LITHIUM PLUS PTY LTD

MINING MANAGEMENT PLAN

ARUNTA PROJECT
NORTHERN TERRITORY

October 2018 Amendment

Authorisation Number 0994

RC Drilling Program

on

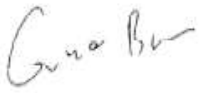
ELs 31138 & 31212

Updated
October 2018

DISTRIBUTION:

DPIR	1 copy
Lithium Plus Sydney	1 copy
Lithium Plus Field Crew	1 copy

DOCUMENT APPROVAL

	Author	Reviewed	Approved
Date	October 2018	October 2018	October 2018
Name	N Chalmers	WL Jettner	B Guo
Signature			

I, **Bin Guo,** declare that to the best of my knowledge the information contained in this mining management plan is true and correct and commit to undertake the works detailed in this plan in accordance with all the relevant Local, Northern Territory and Commonwealth Government legislation.

Signature: 

Date: **15/10/2018**

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AMENDMENTS

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1.0	Operator details, summary of current status
3.0	Site layout, Locality map updates
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1.0 OPERATOR DETAILS

Operator Name:	**Lithium Plus Pty Ltd (Lithium Plus)**
ACN:	**ACN 626 593 799**
Key Contact Person/s:	**Mr Bin Guo**
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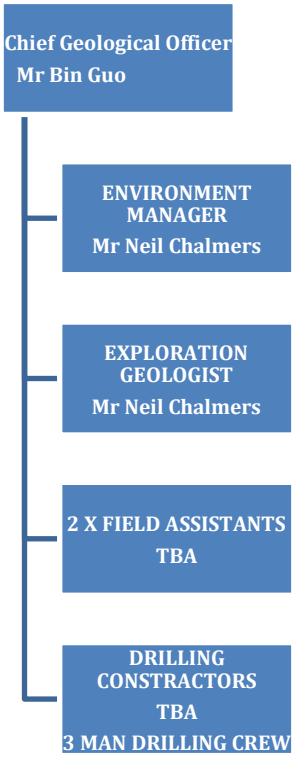
The completed Cover Page and Application for an Authorisation are included as APPENDIX 1, the Nomination of Operator of a Mining Site is included as APPENDIX 2 and the Appointment of Agent is included as APPENDIX 3.

Lithium Plus Pty Ltd completed a corporate transaction to acquire Kingston Resources Ltd's Northern Territory lithium prospective tenure in July 2018. EL 31138 and EL31212 were part of that transaction. This amendment is designed to expand the extent of approved activities of the current Arunta Project approval 0995-01.

1.1 ORGANISATIONAL STRUCTURE / CHART

Arunta Project Site Management Structure



1.2 WORKFORCE

The workforce will consist of the chief geological officer - who will also act as the environment manager for the project, an exploration geologist, a geological field crew of two and a contract drilling crew of 3 people which will undertake daily on-ground exploration operations.

2.0 IDENTIFIED STAKEHOLDERS AND CONSULTATION

IDENTIFIED STAKEHOLDERS

STAKEHOLDERS	NAME	CONSULTED
Licence Owners	EL 31138, EL31212 – Lithium Plus Pty Ltd	YES
Land Owner	Delmore Downs Pty Ltd ATF Napier Pastoral (Territory) Trust	YES
Land Manager	Napier Pastoral, Brad and Georgina Vickers station owners and managers	YES
Land Claimants (Native Title)	NIL	NO
Land Council Area	Central Land Council	NO
Neighbours and Community	NIL	NO
Tenement Manager	Complete Tenement Management	YES
Government Departments	Dept. of Primary Industry and Resources NT Environmental Protection Agency Dept. of Environment and Natural Resources (DENR) Dept. of Health (DH) Dept. of Infrastructure, Planning and Logistics (DIPL) Heritage Branch AAPA Bushfires NT NT Worksafe	YES NO NO NO NO YES YES NO NO
Shareholders	Lithium Plus Pty Ltd Shareholders	YES

For discussion and the status of consultations see below:

Licence Owner

The mineral exploration tenure is EL 31138 and EL 31212 which is owned by Lithium Plus Pty Ltd a privately owned exploration company.

Land Owner

The affected real property is NT Por 00714 (PPL 1126) Delmore Downs Station, which is owned by Delmore Downs Pty Ltd As trustee for the Napier Pastoral (Territory) Trust.
APPENDIX 4 contains a copy of the land title search for the affected land parcel.

Land/Pastoral Manager

The land manager for Delmore Downs Station is currently Brad and Georgina Vickers. APPENDIX 4 contains copies of correspondence with the land manager on behalf of the land owner.

Land Claimants (Native Title)

The proposed activities are in accordance with an Exploration Licence granted under the Northern Territory DPIR's Expedited Native Title procedure and no agreements are required. No meetings have been held with any native title claimants.

Land Council representing traditional owners for the country

As the land is not Aboriginal Freehold land, subject to a land claim, owned by a registered aboriginal land trust or subject to a site of significance listed with the AAPA the operator has not conducted negotiations with the Central Land Council.

Neighbours and Community

There are no nearby neighbours or communities so no consultations have been undertaken.

Tenement Manager

Lithium Plus employs Complete Tenement Management as its tenement managers and this organisation is fully informed of Lithium Plus' planned activities in the area.

Government Departments

- This MMP may be considered to be notification to the Dept. of Primary Industries and Resources and communications relating to it are the consultation process, these remain ongoing throughout the life of the MMP.
- The Environmental Protection Agency has not been consulted.
- The Dept. of Environment and Natural Resources has not been consulted, although information has been sought from it utilising its INFONET portal and the results of this have been included as APPENDIX 6 of this MMP.
- The Department of Health has not been consulted.
- The Department of Infrastructure Planning and Logistics has not been consulted.
- The Aboriginal Areas Protection Authority has been consulted by requesting information from records covering the area pertaining to this MMP with reference to any registered sites of significance within the area of EL 31138 and 31212 and the results of this request are included as APPENDIX 7 of this MMP.
- The Heritage Branch of the Department of Tourism and Culture has been consulted with reference to any archaeological and/or heritage sites and results of this request are included as APPENDIX 8 of this MMP.
- Lithium Plus Pty Ltd has not consulted Bushfires NT but will maintain contact with Bushfires NT through its web portal to establish the daily fire regime within the broader area to ascertain the level of fire danger pertinent to the area of operations.
- Lithium Plus Pty Ltd has ascertained its level of obligation to NT Worksafe through its adherence to National Health & Safety (National Uniform Legislation) Act and will continue to meet its obligations under this act.

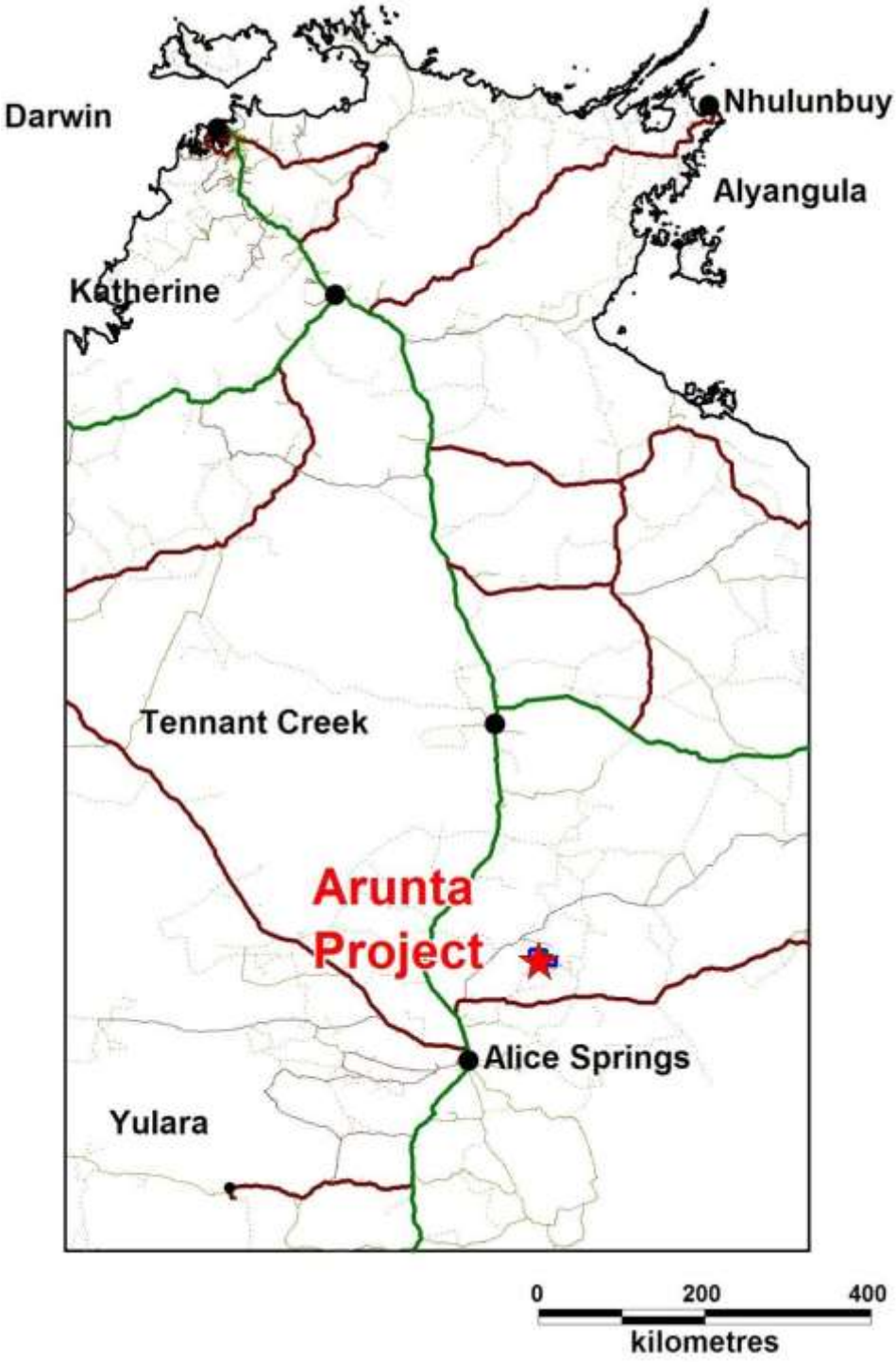
Shareholders

The shareholders of Lithium Plus Pty Ltd have been informed of the planned activities.

3.0 PROJECT DETAILS

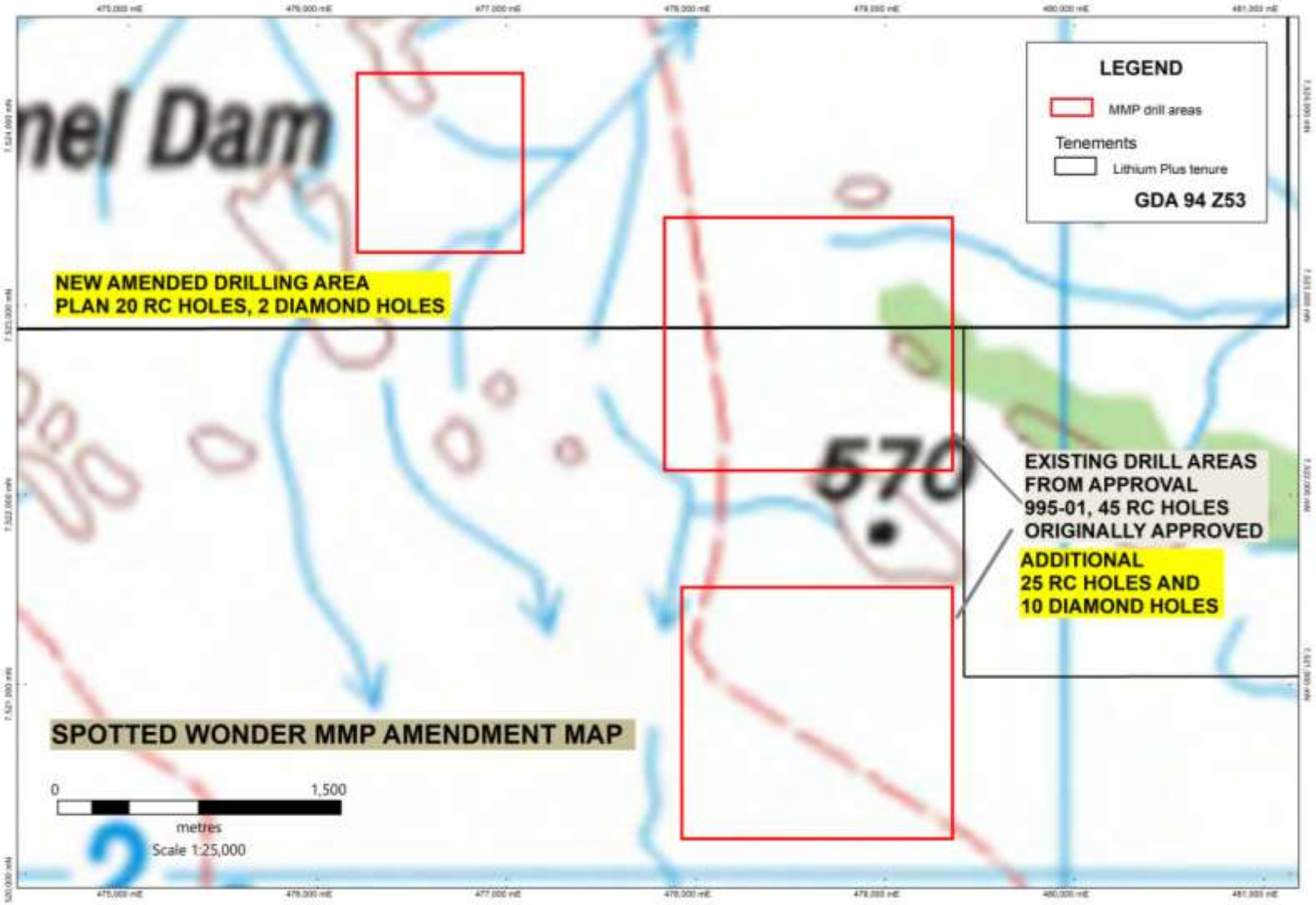
Project Name:	Arunta Project
Location:	Delmore Downs area, Northern Territory
Site Access:	Northwards via the Stuart Highway from Alice Springs, then eastwards via the Plenty Highway, thence north via gravel roads to EL 31138 on Delmore Downs Station.
Mining Interests:	EL 31138 and EL 31212
Title holders:	Lithium Plus Pty Ltd

PROJECT LOCATION



Northern Territory Map showing the location of the Arunta Project (scale 1:4M)

LOCALITY MAP



Topographical Map showing Arunta Project 2018 planned drilling activities in a regional context (scale1:25,000K)

SITE LAYOUT

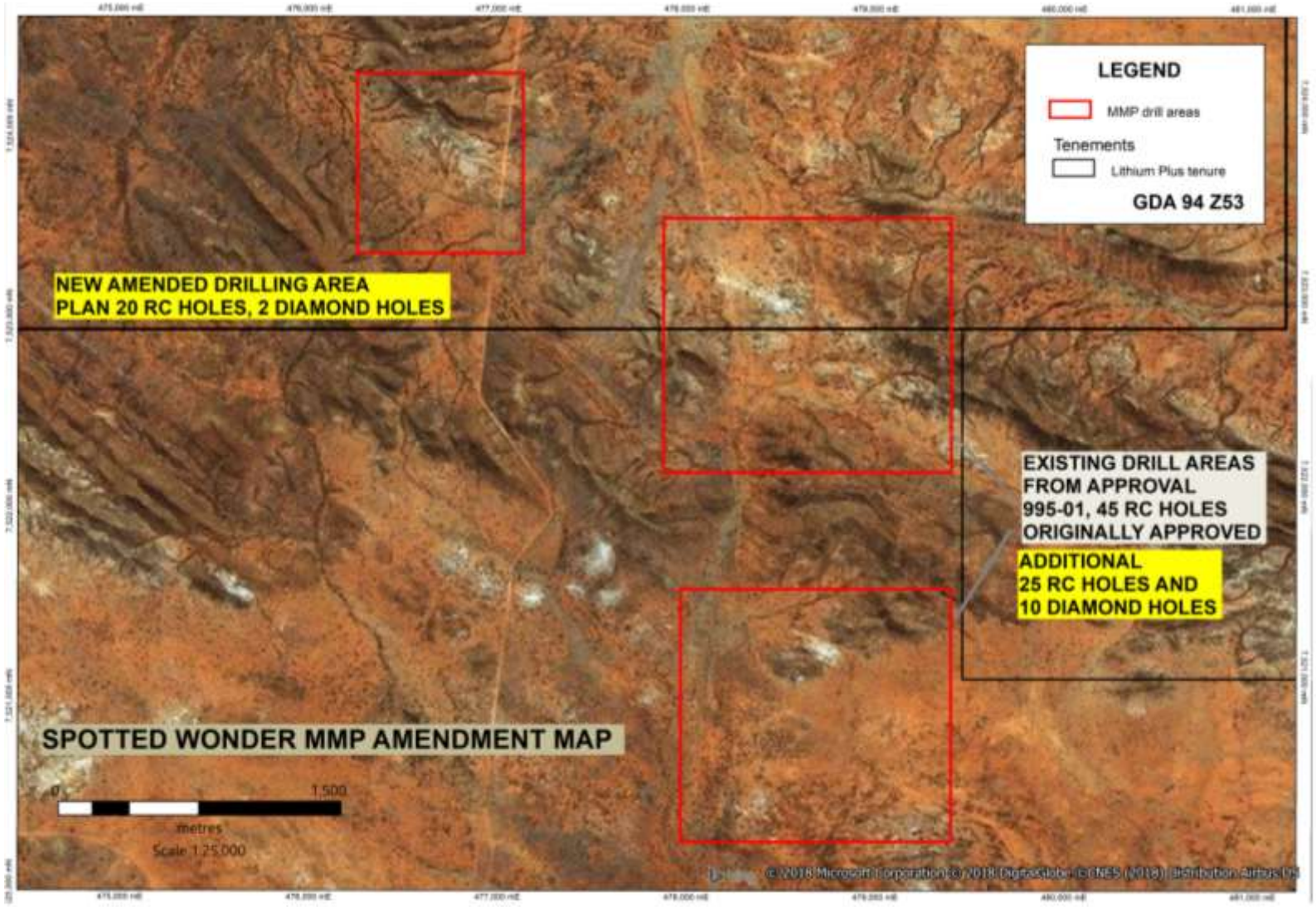


Image of planned drill areas with satellite image (scale 1:25,000)

3.1 PREVIOUS ACTIVITIES AND CURRENT STATUS

Historical Mining and Exploration Activities

- The only recorded mining activities in this area are a number of prospecting pits on a small gouging show named the Spotted Wonder on a pegmatite dyke within the southern drill polygon.
- Historical exploration activities have been exploration for tin/tungsten, base metals and uranium over the preceding 50 years.
- Kingston Resources started exploring EL 31138 and EL 31212 for lithium mineralisation in 2017 and undertook geochemical surface sampling and mapping activities within this licence to locate pegmatites and existing access tracks. They completed mapping to allow the location and sighting of a number of drill programs over the highest ranked pegmatites with the intention of investigating their lithium prospectively.

Lithium Plus Pty Ltd

Lithium Plus is currently undertaking additional rockchip and soil sampling programs expanding on Kingston's exploration footprint and intend to identify further drill targets in addition to the two main target areas planned to be drill tested under this proposed MMP.

Lithium Plus will complete an initial RC program at Delmore and Tank Hill Prospects in October 2018 under approval 995-01, the results of this program will be used to target and plan the addition RC and diamond holes discussed in this amendment. The rehabilitation of the initial program will be pending whilst the follow up work discussed in this document is completed, then all rehabilitation will be completed on the area.

3.2 PROPOSED ACTIVITIES

The purpose of this MMP is to seek approval for further drill testing of a number of areas postulated to have the potential to host economically recoverable concentrations of spodumene.

Preliminary ground works have been undertaken to investigate existing access tracks, locating and determining suitability of proposed drill sites and conducting field investigations within the exploration area.

Once access has been planned and site conditions examined and documented in the Rehabilitation Register, site preparation may commence.

This MMP is an amendment to the approved MMP (995-01) approved in September 2018. Lithium Plus intends to undertake the approved activities is October 2018 and is submitting this MMP to allow subsequent further works.

It is planned to construct an addition 2.5 km of new access tracks, bringing the approved total to 5km of new tracks.

It is planned to drill an additional 25 reverse circulation holes and up to 10 diamond holes within the original two drill polygons (bring the total approved to up to 70 RC and 10 diamond). The diamond drill holes will require sumps for drilling water and the reverse circulation holes will only require sumps to capture any intersected ground water if the previous drilling indicates that water is expected. The maximum depth of the drill holes will be 250 m. Additionally, a third polygon has been included in this MMP where approval is being sought for 20 reverse circulation holes and two diamond holes.

The drilling program is expected to be completed within 90 days of arrival on to the site.

At the completion of the drilling program, rehabilitation works will be undertaken as required and as described in Section 6 of this MMP.

Further maps and images of the proposed activities are included as APPENDIX 5.

Table showing Proposed Activities

Mining Interests (i.e. titles)	EL 31138 (original)	EL 31212 (original)	EL31138 (amendment)	EL31212 (amendment)
What time of the year will exploration occur?	October 2018	October 2018	November 2018	November 2018
How long is exploration expected to occur?	1 month	2 weeks	1.5 months	1.5 months
Type of drilling (i.e. RAB, RC, Diamond, aircore)	RC	RC	RC, DD	RC, DD
Target commodity	Lithium	Lithium	Lithium	Lithium
Is drilling likely to encounter radioactive material?	No	No	No	No
Number of proposed drill holes	30	15	8 Diamond, 20 RC	4 Diamond, 25 RC
Maximum depth of holes	150m	150m	250m	250m
Number of drill pads (Length: 10m x Width: 4m)	30	15	28	29
Is drilling likely to encounter groundwater? (Y, N, unsure)	No	No	No	No
Number of sumps (Length: 5m x Width: 3m x Depth: 1.5m)	0	0	8	4
Length of line / track clearing (Kilometres: 2.5 km x Width: 4m)	2	0.5	0.5	2
Number of costeans (Length: x Width: x Depth: m)	0	0	0	0
Total bulk sample (tonnes) (Length: x Width: x Depth: m)	0	0	0	0
Will topsoil be removed for rehabilitation purposes?	No	No	No	No
Previous disturbance yet to be rehabilitated on title (ha)	0	0	1.19	.24
Camp Loc: 478 000mE 7520900mN (Length: 50m x Width: 50m)	1	0	1	0
Total area disturbed (hectares)	1.19ha	0.24ha	0.75	1.5
Other:	0	0	0	0

4.0 CURRENT PROJECT SITE CONDITIONS

Site Conditions	Description
Geology	The Tank Hill prospect is located in an area of Proterozoic Ledan Schist. This unit consists of micaceous schist, minor para-amphibolite and metamorphosed conglomerate. The nearby Delmore Prospect is located over an area of Delmore Metamorphics. This prospect is located over a high grade metamorphic suite comprised of calc-silicate rock, pelitic gneiss, and epidote quartzite. Within this suite are a number of pegmatite dykes which host the tungsten mineralisation. It is within these dykes that there is thought to be the potential to host lithium mineralisation.
Hydrology	The Delmore Downs area has very poor groundwater resources due to the "tight" nature of the underlying granite. Of the 5 closest bores to the exploration area the highest flow recorded was 0.6 l/s at the Delmore Downs homestead. All others were below 0.2 l/s.
Threatened Flora	An interrogation of the INFONET database shows that there are no endangered flora species in the project area. See APPENDIX 5
Threatened Fauna	An interrogation of the INFONET database shows that there is 1 endangered bird species, but there are two species of mammal (Golden Bandicoot and Common Brushtail Possum) that are endangered. There are 2 species listed as vulnerable. See APPENDIX 5
Historical, Aboriginal, Heritage Sites	Requests were made of the AAPA and the Heritage Branch of the DLPE to identify known historical, aboriginal and heritage sites within EL 31138 and EL 31212. The AAPA request returned the information that there are no known Aboriginal sites of significance within the ELs. The Heritage search also showed no Heritage Sites listed as occurring within the ELs. See APPENDICES 6 and 7.
Sites of Conservation Significance	The area of proposed works on EL 31138 and EL 31212 are **not** located within any Site of Conservation Significance.
Weeds	There are 4 species of weeds of NT Status B or above, two of which are of WONS national status. These are listed in the Guidelines for the Management of Weeds of EL 31138. See APPENDIX 5
Native Species	There are 588 native flora species consisting of 8 Fern species, 1 conifer specie and 579 flowering plant species listed as occurring within the grid cell (cell 96) surrounding the project area. There were 243 native fauna species consisting of 3 frog species, 61 reptile species, 146 bird species and 33 mammal species listed as occurring within the grid cell (cell 96) surrounding the project area.
Invasive Species	There are 9 pest and potential pest species listed for the grid cell 96 in which EL 31138 and EL31212 occur, of these 2 are native species and the remaining 7 are introduced species.
Vegetation Community	The Arunta Project is located within the Burt Range Bioregion and the vegetation community of the project area consists predominantly of low open woodland comprising A. estrophiolata (Ironwood) with an open grassland understorey.
Land Use	The current land use of the Arunta Project area is open range cattle grazing utilising Bos taurus cattle.

In support of the above table please find included the following documents as appendices for this Mining Management Plan.

APPENDIX 6 - The DENR INFONET Database Extract covering endangered flora and fauna of the Arunta Project Area.

APPENDIX 7 – The AAPA reply to a request for information from records.

APPENDIX 8 – The DTC Heritage Branch reply to a request for information from the NTG Heritage and Archaeological database.

Threatened Species of Grid Cell 96

There are no threatened species listed specifically for the planned drilling area and grid cell 96 covers an area extending 100km north-south and 100km to the east-west, covering a total area of 10,000km^2.

The locations of recorded threatened species observations are indicated within the NRM NT Maps web application.

Scientific Name	Common Name	TPWC Status	EPBC Status	Preferred Habitats	Observations within 5km of EL31138	Likelihood of Occurrence in EL 31138
Plants						

No threatened flora species indicated within the grid cell.

Scientific Name	Common Name	TPWC Status	EPBC Status	Preferred Habitats	Observations within 5km of EL31212	Likelihood of Occurrence in EL 31212
Reptiles						

No threatened reptile species indicated within the grid cell.

Scientific Name	Common Name	TPWC Status	EPBC Status	Preferred Habitats	Observations within 5km of EL31138	Likelihood of Occurrence in EL 31138
Birds						
Falco hypoleucos	Grey Falcon	Vulnerable			Nil	Unlikely – no previous observations and preferred habitat not present.
Pezoporus occidentalis	Night Parrot	Critically Endangered	Endangered	Habitat consists of spinifex grassland in stony or sandy areas and samphire associations on flood plains, salt lakes and claypans.	Nil	Unlikely – no previous observations and preferred habitat not present.

Scientific Name	Common Name	TPWC Status	EPBC Status	Preferred Habitats	Observations within 5km of EL31138	Likelihood of Occurrence in EL 31138
Mammals						
Isoodon auratus	Golden Bandicoot	Endangered	Vulnerable	Near costal environment in WA, NTs only surviving population is located on Marchinbar Island.	Nil	Unlikely – no observations indicated by NRM website.
Macrotis lagotis	Greater Bilby	Vulnerable	Vulnerable	Found occasionally through the Tanami, Sturt Plains and Great Sandy Desert bioregions.	Nil	Unlikely, although preferred habitat probably exists.
Trichosurus vulpecula vulpecula	Common Brushtail Possum (southern)	Endangered		Found in isolated populations in the southern NT. Shelters in caves, rock holes, tree hollows, and the tops of dense trees.	Nil	Unlikely, although preferred habitat probably exists.
Petrogale lateralis	Black footed Rock Wallaby		Vulnerable	Concentrated in the MacDonnell Ranges, Gibson Desert and northern SA.	Nil	Unlikely – no observations indicated by NRM website.

Sources:
NT NRM Report on EL 31138 (APPENDIX 6)
NRM NT Maps Web application

5.0 ENVIRONMENTAL MANAGEMENT SYSTEM

Lithium Plus currently does not have a formal environmental management system in place and this section will be used to report progress made against the outcomes listed in Section 5.6 of this MMP.

The Lithium Plus Environmental Management Plan for the Arunta Project is located in APPENDIX 9 of this MMP.

5.1 ENVIRONMENTAL POLICY AND RESPONSIBILITIES

Lithium Plus does not have a formal environmental policy in place at the present time and Lithium Plus aims to minimise the impact on the natural environment in which we operate by adopting best environmental practices. To achieve this we ensure strict compliance with statutory laws and regulations, promote awareness of environmental issues amongst our workforce to identify the potential impact of their activities and wherever possible to conserve natural resources.

The exploration geologist shall be responsible for day to day management and control of activities that may impact on the environment.

5.2 STATUTORY REQUIREMENTS and NON-STATUTORY REQUIREMENTS

All exploration activities will be conducted under the relevant acts and regulations which may include but are not restricted to the following:

- *Mining Management Act*
- *Mineral Titles Act*
- *Weeds Management Act*
- *Bushfires Act*
- *Heritage Conservation Act*
- *NT Aboriginal Sacred Sites Act*
- *Native Title Act*
- *Aboriginal Land Rights (Northern Territory) Act*
- *Environment Protection & Biodiversity Conservation Act*
- *Atomic Energy Act*
- *Work Health & Safety (National Uniform Legislation) Act*

Also

- Exploration Licence conditions
- Authorisation conditions

There is currently a landowner access agreement in place (see APPENDIX 4).

5.3 INDUCTION AND TRAINING

Induction and training is to be conducted for all personnel including geologists and field support teams, drilling crews and relevant technical services personnel prior to commencement of work.

As a minimum the induction will cover the following:

Introduction to the site – geography, contacts, land owners and emergency procedures, location of and use of fire extinguishers and other safety equipment;

Expected behaviour and personal conduct rules;

Access, including the use of roads and tracks and gates;

Control measures required with regard to the management of Aboriginal and historic heritage sites.

Control measures required with regard to the management of flora and fauna, including the procedures required where tracks, drill sites and camps are to be created. Indiscriminate clearing of vegetation is to be avoided at all times;

Handling, storage and disposal of waste;

Weed control

Sediment and erosion controls;

Control measures required with regard to surface and ground water management. Control measures required to be implemented with regard to the management and control of dust, noise, soil contamination and water pollution;

Reporting of complaints and incidents;

Rehabilitation of drill hole sites, access tracks and campsites;

Personnel vehicles (including hire vehicles) are to be adequately equipped, maintained and suited to task. Daily checks are a part of the daily routine and will be demonstrated as part of the induction;

Lithium Plus has a policy of zero alcohol and drug tolerance for drivers and equipment operators when on the job;

Drilling and related equipment – Lithium Plus uses contractors for all drilling. All operators must be trained and be able to demonstrate safe working practices on the equipment. No person shall operate any related equipment without adequate training and supervision. No person shall approach drilling machinery without the permission of the driller;

Housekeeping, security, personal safety equipment, personal safety (including remote area awareness & procedures, first aid, fauna awareness, breakdown / lost procedures;

Duty of care and individual responsibilities;

Operation of the Weed Identification Sheet

Operation of the Threatened Species Identification Handbook

The Lithium Plus Induction Manual for the Arunta Project has been included within this MMP as APPENDIX 10.

5.4 IDENTIFICATION OF ENVIRONMENTAL ASPECTS AND IMPACTS

The Risk Rating is that of the initial risk, prior to the application of control measures

Aspect	Impact(s)	Risk Rating	Preventative Control Measures (prevention)	Mitigating Control Measures (remediation)
Native vegetation disturbance	Potential for damage to native vegetation	2	The Arunta Project has an established network of station access tracks. These will be used where possible, but not all of the target areas are serviced by existing tracks and will require new access track construction. New tracks or drill pads at Arunta may need to be "cleared" along at least part of their length because the vegetation is thick. Naturally clear pathways between large trees will be utilised, but shrubs and grass will need to be driven over using a loader with blade-up techniques, thereby reducing the disturbance to the topsoil, and allowing for a greater chance of quick regeneration from in-situ root systems. Large trees will be avoided by not drilling near them and directing tracks around them, when possible.	Where continued use of vehicle pathways results in the development of a firm track the site will be scarified after use to even the ground surface and encourage the regeneration of native vegetation. If vegetation is physically removed from the track route, it will be placed back over the track upon rehabilitation.
Soil disturbance	Potential for erosion of soil due to exploration activities	1	The drill sites for this program will preferably be located in naturally clear areas and as such will not require drill pads to be cleared. This greatly reduces the potential impact of the drilling in terms of soil disturbance and vegetation disturbance. This should be the case for many of the already-disturbed historic mine sites. However, at least some "clearing" will be required for drill pads, as described above. Regardless, allowance has been made in this MMP for all 45 RC pads to be cleared.	By utilising natural clear paths and avoiding soil disturbance constructing the new tracks, it is planned that little to no scarification will be necessary during rehabilitation. The speed restrictions on tracks will reduce the potential for tracks to degrade or "bull dust". In the event that this occurs LP will endeavour to rehabilitate the problem area before continuing use. In the event of heavy rain it is expected that the program will be delayed or put on hold to prevent significant impact to the tracks.

			As discussed, new access tracks are locally required to undertake this drill program. The tracks are planned to begin at existing tracks and/or public roads. The new tracks are located along routes designed to have the minimum impact on the natural environment, as determined from imagery and from field reconnaissance. The tracks are designed to avoid, when possible, steep topography and large or significant vegetation. The tracks will be simple levelled paths clear of upright vegetation (i.e. will not be graded or have topsoil cleared/removed) and vehicle speeds will be restricted (dependant on style and condition of track). Lithium Plus believes that by utilising these techniques the program will have only minor disturbance to the soil profile from its proposed new tracks and drill pads.	
Scientific & cultural sites	Disturbance of sites of cultural or scientific interest	1	Lithium Plus is unaware of any specific scientific or cultural sites within the confines of the proposed work program.	Disturbance of sites will be avoided through fact sheets provided to field staff with feed-back as determined by the AAPA and the DTC Heritage Branch.
Fauna disturbance	Disturbance of vulnerable or endangered fauna	2	Lithium Plus believes that the disturbance of fauna from this program is low. As stated in section 3, endangered species in the region as indicated from the NTG INFONET report are limited. Regardless, Lithium Plus will walk new access tracks and drill pads prior to construction to avoid specific fauna habitats.	Disturbance will be managed through fact sheets provided to field staff and avoided along with habitat and any trees or plants identified as nesting sites or food sources. Recognition of NTG INFONET listed species will be reported to DENR (Flora/Fauna Division)

Flora disturbance	Disturbance of vulnerable or endangered flora	2	Lithium Plus believes that the disturbance of significant flora from this program is low. There are no endangered species recognised according to the NTG INFONET report.	Disturbance will be minimised by careful management of all earth-works activities. All Employees will be inducted to be able to recognise significant species. Recognition of NTG INFONET endangered species will be reported to DENR(Flora/Fauna Division)
Visual impact	Evidence of increased vehicle activity in the area.	2	Through implementing the land use techniques discussed in this document Lithium Plus is reducing the impact of the program on the environment and therefore having a lesser effect on the visual impact on the area.	It is expected that once the program is completed and rehabilitation has taken place, the evidence of the work program on the area will be restricted to increased tyre tracks due to increased traffic in an otherwise rarely used area, it will be evident that vehicles have used the new proposed tracks and the drillhole locations will be visible due to the lack of grasses and other small vegetation in the immediate radius of the hole. Over time natural regeneration will remediate the visual impacts of this program to their pre-disturbance state.
Fire	Ignition of a fire from hot exhausts/ equipment	1	Lithium Plus believes fire risk from this program is likely to be minimal. Drilling operations will cease on total fire ban days. No vehicles with petrol engines which can have hot exhausts will be allowed on site. This should drastically reduce the chances of Lithium Plus personnel starting a fire.	All vehicles on site will carry fire extinguishers and shovels. Vehicles and equipment will only be parked on open ground.
Groundwater contamination	Cross contamination of fresh aquifers with saline aquifers	1	There is little or no cross contamination of aquifers expected during this program, as all groundwater is in tight fracture controlled situations.	If significant aquifers are encountered cement plugs will be placed between and above aquifers to preserve the integrity of the seals
Surface drainage interference	Disturbance of natural drainage systems and	1	The proposed work area has only minor low-order surface drainage with no significant or steeply banked drainage systems. No clearing will occur within 25m of any significant drainage	Any works will be removed/cleared at the completion of the program back to as close to its original state as possible.

	erosion		features and will follow the guidelines discussed later in this section.	
Introduced weeds/Invasive species	Introduction of weeds from vehicles	2	Lithium Plus anticipates that the risk from introduced species is low for this work program. Induction processes will inform all employees of potential weed species and their management to prevent weed propagation	As a precautionary measure LP will ensure that all LP staff and contractors vehicles are cleaned before entering the site and when moving between sites, to reduce the risk of contamination. Weed monitoring will be periodically ongoing to ensure any drill blow down areas do not become infested.
Rubbish and waste	Contamination of drill sites and tracks with rubbish and waste	2	Lithium Plus will induct all staff and contractors on the appropriate actions when dealing with rubbish and waste.	All rubbish at the drill sites will be collected and removed from site.
Landowner activities/interests	Disturbance of landowner activities/assets	1	As the land is pastoral land the main activities are the production of beef cattle. Lithium Plus will liaise with the land manager to minimise any potential for land use conflict whilst they are conducting activities on site.	The exploration manager will be responsible for managing any unforeseen conflicts with the wishes of the landowners.
Hydrocarbon and hazardous materials	Hydrocarbon leak / spill – contamination of soil, surface and ground water	2	Spill Kits and absorbent matting will be available at all areas where there is potential to spill hydrocarbons (ie drill sites, and with any bulk transportable fuel tanks). Where possible full or partial bunding will be deployed to storage tanks contain any leaks (exceptions include fitted vehicle fuel tanks). It is not planned to have any hazardous materials on the site.	Any contaminated soil will be removed, bagged and disposed at an appropriately licenced facility with contaminated areas replaced with clean topsoil. All leaks of hydrocarbons over 20L will be recorded as and environmental incident and will thus be fully investigated and reported to the Department with the rehabilitation report.
Public or third party activities	Disturbance of public activities. Access by unauthorized	1	All drilling activities will be undertaken away from areas generally accessed by the public. Signs will be placed at all public entrances stating no unauthorised access.	Any unauthorized access to drill sites will be managed by the supervising geologist who will be on site at all times while drilling.

	parties to drill sites.			
Noise and Air Quality	Detrimental effects to workers and nearby stock	1	Workers are protected by the use of correct PPE such as ear plugs or ear muffs.	Lithium Plus has identified no need for a noise or dust monitoring program for the 2018 drilling program.
Erosion and Sediment Control	Sediment and turbidity in nearby creeks can be influenced by inappropriately planned roads and drill pad locations. This is a sign of soil erosion and potentially inappropriate rehabilitation techniques in areas upstream.	2	Turbidity in nearby streams is caused by sediment load being carried with the stream when it is flowing. This can be influenced by wind and water-borne soils eroded from the in-situ soil profile due to vehicle disturbance and clearing. An erosion and sediment control risk analysis has been undertaken and its identified risks will be the subject of specific control measures in the planning stages of this exploration program.	Primary considerations for minimising this, is the correct siting of access tracks and drill sites to minimise soil disturbance. Clearing requirements should also be done “blade-up” to minimise damage to flora and subsequent soil damage. Access roads and drill pad locations have been planned to keep on level surfaces to minimise sediment runoff and to allow easy access and drill rig operation. There will be no drill adjacent to streams.

Risk Rating Table
(after DPIR Risk Matrix)

		Consequence (C)		
Likelihood (L)		**Low** Little or no Impact	**Medium** Medium term –ve Impact	**High** Irreversable or long term –ve Impact
	High >75% Chance event will occur in the life of the program	**4**	**7**	**9**
	Medium 25-75% Chance event will occur in the life of the program	**2**	**5**	**8**
	Low <25% Chance event will occur in the life of the program	**1**	**3**	**6**

KEY	
Critical Risk	
High Risk	
Moderate Risk	
Low Risk	

Discussion of Management Measures

Native Vegetation Disturbance

Impact

Potential for damage to native vegetation

Management

The Arunta Project has an established network of existing station access tracks. These will be used where possible, but not all of the target areas are serviced by existing tracks and will require new access track construction. New tracks or drill pads at Arunta will need to be "cleared" along at least part of their length due to the vegetation density..

Any clearing will be undertaken in accordance with the DPIR Guideline No AA7-005 "Clearing and Rehabilitation of Exploration Tracks and Gridlines", and Guideline No AA7-029 "Construction and Rehabilitation of Exploration Drill Sites".

Monitoring

Any potential native vegetation disturbance will be monitored by the exploration geologist as part of his daily duties and will be captured in the site rehabilitation register.

Soil Disturbance

Impact

Potential for erosion of soil due to exploration activities.

Management

The tracks are designed to avoid, when possible, steep topography and large or significant vegetation. The tracks will be simple levelled paths clear of upright vegetation (i.e. will not be graded or have topsoil cleared/removed) and vehicle speeds will be restricted (variant on style and condition of track). Lithium Plus believes that by utilising these techniques the program will have only minor disturbance to the soil profile from its proposed new tracks and drill pads.

Monitoring

Any potential soil disturbance will be monitored by the exploration geologist as part of his daily duties and will be captured in the site environmental inspections and audits.

Scientific and Cultural Sites

Impact

Potential loss of cultural and heritage sites.

Management

At this stage the identification of cultural and heritage sites by applications to the AAPA and the DTC Heritage Branch has shown that there are no recorded sites within the 2018 exploration area. Lithium Plus recognises and acknowledges that not all cultural and heritage sites are reported to the government and they may exist unreported.

Monitoring

To date there have been no recorded cultural and heritage sites found in the exploration area. As part of the exploration activities personnel are encouraged to report any suspected indigenous, archaeological or heritage sites to the exploration geologist for preliminary evaluation. If the geologist is satisfied he will place a moratorium on the immediate area and report it to the appropriate authorities.

Flora and Fauna Disturbance

Impact

Clearing of access tracks and drill pads for flora and presence of workers and equipment for fauna.

Management

Flora and fauna loss or disturbance is primarily due to habitat loss, this is due to excessive or over clearing in drilling activities. The strategy for flora management is to minimise vegetation clearing by using the DPIR recommended 'blade up' track and drill pad construction techniques. As part of exploration activities any worker identifying a suspected endangered species should report it to the exploration geologist for further evaluation.

Monitoring

The monitoring of this is done directly within the reporting requirements of the annual MMP review process and as part of our Environmental Management System in the Rehabilitation Register.

Visual Impact

Impact

Evidence of increased vehicle activity in the area.

Management

Due to the spread out nature of the 2018 drilling program it is anticipated that there will be no loss of visual amenity in this relatively isolated area.

Monitoring

Any perceived long term visual impact will be noted during the periodic audits and this data captured in the rehabilitation register.

Fire

Impact

Loss of habitat and death of small animals, also the possible loss of infrastructure and equipment and possessions onsite.

Management

The use of fire as a land management tool is the responsibility of the landowner and will not be undertaken in any circumstances by Lithium Plus .

Monitoring

Fire management monitoring is done visually by all personnel on the site.

Ground Water Contamination

Impact

Cross-contamination of aquifers if drill holes are left open after they encounter groundwater.

Ground Water Management

If the drill holes were to intersect locally fractured rock then this flow will be contained within the drill sumps. In this case Lithium Plus has permitted a drill sump for each corresponding drill hole, it is expected that very few of these will be required due to the paucity of groundwater in the area. Sumps will only be constructed when and where required by groundwater flows.

If groundwater flows are significant then Lithium Plus will plug any such holes with concrete plugs to reseal the aquifer. From historical data there are no significant groundwater flows expected.

Monitoring

Ground water presence and discharge will be monitored by the exploration geologist as part of his daily duties.

Surface Drainage Contamination

Impact

Contamination of natural surface drainage systems and potential for erosion.

Surface Water Management

Any requirements for discharging of water will be identified during exploration planning and the appropriate actions taken as outlined in the risk matrix above. There is currently no anticipated need for water discharge from the exploration sites, As exploration is being conducted in the dry season there is no need for any surface water management (surface runoff) plans to be developed. As the program is to utilise the RC (Reverse Circulation) drilling there will be no requirement for operational drilling water. As all drillers carry 3-5,000Lt of water (usually in the service truck or rod truck, there will be a significant quantity of non-potable water on hand for use in the planned activities should it be required.

Monitoring

Surface water discharge will be workplace monitored by the exploration geologist as part of his daily duties.

Introduced Weeds/Invasive Species

Impact

Possible competition for native flora both within the planned drilling area and further afield (due to the presence of wild stock).

Management

Weeds identification and management will occur in accordance with this MMP which is built around the DENR weeds data collection and eradication system. Weed eradication may involve spraying of small infestations around drill sites. Large scale infestations are the responsibility of the landowner and not Lithium Plus. Weed control and monitoring will be included as an ongoing regular duty of one or more designated staff members. Wash down units will be used for vehicles and any other equipment moving on or off the exploration site to prevent the spread of declared weeds. The wash down unit will be located in a central cleared area which will enable all vehicles leaving the site to be examined and treated. Water for this unit will also be sourced from off site and stored at the unit in a 200Lt blue plastic drum. Vehicle monitoring will consist of examination of grass and seeds before leaving site if the activities are being conducted within an identified weed infestation. The wash-down area will be sprayed with weed poison on completion of the exploration program to minimise potential weeds spread from the site. All materials sourced outside the project area must be weed-free prior to being taken onsite.

Monitoring

Monitoring of weed infestations occurs by visual means with periodic inspections in accordance with this MMP.

As part of the exploration activities any worker identifying a suspected weed infestation should report it to the exploration geologist for further evaluation.

Rubbish and Waste

Impact

Untidy site with potential health hazards.

Management

All wastes will be collected and transported off site to the nearest approved waste disposal facility.

Drilling sites will be maintained in a clean and tidy condition at all times. All wastes, including human wastes, will be collected, segregated and stored in properly constructed containers and removed to an approved land fill or other disposal site in accordance with local council requirements.

Monitoring

Monitoring of waste collection and disposal will be the responsibility of the exploration geologist and will be undertaken visually.

Landowner Activities

Impact

Interference with authorised landowner activities

Management

As the land is leasehold land owned by the Delmore Downs Pty Ltd there are currently pastoral activities being undertaken in the general area of the 2018 proposed drilling activities. Active liaison with the station management will seek to avoid any potential misunderstandings or miscommunications about Lithium Plus' activities. Lithium Plus is aware of its role and responsibilities not to interfere with active pastoral activities.

Monitoring

The chief geological officer will be responsible for identifying and managing any potential landowner conflicts.

Hydrocarbons and Hazardous Materials

Impact

Possible impact on flora, contamination of underlying soils and poisoning of stock if ingested.

Management

Fuels and Oils will be stored onsite in the appropriate storage facilities by the drilling contractors in accordance with the appropriate legislation, ie in self-bunded storage facilities for bulk products and in delivery containers for packaged products. Spill kits will be positioned at fuel, storage facilities, and at the rig.

Drilling chemicals required by the drilling crew will be of the non-toxic and environmentally friendly type.

Hazardous chemicals will generally be of less than 1Lt quantity and will be stored in the appropriate Drillers DG storage cabinet.

Monitoring

Because of the short duration of the program the potential sources of pollution will be visually monitored by daily workplace observations by the exploration geologist as part of his daily duties

Public Activities

Impact

Disturbance of public activities. Access by unauthorized parties to drill sites.

Management

There is no anticipated interference with public activities although the possibility of public access to drill sites is recognised. Drilling areas will be signposted to warn any members of the public in the near vicinity of operational exploration activities.

Monitoring

Signage and potential presence of members of the public will be visually monitored by daily workplace observations by the exploration geologist as part of his daily duties

Noise and Air Quality

Impact

Noise and dust affects workers, neighbours and nearby stock.

Management

Workers are protected by the use of correct PPE such as ear plugs, ear muffs and dust masks.

Neighbours are located +10km away and are unlikely to experience intrusive noise from drilling operations.

If any stock are in the immediate area they will remove themselves to a location where they are comfortable, the immediate area contains no fences to inhibit free movement.

All drill rigs to be used on site will be fitted with the appropriate noise suppression equipment (eg. mufflers).

RC Drill rigs are designed as dust collectors as part of their sample collection system, the use of the correct PPE by the workers associated with drilling activities; drillers, offsiders, field assistants and geologists are an essential part of daily operation performance.

All drill rigs to be used on site will be fitted with the appropriate dust suppression equipment (eg. cyclones).

Monitoring

Lithium Plus has identified no need for a noise or dust monitoring program for the 2018 drilling program. The monitoring of the dust and noise generated will be by workplace monitoring by the exploration geologist.

Erosion and Sediment Control

Impact

Sediment and turbidity in nearby creeks can be influenced by inappropriately planned roads and drill pad locations. This is a sign of soil erosion and potentially inappropriate rehabilitation techniques in areas upstream.

Management

Turbidity in nearby streams is caused by sediment load being carried with the stream when it is flowing. This can be influenced by wind and water-borne soils eroded from the in-situ soil profile due to vehicle disturbance and clearing. Primary considerations for minimising this, is the correct siting of access tracks and drill sites to minimise soil disturbance. Clearing requirements will be done “blade-up” to minimise damage to flora and subsequent soil damage.

Access roads and drill pad locations have been planned to keep on level surfaces to minimise sediment runoff and to allow easy access and drill rig operation. There will be no drilling adjacent to streams.

The drilling program is designed to be conducted in the 2018 dry season to minimise any erosion that may occur before site rehabilitation can occur.

Monitoring

Because of the small program (45 holes) and short duration (<45 days) it is not proposed to have a water monitoring program within the nearby ephemeral streams, which will most likely not be flowing or holding water anyway.

5.5 ENVIRONMENTAL AUDITS AND INSPECTIONS

Environmental inspections will be undertaken by the environmental manager during the program. Lithium Plus will then monitor the drill program whilst it is underway specifically focusing on the state of the tracks and the state of the drill sites. These will be accessed daily and if issues are beginning to arise they will be rectified by the exploration geologist immediately. These will be recorded and photographed.

At completion of the program all drill sites will be rehabilitated to meet best practice standards, as set out in the DPIR guidelines included under the section 'DPIR Rehabilitation Guidelines' in the Environmental Management Plan which is located in APPENDIX 9 of this MMP.

5.6 ENVIRONMENTAL PERFORMANCE

5.6.1 OBJECTIVES AND TARGETS

The success of the exploration drilling program will be measured in terms of:

- Successfully testing the target area with the minimum number of holes required to decide if additional work is warranted.
- The completion of the program with no accidents or incidents involving employees, contractors or material damage to the environment.
- Completion of the program with the absolute minimum of surface disturbance.
- The removal of all items brought to the site including drilling equipment and rubbish.
- The rehabilitation of tracks and drill sites in accordance with DPIR guidelines.
- The restoration of the drill sites to as close to natural profile.
- Best practice environmental management.

It is anticipated that the drilling operations will be completed by the end of June and the rehabilitation completed within 1 month of completion of drilling activities and before the onset of the wet season. At the completion of the rehabilitation a final site inspection will be undertaken by the environmental manager who will ensure that the work has been done to the highest possible standards.

At closeout, a final rehabilitation report will be prepared detailing the work completed, and this will be submitted to the Department of Primary Industry and Resources.

5.6.2 ENVIRONMENTAL PERFORMANCE REPORTING

Performance t argets relevant to this phase of exploration are the rehabilitation of tracks, drill pads and collars, the removal of waste from sites and, where appropriate, back-filling of drill sumps within 1 month after completion of the drill holes. It is planned that up to 2.5km of tracks to access the drill pads will be created during this program. The environmental manager will be responsible to insure the tracks and drill sites are fully rehabilitated before the onset of the wet season.

Control and reporting on the rehabilitation work will be managed by establishing a Rehabilitation Register (see Section 5.0 below) , in which the nature of the disturbance and the state of rehabilitation efforts will be recorded. The environmental manager verify the completeness of rehabilitation before signing off. A periodic review will ensure that steady progress on rehabilitation is maintained and no areas are overlooked.

To provide a measurable basis for the rehabilitation works a photographic record will be started and maintained throughout the exploration program. Photographs of tracks and areas that have previously been cleared will be taken. Prior to any ground disturbing work occurring photographs of the area to be affected will be taken. The photographs will be used as base line data against which the effectiveness of the rehabilitation work will be assessed. Additional photographic evidence will be collected at the following points to monitor the progress of rehabilitation, these will also include photos at the time of drilling, after completion of rehabilitation and at monitoring intervals of post-wet season and 12 months after completion of rehabilitation.

5.7 EMERGENCY PROCEDURES AND INCIDENT REPORTING

Emergency Procedures

In the event of an emergency, either safety or environmental, the following general procedures are to be followed:

1. Ensure the safety of workers and anyone else present.
2. Prevent, control and stop the incident and its impact from spreading
3. Advise the Environmental Manager or Exploration Geologist and seek his assistance
4. Advise the Chief Executive of the DPIR by telephone of the incident and the steps undertaken to mitigate the impact and control the source of the incident.
5. Submit a written report on Form CF7-001 to the Chief Executive as soon as practical after assessing the incident
6. Undertake all instructions as issued by the mining officers.

Incident Reporting

All environmental Incidents must be reported to the NT Department of Primary Industry and Resources in accordance with Section 29 of the Mining Management Act. The appropriate form to report an environmental incident is DPIR Form CF7-001, which is included in APPENDIX 9 in the Environmental Management Plan.

Incident Assessment

When assessing an incident and making decisions about reporting on an environmental incident or serious environmental incident an operator should have regard to the definition of "environment" in the MMA.

"Environment" is defined under Section 4 of the MMA as follows:
land, air, water, organisms and ecosystems on a mining site and includes:

(a) the well-being of humans;
(b) structures made or modified by humans;
(c) the amenity values of the site; and
(d) economic, cultural and social conditions.

Operators should conduct an appropriate assessment of the incident in order to determine the severity of the incident and to report the incident to the Chief Executive Officer of DPIR.

Operators should also have regard to the obligations set out in section 16 of the MMA, the conditions of authorisation, the permitted activities and the relevant procedures contained in the operator's own management plan, including its associated systems.
It is not always necessary for there to have been an environmental impact for the requirement to report an incident to be triggered. The *potential* for any incident to

have an impact on the environment should also be taken into account when considering whether to make a report to the Chief Executive Officer. The definition of "environment" is broad and careful consideration should be given to each aspect of the environment before a determination is made.

Incident Reporting

Incidents likely to be the subject of a section 29 incident report may include, but are not limited to, the following:

(a) Escape (by any means such as a spill or leak) of a fuel, chemical, product or residue in solid, liquid or gaseous form including fumes, smoke, vapours, contaminated water, or dust;
(b) Emissions of noise (beyond reasonable permitted levels);
(c) Uncontrolled or accidental fire on any land, structure or infrastructure;
(d) Unauthorised, uncontrolled, or both, discharge of controlled waters to surface or ground waters;
(e) Damage to a Sacred Site, Aboriginal Protected Area, other protected area, archaeological or heritage site;
(f) Unauthorised mining, whether the activity is undertaken on or off an authorised mining site;
(g) Unauthorised clearing of vegetation or disturbance of the ground on or off an authorised mining site; and,
(h) Harm to human well-being.

In accordance with Section 29 of the MMA operators are required to report all environmental incidents:

(1) As soon as practicable after the operator for a mining site becomes aware of the occurrence of an environmental incident or serious environmental incident on the site, the operator must notify the Chief Executive Officer of the occurrence.

Section 29 also states:

(2) An operator who gives notice orally must, as soon as practicable after doing so, give a written notice to the Chief Executive Officer.

Operators should also be aware of Section 33 of the MMA, which states:

(1) A person commits an offence if:
(a) the person releases waste or a contaminant that is from a mining site; and
(b) the release is not authorised by the mining management plan for the site.

General emergency procedures as well as NT Worksafe incident notification and DPIR Environmental Incident notification forms are also included as APPENDIX 11.

6.0 EXPLORATION REHABILITATION

All rehabilitation will be undertaken in accordance with the methods listed below and the relevant parts of the DPIR guidelines for rehabilitation of drill sites (AA7-029) and lines and tracks (AA7-005).

Disturbance	Rehabilitation Methods	Schedule (Timing)	Closure Objectives / Targets	Monitoring Techniques
Drill holes	Cut below ground level and plug with a concrete plug	Progressively or within 1 month of completion of program	All drill holes permanently capped below ground level.	Follow-up observations/photographs at rehabilitation, pre wet season, post wet season, and 1 year.
Drill Holes	Drill holes that intersect groundwater will be plugged	At completion of hole	No groundwater cross-contamination between aquifers	NA
Drill pads	Rehabilitated if required	Progressively or within 1 month of completion of program	Stable land surface	Follow-up observations/photographs at rehabilitation, pre wet season, post wet season, and 1 year.
Drill Sumps	Refilled, compacted and levelled	Progressively or within 1 month of completion of program	Stable land surface	Follow-up observations/photographs at rehabilitation, pre wet season, post wet season, and 1 year.
Tracks / Gridlines	Levelled and scarified if required	Progressively or within 1 month of completion of program	Stable land surface	Follow-up observations/photographs at rehabilitation, pre wet season, post wet season, and 1 year.
RC Drill Spoil	RC drill spoil will be placed back down the drill hole and any excess levelled	Progressively or within 1 month of completion of program	Stable land surface	Follow-up observations/photographs at rehabilitation, pre wet season, post wet season, and 1 year.

6.1 EXPLORATION REHABILITATION REGISTER

The Arunta Project Rehabilitation Register is included as APPENDIX 5 within the Environmental Management Plan, (APPENDIX 9).
This register includes images and details of the individual sites.

Summary sheets are included here for information purposes.

Reporting period	Tenement	MMP Reference	Drill Holes /Pads (No.)	Drill Holes/ Pads under Rehab (No.)	Drill Line/ Access Track Length (km)	Drill line/access track under Rehab (km)	Comments

Hole ID	Date Drilled	Drill hole Coordinates (GDA94 Zone # UTM)	Rehabilitation (✓ or date completed)									Post-closure Monitoring (1 Year after)							Sign off and Comments
			Drill holes plugged/capped	Drill spoils buried/backfilled	Sample bags/core removed	Sumps backfilled	Topsoil/vegetation replaced	Drill pad ripped	Access track ripped	Rubbish removed	Is radiation within background levels?	Date of Monitoring	Is site nominated for ongoing monitoring?	Is the site revegetated?	Are there signs of erosion?	Are there weeds?	Is there subsidence?	Is radiation within background levels?	

6.2 COSTING OF CLOSURE ACTIVITIES

Being commercial in confidence the costing of closure activities is included as APPENDIX 12.

APPENDIX 1

APPLICATION FOR AN AUTHORISATION
Section 1.0

APPENDIX 2

NOMINATION OF OPERATOR
Section 1.0

APPENDIX 3

APPOINTMENT OF AGENT
Section 1.0

APPENDIX 4

LAND OWNER CORRESPONDENCE
Section 2.0

APPENDIX 5

LOCATION OF PROPOSED ACTIVITIES
Section 3.2

APPENDIX 6

DENR

ENDANGERED FLORA AND FAUNA

DATABASE EXTRACT
Section 4.0

APPENDIX 7

AAPA INFORMATION FROM RECORDS
Section 4.0

APPENDIX 8

DTC

ARCHAEOLOGICAL AND HERITAGE

DATABASE EXTRACT
Section 4.0

APPENDIX 9

ENVIRONMENTAL MANAGEMENT PLAN
Section 5.0

APPENDIX 10

SITE INDUCTION MANUAL
Section 5.3

APPENDIX 11

EMERGENCY PROCEDURES

AND

INCIDENT REPORTING
Section 5.7

APPENDIX 12

SECURITY CALCULATION

SPREADSHEET
Section 6.2