

REFERRAL OF A PROJECT FOR A DECISION ON THE NEED FOR ASSESSMENT UNDER THE *ENVIRONMENT EFFECTS ACT 1978*

REFERRAL FORM

The *Environment Effects Act 1978* provides that where proposed works may have a significant effect on the environment, either a proponent or a decision-maker may refer these works (or project) to the Minister for Planning for advice as to whether an Environment Effects Statement (EES) is required.

This Referral Form is designed to assist in the provision of relevant information in accordance with the *Ministerial Guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Seventh Edition, 2006). Where a decision-maker is referring a project, they should complete a Referral Form to the best of their ability, recognising that further information may need to be obtained from the proponent.

It will generally be useful for a proponent to discuss the preparation of a Referral with the Department of Planning and Community Development (DPCD) before submitting the Referral.

If a proponent believes that effective measures to address environmental risks are available, sufficient information could be provided in the Referral to substantiate this view. In contrast, if a proponent considers that further detailed environmental studies will be needed as part of project investigations, a more general description of potential effects and possible mitigation measures in the Referral may suffice.

In completing a Referral Form, the following should occur:

- Mark relevant boxes by changing the font colour of the 'cross' to black and provide additional information and explanation where requested.
- As a minimum, a brief response should be provided for each item in the Referral Form, with a more detailed response provided where the item is of particular relevance. Cross-references to sections or pages in supporting documents should also be provided. Information need only be provided once in the Referral Form, although relevant cross-referencing should be included.
- Responses should honestly reflect the potential for adverse environmental effects. A Referral will only be accepted for processing once DPCD is satisfied that it has been completed appropriately.
- Potentially significant effects should be described in sufficient detail for a reasonable conclusion to be drawn on whether the project could pose a significant risk to environmental assets. Responses should include:
 - a brief description of potential changes or risks to environmental assets resulting from the project;
 - available information on the likelihood and significance of such changes;
 - the sources and accuracy of this information, and associated uncertainties.
- Any attachments, maps and supporting reports should be provided in a secure folder with the Referral Form.
- A CD or DVD copy of all documents will be needed, especially if the size of electronic documents may cause email difficulties. **Individual documents should not exceed 2MB.**

- A completed form would normally be between 15 and 30 pages in length. Responses should not be constrained by the size of the text boxes provided. Text boxes should be extended to allow for an appropriate level of detail.
- The form should be completed in MS Word and not handwritten.

The party referring a project should submit a covering letter to the Minister for Planning together with a completed Referral Form, attaching supporting reports and other information that may be relevant. This should be sent to:

Postal address

**Minister for Planning
GPO Box 2392
MELBOURNE VIC 3001**

Couriers

**Minister for Planning
Level 7, 1 Spring Street
MELBOURNE VIC 3001**

In addition to the submission of the hardcopy to the Minister, separate submission of an electronic copy of the Referral via email to ees.referrals@dpcd.vic.gov.au is encouraged. This will assist the timely processing of a referral.

PART 1 PROPONENT DETAILS, PROJECT DESCRIPTION & LOCATION

1. Information on proponent and person making Referral

Name of Proponent:	Dart Mining NL
Authorised person for proponent:	Lindsay Ward
Position:	Managing Director
Postal address:	Level 2, 395 Collins St, Melbourne, Vic, 3000
Email address:	lward@dartmining.com.au
Phone number:	03 9621 1299
Facsimile number:	
Person who prepared Referral:	Christine Wyatt
Position:	Environmental and Planning Approvals Strategic Advisor
Organisation:	GHD Pty Ltd
Postal address:	Level 8, 180 Lonsdale St, Melbourne, Vic, 3000
Email address:	Christine.wyatt@ghd.com
Phone number:	03 8687 8473
Facsimile number:	
Available industry & environmental expertise: (areas of 'in-house' expertise & consultancy firms engaged for project)	<p>GHD Pty Ltd</p> <ul style="list-style-type: none"> • Planning & Environmental Assessment • Cultural heritage <p>Biosis Pty Ltd</p> <ul style="list-style-type: none"> • Flora & Fauna <p>URS Pty Ltd</p> <ul style="list-style-type: none"> • Water Management (surface & groundwater) <p>Lycopodium Pty Ltd</p> <ul style="list-style-type: none"> • Project management • Plant and Process Design <p>ATC Williams Pty Ltd</p> <ul style="list-style-type: none"> • Tailings Storage and Management <p>Parsons Brinckerhoff Pty Ltd</p> <ul style="list-style-type: none"> • Power supply and generation <p>Mining Plus Pty Ltd</p> <ul style="list-style-type: none"> • Mine Design and Planning

2. Project – brief outline

Project title: Unicorn Project
<p>Project location: (describe location with AMG coordinates and attach A4/A3 map(s) showing project site or investigation area, as well as its regional and local context)</p> <p>The Unicorn Project (the "Project") is located 17 km south east of Corryong in North East Victoria, on the western slopes of Mt Unicorn (refer Appendix A).</p>

The Project components are currently associated with three investigation areas: Mine Investigation Area incorporating an ore processing facility, Tailings Storage Facility (TSF) Investigation Area and Broader Power Line Investigation Area. The investigation areas are based on the broad geographic locations where project activities may be undertaken. The investigation areas are much larger than the actual impact area of the project to allow for flexibility in siting of ancillary activities such as access roads.

The Mine Investigation Area and the TSF Investigation Area are located on Crown land in State Forest, and occur entirely within Victoria.

A number of potential alignments associated with power supply are currently being investigated. A Broader Power Line Investigation Area within Victoria and NSW has been identified. Within this investigation area two potential or 'indicative' alignments have been identified based on different grid connection points. These 'indicative' alignments have been assessed as part of the preliminary flora and fauna assessment (see **Attachment B**) and desktop cultural heritage assessment (see **Attachment C**), where they are referred to as the 'power line investigation area'. It should be noted that the options assessment and identification of a preferred power line alignment within the wider investigation area is yet to be undertaken. It is envisaged that assessment of the preferred alignment would be undertaken at a later stage.

Table 1 presents AMG coordinates for the perimeter of the TSF and Mine Investigation Areas and indicative power line alignments (refer **Appendix B**).

Table 1 AMG coordinates for the perimeter of the TSF and Mine Investigation Areas and indicative power line alignments.

Point No.	Easting	Northing	Point No.	Easting	Northing
1	602842.080	5990559.20	24	588039.870	5975599.11
2	599009.410	5992658.92	25	587647.700	5974715.10
3	596580.360	5993082.54	26	587493.260	5974008.36
4	594091.820	5992330.78	27	587001.630	5973402.23
5	593242.850	5990134.05	28	585477.940	5971379.56
6	593127.360	5987921.86	29	584538.260	5971625.82
7	591642.600	5986366.01	30	584912.190	5972448.97
8	592706.900	5989070.02	31	584654.860	5972548.30
9	591781.730	5991638.04	32	584869.190	5973543.20
10	592212.480	5992270.05	33	585368.140	5974481.86
11	591560.730	5994086.06	34	585127.400	5975448.37
12	591662.970	5995692.08	35	584303.970	5975266.28
13	590659.560	5997140.07	36	584175.690	5975722.65
14	589811.910	5985447.01	37	584698.470	5976044.97
15	589279.790	5984098.01	38	585836.220	5976068.59
16	589791.610	5981672.98	39	586381.820	5976363.61
17	590377.130	5980753.03	40	586577.040	5976615.86
18	590437.110	5980181.45	41	586890.800	5976763.56
19	590879.150	5979481.56	42	587670.010	5978797.81
20	590353.210	5978966.31	43	589367.330	5980666.99
21	590427.400	5977461.62	44	589174.300	5981204.96
22	590411.630	5977094.39	45	589196.090	5981427.68
23	587820.420	5976132.73	46	589605.460	5981705.58

After Corryong, the next closest town is Khancoban, located approximately 9 km to the north-west of the Unicorn mine site in NSW. The closest main roads to the site are the Benambra-Corryong Road to the east and the Murray Valley Highway to the north.

The Project lies within the upper headwaters of the River Murray, or the 'Upper Murray' catchment, within the Murray Darling Basin. The main sub-catchments feeding the River Murray in this area are Corryong Creek, Thowgla Creek and Biggara Creek systems. Waterways that intersect the Mine and the TSF Investigation Areas include Teapot Creek, McCormack Creek, Paddock Creek, Dinner Creek, Hayes Creek and Jarvis Creek. The River Murray is located approximately 5.5 km due east of Mt Unicorn.

The nearest National Park is the Alpine National Park, 6 km to the southeast of the project area. The Burbibuyong Creek Reference Area lies 8.5 km to the west.

Short project description (few sentences):

The Unicorn Project is a proposed open-cut mining project. The proposed operations would involve the mining and production of molybdenum, silver and copper ore concentrates for export. It is estimated that 10 million tonnes of ore would be mined and processed annually over the 20 year life of the mine.

3. Project description

Aim/objectives of the project (what is its purpose / intended to achieve?):

The project objective is to establish and operate an economically viable open cut mine to extract molybdenum, silver and copper from a proven deposit. This greenfields mining project is expected to have a mine life in the order of 20 years.

The project would construct all necessary infrastructure required to facilitate the operation of the mine, the processing of ore, storage of waste rock and tailings and the transport of ore concentrate to market. The final stage of the project would include appropriate mine closure and rehabilitation of the areas associated with the mining, ore processing and tailings storage activities.

Background/rationale of project (describe the context / basis for the proposal, eg. for siting):

In recent years Dart Mining NL (hereafter Dart Mining) has undertaken a variety of exploration activities in the Corryong region as part of its ownership of exploration licence EL4726. Exploration in the Mount Unicorn area has confirmed the presence of a significant economic deposit of molybdenum, with other metals such as silver and copper also being potentially available. Modelling of the Unicorn deposit has estimated a total Measured, Indicated and Inferred Mineral Resource of 203 million tonnes at 0.06% Molybdenum.

Molybdenum is both a traditional and new age / future metal with unique characteristics. Its primary use is as an essential metal in the manufacture of steel where it adds strength, hardness and toughness as well as increasing steel's resistance to corrosion. Molybdenum also has a range of chemical uses including acting as a catalyst to remove impurities, including sulphur, during crude oil production. It is also used in the paint and plastics industry.

Molybdenum has a growing use in the renewable energy sector where it is used in the manufacture of solar panels and has a potential use as the electrode plate for the separation of hydrogen and oxygen to produce hydrogen energy. Molybdenum is also used in nano-technologies to make electrical goods smaller.

Dart Mining considers that a variety of factors make the Unicorn project viable. These include:

- the ongoing international demand for molybdenum;
- the presence of an ore body which is both technically and economically accessible;
- the availability of key project inputs including power, water and access to a skilled workforce in the Corryong region; and
- existing regional transport infrastructure to facilitate the movement of ore concentrates to market.

The Project is currently in the pre-feasibility stage following the completion of a scoping study in August 2012. The pre-feasibility is evaluating a variety of options including the details of the mining method, on-site ore transport options, power and water supply options, the siting of key infrastructure and the management of tailings and waste materials.

Dart has an approved work plan to carry out a drilling investigation program on exploration licence EL4726. An amendment to the work plan was approved on 13 March 2012.

Main components of the project (nature, siting & approx. dimensions; attach A4/A3 plan(s) of site layout if available):

The main components of the Project are listed below. Their location (or potential location) and relative size are shown in **Appendix B**.

The Project will include the following key components:

- Open pit mining
- Ore processing facility
- TSF, including waste rock storage and possibly incorporating diversion drains to maintain creek flow
- Water supply, storage and discharge
- Electrical power supply
- Buildings

A description of each of these project elements is provided in Section 2 of the Project Development Concept Report (**Attachment A**).

A summary of the key components is provided as follows:

Open pit mining

The ore body would be mined from the location shown in **Appendix B** using open pit methods which involve the construction of a series of benches and result in the progressive deepening of pit. Ore crushing would be undertaken either within the pit, immediately adjacent to it or possibly at the ore process facility. The approximate footprint of the mine site is 16 Ha.

Ore processing facility

The crushed ore would be transported to a nearby ore processing facility (preferred location within broad investigation area shown in **Appendix B**) via either ore passes and underground conveyor decline or surface conveyor. The facility would include an ore storage area, processing equipment, concentrate storage and handling, and waste (tailings) collection and transport. The approximate footprint of the ore processing facility is 5 Ha.

Tailings storage facility

The TSF would be constructed in part of the Bull Paddock Creek catchment (shown in **Appendix B**). The embankment of the TSF would be constructed in a series of stages. Tailings would be discharged into the facility where water would be recovered and reused in the mine and ore processing facility. Seepage from the embankment would be captured and discharged back into the facility. The life of mine (20) year volumetric tailing storage requirement has been estimated to be approximately 200 million tonnes. The TSF footprint at full capacity is expected to be 300 Ha.

The TSF may possibly incorporate a constructed diversion drain which can be used to regulate the amount of upstream catchment water entering the TSF. Upstream flows in excess of the volume required for Project operations could be diverted into the Bull Paddock Creek catchment.

Waste rock material produced from the open cut would be comprised of low grade porphyry, altered sandstone and breccia and is expected to be non-acid forming. The quantity of waste rock is estimated to be approximately 30 million tonnes. Crushed waste rock material is expected to be incorporated into the TSF embankment. As the TSF embankment is to be built in stages, waste rock would be temporarily stored in-pit or transported via haul truck for storage within the TSF boundary until such time as it can be used in the next stage of the TSF embankment construction.

Water supply, storage and discharge

Water is likely to be supplied from on-site sources including on-site surface water harvesting from the TSF and utilising groundwater surrounding the ore body. The potential for the water supply to be supplemented by water from bore fields in the vicinity of the project or pumped directly from the Murray River is also under investigation. The Project would require approximately 15 GL/year in process water, of which it has been estimated that approximately 4 GL/year would be required in 'make up' water.

Electrical power supply

Electricity would be supplied via an upgrade and extension to the existing electricity network.

Potential alignment and connections points to the power supply network are under investigation. The total estimated average power requirement of the Project is 40 MW.

Buildings

The Project would include an administration office, workshop, laboratory, amenities, together with fuel and spares stores located near the ore processing facility.

Transport

Bagged concentrate material would be trucked from the site to the Ettamogah intermodal rail hub immediately north of Albury-Wodonga, where it would be loaded into containers and transported by rail to the Port of Melbourne. No augmentation of the intermodal hub would be required. The transport route (approximately 172 km) is anticipated to utilise Bunroy Road, the Upper Murray Road, the Murray Valley Highway, Bandiana Link Road and the Hume Highway.

Ancillary components of the project (eg. upgraded access roads, new high-pressure gas pipeline; off-site resource processing):

Ancillary components of the Project are anticipated to include the construction of a site access road on a new alignment and other site access tracks.

Key construction activities:

Key pre-construction and construction activities are anticipated to include:

- Vegetation clearing to establish site access, road and infrastructure alignments and the process plant site / laydown area
- Topsoil stripping and stockpiling
- Earthworks associated with new access roads and the Teapot Creek water storage dam
- Construction activities associated with the mine and ancillary infrastructure including:
 - ore storage area
 - ore processing facility
 - power supply and distribution
 - transport, bulk handling and truck loading facilities
 - quarrying and establishment of borrow areas for use in the TSF
 - Stage 1 of the TSF
 - mine pit, ore passes and decline (if required)
 - ore conveyance infrastructure
 - pipelines for the transport of tailings and return water
 - haul roads and access tracks
 - water supply and treatment infrastructure
 - site offices, laboratory, workshop and amenities buildings

Key operational activities:

The key operational activities for the Project over the expected 20 year mine life are expected to include:

- Drill and blast operations
- Haul truck operations
- Ore crushing
- Ore processing and concentrate production
- Waste rock transport and storage
- Fuel and chemical storage
- Tailings management
- Water management
- Off-site transport of concentrate
- Maintenance of site office, workshop, explosives storage buildings
- Employee and contractor transport

<p>Key decommissioning activities (if applicable):</p> <p>Decommissioning activities would be progressively undertaken during the life of the project (e.g. closure and revegetation of disturbed areas which are no longer active) and at the end of mining and processing activities, and would be likely to include:</p> <ul style="list-style-type: none"> • Clean and make good all hazardous storage structures • Sealing and rehabilitation of mine portals, ore passes and ventilation shafts (if constructed) • Contouring, topsoiling and revegetating any waste rock storage areas not rehabilitated during the life of the operation • Shaping of the surface of the mine pit to achieve a stable and final profile • Removal of all infrastructure including process plant, workshops and offices, plus their footings, together with rehabilitation of the site(s) • Implementation of closure processes agreed with government, TSF closure activities, decommissioning ancillary infrastructure, rehabilitation of access tracks and any bore fields and continue the environmental monitoring programmes setup during the construction of these facilities for the agreed period following cessation of activities, and • Ongoing revegetation and rehabilitation monitoring.
<p>Is the project an element or stage in a larger project?</p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please describe: the overall project strategy for delivery of all stages and components; the concept design for the overall project; and the intended scheduling of the design and development of project stages).</p>
<p>The Project is not intended to be staged. With the exception of the progressive construction of the TSF, it would be necessary to construct the above project components and ancillary infrastructure at commencement in order for the Project to operate. The mining method may involve a series of stages, but the basic project components and activities would not be staged.</p>
<p>Is the project related to any other past, current or mooted proposals in the region?</p> <p><input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please identify related proposals.</p>
<p>The Project is a new proposal and is not related to any past, current or mooted proposals.</p>

4. Project alternatives

<p>Brief description of key alternatives considered to date (eg. locational, scale or design alternatives. If relevant, attach A4/A3 plans):</p> <p>A number of options and alternatives have been considered for the Project. These are primarily associated with:</p> <ul style="list-style-type: none"> • Mining method • Power supply • Water supply • TSF design and siting • Process plant design, siting and operational considerations <p>Section 2.5 of the Project Development Concept Report (Attachment A) describes the project alternatives and options considered for each of these project components. The location of the options considered is also presented in Appendix C. Section 2.5 also lists the assessment and decision-making criteria (environmental, economic, social, health and safety) which have been used by the Project to assess various options, and identifies the options which are proposed to be assessed in greater detail.</p> <p>A summary of the project alternatives and options is provided in Table 2 to Table 6.</p>

Table 2 Mining method options

Project element	Alternatives	Considerations	Assessment
Mining methods	In-pit primary crusher & ore passes to underground conveyor	<ul style="list-style-type: none"> • May be less economically viable during start up • Smallest disturbance footprint • Reduced operating costs and workforce requirements • Less flexibility to adapt to production rate changes 	To be further assessed.
	Truck haul to ex-pit primary crusher & surface conveyor	<ul style="list-style-type: none"> • May be more economically viable during start up • Increased disturbance footprint • Highest operating cost and workforce requirements • Flexibility to adapt to production rate changes 	To be further assessed.
	In-pit primary crusher & surface conveyor	<ul style="list-style-type: none"> • Consistent operating costs of life of mine • Limited workforce required • Increased disturbance footprint • Resource development constraints 	Not to be further assessed.

Table 3 TSF design and location options

Alternatives	Considerations	Assessment
<i>TSF design</i>		
Paddock cells	<ul style="list-style-type: none"> • Inefficient earth-fill quantities • On- site source materials limited • Limited suitable terrain available in proximity to mine • Large area required 	Not to be further assessed.
Stacked schemes	<ul style="list-style-type: none"> • Proposed tailings characteristics are unsuitable 	Not to be further assessed.
Valley storage	<ul style="list-style-type: none"> • Efficient storage • Suitable terrain available in proximity to mine • Large area required 	Preferred option.
<i>TSF location</i>		
Bunroy Creek	<ul style="list-style-type: none"> • Close proximity to the Murray River • Close to historic heritage areas (Bunroy Station) • Efficient storage capacity • Relocation of public road required • Heavily vegetated 	Not to be further assessed.
Bullocky Creek	<ul style="list-style-type: none"> • Located in isolated valley 	Not to be further

	<ul style="list-style-type: none"> • High elevation - Significant pumping required • Long pipe line route and materials haul route • Inefficient storage capacity • Heavily vegetated 	assessed.
Biggara Creek	<ul style="list-style-type: none"> • Open farm land • Amenity impacts • Relocation of public road required • Efficient storage capacity • Large foundation excavation required • Located downstream of plant site • Large catchment with likely excess water 	Not to be further assessed.
Upper and Lower Teapot Creek	<ul style="list-style-type: none"> • Water interactions with processing site and/or mine and associated infrastructure • Inefficient storage capacity 	Not to be further assessed.
Bull Paddock Creek	<ul style="list-style-type: none"> • Located in isolated valley • Efficient storage capacity • Down-valley discharge • Relatively long pipeline route • Rock-fill materials likely sourced internally • Large catchment to provide significant contribution to mine water supply • Heavily vegetated 	Preferred option. To be further assessed.

Table 4 Ore processing facility location options

Alternatives	Considerations	Assessment
Site 'A'	<ul style="list-style-type: none"> • Close proximity to mine • Ore transport via conveyor • Terrain and earthworks requirements • Access requirements • State Forest 	Preferred option
Site 'B'	<ul style="list-style-type: none"> • Reasonable proximity to mine • Ore transport via truck • Terrain and earthworks requirements • Access requirements • State Forest 	Not to be further assessed.
Site 'C'	<ul style="list-style-type: none"> • Further from mine • Ore transport via truck • Terrain and earthworks requirements • Access requirements • Open farmland 	Not to be further assessed.
Site 'D'	<ul style="list-style-type: none"> • Further from mine • Ore transport via truck • Terrain and earthworks requirements • Access requirements • State Forest 	Not to be further assessed.
Site 'E'	<ul style="list-style-type: none"> • Further from mine • Ore transport via truck • Terrain and earthworks requirements • Access requirements • State Forest 	Not to be further assessed.
Site 'F'	<ul style="list-style-type: none"> • Further from mine • Ore transport via truck • Terrain and earthworks requirements 	Not to be further assessed.

	<ul style="list-style-type: none"> • Access requirements • State Forest 	
Site 'G'	<ul style="list-style-type: none"> • Reasonable proximity to the mine • Reduced energy consumption for pumped transfer of water and tailings due to increased altitude • Ore transport via conveyor • Terrain and earthworks requirements • Access requirements • State Forest 	To be further assessed

Table 5 Power supply options

Alternatives	Considerations	Assessment
Option 3: Power line from new substation east of Corryong.	<ul style="list-style-type: none"> • Connection and approval requirements • Line fault interruptions • Route alignments • Power supply costs 	To be further assessed.
Option 4: Power line from Murray Switching Station	<ul style="list-style-type: none"> • Traverses a State boundary and transmission business boundary. • Connection and approval considerations • Line fault interruptions • Route alignments • Power supply costs 	To be further assessed.
Option 7 & 8: Gas-fired power plant & fuel via CNG/ LNG trucking scheme	<ul style="list-style-type: none"> • Flexibility • Noise and emissions • Traffic volumes • Interconnect supply capacity constraints 	Not to be assessed further
Option 6: Gas-fired power plant & fuel via pipe line	<ul style="list-style-type: none"> • 150 km pipe line required • Significant capital cost 	Not to be further assessed.
Renewables: Solar/ gas, wind/ gas, biomass, hydro-electric	<ul style="list-style-type: none"> • Generation capacity from biomass, wind and solar resources is limited and will not match project power requirements. • Rate of return over mine life 	Not to be further assessed.

Table 6 Water supply options

Alternatives	Considerations	Assessment
Biggara Valley - groundwater	<ul style="list-style-type: none"> • Good water quality • Potentially high yielding basement • Close proximity to mine • Fewer groundwater users • Overlying sediments may be a constraint 	To be further assessed.
Thowgla Valley - groundwater	<ul style="list-style-type: none"> • Good water quality • Potentially high yielding sediments • Fewer groundwater users • Potentially low yielding basement • Significant pipe line and pumping requirements 	Not to be further assessed.
Corryong Plains - groundwater	<ul style="list-style-type: none"> • Good water quality • Long distance from mine • Potential flood risk • High density of groundwater users 	Not to be further assessed.
Unicorn Mine - groundwater	<ul style="list-style-type: none"> • Good water quality • Close proximity to mine • Limited groundwater users 	Preferred option. To be further assessed.

	<ul style="list-style-type: none"> • Potentially low sustainability of supply 	
Bull Paddock TSF – surface water	<ul style="list-style-type: none"> • Good water quality • Security of supply uncertain • Currently proposed infrastructure can be utilised 	Preferred option. To be further assessed.
Pumped directly from the Murray River	<ul style="list-style-type: none"> • Good water quality • Reliability of supply • Long distance from mine • Pipeline easement • Environmental impacts of pipeline and off take • Operating costs 	Unlikely. No further assessment at this stage.

Brief description of key alternatives to be further investigated (if known):

The key alternatives which are proposed for further investigation (and subsequent approval) are discussed below.

Mining process

Two mining methods are currently being considered:

1. Truck and shovel operation with ex-pit primary crusher and overland conveyor. This option involves drill and blast operations to mobilise ore that would be loaded by front end loader to 90 tonne haul trucks for delivery to an ex-pit primary crusher. The crushed material would then be fed onto an overland conveyor for transport to the processing plant. This option would require an ore stockpile at the junction of the conveyors.
2. In-pit crusher with gravity fed ore passes and underground conveyor decline (**Error! Reference source not found.**). Front end loaders would transport blasted ore to a mobile in-pit crusher for delivery to twin inclined ore passes. The ore would be gravity fed down a 1 km long adit extending from near the process plant site to beneath the open pit design. The crushed material would be captured in twin apron feeders that progressively feed the ore to a trunk conveyor up the decline to the processing plant. The majority of the ore would be stored in the ore passes and there would be a small stockpile at the process plant site.

These mining process methods are being investigated further in the pre-feasibility phase of the project.

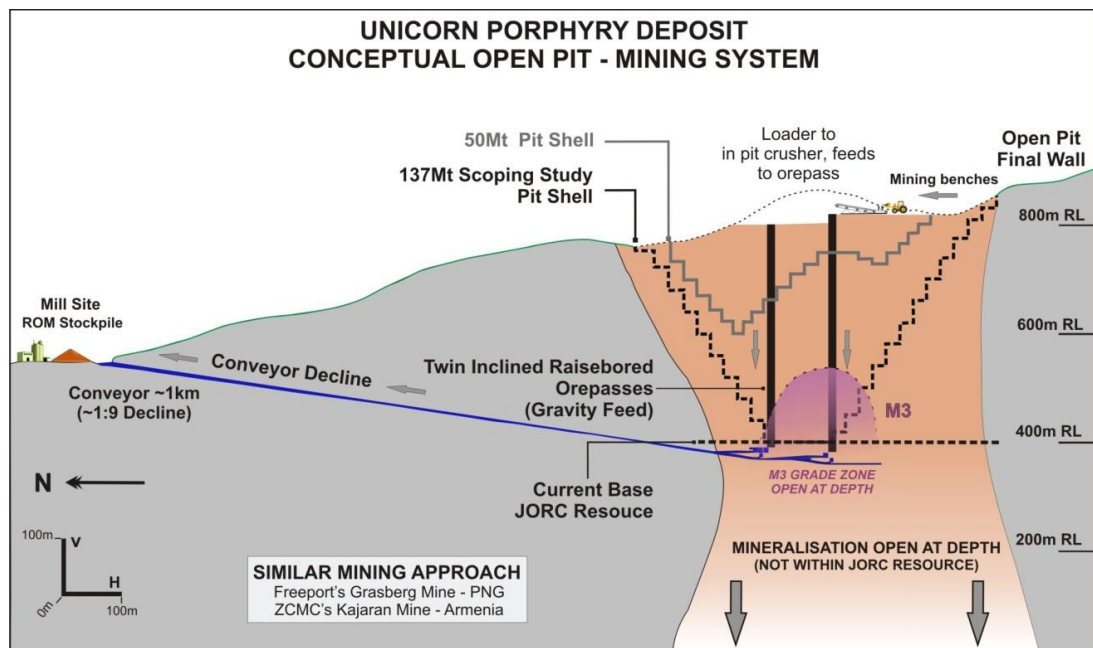


Figure 1 Conceptual mining system – ore passes and underground conveyor decline

the area is generally limited to access tracks principally for fire management purposes. Some approved track development has occurred more recently as part of the minerals exploration (drilling) program undertaken by Dart Mining.

The current land use for the Broader Power line Investigation Area is predominantly agriculture (grazing).

Description of local setting (eg. adjoining land uses, road access, infrastructure, proximity to residences & urban centres):

The Mine and TSF Investigation Areas are located approximately 17 km south east of Corryong. The next closest township is Khancoban to the north-west of the site in New South Wales.

The main adjoining land use of the Mine and TSF Investigation Areas is State forest. The northern end of the Mine Investigation Area adjoins cleared, privately owned agricultural land in the Biggara Valley. Land use in this section of the Biggara Valley is dominated by dairying activities.

Road access to the Mine and the TSF Investigation Areas is via the Bunroy Road. Some sections of this road are unsealed. The main arterial roads within the vicinity of the investigation area include the Alpine Way, the Murray Valley Hwy, which links the two states and the Upper Murray Road.

Both indicative power line alignments follow the same route to near the Victoria and New South Wales border. One alignment then follows to Upper Murray Road and River Murray north until the Upper Murray Road separates from the River Murray. This alignment then continues to follow the Upper Murray Road to a substation proposed to be constructed to the east of Corryong.

The other alignment then crosses the River Murray and then follows the Indi North Road to the Swampy Plain River. This alignment then follows the Swampy Plain River east past the Khancoban to the Murray Switching Station located at Khancoban in NSW.

There is minimal built infrastructure in the vicinity of the Mine and TSF Investigation Areas. The electricity distribution network (22 kV) caters for small rural uses. There is no reticulated water, sewer or natural gas. An underground telecommunications cable extends along the Bunroy Road that passes within approximately 2 km of the proposed mining area. The mobile phone network coverage is highly variable.

The nearest residence (farmhouse) to the Mine and TSF Investigation areas is located on the Bunroy Road approximately 4 km from the proposed mine site.

Planning context (eg. strategic planning, zoning & overlays, management plans):

PLANNING SCHEME

The Victorian component of the works occurs within the Towong Shire local government area. The planning scheme is broken up into standard sections including State Planning Policies, Local Planning Policies, Zoning, Overlays and other specific planning controls applicable to land within the Towong Shire.

Project Definition

The Towong Planning Scheme applies to the Victorian component of the works. Under clause 74 of the Towong Planning Scheme the project is defined as:

Earth and energy resources industry, which includes:

- *'Land used for the exploration, removal or processing of natural earth or energy resources. It includes any activity incidental to this purpose including the construction and use of temporary accommodation'.*

State Planning Policy Framework and Local Planning Policy Framework

The following clauses of the State Planning Policy Framework are considered relevant to the project:

- Clause 12.01 – Biodiversity
- Clause 13.04 – Noise and Air

- Clause 13.05 – Bushfire
- Clause 14.02 – Water
- Clause 14.03 – Resource Exploration and extraction
- Clause 15.03 – Heritage
- Clause 17.02 – Industry
- Clause 19.03 – Development Infrastructure

The Local Planning Policy Framework consists of Councils municipal strategic statement and local planning policies. Key sections of Council's Municipal Strategic Statement include:

- Clause 21.06 Environment
- Clause 21.09 Reference Documents

Relevant local planning policies are identified below:

- Clause 22.04 Steep Land
- Clause 22.08 Effluent Disposal and Water Quality

Zone and overlays

The following zones are relevant to the investigation area.

- Public Conservation and Resource Zone (PCRZ)
- Farming Zone (FZ)
- Rural Activity Zone (RAZ)

The following planning overlays are considered relevant to the project:

- Wildfire Management Overlay (WMO)
- Land Subject to Inundation Overlay (LSIO)
- Environmental Significance Overlay Schedule 1 (ESO1) 'High Quality Agricultural Land'

Zoning and Overlays are presented within **Appendix D**.

Particular provisions

The following particular provisions are considered relevant:

- Clause 52.08 – Earth Resource Exploration and Development
- Clause 52.17 – Native Vegetation

Planning permit requirements

Under the *Mineral Resources (Sustainable Development) Act 1990* the project would be exempt from requiring a planning permit if an EES is prepared for the project and approved by the Minister for Planning.

OTHER MANAGEMENT DOCUMENTS

Forest Management Plan

A Regional Forest Agreement (RFA) was developed for North-East Victoria between the Federal and Victorian Governments in 1999.

Two key land classifications (refer to **Appendix F**) affect the project area being:

- State Forest – Special Protection Zone (SPZ); and
- State Forest – General Management Zone (GMZ).

Victorian Environmental Assessment Council

A review of the Victorian Environmental Assessment Council (VEAC) website indicates that there are no current investigations applicable to the investigation areas (Victorian component).

NEW SOUTH WALES CONTEXT

The broad Power line Investigation Area includes lands within NSW. These lands would be subject to the provisions of the Tumbarumba Local Environment Plan and the State Environmental Planning Policy (Infrastructure) 2007.

Local government area(s):

The Project occurs within the Towong Shire local government area. Depending upon the final

footprint of the power supply for the Project, it may be necessary to construct some infrastructure in the Tumbarumba Shire Council local government area (NSW).

8. Existing environment

Overview of key environmental assets/sensitivities in project area and vicinity

(cf. general description of project site/study area under section 7):

The key assets and sensitivities within the vicinity of the Project area include:

- Surface water resource. The Project is located in the upper catchment of the River Murray. The quality and quantity of water provided by the catchment are important for a variety of beneficial uses.
- Groundwater resource. The Project area covers land which contributes to both local and regional groundwater resources. These groundwater resources have a variety of beneficial uses including groundwater dependant ecosystems.
- Native forest and woodland. Much of the Project area occurs within State Forest. The zoning of parts of this area allows for timber harvesting (a commercial asset). The current predominant use of these lands is for nature conservation and passive recreation.
- Productive agricultural land containing alluvial soils associated with high rainfall is located within the project investigation area. Siting options to be further investigated have been developed in consideration of this agricultural land.
- Significant flora and fauna: Species listed under the *Flora & Fauna Guarantee Act 1988*, DSE Advisory List of Rare or Threatened Plants in Victoria (DSE 2005) or Advisory List of Threatened Vertebrate Fauna in Victoria (DSE 2013) have been recorded and/or are considered likely to occur within the project investigation areas.

Preliminary characterisation of these assets and sensitivities has been the subject of studies which have informed this referral, including a preliminary flora and fauna assessment (Biosis 2013) (**Attachment B**) and a Water Supply Options Assessment (URS 2013). The outcomes of these assessments are described further in Part 2 of this document.

9. Land availability and control

Is the proposal on, or partly on, Crown land?

No Yes If yes, please provide details.

The majority of land associated with the Mine and TSF Investigation Areas is Crown Land. Refer **Appendix E**.

Current land tenure (provide plan, if practicable):

As discussed above, the majority of land associated with the Mine and TSF Investigation Areas is Crown Land. Several small land parcels in the northern end of the proposed Mine Investigation Area are privately owned and are subject to the Rural Activity Zone.

The majority of the indicative power line alignment is on privately owned land. Refer **Appendix E**.

The TSF Investigation Area and the majority of the Mine Investigation Area are covered by the Dart Mining exploration licence EL4726. A small portion of the Mine Investigation Area is covered by exploration licence EL5131.

Refer to **Appendix E** for a map of current land tenure and map showing areas covered by exploration licences.

Intended land tenure (tenure over or access to project land):

No change in land ownership is proposed.

Dart Mining would seek a Mining Licence under the *Mineral Resources (Sustainable*

Development) Act 1990, purchase any freehold land affected by the project and obtain any relevant consents to occupy Crown land in consultation with the Crown Land Manager.

Other interests in affected land (eg. easements, native title claims):

A search of the National Native Title Tribunal records showed that there were no Native Title Claimants or Determinations for the proposed Project activity area – in either NSW or Victoria. As such there are no Indigenous Land Use Agreements in place.

10. Required approvals

State and Commonwealth approvals required for project components (if known):

Commonwealth

- Referral under the *Environment Protection and Biodiversity Conservation Act 1999* for a decision on whether the project is a 'controlled action'. Further assessment and targeted survey will be undertaken in Spring to resolve the presence the EPBC Act listed flora and fauna species in order to provide supporting evidence as to whether the project is a 'controlled action'.

Victoria

- Granting of a Mining Licence, approval of a Work Plan and Work Authority in accordance with the *Mineral Resources (Sustainable Development) Act 1990*.
- Approval of a Cultural Heritage Management Plan under the *Aboriginal Heritage Act 2006*
- Consents or licences under the *Water Act 1989* for the extraction of surface and/or ground water and works on waterways.

Approvals, permits or consents may also be required in relation to the *Road Management Act 2004*, *Heritage Act 1995*, *Land Act 1958*, *Crown Land (Reserves) Act 1978*, *Forest Act 1958*, *Wildlife Act 1975* and the *Flora and Fauna Guarantee Act 1988*.

Note that the need for a permit under the *Planning and Environment Act 1987* will depend on whether the project is subject to an Environment Effects Statement (EES) process as an outcome of this referral.

New South Wales

It may be necessary for the Project to obtain NSW approvals subject to the final footprint of proposed power supply infrastructure. These may include approvals under the *Environmental Planning and Assessment Act 1979*, *National Parks and Wildlife Act 1974*, *Heritage Act 1977*, and the *Roads Act 1993*.

Have any applications for approval been lodged?

No Yes If yes, please provide details.

No approval applications have been lodged.

Approval agency consultation (agencies with whom the proposal has been discussed):

- Department of Transport, Planning and Local Infrastructure (DTPLI)
- Department of Environment and Primary Industries (DEPI)
- Department of State Development, Business and Innovation (DSDBI)
- Environment Protection Authority (EPA)
- North East Catchment Management Authority (NECMA)
- Towong Shire Council

Other agencies consulted:

Aboriginal Affairs Victoria (AAV)

PART 2 POTENTIAL ENVIRONMENTAL EFFECTS

11. Potentially significant environmental effects

Overview of potentially significant environmental effects (identify key potential effects and comment on their significance and likelihood, as well as key uncertainties):

A preliminary evaluation of potential environmental aspects and impacts associated with the project has been undertaken using a screening approach.

The preliminary screening aimed to:

- Highlight those issues that would require particular focus for investigation during the assessment and approvals process.
- Assist in determining the level and scope of investigations that would be undertaken.

The screening exercise forms the basis for further and ongoing comprehensive risk assessment and management throughout project development and delivery, consistent with the International Standards ISO 31000, Risk Management and ISO14001, Environmental Management Systems.

A description of the methodology used and the results from the screening undertaken is provided in Section 4 of **Attachment A**.

A summary of the project's key aspects and impacts is presented below.

Biodiversity & habitat

- Loss of large areas of native vegetation.
- Decline in quality of retained adjacent vegetation due to land use changes and potential hydrological changes.
- Removal of known/potential habitat for significant flora and fauna species
- Loss of, or alterations to, riparian and in-stream habitat within and downstream of the investigation area.

The primary measure to reduce impacts to biodiversity values is to minimise removal of native vegetation and terrestrial and aquatic habitat during the design phase of the project. Further targeted surveys will be conducted to determine the presence of significant species within the investigation area and mitigation measures designed accordingly.

Surface water and groundwater environments

- Changes to hydrological patterns and surface and groundwater flow regimes
- Surface water quality impacts from mine water discharges or uncontrolled release of contaminated water from the TSF
- Groundwater quality impacts from seepage from storages
- Water use including water harvesting from the TSF and abstraction from local surface water and groundwater environments

Further investigations, including a site water balance, are required in order to assess and quantify the potential of the Project to affect the beneficial uses of surface water and groundwater environments. Key management measures would include site selection and minimisation of footprint, design and construction of the TSF and design and operation of water supply and reuse infrastructure.

Land stability, soil erosion and geochemistry

- Soil erosion and degradation
- Modification of landforms resulting in erosion, changed drainage patterns etc
- Waste rock generation
- Acid mine drainage and contamination potential

Potential effects of construction and operation activities on soil systems and landforms will require investigation. Current information indicates that the waste rock is non-acid forming. Further waste rock characterisation is currently underway. A waste rock management plan would be developed

to identify measures to reduce impacts to environmental values from the handling, storage and use of waste rock and to plan for future rehabilitation.

Cultural heritage

- Disturbance to sites of aboriginal and/or historical heritage

Areas of potential cultural heritage sensitivity are located within the investigation area. As such, a CHMP would be prepared to investigate cultural heritage values. A Cultural Heritage Desktop Assessment (GHD 2013) (**Attachment C**) identified listed heritage places within the vicinity of the project area, however it is expected that, through project design, impacts to these sites can be avoided.

Public safety and hazards

- Bushfire risk
- Hazardous materials
- TSF failure
- Changed traffic or road conditions

There are a number of risks and hazards associated with the proposed operation that will require detailed planning and review. These hazards however, are dealt with routinely on other mine development projects and comprehensive guidelines and standards exist.

Land use & rehabilitation

- Impact to land uses (forestry and agriculture)
- Impact to future land uses

Land used for forestry activities would be displaced during the life of the mine. Given the extent of the native forest estate in this region, impact to this land use activity is not expected to be significant, subject to further discussions with DEPI. A small percentage of the investigation area is agricultural land, used predominately for grazing. Project design would seek to minimise any disruption to agricultural activity. A rehabilitation and closure plan would be developed to ensure the viability of future land uses.

12. Native vegetation, flora and fauna

Native vegetation

Is any native vegetation likely to be cleared or otherwise affected by the project?

NYD No Yes If yes, answer the following questions and attach details.

What investigation of native vegetation in the project area has been done? (briefly describe)

Information on native vegetation, flora and fauna is drawn from the following report (see **Attachment B**):

- Biosis 2013, Unicorn Project: Preliminary Flora and Fauna Assessment Draft Report, 1 August 2013.

The primary objective of this assessment was to collect priority field data to inform referrals under the EPBC Act and Victorian *Environment Effects Act 1978*. An assessment method was developed to focus on the detection of Spot-tailed Quoll and Smoky Mouse, as well as potential habitat for Austral Toad-flax, which were all predicted to occur within the investigation area by the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) Protected Matters Search Tool (PMST). During the course of targeted survey, general survey of species, habitats and vegetation types were undertaken in the Mine Investigation Area and TSF Investigation Area. A desktop level assessment was undertaken for the indicative power line alignments. Details on methods are included in Biosis 2013 (see **Attachment B**).

A flora and fauna assessment of proposed access tracks for a rig to conduct exploration drilling in the project area has been undertaken and reported in:

- Biosis 2012, Proposed access tracks, Mount Unicorn, Victoria: Flora and Fauna Assessment, January 2012.

What is the maximum area of native vegetation that may need to be cleared?

NYD An estimated area of up to 440 hectares of native vegetation may be removed for the project.

How much of this clearing would be authorised under a Forest Management Plan or Fire Protection Plan?

N/A approx. percent (if applicable)

Which Ecological Vegetation Classes may be affected? (if not authorised as above)

NYD Preliminary/detailed assessment completed. If assessed, please list.

As outlined in Table 8 nine Ecological Vegetation Classes (EVCs) were recorded within the Mine and TSF Investigation Areas and indicative power line alignments (Biosis 2013). This information is based on DEPI Biodiversity Interactive Mapping 2005 data layer.

Table 8 EVCs identified in the Project Investigation Areas (Victoria)

EVC No.	EVC (Bioregion)	Bioregional Conservation Status	Area (Ha)
18	Riparian Forest (Highlands - Northern Fall)	Least Concern	83.75
20	Heathy Dry Forest (Highlands - Northern Fall)	Least Concern	42.63
21	Shrubby Dry Forest (Highlands - Northern Fall)	Least Concern	921.54
22	Grassy Dry Forest (Northern Inland Slopes)	Depleted	18.96
23	Herb-rich Foothill Forest (Highlands - Northern Fall)	Least Concern	1121.51
	Herb-rich Foothill Forest (Northern Inland Slopes)	Least Concern	13.29
29	Damp Forest (Highlands - Northern Fall)	Least Concern	139.29
47	Valley Grassy Forest (Northern Inland Slopes)	Endangered	18.36
56	Floodplain Riparian Woodland (Northern Inland Slopes)	Endangered	1.60
	Riparian Forest/Swampy Riparian Woodland/Riparian Shrubland/Riverine Escarpment Scrub Mosaic (Highlands - Northern Fall)	Depleted	23.82
TOTAL			2384.75

The majority of EVCs within the footprint of the TSF are Shrubby Dry Forest, Herb-rich Foothill Forest and Damp Forest, all of which are common and widespread in the local area and have a bioregional conservation status of 'Least Concern' in the Highlands – Northern Fall Bioregion.

There are smaller areas of Swampy Riparian Woodland near the proposed wall of the TSF. This EVC is part of a mosaic grouping of riparian and riverine EVCs which could not be mapped separately at the scale of this investigation. Swampy Riparian Woodland has a bioregional conservation status of 'Least Concern' in the Highlands – Northern Fall Bioregion.

Dart Mining will aim to minimise impact on native vegetation.

Have potential vegetation offsets been identified as yet?

NYD Yes If yes, please briefly describe.

An offset strategy for the Project has not yet been developed.

Other information/comments? (eg. accuracy of information)

Flora and fauna

What investigations of flora and fauna in the project area have been done?

(provide overview here and attach details of method and results of any surveys for the project & describe their accuracy)

As discussed in the previous section information on native vegetation, flora and fauna is drawn from the following report (see **Attachment B**):

- Biosis 2013, Unicorn Project: Preliminary Flora and Fauna Assessment Draft Report, 9 July 2013.

Have any threatened or migratory species or listed communities been recorded from the local area?

NYD No Yes If yes, please:

- List species/communities recorded in recent surveys and/or past observations.
- Indicate which of these have been recorded from the project site or nearby.

Site inspections, along with the desktop assessment, indicated that no vegetation communities listed under the FFG Act are located within the investigation area (Biosis 2013).

FFG Act listed species recorded or predicted to occur within 5km of the investigation area are provided in Appendix 2 and Appendix 3 of Biosis 2013 (see **Attachment B**). An assessment of the likelihood of these species occurring in the investigation area and an indication of where within the site (i.e. which habitats or features of relevance to the species) is included. A summary of those species recorded, or with medium or higher likelihood of occurrence, within the TSF or Mine Investigation Areas or indicative power line alignment is shown in Table 9.

The preliminary flora and fauna survey (Biosis 2013) also identified a number of species on the DSE advisory list and that had been recorded, or had a medium or higher likelihood of occurrence in the investigation area. These are presented in Table 3 of **Attachment B**. Biosis (2013) also provides a list of migratory species that have been recorded or predicted to occur within 5 km of the investigation area.

With the exception of some habitat features such as rocky outcrops, the type and condition of native vegetation and habitat within the investigation area is widely distributed within the local region, and the values described below for biodiversity are likely to be similar to other areas in the region.

Table 9 Summary of significant FFG Act listed species recorded, or likely to occur, within the investigation area.

Species name	Occurrence within the investigation area	Notes
<i>Flora</i>		
Purple Eyebright*	Medium likelihood of occurrence	Plants of the <i>Euphrasia collina</i> taxonomic group were identified in the investigation area. Further survey during flowering time will determine if they are the listed subspecies <i>Euphrasia collina subsp. muelleri</i> . The distribution of this species in the local region is poorly understood and this would be subject to further investigation should it be recorded within the investigation area.
Austral Toad-flax*	Medium likelihood of occurrence	Potential habitat in remnant vegetation adjacent to cleared farmland on more fertile soils associated with Kangaroo Grass <i>Themeda triandra</i> . It is likely that potential habitat for this species can be avoided during project design.

<i>Fauna</i>		
Growling Grass Frog*	Medium likelihood of occurrence	Some potential for suitable wetland habitat to occur within the power supply alignment (floodplain and associated billabongs). It is expected that the power line can be designed to minimise impacts to this species.
Macquarie Perch*	Medium likelihood of occurrence	Some potential habitat may occur in the Bunroy Creek system. Species has also been predicted to occur by DEPI fauna habitat model. Further survey for the species is required.
Common Bent-wing Bat	High likelihood of occurrence	Recorded locally and highly likely to utilise the investigation area for foraging. The project will therefore result in the loss of potential foraging habitat for this species.
White-footed Dunnart	Recorded	Recorded on remote camera during current assessment. Drier EVCs located along ridgelines are likely to be key areas for this species. The project will result in the loss of confirmed occupied habitat for this species.
Grey Goshawk	High likelihood of occurrence	This species is known to occur in similar forested habitat within the local area. The project will result in the loss of potential habitat for these species.
Intermediate Egret	Medium likelihood of occurrence	Some potential wetland habitat for these species may occur in the northern section of the investigation area, within the power supply alignment (floodplain and associated billabongs). It is expected that the power line can be designed to minimise impacts to this species.
Eastern Great Egret		
Lewin's Rail	Medium likelihood of occurrence	Recorded locally and potential wetland habitat may occur within the northern power supply alignment that traverses floodplain areas. It is expected that the power line can be designed to minimise impacts to this species.
Hooded Robin	Medium likelihood of occurrence	Most likely to occur in drier foothill forest located in the northern section of the investigation area. The project will therefore result in the loss of potential habitat for these species.
Diamond Firetail		
Powerful Owl	High likelihood of occurrence	Suitable habitat present for these species, further targeted surveys would be required to determine presence/absence within the investigation area and extent of potential impacts.
Barking Owl	Medium likelihood of occurrence	

*denotes species that are also listed under the EPBC Act.

If known, what threatening processes affecting these species or communities may be exacerbated by the project? (eg. loss or fragmentation of habitats) Please describe briefly.

The following threatening species may be relevant to the project:

- Alteration to the natural flow regimes of rivers and streams.
- Alteration to the natural temperature regimes of rivers and streams.
- Degradation of native riparian vegetation along Victorian rivers and streams.
- Habitat fragmentation as a threatening process for fauna in Victoria.
- Increase in sediment input into Victorian rivers and streams due to human activities.
- Input of toxic substances into Victorian rivers and streams.
- Invasion of native vegetation by Blackberry *Rubus fruticosus L. agg.*

- Invasion of native vegetation by 'environmental weeds'.
- Loss of coarse woody debris from Victorian native forests and woodlands.
- Removal of wood debris from Victorian streams.
- Loss of hollow-bearing trees from Victorian native forests.
- Prevention of passage of aquatic biota as a result of the presence of instream structures.
- The spread of *Phytophthora cinnamomi* from infected sites into parks and reserves, including roadsides, under the control of a state or local government authority.
- Use of *Phytophthora*-infected gravel in construction of roads, bridges and reservoirs

Are any threatened or migratory species, other species of conservation significance or listed communities potentially affected by the project?

NYD No Yes If yes, please:

- List these species/communities:
- Indicate which species or communities could be subject to a major or extensive impact (including the loss of a genetically important population of a species listed or nominated for listing) Comment on likelihood of effects and associated uncertainties, if practicable.

Table 9 provides a summary of significant FFG Act species recorded, or likely to occur, within the investigation area. Further investigation will be undertaken to determine the presence of these species and to better understand the impact on these species from the Project.

Is mitigation of potential effects on indigenous flora and fauna proposed?

NYD No Yes If yes, please briefly describe.

The following mitigation measures have been proposed to mitigate the potential effects on indigenous flora and fauna:

- Minimise removal of native vegetation, in accordance with Net Gain policy during mine site planning for all elements.
- Minimise indirect impacts to riparian vegetation downstream of TSF by maintaining environmental flows out of the Bull Paddock Creek catchment.
- Minimise potential for indirect impacts to retained vegetation during construction and operation (i.e. accidental damage, dust, weed invasion) by addressing these issues in a detailed Environmental Management Plan for the Unicorn Project.
- Commence preparation of an offset strategy to identify and implement appropriate offsets for approved vegetation losses.
- Undertake further targeted surveys of significant flora and fauna species to inform site planning and development of management measures.
- Minimise removal of terrestrial and aquatic habitat by planning and designing appropriately to avoid or minimise instream works.
- Develop an appropriate water quality monitoring plan

Other information/comments? (eg. accuracy of information)

13. Water environments

Will the project require significant volumes of fresh water (eg. > 1 GL/yr)?

NYD No Yes If yes, indicate approximate volume and likely source.

A continuous water recycling loop would be utilised to meet the water needs of the ore processing plant and other mine related activities. However, an additional 4 GL/ year of water is estimated to be required as 'make up water'.

Dart Mining is considering options to supply this 4 GL/year, including groundwater extraction and on-site surface water harvesting.

Will the project discharge waste water or runoff to water environments?

NYD No Yes If yes, specify types of discharges and which environments.

The project water balance will be assessed in more detail in order to determine the potential timing, frequency, quantity and location of any discharges to water environment.

A runoff diversion facility may be incorporated as part of the design and construction of the TSF. This diversion would provide the potential to divert flows from upstream parts of the Bull Paddock Creek catchment and return them to downstream of the TSF.

A site water management plan including bunded runoff management structures, sediment traps and water diversion installations would be implemented. Stormwater associated with the mine site and processing plant areas would be collected and reused as part of the overall site water balance.

Are any waterways, wetlands, estuaries or marine environments likely to be affected?

NYD No Yes If yes, specify which water environments, answer the following questions and attach any relevant details.

The waterways most affected by the project footprint and water extraction activities are expected to be the Teapot Creek (part of the Biggara Creek catchment) and the Bull Paddock Creek (part of the Thowgla Creek catchment).

Are any of these water environments likely to support threatened or migratory species?

NYD No Yes If yes, specify which water environments.

Biosis (2013) completed a preliminary aquatic habitat assessment which involved an aquatic ecologist inspecting two 1 km sections along Bull Paddock Creek within the investigation area. Aquatic habitat within the investigation area, while suitable for numerous native species, was not considered capable of supporting populations of listed threatened species. This would be verified by conducting an aquatic fauna assessment within and downstream of the investigation area.

Are any potentially affected wetlands listed under the Ramsar Convention or in 'A Directory of Important Wetlands in Australia'?

NYD No Yes If yes, please specify.

The project area is identified as being within the catchment of six Ramsar sites: Banrock Station Wetland Complex, Barmah Forest, Coorong and Lakes Alexandrina and Albert, Gunbower Forest, NSW Central Murray State Forests and Riverland. The project area is over 500 km upstream of the nearest Ramsar site, Barmah Forest, therefore the potential for the development to have a significant impact on it is considered to be negligible.

Could the project affect streamflows?

NYD No Yes If yes, briefly describe implications for streamflows.

The construction of the TSF in the Bull Paddock Creek catchment together with the sourcing of the project make-up water requirements (4 GL/year) has the potential to affect streamflows.

Construction of the TSF will alter stream flows of Bull Paddock Creek within and downstream of the area.

Water for the project may be sourced either through the direct extraction of water via the TSF or indirectly through the use of groundwater. Further assessment of the potential impacts on streamflows is proposed as part of the project requirement to acquire surface and /or groundwater entitlements.

Could regional groundwater resources be affected by the project?

NYD No Yes If yes, describe in what way.

Project water requirements may be met in part by groundwater. Groundwater may be sourced in the vicinity of the mine site or from more distant sources. Further investigations of potential groundwater sources are proposed.

The project area is located within the Unincorporated Area - Goulburn-Murray Water groundwater management unit. There is no Groundwater Supply Protection Area (GWSPA) or Management Plan in place. Therefore there are no specific groundwater management protocols or conditions on groundwater use. Environmental water requirements for groundwater dependant ecosystems have not been developed.

The regional hydrogeology includes three hydrostratigraphic units: Sediments, Intrusives and Ordovician Basement . A preliminary assessment of groundwater in the region reported in *Unicorn Project – Water Supply Options Assessment, URS, July 2013*, found that:

- Springs are common in the Upper Murray catchment;
- Groundwater discharge occurs on the alluvial plains of the Corryong and Thowgla valleys;
- Groundwater discharge is fresh (<400 µS/cm);
- Most springs remained wet during drought, or only dried up briefly;
- Alluvial sediments include layers of clay and gravel; and
- Gravel layers contain 'good drinking water'.

The project has the potential to interact with groundwater resources by:

- Affecting the availability and movement of groundwater
- Affecting surface waters which are linked to groundwater
- Introducing seepage to groundwater from the TSF

Impacts to the quality or quantity of the groundwater resource would in turn have the potential to impact upon groundwater dependant ecosystems and other groundwater users. A groundwater investigation would be undertaken to assess the impacts on hydrology, groundwater quality, resources and groundwater dependent ecosystems.

Could environmental values (beneficial uses) of water environments be affected?

NYD No Yes If yes, identify waterways/water bodies and beneficial uses (as recognised by State Environment Protection Policies)

The beneficial uses of the water environments within the project area could be affected by alteration to waterways, changed stream and groundwater flow conditions, water extraction and/or water discharges.

Further investigations are required to assess and quantify the potential of the Project to affect the beneficial uses of the water environments. The most relevant beneficial uses in the potentially affected catchments include aquatic ecosystems, recreation, human consumption, commercial use, agriculture, consumption of fish, crustacea and molluscs.

Could aquatic, estuarine or marine ecosystems be affected by the project?

NYD No Yes If yes, describe in what way.

As discussed above aquatic ecosystems are likely to be affected by the Project.

This is likely to include loss of, or alterations to, riparian and in-stream habitat within and downstream of the project area via direct removal, notable hydrological changes, deterioration in water quality (including pollution events) and sedimentation.

Further investigations are required to assess the potential of the Project to affect aquatic ecosystems.

<p>Is there a potential for extensive or major effects on the health or biodiversity of aquatic, estuarine or marine ecosystems over the long-term? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please describe. Comment on likelihood of effects and associated uncertainties, if practicable.</p> <p>The potential scale of impacts to aquatic ecosystems will be subject to further investigation. It is expected that the project can be designed to minimise catchment wide effects.</p>
<p>Is mitigation of potential effects on water environments proposed? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please briefly describe.</p> <p>Mitigation of potential effects on water environments would be implemented through site selection (minimisation of footprint), design and construction of the TSF (to accommodate flood events, collect and recycle seepage, potential water diversion of upstream catchment water), design and operation of water supply and reuse infrastructure and installation of stormwater and runoff controls. A water quality monitoring program will be developed which will identify parameter values that if exceeded will require management actions.</p>
<p>Other information/comments? (eg. accuracy of information)</p>

14. Landscape and soils

Landscape

<p>Has a preliminary landscape assessment been prepared? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please attach.</p>
<p>Is the project to be located either within or near an area that is:</p> <ul style="list-style-type: none"> • Subject to a Landscape Significance Overlay or Environmental Significance Overlay? <input type="checkbox"/> NYD <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, provide plan showing footprint relative to overlay. • Identified as of regional or State significance in a reputable study of landscape values? <input type="checkbox"/> NYD <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please specify. • Within or adjoining land reserved under the <i>National Parks Act 1975</i>? <input type="checkbox"/> NYD <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, please specify. The nearest National Park is the Alpine National Park, 6 km to the southeast of the project area. The Burbibyong Creek Reference Area lies 8.5 km to the west of the project area. • Within or adjoining other public land used for conservation or recreational purposes? <input type="checkbox"/> NYD <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes If yes, please specify. <p>All State forest within the investigation area is mapped as either General Management Zone (GMZ) or Special Protection Zone (SPZ) (refer to Appendix F) under the North East Forest Management Plan (DNRE 2001). Forests in the GMZ will be managed for the sustainable production of timber and other forest products in accordance with the Code and more detailed local management prescriptions (DNRE 2001). Associated aims include protection of landscape, provision of recreation and educational opportunities, fire protection and conservation of natural values to complement adjacent zones (DNRE 2001). The SPZ generally excludes or restricts land use practices that are known to cause disturbance to the identified values within the zone. The investigation area intersects the following SPZs:</p> <ul style="list-style-type: none"> • SPZ 695/02 – Powerful Owl; EVC protection (Riparian Forest, Riparian Mosaic North East). This site is 1,986 ha and encompasses an area including Mount Morgan, Burnt Bridge Creek and Thowgla Creek. • SPZ 696/01 – Powerful Owl; Old Growth Values (Shrubby Dry Forest, Herb-rich Foothill Forest). This site is 718 Ha and includes Charlie Creek in the northern portion of the investigation area, intersecting the proposed power line route. • SPZ 696/02 – Powerful Owl, Barking Owl; Old Growth Values (Heathy Dry Forest, Shrubby Dry Forest, Herb-rich Foothill Forest); Historic Site (Thowgla Creek alluvial workings); Recreation Site (Bullocky Crossing and Tunnel Bend). This SPZ is 3,502 Ha and covers a large area west of Teapot Creek, incorporating Spout Gully, Bullocky Creek and Fisher Creek.

- SPZ 696/04 – Old Growth Values (Shrubby Dry Forest, Herb-rich Foothill Forest). This site is 1,353 Ha and covers large areas of the Bunroy Creek valley.
- SPZ 696/05 - Powerful Owl; Old Growth Values (Shrubby Dry Forest). This SPZ is 507 Ha and overlaps with the proposed TSF in the Bull Paddock Creek catchment.

Mining may occur in Special Protection Zones subject to evaluation of environmental impacts and development of appropriate operational guidelines (DNRE 2001).

Is any clearing vegetation or alteration of landforms likely to affect landscape values?

NYD No Yes If yes, please briefly describe.

The project is located in a remote location and not easily viewed from vantage points routinely accessed by the general public. The construction of the mine and possibly the ore processing facility would result in minimal local impacts to landscape values as viewed from Bunroy Road. Further assessment of landscape values and impacts is proposed.

Is there a potential for effects on landscape values of regional or State importance?

NYD No Yes Please briefly explain response.

No landscape values of regional or State importance have been identified. Further assessment of landscape values and impacts is proposed.

Is mitigation of potential landscape effects proposed?

NYD No Yes If yes, please briefly describe.

Mine closure and rehabilitation would involve the modification of the area adjoining the mine pit to achieve more natural, gentler slopes. At closure, the open pit would be reshaped and rehabilitated to form a stable final landform and possibly a permanent water storage. It is considered likely that the downstream TSF embankment slope would be reshaped (flattened) to a slope that matches the surrounding terrain and provides long term stability. Areas would be rehabilitated and where appropriate reshaped and covered with soils that will support native vegetation. Rehabilitation of the TSF would include revegetation in order to mitigate landscape effects over the longer term. This would be comprehensively documented within a mine rehabilitation plan.

Other information/comments? (eg. accuracy of information)

Soils

Is there a potential for effects on land stability, acid sulphate soils or highly erodible soils?

NYD No Yes If yes, please briefly describe.

No areas of land instability, highly erodible or acid sulphate soils have been identified.

A review of the ASRIS database indicated that the probability of encountering acid sulphate soils in the Project Investigation Area is considered to be low to extremely low.

Further assessment of the soil and geotechnical conditions of the project area is proposed.

Are there geotechnical hazards that may either affect the project or be affected by it?

NYD No Yes If yes, please briefly describe.

Geotechnical investigations would be conducted to support project design activities.

Other information/comments? (eg. accuracy of information)

15. Social environments

Is the project likely to generate significant volumes of road traffic, during construction or operation?

NYD No Yes If yes, provide estimate of traffic volume(s) if practicable.

Additional road traffic volumes would be generated in both the construction and operational phases of the Project. Traffic access to the site would be achieved via the Murray Valley Highway, Upper Murray Road and Bunroy Road (**Appendix A**). Upgrade to Bunroy road may be required.

Further assessment of the anticipated traffic volumes during each Project phase and the impact on the local road network and its users is proposed.

Is there a potential for significant effects on the amenity of residents, due to emissions of dust or odours or changes in visual, noise or traffic conditions?

NYD No Yes If yes, briefly describe the nature of the changes in amenity conditions and the possible areas affected.

The nearest sensitive receptor (residence) is located approximately 4 km from the Project area. Dust and noise impacts associated with the construction and operation of the Project are not anticipated to be significant due to the prevailing winds and the distance of the operations from sensitive receptors such as dwellings.

Dust and noise impacts would be managed as part of the Environmental Management Plan.

Is there a potential for exposure of a human community to health or safety hazards, due to emissions to air or water or noise or chemical hazards or associated transport?

NYD No Yes If yes, briefly describe the hazards and possible implications.

Further assessment of potential public safety and hazards is proposed. Assessment would cover aspects such as transport, chemical storage and use, construction and management of the TSF, as well as emissions to air, noise and water.

Is there a potential for displacement of residences or severance of residential access to community resources due to the proposed development?

NYD No Yes If yes, briefly describe potential effects.

No displacement or severance of residences is anticipated as a result of the Project.

Are non-residential land use activities likely to be displaced as a result of the project?

NYD No Yes If yes, briefly describe the likely effects.

Land used for forestry activities would be displaced during the life of the mine. A small percentage of the investigation area is agricultural land, used predominately for grazing. Project design would seek to minimise any disruption to agricultural activity.

Do any expected changes in non-residential land use activities have a potential to cause adverse effects on local residents/communities, social groups or industries?

NYD No Yes If yes, briefly describe the potential effects.

Given the extent of the native forest estate in this region, impact to forestry activity is not expected to be significant.

It would be necessary to alter the existing public access arrangements (4WD trails) to State Forest in the vicinity of the mine site, ore processing site and the TSF, as these areas would no longer be accessible to the general public. Restricted access has the potential to impact upon recreational pursuits (for example 4WD, trail bike riding, bushwalking).

Is mitigation of potential social effects proposed?

NYD No Yes If yes, please briefly describe.

Dart mining are implementing a community consultation program. This consultation program will assist in identifying issues of concern to affected communities and development of mitigation measures.

Other information/comments? (eg. accuracy of information)

It is expected that the Project would generate local employment and business opportunities. Around 85 Full Time Equivalent (FTE) jobs would be created by the Project when operational and personnel would be sourced primarily from Corryong and the surrounding region. No onsite worker accommodation is required by the project. All accommodation requirements for employees and contractors are expected to be met within existing townships and the local area.

The area to the east of the Project Investigation Area includes an area of cleared agricultural land known as Bunroy Station. Bunroy Station is privately owned land and is zoned in the Towong Planning Scheme as a Rural Activity Zone (RAZ). Harrington's Track is a historic bridle trail approximately 20 km long which runs along the Murray River. It links the Bunroy Station to Tom Groggin Station. It is currently used for bushwalking and for horse riding. An annual 4 day horse-riding event known as 'Riley's Ride' is conducted as part of the Corryong 'Man from Snowy River' Festival. Bunroy Station is considered to have social significance. The Bunroy Creek Tailings Storage Facility alternative was eliminated in part due to the impact that it would have on this property. Access to the Bunroy Station is via Bunroy Road which would be upgraded as part of the Project. No amenity impacts associated with users of Bunroy Station are anticipated.

Cultural heritage**Have relevant Indigenous organisations been consulted on the occurrence of Aboriginal cultural heritage within the project area?**

No If no, list any organisations that it is proposed to consult.
 Yes If yes, list the organisations so far consulted.

At present there are no appointed Registered Aboriginal Parties (RAPs) or registered RAP Applicants for the Project area, but there are three interested Aboriginal parties identified by AAV Hume Region: Duduroa Local Custodians, Dhudhuroa Waywurru and Yaithmatang.

These groups were consulted during the development of the Cultural Heritage Management Plan (CHMP) undertaken for the Dart Mining exploratory drilling access track construction in 2012.

No consultation with these groups has occurred subsequent to the CHMP.

What investigations of cultural heritage in the project area have been done?

(attach details of method and results of any surveys for the project & describe their accuracy)

A CHMP was conducted in 2012 within the Mine Investigation Area of this project:

- *Drilling Access Track Construction. Northern Fall of Mt Unicorn, Corryong: Cultural Heritage Management Plan" (Myers and Mirams 2012).*

The activity area of this CHMP lies between McCormack Creek across Mt Unicorn to Teapot Creek. No previously recorded Aboriginal cultural heritage places were present in the activity area.

A desktop cultural heritage investigation has been undertaken as part of the project pre-feasibility study (GHD 2013) (**Attachment C**). The results of this investigation are described in subsequent sections.

Is any Aboriginal cultural heritage known from the project area?

NYD No Yes If yes, briefly describe:

- Any sites listed on the AAV Site Register
- Sites or areas of sensitivity recorded in recent surveys from the project site or nearby
- Sites or areas of sensitivity identified by representatives of Indigenous organisations

A Victorian Aboriginal Heritage Register database search undertaken 3 July 2013 did not identify any registered Aboriginal cultural heritage places within the Project activity area. The search determined that the activity area is located within registered areas of cultural heritage sensitivity as defined under Regulation 23 of the *Aboriginal Heritage Regulations 2007* (Vic) (refer

Appendix 8):.

A basic search of the NSW AHIMS database showed no sites as being previously recorded for the activity area.

Are there any cultural heritage places listed on the Heritage Register or the Archaeological Inventory under the *Heritage Act 1995* within the project area?

NYD No Yes If yes, please list.

A search conducted on the 8 July 2013 of both the Victorian Heritage Register and Heritage Inventory indicated that there was one Heritage Inventory (VHI) site located within the Power line Investigation area:

- Heritage Inventory Site (Hermes 12200) (VHI No H8325-0007) – Conness Reef mine Site (lat/long: 36.1945/148.0183).

It is expected that through further refinement of the power line alignment, any impacts to the site can be avoided.

An additional site listed on the Victorian Heritage Inventory is located immediately east of the TSF Investigation area:

- Heritage Inventory Site (Hermes 11077) (VHI No H8425-0001) – Thowgla Creek Alluvial Workings (lat/long: 36.3561/147.9325)

No direct impacts to this site are expected.

Is mitigation of potential cultural heritage effects proposed?

NYD No Yes If yes, please briefly describe.

The Project would be subject to a mandatory CHMP in compliance with requirements of the *Aboriginal Heritage Act 2006* and the *Aboriginal Heritage Regulations 2007*.

The Power line Investigation Area (within the NSW border) would be subject to a Due Diligence Assessment in accordance with the Due Diligence Code of Practice for Protection of Aboriginal Objects in NSW to determine whether an Aboriginal Heritage Impact Permit (AHIP) is required.

Any mitigation measures required will be developed as part of these processes.

Other information/comments? (eg. accuracy of information)

16. Energy, wastes & greenhouse gas emissions

What are the main sources of energy that the project facility would consume/generate?

- Electricity network. If possible, estimate power requirement/output
- Natural gas network. If possible, estimate gas requirement/output
- Generated on-site. If possible, estimate power capacity/output
- Other. Please describe.

Please add any relevant additional information.

It is estimated that the electricity consumption would be approximately 40MW over an average period of 8,500hrs per year consuming 340GWhr over a year.

What are the main forms of waste that would be generated by the project facility?

- Wastewater. Describe briefly.
- Solid chemical wastes. Describe briefly.
- Excavated material. Describe briefly.
- Other. Describe briefly.

Please provide relevant further information, including proposed management of wastes.

Current information indicates that the waste rock (approximately 30 million tonnes to be generated over the life of the project) is non-acid forming. A further waste rock characterisation study is currently being undertaken. Waste rock would be used in construction of the Tailings Storage Facility embankment. A waste rock management plan would be developed to identify measures to reduce impacts to environmental values from the handling, storage and use of waste rock. A rehabilitation plan would be developed for the work plan that will identify suitable uses and rehabilitation requirements for waste rock.

The tailings material (approximately 200 million tonnes to be generated over the life of the project) is expected to be non-acid forming. The tailings material would be thickened to a solids concentration to reduce pumping requirements and then transported from the process plant via pipeline and discharged via spigots from the head of the valley. This pipeline easement would be approximately 10 metres wide and would be approximately 4km in length

What level of greenhouse gas emissions is expected to result directly from operation of the project facility?

- Less than 50,000 tonnes of CO₂ equivalent per annum
- Between 50,000 and 100,000 tonnes of CO₂ equivalent per annum
- Between 100,000 and 200,000 tonnes of CO₂ equivalent per annum
- More than 200,000 tonnes of CO₂ equivalent per annum

Please add any relevant additional information, including any identified mitigation options.

The majority of direct greenhouse gas emissions from the operation of the project are from the combustion of diesel for transport.

17. Other environmental issues

Are there any other environmental issues arising from the proposed project?

- No Yes If yes, briefly describe.

18. Environmental management

What measures are currently proposed to avoid, minimise or manage the main potential adverse environmental effects? (if not already described above)

Siting: Please describe briefly

Environmental aspects associated with the project footprint (removal of native vegetation, impacts to significant flora and fauna species etc) would be minimised through micro-siting of project components such as the processing plant, power line and other ancillary works.

Design: Please describe briefly

Key to the design process would be:

- Water - developing a better understanding of the site water balance and designing the operation's water needs and infrastructure in order to minimise impacts to stream flow, water quality and hydrological regimes
- Tailings – characterisation of the tailings material and design of the TSF to minimise risks, manage water quality issues and ensure viability of future rehabilitation objectives.

Environmental management: Please describe briefly.

An Environmental Management Plan (EMP) would be developed to protect the environmental from potential adverse impacts from the construction and operation of the project. The EMP would be consistent with the requirement of AS/NZS 14001:4004, Environmental management systems – Requirements for guidance for use. The EMP would include measures manage the following:

- Impacts on flora and fauna;
- Impacts on cultural heritage;
- Impacts on ground and surface water quality;
- Waste;
- Blast and vibration;
- Erosion and sedimentation;
- Visual amenity;
- Traffic; and
- Dust deposition.

Environmental management during construction and operation would build on Dart's existing protocols for the site as outlined in the approved Work Plan for exploration activities.

19. Other activities

Are there any other activities in the vicinity of the proposed project that have a potential for cumulative effects?

NYD No Yes If yes, briefly describe.

20. Investigation program

Study program

Have any environmental studies not referred to above been conducted for the project?

No Yes If yes, please list here and attach if relevant.

Has a program for future environmental studies been developed?

No Yes If yes, briefly describe.

Section 6 of the Project Development Concept Report (**Attachment A**) provides an indicative list of the proposed further studies and their scope. The requirement for, priority and scope of works associated with these studies would be confirmed as part a detailed risk assessment to be undertaken for the Project.

The indicative list of studies and investigations for the Project is as follows:

- Risk Assessment
- Soils, Geochemistry and Mine Materials
- Surface water, flooding and drainage
- Biodiversity and Habitat
- Groundwater
- Water Management
- Greenhouse Gases and Energy Consumption
- Rehabilitation and Closure
- Land Use
- Aboriginal Cultural Heritage
- Non-Aboriginal Cultural Heritage
- Air Quality
- Noise and Vibration
- Visual
- Social
- Economic
- Road Traffic and Transport
- Environmental Management

Consultation program**Has a consultation program conducted to date for the project?**

No Yes If yes, outline the consultation activities and the stakeholder groups or organisations consulted.

Dart Mining has established a Community Engagement Strategy that identifies key community stakeholders and documents the types of consultation undertaken to engage with the community. Dart Mining has hosted annual community meetings since 2011 in the Corryong and Biggara / Bunroy Valley communities, undertaken letter drops and engaged directly with local landholders. Dart Mining has engaged directly with the Towong Shire Council, has attended council meetings and regularly informs the council of its activities. Other local and state agencies have been consulted about the project.

Consultation with interested indigenous parties has occurred during the development of the Cultural Heritage Management Plan (CHMP) for the exploration program. Consultation with these indigenous parties would continue through the development of a CHMP for the Project.

A summary of community stakeholders is included in Table 10.

Table 10 Community Stakeholders

Stakeholder group	Interest in the Project	Consultation activities undertaken to date
Towong Council	Interest in employment, social aspects, traffic, land use, catchment management.	Various activities including presentation to council meetings and consultation with councillors, mayor and CEO
Upper Murray Landcare Network	Comprised of 8 Landcare groups in the Upper Murray region. Interest in management and	Biggara Landcare Group catchment planning session, Feb 2013.

	quality of land and waterways.	Upper Murray Landcare Network meeting, February 2013.
Bunroy / Biggara / Indi Community	Interest in employment, social aspects, traffic, amenity, land use, catchment management.	Community Meeting, July 2012. Landholder consultation, June 2012. Pre-Drilling information flyer, Nov 2012.
Corryong, Thowgla Valley and Khancoban Communities	Interest in employment, social aspects, traffic, land use, catchment management.	Community Meeting, July 2011 & July 2012. Community update flyer which are advertised on local radio, in newspapers and on signs in shop windows.
Interested Aboriginal Parties: - Dhudhoroa Waywurru - Yaithmathang - Duduroa Traditional Custodians	Interest in aboriginal cultural heritage aspects.	Phone call and/ or email to each interested aboriginal party, Nov 2011 for exploration drilling program.

Has a program for future consultation been developed?

NYD No Yes If yes, briefly describe.

A Consultation Strategy would be developed for the Project that would expand the current engagement strategy to identify opportunities for community involvement as the Project progresses through the environmental and planning approvals process. The objective of community consultation would be to identify community issues of concern and the potential effects of the Project on community values and would assist in providing a mechanism for community feedback and input on project options and potential mitigation measures.

Authorised person for proponent:

I, Lindsay Ward, Managing Director, Dart Mining, confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature: *L.J. Ward.*

Date: 2 August 2013

Person who prepared this referral:

I, Christine Wyatt, Environmental and Planning Approvals Strategic Advisor, GHD, confirm that the information contained in this form is, to my knowledge, true and not misleading.

Signature: 

Date: 2 August 2013

Appendices

Appendix A	Location plan
Appendix B	Investigation area and project elements
Appendix C	Project options
Appendix D	Zoning and overlay plans
Appendix E	Land tenure and exploration licences
Appendix F	Public land management
Appendix G	Cultural heritage plans

Attachments

Attachment A	Project Development Concept Report
Attachment B	Preliminary Flora and Fauna Assessment
Attachment C	Cultural Heritage Desktop Assessment