



WINGELLINA NICKEL PROJECT

RESPONSE TO SUBMISSIONS



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DOCUMENT

WINGELLINA NICKEL PROJECT
PUBLIC ENVIRONMENTAL REVIEW
RESPONSE TO SUBMISSIONS



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WINGELLINA NICKEL PROJECT – RESPONSE TO SUBMISSIONS

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1.0 INTRODUCTION

Hinckley Range Pty Ltd (Hinckley Range), a wholly owned subsidiary of Metals X Limited (Metals X) proposes to develop the nickeliferous limonite ore deposit at Wingellina, located approximately 1,400 km north-east of Perth and 8 km south west of the Surveyor General's Corner, bordering Northern Territory, South Australian and Western Australian. The project will involve:

- Open pit mining from multiple pits;
- In-pit dewatering;
- Abstraction of up to 12GL per annum of groundwater and overland pipeline from the Officer Basin located about 100km south west of the proposed mine;
- Crushing and screening;
- On-site processing using a high pressure acid leach (HPAL) process, to produce an intermediate mixed nickel-cobalt hydroxide concentrate;
- A tailings storage facility (TSF) with separate evaporation ponds to manage both decant water and storm water; and
- The nickel-cobalt hydroxide concentrate will be transported to overseas markets, via existing road and rail to networks the Port of Darwin or the Port of Adelaide.

The anticipated mine life is about 40 years at a mining rate of approximately 4 million tonnes per year (Mtpa), to produce approximately 40,000 tonnes (t) of nickel and 3,000 t of cobalt per year.

Hinckley Range referred the Project to the Environmental Protection Authority (EPA) in September 2013 under Section 38 (Part IV) of the *Environmental Protection Act 1986* (EP Act). In November 2013 the EPA determined that the Project required formal assessment under the EP Act and set a Public Environment Review (PER) level of assessment with an eight week public review period.

An Environmental Scoping Document (ESD) was prepared and approved by the EPA on 4 July 2014 and the final PER document approved for public release on 1 September 2015.

1.1 PER Public Review

Hinckley Range published the PER and made it available for an 8 week public review period between 14 September 2015 and 09 November 2015.

1.1.1 Document Availability

The PER document was available in the following formats:

- Digital Format downloaded from the website at <http://www.metalsx.com.au/nickel/> ;
- Digital Copy on compact disc obtained at no cost from Hinckley Range offices in West Perth;

- In hard Copy purchased for \$10 from Hinckley Range offices in West Perth; and
- Hard Copies were also distributed and available for review at public libraries, Ngaanyatjarraku Shire Office and the Wingellina Media Centre.

1.1.2 Document Distribution

In addition documents were sent to the following nominated stakeholders and Government Agencies:

- State Library of WA;
- JS Batty Library;
- Department of Health;
- Department of Mines and Petroleum;
- Department of Environmental Regulation;
- Department of Aboriginal Affairs;
- Kalgoorlie Public Library; and
- Conservation Council of WA.

1.1.3 Consultation during Review Period

Consultation was undertaken with the following key stakeholders in relation to the PER during the Public Review Period:

Stakeholder	Nature of Consultation and Issues Raised	Outcome
Department of Health	Request for reference documents on baseline soil surveys undertaken and metals data.	Reference provided and correspondence indicating how the Health Risk Assessment considered metals other than Nickel in reference to Health Investigation Levels.
	Request for further evidence on how asbestiform material has been investigated.	Correspondence was provided referencing the exploration drill logs and thin section mineralogical identification, where no asbestiform minerals were identified.
OEPA	Request for provision of additional information regarding configuration of sulphuric acid production plant and tail gas scrubber.	Clarifications were provided and basis of calculation of emission intensities described. Small adjustment to nominal annual quantities of total SO ₂ , NO _x , PM and acid mist were made and confirmed.

Stakeholder	Nature of Consultation and Issues Raised	Outcome
<p>Wingellina Community</p>	<p>Community Meeting on 19 October 2015 between senior representatives of Hinckley Range and members of the Ngaanyatjarra Community and the Ngaanyatjarra Council to discuss the PER.</p> <p>35 community members were in attendance, with translation services provided by Mr Bruce Smith.</p> <p>Questions raised during this forum included:</p>	<p>An overview of the PER and the supporting impact assessments were presented by a director of MetalsX to facilitate discussion.</p> <p>This included information on the PER process and the public review period.</p> <p>Responses to specific issues raised at this forum are summarized below:</p>
	<ul style="list-style-type: none"> • Timeframe for the Mine Development. 	<p>Further processes following Environmental Approval was explained, including detail engineering, financing and planning and the factors that affected these decisions (such as nickel prices) indicating this could take up to 3 years before construction could commence.</p>
	<ul style="list-style-type: none"> • Outstanding issues around heritage information and work undertaken by anthropologists and Traditional Owners to resolve this with DAA. 	<p>Work is currently being progressed by the heritage consultant directly with DAA to resolve inaccuracies in heritage information.</p>
	<ul style="list-style-type: none"> • Security concerning heritage information provided to DAA and stressing that ownership of information was to stay with traditional owners. 	<p>Hinckley Range confirmed that information collected as part of the heritage studies was kept confidential by the company and they will continue to respect the special significance of the area to the traditional owners. Hinckley Range also committed to continue to assist the TO's participation in the heritage process with DAA.</p>

Stakeholder	Nature of Consultation and Issues Raised	Outcome
	<ul style="list-style-type: none"> Concerns on how the Wingellina project would impact on the water table and impact on town water supply. 	<p>Reference was made to the supporting studies in the PER and the initial modeling on the impact of dewatering and TSF on local groundwater should not impact on the town supply. Also the supply of the raw water for the project would be sourced from the Officer Basin over 100km from the town water bores.</p>
	<ul style="list-style-type: none"> Relocation of the Community. 	<p>Hinckley Range confirmed the previous company agreement to move the town but noted preliminary planning advice from Government meant this was going to be a complicated and potentially lengthy process. This would have to be undertaken separately from the PER.</p>
	<ul style="list-style-type: none"> Location of Workers Accommodation and change to community. 	<p>The location of the worker accommodation was described and the transport arrangements to the mine were explained, including commitments made to restrict workers moving around the area.</p> <p>The potential for the business opportunity to transport workers to and from the accommodation was also discussed.</p>
	<ul style="list-style-type: none"> Risk and handling of hazardous materials. 	<p>Assurances were given that licensing and operational procedures (including appropriate storage) required to handle hazardous materials were statutory requirements which would be strictly adhered to prior to operation.</p>

Stakeholder	Nature of Consultation and Issues Raised	Outcome
	<ul style="list-style-type: none"> Construction time of the project. 	Construction would take approximately 2 years prior to operation.
	<ul style="list-style-type: none"> Options for road locations outside the mine operation. 	Consultation around this is currently ongoing with NT to obtain funding allocation for road improvements.
	<ul style="list-style-type: none"> Impact of Nickel Price on the development decision. 	Hinckley Range confirmed they are currently progressing studies and approvals to match the nickel price cycle, so it was not currently holding up the project.
	<ul style="list-style-type: none"> Concerns were raised over the current neglect of the community and what could be done in the next five years prior to development. 	Hinckley Range confirmed they raise this issue with various Government departments when opportunity arises. They noted the concerns expressed by the community on the standard of services in the town and advised the council to progress this issue with Government given the project development timeframe provided.

1.1.4 Submissions Received

A total of 6 public submissions were received by the Office of EPA and forwarded to Hinckley Range on 24 November 2015. The following table lists the submissions received.

No.	Submitter	Date Received
1	Department of Water	09 October 2015
2	Department of Environmental Regulation	23 November 2015
3	Department of Mines and Petroleum	09 November 2015
4	Department of Aboriginal Affairs	25 September 2015
5	Department of Health	09 November 2015
6	Public Submission	02 November 2015

The following section provides a response to the submissions received.

2.0 SUMMARY OF SUBMISSIONS

2.1 Hydrological processes

Submitter	Submission and/or issue	Response to comment
Department of Water	<p>The DoW, under the <i>Rights in Water and Irrigation Act 1914</i> (RIWI Act), is responsible for the licensing of water abstraction. In regards to the above proposal this includes mine pit dewatering and the taking of groundwater for processing and dust suppression requirements. The subject site is located in the East Murchison Groundwater Area, proclaimed under the RIWI Act 1914. The subject site is not a proclaimed surface water area under this Act.</p> <p>The DoW has previously reviewed the draft PER and provided advice to the Office of the Environmental Protection Authority that the level of hydrological investigation and assessment for Wingellina pit dewatering and the associated Officer Basin water supply borefield is sufficient to indicate that impacts on the environment, other users, and aquifer system groundwater resources is acceptable. Therefore, the DoW has no further comments to provide and is satisfied with the final PER.</p>	Noted.

2.2 Air quality and atmospheric gases

Submitter	Submission and/or issue	Response to comment
Department of Health	<p><i>Health Risk Assessment (HRA)</i></p> <p>The air quality HRA follows the required format and considers appropriate contaminants of concern. As previously stated to the EPA, there are number of uncertainties and weaknesses in the HRA however given the</p>	<p>Noted.</p> <p>Hinckley Range has committed to undertaking further monitoring for nickel in PM10 to confirm the risk assessment</p>

Submitter	Submission and/or issue	Response to comment
	<p>ascribed level of risk these can be managed with appropriate dust management plans that include monitoring for nickel in PM10. The PER has been updated to reflect these requirements and provided the plans are implemented and the predicted Ni concentration confirmed with appropriate monitoring, then the potential for any future risk can be determined early.</p>	<p>and updating management and mitigation measures as required prior to construction.</p>
<p>Ngaanyatjarra Media Aboriginal Corporation</p>	<p>The Review report raises and addresses a number of potential environmental impacts flowing from the development and conduct of the mining and processing of the nickel deposit at Wingellina. These include the production of airborne pollutants: sulfur dioxide, nitrogen dioxide and particulate matter.</p> <p>Of particular concern to NG Media is the potential negative impact that all these pollutants may have on our extensive archive of important and irreplaceable historical material, much of which takes the form of audio and video that was produced using magnetic tape formats like VHS, SuperVHS, MiniDV, and Betacam among others. The archive is currently stored in a temperature controlled room within the Media Centre at Wingellina and has recently been independently assessed to be of national significance (please see attached report -<i>Assessment of Historical Significance</i>, Vikki Plant, June 2015).</p> <p>While the models used for the PER predict that the concentrations of the airborne pollutants listed above should not exceed allowable limits with regard to Air Quality standards and goals in relation to potential negative human health impacts, no assessment has been made of the potential negative impact on the material in an archive such as ours. I have contacted the Mick Newnham at the National Film and Sound Archive requesting some general advice regarding the possible effects of the airborne pollutants listed in the Report on magnetic video and audio tapes and have received the following:</p>	<p>Hinckley Range acknowledges and is sympathetic to the respondent's concerns regarding the uncertain effect of air borne pollutants on taped media, and notes the suggestion that the developer should support completion of the archiving process ahead of development.</p> <p>Hinckley Range understands the preservation of the recorded history at Wingellina is a broader community issue. There are funds within the existing Mining Trust Account for "community projects", and Ng Media's request for support of the archiving project would be best made through this forum.</p> <p>Funding requests at a local level by Ng Media should therefore go through to the Board of the Mining Trust Account.</p> <p>Hinckley Range encourages Ng</p>

Submitter	Submission and/or issue	Response to comment
	<p><i>There isn't any really useful information on the threshold levels that cause problems for magnetic tapes for N02 and S02, however in broad terms both these are not good. The difference between people and magnetic media is that people are "self-repairing" so low levels of these pollutants can be removed from the body via normal respiration/metabolic processes... magnetic tape is an accumulator so the damage will keep building up. It maybe that 5 ppm (or whatever limit has been set) is OK for people but will cause damage to a tape after 5 years or 7 years etc (or maybe sooner). The other thing is both these compounds may be free radicals and, in conjunction with water, can form strong acids. Now I'm guessing that your environment has a very low relative humidity so this eventuality is less of a problem than it may be elsewhere, however if everything is nicely coated with a quantity of either of these compounds and it does rain for a while then this is a feasible event and would deteriorate the tapes quite quickly (even if it is just the rollers and other metals parts of the cassettes)</i></p> <p><i>As we all know dust is a perennial problem and short of hermetic encapsulation at the object level is very difficult to deal with. Increased dust levels will certainly exacerbate the problem. Nickel in the dust may be an interesting thing to consider. I'm not sure if/how tapes may be affected by nickel but I know that nickel can be a catalyst for some reactions. If there is a reaction between N02 or S02 and something in the magnetic tape that would be catalysed by nickel I don't know.</i></p> <p>While these comments are general in nature and do not specifically address the results from the data model used for the PER, they indicate that the presence of all three cited pollutants does pose some risk to the archive, particularly given the expected long duration of the mine life compared to the much shorter timeframes for potential damage, and that that risk exists at much lower levels of pollutants than those acceptable for</p>	<p>Media to familiarise themselves with the opportunity to gain access to a portion of the royalties that will be paid into the Mining Trust Account for the benefit of the community as a whole to assist in completing this project.</p> <p>It should be noted that it will be several years before the project starts mining and production. Hinckley Range would therefore expect the Ng Media digitising program to be substantially complete and as such this would no longer be an issue.</p> <p>Hinckley Range has committed to further measurement and modeling of PM10 prior to development and this would include a location close to the townsite. However, results and the level of detail required to address the objectives of NgMedia is not possible within modeling certainty.</p>

Submitter	Submission and/or issue	Response to comment
	<p>human health. However, without specific data and modeling relevant to the air quality in the archive itself, it is not possible to ascertain exactly what level of increased risk would exist.</p> <p>It seems to me that the options for eliminating or mitigating the risk to the archive would be as follows:</p> <ol style="list-style-type: none"> 1) An agreement has been reached between the community and the mine developers to re-locate the community (including the Media Centre and its resident archive) to a location away from the mine site. Such a re-location would eliminate all risks to the archive from the mining and processing of the ore. (Obviously, delays to relocation would place the archive at risk for that period from the commencement of construction until the move actually happened); or 2) Measurement and modeling is undertaken by the mine developers to assess the risk of sulfur dioxide, nitrogen dioxide and increased particulate material penetrating to the air within the archive and appropriate steps taken to eliminate (as far as is possible) these contaminants. Alongside of this, work should be done to complete the digitisation of the assets held by the archive so that the content can be safely secured for posterity. (Digitisation is an ongoing project. Some digitisation of the assets has been completed already, but it is heavily reliant on sufficient funding. The National Library of Australia is one possible source - preliminary steps, such as the Significance Assessment, have already been undertaken with a view to securing sufficient funds in the future. Part of the mine developers risk mitigation plan could include support to complete the digitisation process as quickly as possible). <p>Parts of the collection of Ngaanyatjarra Media have been described as "rare and irreplaceable" and much of it as "rare, ground breaking yet vulnerable"</p>	

Submitter	Submission and/or issue	Response to comment
	<p>(page 15, <i>Plant, 2015</i>). As such, whatever measures are needed to safeguard these items for the future should be taken. While the archive is a 'man-made' feature of the local environment, it is pre-existing to the commencement of the mine and should be assessed as part of the environmental impact studies.</p>	

2.3 Heritage

Submitter	Submission and/or issue	Response to comment
<p>Department of Aboriginal Affairs</p>	<p>DAA has reviewed the relevant information and can confirm that there are currently 46 Aboriginal heritage places known to DAA as being located either wholly or partially within tenement E69/535 (the Project Area).</p> <p>It is noted that the Proponent has commissioned a number of heritage surveys over the Project Area between 2001 and 2008 in consultation with the Ngaanyatjarra Council, Traditional Owners of the area and Artefaxion. It is understood that these surveys have identified the presence of 35 archaeological places and ten ethnographic 'exclusion zones' on the tenement.</p> <p>It is also understood that all ten of the exclusion zones and 33 of the 35 archaeological places can currently be avoided by the proposed works and that the Proponent will seek consent under section 18 of the <i>Aboriginal Heritage Act 1972</i> (the AHA) to impact heritage places that cannot be avoided prior to any ground disturbance in those areas.</p> <p>It is further noted that the Proponent holds a mining agreement with the Traditional Owners and Native Title Holders of the Project area and that the</p>	<p>Noted</p> <p>Hinckley Range confirms its commitments to protect all heritage areas and will continue to work with the traditional owners to continue to manage and protect these areas having consideration for the Aboriginal Heritage Due Diligence Guidelines.</p> <p>In late 2015 – early 2016 Hinckley Range worked with traditional owners and DAA to more accurately define the location, shape and significance of the heritage sites within the tenement, and to update the DAA Site</p>

	<p>agreement includes mechanisms for the protection and management of Aboriginal heritage.</p> <p>DAA advises that any potential impacts to Aboriginal heritage from the Proposal can be addressed through the mechanisms established in the mining agreement discussed above and the provisions of the AHA.</p> <p>DAA has released Aboriginal Heritage Due Diligence Guidelines (the Guidelines) to assist developers with planning and considering Aboriginal heritage during proposed works. It is recommended that the developer be made aware of the Guidelines. A copy of the Guidelines can be found on the DAA website at: http://www.daa.wa.gov.au/globalassets/odf-files/ddo.</p>	<p>Register.</p>
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2.4 Human health

Submitter	Submission and/or issue	Response to comment
<p>Department of Health</p>	<p><i>Asbestiform Materials</i></p> <p>It is noted that the mining location appears to coincide with medium probability of encountering asbestiform minerals based on the DMP state map of their occurrence. The PER document appears to omit reference to the potential for asbestiform minerals and their management, however in a subsequent email to the department evidence was provided that asbestiform material was not identified in over 50 diamond drill holes made over the intended mine site. As this issue has the potential to cause serious public health impact the EPA is to require the proponent to provide this information to the EPA as evidence that asbestiform material has been considered.</p> <p><i>Health Impact Assessment (HIA)</i></p> <p>The HIA assessed the risks identified in the HRA against potential benefits the development may bring to the community. A number of socio-economic</p>	<p>Noted.</p> <p>The full data set and thin section descriptions referenced in Hinckley Range’s response to Department of Health has been provided to the OEPA in digital format to satisfy this request.</p> <p>Noted.</p> <p>Hinckley Range is committed to the</p>

	<p>plans have been slated for development in consultation with the local community which if realised over time may greatly benefit the community. DOH is aware that the low level of literacy and numeracy in the community may serve as barriers to fully realising opportunities, however this should not serve as a deterrent for engaging with existing service providers in the region (government or private), to facilitate community engagement or to implement environmental health improvement programs.</p> <p><i>Water Supply and Wastewater Disposal</i></p> <p>The proponents are advised to address the following in due course:</p> <ul style="list-style-type: none"> • Installation of wastewater treatment and disposal system/s associated with the accommodation village and worksite requiring separate approval of the DOH; and • Potable water quality must be of the standard as specified under the Australian Drinking Water Guidelines 2004. 	<p>implementation of the social impact management plan and many of these commitments are contained within the existing Wingellina Project Agreement.</p> <p>Noted.</p>
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2.5 Rehabilitation and decommissioning

Submitter	Submission and/or issue	Response to comment
Department of Mines and Petroleum	<ul style="list-style-type: none"> • A review of the Public Environmental Review document has been conducted and DMP provides the following comments: <ul style="list-style-type: none"> ○ The proposed practice of progressive rehabilitation and trials/investigations to refine rehabilitation techniques is considered best practice and widely encouraged by the Department of Mines and Petroleum (DMP); and ○ DMP considers that the Mine Closure Plan (MCP) and associated rehabilitation activities are appropriate to the identified closure issues and the associated risks may be adequately managed 	<p>Noted.</p> <p>Rehabilitation and closure outcomes will be continually reviewed and the MCP revised as per the guidelines for preparing mine closure plans (2015).</p> <p>Hinckley Range will ensure all appropriate tenure is secured prior to submission of approval documentation.</p>

	<p style="text-align: center;">under the <i>Mining Act 1978</i>;</p> <ul style="list-style-type: none"> • When considering the environmental impacts and the potential for suitable rehabilitation and closure outcomes, DMP supports further investigation of open pit backfilling as an option for waste rock management and/or tailings management. It is however acknowledged that considerations other than environmental must also be taken into account; • Under the <i>Mining Act 1978</i>: <ul style="list-style-type: none"> ○ The MCP will need to be revised in accordance with the Guidelines for Preparing Mine Closure Plans (2015) for submission with the Mining Proposal; and ○ Legal and appropriate tenure will be required for the proposed pipeline corridor prior to the submission of approval documentation to DMP. 	
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