

# Mining Management Exploration Activities

## Northern Territory of Australia – Mining Management Act 2001

It is recommended that the Mining Management Plan (MMP) is completed in conjunction with the user guide available on the [Northern Territory Government website](#).

### Section 1 – Project Details

<b>Project Name</b> Provide new or existing project name	Winchelsea (Akwamburrkba) Island Project
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<b>Authorisation Number</b> Insert existing authorisation number, where applicable	1017-01
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<b>Operator Name</b> Use ASIC-ABR registered name (if a company), or name of the applicant	Winchelsea Mining Pty Ltd (Winchelsea)
<b>Operator ABN and ACN numbers</b>	ACN- 626 747 037 ABN- 92 626 747 037

<b>Location and Access Details</b> Include brief description of the location, access details, and distance to nearest town or community	<p>The project area is located on the remote Winchelsea Island off the north eastern coast of the Northern Territory. Access to the site is from helicopter or boat. Winchelsea will be accessing the Island via boat from Groote Eylandt.</p> <p>Winchelsea Island is located approximately 250km north of Borroloola.</p>
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<b>Target Commodity Details</b> Include target mineral commodities (i.e. gold, copper etc.)	Manganese
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## Mining Management Exploration Activities

<p><b>Mining Activities</b> Summarise the mining activities (exploration) to be the subject of the proposed Authorisation or Variation.</p> <p>Drilling programs over a maximum of four years are supported and encouraged and can be staged. Please refer to the guidelines for further information.</p>	<ul style="list-style-type: none"> <li>• NT EPA have issued Terms of Reference (ToR) that establish requirements to be met to inform an impact assessment required to support approval to mine. In order to address the ToR in full, additional works are required as outlined below.</li> <li>• Clause 2.2.6 of the ToR requires sufficient information on the Construction and Operation of the mine. Due to the complexity of the ore body and variance in physical structure from lump to fines, the project team require a greater level of understanding to define the boundaries of the mineral resource more accurately and inform the optimised ore processing method(s). This information has implications for water demand, process and export infrastructure and methods proposed for the mine, which all need to be addressed in the Environmental Impact Statement (EIS).</li> </ul> <p>To achieve the required level of understanding, an additional 19 small ore sample pits are proposed.</p> <p>These works are predominantly located on already cleared access tracks and disturbed areas with additional disturbance limited to ~480m<sup>2</sup> and tree clearing avoided. This approach means there is little to no impact to biodiversity values.</p> <ul style="list-style-type: none"> <li>• Clause 3.3 of the ToR require sufficient information to inform knowledge on groundwater processes and how the project may impact on these.</li> </ul> <p>To achieve this, 2 additional water monitoring bores are required to inform the understanding of interaction with groundwater, groundwater and water balance models and mitigation measures to protect the islands freshwater lens. This level of information is necessary to meet a Class 2 model and regulator expectations and provide sufficient certainty regarding assessment and mitigation planning for environmental impacts.</p> <p>The bores will be predominantly accessed on pre-disturbed tracks and developed by licenced contractors and registered.</p>
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<p><b>Proposed Schedule</b> Include start and finish dates of ground disturbing work</p>	<p>ASAP to December 2023</p>
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## Mining Interest and Land Ownership

List the mining interests (titles), the title holder name/s, the title expiry date and the Property name/Land holder (e.g. pastoralist or Aboriginal land trust) for each title.

Title Number	Title Holder	Expiry Date	Underlying Property Name or Land Holder
EL27521	Winchelsea Mining Pty Ltd (100%)	20/12/2024	NT Portion 6823- Anindilyakwa Land Trust
ML32704	Winchelsea Mining Pty Ltd (100%)	24/03/2052	NT Portion 6823- Anindilyakwa Land Trust

## Organisational Structure

Position Title	Name
Co- Chief Executive Officer	Mark Hewitt
Co- Chief Executive Officer	Dongfang Yu
Program Manager	Sean McCarthy
Tenement Manager	Holly Edgar

## Section 2 – Operator Self-Assessment of the Environmental Risk

The purpose of this self-assessment is to ensure Operators complete a project risk assessment of potential environmental impacts and are aware of other legislative obligations from various Agencies. As a result of this self-assessment, further information may be required in the form of a management plan to enable full assessment of the MMP. If you have any queries please contact a Mining Officer prior to submitting the MMP. Useful resources to assist with this self-assessment are provided in the User Guide.

### Environmental considerations

ASSESSMENT ASPECT	YES or NO	ACTIONS REQUIRED (if answered YES)	APPENDED INFORMATION (e.g. evidence of consultation with DEPWS and/or management plan where required).
<b>Step 1:</b> Are there any threatened flora and fauna species or habitats of significance that may occur in the proposed work area?	Fauna- Yes  Flora- No	The Operator must assess the likelihood of threatened species or their habitats occurring at or near the site. If the likelihood is high, then a “Significant Impact Assessment” must be undertaken and appended to this document.	Please see:  Appendix 4- Flora & Fauna Survey  Appendix 7- Likelihood Assessment
<b>Step 2:</b> Are there any known declared weeds within the proposed work area?	Yes	Seek advice from DEPWS – Weed Management Branch to determine if weeds are present on site and ensure management measures are appropriate for the level of activity proposed and attach a Weed Management Plan (if required).	Please see: Appendix 4- Flora & Fauna Survey  Appendix 2- Infonet Report.  Appendix 7- Likelihood Assessment  Appendix 8- SOP Noxious Weeds, Plant Disease & Pest Management

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ASSESSMENT ASPECT	YES or NO	ACTIONS REQUIRED (if answered YES)	APPENDED INFORMATION (e.g. evidence of consultation with DEPWS and/or management plan where required).
<b>Step 3:</b> Will you be using water from bores or other sources for the operation?	No	Water related matters on mineral titles are no longer exempt from the <i>Water Act 1992</i> . Please consult with DEPWS Water Resources and/or familiarise yourself with the <i>Water Act</i> to ensure compliance under this Act when undertaking exploration activities.	Environmental water consumption is not required for the pit sampling or bore development.

## Environmental assessment and cultural considerations

ASSESSMENT ASPECT	YES or NO	MANAGEMENT REQUIREMENTS
<b>Step 4:</b> Is your project likely to have a significant impact on the environment?	No	Flora and fauna surveys have been conducted to inform avoidance areas. New disturbance areas are limited to ~480m <sup>2</sup> and will avoid clearing of trees or impacts to biodiversity values. Standard controls for hydrocarbon spills will be in place. Appendix 4- Flora & Fauna Survey EPA self-assessment at Appendix 6.
<b>Step 5:</b> Are there Aboriginal sacred sites in the Project area?	No	The operator has received abstracts from the AAPA register of sacred sites, which advise that there are no restricted works areas or registered sacred sites within the project areas.  The AAPA Abstract of Records is attached at Appendix 1.  The ALC exclusion area will be avoided.
<b>Step 6:</b> Are there archaeological and heritage sites in the Project area?	No	There are no declared heritage places or any previously recorded Aboriginal archaeological sites within the project area.  A cultural heritage report of Akwamburrkba was prepared for the Anindilyakwa Land Council by SHIM Consulting. 10 sites were identified as having the potential to be directly affected by any exploration or mining. All sites will be avoided for the development of the test pits and groundwater bores. A copy of the cultural heritage report is within Appendix 5.  At all times, Winchelsea will be working closely with ALC anthropologists, environment and ranger staff.

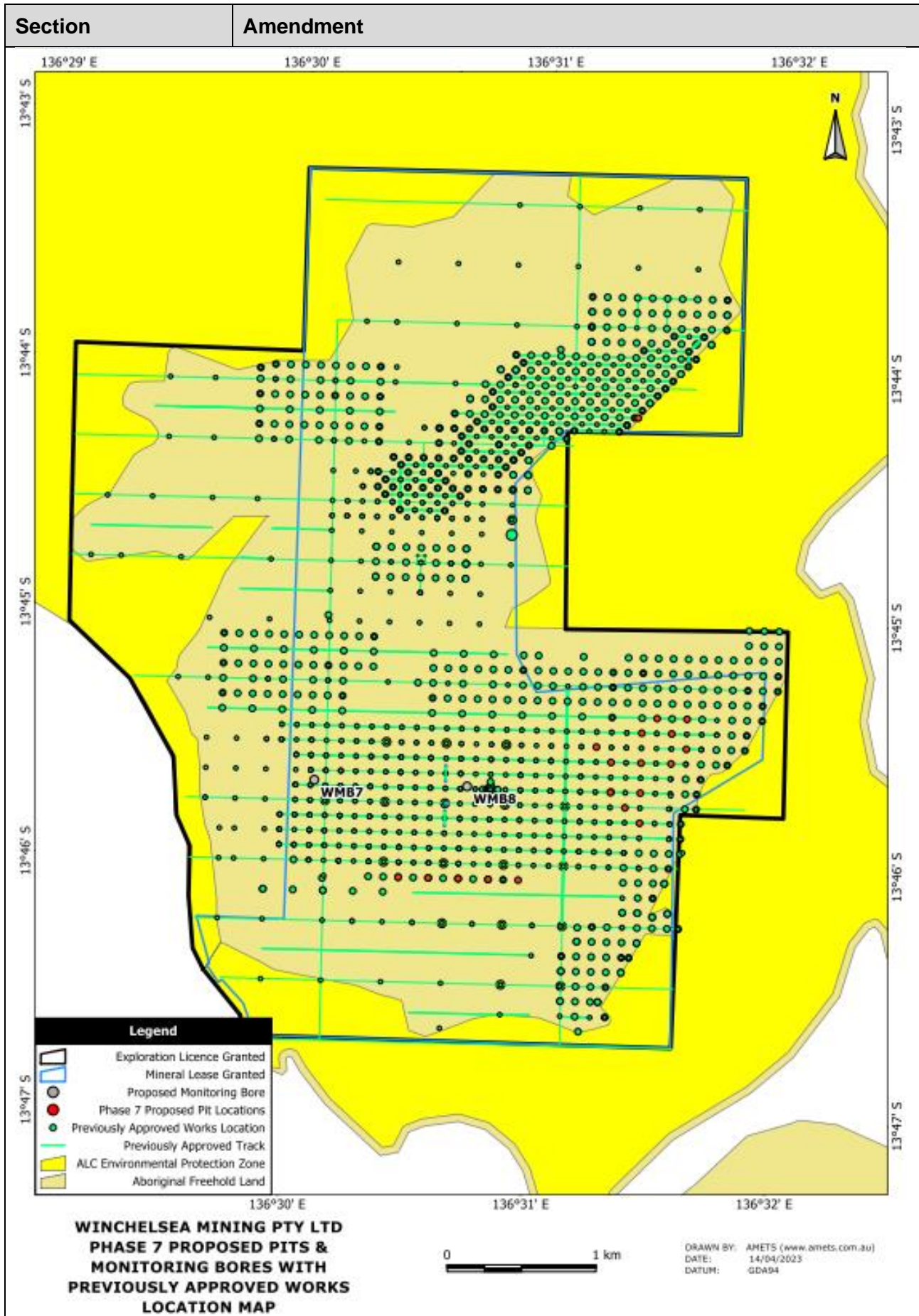
## Section 3 – Amendments

As per Section 41(3) of the *Mining Management Act*, an MMP reviewed and amended under Section 41(1)(a) is to have amendments made since the previous MMP submission clearly identified.

Section	Amendment
<b>Section 1 – Project Details</b>	<p>Addition of new proposed works (19 small test pits and 2 groundwater monitoring bores) within pre-approved disturbance areas and pre-approved methods.</p> <p>Addition of Mining Lease into project, as ML was granted over EL27521. Sean McCarthy updated as new Program Manager.</p>
<b>Section 2 – Operator Self-Assessment of the Environmental Risk</b>	<p>Updated notes on monitoring bores.</p>
<b>Section 4 – Activities Proposed for this MMP only</b>	<p>Proposed new works detailed.</p>
<b>Section 6- Environmental Management</b>	<p>Updated with mitigation measures</p>
<b>Appendix 3</b>	<p>Updated security calculation spreadsheet.</p>
<b>Notes</b>	<p>AMETS on behalf of Winchelsea Mining emailed the NT EPA on 14 September 2022, to advise of these proposed works.</p> <p>The same work methods previously approved by DITT will be utilised for the proposed new works. The majority of the proposed works are within previously approved work areas that have been assessed by DITT and DEPWS and where previous drilling or track clearances have already taken place. Therefore, Winchelsea Mining request that these works be assessed by DITT only with no requirement for an EPA referral.</p> <p>Further communication from Winchelsea Mining was submitted to NT EPA on 23 September 2022 requesting confirmation by NT EPA that the DITT are able to provide approval for the proposed sampling pits to inform the Winchelsea Mine EIS.</p> <p>On 22<sup>nd</sup> February 2023 the NT EPA provided a response letter advising “Should the statutory decision-maker decide to authorise activities under the Mining Management Act for the purpose of informing the environmental impact assessment process, the NT EPA recommends that measures be put in place to limit potential impact to the greatest extent practicable.” In response to this requirement, the number of test pits were revised down from 37 to 19 and locations have been limited to existing disturbance areas to avoid new disturbance.</p>

## Mining Management Exploration Activities

Section	Amendment
	<p>New disturbance will be limited to ~480m<sup>2</sup> of ground disturbance and clearing of trees will be avoided.</p> <p>The pit sampling works under this updated MMP are to obtain samples for processing testing to assist in selecting wet processing equipment for mining.</p> <p>The bore works under this updated MMP are required to advance the groundwater model to a class 2 groundwater model to inform the environmental impact assessment. The bore holes will also provide the below:</p> <ul style="list-style-type: none"> <li>• To fill the data gap for the depth of existing salinity on the western portion of the island where rough model drawdown impacts were anticipated to be greatest.</li> <li>• To allow us to determine if the topographic ridge is due to a sandstone ridge or basement high, as these will have large implications on Specific Yields.</li> <li>• To close out geological questions and inform salinities in the middle of the island.</li> <li>• Improve our understanding of hydraulic conductivity.</li> <li>• These bores will provide additional information on the fresh/saltwater interface and aquifer responsiveness.</li> </ul> <p>The bores are proposed within the existing ML and predominantly pre-disturbed areas to avoid any sensitive habitats. They will require a small pad (18m x 15m each or a total of 0.054 ha) developed during drilling. The bores would be a monument design with a small (1m x1 m) concrete collar on the surface. No clearing of tracks would be required as existing tracks will be utilised and trees avoided in accessing new sites P7TP019 and P7TP005.</p> <p>Refer Appendix 131for Figure presenting proposed new work locations in relation to pre-approved and existing disturbance areas and ALC exclusion zone.</p>





## Mining Management Exploration Activities

Section	Amendment
Appendices	Appendices that are not applicable removed.  Addition of Appendix 12. Letter from Xenith Consultants advising of program amendment.

## Section 4 – Activities Proposed for this MMP only

Mining Interests (i.e. titles)	EL27521
Number and type of proposed exploration drill holes	Nil
Maximum depth of proposed holes (m)	N/A
Number and size of drill pads to be cleared (Length:18 m x Width:15m)	N/A
Total area of drill pads to be cleared (ha)	2 drill pads at 18 m x 15m= <b>0.054 Ha</b>
Number of proposed water bores	2 water monitoring bores to inform the groundwater model required for the EIS as well as provide for monitoring during operations and closure.
Is drilling likely to encounter groundwater? (Y, N, unsure)	Yes
Number of bulk sample pits	See below pits.
Total bulk sample (tonnes) (Length: m x Width: m x Depth: m)	See below Amount of material to be extracted and stockpiled.
Bulk sample pits approved under <i>Mineral Titles Act</i> ? (Y or N)	N/A- All pits will be within ML32704.
Number of Sampling pits	19 small pits are required to obtain samples needed for processing testing.

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Mining Interests (i.e. titles)	EL27521
<p>Dimensions (Length: m x Width:m x Depth: m)</p>	<p>Approximately 19 Pits will be within the below dimensions.</p> <p>Pit Base- 2.5 m x 5.5m x 2m First bench- 4.5 m x 4.5m x 2m Second Bench – 6.5m x 6.5m x 2m (required only if pit &gt;4m deep)</p> <p>All pits will have ramps, just in case small animals enter the pits, they will be able to escape.</p>
<p>Amount of material to be extracted and stockpiled</p>	<p>19 Pits will be within the below dimensions.</p> <p>Pit Base- 2.5 m x 2.5m x 2m = 238 m<sup>3</sup> (all pits) First bench – 4.5 m x 4.5m x 2m = 652 m<sup>3</sup> (all pits) Second Bench – 6.5m x 6.5m x 2m =558 m<sup>3</sup> (13 pits) <b>Total = 1,447 m<sup>3</sup></b></p> <p>Sampling of each of these test pits will include approximately 6 x 2 kg samples for assay.</p> <p>Some test pits may also have a bulk sample taken which is planned to be a <u>maximum</u> of 3 x 44-gallon drums per test pit (approximately 1 tonne of sample). Note: in most instances only 2 x 44-gallon drums will be sampled per bulk sample pit (approximately 600kg of sample).</p> <p>The sample pits will be back-filled with the disturbed material as soon as they are logged, photographed, and sampled.</p>
<p>Total area of pit pads to be cleared (ha)</p>	<p>Excepting P7TP019 and P7TP005, no clearing is required for the pit pads.</p> <p>The dimensions for the 19 new Pits on existing cleared areas @ 5 x 10m X 6m= 360 m<sup>2</sup> plus 13 x 10m x 8m = 1,040 m<sup>2</sup>.</p> <p><b>Total= 1,400 m<sup>2</sup> or 0.14 Ha</b> (of which <b>0.014 Ha</b> is new disturbance)</p>

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Mining Interests (i.e. titles)	EL27521
Gravel Pit (Length: 100 m x Width: 100 m x Depth: 1 m)	Nil
Length of line/track clearing (km: 78.57 x Width: 5 m)	All tracks required will be on previously cleared tracks. Nil additional tracks required.
Logistic supply base area to be cleared (ha)	Nil
Base Infrastructure (i.e. demountable, tents)	Nil
Previous disturbance yet to be remediated on title (ha) if known	Nil
Other	Refer Appendix 11 for proposed pit and groundwater monitoring bore locations
Total area disturbed proposed (ha)	0.054 Ha associated with 2 new groundwater bore pads  The total area including pits on existing disturbed areas is <b>0.194 Ha.</b> Refer Appendix 10 for spreadsheet of proposed pit dimensions

### Section 5 – Previous Disturbance (for existing Authorisations only)

The 'Disturbance Tracking' spreadsheet is located at Appendix 9. Refer Appendix 13 for a figure of the proposed new sites in relation to the pre-disturbed areas.

## Section 6 – Environmental Management

By checking these shaded boxes, you are agreeing to implement the following minimum environmental management standards on the project area. Where boxes have been left unchecked, justification is required.

6.1	✓	Blade-up approach for clearing will be used (i.e. no windrows, leave root stock and topsoil)
6.2	✓	Significant vegetation will be avoided during clearing (i.e. large trees, specimens providing habitat or food sources, riparian vegetation, and threatened species) An existing condition that Winchelsea adheres to is all trees greater than 50cm diameter at breast height area avoided during clearing activities in order to reduce the potential impact on arboreal species such as the Brush-tailed Rabbit rat and Masked Owl, which use large-hollow bearing trees.
6.3	✓	Vegetation clearing during, and immediately after rainfall events, will be avoided
6.4	✓	Vegetation clearing will be kept to the minimum required to safely traverse vehicles and drill rigs along tracks and drill pads
6.5	✓	Where blade-up techniques cannot be employed, topsoil and vegetation will be stockpiled appropriately for rehabilitation purposes
6.6	✓	All employees and contractors will be trained and inducted in relation to the management of environmental risks in the work area, including weeds, waterways, threatened species, soil erosion, sacred sites and heritage areas
6.7	✓	Sumps will be lined or tanks of appropriate size to contain water, sediment and drilling fluids encountered during drilling, will be used
6.8	✓	Sumps, drill holes, and fuel stores will be located away from environmentally significant areas and water courses
6.9	✓	Excavations (sumps, costeans and pits) will be appropriately ramped to allow fauna egress. Shallow dipping ramp for access, which also allows egress for any animals that enter the pit.
6.10	✓	Drill holes will be securely capped immediately after drilling
6.11	✓	Vehicle hygiene measures will be employed to prevent the introduction and spread of invasive species and pathogens when mobilising vehicles and equipment from one location to another
6.12	✓	Hydrocarbon spills will be minimised using liners and drip trays under machinery, and appropriately sized spill-kits available in the event of a spill
6.13	✓	Hazardous substances (including hydrocarbons) will be stored and handled in accordance with relevant Australian Standards
6.14	✓	Hydrocarbons will be stored in lined and bunded areas Internally bunded steel isotanks.
6.15	✓	Waste will be stored securely while on-site to minimise windblown rubbish and access by feral animals

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6.16	✓	Waste will be removed off-site and disposed of at an appropriate waste management facility- compliant waste management facility on Groote Eylandt.
6.17	✓	All environmental incidents will be reported to the Department in accordance with Section 29 of the <i>Mining Management Act</i> .
6.18	✓	Acid and Metalliferous Drainage (AMD) and Potentially Acid Forming (PAF) material derived from drilling cuts will be managed to avoid AMD and PAF related issues on site.
6.19	<b>N/A</b>	Radioactive/NORM drill cuttings will be managed to avoid radiation related issues on site.
6.20	✓	Dust management will be implemented on site.

### Justification and alternative management measures:

- Works will only occur between 7am to 6pm to avoid disturbances in the evening to nocturnal species.
- Works to only occur 3-4 hours at a single location to ensure works are minimal and temporary.
- Works will be kept to existing pre-disturbed areas where possible.
- GPS will be used to ensure that the proposed works do not enter the ALC exclusion zone.
- Areas of proposed disturbances will be inspected by an experienced ecologist prior to any activities. Any non-listed fauna species will be safely relocated outside the minor disturbance footprint. Any site where a fauna species listed under the NT EP Act or Cth EPBC Act is identified as being present, would involve relocating the pit to a satisfactory adjacent area that is clear of a listed threatened species.
- Once pits are logged and sampled, they will be backfilled asap, to prevent fauna entering the pit. The ramp into the pit will ensure any fauna that enters the pit can escape.
- All movement of vehicles and equipment will follow strict ALC biosecurity procedures.

## Section 7 – Rehabilitation and Closure

By checking these shaded boxes, you are agreeing to implement the following minimum rehabilitation standards on the project area. Where boxes have been left unchecked, justification is required.

A refund of security related to completed rehabilitation on site requires the submission of a rehabilitation report including photographs, an updated security calculation and updated disturbance tracking spreadsheet to the Department.

7.1	✓	Drill holes will be plugged below ground level at a minimum depth of 0.4 metres and soil mounded to prevent subsidence, within 6 months of completion of drilling.
7.2	✓	Drill holes encountering multiple or confined aquifers will be grouted with concrete.
7.3	✓	Drill samples/spoil will be returned down drill holes, buried in sumps, or removed from site.
7.4	✓	All drill hole and access markers including flagging tape, wooden markers and star pickets will be removed from site.
7.5	✓	Cut and fill drill pads will be re-contoured to be consistent with the surrounding terrain.
7.6	✓	Drill pads and compacted areas along the contour (on sloping ground) will be ripped/scarified of and tracks will be cross-ripped (zig-zag).
7.7	✓	Tracks will be rehabilitated, including pushing in all windrows, unless otherwise agreed in writing by the land holder or appropriate third party.
7.8	✓	Appropriate erosion and sediment controls will be installed where erosion is evident or likely to occur.
7.10	✓	Access through watercourses will be removed and banks restored.
7.11	✓	All previously disturbed areas will be stable, with no evidence of active soil erosion.
7.12	✓	All excavations will be backfilled within 6 months of their completion.
7.13	✓	All water bores will be decommissioned unless otherwise agreed in writing by the land holder or appropriate third party.
7.14	✓	All rubbish and infrastructure will be removed from site.
7.15	✓	Topsoil will be replaced and vegetation re-established.
7.16	✓	Contaminated soils (e.g. hydrocarbon or hazardous chemicals) will be rehabilitated or removed from site.
7.17	✓	Monitoring will be undertaken following the wet season or a significant rainfall event.

Justification and alternative management measures:

The works are required to allow Winchelsea Mining complete mine infrastructure and water use planning and to address the requirements of the Environmental Impact Statement. In order to minimise further disturbance, the number of test pits were revised down from 37 to 19 and locations have been predominantly limited to existing disturbance areas to avoid new disturbance, with commitments of no clearing of trees.

## Section 8 – Required Attachments

8.1	✓	Initial Application for Authorisation or variation of Authorisation (only if details on the form have subsequently changed).
8.2	<b>N/A</b>	Nomination of Operator Form, where required
8.3	✓	Security Calculation Spreadsheet
8.4	✓	Evidence of Land Access Agreement if operating on an Exploration Licence (EL) on Pastoral Lease (e.g. two-ways exchange of email)
8.5	✓	Disturbance tracking spreadsheet (for existing Authorisations)
8.6	✓	Spreadsheet with coordinates of proposed drill holes or polygons of target areas
8.7	✓	KML/shape files/track logs of proposed tracks, camp sites and proposed drill holes or polygons of target areas
8.8	✓	Map(s) of the work area(s) showing: <ul style="list-style-type: none"> <li>1. title boundaries and title numbers</li> <li>2. current and proposed drill holes, or polygons of target areas</li> <li>3. current and proposed tracks</li> <li>4. rehabilitated areas</li> <li>5. camp sites</li> <li>6. heritage sites or significant environmental areas</li> <li>7. environmental constraints</li> </ul>
8.10	<b>N/A</b>	Radiation Management Plan (if applicable)
8.12	✓	Document(s) being appended in relation to Section 2 (if any): <ul style="list-style-type: none"> <li>- Appendix 2- Infonet Report.</li> <li>- Appendix 4- Flora &amp; Fauna Survey</li> <li>- Appendix 7- Likelihood Assessment</li> <li>- Appendix 8- SOP Noxious Weeds, Plant Disease &amp; Pest Management</li> </ul>