

Statement of Reasons

MINEMAKERS AUSTRALIA PTY LTD – WONARAH IMPROVED HARD PROCESS PROJECT

PROJECT

Minemakers Australia Pty Ltd (the Proponent) submitted a Notice of Intent (NOI) on 20 December 2012 proposing to develop and operate the Wonarah Improved Hard Process (IHP) Project (the Current Project) in the Barkly Tablelands, approximately 260 km east of Tennant Creek and 170 km west of Camooweal, on the Barkly Highway in the Northern Territory. The Current proposal is to mine two phosphate deposits using open-pit mining with pits to 35m depth. The ore would be processed onsite utilising local silica sand and imported petroleum coke to extract a super phosphoric acid (SPA) product. Approximately 2619 ha of native vegetation clearing would be required to construct the pits, stockpiles, processing facilities (beneficiation plant, slime storage facility, IHP plant), haul and mine access roads, an aerodrome, a power station, workforce accommodation and ancillary infrastructure. Estimated Project life is 20 years.

This project is a variation to the Proponent's *Wonarah Phosphate Project* (referred to here as the DSO Project). The DSO project was formally assessed under the *Environmental Assessment Act* (EA Act) as an Environmental Impact Statement (EIS), concluding in April 2010 with Assessment Report 64. The DSO Project involved strip-mining of higher grade Direct Shipping Ore (DSO). Onsite crushing and screening was to occur, but no further onsite processing. The DSO was to be sold and exported to third party processing companies. The DSO Project was granted approval to mine in September 2010, subject to a security being paid. The Project however was subsequently deemed to be uneconomic, and the security deposit was not lodged. Economic hurdles included high transport and logistical costs associated with operating in a remote location. High silica content of the ore was found to devalue the Wonarah ore bound for wet (sulphuric) acid processing plants, which were the only available processing option at that time.

As the DSO Project has undergone an EIS process, aspects of the Current Project unchanged from the DSO Project proposal do not require reassessment, unless they have changed in their environmental significance.

The key difference between the DSO Project and the Current Project is that the Current Project includes on-site processing, and associated infrastructure. The IHP process enables a lower grade ore to be processed, resulting in a longer mine life and a greater portion of the resource being extracted. Differences between the DSO Project and the Current Project are summarised in **Appendix A -Table 2**. The Current Project is in other respects as described in the 2009 EIS for the *Wonarah Phosphate Project*. Minemakers has confirmed commitments made in relation to avoidance, mitigation and management of environmental and social aspects of the DSO Project, where they are still of direct relevance to the IHP project. The Current NOI provides a summary table of impacts, environmental and social outcomes, and residual impacts assessed for the DSO Project. **Appendix A -Table 3** describes how AR64 Recommendations were addressed in the *Wonarah Phosphate Project Mining Management Plan*.

CONSULTATION

On 31 December 2012, in accordance with the *Environmental Assessment Administrative Procedures 1984* (EAAP), the NOI was circulated to relevant Northern Territory Government advisory agencies.

On 23 January 2013, the Current Project was referred to the Australian Government for assessment under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). On 18 February 2013 the Project was determined not to be a *controlled action*. No further assessment is required under the EPBC Act.

Distribution of the NOI for the Current Project to Government advisory agencies identified the following information gaps:

- Further groundwater investigations are required to ensure extraction rates will be available for the 20-year mine life of the IHP Project. Potential risks to the aquifers and other users /dependent ecosystems from the increased extraction rates need to be identified.
- Detailed characterisation and quantification¹ is required of:
 - Processing plant air emissions;
 - Clay slimes;
 - Tailings (silica balls, J-Rox); and
 - Petroleum coke.
- Waste rock and non-DSO samples showed consistently elevated levels of phosphate, fluorine and beryllium. Some samples also showed elevated levels of silver, calcium, cadmium, cobalt, copper, lead, magnesium, strontium, thallium, uranium, and/or zinc. Information gaps exist regarding the environmental fate, health consequences and ecological significance of these elements when exposed and/or processed by the Project.
- Details of the significance and management (where significant) are yet to be provided for:
 - Processing plant emissions –including P_4O_{10} gas;
 - Transport of potentially hazardous material - super phosphoric acid - P_2O_5 , at high volumes, daily by road over great distances;
 - Potential spills of hazardous acid materials, such as for leaks in the acid plant, acid truck loading area, along the transport route and acid railway loading area, and in protecting surface waters from acid runoff in stormwater.
 - Petroleum coke stockpiles on the mine-site;
 - Storage of tailings and waste on site;
 - Increased power consumption;
 - Increased greenhouse gas emissions;
 - Increased water consumption;
 - Creation of potential mosquito breeding sites;
 - Archaeological sites, through a Cultural Heritage Management Plan;
 - Erosion and Sediment Control; and
 - Rehabilitation of erosion affected areas.
- For the clay slimes storage facility, design details and applicable standards are required.
- Revision of the flora and fauna assessment of the Arruwurra deposit area is recommended closer to actual mining (est. in <16 years) incorporating accrued data, including consideration of the Brush-tailed Mulgara, Greater Bilby and Wornah.
- The processing plant has been proposed based upon technology that has not been tried at a commercial scale before, and still contains many unknowns.
 - Processing plant emissions will be undefined and unquantified until completion of an associated pilot plant in Florida, USA (expected June 2013) and trials with Wonarah ore. Uncontrolled combustion of petroleum coke is generally associated with emissions of high levels of sulphur and contaminants, some toxic, commonly including lead and mercury. The likely success rates of emission scrubbers to remove such combustion products has not been described in the NOI.

¹ Collection of this information is dependent on completion of an associated pilot processing plant in Florida, USA.

- Actual processing plant emissions over the 20 year life of the Project could lead to chronic exposure of any static sensitive receptors if they exist, although sensitive receptors may not exist.
- Increased diesel and gas fuel use to run a 54 MW power station, (compared to the 4MW power station for the DSO Project). The high temperature furnace would be natural gas-fired, and further heated by combustion of petroleum coke, which will release large quantities of carbon monoxide (converting to CO₂). Detailed management of greenhouse emissions has not been defined.

Government advisory agencies also identified issues relevant to assessment requirements for the Current Project:

- Although the Current Project does represent a reduction in operational truck movements on the Barkly Hwy between the mine site and Tennant Creek, the loads under the Current Project now include full isotainers of environmentally hazardous material for 40% of those trip legs [averaging up to 48 one way (306km) trips per day, or 14,700km/day travelled, loaded with Super Phosphoric Acid]. The direct shipping ore proposed to be carted under the DSO Project was not considered hazardous to the environment if spilled.
- The Current Project, if successfully implemented, is likely to deliver significant economic and social benefits for the local communities and the Northern Territory more broadly.
- The 2009 EIS for the DSO Project was of a high standard, addressing environmental issues thoroughly, and left no significant residual environmental concerns.

JUSTIFICATION

The Project is considered to have a lower risk rating, as evidenced by:

- the absence of potential for acid mine drainage from mining of the phosphate ore;
- The remote location at least 10km from the nearest community indicates low risk of human health impacts;
- In the region of the northern bores, aquifers are quite deep (50-90m), and unconnected to surface water bodies, so drawdown of a few metres is unlikely to be found to affect any groundwater dependent ecosystems, such as wetlands; and
- No EPBC Act listed species have been found onsite.

Vegetation types are homogenous with the much wider Barkly Tablelands area, suggesting impacts on any NT listed threatened species will not be significant.

The key issues identified for consideration in deciding whether a formal assessment process should be required for the Current Project are presented in **Table 1** below, with reasons why formal assessment has not been required with respect to each identified risk.

Table 1

Identified Risks from the Current Project	Risk Resolution
Unknowns with regard to final processing plant emissions and their impacts from an untested processing method.	Regulation of emissions can be suitably addressed through the <i>Mining Management Act</i> (MMA) process, in combination with existing applicable legislation and standards.
Environmental and human health impacts have potential to occur from processing plant emissions and from acid handling and transport, if not properly managed and regulated.	Application of relevant standards and thresholds, such as Australian Standards, Dangerous Goods legislation and regulation, and safety requirements tied to mining licence conditions, all minimise risks from those aspects.

Business uncertainty around an untested process.	It is the proponents responsibility and in its interests to evaluate this risk.
Detailed management is required for safe containment, transport and spill management of hazardous substances (Super Phosphoric Acid).	This can be suitably addressed through the MMA process, in combination with existing applicable legislation and standards.
A number of information gaps exist for the Current Project in terms of details of proposed environmental management.	<p>Further information requests can be made through the MMA process.</p> <p>Opportunity exists for those information gaps to be addressed through NT EPA recommendations being made to the Minister for Mines and Energy, for submission of that information within the MMA process.</p> <p>The information gaps appear from preliminary information, information from the 2009 EIS and consultation with the Proponent, to relate to issues which could readily be managed through detailed environmental management plans, without resulting in significant residual environmental risks.</p>
Public consultation would not occur for the Current Project through an EIS process.	Minemakers already has an approved and active stakeholder engagement plan in place from the 2009 DSO Project EIS process. Communication to stakeholders of IHP Project details has commenced. NT EPA can recommend continuance of the approved stakeholder engagement plan without requiring an EIS process.

DECISION

- The Northern Territory Environment Protection Authority considers that further assessment under the NT *Environmental Assessment Act 1982* (EA Act) is not required, and subject to clause 14A, the administrative procedures are at an end in respect of the proposed action.
- Recommendation is made to the responsible Agency (Department of Mines and Energy) that identified issues and information gaps will be fully addressed and resolved through the *Mining Management Act* assessment process, subject to review by the NT EPA, prior to the Project being granted approval to proceed.



DR BILL FREELAND

CHAIR

NORTHERN TERRITORY ENVIRONMENT PROTECTION AUTHORITY

7 JUNE 2013

Appendix A –

Table 2 - Differences between IHP and DSO projects

(from Table 2.2 - NOTICE OF INTENT Wonarah Improved Hard Process Project, December 2012, CR 9014_22_v3)

Project component	DSO project	Current (IHP) Project	Clarification
Mine grade	Mining a high to medium grade ore.	Mining a lower grade ore.	The same mining process will be utilised. The IHP process enables a lower grade ore to be processed. This will result in a longer mine life as a greater portion of the resource can be extracted.
Pits	Mining up to 23 open pits.	Mining fewer but larger open pits.	<p>The number of pits will be reduced; however, pits will be larger than those proposed for the DSO. Pits will be situated in roughly the same locations as they are targeting the same resource body. As there are fewer pits there will be a smaller haul road network connecting the pits.</p> <p>The DSO project had a mine life of 10 years whereas the IHP project has an anticipated mine life of 20 years. Both Main Zone and Arruwarra pits were to be mined concurrently in the DSO project. However, the IHP project will not involve mining at Arruwarra until year 15 of the 20 year mine life.</p>
Treatment process	Mobile crushing and screening plants located at Arruwarra and Main Zone deposits to reduce ore to 2 mm particle size.	<p>Beneficiation of the ore.</p> <p>Pyrometallurgical processing of the ore to produce SPA.</p> <p>Generation of inert silica balls to be backfilled into pit voids or sold.</p>	The IHP project will involve a single crushing and scrubbing plant for beneficiation of the ore. The IHP process is as described in Section 2.6 of the Wonarah IHP NOI. The emissions to air in the form of flue gases from the IHP plant will be greater than the projected emissions to air of the DSO project. At full production capacity (i.e. five trains) the IHP plant has an estimated disturbance footprint of approx. 100ha.
Tailings/slimes disposal	No tailings produced.	Production of inert clay slimes and the need to initially store slimes within a slimes storage facility.	As processing will now be occurring on site the production and storage / disposal of beneficiated slimes is a new element of the IHP project. Geochemical and physical characterisation of the slimes (Kaolinite) is required to determine management and disposal options.
Product transport	Haulage of 3 Mtpa of contained P2O5 total truck movements of 31,250 per annum.	Reduction on total volume of heavy haulage traffic on the Barkly Highway to 2.2 Mtpa or 23,000 truck movements per annum.	The IHP project presents a reduction in operational truck movements on the Barkly Hwy between the mine site and Tennant Creek.

Project component	DSO project	Current (IHP) Project	Clarification
	Transport of rock phosphate from the project area.	Transport of SPA from the project area and the transport of petroleum coke to the mine site.	
Storage requirements	Phosphate to be delivered to a multiuser hub north of Tennant Creek and stockpiled at East Arm prior to shipment.	<p>Requirement for SPA isotainer storage at the Tennant Creek rail siding to hold product between road and train transport.</p> <p>Requirement for a storage area at the rail siding to receive full containers of petroleum coke and empty containers for return to Darwin.</p> <p>Requirement for SPA storage at Vopak's facility at the Port of Darwin for export of SPA in bulk and a storage area for petroleum coke delivered in bulk, prior to loading into containers for rail and road transport to the mine site.</p>	<p>The differences here are the products being transported. The containerised SPA will not require transfer at any point between leaving the mine site and arriving at Minemaker's facility at East Arm. Where bulk quantity supply is required SPA will be transferred from isotainers into bulk tanks at the Vopak facility at East Arm. For customers requiring small quantities the isotainers can be directly shipped.</p> <p>Petroleum coke will arrive at Darwin by ship in bulk. It will be transferred to customised shipping containers at Minemakers' facility at East Arm and transported by rail to Tennant Creek from where the containers will be trucked to the mine site.</p>
Power and water requirements	<p>A power station generating 4 MW.</p> <p>Peak water use of 9.6 ML/d for all purposes including dust suppression and potable water for domestic use.</p>	<p>A power station generating 54 MW.</p> <p>Peak water use of 22 ML/d for all purposes including dust suppression and potable water for domestic use.</p>	<p>Power supply to the mine will be provided by a dual-fuel gas generated power station. The power station will be built in stages in parallel with the staged expansion of the IHP plant.</p> <p>The greater power demand for the IHP project presents an increase in GHG emissions in comparison to the DSO project.</p> <p>The introduction of onsite processing means a substantial increase in peak water demand for the project. Previous hydrogeological studies and modelling focused on sustaining the DSO water demand over the 10 year mine life. Additional hydrogeological studies will be required for the IHP project.</p> <p>The water demand will increase in stages in parallel with the staged development of the IHP plant. This offers the opportunity to closely monitor the impact of the water extraction on the area and ensure sustainable extraction practices are implemented.</p>

Table 3 – How AR64 Recommendations were addressed in the Wonarah Phosphate Project _Mining Management Plan.

(based on *Table 3.3, MINING MANAGEMENT PLAN, Wonarah Phosphate Project, August 2010, CR 9014_19_v2*)

No.	Recommendation	Reference in MMP	Minemakers Comment
1	Minemakers shall ensure that the proposal is implemented in accordance with the proposed environmental management measures, environmental commitments and safeguards identified in the Wonarah Phosphate Project Draft Environmental Impact Statement, Supplement, and in this Assessment Report (No. 64). All safeguards, mitigation measures, and commitments outlined in the draft Environmental Impact Statement and Supplement are considered as commitments of Minemakers and are to be incorporated into the Mining Management Plan.	1.5.3	Minemakers will implement the relevant environmental management measures, environmental commitments and safeguards identified in the EIS and in the Assessment Report (No. 64) (DNRETAS, 2010) during the current MMP period.
2	Minemakers shall advise the Minister of any changes to the proposal in accordance with clause 14A of the Administrative Procedures of the Environmental Assessment Act, for determination of whether or not further assessment is required.	1.5	Any changes to the project will be communicated to the Minister for Natural Resources, Environment and Heritage and the Department of Resources.
3	Minemakers shall continue to refine the mine plan and sequencing over the mine life to identify potential increases in backfilling and commit to backfilling where possible. Minemakers shall demonstrate maximisation of backfilling by providing detail of developments of the mine plan and sequencing, to be reported into the Mining Management Plan for the Project.	7.1.3	Minemakers will develop the mine plan and sequencing to ensure backfilling of pits is maximised during the current MMP period. Details of backfilling will be reported in the MMP as part of mine plan reporting.
4	Minemakers shall explore options to create natural profiles to the legacy waste rock storages and pits, to maximise visual amenity of legacy mine landscape. Consultation with a landscape designer is recommended. Creation of a 3-dimensional model of the proposed legacy landscape is recommended, to facilitate consultation discussions of legacy landscape profiles.	7.1	Minemakers will continue to develop the mine closure and rehabilitation plan throughout the life of the mine. As part of this process, Minemakers will refine the design of the final landform.
5	Minemakers shall continue to consult with the Central Land Council and traditional owners to fully account for and minimise to the greatest extent possible all negative environmental legacies and loss of amenity from the Project to current and future generations of traditional owners. The results of consultations shall be incorporated into mine closure and rehabilitation planning, and the Mining Management Plan for the Project.	7.1	Minemakers will continue consultation with the CLC during the current MMP period.
6	Minemakers shall establish an on-site nursery, to optimise practical revegetation logistics and Project rehabilitation trials, and to facilitate Indigenous employment. Details shall be presented in the Mining Management Plan for the project.	7.2.2	Minemakers will commence establishment of an on-site nursery during the current MMP period.
7	Minemakers shall create an auditable plan and timeline for rehabilitation trials, including seed bank investigations and testing of seed viability, for inclusion into the Mining Management Plan for the project.	7.1.3 and 7.6.1	Specific closure criteria will be developed as mine closure and rehabilitation planning is refined. The current MMP provides outcomes and closure concepts that represent Minemakers' current public commitments for the closure of the project.

No.	Recommendation	Reference in MMP	Minemakers Comment
8	Minemakers shall follow the Guidelines: <ul style="list-style-type: none"> • <i>Native seed storage for revegetation</i> (Florabank, 2010), with regard to storage of seed; and • <i>Weed Management on Mine Sites</i> (DoR, 2010) with regard to weed management planning. 	7.2.2	Section 7.2.2 of the MMP addresses revegetation, with the Florabank (2010) guidelines having been taken into account when preparing this section.
9	Minemakers shall establish Best Practice treatments to prevent erosion and control drainage of Waste Rock Storage slopes, appropriate to the semi arid environment. These shall be included in the Mining Management Plan for the Project.	4.2	Minemakers will implement best practice treatments to prevent erosion and control drainage in the current MMP period.
10	As a component of rehabilitation trials, Minemakers shall analyse whether topsoil seed banks to be applied to surfaces particularly vulnerable to erosion, such as Waste Rock Storage slopes, contain sufficient appropriate seed types to provide a quick stabilising role to protect topsoil and underlying soil profiles from erosion from the first heavy Wet season rains. Minemakers shall propose in the Mining Management Plan, contingency stabilising rehabilitation works to be applied in the absence of sufficient species being present within seed banks to stabilize soil profiles.	7.6	Minemakers will undertake revegetation and rehabilitation trials on disturbed areas throughout the life of the mine to evaluate the most effective rehabilitation techniques.
11	Minemakers shall develop the Erosion and Sediment Control Plan (ESCP) for the Project in consultation with the Land Management Unit of DNRETAS (as per Section 4.7.4 of the Supplement), prior to inclusion of the ESCP into the Mining Management Plan.	4.2 and the ESCP (Attachment 2b)	Minemakers has prepared the ESCP in consultation with the Land Management Unit of DNRETAS. This has included provision of a draft version of the plan for review and comment, with the final ESCP revised to take DNRETAS advice into account
12	Minemakers shall be aware of potential necessity for a rehabilitation, revegetation and monitoring program spanning a number of decades to meet all post-closure outcomes agreed to in Minemakers consultations with traditional owners. Calculation of environmental securities should reflect potential long-term requirements for monitoring and maintenance.	7.4.2	Maintenance of the site will continue until all lease conditions and completion criteria have been met.
13	Minemakers shall present details of the proposed timing and frequency of routine surveys for near threatened and data deficient flora species in the Mining Management Plan.	Flora management plan (Attachment 2d)	Details of surveys for threatened and data deficient flora species during the current MMP period are included flora management plan.
14	Minemakers shall develop appropriate survey schedules for flora species of conservation significance, including data deficient species, in consultation with the threatened species officer and Herbarium DNRETAS. Details shall be provided in the Mining Management Plan for the Project. Pre-clearance procedures shall be developed for threatened and data deficient flora species in consultation with the Herbarium DNRETAS.	Flora management plan (Attachment 2d)	Details of surveys for threatened and data deficient flora species during the current MMP period are included flora management plan.

15	Minemakers shall undertake regional and seasonal studies of data deficient flora species which may be present on-site, to better understand their regional / seasonal context within the Project Area. Survey results shall be included in the MMP, and supplied to Biodiversity Conservation DNRETAS in appropriate digital format.	Flora management plan (Attachment 2d)	Flora surveys targeting listed species of conservation significance were carried out as part of the EIS process. These results have been provided to Biodiversity Conservation DNRETAS. Results of these surveys have been summarised in the current MMP. Results for flora surveys conducted during operations will be included in the MMP and provided to the Biodiversity Conservation Unit of DNRETAS.
16	Minemakers shall explore potential for minimising (such as overlapping) statutory and non-statutory vegetation clearing corridors required for the various utilities to be placed beside proposed roads. Prompt revegetation of corridors shall occur where continued vegetation clearance is not required.	4.6.2	Minemakers will minimise vegetation clearing associated with utility and road corridors wherever possible. Revegetation will be as per the mine closure plan.
17	Minemakers shall revise proposed standard operating procedures for management of fauna road-strikes to fully address animal-welfare and safety objectives, including: <ul style="list-style-type: none"> • Risk of leaving large animal carcasses on the road, which presents risks of causing further accidents for other road users, particularly at night, on un-lit highways. • Risk of attracting scavenger fauna, such as eagles, and kites onto the highways risking further fauna strikes, and further accidents for other road users. • Avoiding preventable fauna deaths by providing effective procedures for rescue of injured wildlife, and /or recovery and care of orphaned wildlife that may still be present in the pouch of a freshly killed or injured parent. 	Fauna management plan (Attachment 2e)	Measures to manage fauna roadstrikes are outlined in the fauna management plan.
18	Minemakers shall inspect all vehicles, equipment, goods and machinery transported from Northern Queensland on entry to the mine-site to ensure no mosquito larvae are present in any open reservoirs or pockets containing water. Any mosquitoes found breeding in transported machinery etc. shall be sent to Medical Entomology, Department of Health and Families for identification. The water holding receptacle is to be subsequently treated with a 10% chlorine solution or residual insecticide such as lambda-cyhalothrin.	Mosquito management plan (Attachment 2f)	This recommendation has been included the mosquito management plan with the MMP.
19	Minemakers shall continue to seriously consider measures to reduce greenhouse gas emissions from the Project through identification of further opportunities to improve energy efficiency and utilise alternative, lower emission energy options. Minemakers shall consult with DNRETAS on opportunities to offset greenhouse gas emissions in the Northern Territory.	4.6.4	Minemakers will continue to investigate and implement measures to reduce greenhouse gas emissions in the current MMP period.
20	Minemakers shall identify measurable auditable outcomes for the Industry Participation Plan (IPP), and include these in the Mining Management Plan for the Project.	2.6.1 and 6.2.1	Minemakers will report on key metrics for the project, as per the Industry Participation Plan, to the Northern Territory Government. Current key metrics and reporting period is outlined in Section 2.6.1.

21	<p>Minemakers shall formulate a traffic management plan, identifying risks, potential scenarios, monitoring and contingency management measures to be applied.</p> <p>Minemakers shall consult with Road Network Division, Department of Lands and Planning to resolve any road related issues associated with the project. Consultation should clarify appropriate:</p> <ul style="list-style-type: none"> • Procedures for responding to significant traffic incidents; • Procedures for reporting of significant incidents; • Detail for the Traffic Awareness Program, prior to its delivery to members of Indigenous communities; • Liability for repairs or preventative maintenance of road degradation; • Requirements for, and design of any upgrades of road infrastructure, such as lighting of intersections; • Safe interaction of the haul trucks with tourist traffic, such as slower vehicles towing caravans, or vehicles wishing to overtake; • Management of driver fatigue and distraction; and • Any other road or traffic related issues for the Project. <p>Minemakers shall include the Traffic Management Plan in the Mining Management Plan for the Project.</p>	Traffic management plan (Attachment 3)	Minemakers has prepared a traffic management plan for the project. This is included as an attachment to the MMP.
22	<p>Minemakers shall include a commitment to maintaining groundwater quality, and include details of the groundwater monitoring program in the Mining Management Plan for the Project.</p> <p>Minemakers shall commit to ongoing evaluation of groundwater quality and depth data, and verification / refinement of the existing groundwater model for the Project area.</p>	Included in the Wonarah Phosphate Project Water Management Plan.	Minemakers has a Water Management Plan (WMP) for the mine site which details the use, management and monitoring associated with groundwater. The groundwater monitoring program is also detailed in the groundwater management plan.
23	<p>Minemakers shall prepare a formal biennial report and review the groundwater monitoring program every two years with particular consideration to the comparison of modeled and observed data. The report shall be included as part of the Mining Management Plan and forwarded to Water Resources DNRETAS. The report shall include as a minimum: monitoring data, data analysis and updates of model predictions of drawdown and recharge.</p>	Included in the Wonarah Phosphate Project Water Management Plan.	<p>A requirement for biennial review and reporting of the groundwater monitoring program is included in the WMP.</p> <p>Recommendation not applicable during the current MMP period as it is the first MMP period and is only for the first 12 months of operations.</p>
24	<p>If groundwater extraction impacts on other groundwater users, Minemakers shall provide another water supply by one or more of the following:</p> <ul style="list-style-type: none"> • Deepening existing bores • Providing additional bores • Determining a new area suitable for groundwater extraction • Trucking adequate water supplies to affected parties • Piping adequate water from its bores to a location required by affected bore user 	Included in the Wonarah Phosphate Project	<p>Water Management Plan.</p> <p>Mitigation and management measures for groundwater impacts are included in the WMP.</p>

25	Minemakers shall investigate opportunities to maximise the efficient use of water on site including reusing treated effluent; minimising sources of dust generation to reduce requirements for dust suppression; and using any stored water in pits as a seasonal supplement. Proposed measures are to be included in the Mining Management Plan for the Project.	4.2	Minemakers will continue to investigate and implement measures to maximize the efficient use of water on site in the current MMP period.
26	Minemakers shall report to the Department of Resources all incidents of overtopping of sediment ponds and release of water. Water quality of discharge water shall be monitored, and reported. Discharges from water holding structures travelling off the Mining Lease may potentially require a waste discharge licence, and must be reported to Environmental Operations section of DNRETAS, and to the Department of Resources.	4.2	Minemakers will report any overtopping of sediment ponds and release of water in the current MMP period to the Environmental Operations section of DNRETAS and the Department of Resources.