most circumstances. Hamersley, in consultation with the Department of Biodiversity Conservation and Attractions, has developed the Endorsed Species List for cultivation of crop species at the HAP.

Inclusion of the Endorsed Species List and the Crop Species Selection Procedure in the condition provides the proponent with flexibility in cultivating the endorsed crop species while maintaining appropriate oversight on the future inclusion of any non-indigenous plant species for cultivation at the HAP.

In consideration of the above, the EPA considers that the Condition Environmental Management Plan required in the interim implementation conditions (condition 5) is no longer required as impacts can be adequately managed through the current EMP, the Crop Species Selection Procedure, and any subsequent revisions of these documents.

Upon completion of the project, areas of the HAP are proposed to be rehabilitated to native vegetation. A minor amendment is proposed to existing condition 7 (Rehabilitation), to take account of new information concerning collection of native vegetation seeds that have become available since the initial assessment of the HAP. Additional research has shown that the 100 kilometre seed collection boundary referred to in the existing condition unnecessarily restricts native vegetation seed collection. As such, this requirement is being removed from new condition 6 (Rehabilitation); however, the requirement to collect seeds from native plant species of local provenance remains. This change provides greater flexibility to collect seeds of local provenance from a larger area. Hence, there are likely to be improved rehabilitation outcomes.

Inland Waters Environmental Quality and Hydrological Processes

The EPA's objective for Inland Waters Environmental Quality is "*To maintain the quality of groundwater and surface waters so that environmental values are protected*".

The EPA's objective for Hydrological Processes is "*To maintain the hydrological regimes of groundwater and surface water so that environmental values are protected*".

The proposal has the potential to impact the water quality from runoff and the hydrological regime through soil saturation.

EPA Report 1416 noted that a Nutrient Irrigation Management Plan (NIMP) was developed as part of the requirements for Project's EMP. The NIMP details the application rates for nutrient and fertilisers, and the irrigation systems and scheduling. The NIMP also describes the monitoring and contingencies to be carried out to ensure the surrounding environment does not receive an influx of irrigated water causing saturation, erosion, or containing nutrients or chemicals.

In its original assessment, the EPA noted that the use of any pesticides was consistent with the requirements of the Department of Agriculture and Food, and Western Australia's *Code of Practice for the use of Agricultural and Veterinary*

Chemicals, thus ensuring safe use of chemicals and preventing the risk of detrimental environmental impacts. The NIMP has been implemented and monitored since 2012. Accordingly, the proponent has demonstrated that it is able to contain its impact on these environmental factors to the HAP Development Envelope and is able to define, with some level of confidence, trigger and threshold criteria; trigger level actions and threshold contingency actions, in relation to maintaining the quality of groundwater and surface waters and maintaining the hydrological regime.

To achieve the EPA's environmental objectives for these factors, the EPA has recommended condition 5-2(1) that runoff from the HAP development envelope does not cause the quality of surface water leaving the HAP Development Envelope to exceed ANZECC/ARMCAMZ guidelines. Condition 5-2(2) provides that changes to the hydrological regime, specifically soil saturation related to the establishment of irrigated pivot cells, do not adversely affect the surrounding environment beyond the HAP Development Envelope.

Social Surroundings

The EPA's environmental objective for this factor is *"to protect social surroundings from significant harm"*.

In its original assessment, the EPA noted that the proposal was to be implemented in Stages (Stage 1 and Stage 2), with Stage 1 required for the project to proceed and Stage 2 only being implemented depending on the success of Stage 1. Stage 2 consisted of two alternative areas being Option A (the Eastern Agricultural area) and Option B (the Southern Fortescue Bore field). Due to the close proximity to the Karijini National Park and the potential visual amenity impact of Option A and the lack of adequate surveys for Option B, the EPA recommended condition 8 (Visual amenity).

Condition 8 (Visual amenity) of Statement 883, requires the proponent to undertake biological surveys of Option B and comparison of environmental impacts of Stages A and B prior to the implementation of Stage 2. Further, in accordance with condition 8, in the event that the proponent decided to proceed with implementing Stage 2, only one option, either Option A or Option B was permitted to be implemented. As the proponent completed the investigations and selected Option A (Eastern Agricultural Area), the requirements of this condition have been met. As such condition 8 has been deleted from the new Ministerial Statement.

EPA conclusions and recommendations

Conclusions

In relation to the environmental factors, and in consideration of the information provided by the proponent and relevant EPA policies and guidelines, the EPA concludes that:

- The learnings from implementing the proposal since 2012 have provided valuable knowledge and experience in the management and monitoring of

the HAP in relation to containing the predicted impacts of the proposal to the HAP Development Envelope. This includes containment of crop species to the HAP Development Envelope to reduce the spread of weeds, and maintaining groundwater quality and the prevailing hydrological regime. Accordingly, the EPA has recommended outcome based condition 5, *Flora (Spread of Weeds), Water Quality and Quantity*;

- The approach of including the *Endorsed Species List* and the *Crop Species Selection Procedure* in condition 5-1 provides the proponent with flexibility in cultivating the endorsed crop species while maintaining appropriate oversight on the future inclusion of any non-indigenous plant species for cultivation at the HAP;
- The requirement for a *Hamersley Agriculture Project Environmental Management Plan* (condition 5-3) be retained that addresses the above outcomes and provides the basis for the proponent to specify the trigger and threshold criteria, trigger level actions, threshold contingency actions and monitoring and reporting;
- The minor modification to the rehabilitation condition (condition 6) should ensure that seed collected for rehabilitation purposes has regard, in the first instance, to the provenance of flora species;
- It is appropriate to delete condition 8 (Visual Amenity) as the proponent has selected Option A (Eastern Agricultural Area), and the requirements of this condition have been met; and
- The EPA supports the updating of administration and compliance conditions (conditions 1-4).

Recommendations

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment; that it is appropriate to, under section 46 of the *Environmental Protection Act 1986*:

1. Replace Ministerial Statement 883 (December 2011) with a new Ministerial Statement in the manner provided for in the attached recommended Statement; and
2. That, after complying with section 46(8) of the *Environmental Protection Act 1986*, the Minister issues a statement of decision to replace Ministerial Statement 883 in the manner provided for in the attached recommended Statement.

Table 1 – Relevant EPA Policies and Guidelines

Process/ Factor/s	Policies and guidelines considered relevant	Applied Yes/No	Comments
Change to conditions	<i>Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016</i>	Yes	<p>The Administrative Procedures provide the practices around the environmental impact assessment process undertaken by the Office of the Environmental Protection Authority under Part IV of the EP Act.</p> <p>Relevantly, section 5.4 of the Administrative Procedures provide guidance on the process for changing conditions under section 46 of the EP Act.</p>
Change to conditions	<i>Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual, December 2016</i>	Yes	<p>The Procedures Manual supports the Administrative Procedures and contains more detailed information on each step of the EIA process, including section 46 changes to conditions, under section 5.4.</p> <p>More relevantly, section 5.4 details the process for changing implementation conditions.</p>
Change to conditions	<i>Statement of Environmental Principles, Factors and Objectives (December 2016) (SEPFO).</i>	Yes	<p>Relevantly, the SEPFO:</p> <ul style="list-style-type: none"> • considers the object and principles of the EP Act; • uses environmental factors and objectives to organise and systemise environmental impact assessment and reporting; • takes a holistic view of the environment and a proposal or scheme’s potential impact on the environment; and • considers significance when determining whether or not to assess a proposal or scheme and recommend whether or not an assessed proposal or scheme may be implemented. <p>In this case the SEPFO was applied in:</p> <ul style="list-style-type: none"> • confirming the key environmental factors identified for the original assessment in the current policy context; • determining whether the identified environmental factors are still relevant and if any new factors should be considered; and • preparing advice on whether the EPA’s environmental objectives can be met.

Process/ Factor/s	Policies and guidelines considered relevant	Applied Yes/No	Comments
Flora and Vegetation	<i>Environmental Factor Guideline – Flora and Vegetation</i> (December 2016)	Yes	<p>The purpose of this guideline is to outline how the factor Flora and Vegetation is considered by the EPA in the EIA process.</p> <p>In considering the change to conditions, this guideline was applied when defining and identifying the environmental values for the factor Flora and Vegetation.</p> <p>Relevantly this guideline was applied with regard to:</p> <ul style="list-style-type: none"> • the potential impacts and the activities that will cause them, including direct and indirect impacts from the spread of cultivated crop species on Flora and vegetation; • whether proposed management and mitigation approaches are technically and practically feasible, in particular, whether the spread of cultivated species can be appropriately contained and managed so as not to impact native vegetation beyond the development envelope; • whether the removal of the requirement to collect native seed for rehabilitation within 100 km of the HAP is likely to improve rehabilitation outcomes. <p>The proponent has advised that there are no changes to the approved area of native vegetation disturbance.</p>
Inland Waters Environmental Quality	<i>Environmental Factor Guideline Inland Waters Environmental Quality</i> (December 2016)		<p>The purpose of this guideline is to communicate how Inland Waters Environmental Quality are considered by the EPA in the EIA process.</p> <p>In considering the change to conditions, the Guideline was used to consider the risk to environmental values and whether the proposed mitigation is technically and practically feasible. In particular, water quality, hydrology, soil saturation and runoff from the HAP have been considered.</p>
Hydrological Processes	<i>Environmental Factor Guideline – Hydrological Processes</i> , (December 2016).		<p>The purpose of this guideline is to communicate how the factor Hydrological Processes is considered by the EPA in the EIA process.</p> <p>In considering the change to conditions, this Guideline was applied when defining and identifying the environmental values for the factor Hydrological Processes.</p> <p>Relevantly, this guideline was applied with regard to:</p>

Process/ Factor/s	Policies and guidelines considered relevant	Applied Yes/No	Comments
			<ul style="list-style-type: none"> • the environmental values which are permanently impacted, and their significance. • the significance of the potential impacts in the context of the location, regional cumulative impacts, climate, and other relevant issues discussed in this guideline; and • whether proposed mitigation is technically and practically feasible. <p>The proponent has indicated that since Ministerial Statement 883 was granted, there has been no significant environmental change to this key environmental factor at a local or regional level. The main considerations are the application of the Nutrient Irrigation Management Plan to demonstrate that the proposed monitoring and mitigation is practicably feasible to contain impacts to the boundary of the HAP development envelope.</p>
Social Surroundings	<i>Environmental Factor Guideline – Social Surroundings</i> (December 2016)		The purpose of this guideline is to communicate how the factor of Social Surroundings is considered by the EPA in the EIA process. With regard to the change to conditions, this guideline was applied in the context of visual amenity impacts when considering the contribution implementation of the proposal may make to the predicted cumulative impacts to aesthetic values.

RECOMMENDED ENVIRONMENTAL CONDITIONS

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

HAMERSLEY AGRICULTURE PROJECT

Proposal: The proposal involves utilising mine dewatering, surplus to other Marandoo Mine Phase 2 requirements, for irrigated agriculture. The Project area is located approximately 6 km to the west of Marandoo Mine. The Project area is approximately 2800 hectares of which a maximum of 1815 hectares is to be disturbed. This includes 1650 hectares of direct impact and 165 hectares of indirect impact.

Proponent: Hamersley Iron Pty. Limited
Australian Company Number 004558276

Proponent Address: 152-158 St Georges Terrace PERTH WA 6000

Assessment Number: 2078

Report of the Environmental Protection Authority: 1605

Previous Assessment Number: 1878

Previous Report Number: 1416

Preceding Statement/s Relating to this Proposal: 883

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 Ministerial Statement No. 883, be changed as specified in this Statement.

This Statement authorises the implementation of the proposal described and documented in Tables 1 and 2 of Schedule 1. The implementation of the proposal is subject to the following implementation conditions and procedures which replace and supersede all previous conditions and procedures of Statement 883 and details definitions of terms and phrases used in the implementation conditions and procedures.

1 Proposal Implementation

1-1 When implementing the proposal, the proponent shall not exceed the authorised extent of the proposal as defined in Table 2 in Schedule 1, unless amendments to the proposal and the authorised extent of the proposal has been approved under the EP Act.

2 Contact Details

- 2-1 The proponent shall notify the CEO of any change of its name, physical address or postal address for the serving of notices or other correspondence within twenty eight (28) days of such change. Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State.

3 Compliance Reporting

- 3-1 The proponent shall prepare, submit and maintain a Compliance Assessment Plan to the CEO at least six (6) months prior to the first Compliance Assessment Report required by condition 3-6.
- 3-2 The Compliance Assessment Plan shall indicate:
- (1) the frequency of compliance reporting;
 - (2) the approach and timing of compliance assessments;
 - (3) the retention of compliance assessments;
 - (4) the method of reporting of potential non-compliances and corrective actions taken;
 - (5) the table of contents of Compliance Assessment Reports; and
 - (6) public availability of Compliance Assessment Reports.
- 3-3 After receiving notice in writing from the CEO that the Compliance Assessment Plan satisfies the requirements of condition 3-2 the proponent shall assess compliance with conditions in accordance with the Compliance Assessment Plan required by condition 3-1.
- 3-4 The proponent shall retain reports of all compliance assessments described in the Compliance Assessment Plan required by condition 3-1 and shall make those reports available when requested by the CEO.
- 3-5 The proponent shall advise the CEO of any potential non-compliance within seven (7) days of that non-compliance being known.
- 3-6 The proponent shall submit to the CEO a Compliance Assessment Report by 30 April each year addressing compliance in the previous calendar year, or as otherwise agreed in writing by the CEO. The first Compliance Assessment Report shall be submitted by 30 April 2018 addressing compliance for the period from the date of issue of this Statement, notwithstanding that the first reporting period may be less than 12 months.

The Compliance Assessment Report shall:

- (1) be endorsed by the proponent's CEO or a person delegated to sign on the CEO's behalf;
- (2) include a statement as to whether the proponent has complied with the conditions;
- (3) identify all potential non-compliances and describe corrective and preventative actions taken;
- (4) be made publicly available in accordance with the approved Compliance Assessment Plan; and
- (5) indicate any proposed changes to the Compliance Assessment Plan required by condition 3-1.

4 Public Availability of Plans and Reports

4-1 Subject to condition 4-2, within a reasonable time period approved by the CEO of the issue of this Statement and for the remainder of the life of the proposal the proponent shall make publicly available, in a manner approved in writing by the CEO, all environmental plans and reports required under this statement..

4-2 If any parts of the plans and reports referred to in condition 4-1 contains particulars of:

- (1) a secret formula or process; or
- (2) confidential commercially sensitive information;

the proponent may submit a request for approval from the CEO to not make those parts of the plans and reports publicly available. In making such a request the proponent shall provide the CEO with an explanation and reasons why the data should not be made publicly available.

5 Flora (Spread of Weeds), Water Quality and Quantity

5-1 The proponent shall ensure that crop species, selected in accordance with the *Hamersley Agriculture Project – Crop Species Selection Procedure* and *Endorsed Species List* (June 2016, or subsequent revisions), are contained to the Hamersley Agriculture Project (HAP) Development Envelope as shown in Figure 1.

5-2 The proponent shall ensure that:

- (1) The run-off from the HAP Development Envelope does not cause the quality of surface water leaving the HAP Development Envelope to

exceed trigger values established by the proponent in accordance with ANZECC/ARMCANZ guidelines, taking into consideration natural background water quality, protecting existing and potential users, including ecosystem maintenance, to the requirements of the CEO; and

- (2) Changes to the hydrological regime, specifically soil saturation, related to the establishment of irrigated pivot cells do not adversely affect the surrounding environment beyond the HAP Development Envelope shown in Figure 1.

5-3 The proponent shall continue to implement the *Hamersley Agriculture Project Environmental Management Plan* (RTIO-HSE-0240250, March 2016), or subsequent revisions approved by the CEO, until the CEO, in consultation with the Department of Biodiversity Conservation and Attractions, has confirmed by notice in writing that the above plan satisfies the requirements of condition 5-1 and 5-2.

5-4 The proponent:

- (1) may review and revise the *Hamersley Agriculture Project Environmental Management Plan* (RTIO-HSE-0240250, March 2016), or
- (2) shall review and revise the *Hamersley Agriculture Project Environmental Management Plan* (RTIO-HSE-0240250, March 2016) as and when directed by the CEO.

6 Rehabilitation

6-1 Unless otherwise agreed in writing by the CEO, the Proponent shall commence progressive rehabilitation within 12 months following cessation of use of the irrigation area. The rehabilitation shall achieve the following outcomes:

- (1) Areas disturbed through implementation of the proposal shall be rehabilitated with vegetation composed of native plant species of local provenance;
- (2) The percentage cover and species diversity of living self-sustaining native vegetation in all rehabilitation areas shall be comparable to that of the undisturbed natural analogue sites as demonstrated by a methodology approved by the CEO. Undisturbed natural analogue sites for comparison shall be selected to the requirements of the CEO;
- (3) No new species of declared and environmental weeds, shall establish in the HAP Development Envelope shown in Figure 1 as a result of the implementation of the proposal; and

(4) The coverage of declared and environmental weeds in all rehabilitation areas, shall be no greater than the average of the approved reference sites on nearby land, selected to the requirements of the CEO.

6-2 Rehabilitation activities shall continue until such time as the requirements of condition 6-1 are demonstrated by inspections and reports to be met for a minimum of five years to the requirements of the CEO.

Schedule 1

Table 1: Summary of the Proposal

Proposal Title	Hamersley Agriculture Project
Short Description	<p>Operate an agricultural project using water from mine dewatering, surplus to other Marandoo Iron Ore Projects – Revised Proposal (Statement 1020) requirements, to cultivate crop species and reduce impacts on downstream ecosystems due to surface water discharge.</p> <p>The HAP Development Envelope, consisting of three agricultural areas (Western, Central and Eastern) and a water storage dam, is located approximately 6km to the west of the Marandoo Mine and is 2800 hectares of which a maximum of 1650 hectares will be disturbed.</p> <p>The location of the HAP Development Envelope is shown in Figure 1.</p> <p>The main characteristics of the proposal are summarized in Table 2 below.</p>

Table 2: Location and authorised extent of physical and operational elements

Element	Location	Authorised Extent
Irrigated agriculture	Figure 1	Disturbance of no more than 1650 ha within a 2800 ha Development Envelope.

Table 3: Abbreviations

Abbreviation	Term
HAP	Hamersley Agricultural Project
ha	hectare
km	kilometre
ANZECC/ARMCANZ	Australian and New Zealand Environment and Conservation Council and Agriculture and Resource Management Council of Australia and New Zealand 2000, Australian Water Quality Guidelines for Fresh and Marine Waters and its updates.
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.

Figure 1 Development Envelope of Hamersley Agriculture Project

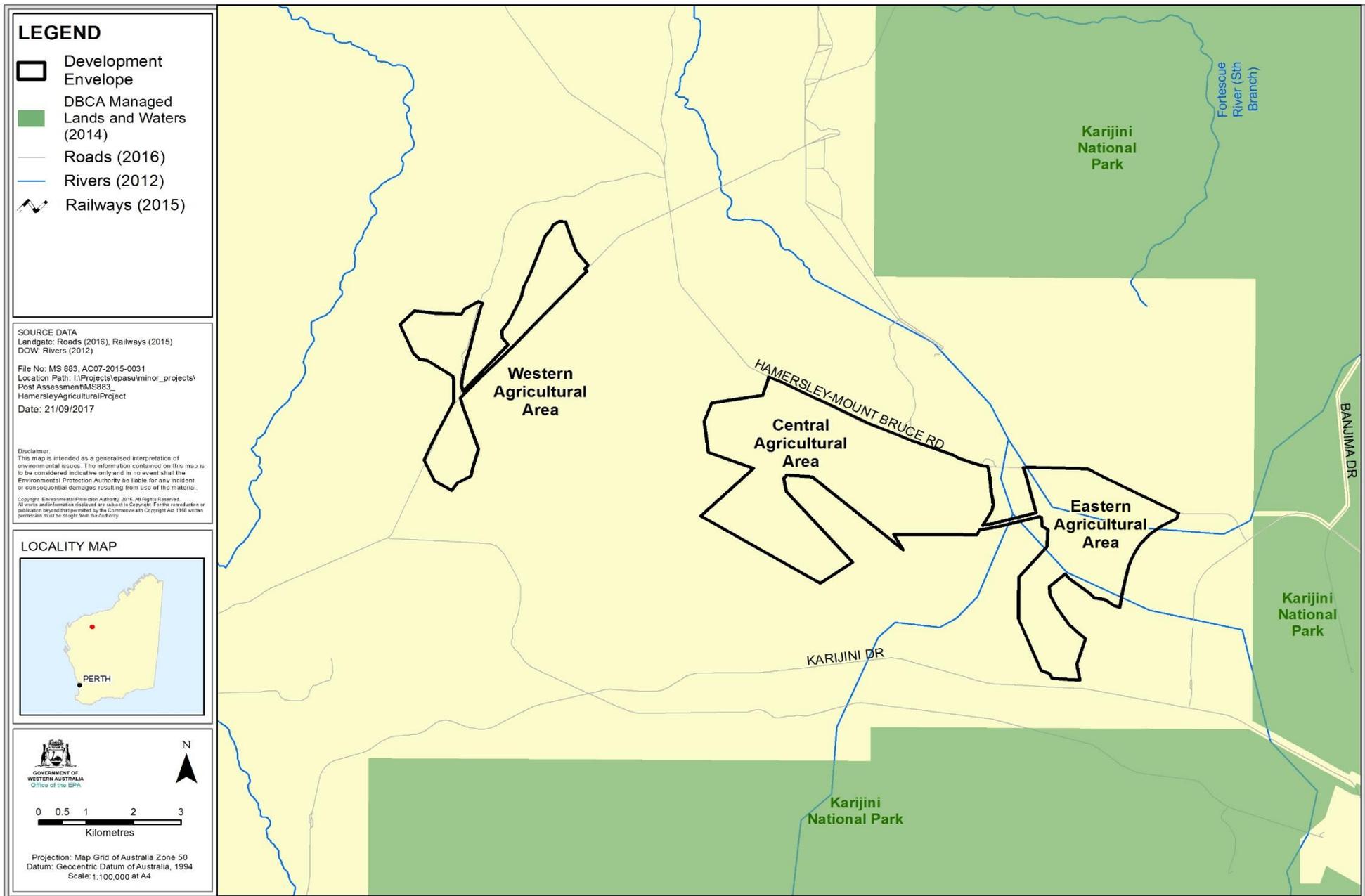


Figure 1: Development Envelope of Hamersley Agriculture Project