Title of Proposal - Multicom Resources Pty Ltd, Saint Elmo Vanadium Project, 25 km east Julia Creek, QLD

Section 1 - Summary of your proposed action

Provide a summary of your proposed action, including any consultations undertaken.

1.1 Project Industry Type

Mining

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

Multicom Resources Pty Ltd is an exploration and mining company seeking to develop the Saint Elmo Vanadium Project (the Project), approximately 25 km east of Julia Creek, Queensland (EPM 26410).

The area of EPM 26410 is 10,573 ha and measures approximately 20 km in length and 8 km in width at its widest boundary. The total perimeter is 65 km. Extensive test drilling and metallurgical test work has been completed, identifying significant vanadium deposits close to the soil surface. The Project has a target production of 10,000 tonnes per annum (tpa) of Vanadium Pentoxide (V2O5), with the resource exceeding a 30 year mine life. The mine is expected to be a shallow (15 m average) open cut mine.

The proposed activity involves the development of an intrusive resource harvesting facility, incorporating shallow <20 m deep (strip ratios: 0/1 – 2/1) strip mining practices, in order to obtain access to large known deposits of vanadium.

The Project will be an open cut mine with associated dump and haul operations. A range of ancillary infrastructure will be required to support the mining activity, including:
? Basic administrative and crib facilities;
? Vehicle storage, maintenance and refueling areas;
? Site water storage and management facilities;
? Overburden storage and management areas;
? Ore processing facilities; and
? Site access road, fencing and related security facilities.

Vanadium is a soft, ductile, silver-grey metal that is used primarily to make metal alloys for high-strength steel production. Additionally, Vanadium is used in the production of Vanadium redox batteries which have the capacity to supply multi-megawatt scale base load storage. There is currently an increasing global demand for lighter weight and higher strength steels, making Vanadium a valuable resource.

1.3 What is the extent and location of your proposed action? Use the polygon tool on the

map below to mark the location of your proposed action.

Area	Point	Latitude	Longitude
Approx. EPM	1	-20.606856062846	141.87102933427
Approx. EPM	2	-20.606775723804	141.88913960953
Approx. EPM	3	-20.621637725394	141.88974042435
Approx. EPM	4	-20.621798387758	141.89840932389
Approx. EPM	5	-20.663484537773	141.90064092179
Approx. EPM	6	-20.663484537773	141.90690656205
Approx. EPM	7	-20.66870454117	141.9072498848
Approx. EPM	8	-20.668945460073	141.88218732377
Approx. EPM	9	-20.651437691594	141.88115735551
Approx. EPM	10	-20.651277060527	141.88725133439
Approx. EPM	11	-20.645413910448	141.88690801163
Approx. EPM	12	-20.645574547709	141.88081403275
Approx. EPM	13	-20.640112785645	141.88038487931
Approx. EPM	14	-20.640112785645	141.87506337662
Approx. EPM	15	-20.624690281309	141.87446256181
Approx. EPM	16	-20.624850940451	141.86862607499
Approx. EPM	17	-20.60669538472	141.87120099564
Approx. EPM	18	-20.606775723804	141.87120099564
Approx. EPM	19	-20.606856062846	141.87102933427

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 Project is located approximately 25 km east of the township of Julia Creek and 250 km east of Mt Isa, Queensland, Australia and falls within the McKinlay Council area. The area of EPM 26410 is 10,573 ha and measures approximately 20 km in length and 8 km in width at its widest boundary. The total perimeter is 65 km.

1.6 What is the size of the development footprint or work area?

10,573 ha

1.7 Is the proposed action a street address or lot?

Lot

1.7.2 Describe the lot number and title.EPM26410

1.8 Primary Jurisdiction.

Queensland

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

No

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

No

1.11 Provide an estimated start and estimated end date for the proposed action.

Start date 07/2019

End date 07/2049

1.12 Provide details of the context, planning framework and State and/or Local government requirements.

Multicom is seeking to develop the SEVP for the purposes of mining and processing vanadium. The proposed activity involves the development of an intrusive resource harvesting facility, incorporating shallow <20 m deep (strip ratios: 0/1 - 2/1) strip mining practices, in order to obtain access to large known deposits of Vanadium. The SEVP will be an open cut mine with associated dump and haul operations. The SEVP will produce approximately 10,000 tpa of Vanadium product, predominantly into the growth market for Vanadium redox flow batteries.

The process will include a voluntary Environmental Impact Statement (EIS) through the State EIS process under the *Environmental Protection Act 1994* (EP Act) as an accredited process for the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Mining Lease (ML) will be granted under the *Mineral Resources Act 1989*. All matters of Indigenous cultural heritage will be dealt with under the *Aboriginal Cultural Heritage Act 2003*.

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

No formal public consultation has been undertaken to date. However, directly affected landholders have been consulted and preliminary discussions with local government have commenced. Consultation with all stakeholders (including Indigenous stakeholders) will be

undertaken as the SEVP progresses through the approvals process.

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.

To-date, a baseline terrestrial ecology field survey was undertaken in March 2017 and a targeted terrestrial ecology field survey was undertaken in July 2017. The Ecology Report has been included in this referral and covers both field surveys. Pre-lodgement meetings were held with the Commonwealth and State Governments in May/June 2017. An Initial Advice Statement is scheduled for lodgement to the Queensland Government in late 2017.

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

No

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

No

Section 2 - Matters of National Environmental Significance

Describe the affected area and the likely impacts of the proposal, emphasising the relevant matters protected by the EPBC Act. Refer to relevant maps as appropriate. The interactive map tool can help determine whether matters of national environmental significance or other matters protected by the EPBC Act are likely to occur in your area of interest. Consideration of likely impacts should include both direct and indirect impacts.

Your assessment of likely impacts should consider whether a bioregional plan is relevant to your proposal. The following resources can assist you in your assessment of likely impacts:

• Profiles of relevant species/communities (where available), that will assist in the identification of whether there is likely to be a significant impact on them if the proposal proceeds;

• Significant Impact Guidelines 1.1 – Matters of National Environmental Significance;

• Significant Impact Guideline 1.2 – Actions on, or impacting upon, Commonwealth land and Actions by Commonwealth Agencies.

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

No

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

No

2.3 Is the proposed action likely to impact on the ecological character of a Ramsar wetland?

No

2.4 Is the proposed action likely to impact on the members of any listed threatened species (except a conservation dependent species) or any threatened ecological community, or their habitat?

Yes

2.4.1 Impact table

Species	Impact
Julia Creek Dunnart (Sminthopsis douglasi),	There is a potential for direct and indirect

Species	Impact
Vulnerable under the EPBC Act	threats on the Julia Creek Dunnart (Sminthopsis douglasi) as a result of the SEVP. Direct threats comprise the loss of habitat or direct mortality of individuals through clearing and excavation works. Indirect threats refer to secondary threats that may occur as a result of the SEVP. Indirect threats associated with the SEVP may include: - Increased number of feral animals attracted to rubbish; - Increased chance of wildlife colliding with vehicles; - Increased number of human-wildlife interactions; - Increased levels of habitat fragmentation, i.e. changed fauna behaviour in response to human presence and/or physical habitat loss; - Decreased quality of remaining vegetation due to weed introductions; and - Alteration to fire regimes. These threats may result in minor reductions in local population size and viability should a population be present. These potential threats were considered as part of the assessment of the MNES significant impact criteria. Considering the likelihood of the threats identified, it is not considered that there will be a long-term negative significant impact on Julia Creek Dunnart as a result of the SEVP, based on the information assessed. It is noted that whilst no Julia Creek Dunnart were recorded during the March or July 2017 surveys, this does not mean the species or its habitat is not present now (nor could be in the future). Potential impacts to Julia Creek Dunnart would need to be monitored throughout the duration of the SEVP.

2.4.2 Do you consider this impact to be significant?

Yes

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

Yes

2.5.1 Impact table

Species	Impact
Glossy Ibis (Plegadis falcinellus), Migratory under the EPBC Act	Major threats to the Glossy Ibis include wetland destruction or degradation, water diversion and drainage (restricting areas of shallow water) and irrigation. Clearing, grazing, increased salinity, groundwater extraction and invasion by exotic plants and fish species are also threats to the species through habitat modification. The Glossy Ibis does not use the site for breeding or foraging as suitable habitat is not present. As a result, impacts from the Project are considered to be minimal and short-term.
Sharp-tailed Sandpiper (Calidris acuminate), Migratory under the EPBC Act	The Sharp-tailed Sandpiper (Calidris acuminate) spends the non-breeding season in Australia with small numbers occurring regularly in New Zealand. Most of the population migrates to Australia, typically to the south-east and are widespread in both inland and coastal locations and in both freshwater and saline habitats. In Australasia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. They tend to occupy coastal mudflats mainly after ephemeral terrestrial wetlands have dried out, moving back during the wet season. After rain, they may forage in paddocks of short grass, well away from water. Habitat loss is a major threat to the Sharp-tailed Sandpiper. The Sharp-tailed Sandpiper does not use the site for breeding or foraging as suitable habitat is not present. As a result, impacts from the project are considered to be minimal and short-term.

2.5.2 Do you consider this impact to be significant?

No

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

No

2.7 Is the proposed action likely to impact on any part of the environment in the Commonwealth land?

No

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

No

2.9 Will there be any impact on a water resource related to coal / gas / mining?

No

2.10 Is the proposed action a nuclear action?

No

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

No

2.12 Is the proposed action to be undertaken in a Commonwealth Heritage Place Overseas?

No

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

No

Section 3 - Description of the project area

Provide a description of the project area and the affected area, including information about the following features (where relevant to the project area and/or affected area, and to the extent not otherwise addressed in Section 2).

3.1 Describe the flora and fauna relevant to the project area.

Six Regional Ecosystems (REs) mapped under QLD State legislation were recorded within the SEVP. Two of these REs were contained in certified mapping. The remainder occurred in patches that are too small (<4 ha in area) to be mapped at the scale (1:100,000) applied to certified mapping, or were misidentified from satellite imagery used in the certified mapping. Secondary vegetation assessment site data, was able to support the assignment of REs to the vegetation communities present. The field survey identified that no Threatened Ecological Communities (TECs) protected under the EPBC Act occur within the SEVP area. It is noted however that the EPBC Act Protected Matters Search identified one TEC, the community of native species dependent on natural discharge of groundwater from the Great Artesian Basin, within a 50 km radius of the SEVP. This TEC is not within or adjacent to the SEVP and no impacts are considered to be likely to occur as a result of the project.

A total of 91 fauna species were found within the SEVP area. Of these, two species of National and/or State-level conservation significance were recorded within the SEVP area; Glossy Ibis (*Plegadis falcinellus*) and Sharp-tailed Sandpiper (*Calidris acuminate*). Whilst not observed during the March or July 2017 fauna surveys, the Julia Creek Dunnart (*Sminthopsis douglasi*), a vulnerable species under the EPBC Act, is restricted to the Mitchell Grass downs country of north-west Queensland and known from the vicinity of the Project.

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

The Project area consists of undulating plains, with no noticeable topographic features. There are several rural water storages within the Project area and two braided drainage lines occur in the southern portion of the site. Part of this network bi-sects the Flinders Highway. There is a small, unnamed creek toward the middle of the site. Inferred surface water flow is generally in the westerly/north-westerly direction.

One medium sized water body exists in the centre of the SEVP, and serves as the receiving waters for several on-site tributaries. Two registered groundwater bores exist within the Project area (Bore RN3540 and Bore RN72).

No referrable wetlands, or wetland protected areas were identified within the study area during the desktop assessment, nor during field assessment.

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

The Mitchell Grass Downs bioregion is dominated by Mitchell grass (*Astrebla* spp.) tussock grasslands on rolling plains (downs). The soils are predominantly deep, heavy clays (Sattler and Williams 1999). The plains are interspersed with drainage lines, supporting open grasslands, herblands or eucalypt woodlands and isolated remnant plateaus (Sattler and Williams 1999). Although the nature of the bioregion is still poorly known, 60 REs are currently recognised in the bioregion (REDD V10). Nineteen of the REs are grasslands, typically dominated by Mitchell grass (*Astrebla* spp) and 30 of the REs are woodlands dominated by either Gidgee (*Acacia cambagei* or *georginae*) or Mulga (*Acacia aneura*). Eucalyptus communities occur on the alluvial plains, and are dominated by Coolabah (*Eucalyptus coolabah*) or River red gum (*Eucalyptus camaldulensis*).

Desktop analysis of remnant vegetation within the study area and surrounds showed a modified landscape with large areas converted to agricultural purposes (predominantly grazing), although large patches of non-remnant vegetation remain. Six REs were recorded within the SEVP. The REs recorded within the SEVP Project area were:

-RE 4.3.15: *Astrebla squarrosa* +/- *Dichanthium* spp*.* +/- *Eulalia aurea* grassland on alluvium.

-RE 4.3.4f: *Eucalyptus coolabah* and/or *E. microtheca* low open woodland. Occurs on drainage lines on *Astrebla spp.* undulating plains and braided channels on alluvial plains, particularly north-east Riverine wetland or fringing riverine wetland.

-RE 4.3.19: *Dichanthium spp.*, *Eulalia aurea*, *Astrebla spp*. grassland on alluvium.

-RE 4.9.1c: *Astrebla lappacea* +/- *Aristida latifolia* +/- *Panicum decompositum* grassland on Cretaceous sediments.

-RE 4.9.2b: Mixed tussock grassland, with combinations of the species *Astrebla spp.*, *Aristida latifolia*, *Enneapogon sp*. mixed tussock grassland. Emergent *Atalaya hemiglauca*, *Ventilago viminalis* and *Corymbia terminalis* commonly occur. Occurs on rises of exposed Cretaceous shale and limestone with rocks to the surface. Cracking clay soils.

-RE 4.9.1c/4.9.2b: The patches of 4.9.2b that occur within the mosaic of 4.9.1c are slight rises with surface limestone rocks. It was not possible to map them all out without walking the entire polygon therefore this particular polygon needs to remain mixed. RE 4.9.1c Occurs on level to gently undulating downs derived from Cretaceous mudstones (predominantly Allaru Mudstone) in the north of the bioregion (BVG1M: 30b). RE 4.9.2b occurs on rises of exposed Cretaceous shale and limestone with rocks to the surface. Cracking clay soils. (BVG1M: 30b).

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

There are no outstanding natural features and/or important or unique values relevant to the SEVP area.

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

Most of the site is composed of remnant vegetation however all of this vegetation is subject to grazing pressure. The SEVP area largely consists of *Astrebla* dominated tussock grassland. Despite comprising a number of subtly different REs, these grasslands constitute a relatively homogenous habitat type for fauna. A mosaic of other habitat types occurs in small patches around the periphery of several drainage lines throughout the Project area (refer Figure 4 in Terrestrial Ecology Report).

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

The site is estimated to be approximately 120 - 140 metres above sea level, and is generally flat to slightly undulating. Various minor gullies/watercourses exist throughout the site (refer Figure 3 in Terrestrial Ecology Report).

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

The Project is located in the Mitchell Grass Downs bioregion and is currently comprised of open grassland used for grazing purposes, consistent with the bioregion. The SEVP area is in a largely disturbed state, situated across several rural properties. The area has been historically used for cattle grazing on unimproved pastures. Several vehicular tracks and fencing lines occur within EPM 26410.

The site is bisected by the Flinders Highway, and the Great Northern Line rail corridor, both running east-west through the site. There is a large road reserve that crosses the width of EPM 26410 through the centre, the intent of this road reserve is unclear at the present time.

Eight species of weeds were recorded within the SEVP (refer Table 6 of Terrestrial Ecology Report). Several pest animal species were identified as potentially occuring on the site, however only Domestic Goat (*Capra hircus*) and Dingo (*Canis lupus dingo*) were seen during the field survey. All potential species have been listed in Table 7 of the Terrestrial Ecology Report.

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

There are no Commonwealth Heritage Places recognised as having heritage values relevant to the Project area. Other heritage places will be investigated as part of the EIS process.

3.9 Describe any Indigenous heritage values relevant to the project area.

Indigenous cultural heritage values have not been identified at the site, this will require further investigation as part of the EIS process.

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

There are multiple properties within EPM 26410, namely:

- Lot 13 on Plan EN89 - Freehold

- Lot 1 on Plan EN15 - Lands Lease

- Lot 1 on Plan MF3 - Lands Lease

- Lot 11 on Plan EN105 - Freehold

- Lot 3 on Plan EN17 - Lands Lease

- Lot 3 on Plan EN147 - Lands Lease

- Lot 1 on Plan EN17 - Reserve

- Lot 4 on Plan B157126 - Lands Lease

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

Existing uses within the SEVP area are predominantly cattle grazing and rural purposes. Two programs of drilling have been completed in the area of the current resource. Both programs have used rotary air blast (RAB) drilling to complete the work using a custom built RAB rig. The rig with a 450 CFM x 150 PSI compressor and 3 1/4 inch percussion rods and 3 1/2 blade bit completed the drilling with an average of 310-350 metres drilled per day. All drilling was completed with a blade bit.

The vast majority of drilling was dry, with approximately 10 holes in the fresh rock, recording minor water inflows. The water all occurred below the base of oxidation and the maximum number of wet samples per hole was three. The water was generally found below the Coquina at the base of the oil shale proper. The water when encountered was generally a dark brown colour with oily overtones. The drilling was of good quality with layering of the sample often observed in the bags reflecting the original geology. The overlying overbuden was very often the still clayey Allura formation with little potential for contamination down the hole.

Section 4 - Measures to avoid or reduce impacts

Provide a description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action. Include, if appropriate, any relevant reports or technical advice relating to the feasibility and effectiveness of the proposed measures.

Examples of relevant measures to avoid or reduce impacts may include the timing of works, avoidance of important habitat, specific design measures, or adoption of specific work practices.

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

The avoidance and minimisation of impacts to National and State significant environmental values were a major consideration during the planning of the SEVP. The mine footprint has been positioned to limit disturbance, as much as practicable.

Clearing:

The clearing of vegetation is the most significant and direct impact of the SEVP on ecological values of the site. Land clearance is listed as a key threatening process under the EPBC Act. The removal of habitat reduces the size of local populations of flora and fauna dependent on that habitat. These impacts are immediate and significant in the short-term. Impacts may persist in the long-term if habitat created during mine rehabilitation does not closely resemble pre-mining ecosystems. In addition, if sufficient habitat refuges are not maintained locally prior to the maturation of rehabilitated land, local extinction of certain species may occur. Vegetation will be removed to accommodate mining, demountables, minor roads and other infrastrucutre associated with the SEVP.

Habitat Fragmentation:

Highly fragmented habitats support fewer species than connected blocks of habitat of the same size. This is because fragmentation restricts dispersal of fauna and plant seeds between available habitat. The impacts of habitat fragmentation depend on the degree to which dispersal is inhibited by habitat gaps, the size of the remaining habitat fragments, and ecological attributes of the species. The size of the SEVP, coupled with the retention of vegetation corridors along drainage lines within the site, means that there are no anticipated impacts of the SEVP through habitat fragmentation.

Direct Mortality:

Clearing of vegetation for the SEVP presents a risk of direct mortality or injury to fauna. Fauna of low mobility are at risk of injury or death from heavy machinery during the construction and operation of the SEVP. The small scale and staged expansion of SEVP operations is likely to reduce the risk of these impacts.

In addition, clearing will only occur within designated areas and only during designated time periods. The presence of qualified Wildlife Spotter-Catcher/s during initial clearing will decrease incidences of fauna mortality. Educating employees and contractors on threatened species of fauna and flora identification will further reduce direct mortality as part of the SEVP.

Dust:

Earthworks and vehicular traffic associated with mining can generate substantial amounts of dust during dry weather. The pronounced wet and dry seasons in northern Australia may make vegetation in these areas less susceptible to the impacts of dust. This is because most or all annual growth occurs during a period of the year when rainfall is highest. This coincides with the time of year when dust is least problematic, as rain inhibits the dispersal of dust in the air, and washes dust from leaves.

The moving nature of the proposed earthworks means that any one block of vegetation will only be exposed to significant levels of dust for a short period. This is unlikely to interrupt growth.

Altered Fire Regimes:

Fire is generally only possible in the Mitchell Grass Downs bioregion after an adequate wet season which promotes sufficient vegetative growth (QPWS 2012). When burnt with adequate soil moisture, Mitchell grass responds well to fire and is known to seed profusely after recovering from a burn. Despite this, the bioregion is rarely being widely burnt, due to the high fodder value of Mitchell grass speices (QPWS 2012). The lack of burning in times of good grass growth, has sometimes led to extreme fire events as well as the invasion of some acacia species into the grasslands. Lack of fire, or fire regimes that allow or promote the encroachment of woody species are detrimental to the grazing and biodiversity values of the Mitchell Grass Downs.

In general, the SEVP is not expected to cause substantial changes to local fire regimes. The

most likely change is the reduced frequency of fire as a result of fuel reduction from clearing. This is likely to benefit the fire-sensitive vegetation occurring along the periphery of drainage lines. Any change is expected to be short-term, as rehabilitated sites are expected to develop a grass layer. Active fire exclusion from rehabilitated sites will be practiced for at least 10 years, to allow for the establishment of trees and shrubs.

Waste:

Mine-affected water has the potential to impact on vegetation health and wildlife. Providing the design and operation of water management infrastructure and chemical / fuel storage facilities are undertaken in accordance with relevant legislation and standards, no impacts from contaminants are anticipated.

Weeds and Pest Animals:

Eight weed species and two species of introduced animal were recorded in the SEVP area.

The following activities associated with the SEVP have the potential to promote the proliferation of weeds and pests within the SEVP area, or introduce new weeds and pests from surrounding areas:

- Increased vehicular traffic may introduce and spread weed speeds;

- Land clearance favours the establishment of weeds due to increased light and soil disturbance; and

- Inappropriate disposal and storage of putrescible wastes may attract feral animals.

The pests and weeds currently occurring within the SEVP area are not expected to significantly proliferate in response to the mining activities. The major threat is the introduction of new weeds via contaminated vehicles or soils.

Rehabilitation:

Based on the life of the Project, progressive rehabilitation using locally available indigenous species will be undertaken to manage the significance of impacts. A site-specific Rehabilitation Management Plan will be required as part of the EIS assessment process and will be implemented prior to commencement of works.

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.

Julia Creek Dunnart:

There is a potential for direct and indirect impacts on Julia Creek Dunnart (*Sminthopsis douglasi*) as a result of the SEVP. Direct threats comprise the loss of habitat or direct mortality of individuals through clearing and excavation works. Indirect threats refer to secondary threats that may occur as a result of the SEVP. Indirect threats associated with the SEVP may include:

- Increased number of feral animals attracted to rubbish;

- Increased chance of wildlife colliding with vehicles;

- Increased number of human-wildlife interactions;

- Increased levels of habitat fragmentation, i.e. changed fauna behaviours in response to human presence and/or physical habitat loss;

- Decreased quality of remaining vegetation due to weed introductions; and

- Alteration to fire regimes.

These impacts may result in small reductions in local population size and viability should a population be present. These potential impacts were considered as part of the assessment of

the MNES significant impact criteria. During the terrestrial ecology surveys, the Julia Creek Dunnart was not identified, however habitat that may be suitable for the species and possible food sources were identified.

Monitoring for the species will be undertaken prior to works commencing and if identified, a species management plan may be required. The progressive nature of the rehabilitation effort will replace areas of potential habitat affected during mining.

Section 5 – Conclusion on the likelihood of significant impacts

A checkbox tick identifies each of the matters of National Environmental Significance you identified in section 2 of this application as likely to be a significant impact.

Review the matters you have identified below. If a matter ticked below has been incorrectly identified you will need to return to Section 2 to edit.

5.1.1 World Heritage Properties

No

5.1.2 National Heritage Places

No

5.1.3 Wetlands of International Importance (declared Ramsar Wetlands)

No

5.1.4 Listed threatened species or any threatened ecological community

Listed threatened species and communities - Yes

5.1.5 Listed migratory species

No

5.1.6 Commonwealth marine environment

No

5.1.7 Protection of the environment from actions involving Commonwealth land

No

5.1.8 Great Barrier Reef Marine Park

No

5.1.9 A water resource, in relation to coal/gas/mining

No

5.1.10 Protection of the environment from nuclear actions

No

5.1.11 Protection of the environment from Commonwealth actions

No

5.1.12 Commonwealth Heritage places overseas

No

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.

Julia Creek Dunnart may be present at the site or could utilise habitat within the Project footprint. Whilst Julia Creek Dunnart was not detected during field surveys, there remains a possibility that the species and its habitat may be present at the site either now or in the future.

Section 6 – Environmental record of the person proposing to take the action

Provide details of any proceedings under Commonwealth, State or Territory law against the person proposing to take the action that pertain to the protection of the environment or the conservation and sustainable use of natural resources.

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

Yes. Multicom has a satisfactory record of responsible environmental management. Multicom's values are expressed through its business principles, policies and procedures, ensuring environmental compliance at all levels. Multicom believes that consideration of the environment, people and the community is integral to sustainable development of their business so that these drivers guide the company's activities to provide accountability during all stages of work.

Environmental performance is regularly evaluated for any changes to managed aspects / impacts. This is completed in order to ensure there are no additional concerns / impacts that have developed. The evaluation of planning and works is aimed to provide continuous improvement and further develop the company's environmental performance.

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.

Nil.

6.3 Will the action be taken in accordance with the corporation's environmental policy and planning framework?

Yes

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

Multicom does not currently have an environmental policy and planning framework. However, they work in accordance with the principles of Ecologically Sustainable Development (ESD) and intend to develop the mine in accordance with available industry best practice.

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?

No

Section 7 – Information sources

You are required to provide the references used in preparing the referral including the reliability of the source.

7.1 List references used in preparing the referral (please provide the reference source reliability and any uncertainties of source).

Reference Source	Reliability	Uncertainties
Saint Elmo Vanadium Project - Terrestrial Ecology Report, Epic Environmental 2017	Very reliable, this report is based on March and July 2017 field surveys on site and completed by suitably qualified individuals	Nil

Section 8 – Proposed alternatives

You are required to complete this section if you have any feasible alternatives to taking the proposed action (including not taking the action) that were considered but not proposed.

8.0 Provide a description of the feasible alternative?

The SEVP's location is limited by the presence of Vanadium, as it is a rare metal and is not broadly distributed across the landscape. The presence of Vanadium at such low strip ratio and close to the surface is unusual and supports a lower impact development for the mining operation.

Based on the location and availability of Vanadium at the SEVP site, no other commercially feasible alternative is available.

Vanadium is important to produce high-strength steel products and Vanadium redox batteries. The quality of steel requires the use of Vanadium to assist with the production process. Secondly, the rise of renewable energy sources and associated battery storage capacity has necessitated the development of battery storage projects that require sources such as Vanadium. Given these drivers, not taking the action would significantly detract from the development of a sound steel production and renewables market in Australia.

8.1 Select the relevant alternatives related to your proposed action.

8.27 Do you have another alternative?

No

Section 9 – Contacts, signatures and declarations

Where applicable, you must provide the contact details of each of the following entities: Person Proposing the Action; Proposed Designated Proponent and; Person Preparing the Referral. You will also be required to provide signed declarations from each of the identified entities.

9.0 Is the person proposing to take the action an Organisation or an Individual?

Organisation

9.2 Organisation

9.2.1 Job Title

Executive Director

9.2.2 First Name

Nathan

9.2.3 Last Name

Cammerman

9.2.4 E-mail

nathan@mcres.com.au

9.2.5 Postal Address

PO Box 434
Indooroopilly QLD 4068
Australia

9.2.6 ABN/ACN

ABN

51605352690 - MULTICOM RESOURCES PTY LTD

9.2.7 Organisation Telephone

0437 119 017

9.2.8 Organisation E-mail

nathan@mcres.com.au

9.2.9 I qualify for exemption from fees under section 520(4C)(e)(v) of the EPBC Act because I am:

Small business

9.2.9.1 You must provide the Date/Income Year that you became a small business entity:

Wed, 01/07/2015

Small Business Declaration

I have read the Department of the Environment and Energy's guidance in the online form concerning the definition of a small a business entity and confirm that I qualify for a small business exemption.

Signature:  ……. Date: …09.08.17……

9.2.9.2 I would like to apply for a waiver of full or partial fees under Schedule 1, 5.21A of the EPBC Regulations

Yes

9.2.9.3 Under sub regulation 5.21A(5), you must include information about the applicant (if not you) the grounds on which the waiver is sought and the reasons why it should be made

Under section 520(4C)(e)(v) of the EPBC Act an exemption applies to a small business entity. The definition of a small business entity in relation to referrals under the EPBC Act is defined as where aggregate turnover is less than $10 million for the previous income year. Multicom Resources aggregate turnover is less than this threshold and therefore applies for the small business entity full fee waiver.

Person proposing the action - Declaration

I, __Nathan Cammerman_____, 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 of or for the benefit of any other person or entity.

Signature:.  ….. Date: 09.08.17……

I, __Nathan Cammerman_____, the person proposing the action, consent to the designation of _____Multicom_____ as the proponent of the purposes of the action describe in this EPBC Act Referral.

Signature:  ….. Date: …09.08.17……

9.3 Is the Proposed Designated Proponent an Organisation or Individual?

Organisation

9.5 Organisation

9.5.1 Job Title

Executive Director

9.5.2 First Name

Nathan

9.5.3 Last Name

Cammerman

9.5.4 E-mail

nathan@mcres.com.au

9.5.5 Postal Address

PO Box 434
Indooroopilly QLD 4068
Australia

9.5.6 ABN/ACN

ABN

51605352690 - MULTICOM RESOURCES PTY LTD

9.5.7 Organisation Telephone

0437 119 017

9.5.8 Organisation E-mail

nathan@mcres.com.au

Proposed designated proponent - Declaration

I, _Nathan Cammerman_____, 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: 09.08.17……

9.6 Is the Referring Party an Organisation or Individual?

Organisation

9.8 Organisation

9.8.1 Job Title

Director / Principal Environmental Scientist

9.8.2 First Name

Mark

9.8.3 Last Name

Breitfuss

9.8.4 E-mail

mbreitfuss@epicenvironmental.com.au

9.8.5 Postal Address

Level 6

193 North Quay
Brisbane QLD 4000
Australia

9.8.6 ABN/ACN

ABN

54169579275 - EPIC ENVIRONMENTAL PTY LTD

9.8.7 Organisation Telephone

0400 412 212

9.8.8 Organisation E-mail

enquiries@epicenvironmental.com.au

Referring Party - Declaration

I, _Dr Mark Breitfuss_____, I 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: 09.08.17……

Appendix A - Attachments

The following attachments have been supplied with this EPBC Act Referral:

1. be170006.01-rpt-saint_elmo_terrestrial_ecology-090817_rev0.sml_.pdf
2. epm26410_coordinates.pdf
3. figure_2_indicative_mine_plan.pdf