EPBC Act referral

Australian Government
Department of Agriculture, Water and the Environment

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Title of proposal	**2021/9131 - Livingstone DSO Hematite Mine Project**

Section 1

Summary of your proposed action

1.1 Project industry type Mining

1.2 Provide a detailed description of the proposed action, including all proposed activities

Venture Minerals propose to develop a standalone operation to extract hematite from an ore body within the Livingstone Creek catchment through direct shipping ore (DSO) which has been extracted using conventional open pit mining.

Due to space constraints and portal limitations, further detailed description of the proposed action is provided as supplementary Information in Attachment A Referral Supplement Rev02.pdf (Att A, Section 1.2, pp 1-6) including a project summary table, equipment list, open pit preliminary design and schedule input parameters, characterisation of waste rock for disposal, rock storage facility, product transport, direct and indirect impacts.

1.3 What is the extent and location of your proposed action?

See Appendix B

1.5 Provide a brief physical description of the property on which the proposed action will take place and the location of the proposed action (e.g. proximity to major towns, or for off-shore actions, shortest distance to mainland)

The proposed action is situated approximately 30 km due west of the township of Tullah (approximately 42 km by road), in north-western Tasmania within the Livingstone mining lease area (MLA) 3M/2012. The site is within the Meredith Range Regional Reserve (Crown land which is vested in the Department of Primary Industries, Parks, Water and the Environment, and managed by the Tasmanian Parks and Wildlife Service (PWS).

Further physical description information relating to the property such as vegetation and terrain is provided as supplementary information in Attachment A Referral Supplement Rev02.pdf (Att A, Section 1.5, pp 6) due to space constraints and portal content limit problems preventing inputs.

1.6 What is the size of the proposed action area development footprint (or work area) including disturbance footprint and avoidance footprint (if relevant)?

The project is situated within the Mount Livingstone Mining Lease (ML 3M/2012) which has a total area of 324.3 hectares. The total development footprint of the proposed mining and associated infrastructure will comprise a smaller pit and overall disturbance footprint than the 77.8 ha area presented in the 2012 application and documentation which supported the original application which has been attached as baseline information for this current application. The project disturbance footprint will be as shown in Att B-Fig 2-Disturbance footprint RevE.pdf, and will require clearing of 35.1 ha of existing native vegetation and comprise the following main elements: Open pit – 9.2 ha, Rock storage facility – 11.7 ha, Offices – 1.0 ha, Go line (truck parking) – 0.5 ha, Roads – 9.2 ha, Topsoil stockpiles – 3.5 ha. In summary, the disturbance footprint for the current referral is half that previously proposed in 2012 and the avoidance footprint will be 289.2 ha.

1.7 Proposed action location

Other - Pieman Road, west coast Tasmania. Refer to supplementary information in Att A, Section 1.7.3, pp 6.

1.8 Primary jurisdiction Tasmania

1.9 Has the person proposing to take the action received any Australian Government grant funding to undertake this project?

☐ Yes ☑ No

1.10 Is the proposed action subject to local government planning approval?

☑ Yes ☐ No

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1.10.1 Is there a local government area and council contact for the proposal?

☑ Yes ☐ No

1.10.1.0 Council contact officer details

1.10.1.1 Name of relevant council contact officer	Council Planner: Alison Shea
1.10.1.2 E-mail	planning@westcoast.tas.gov.au
1.10.1.3 Telephone Number	03 6471 4700

1.11 Provide an estimated start and estimated end date for the proposed action	Start Date	04/03/2024
	End Date	30/09/2026

1.12 Provide details of the context, planning framework and state and/or local Government requirements

The proposed action will be required to address a range of environmental, planning and heritage assessment and approval requirements. The Tasmanian Resource Management Planning System (RMPS) was established to achieve sustainable outcomes from the use and development of the State's natural and physical resources. Several pieces of legislation embody the aims of the RMPS. Within the context of this development proposal there are a number of pieces of legislation that the development will be considered against as outlined below.

The proposed action will require planning and environmental approval under the Tasmanian Land Use Planning and Approvals Act 1993 (LUPA Act) and will be assessed as a Level 2 activity under the Environmental Management and Pollution Control Act 1994 (EMPC Act).

Principal approvals

The proposed action is on land is zoned Environmental Management and Rural under the Tasmanian Planning Scheme – West Coast. Mining falls within the extractive industry use class. Extractive industries are a Discretionary use in the Environmental Management zone and a Permitted land use in the Rural zone. This means that a planning permit will be required for the development of the Project.

It is noted that this is a new facility and there are no existing use provisions which apply to the proposal.

Level 2 activities listed in Schedule 2 of EMPC Act are exempt from many of the codes related to environmental matters under the Tasmanian Planning Scheme – West Coast, as these are deferred to the Environment Protection Authority Tasmania (EPA) for assessment under EMPC Act in relation to environmental management.

The EMPC Act classifies development activity depending on the environmental risk presented by the activity. The proposed action is an activity classified as a Level 2 activity under the EMPC Act. Level 2 activities require referral to the EPA and assessment by the Board of the EPA. Any planning permit issued by the West Coast Council must include any conditions provided by the EPA. A Notice of Intent for the proposed action has been prepared and lodged with the EPA pursuant to section 25 of the EMPC Act. It is anticipated that an EIS will be required and that it will be prepared in accordance with general and project-specific guidelines issued by the EPA.

The assessment of impacts on Aboriginal cultural heritage sites outside of the RMPS and is addressed through the Aboriginal Heritage Act 1975. Aboriginal Heritage Tasmania (AHT) have identified no sites of significance within the project area and raised no objection to the proposed action proceeding provided that it is guided by an Unanticipated Discovery Plan.

The project area is within Mining Lease 3M/2012 and the proposed action requires approval of a work program under the Mineral Resources Development Act 1995 (MRD Act). Conditions imposed by Mineral Resources Tasmania (MRT) on the work program may include limitations of areas of disturbance, plus vegetation and plant pathogen management measures.

Secondary approvals

The Tasmanian Nature Conservation Act 2002 (NC Act) lists threatened native vegetation communities in Tasmania. Generally, these communities do not directly translate to threatened ecological communities listed as Matters of National Environmental Significance under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The Tasmanian Threatened Species Protection Act 1995 (TSP Act) identifies those species of flora and fauna considered to be threatened within Tasmania. A Permit to Take is required to disturb these species or their habitats. Many of these species are also listed under the EPBC Act.

Tasmanian State Policies and Projects Act 1993 establishes the process to enact State Policies in relation to the RMPS. State Policies seek to ensure a consistent and co-ordinated approach and incorporate the minimum amount of regulation necessary to achieve their objectives of managing natural resources. State Policies are implemented through their integration into Local Government Planning Schemes.

State policies, environmental protection policies enacted under EMPC Act, and other acts which regulate specific aspects of the assessment process include: Water Management Act 1999, State Policy on Water Quality Management 1997 (Water Quality Policy), State Stormwater Strategy, National Environmental Protection Measures (NEPMs) relating to ambient air quality and other matters, and Weed Management Act 1999 relating to the management of weeds.

1.13 Describe any public consultation that has been, is being or will be undertaken, including with Indigenous stakeholders

The location of the proposed action is remote and there are no neighbours or sensitive uses immediately adjoining the site.

Venture Minerals' stakeholder consultation regarding the proposed Livingstone project will include, but not be limited to, the following methods to facilitate contact and the dissemination of project related information:

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- Maintenance of a register of stakeholders
- Presentation of project information on the Company website (with progress updates as necessary)
- Implementation of consultation actions such as: (i) direct contact of identified primary stakeholders (EPA, DAWE, MRT, WCC, etc), (ii) mailing of project related information to identified stakeholders, (iii) display of posters at relevant locations within local communities.
- Identification of issues of concern to address in approval documentation.
- Venture Minerals has undertaken consultation with key stakeholders, including: (i) Municipal councils and organisations: (ii) West Coast Council, (iii) Waratah-Wynyard Council, (iv) Burnie City Council, (v) Tullah Progress Association, (vi) Cradle Coast Authority, and (vii) State and Federal Members of Parliament.
- State Government Departments: (i) Department of State Growth (including Mineral Resources Tasmania), and (ii) Department of Primary Industries, Parks, Water and Environment (including Aboriginal Heritage Tasmania).
- Commonwealth Government Departments: Department of Agriculture, Water, and the Environment.
- State Authorities: (i) TasRail, (ii) TasPorts, and (iii) Sustainable Timbers Tasmania.
- Other mining companies: (i) Grange Resources, (ii) Minerals and Metals Group (MMG), (iii) Metals X, (iv) Shree Minerals, and (v) Bass Metals.
- Other organisations: (i) Save the Devil Program, and (ii) Tarkine National Coalition.

The identified key issues outlined in the Project Specific Guidelines issued by the EPA for the previous application for this project in 2012 will be used as a base for identified potential issues of concern. They included:
- Potential impacts on surface and groundwater water quality,
- Waste rock management (including measures to prevent or mitigate the formation of acid rock drainage),
- Potential impacts on flora and fauna, and
- Closure strategy.

Any field survey work undertaken as part of the Aboriginal cultural heritage assessment must be undertaken jointly by a Consulting Archaeologist and Aboriginal Heritage Officer using AHT's Aboriginal Heritage standards and procedures, with the assessment forwarded to AHT for endorsement, and to incorporate consultation with traditional owner groups.

1.14 Describe any environmental impact assessments that have been or will be carried out under Commonwealth, State or Territory legislation including relevant impacts of the project

Due to space constraints preventing inputs, environmental impact assessment related information is provided as supplementary information in Att A, Section 1.14, pp 7.

1.15 Is this action part of a staged development (or a component of a larger project)?

☐ Yes ☑ No

1.16 Is the proposed action related to other actions or proposals in the region?

☑ Yes ☐ No

1.16.1 Identify the nature/scope and location of the related action (Including under the relevant legislation)

Due to space constraints preventing inputs, the nature/scope and location of the related action has been provided as supplementary information in Att A, Section 1.16.1, pp 7.

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Section 2

Matters of national environmental significance

2.1 Is the proposed action likely to have any direct or indirect impact on the values of any World Heritage properties?

☐ Yes ☑ No

2.2 Is the proposed action likely to have any direct or indirect impact on the values of any National Heritage places?

☐ Yes ☑ No

2.3 Is the proposed action likely to have any direct or indirect impact on the ecological character of a Ramsar wetland?

☐ Yes ☑ No

2.4 Is the proposed action likely to have any direct or indirect impact on the members of any listed species or any threatened ecological community, or their habitat?

☑ Yes ☐ No

Species or threatened ecological community

Alpine Sphagnum Bogs and Associated fens.
NOTE: Due to space constraints and portal character limit upload problems, general overview comments relating to species or threatened ecological community have been included as supplementary information in Att A, Section 2.4.1, pp7. Further information provided for Significance Assessment provided as Att C-Significance Assessment.pdf.

Impact

The Commonwealth Protected Matters report (EPBC Act PMR, 2021), provided as Att F-PMST Livingstone.pdf, identifies this community as having potential to be present within the project area.
This community was not listed in 2011 when NBES undertook the site survey.
The 2012 NBES report (provided as Att D-Flora Fauna Rpt.pdf) recorded that it was unlikely for Alpine Sphagnum Bogs and Associated fens to occur within the project area and therefore be impacted.

Species or threatened ecological community

Tasmanian Forests and Woodlands dominated by black gum or Brookers gum (Eucalyptus ovata / E.brookeriana)
Tasmanian white gum (Eucalyptus viminalis) wet forest

Impact

These ecological communities were not listed in 2011, so were not considered in the assessment report for the project area (NBES, 2012; provided as Att D-Flora fauna Rpt.pdf).
Based on the vegetation community descriptions provided in the assessment report, they are considered unlikely to exist within the project area.

Species or threatened ecological community

Tasmanian devil (Sarcophilus harrisii) - listed as Endangered under both the EPBC and TSP Acts

Impact

Identified as potentially present by the EPBC Act PMR (provided as Att F-PMST Livingstone.pdf) and NVAR (provided as Att E-NVA Report.pdf) searches, plus the 2012 NBES report (provided as Att D-Flora Fauna Rpt.pdf) stated while not considered to be denning habitat, there was a high likelihood of it being present, as a scat was found during the 2011 survey.

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Clearing of native vegetation should not directly impact on the species as the lack of rocky outcrops with suitable shelters (i. e. low likelihood of critical habitat being present).

There is potential for an indirectly impact through reduction in the local foraging area and potentially affect the carrying capacity of the area to support devils and potential increase mortality near Pieman Road due to collision with vehicles.

The NBES 2012 assessment report (NBES, 2012; provided as Att D-Flora fauna Rpt.pdf) concluded that the potential impact is likely to be insignificant due to the large extent of continuous similar habitat in the immediate and broader vicinity.

Species or threatened ecological community

Spotted-tail quoll, Tiger Quoll (Dasyurus maculatus maculatus) – listed as Vulnerable under the EPBC Act and Rare under the TSP Act

Impact

The 2012 NBES report (NBES, 2012; provided as Att D-Flora fauna Rpt.pdf) stated there was a high likelihood of it being present, as a potential scat was found during the survey.

The proposed action area is considered to have high foraging habitat value and areas of rainforest to have a moderate possibility of supporting a spotted-tailed quoll den. The clearing of native vegetation and proposed activity within the project area will result in a localised change in distribution of the population, but due to the potential habitat in surrounding area has low potential to cause a long term decrease in population size.

The NBES report reported that the development's area of disturbance would result in a 0.5% loss of suitable spotted-tailed quoll foraging habitat from the 15,000 ha present in the immediate area and was unlikely to have a significant impact on the population.

An increase in traffic volume to and from the site has the potential to result in a higher incidence of roadkill or injury to the species if not managed to mitigate impacts.

The potential impact upon this species as a result of the proposed action is not considered significant, nor to impact the recovery of the species.

A Quoll den investigation will be undertaken as part of the preparation of the Environmental Impact Statement for the proposed and avoidance and/or mitigation measures identified.

Species or threatened ecological community

Tasmanian Wedge-tailed eagle (Aquila audax subsp. fleayi) – listed as Endangered under the EPBC and TSP Acts

Impact

The NBES 2012 assessment report (provided as Att D_Flora Fauna Rpt.pdf) considered the majority of the MLA to be unsuitable as nesting habitat for wedge-tailed eagles, some areas were highlighted during the on-ground survey as having the potential to support wedge-tailed eagle nests. Refer to Figure 3 of the NBES 2012 assessment report (Att D, Fig 3, pp 26) for the shows the location of potential nesting habitat investigated within the project area for nests during the helicopter survey in 2011.

The absence of old growth eucalypt trees means a lack of nesting habitat for eagles. On this basis, the disturbance footprint and mining activity is not expected to have a direct impact on eagles.

The overall disturbance footprint of approximately 35.1 ha will not significantly reduce the available foraging or nesting habitats for this species in the mining lease area or the wider locality, nor result in fragmentation of any populations as this species occurs widely across Tasmania.

A follow-up survey will be undertaken to ascertain their presence, or otherwise. Assessment of the findings of the survey will be undertaken in relation to potential impact on their breeding cycle and avoidance and mitigation measures required.

2.4.2 Do you consider this impact to be significant?

☑ Yes ☐ No

2.5 Is the proposed action likely to have any direct or indirect impact on the members of any listed migratory species or their habitat?

☐ Yes ☑ No

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2.6 Is the proposed action to be undertaken in a marine environment (outside Commonwealth marine areas)?

☐ Yes ☑ No

2.7 Is the proposed action likely to be taken on or near Commonwealth land?

☐ Yes ☑ No

2.8 Is the proposed action taking place in the Great Barrier Reef Marine Park?

☐ Yes ☑ No

2.9 Is the proposed action likely to have any direct or indirect impact on a water resource from coal seam gas or large coal mining development?

☐ Yes ☑ No

2.10 Is the proposed action a nuclear action?

☐ Yes ☑ No

2.11 Is the proposed action to be taken by a Commonwealth agency?

☐ Yes ☑ No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage place overseas?

☐ Yes ☑ No

2.13 Is the proposed action likely to have any direct or indirect impact on any part of the environment in the Commonwealth marine area?

☐ Yes ☑ No

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Section 3

Description of the project area

3.1 Describe the flora and fauna relevant to the project area

Due to space constraints, general overview comments relating to flora and fauna that are relevant to the project area have been included as supplementary information in Att A, Section 3.1, pp 9).

Flora and fauna investigation related searches and survey reports are provided as supplementary information in Att C-Significance Assessment.pdf, Att D-Flora Fauna Rpt.pdf, Att E-NVA Report.pdf and Att F-PMST Livingstone.pdf.

3.2 Describe the hydrology relevant to the project area (including water flows)

Refer to supplementary information (Figures 1, 2 and 3) provided Att A, Section 3.2, pp 10 for figures and tables, plus Figure 1 in Attachment A supplementary information report titled Att A-Referral Supplement Rev02.pdf (Att A, Fig 1, pp 11) for description of the Livingstone Creek catchment. This catchment is approximately 450 ha in size, forming a sub-catchment of the Stanley River. Flows in these catchments respond rapidly to rain events. Based on the adopted rainfall and evaporation data in 2011, and a runoff coefficient of about 60%, the annual discharge from the mainstream and its minor tributaries flowing through the Livingstone Creek catchment to the Stanley River was estimated at 6,000 ML (6 GL).

Climatological data recorded at the nearest meteorological station (14.2 km away) at Mt Read from 1996 to 2021 reports an annual rainfall (decile 5 median) of 3,581.4 mm, ranging from a minimum of 179.8 mm in February up to a maximum rainfall of 429.2 mm in May. No evaporation data is available for this weather station.

Lake Pieman is the ultimate receiving body of water for the Stanley River. It is a narrow, Class 1 watercourse impounded by Reece Dam, with a full storage level near 96 m AHD. The total catchment area of the Pieman River at Pieman Heads is about 4,150 km2 and about 2,500 km2 above the Reece Dam and including Stanley River near the Livingstone site. The average discharge at Pieman Heads is 190 cubic metres per second (cumecs) and at Reece Dam 160 cumecs and the average retention time of water in the lake is 55 days.

During 2008 and 2009, preliminary water quality monitoring in the Stanley River catchment was undertaken by Coffey Environments – just upstream at the Stanley River Bridge on the Pieman Road, and at the lower end of Livingstone Creek at its confluence with Stanley River. Water quality results from four quarterly sampling runs showed that, like the streams on Mount Lindsay to the east, the Stanley River catchment watercourses' waters are very low salinity, slightly acidic sodium chloride types with relatively high levels of naturally occurring aluminium and copper. Sulphate was not detected at levels up to 5 mg/L in all samples. The pH of all creek waters monitored in the Livingstone catchment ranged from 3.5 to 6.2, which is slightly more acidic than recorded in the Mount Lindsay streams, and probably relates to the Meredith Granite as a basement rock.

The 2021 NVA search report records the freshwater ecosystem values of the nearby Stanley River as having high naturalness, medium integrated conservation value and high conservation management priority (Att E-NVA Report.pdf).

A hydrogeological program was undertaken at the site in 2011, with:

- The depth to water table identified as being variable, ranging from 0 to 50 m across the project site
- Ongoing surface water and groundwater sampling as shown in Figure 3 in Attachment G
- Groundwater monitoring bores have been installed and permeability tested; and
- A numerical 3D computer model of the proposed mine site and environs developed.

At each of the four water monitoring sites on Livingstone Creek and Stanley River (LC1, LC2, SR1 and SR2), submerged data loggers recorded water depth, which, correlated with flow rates, provide estimates of discharge, plus water quality monitoring sites in each of the watercourses, upstream and downstream of the proposed mining operations.

Three subsequent monitoring events occurred in July 2011, September 2011 and January 2012. Monitoring ceased in 2013 when the project was put on hold. The previous monitoring program will be reviewed and recommenced for the proposed action.

Detailed groundwater data will be presented in the EIS. A baseline groundwater investigation will be undertaken to investigate any hydraulic connectivity between the proposed activity and surrounding hydrogeological values such as aquifers. The proposed RSF will be designed to result in minimal interaction between any values.

3.3 Describe the soil and vegetation characteristics relevant to the project area

Due to space constraints, general overview comments relating to species or threatened ecological community have been included as supplementary information in Att A, Section 3.3, pp 14.

3.4 Describe any outstanding natural features and/or any other important or unique values relevant to the project area

Part of the proposed action footprint includes areas mapped as part of the Western Tasmania Blanket Bogs, a geoconservation feature listed on the Tasmanian Geoconservation Database. As this geoconservation feature has not been mapped, its distribution is defined on the LISTmap by identifying all areas covered by organosols and moorland vegetation in western Tasmania, extending from far northwest to far south Tasmania. This feature is described as the most extensive organosol terrain in Australia and the Southern Hemisphere, and the conservation values relate to the total extent and size of the site. There are numerous other areas of this site mapped in proximity to the project area. Blanket bogs can also contain

other significant features including peat mounds and subfossils.

Ground disturbance and vegetation disturbance are identified as threats to this feature and its presence will be confirmed, to allow appropriate avoidance or management measures to be developed.

Buttongrass moorland with emergent shrubs is identified as an indicator community for this feature and this community has been identified during botanical field survey of the project area in 2011 (Att D-Flora Fauna Rpt.pdf), but the potential for Alpine Sphagnum Bogs and Associated fens to occur within the project area was noted to be nil, as the entire MLA is below alpine level and is not suitable habitat.

Further investigation of the geoconservation significance and reservation of this feature within Tasmania will be incorporated into the EIS.

The proposed action is within an area referred to as the Tarkine Wilderness Area, which does not currently have a National heritage listing but is included in a nominated boundary extension of the Tarkine Wilderness Area.

3.5 Describe the status of native vegetation relevant to the project area

None of the six vegetation communities recorded in 2011 botanical site survey, nor in 2021 EPBC Act PMR (Att E-NVA Report.pdf) and NVAR database (Att F- PMST Livingstone.pdf) searches, were listed as threatened under the Commonwealth or State legislation and are reported to be well reserved within Tasmania on a state-wide and bioregional context.

Refer to Table 1 in the NBES report in Att D, Section 3.1, pp 13 which outlines the extent and reservation status of vegetation communities within the project area and Appendix 3 for a full species list.

The 2011 botanical survey (NBES, 2012; Att D-Flora Fauna Rpt.pdf) of the Livingstone MLA reported that the presence of threatened vascular plant species listed under the schedules of the Commonwealth EPBC Act, nor Tasmanian TSP Act is considered to be unlikely. The following species listed were identified in the NBES report as potentially present within the project area:

- Funnel heath, Smooth heath (Epacris glabella), listed as endangered under the EPBC Act, has low potential to be present
- Northwest heath (Epacris curtisiae), listed as rare under the TSP Act, has low potential to be present
- Scrambling Ground-fern (Hypolepis distans), listed as endangered under the EPBC Act, was not identified for consideration in the 2011 botanical survey
- Forest groundsel (Senecio velleioides), listed as rare under the TSP Act, has very low potential to be present; and
- An endemic tiny, flat, leafy lichen (Menegassia minuta), listed as endangered under the TSP Act, has very low potential to be present as there is no tall rainforest present.

The EPBC Act PMST (Att F-PMST Livingstone) identified three threatened ecological communities as potentially occurring within 5 km of the proposed action. Based on the 2011 botanical study findings, it is not expected that these communities are present within the proposed action:

- Alpine Sphagnum Bogs and Associated Fens (listed as endangered under the EPBC Act)
- Tasmanian Forests and Woodlands dominated by black gum or Brookers gum (Eucalyptus ovata / E. brookeriana) (listed as critically endangered under the EPBC Act); and
- Tasmanian white gum (Eucalyptus viminalis) wet forest (listed as critically endangered under the EPBC Act).

A natural values assessment for the proposed action will be prepared and reported in the EIS. Based on current information, clearing of vegetation within the disturbance footprint of the proposed action is not expected to have an impact on listed flora species or threatened vegetation communities.

3.6 Describe the gradient (or depth range if action is to be taken in a marine area) relevant to the project area

The area around the proposed action is comprised of hill slopes on the western, northern, and eastern sides, while the central and southern portions are predominantly flat and low-lying, with topography dominated by drainage lines that feed into Stanley River.

Livingstone Creek runs through the central section of the survey area towards Lake Pieman. The altitude range of terrain within the proposed action area is from approximately 230 m above sea level (ASL) in the south to 500 m ASL in the north. Further description of site hydrology was provided in Section 3.2 above.

Surface drainage will require management, comprising:

- Construction of surface water cut-off drains upslope of the open pit and rock storage facility to divert clean water
- Collection of water from within the open pit and RSF; and
- Treatment and controlled discharge of water.

3.7 Describe the current condition of the environment relevant to the project area

The 2011 Botanical assessment report of the MLA (provided as Att D-Flora and Fauna Rpt.pdf):

- described the vegetation on site to have been largely undisturbed until recent exploration related activities (e.g. access tracks, cut lines and drilling platforms) occurred within lower lying areas
- observed evidence of historic mining activity in some parts
- evidence of some vegetation communities having historical impact by fire

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- no declared weeds recorded within the project area (but the site will need to manage vehicle hygiene to minimise introduction and spread of weeds as present within the region); and
- likely presence and potential for spread of plant pathogens (Phytophthora cinnamomi and Chalara australis).

Since the 2011 survey, additional geological investigations and groundwater bore installation has occurred within the proposed action area.

3.8 Describe any Commonwealth Heritage places or other places recognised as having heritage values relevant to the project

There are no listed Commonwealth Heritage places within the project area.

The site is National heritage listing but is not included in the MNES as the nominated boundary extension of the Tarkine Wilderness Area is yet to be assessed.

In relation to other places recognised as having heritage values:

- A report titled Historic Heritage Desktop Assessment, Stanley River, Tullah was prepared by Austral Tasmania in July 2011 (Att I-Heritage Rpt.pdf) found an intensive period of mining development on the Stanley River tin field from the late nineteenth through to the early twentieth century, with lower levels of development along Livingstone Creek.
- A subsequent field survey by Austral Tasmania identified 47 potential historical heritage sites of local significance, with the site types broadly divided into sites related to historic occupation and sites related to historic mining activity. It should be noted that the majority of historic heritage sites identified, ie the Stanley Reward sites, will not be impacted as the Livingstone project works will not disturb these areas.
- Recent searches of the Tasmanian Heritage Register and Tasmanian Planning Scheme – West Coast heritage schedule in October 2021 confirms there are no state significant historic heritage places on the site.

3.9 Describe any Indigenous heritage values relevant to the project area

Cultural Heritage Management Australia (CHMA) undertook an Aboriginal Cultural Heritage Assessment of the Stanley River Mining Lease Area, North-West Tasmania in 2011 (Att J-Aboriginal Hertiage.pdf). This field survey comprised 16.2 km of walked survey transects within the bounds of the MLA. This survey identified no archaeological sites or areas of potential archaeological sensitivity, and no site-specific heritage constraints or requirements for the proposed action.

A search of the Tasmanian Aboriginal Site Index (TASI) in 2011 identified no registered Aboriginal heritage sites identified within proposed action area, with the closest known site was situated over 20 km to the west of Mount Lindsay.

A recent search of the Aboriginal Heritage Register in October 2021 by Aboriginal Heritage Tasmania indicated that there are no Aboriginal heritage sites recorded within or close to the proposed action.

Due to a review of previous reports and some of the areas being highly disturbed, it is anticipated that there is a low likelihood of Aboriginal heritage being present. AHT have no objection to the project proceeding, provided works are undertaken in accordance with AHT's Unanticipated Discovery Plan.

3.10 Describe the tenure of the action area (e.g. freehold, leasehold) relevant to the project area

All of the proposed action is located within the Meredith Range Regional Reserve under the Nature Conservation Act 2002 on land which has no title available and is Crown Land vested in the Department of Primary Industries, Parks, Water and the Environment and managed by the Tasmanian Parks and Wildlife Service. There is one small area on the south-eastern corner of the MLA which is vested in the Hydro Electric Corporation.

3.11 Describe any existing or any proposed uses relevant to the project area

The proposed action will be located in an area which has been subjected to more than a century of previous mining and exploration activities and will therefore be consistent with established land use.

The existing Pieman Road will be used to access the site. The Piemen Road is used by Venture to access its existing Riley and proposed Mount Lindsay mines. Existing infrastructure on the Riley mine will be utilised for crushing and screening material from the proposed action to minimise the need for duplication within the proposed action area.

The location of existing exploration tracks onsite will be adopted where possible for proposed roads for the proposed action.

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Section 4

Measures to avoid or reduce impacts

4.1 Describe the measures you will undertake to avoid or reduce impact from your proposed action

Avoidance measures

The key approach proposed to minimise impacts on MNES will be avoidance of impacts. The open pit mining method proposed will have a total disturbance footprint of approximately 35.1 ha. This is notably smaller than the original development 77.8 ha proposed in 2012 (under 2012/6342), reducing impacts on habitats available on site.

Similarly, the proposed action would utilise existing processing the material via crushing and screening infrastructure on the Riley Mine lease rather than developing duplicate facilities within the project area. The Riley operation is anticipated to have been completed by the time the Livingstone mining activity commences, so this is a beneficial use of existing equipment which is no longer actively being used.

Management Measures

Where impacts cannot be avoided, management measures, including (but not limited to) the following, will be implemented to ensure that ongoing impacts are minimised as far as reasonable.

Due to the passage of time since some of the original field surveys and impact assessments, it is proposed that a focussed fauna survey for significant fauna species and habitat (denning and nesting sites) will be undertaken to obtain a more current understanding of the existing environment within the project area and reflect updated proposed development information. This updated information will be presented in the EIS and form the basis of environmental approvals.

An EIS will be prepared as part of the approval process which will outline Venture's management measure commitments for implement to avoid and minimise potential impacts of the proposed development on the environment during construction and operation of the mine. These measures will include and not be limited to:

- Pre-clearance survey for Tasmanian devil and Spotted-tailed quoll dens will be undertaken prior to the commencement of any vegetation clearance (If a suspected den is found, then appropriate permits will be sought to enable temporary decommissioning of the den prior to construction in accordance with DPIPWE Guidelines).
- Recommencement of baseline surface water and groundwater monitoring
- Construction areas (and identified MNES related features identified in surveys and impact assessment reports) will be clearly demarcated in construction plans so that significant features are protected, and the extent of disturbance is delineated on the ground to minimise unnecessary soil or vegetation disturbance
- A weed and hygiene management plan meeting the DPIPWE guidelines for such plans will be developed. In particular, the plan will identify how these issues will be managed during and post construction and including long term monitoring and control
- Stockpiled materials (e.g. topsoil) will be managed to ensure that dust and potential runoff is minimised and does not enter watercourses
- Where required, erosion and sediment control measures such as silt stop fencing, sediment traps and erosion control matting will be installed prior to the commencement of construction activities (and monitored regularly during construction)
- Overland drainage flow will be diverted away from disturbed areas and bare soil to outfalls with sediment traps to reduce the potential for erosion
- Construction of surface water diversion drains upslope of the open pit and RSF
- Undertake ongoing operational discharge, ambient surface water and groundwater monitoring
- Construction and operation of a system for management of water collected within the open pit and RSF
- Construction and operation of a suitably designed RSF for containment of PAF waste rock
- Rehabilitation and revegetation of disturbed areas will occur as soon as practicable on completion of construction to reduce the potential for ongoing soil erosion to occur
- Establishment of a maximum speed limit of 20 km/h for all access tracks within the mining lease area.
- Placement of warning signs to advise drivers to the presence of threatened mammals.
- Development and implementation of a roadkill management strategy including using buses to transport staff to site, avoidance of night traffic where possible to minimise potential for roadkill mortality, and relocation of roadkill carcasses from the road verge into nearby vegetation to reduce the potential for secondary roadkill deaths.
- Implementation of virtual fencing if monitoring indicates further management measures are needed.
- Development and implementation of a management strategy based on the findings of the fauna surveys and recommendations in the associated impact assessment report to minimise impacts on identified potential habitat trees for significant fauna species (e.g. Tasmanian wedge-tailed eagle).

4.2 For matters protected by the EPBC Act that may be affected by the proposed action, describe the proposed environmental outcomes to be achieved

None of the likely assessed impacts on threatened species or communities protected by the EPBC Act are considered to be significant (refer to Section 2.4 of the online portal). As noted in Section 4.1 of the online portal, avoidance measures will be implemented to ensure impacts are avoided and/or mitigated. The proposed outcomes and potential for significant impacts on MNES is summarised below:

- Tasmanian devil and Spotted-tailed quoll – outcomes for the Tasmanian devil and spotted-tailed quoll relate to the

protection of maternal den sites. Surveys for active and suspected den sites prior to disturbance, and avoidance of these will avoid disruption of breeding activities, or investigate permanent decommissioning if present within the open pit or RSF areas where avoidance is not possible. Development and implementation of a roadkill management strategy to minimise potential impacts. Impacts to these species are not anticipated to be significant.

- Tasmanian wedge-tailed eagle – while the 2012 NBES report (Att D-Flora Fauna Rpt.pdf) stated the likelihood of occurrence of this species was low, follow-up focussed survey is considered pertinent. Outcomes for this species in this case relate to the protection of identified active nest sites from disturbance by the proposed action as identified in focussed survey and impact assessment report, plus checked during the pre-clearance survey. Implementation of avoidance measures will minimise the potential for disturbance of nesting activities. A follow-up nest survey will be undertaken to identify active nests, assess impacts and enable avoidance and mitigation measures to be outlined in the EIS. Based on the 2011 NBES survey and 2012 report (Att D-Flora Fauna Rpt.pdf), no direct impact to any nest site is expected and impacts will be avoided.

Further focussed surveys of listed species will be undertaken within the project area to facilitate the use of current significant or threatened flora and fauna related information is used in an updated impact assessment of the proposed development, enable avoidance or mitigation measures to be implemented and subsequently reported in the EIS.

Refer attached supporting documents uploaded in previous sections; Att C-Significance Assessment.pdf, Att D-Flora Fauna Rpt.pdf, Att F-PMST Livingstone.pdf.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 5

Conclusion on the likelihood of significant impacts

5.1 You indicated the below ticked items to be of significant impact and therefore you consider the action to be a controlled action

- ☐ World Heritage properties
- ☐ National Heritage places
- ☐ Wetlands of international importance (declared Ramsar wetlands)
- ☑ Listed threatened species or any threatened ecological community
- ☐ Listed migratory species
- ☐ Marine environment outside Commonwealth marine areas
- ☐ Protection of the environment from actions involving Commonwealth land
- ☐ Great Barrier Reef Marine Park
- ☐ A water resource, in relation to coal seam gas development and large coal mining development
- ☐ Protection of the environment from nuclear actions
- ☐ Protection of the environment from Commonwealth actions
- ☐ Commonwealth Heritage places overseas
- ☐ Commonwealth marine areas

5.2 If no significant matters are identified, provide the key reasons why you think the proposed action is not likely to have a significant impact on a matter protected under the EPBC Act and therefore not a controlled action

Not applicable - the proposed action is considered to have the potential to have a significant impact on MNES.

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 6

Environmental record of the person proposing to take the action

6.1 Does the person taking the action have a satisfactory record of responsible environmental management? Explain in further detail

Yes. Venture is committed to responsible environmental and social performance and the effective governance of its operations in accordance with its Sustainability Policy and Australian Standards. It is effectively operating an existing nearby operation, the Riley Mine under the core principles of its Sustainability Policy which comprises Environment, Social (Health and Safety) and Governance (provided as Att G-Sustainability Policy.pdf).

While the Riley Mine was granted approval in August 2013, appeals were made, and the development was stalled while the appeals were heard.

Once resolved, the iron ore price had dropped, and the Riley Mine was put on hold until 2021 when more favourable market returned. Unfortunately, cessation of the Riley Mine failed to notify the Department and was issued with infringements as outlined in Section 6.2.

6.2 Provide details of any past or present proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against either (a) the person proposing to take the action or, (b) if a permit has been applied for in relation to the action – the person making the application

On 3 December 2019, Venture was issued with two infringement notices totalling $25,200 by the Department of the Environment and Energy for failing to meet two of the 37 conditions attached to their environmental approval received under Part 9 of the EPBC Act (Conditions 24 and 29). Venture was found to have failed to notify the Department of the commencement date and to contribute funds to the Save the Tasmanian Devil Program.

Venture cooperated with officers of the Office of Compliance throughout the investigation and undertook steps to rectify the situation.

6.3 If it is a corporation undertaking the action will the action be taken in accordance with the corporation's environmental policy and framework?

☑ Yes ☐ No

6.3.1 If the person taking the action is a corporation, provide details of the corporation's environmental policy and planning framework

The Venture Minerals environment policy is incorporated into a Sustainability policy incorporates environmental (Att G-Sustainability policy.pdf).

The Livingstone DSO project will be managed under an Environmental Management System consistent with the principles of ISO14001.

6.4 Has the person taking the action previously referred an action under the EPBC Act, or been responsible for undertaking an action referred under the EPBC Act?

☑ Yes ☐ No

6.4.1 EPBC Act No and/or Name of Proposal

Venture have submitted three referrals since 2011 as outlined below, with only one progressing through the approval process to construction and operation;

- EPBC 2012/6342; Livingstone Hematite DSO Mine EPBC Referral (Determined to be a controlled action. Application was put on hold and not progressed to completion - Withdrawn in October 2021)
- 2011/6178; Mt Lindsay Tin-Tungsten-Magnetite-Copper Mine EPBC Referral (Determined to be a controlled action. Application was put on hold and not progressed to completion - Withdrawn in October 2021)
- 2012/6339; Riley Hematite DSO Mine EPBC Referral (Approved and operating).

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 7

Information sources

Reference source

All references are attached

Reliability

Medium - The investigations and associated reports have been prepared by environmental and specialist consultants, adopting approved methodology and reporting procedures, using reliable database and information sources. Reports have been prepared with consideration of regulatory guidelines, with reference to applicable regulatory and accepted best practice requirements.

Uncertainties

Medium - Uncertainties relate to the passage of time and extent of investigations within the Livingstone site. Information relating to some environmental aspects of the site described for the original 2012 project will need to be revisited and reports updated to reflect changes in the environment and in relation to changes in regulatory descriptions and listings (e.g. TASVEG communities, threatened flora and fauna).

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 8

Proposed alternatives

Do you have any feasible alternatives to taking the proposed action?

Yes ☑ No

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Section 9

Person proposing the action

9.1.1 Is the person proposing the action an organisation or business?

☑ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	Venture Minerals Limited
Business name	
ABN	51119678385
ACN	
Business address	24 Outram St, West Perth, 6005, WA, Australia
Postal address	
Main Phone number	08 6279 9428
Fax	
Primary email address	admin@ventureminerals.com.au
Secondary email address	

9.1.2 I qualify for exemption from fees under Regulation 5.23(1)(ii) of the EPBC Regulations because I am:

☐ Small business
☑ Not applicable

9.1.2.2 I would like to apply for a waiver of full or partial fees under Regulation 5.21A of the EPBC Regulations

☐ Yes ☑ No

9.1.3 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Andrew
Last name	Radonjic
Job title	Managing Director
Phone	08 6279 9428
Mobile	
Fax	
Email	admin@ventureminerals.com.au
Primary address	24 Outram St, West Perth, 6005, WA, Australia
Address	

Declaration: Person proposing the action (To be signed by the person at 9.1.3)

I, Andrew Radonjic, declare that to the best of my knowledge the information I have given on, or attached to the EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence. I declare that I am not taking the action on behalf or for the benefit of any other person or entity.

Signature: ..... Date: 23/02/2022

I, Andrew Radonjic, the person proposing the action, consent to the designation of _____ as the proponent for the purposes of the action described in this EPBC Act Referral.

Signature:..... Date: 23/02/2022

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Proposed designated proponent

9.2.1 Is the proposed designated proponent an organisation or business?

☐ Yes ☑ No

9.2.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	Andrew
Last name	Radonjic
Job title	Managing Director
Phone	08 6279 9428
Mobile	
Fax	
Email	admin@ventureminerals.com.au
Primary address	24 Outram St, West Perth, 6005, WA, Australia
Address	

Declaration: Proposed Designated Proponent

I, Andrew Radonjic ,the **proposed designated proponent, consent to the designation of myself as the proponent for the purposes of the action described in this EPBC Act Referral.**

Signature: ..... **Date:** 23/02/2022

Australian Government
Department of Agriculture, Water and the Environment

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Referring party (person preparing the information)

9.3.1 Is the referring party an organisation or a business?

☑ Yes ☐ No

Organisation

Organisation name (as registered for ABN/ACN)	PITT & SHERRY (OPERATIONS) PTY. LTD.
Business name	
ABN	67140184309
ACN	
Business address	199 Macquarie St, Hobart, 7000, TAS, Australia
Postal address	
Main Phone number	1300748874
Fax	
Primary email address	info@pittsh.com.au
Secondary email address	

9.3.2 Contact (for an organisation - the contact details of the person authorised to sign on behalf of the organisation)

First name	David
Last name	Lenel
Job title	Team Leader - Planning and Environment
Phone	1300748874
Mobile	
Fax	
Email	dlenel@pittsh.com.au
Primary address	199 Macquarie St, Hobart, 7000, TAS, Australia
Address	

Declaration: Referring party (person preparing the information)

I, David Lenel **, declare that to the best of my knowledge the information I have given on, or attached to this EPBC Act Referral is complete, current and correct. I understand that giving false or misleading information is a serious offence.**

Signature: ..... **Date:** 23/02/2022

Note: PDF may contain fields not relevant to your application. These fields will appear blank or unticked. Please disregard these fields.

Appendix A

Attachment

Document Type	File Name
action_area_images	Att B-Fig 1-Site Location.pdf
action_area_images	*Att B- Fig 2-Disturbance footprint.pdf
action_area_images	*AttA-Referral_Supplement.pdf
action_area_images	Att A- Referral Supplement Rev02.pdf
action_area_images	Att B-Fig 2-Disturbance footprint RevE.pdf
supporting_tech_reports	Att C-Significance Assessment.pdf
supporting_tech_reports	Att D-Flora Fauna Rpt.pdf
supporting_tech_reports	Att E-NVA Report.pdf
supporting_tech_reports	Att F-PMST Livingstone.pdf
supporting_tech_reports	**Att J-Aboriginal heritage Rpt.pdf
hydro_investigation_files	Att H-Hydrogeological Rpt.pdf
corp_env_policy_docs	Att G-Sustainability Policy.pdf

* NOT PUBLISHED - SUPERSEDED
** NOT PUBLISHED - SENSITIVITIES

Appendix B

Coordinates

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