

20 June 2014

Mr Anthony Sutton
Director
Assessment and Compliance Division
Office of the Environmental Protection Authority
Locked Bag 10
East Perth, WA 6892

Dear Mr Sutton

Section 38A Notice – Jackson 5 and Bungalbin East Iron Ore Project

I refer to your letter dated 16 June 2014 requesting Polaris Metals Pty Ltd (**Polaris**) provide further information in respect to the Jackson 5 and Bungalbin East Iron Ore Project (**Proposal**) pursuant to section 38A of the *Environmental Protection Act 1986* (WA) (**EP Act**).

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Summary

The purpose of this letter is to respond to the EPA's request for further information, clarify information requirements at the referral stage and assist the EPA progress towards a decision on whether the Proposal should be assessed.

In preparing the Proposal referral, Polaris closely considered the necessary information requirements at this stage of the Part IV EP Act process. The documentation was prepared in accordance with EPA guidance, the template referral form and with the expectation that the Proposal would be assessed at the Public Environmental Review (**PER**) level of assessment.

Polaris respectfully submits the information it has provided in the Proposal referral is of an appropriate level and sufficient to enable the EPA to make a decision that the Proposal should be assessed and the PER level of assessment is the most appropriate forum for that assessment. A quasi-assessment at the referral stage ahead of the formal assessment process actually being enlivened is an inappropriate forum for detailed consideration of the environmental factors and issues presented by the Proposal.

However, to assist the EPA's consideration of preliminary key environmental factors, section 6 of this letter provides additional information in respect to the factors for land, water, air, people and integrating factors set out in Environmental Assessment Guidelines 8: Environmental factors and objectives.

Polaris wishes to work cooperatively with the EPA in assessing the Proposal and will accord with the principles of environmental impact assessment set out in the Administrative Procedures. This includes building upon the substantial investment Polaris has made to understand the values of the region by undertaking a detailed environmental impact assessment and openly subjecting that assessment to stakeholder and community scrutiny.

Polaris recognises its responsibility for protection of the environment relating to the Proposal and that it bears the onus of demonstrating that the unavoidable impacts of the Proposal will meet EPA objectives and the Proposal is environmentally acceptable. The PER level of assessment will provide an appropriate forum of Polaris to demonstrate its ability to do so and ensure the EPA is able to provide Government with the best possible advice on the environmental impacts of the Proposal.

2 Relevant inquiry on referral of a proposal

Pursuant to section 38, Polaris referred the Proposal to the EPA as Polaris is of the view it is likely, if implemented, to have a significant effect on the environment. Following referral, in accordance with section 39A, the EPA must decide whether or not to assess the Proposal. Additionally, the EPA designates a level of assessment at the same time as making the assessment decision. The level of assessment decision is not prescribed in the EP Act and occurs pursuant to the EPA's Environmental Impact Assessment Administrative Procedures 2012 (**Administrative Procedures**).

In your letter, you identify that at the referral stage the EPA is required to:

- determine the significance of the effect on the environment of the proposal, if implemented; and
- make a decision on whether or not to assess the proposal and, if the decision is to assess, the level of assessment.

Polaris respectfully disagrees with how the relevant inquiries for the EPA have been framed. To inform the decision on whether or not to assess, the EPA must consider if the Proposal is likely to have a significant effect on the environment. The scope of this inquiry must be viewed in context; it is a threshold question as part of a process initiation decision. In Polaris' view, it is a reasonably simple test at this stage. It is not necessary to seek to determine the significance of those effects in any detailed manner, as this is the purpose of environmental impact assessment under the Part IV EP Act process. If there is doubt as to whether the environmental effects meet the 'significant' threshold, taking a precautionary approach, the EPA should decide to assess.

3 Information requirements at the referral stage

The EP Act does not prescribe referral information requirements other than to state that referrals must be in writing (section 38(5)(i)). Distinguishable from Part V EP Act approvals, there is no statutory requirement for referrals to be made in the form and manner established by the EPA.

To assist proponents, and other parties who may refer a proposal, the EPA has prepared guidance as to what information should be contained in a proposal referral. Additionally, a template proponent referral form has been prepared by the EPA. Section 8.1 of the Administrative Procedures indicates that the form must be used to ensure the EPA is able to determine, in a timely manner, whether the proposal should be assessed.

Part A of the form requires information to be provided about the proponent and the proposal. Part B of the form poses a number of questions in respect to particular elements of the environment to identify whether those elements may be impacted by the proposal. It is reasonable for a proponent to assume, and it is implicit from the Administrative Procedures, that completing the form will generally provide the EPA with sufficient information for this decision making process.

The referral guidance and template form indicate that the proponent may attach any other information they consider may be relevant to the EPA decision whether or not to assess the proposal and, if it is to be assessed, the level of assessment. Providing information beyond that anticipated in the form is voluntary and there are no minimum content or structural requirements that must be satisfied.

Proponents adopt different approaches to referral documentation. Where a proponent seeks an EPA decision not to assess a proposal, or to assess at the lower level of Assessment on Proponent Information – Category A (**API(A)**), it is often the case a significantly greater amount of information than anticipated by the referral guidance and template form is provided to facilitate such a decision.

4 Level of information provided in the Proposal referral

Polaris prepared the referral document for this Proposal in light of its belief that the Proposal is likely, if implemented, to have a significant effect on the environment and the most appropriate level of assessment would be PER. This view is based on consideration of the level of assessment criteria in the Administrative Procedures. Notably, Polaris considers:

- the Proposal has several key environmental factors, some of which are complex; and
- substantial and detailed assessment of the Proposal is required to determine whether, and if so how, the environmental issues could be managed.

The referral document for the Jackson 5 Low Impact Drill Program on M77/1095 (**Exploration Proposal**) was prepared in entirely different circumstances as Polaris believed API(A) would be the most appropriate level of assessment. In this context, Polaris chose to provide information to the EPA substantially in excess of that anticipated by the guidance and template referral form, more akin to the information that would be generated during the Part IV EP Act assessment process. While the EPA ultimately decided to assess the Exploration Proposal at the PER level, Polaris' expectations for level of assessment were API(A) and this was the key determining factor for adopting a detailed approach at the referral stage.

Polaris does not consider it appropriate for the EPA to determine information requirements for this Proposal, or any of its future proposals, based on previous referral documents, such as for the Exploration Proposal. The adequacy of the information provided in the referral should be measured against whether it provides sufficient information for the EPA to undertake its statutory duty to decide whether or not to assess.

In any event, Polaris is aware of a number of recent proposals that have contained analogous levels of information in the referral documentation as the Proposal referral. These include, but are not limited to, WA Shark Drum Line Policy, FMG's Nyidinghu Iron Ore Project, BHP Billiton Iron Ore's Pilbara Expansion Strategic Proposal and Tronox's Cooljarloo West Titanium Minerals Project. In these circumstances the EPA considered it had adequate information to be able to decide to assess each of the proposals and set a PER level of assessment.

As set out above, Polaris is of the view that the Proposal requires detailed assessment before it can be determined whether the environmental issues raised are able to be managed. Initial information with respect to the potential environmental impacts of the Proposal is provided in section 2 of Attachment 2 to the referral document, which is structured for consistency with the template referral form.

Polaris' overall approach to the management of environmental impacts is outlined in section 3, with reference to the principles of the EP Act. Details of proposed management mechanisms to minimise and mitigate impacts and further detail on how the principles are addressed by the Proposal will be developed during the environmental impact assessment process, where stakeholders and the community will have the opportunity to provide input.

A quasi-assessment at the referral stage ahead of the formal assessment process actually being enlivened is an inappropriate forum for detailed consideration of the environmental factors and issues presented by the Proposal. To elaborate further with respect to the impacts of the Proposal would be premature whilst design work and other investigations relevant to defining the Proposal and its impacts are ongoing. It is also inconsistent with the structure and intent of Part IV of the EP Act and the process for referral anticipated by the Administrative Procedures. This inconsistency cuts across the fundamental principles of accountability, transparency and fairness that best practice environmental impact assessment should embody.

Polaris respectfully submits the information it has provided in the Proposal referral is of an appropriate level and sufficient to enable the EPA to make a decision that the Proposal

should be assessed and the PER level of assessment is the most appropriate forum for that assessment.

5 Structure of the referral document

In accordance with the Administrative Procedures, Polaris adopted the structure contained in the template referral form for the Proposal referral document. In preparing this document, Polaris also considered Environmental Assessment Guidelines 8: Environmental factors and objectives (**EAG 8**) and 9: Application of a significance framework in the environmental impact assessment process (**EAG 9**). As a result, Polaris identified the key environmental factors it considers may be relevant to the Proposal in section 1.5 of Attachment 2 of the referral document (noting this is ultimately a decision for the EPA). Section 2 goes on to address these factors within the structure set out in Part B of the template referral form.

Neither the Administrative Procedures, referral guidance or template form indicate the referral is required to adopt a format consistent with EAG 8 and in consideration of EAG 9. To the contrary, the EPA has indicated an appropriate structure in the template form, which Polaris has diligently followed. EAG 8 and EAG 9 do not contain structural or content guidance for referral documents and Polaris has difficulty in appreciating how the approach it has adopted to referral of the Proposal is inconsistent with these guidelines.

In any event, to assist the EPA's consideration of preliminary key environmental factors and their management, sections 6 and 7 provide additional information in respect to the factors for land, water, air, people and integrating factors set out in EAG 8.

6 Environmental factors

6.1 Flora and vegetation

The EPA objective for this factor is to maintain representation, diversity, viability and ecological function at the species, population and community level. Polaris considers flora and vegetation likely to be a key environmental factor for the Proposal.

The flora and vegetation of the Proposal area and its surrounding environment include five broad vegetation associations, one Priority Ecological Community, 46 vegetation units, two Threatened taxa, 18 Priority taxa as well as numerous other flora species that are not of conservation significance.

Direct and indirect impacts to flora and vegetation will occur primarily during the construction phase. An estimated 713 hectare of land will be cleared, however this area is subject to further mine planning, detailed design of mine pits and infrastructure, and subsequent changes to these designs arising from stakeholder and community engagement. The extent of impacts and how the EPA objective for this factor is met will be confirmed through environmental impact assessment.

6.2 Landforms

The EPA objective for this factor is to maintain the variety, integrity, ecological functions and environmental values of landforms and soils. Polaris considers landforms likely to be a key environmental factor for the Proposal.

The broad landforms of the Proposal area and its surrounding environment include hills, sandy plains, broad valleys and undulating plains. The hills landform is predominately comprised of banded ironstone formations (**BIF**) associated with the Helena and Aurora Range. Environmental values of the BIF include nature conservation, cultural, recreation and tourism, education and monitoring and research.

Impacts to landforms will occur during implementation of the proposal, including localised change to a relatively small proportion of the total length of BIF ranges in the Mt Manning and Helena-Aurora Ranges Conservation Park. The extent of impacts and how the EPA objective for this factor is met will be confirmed through environmental impact assessment.

6.3 Subterranean fauna

The EPA objective for this factor is to maintain representation, diversity, viability and ecological function at the species, population and assemblage level. Polaris does not consider subterranean fauna to be a key environmental factor for the Proposal.

Polaris has formed this view as the Proposal area, and more broadly the region, has a limited stygobitic fauna assemblage as well as some troglofauna. There has only been a single stygobitic fauna recorded in the region, and no stygofauna were recorded during a recent survey at J4, located to the west of the proposal area.

6.4 Terrestrial environmental quality

The EPA objective for this factor is to maintain the quality of land and soils so that the environment values, both ecological and social, are protected. Polaris considers terrestrial environmental quality may be a key environmental factor for the Proposal.

The terrestrial environmental quality of the area is generally good to excellent, consistent with the remoteness of the area, the lack of permanent population and its use for low environmental impact activities such as mineral exploration and recreation. Potential impacts include landform instability, acid and metalliferous drainage and disposal of saline water causing environmental degradation. Further studies are required to characterise mine waste and develop a site/operation water balance. The extent of impact and how the EPA objective for this factor is met will be confirmed through environmental impact assessment.

6.5 Terrestrial fauna

The EPA objective for this factor is to maintain representation, diversity, viability and ecological function at the species, population and assemblage level. Polaris considers terrestrial fauna may be a key environmental factor for the Proposal.

The fauna of the Proposal area and its surrounding environment include 41 conservation significant vertebrate species (the majority of these species are birds), 305 invertebrate species (include some potential short-range endemic species) as well as a variety of other vertebrate, invertebrate and SRE fauna that are not of conservation significance.

Potential impacts to fauna include loss of habitat from land clearing and to a lesser extent vehicle collisions and the introduction of feral species that may predate and/or compete with native fauna for resources. The extent of impacts and how the EPA objective for this factor is met will be confirmed through environmental impact assessment.

6.6 Hydrological processes

The EPA objective for this factor is to maintain the hydrological regimes of groundwater and surface water so that existing and potential uses, including ecosystem maintenance, are protected. Polaris does not consider hydrological processes are a key environmental factor for the Proposal.

The Proposal area and its surrounding environment contain numerous ephemeral creeks and gullies with occasional major drainage lines. Groundwater is located at an elevation of about 390 metres Australian Height Datum.

The Proposal will impact some ephemeral drainage lines during construction of haul roads but will not result in the impoundment of a major river, creek, wetland or estuary. Groundwater extraction will occur as a result of construction and mining activities but is not likely to have a significant effect on ecosystem maintenance due to the absence of permanent water bodies and the typically high salinity of groundwater in the region. .

6.7 Inland waters environmental quality

The EPA objective for this factor is to maintain the quality of groundwater and surface water, sediment and biota so that the environmental values, both ecological and social, are protected. Polaris does not consider inland waters environmental quality is a key environmental factor for the Proposal.

Polaris has formed this view as there are no permanent surface water bodies in the proposal area and its surrounding environment.

6.8 Air quality

The EPA objective for this factor is to maintain air quality for the protection of the environment and human health and amenity. Polaris does not consider air quality is a key environmental factor for the Proposal.

Polaris has formed this view as air quality is consistent with undisturbed natural environments and emissions to air arising from the Proposal (e.g. dust) can be managed effectively.

6.9 Amenity

The EPA objective for this factor is to ensure that impacts to amenity are reduced as low as reasonably practicable. Polaris considers visual amenity may be a key environmental factor for the Proposal.

The Proposal is located in a remote area, with the nearest normalised population centre being Southern Cross, some 100 kilometres to the south. Some recreational use of the area occurs and is focussed on the eastern portion of the Helena and Aurora Range at Bungalbin East. The Helena and Aurora Range is well regarded for its visual amenity.

Potential impacts to amenity include limitation of access to the portions of the BIF within and immediately surrounding the mines as well as visual impact from areas of higher elevation across to Jackson 5. The extent of impacts and how the EPA objective for this factor is met will be confirmed through environmental impact assessment.

6.10 Heritage

The EPA objective for this factor is to ensure that historical and cultural associations are not adversely affected. Polaris does not consider heritage is a key environmental factor for the Proposal.

Polaris has formed this view as a result of the findings of archaeological and ethnographic surveys undertaken across the Proposal area. The Aboriginal heritage of the Proposal area and its surrounding environment includes several sites that are undergoing further assessment to determine whether they meet the requirements of the *Aboriginal Heritage Act 1972*.

6.11 Human health

The EPA objective for this factor is to ensure that human health is not adversely affected. Polaris does not consider human health is a key environmental factor for the Proposal.

Polaris has formed this view as the Proposal area is remote from human settlement - the nearest population centre is located 100 kilometres southwest of the Proposal.

6.12 Offsets

The EPA objective for this factor is to counterbalance any significant residual environmental impacts or uncertainty through the application of offsets. As acknowledged in EAG 8, offsets are not an environmental factor by definition. The applicability of offsets cannot be determined until the extent of residual environmental impacts is known. This will occur during environmental impact assessment of the Proposal and it is premature to form a view on the applicability of this factor at this stage.

6.13 Rehabilitation

The EPA objective for this factor is to ensure that premises are closed, decommissioned and rehabilitated in an ecologically sustainable manner, consistent with agreed outcomes and land uses, and without unacceptable liability to the State. As acknowledged in EAG 8, rehabilitation is not an environmental factor by definition. However, as an integrating factor, rehabilitation is an important consideration in determining the environmental acceptability of proposals.

A comprehensive regime in respect to planning for mine closure and rehabilitation will apply to the Proposal pursuant to the *Mining Act 1978* and in accordance with the joint EPA and Department of Mines and Petroleum (**DMP**) Guidelines for Preparing Mine Closure Plans (**MCP Guidelines**). DMP is the lead regulator and decision-making authority for mining projects in WA, including in respect to closure and rehabilitation.

The environmental impact assessment documentation for the Proposal will contain sufficient information to demonstrate that the mine is capable of being closed in an ecological sustainable manner. The MCP Guidelines state that the EPA will generally not assess mine closure as part of the Part IV EP Act process, where proposals are subject to the *Mining Act 1978*. Should the EPA decide to assess mine closure, it has committed to consulting with DMP before making any such decision.

7 Impact Minimisation and Mitigation

As a minimum, Polaris will adhere to the requirements of its Operational Management System (MRL-OHM-PLN-OO4) throughout the life of mining. Polaris will also develop specific Environmental Management Plans to minimise and mitigate the potential environmental impacts of the proposal to the key environmental factors identified during the assessment process.

8 Studies/investigations and environmental objectives

During environmental impact assessment, Polaris will undertake the studies and investigations necessary to demonstrate that the Proposal meets the EPA's objectives for the relevant environmental factors. The scope and extent of such studies/investigations will be determined in consultation with the EPA and other relevant decision-making authorities.

In accordance with the Administrative Procedures, Polaris anticipates it will be required to prepare an Environmental Scoping Document (**ESD**), to be approved by the EPA. The purpose of the ESD is to provide Proposal specific guidelines for the form, content and timing of environmental review and to identify the studies and investigations that need to be carried out. It is therefore premature to comment at this stage on how studies and investigations will contribute toward the proposal meeting environmental objectives.

Polaris reiterates that it wishes to work cooperatively with the EPA in assessing the Proposal and will accord with the principles of environmental impact assessment set out in the Administrative Procedures. This includes building upon the substantial investment Polaris has made to understand the values of the region by undertaking a detailed environmental impact assessment and openly subjecting that assessment to stakeholder and community scrutiny.

Polaris recognises its responsibility for protection of the environment relating to the Proposal and that it bears the onus of demonstrating that the unavoidable impacts of the Proposal will meet EPA objectives and the Proposal is environmentally acceptable. The PER level of assessment will provide an appropriate forum of Polaris to demonstrate its ability to do so and ensure the EPA is able to provide Government with the best possible advice on the environmental impacts of the Proposal.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Sean Gregory".

Sean Gregory
General Manager, Technical Service
Polaris Metals Pty Ltd