



# Report and recommendations of the Environmental Protection Authority



## Weld Range Iron Ore Project

Sinosteel Midwest Corporation  
Limited

Report 1637

May 2019

## **Inquiry Under Section 46 of the *Environmental Protection Act 1986***

The Minister for Environment has requested the Environmental Protection Authority (EPA) inquire into and report on the matter of changing the implementation conditions in Ministerial Statement 908 relating to the Sinosteel Midwest Corporation Limited (SMC) proposal Weld Range Iron Ore Project.

Section 46(6) of the *Environmental Protection Act 1986* requires the EPA Report to include:

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

The following is the EPA's Report and Recommendations to the Minister pursuant to s. 46(6) of the *Environmental Protection Act 1986*.



Dr Tom Hatton  
Chairman

2 May 2019

ISSN 1836-0483 (Print)  
ISSN 1836-0491 (Online)  
Assessment No. 2205

# Contents

|   | <b>Page</b> |
|---|-------------|
| <b>1. The proposal .....</b>  | <b>1</b>    |
| <b>2. Requested changes to conditions.....</b>  | <b>3</b>    |
| <b>3. Inquiry findings .....</b>  | <b>5</b>    |
| 3.1 Flora and Vegetation.....   | 5           |
| 3.2 Terrestrial Fauna.....  | 7           |
| 3.3 Inland Waters.....  | 9           |
| 3.4 Social Surroundings.....  | 9           |
| <b>4. Conclusions and recommendations .....</b>   | <b>11</b>   |
| <b>References.....</b>  | <b>13</b>   |
| <b>Appendix 1: Identified Decision-Making Authorities and recommended<br/>environmental conditions.....</b> | <b>14</b>   |



# 1. The proposal

The Sinosteel Midwest Corporation Limited (SMC) currently has approval to implement the Weld Range Iron Ore Project, which is to construct and operate an iron ore mine at Weld Range, 85 kilometres south west of Meekatharra and 60 kilometres north west of Cue in the Mid West region of Western Australia. The proposal consists of an iron ore mine, associated infrastructure, mining above and below the water table and dewatering with the excess water discharged into a lined evaporation pond.

The EPA assessed the proposal at the level of Public Environmental Review (PER), releasing its Report and Recommendations (Report 1441) in June 2012. In this report, the EPA considered the following key environmental factors required detailed evaluation in its Report and Recommendations to the Minister for Environment:

- Flora and vegetation;
- Fauna;
- Short range endemics;
- Groundwater and surface water;
- Aboriginal heritage and;
- Rehabilitation and mine closure.

In applying the EPA *Statement of Environmental Principles, Factors and Objectives* (2018a) these factors are now represented by:

- Flora and Vegetation;
- Terrestrial Fauna;
- Inland Waters; and
- Social Surroundings.

The EPA concluded in Report 1441, it was likely the EPA's objectives could be achieved, provided there was satisfactory implementation by the proponent of the EPA's recommended conditions.

The then Minister for Environment approved the proposal for implementation, subject to the implementation conditions of Ministerial Statement 908 (29 August 2012).

## Previously approved changes to conditions

Attachment 1 of Ministerial Statement 809 details several minor modifications to the implementation conditions approved under 46c of the *Environmental Protection Act 1986*, approved on 12 March 2014. The changes were of a minor nature and were needed to standardise the implementation conditions applying to different proposals and to make administrative changes to the format of implementation conditions without altering the obligations of the proponent.

On 13 September 2017, the Minister for Environment issued interim implementation conditions to extend the time limit of authorisation for a further 12 months.

## 2. Requested changes to conditions

In March 2017, SMC requested the following changes to the implementation conditions of Ministerial Statement 908:

- Extension of the time limit of authorisation for substantial commencement to be extended for a further five years from 29 August 2017.

In July 2017, the Minister for Environment requested that the EPA inquire into and report on the matter of changing the implementation conditions of Ministerial Statements 908 for the Weld Range Iron Ore Project.

On 11 August 2017, the EPA wrote to SMC setting out the nature and extent of the additional information required to enable the EPA to assess this request. It was clear that the time required to provide that additional information, and for the EPA to consider that request, would extend beyond the existing timeframe as approved.

On 4 September 2017, the EPA wrote to the Minister for Environment recommending that the Minister for Environment set Interim Implementation Conditions on the proposal, pursuant to section 46A of the EP Act, to extend the time limit of authorisation for twelve months.

On 13 September 2017, the Minister for Environment issued Interim Implementation Conditions.

The EPA inquiry has considered:

- the currency of its original assessment (EPA Report 1441);
- Ministerial Statement 908;
- information provided by the proponent;
- advice from relevant decision making authorities and;
- any new information regarding the proposal's potential impacts on the environment.

These documents are instructive in determining the extent and nature of the inquiry under s. 46 of the EP Act.

The EPA typically recommends the Minister set conditions on significant proposals that require them to be substantially commenced within a specified timeframe. Extending this timeframe requires the Minister to change the relevant conditions under s. 46 of the EP Act, and provides for the EPA to review and consider the appropriateness of the implementation conditions relating to the proposal. In addition to considering the above, the EPA has also considered:

- Any changes in environmental, scientific or technological knowledge that may have arisen since the initial assessment and;
- whether the proposal is being implemented using best practice and contemporary methods so that the EPA objectives for the key environmental factors are met.

## **EPA policy and procedures**

The EPA followed the procedures in the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016* (EPA 2016a) and the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual 2018* (EPA 2018b).

The EPA had particular regard to *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016b), *Environmental Factor Guideline: Terrestrial Fauna* (EPA 2016c), *Environmental Factor Guideline: Inland Waters* (EPA 2018c) and *Environmental Factor Guideline: Social Surroundings* (EPA 2016d).



### 3. Inquiry findings

The EPA considered the following key environmental factors relevant to the change to conditions:

- Flora and Vegetation;
- Terrestrial Fauna;
- Inland Waters; and
- Social Surroundings

#### 3.1 Flora and Vegetation

The EPA's environmental objective for this factor is: *To protect flora and vegetation so that biological diversity and ecological integrity are maintained.*

##### **EPA Report 1441**

The proposal would require the clearing of 3,589 hectares (ha) of native vegetation. While no Threatened Ecological Communities (TECs) were recorded in the project area, much of the proposed clearing is Priority 1 Priority Ecological Community (PEC) "Weld Range vegetation complexes (Banded Iron Formation)". This loss amounted to 8.15 per cent of the known extent of the PEC, and the EPA concluded this loss was acceptable.

No Declared Rare Flora (DRF) were recorded in the project area. A total of 14 priority flora species would be directly impacted by the project and a further 11 priority species would likely be indirectly impacted.

Occurrences of two locally significant vegetation communities (7a and 7b) situated not within the mine footprint but adjacent to it, were found to be potentially groundwater dependent and could be impacted by the dewatering for the mine void. The proponent was required to monitor impacts to these vegetation communities and initiate mitigation measures if required.

The EPA concluded it is likely that its environmental objectives for this factor can be achieved subject to recommended conditions 6, 7, 8 and 10 be imposed on the proponent related to flora and vegetation.

To manage these impacts, the EPA recommended the following conditions:

- Condition 6 - 'Flora and vegetation' to limit the area of clearing to that required for the proposal, and for targeted flora surveys to be carried out to improve the knowledge of Priority and other important flora species.
- Condition 7 - 'Weeds' ensures that the number of species and intensity of weeds does not increase due to project implementation.
- Condition 8 - 'Groundwater dependent ecosystems' has been recommended to ensure that the drawdown boundary does not extend further than the area predicted by groundwater modeling and that areas expected to be impacted

by groundwater drawdown are monitored and impacts are mitigated, thereby limiting the impacts to groundwater dependent vegetation.

- Condition 10 - 'Residual impact and risk management measures' to undertake a goat control and destocking program for the purpose of improving vegetation and habitat condition.

### **Assessment of the proposed change to conditions**

The EPA considers that the following current environmental policy and guidance is relevant to its assessment of the proposal for this factor:

- *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016b)

This guideline identifies a number of reasons why flora or vegetation may be considered significant, with the most relevant reasons to this assessment being:

- Flora
  - being identified as threatened or priority species,
  - locally endemic or associated with a restricted habitat type (e.g. surface water or groundwater dependent ecosystems) and;
- Vegetation
  - being identified as threatened or priority ecological communities.

With respect to the priority 1 PEC "Weld Range vegetation complexes (Banded Iron Formation)", the Department of Biodiversity, Conservation and Attractions (DBCA) released version 27 of its Priority Ecological Communities for Western Australia in 2017, and the status of the Weld Range vegetation complexes (Banded Iron Formation) remained at P1.

With respect to the 14 priority species that would be directly impacted by the project and the 11 priority species that would likely be indirectly impacted, the conservation status of these 25 species has not increased.

With respect to the two locally significant vegetation communities (7a and 7b), these would only be impacted by the dewatering for the mine void and any extension of time limit for approval would only delay any impacts occurring.

In consideration of the information provided by the proponent, the existing management as required by Ministerial Statement 908 and relevant EPA policies and guidelines, the EPA considers that:

- there is no significant or additional information that justifies the reassessment of issues raised by the original proposal.

The EPA is therefore satisfied that the extension of Time Limit for Proposal Implementation for five years continues to meet the EPA's objective.

### 3.2 Terrestrial Fauna

The EPA's environmental objective for this factor is *to protect terrestrial fauna so that biological diversity and ecological integrity are maintained.*

#### EPA Report 1441

There were two species of fauna of concern considered in the original assessment:

- The Slender-billed Thornbill, which was listed as Vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act); and
- The Shield Back spider, *Idiosoma nigrum*, which is listed as Schedule 1, Vulnerable, and is protected under the *Wildlife Conservation Act 1950*.

The proposal would not directly impact any known habitat of the Slender-billed Thornbill, however it is noted that vegetation community types 7a and 7b are known habitats of the Slender-billed Thornbill. As noted in section 3.1, these communities were found to be potentially groundwater dependent and could be impacted by the dewatering for the mine void. The proponent is required to monitor impacts from groundwater drawdown to community type 7a and 7b and initiate mitigation measures if required. The EPA concluded that these measures would ensure the EPA's objectives were likely to be met.

The proposal would likely cause the loss of two of the five populations of the Shield Back spider at Weld Range, with the total impact to the species at Weld Range being a loss of 12 per cent of the population. The EPA required that impacts on the remaining populations be minimised through the implementation of a Spider Management Plan, which includes removing stock animals from the two impacted populations.

The EPA recommended that given the residual impacts and risks to the species, the proponent shall undertake a goat control and destocking program to the value of \$500,000 over its tenements in the Weld Range region for the purpose of improving vegetation and habitat condition. The EPA concluded that these measures would ensure the EPA's objectives were likely to be achieved.

To manage these impacts, the EPA recommended the following conditions:

- Condition 9: 'Short range endemics' has been recommended to restrict clearing to the area required for the proposal and to monitor the impacts of the proposal on known short range endemics populations surrounding the impact area.
- Condition 10: 'Residual impact and risk management measures' to undertake a goat control and destocking program for the purpose of improving vegetation and habitat condition.

## Assessment of the proposed change to conditions

The EPA considers that the following current environmental policy and guidance is relevant to its assessment of the proposal for this factor:

- *Environmental Factor Guideline: Terrestrial Fauna* (EPA 2016c)

This guideline identifies a number of reasons why Terrestrial Fauna may be considered significant. These are:

- being identified as a threatened or priority species; and
- species with restricted distribution.

The Slender-billed Thornbill was de-listed from the list of significant species under the EPBC Act in December 2013.

With respect to the Shield Back spider, the exact taxonomy of the *Idiosoma nigrum* samples found in the original survey have been disputed recently by the Western Australian Museum. The Museum advised that the *Idiosoma* records from Weld Range were not considered to be *Idiosoma nigrum* but classified as *Idiosoma* 'MYG018'. The proponent has argued that all records from Weld Range area previously identified as *Idiosoma nigrum* or *Idiosoma* 'MYG018' should be treated as *Idiosoma nigrum*.

The DBCA provided advice on this issue and noted that *Idiosoma clypeatum* (northern shield backed trapdoor spider) formerly known as 'MYG018', is likely to be the species most commonly present in the Western Australian rangelands including at Weld Range. *Idiosoma clypeatum* is a Priority 3 species.

On this basis, the DBCA advised that 'best practice management measures should be retained / implemented to avoid or minimise impacts on this species'.

As noted above, the proponent is required to implement a Spider Management Plan and to undertake a goat control and destocking program.

The EPA notes that Condition 10 states that the monetary value of the goat control and destocking program should be \$500,000 at the date the condition comes into effect. The EPA considers that the monetary value should be adjusted annually in accordance with Consumer Price Inflation.

In consideration of the information provided by the proponent, the advice from the DBCA, the existing management as required by Ministerial Statement 908, and relevant EPA policies and guidelines, the EPA considers that:

- there is no significant or additional information that justifies the reassessment of issues raised by the original proposal.

The EPA is therefore satisfied that the extension of time limit for proposal implementation for five years continues to meet the EPA's objective.

### 3.3 Inland Waters

The EPA's environmental objective for this factor is *to maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected*.

#### EPA Report 1441

In its original assessment, the EPA found that the proposed Groundwater Management plan and the Acid Mine Drainage Management Plan "... contain adequate measures to manage the impacts of the proposal on groundwater..." and that the EPA's objectives were likely to be achieved.

#### Assessment of the proposed change to conditions

The EPA considers that the following current environmental policy and guidance is relevant to its assessment of the proposal for this factor:

- *Environmental Factor Guideline: Inland Waters*, (EPA 2018c)

In consideration of the information provided by the proponent, the existing management as required by Ministerial Statement 908, that the proposal has not changed since the original EPA assessment, and relevant EPA policies and guidelines, the EPA considers that:

- there is no significant or additional information that justifies the reassessment of issues raised by the original proposal.

The EPA is therefore satisfied that the extension of Time Limit for Proposal Implementation for five years continues to meet the EPA's objective.

### 3.4 Social Surroundings

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

#### EPA Report 1441

The key aspect of social surrounds was Aboriginal heritage. The EPA, in its original assessment, found that, subject to the proponent avoiding and managing any significant sites with the agreement of the Wadjarri people, establishing a mining agreement with the Wadjarri people, and meeting the requirements of the *Aboriginal Heritage Act 1972*, the EPA's objectives were likely to be achieved.

#### Assessment of the proposed change to conditions

The EPA considers that the following current environmental policy and guidance is relevant to its assessment of the proposal for this factor:

- *Environmental Factor Guideline: Social Surroundings* (2016d)

The proponent has advised that in 2015 it reached agreement with the Wadjarri people for the Weld Range Sustainable Benefits (Heritage) Agreement. This Agreement provides protection for significant heritage sites at Weld Range and provides SMC with access for mining and exploration operations.

The proponent will still need to meet the requirements of the *Aboriginal Heritage Act 1972*. It is noted the *Aboriginal Heritage Act 1972* is currently under review and that any revised Act could require different requirements with respect to mining and Aboriginal heritage.

In consideration of the information provided by the proponent, the existing management as required by Ministerial Statement 908, that the proposal has not changed since the original EPA assessment, and relevant EPA policies and guidelines, the EPA considers that:

- there is no significant or additional information that justifies the reassessment of issues raised by the original proposal.

The EPA is therefore satisfied that the extension of Time Limit for Proposal Implementation for five years continues to meet the EPA's objective.

## 4. Conclusions and recommendations

### ***Change to condition 3***

The proponent has requested an extension of the time limit of authorisation for substantial commencement to be extended for a further five years from 29 August 2017.

On 13 September 2017, the Minister for Environment issued Interim Implementation Conditions to extend the time limit of authorisation for a further 12 months, to 12 September 2018.

The EPA considers it is appropriate to approve the extension of time for a further five to 12 September 2023.

### ***Change to condition 10***

The EPA considers that condition 10 should be updated to adjust the monetary value of the goat control and destocking program to the percentage change in the Consumer Price Index applicable to that year.

## **Conclusions**

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

- There are no changes to the proposal.
- There is no significant new or additional information that changes the conclusions reached by the EPA under any of the relevant environmental factors since the proposal was assessed by the EPA in Report 1441 (June 2012).
- No new significant environmental factors have arisen since its assessment of the proposal.
- The impacts to the key environmental factors are considered manageable, based on the requirements of existing conditions, and the imposition of the attached recommended conditions.

## **Recommendations**

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment under s. 46 of the EP Act:

1. That condition 3 of Ministerial Statement 908 be amended to allow for the time limit for proposal implementation of the Weld Range Iron Ore Project to be extended to 12 September 2023;
2. That condition 10 of Ministerial 908 be amended to adjust the monetary value of the goat control and destocking program to the percentage change in the Consumer Price Index applicable to that year; and

3. That after complying with s. 46(8) of the EP Act, the Minister may issue a statement of decision to change conditions 3 and condition 10 of Statement 908 in the manner provided for in the attached recommended Statement (Appendix 2).



## References

EPA 2016a, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016*, Environmental Protection Authority, Perth, WA.

EPA 2016b, *Environmental Factor Guideline – Flora and Vegetation*, Environmental Protection Authority, Perth, WA.

EPA 2016c, *Environmental Factor Guideline – Terrestrial Fauna*, Environmental Protection Authority, Perth, WA.

EPA 2016d, *Environmental Factor Guideline – Social Surroundings*, Environmental Protection Authority, Perth, WA.

EPA 2018a, *Statement of Environmental Principles, Factors and Objectives*, Environmental Protection Authority, Perth, WA.

EPA 2018b, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual 2018*, Environmental Protection Authority, Perth, WA.

EPA 2018c, *Environmental Factor Guideline – Inland Waters*, Environmental Protection Authority, Perth, WA.

SMC 2017, *Weld Range Iron Ore Project – Ministerial Statement 908, Environmental Protection Authority Inquiry into the matter of changing the conditions of Ministerial Statement 908 in order to extend the timeframe for substantial commencement of the proposal*, Sinosteel Midwest Corporation Limited, Perth, WA.

# Appendix 1: Identified Decision-Making Authorities and recommended environmental conditions

## Identified Decision-making Authorities

S. 44(2) of EP Act specifies that the EPA's report must set out (if it recommends that implementation be allowed) the conditions and procedures, if any, to which implementation should be subject. This Appendix contains the EPA's recommended conditions and procedures.

S. 45(1) requires the Minister for Environment to consult with decision-making authorities (DMAs), and if possible, agree on whether or not the proposal may be implemented, and if so, to what conditions and procedures, if any, that implementation should be subject.

The following decision-making authorities have been identified:

| Decision-making Authority  | Legislation (and Approval)   |
|--|--|
| 1. Minister for Water  | <i>Rights in Water and Irrigation act 1914</i><br>(Water abstraction licence)  |
| 2. Minister for Aboriginal Affairs   | <i>Aboriginal Heritage Act 1972</i><br>(S. 18 clearances)  |
| 3. Minister for Lands  | <i>Land Administration Act 1997</i>  |
| 4. CEO, Department of Water and Environmental Regulation   | <i>Environmental Protection Act 1986</i><br>(Works Approval and Licence)<br>Environmental Protection (Clearing of native vegetation) Regulations<br>(Part V – Clearing Permit) |
| 5. Department of Mines, Industry Regulation and Safety<br>A/Executive Director, Resource and Environmental Compliance Division | <i>Mining Act 1978</i><br>(Mining proposal)  |
| 6. Department of Mines, Industry Regulation and Safety<br>A/Executive Director, Resource and Environmental Compliance Division | <i>Dangerous Goods Safety Act 2004</i>   |
| 7. Department of Mines, Industry Regulation and Safety<br>State Mining Engineer  | <i>Mines Safety Inspection Act 1994</i><br>(Mine Safety)<br><br><i>Mines Safety Inspection Regulations 1995</i><br>(Approval to commence mining operations)                    |

|  |   |
|--|---|
| 8. Shire of Cue, Shire of Meekatharra, Shire of Mount Magnet | <p><i>Planning and Development Act 2005</i><br/>(Planning approval)</p> <p><i>Building Act 2011</i><br/>(Building permit)</p> |
|--|---|

Note: In this instance, agreement is only required with DMA 1, 2 and 3 since these DMAs are a Ministers.



## RECOMMENDED ENVIRONMENTAL CONDITIONS

### STATEMENT TO CHANGE THE IMPLEMENTATION CONDITIONS APPLYING TO A PROPOSAL

(Section 46 of the *Environmental Protection Act 1986*)

#### WELD RANGE IRON ORE PROJECT

**Proposal:** The proposal is to construct and operate an iron ore mine and associated infrastructure at Weld Range. Open pit mining would occur above and below the water table and would involve dewatering. Excess water would be discharged to a lined evaporation pond.

**Proponent:** Sinosteel Midwest Corporation Limited  
Australian Company Number 91 009 224 800 (ABN).

**Proponent Address:** P0 Box 529, West Perth, Western Australia, 6872

**Assessment Number:** 2205

**Report of the Environmental Protection Authority:** 1637

**Previous Assessment Number:** 1714

**Previous Report Number:** 1441

**Preceding Statement/s Relating to this Proposal:** 908

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. 908, be changed as specified in this Statement.

**Condition 3-1 of Ministerial Statement 908 is deleted and replaced with:**

#### **3 Time Limit for Proposal Implementation**

- 3-1 The proponent shall not commence implementation of the proposal after 12 September 2023, and any commencement prior to this date must be substantial.
- 3-2 Any commencement of implementation of the proposal, on or before 12 September 2023 must be demonstrated as substantial by providing the CEO with written evidence, on or before 13 September 2023.

**Condition 10-3 of Ministerial Statement 908 is deleted and replaced with:**

**10     Residual impact and risk management measures**

- 10-3 This program shall have a monetary value of \$500,000 at the date that statement 908 was published. From the commencement of the next financial year after the date that statement 908 was published, the amount of monetary value unspent will be adjusted annually each subsequent financial year in accordance with the percentage change in the CPI (all groups, Perth) applicable to that financial year.

