



Vimy Resources Limited

Exploration Operations

2020 Mining Management Plan

Wellington Range and King River Joint Venture Project

Operator: Viva Resources Pty Ltd

Date: 27 August 2020

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1. Project Details

Viva Resources Pty Ltd (Viva) acquired a controlling stake in the Wellington Range and King River Joint Venture (WR & KR JV; 0852-01) from Cameco Australia Pty Ltd (Cameco), first announced in March and completed in June 2018. The WR & KR JV is a joint venture (JV) between Viva (79.11 % ownership) and Rio Tinto Exploration Pty Ltd (RTX; 20.89 % ownership). Viva is a wholly owned subsidiary of Vimy Resources Limited (Vimy). The project will be operated by Vimy staff on behalf of the JV partners using Vimy work procedures and policies, some of which have been adopted or modified from those generated by Cameco. Vimy is submitting this Mine Management Plan (MMP) on behalf of the WR & KR JV partners, Viva and RTX.

The WR & KR JV project comprises five contiguous tenements EL5893, EL25064, EL25065, EL24017 and EL27059, located in northwestern Arnhem Land, Figure 1.

Vimy proposes to conduct exploration work on the WR & KR JV project on behalf of the JV partners in the second half of 2020. This MMP has been developed to satisfy the requirements of Sections 35 and 40 of the Mining Management Act 2001 and outlines the planned exploration activities for the 2020 program. Once approved, it is anticipated that exploration activities detailed within this MMP will commence in early September 2020 with all work to be completed by December 2020. Vimy will not complete field-based exploration during the 'Wet Season' between December and March. This application provides an overview of the exploration program and the environmental management measures that will be adopted.

Project Name Provide new or existing project name	Wellington Range King River Project										
Authorisation Number Insert existing authorisation number, where applicable											
Operator Name Use ASIC-ABR registered name (if a company), or name of the applicant	<p> Company Name: Viva Resources Pty Ltd (Vimy Resources Limited) ABN: 56 120 178 949 Street Address: Ground Floor, 10 Richardson Street, West Perth WA 6005 Postal Address: PO Box 23, West Perth WA 6872 Telephone No: (08) 9389 2700 Facsimile: (08) 9389 2722 Contact Personnel: </p> <table border="1" data-bbox="639 1630 1469 1839"> <thead> <tr> <th>Name</th> <th>Title</th> <th>Email address</th> </tr> </thead> <tbody> <tr> <td>Xavier Moreau</td> <td>General Manager</td> <td>xmoreau@vimyresources.com.au</td> </tr> <tr> <td>Jason Bishop</td> <td>Senior Geologist</td> <td>jbishop@vimyresources.com.au</td> </tr> </tbody> </table>		Name	Title	Email address	Xavier Moreau	General Manager	xmoreau@vimyresources.com.au	Jason Bishop	Senior Geologist	jbishop@vimyresources.com.au
Name	Title	Email address									
Xavier Moreau	General Manager	xmoreau@vimyresources.com.au									
Jason Bishop	Senior Geologist	jbishop@vimyresources.com.au									

<p>Location and Access Details Include brief description of the location, access details, and distance to nearest town or community</p>	<p>The Wellington Range and King River Joint Venture is situated approximately 300 km east of Darwin in north-western Arnhem Land. The project tenements are located exclusively on Aboriginal Freehold land and cover a range of landforms including high sandstone plateau country, low savannah plains and the nearshore mangrove swamps and beaches along the western margin of the Arafura Sea, Figure 1.</p> <p>The project will be managed from the King River exploration base camp, Figure 2, located on the King River Tenement, EL25064. Vehicle access is via two main public roads, the Gunbalanya-Maningrida Road to the 'Three Ways', then approximately 30 km north along the Murganella Road. Access from the camp to the work areas is via these established roads and a series of company-maintained, dry-season 4WD tracks.</p>
<p>Target Commodity Details Include target commodities (i.e. gold, copper etc)</p>	<p>Uranium</p>
<p>Mining Activities Summarise the mining activities (exploration) to be the subject of the proposed Authorisation or Variation</p>	<p>Exploration:</p>

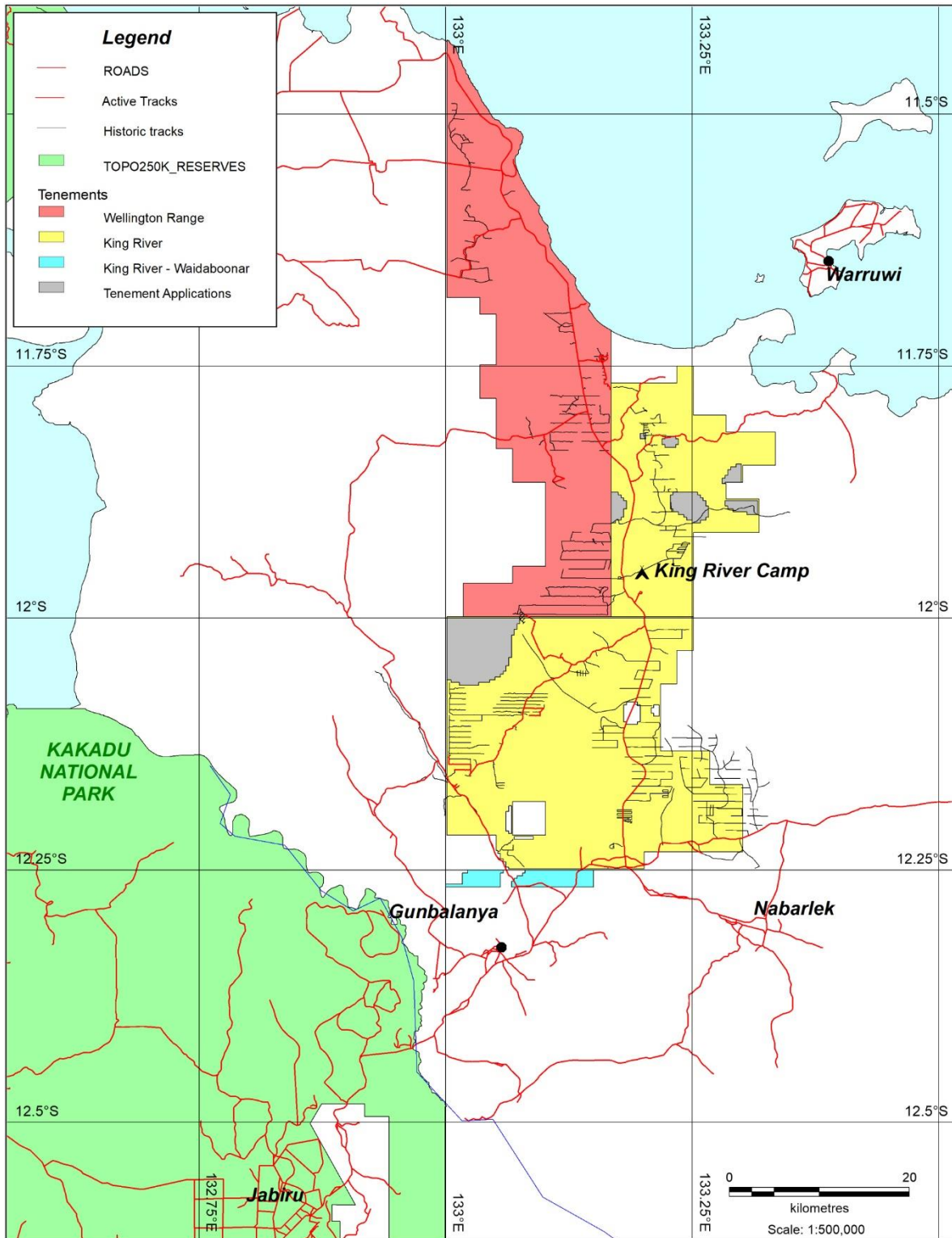


FIGURE 1: WR & KR PROJECT LOCATION

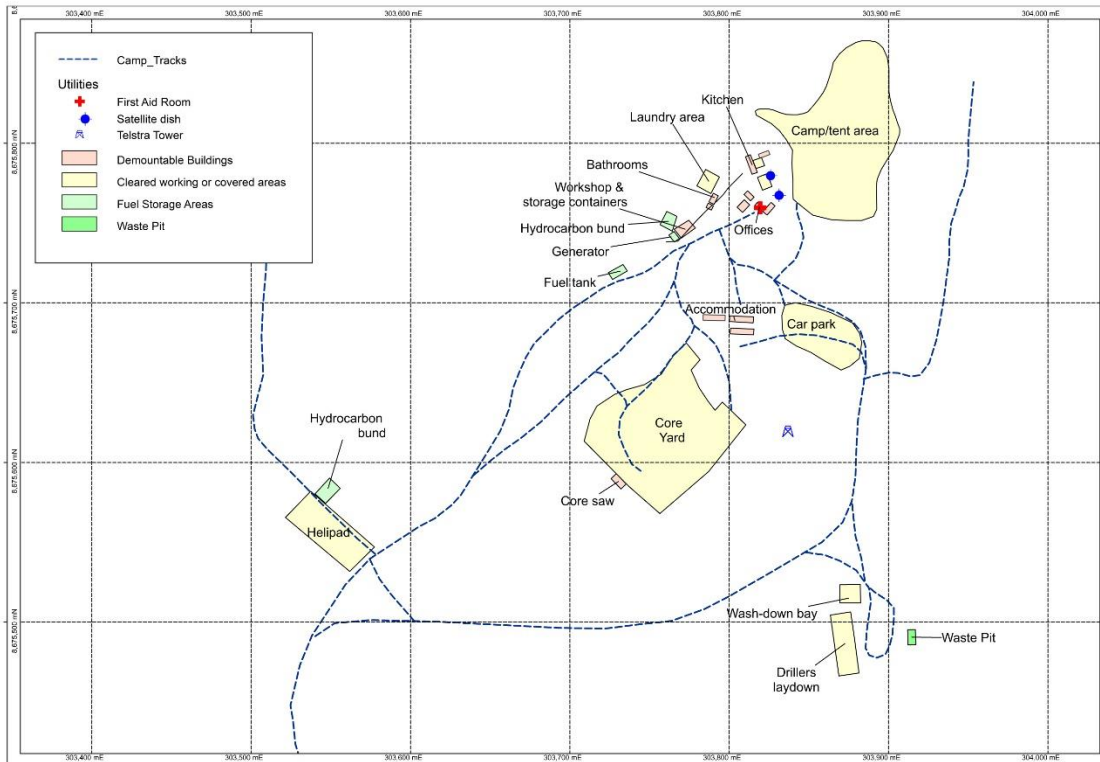


FIGURE 2: KING RIVER CAMP LAYOUT

1.1 Mining Interest and Land Ownership

The project tenements cover a range of landforms including high sandstone plateau country, low savannah plains and the nearshore mangrove swamps and beaches along the western margin of the Arafura Sea.

In 2020, the JV consists of five granted tenements Table 1, located exclusively on Aboriginal Freehold land.

Table 1: WR & KR Project Tenements

Name	Title	Holder	Expiry Date	Area (Ha)
EL 5893	Wellington Range	Viva 79.11 % / RTX 20.89%	3 May 2020 ¹	62,780
EL 25064	King River	Viva 79.11 % / RTX 20.89%	4 July 2021	29,220
EL 25065	King River	Viva 79.11 % / RTX 20.89%	4 July 2021	65,650

¹ A renewal application was lodged on 1 May, and is currently being assessed by the DPIR.

EL 27059	Waidaboonar	Viva 79.11 % / RTX 20.89%	2 September 2020	829.9
EL 24017	Waidaboonar	Viva 75 % / RTX 25%	2 September 2020	1,556

1.2 Organisational Structure

Table 2: Organisational Structure

Position Title	Name
Managing Director	Mike Young
Exploration Manager	Xavier Moreau
Senior Geologist	Jason Bishop
Consultant Geologist	Penny Sinclair
Principal Environmental Officer	Paula Arthur
Radiation Safety Officer	Xavier Moreau
Camp Manager/Senior Field Technician	Karen Larsen

2. Operator Self-Assessment of Environment

Vimy has undertaken and environmental risk identification following the steps outlined in the Exploration Mining Management Plan User Guide. This lead to a likelihood analysis and subsequent significant impact assessment of identified environmental risks.

Table 3: ARP Environmental Risk Assessment Outcomes

Theme	Environmental Aspect	Potential Impacts
Air	Dust (Air Quality and Greenhouse Gases)	Dust impacting flora, surface water and soil
Land	Flora and Vegetation (Terrestrial Flora and Fauna)	Weed Establishment Disturbance of threatened /listed species from clearing Diversity loss from fire as a result of clearing/exploration activities
	Fauna (Terrestrial Flora and Fauna)	Loss of Habitat from clearing/fires Increase in feral predators Increase in road kill Disturbance of threatened /listed species as a result of clearing Death from becoming trapped in unplugged drill holes and sumps
Water	Groundwater (Inland Water Environmental Quality)	Contamination from spillages and drilling activities

	Surface Water (Inland Water Environmental Quality and Aquatic Ecosystems)	Erosion and increased turbidity in local drainage lines from clearing Contamination from spillages and drilling activities
	Hydrocarbons/Hazardous Materials (Inland Water Environmental Quality)	Contamination of groundwater, surface water and soil as a result of incorrect usage, storage and transport Fire as a result of incorrect usage, storage and transport
Water and Land	Waste Management (Inland Water Environmental Quality and Terrestrial Environmental Quality)	Contamination of groundwater, surface water and soil as a result of incorrect usage, storage and transport
People and Communities	Aboriginal Heritage (Social Economic and Cultural Surroundings)	Loss of aboriginal sites as a result of clearing/exploration activities Unauthorised access to cultural sites

2.1 Flora and Fauna

The work proposed by Vimy in the 2020 MMP has not been deemed likely to cause a significant impact to MNES and weeds within the project area. This is due to the proposed work being conducted outside of areas where significant flora and vegetation have been identified and weed management procedures outlined in the Weed Management Plan, Appendix 1. Vimy has developed a Flora and Fauna Management Plan which outlines the proposed measures to avoid and reduce direct and indirect impacts on MNES species potentially located within the proposal area, Appendix 2.

2.1.1 Flora and Vegetation

The WR & KR JV tenements cover three separate bioregions, as described in the Northern Territory Parks and Conservation Master Plan (2005), which are:

- Arnhem Coast (ARC);
- Arnhem Plateau (ARP); and
- Darwin Coastal (DAC).

The main vegetation types of the ARC bioregion are coastal communities of heathlands, mangroves and saline flats; floodplain and wetland areas, including the extensive paperbark forest and sedgeland of the Arafura Swamp. Inland from the coast, the dominant vegetation type is tall open eucalyptus forest, typically dominated by Darwin Woollybutt (*Eucalyptus miniata*) and Darwin Stringybark (*Eucalyptus tetradonta*), with smaller areas of monsoon rainforest and eucalypt woodlands.

The southern tenements are located in the ARP bioregion. The main vegetation types are sandstone heathlands, rainforests (characteristically dominated by the endemic tree *Allosyncarpia ternata*), hummock grasslands and eucalypt open woodlands (with a range of dominants including *Eucalyptus phoenicea*, *Eucalyptus kombolgiensis*, *Eucalyptus miniata* and *Eucalyptus dichromophloia*).

The tenements on the north-western side of the WR & KR JV are located within the DAC bioregion. The most notable vegetation feature of the DAC is the extensive and diverse floodplain environment associated with the lower reaches of the many large river systems. There are areas of substantial mangroves and rainforest and other riparian vegetation fringing the rivers. Inland from the coast, the dominant vegetation type is tall open eucalypt forest, typically dominated by Darwin Woollybutt (*Eucalyptus miniata*) and Darwin Stringybark (*Eucalyptus tetradonta*).

Tenements to the south of the WR & KR project area which are held by Viva (Vimy) contain Sites of Conservation Significance (SOCS). However these areas do not form part of this MMP so will not be impacted by the proposed works.

Seven significant species of flora are potentially located in the WR & KR JV area (results of searching STRIKE, NR MAPS and EPBC Protected Matters Search Tool). These are:

- *Boronia rupicola*;
- *Boronia laxa*;
- *Boronia viridiflora*;
- *Arenga australasica*;
- *Toechima sp. East Alligator*;
- *Grevillea versicolor*; and
- *Lithomyrtus linariifolia*.

No known significant species of flora will be impacted by the proposed works as they are not located within the planned disturbance area of the project.

2.1.2 Managing Impact on Flora

Management measures will be employed to reduce impacts to flora and vegetation, including minimising disturbance areas and ensuring effective progressive rehabilitation. Where disturbance will be required for the construction of tracks, drill pads and sumps, the following management measures will be implemented:

- Position drill pads on flat and stable ground;
- Limit the size of the drill pad to that required for the safe and efficient operation of the drill rig;
- Where possible, use raised blade for the clearing of drill pads and tracks, to obtain an even and safe surface without clearing and soil stripping;
- For those areas where the 'raised blade' technique is not suitable for clearing pads or tracks, the cleared vegetation and topsoil will be stockpiled to be used later in rehabilitation; and
- Rehabilitate the disturbed area as soon as practicable.

2.1.3 Fauna

Many of the fauna species listed as *endangered* or *vulnerable* under Territory and Commonwealth legislation are marine, or do not occur within the tenement area, and will not be affected by Vimy's operations. The following terrestrial *sensitive* fauna is thought to occur in selected parts of the WR & KR JV and may have the potential to be affected by Vimy's operations:

- Northern Quoll (*Dasyurus hallucatus*);
- Partridge Pigeon (*Geophaps smithii*);
- Red Goshawk (*Eruthroriorchis radiatus*); and
- Gouldian Finch (*Erythrura gouldiae*).

Vimy's Ground Disturbance Activity Permit (GDAP) system includes an assessment of significant vegetation, flora and fauna based on the Vimy GIS database which incorporates all known flora, vegetation and fauna from surveys over the area will be used to assess the presence/absence of significant vegetation, flora and fauna.

The GIS layer was assessed during the planning phase, none of the four listed fauna species have previously been recorded within the vicinities of the proposed disturbance, not in similar habitats. The

disturbance will be kept to a minimum to reduce the potential impact to fauna. The area will be visually inspected by operators (who have a long history of working in the area and can identify sensitive fauna). During disturbance, if any sensitive fauna nests or species are identified disturbance will stop until an alternative route/area can be found.

2.1.4 Managing Impacts on Fauna

The main objective of fauna management is to ensure the diversity of fauna is maintained and to minimise disturbance to habitats, wherever possible. The key management actions for fauna management include the following:

- Minimising disturbance to vegetation and potential habitats;
- Visual inspections of the area, before clearing, to look for signs of priority species activity;
- Minimise impact on watercourses;
- Prohibiting firearms and domestic pets on site;
- Educating people on the importance of minimising disturbance to wildlife;
- Limiting vehicle speeds to reduce the potential for road kills;
- Capping of open drill holes (including any historic holes), immediately following drilling;
- Managing refuse and landfill sites to prevent attraction to feral animals; and
- Implementing a fire prevention policy and fire management programme.

2.2 Weeds and Feral Animals

In the records that Vimy obtained from Cameco on the purchase of the project, it was noted that in 2013 and 2014 Cameco came across a small population of Mimosa (*Mimosa pigra*) plants, which was duly reported to the NLC and DPIR. The site was treated by the Mardbalk Rangers. It is highly likely that several 'Weeds of National Significance', including the Alligator Weed (*Alternanthera philoxeroides*) and Olive Hymenachne (*Hymenachne amplexicaulis*) have been introduced into the area through animal movements and via public vehicles that pass along the roads that transect the tenements (over which Vimy has no control). During the first routine camp audit of the 2018 field season, three unidentified weed plants were observed at the vehicle wash-down bay. The plants were removed and burned, and the area was regularly inspected during the 2018 field season and will continue to be inspected during future field seasons.

A similar process was followed in 2019 and an early site inspection in 2020 ahead of camp opening, with a report² submitted to the Darwin Regional Weed Officer of the Weed Management Branch in late June 2020.

The presence of weeds in Arnhem Land is currently being investigated by personnel attached to the NLC (Caring for Country team). DEMED, based at Gunbalanya, has been active in weed eradication in recent years and has also been advising on weed-related issues. The Weeds Branch of the Department of Land Resource Management has basic information relating to weeds in the area; posters will be put up around camp and information provided to personnel during inductions.

Exotic animal species include buffalo, cane toad, feral cat, cattle, crazy ant, feral dogs, goat, honeybees, feral pig, and Sambar deer. Many of these species have been observed in and around King River Camp and throughout the broader WR & KR JV area. In the past, Cameco has sought assistance from local rangers and DEMED to permanently remove feral pigs that take up residence in and around King River Camp. If feral pigs pose a continuing problem around camp in 2019, Vimy will continue the policy of seeking assistance from DEMED.

² For a minor reoccurrence of Mission grass.

2.2.1 Managing the Impacts of Weeds

Protection measures for weeds will primarily focus on the prevention of spreading weed seeds and the control of weeds that may be accidentally introduced. Vehicles arriving on site will be inspected for weeds and seeds and if necessary, washed down in the designated area in the King River Camp laydown area. Any seeds washed from the vehicles or heavy machinery will accumulate in the wash-down area, and if weeds establish in this area, they will be removed. Visual inspections for weeds will be undertaken across the site. If any weeds are identified, they will be removed either by hand pulling or by the use of acceptable and safe herbicides. Vimy will also ensure that no staff or contractors will introduce any weed-affected soil, mulch, fill or other material into the WR & KR JV tenements. Any vehicles moving from one part of the project to another will undergo a weed inspection and cleaning before moving.

2.2.2 Managing Impacts on Groundwater

There is very little information available on the groundwater aquifers and systems within the project area.

One of the most likely impacts that exploration activities could have on groundwater aquifers within the project areas would be pollution caused by the surface spillage of hydrocarbons and hazardous materials. Procedures will be in place to minimise the potential for spills of hydrocarbons and other hazardous materials. If spills do occur, they will be cleaned immediately as per the appropriate work procedure.

2.2.3 Managing Impacts on Surface Water

Surface water sources may be impacted by the proposed exploration program in the following ways:

- The shape, location and profile of natural drainage channels may be affected by the earthworks required to access drilling sites;
- Sediment load and depositional pattern of the watercourses may be altered; and
- Pollution of surface water sources with oil and drilling fluids and excessive sediment run-off drilling pads or access tracks.

Vimy has a series of work procedures and work instructions in place that minimise the impact that exploration activities may have on surface water. These procedures cover the annual construction and rehabilitation of access tracks over both running and dry creek/river beds, the method in which pads are designed and rehabilitated to prevent excessive erosion during subsequent wet seasons and procedures that cover environmental accidents like hydrocarbon spills. These work instructions include the construction and positioning of all drill pads and sumps to ensure that any spills are contained within the permitted disturbance footprint.

2.3 Impact on the Environment

The proposed work outlined in the MMP is not considered to have a significant impact on the environment because the area of disturbance is small (less than 26ha) and will not intersect any known significant flora, vegetation or fauna and waterways and known heritage sites will not be disturbed, risks identified in Table 3 will be managed in the following ways:

2.3.1 Managing General Ground Disturbance Impacts

To minimise the impacts of ground disturbance associated with the proposed activities, existing tracks will be used where possible. In areas where new ground disturbance will be occurring, Vimy has developed a ground disturbance procedure, Appendix 3. This procedure will be applied to the proposed works. The guideline covers the following aspects of ground disturbance:

- Identifying environmental issues.
- Planning, preparation, and rehabilitation of:
 - Access tracks;
 - Drill pads;
 - Sumps; and
 - Campsites.
- Recording and monitoring of disturbed areas.

In addition to the Flora and Fauna and Weed Management Plans, Vimy will implement the following procedures/work instructions to reduce and eliminate impacts that could result from ground disturbance activities:

- Ground Disturbance, Appendix 3
- Ground Disturbance Permit, Appendix 3
- Drilling Environmental Work Procedure, Appendix 4
- Rehabilitation Work Procedure, Appendix 5

2.3.2 Managing Impacts of Fire

Dry season cool-burn fires within the WR & KR JV areas are commonly managed by the West Arnhem Shire, rangers and Traditional Owners. Vimy has no control over the timing and location of these fires but will monitor fires throughout the season via the North Australia and Rangelands Fire Information website (firenorth.org.au). Since early June 2020, extensive preventive back-burning activities have been carried out by Rangers in the Wellington Range and King River project area, with records of burnt areas kept as a baseline for future project development.

Vimy will only attempt to manage fires that directly impact upon areas in which staff and are actively working or around King River Camp. Fire suppression equipment will be present around camp, at all drill sites and in every vehicle.

2.3.3 Managing erosion

The removal of vegetation through the construction of access tracks, drill pads and sumps can result in significant erosion during the wet season. Vimy proposes to minimise the impact of excessive erosion through the following measures (aspects of which are included in work instructions):

- Minimising the area of land disturbed for the exploration activities;
- Identifying and avoid disturbing areas with high erosion potential (slopes, drainage margins etc);
- Maintaining proper drainage systems on access tracks;
- Consider drainage patterns when establishing drill pads; and
- Rehabilitating disturbed areas as soon as practicable.

2.3.4 Topsoil Management

The upper 25 to 40 cm of material in the regolith profile is considered to be 'Topsoil'. The topsoil is important to the environment as it typically has the highest nutrient-enriched, organic component (decaying vegetation) and contains the seeds required for plant re-establishment and ideal growth media.

Management measures applicable to the preservation of topsoil include:

- Avoiding excessive removal of topsoil on access tracks and drill pads (if the pads are in flat terrain, topsoil is left *in situ*) using the 'blade-up' technique; and
- Any topsoil or vegetative material that must be removed to ensure safe access/working areas or for the digging of sumps is stored on the edge of the drill pads (< 1 m high piles) and is used to resurface the cleared areas during post-drilling rehabilitation.

This is the same topsoil strategy that was applied by the previous operator Cameco and appears to have resulted in excellent rehabilitation results.

2.3.5 Waste Management

All waste generated during the exploration program will be managed as per the Waste Disposal Procedure, Appendix 6. In summary, waste will be divided into four main streams:

- Stream 1 - Putrescible and burnable wastes are burned daily in the designated waste pit;
- Stream 2 – Non-burnable waste (i.e. aerosols, non-lead batteries, white goods) will be collected and removed from the site and disposed of in Darwin;
- Stream 3 – Materials that can be recycled (drink cans, printer cartridges, steel cans etc.) are to be divided into appropriate material types and are sent back to Darwin for appropriate disposal
- Stream 4 – Hydrocarbon waste (liquids and solids) is collected and stored in the specified bunded hydrocarbon storage areas around the site. All hydrocarbon waste is transported back to Darwin for appropriate disposal.

All Stream 1 waste will be stored in lidded bins to deter fauna access. The waste pit site will be appropriately fenced to prevent windblown rubbish and fauna access.

All hazardous material such as oils, cleaning chemicals, weed killer, paint, degreasers, aerosols (insect spray etc) hydrochloric acid are stored in one of two designated, flammables storage cupboards located in the camp workshop and outside the men's ablution block. These fireproof, self-bunded cabinets feature self-closing doors, vents and flash arrestors. MSDS sheets for all the chemicals stored on site are located near these cabinets.

Hydrocarbons will be stored in bunded areas in accordance with Australian Standard 1940 – 2017 (see details below).

2.3.6 Managing Impacts of Hydrocarbons and Hazardous Materials

Hydrocarbons and hazardous materials pose potential pollution risks to aquifers and waterways and may be toxic to humans, animals and plants. The correct storage, handling and usage of these substances can significantly minimise the potential risks. Hydrocarbon management during the proposed programme will include the following measures:

- Ensuring that transport of hydrocarbons is undertaken according to all relevant regulations and codes;
- Locating hydrocarbon storage areas at a safe distance from environmentally sensitive areas such as watercourses;
- Bunding of hydrocarbon storage areas. Field activities and therefore bunding of hydrocarbons only occur during the dry season, and hydrocarbons are removed from site during the wet season, therefore preventing the egress of rainwater;
- Cleaning up of any spills and the remediation of contaminated areas as per procedures;
- Constructing sumps at drill sites, where necessary, to contain any spillage from drilling equipment; and
- Collecting and storing waste hydrocarbons in suitable drums within a bunded hydrocarbon storage area before being taken off-site for disposal at an approved facility.

- All fuel is stored in portable pallet bunds which have a minimal exposed surface area for rainwater egress.
- Any contaminated rainwater collected in portable bunds will be drained and added to the waste hydrocarbon storage drums to be disposed of at a registered facility in Darwin.
- The portable bunds will be packed undercover during the wet season where they will not be exposed to rainfall.
- The historic lined hydrocarbon bund located at King River camp behind the workshop has not been used for fuel storage purposes for several years, therefore does not contain contaminated material.

2.3.7 Managing Impacts of Radiation

The majority of material encountered during uranium exploration activities is not mineralised and therefore does not contain radioactive materials in quantities significant enough to present a risk to workers or the environment. When mineralised zones are encountered, the main radioactive materials encountered include naturally occurring uranium, thorium, radon and its decay products.

Vimy has developed a Radiation Management Plan, Appendix 7, which manages the risks associated with the proposed 2020 drilling program. The plan covers all the radiation management and monitoring that will be undertaken as part of the drilling program.

2.3.8 Noise Management

Due to the remoteness of the WR & KR JV, the risks associated with environmental or social noise impacts from the drilling or running of the camp is negligible, and therefore no management measures are required.

2.3.9 Cultural and Heritage Sites

Vimy will meet with the NLC and Traditional Owners each year before the commencement of exploration activities, providing the Traditional Owners with an opportunity to assess the proposed work program. In line with past practice, if the proposed program impinges on any previously unrecorded sites of cultural significance and associated buffer zones, these will be added to the existing digital database maintained by Vimy. The exploration program will be modified to respect any additional 'no-go' areas.

Due to the delay imposed to on-country meetings, the 2020 ground-based heritage survey will be carried out using an NLC approved archaeologist.

Date	Description of Engagement	Stakeholders	Stakeholder comments /issues	Proponent Response and/or resolution	Stakeholder Response
9/09/2020 and 10/09/2020	Discuss the proposed 2020 field season activities on the main tenements EL5893 and EL25065	NLC & Traditional Owners	Require topographical features on maps to be updated to reflect traditional names.	Editable maps will be provided.	Verbal and electronic approval to be granted for all proposed works in 2020 shortly after the meeting

Second half of August 2020	2020 Heritage Survey	Traditional Owners & In Depth Archaeology		Findings to be added to Vimy GIS database	N/A Electronic feedback from survey provided within a few days from completion
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3. Amendments

This is a update to the Variation of Authorisation 0984 and Minin Management Approval granted by the DPIR on 18 July 2019.

4. Activities Proposed

Details for the proposed activities for the 2020 field season are presented in Table 4.

Table 4: Activities Proposed

Exploration licence	EL5893	EL26064	EL26065	EL27059	EL24017
Number and type of proposed drill holes	25 RC	-	20 RC	-	-
Maximum depth of proposed holes (m)	450m	-	250	-	-
Number and size of drill pads to be cleared (Length: m x Width: m)	25 pads 35m x 25m (max)	-	20 pads 35m x 25m (max)	-	-
Total area of drill pads to be cleared (ha)	2.19ha	-	1.75ha	-	-
Is drilling likely to encounter groundwater? (Y, N, unsure)	Y	-	Y	-	-
Number of costeans (Length: m x Width: m x Depth: m)	-	-	-	-	-
Number of bulk sample pits	-	-	-	-	-

Exploration licence	EL5893	EL26064	EL26065	EL27059	EL24017
Total bulk sample (tonnes) (Length: m x Width: m x Depth: m)	-	-	-	-	-
Bulk sample pits approved under <i>Mineral Titles Act</i> ? (Y or N)	-	-	-	-	-
Length of line/track clearing (Track width 3.2m)	4.56km (1.46ha)	-	14.78km (4.73ha)	-	-
Camp area to be cleared (ha)	-	-	-	-	-
Camp Infrastructure (i.e. demountable, tents)	-	-	-	-	-
Previous disturbance yet to be remediated on title (ha) if known	13.59ha [#]	3.92ha ⁺	3.71ha	-	-
Other	-	-	-	-	-
Total area disturbed proposed (ha)	17.24ha	3.92ha	10.19ha	-	-

*Existing MMP and New holes for 2020, #2018 and 2019 disturbance, + Existing KR Camp

5. Previous Disturbance

The table below provides details of previous exploration activities carried out since the last approved MMP.

Table 5: Previous Disturbance (since last approved MMP)

Exploration licence	EL 5893	EL 25064	EL 25065	EL 27059	EL 24017
Number/type of holes drilled	18	0	0	0	0
Maximum depth of holes drilled (m)	420	0	0	0	0

Exploration licence	EL 5893	EL 25064	EL 25065	EL 27059	EL 24017
Number of holes remediated (i.e. plugged/capped)	16	0	0	0	0
Number and size of drill pads cleared (Length: m x Width: m)	21 Cleared 32m x 26m in size.	0	0	0	0
Total area of drill pads cleared (ha)	1.75	0	0	0	0
Total area of drill pads remediated (ha)	1.35	0	0	0	0
Was groundwater encountered? (Y or N)	Y				
Length of line/track cleared (Length: km x Width: m)	Length: 38.23 km Width: 3.2 m Area: 11.84 ha	Length: 1.35 km Width: 3.2 m Area: 0.43 ha	Length: 12.35 km Width: 3.2 m Area: 3.71 ha	0	0
Length of line/track remediated (Length: km x Width: m)	0	0	0	0	0
Number of costeans excavated (L: m x W: m x D: m)	0	0	0	0	0
Number of costeans remediated	0	0	0	0	0
Total bulk sample pits excavated (Length: x Width: x Depth: m)	0	0	0	0	0
Total bulk sample pits remediated	0	0	0	0	0
Camp area/s cleared (ha)	0	3.49	0	0	0
Camp area/s remediated (ha)	0	0	0	0	0
Total area disturbed (ha)	13.59	3.92	3.71	0	0
Total area remediated (ha)	1.35	0	0	0	0

6. Environmental Management

As a minimum Vimy agrees to adopt the Department's environmental standards outlined in Table 6.

Table 6: Environmental Standards for Exploration Activities

6.1	Y	Blade-up approach for clearing will be used (i.e. no windrows, leave root stock and topsoil)
6.2	Y	Significant vegetation will be avoided during clearing (i.e. large trees, specimens providing habitat or food sources, riparian vegetation, and threatened species)
6.3	Y	Vegetation clearing during, and immediately after rainfall events, will be avoided
6.4	Y	Vegetation clearing will be kept to the minimum required to safely traverse vehicles and drill rigs along tracks and drill pads
6.5	Y	Where blade-up techniques cannot be employed, topsoil and vegetation will be stockpiled appropriately for remediation purposes
6.6	Y	All employees and contractors will be trained and inducted in relation to the management of environmental risks in the work area, including weeds, waterways, threatened species, soil erosion, sacred sites and heritage areas
6.7	Y	Sumps will be lined or tanks of the appropriate size to contain water, sediment and drilling fluids encountered during drilling, will be used
6.8	Y	Sumps, drill holes, and fuel stores will be located away from environmentally significant areas and watercourses
6.9	Y	Excavations (sumps, costeans and pits) will be appropriately ramped to allow fauna egress
6.10	Y	Drill holes will be securely capped immediately after drilling
6.11	Y	Vehicle hygiene measures will be employed to prevent the introduction and spread of invasive species and pathogens when mobilising vehicles and equipment from one location to another
6.12	Y	Hydrocarbon spills will be minimised using liners and drip trays under machinery, and appropriately sized spill-kits available in the event of a spill
6.13	Y	Hazardous substances (including hydrocarbons) will be stored and handled in accordance with relevant Australian Standards
6.14	Y	Hydrocarbons will be stored in lined and bunded areas
6.15	Y	Waste will be stored securely while on-site to minimise windblown rubbish and access by feral animals
6.16	Y	Waste will be removed off-site and disposed of at an appropriate waste management facility

6.17	Y	All environmental incidents will be reported to the Department in accordance with Section 29 of the <i>Mining Management Act</i> .
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The Ground Disturbance Activity Procedure and Permit (GDAP) must be completed before any disturbance occurs, the permit is approved by the senior geologist or environmental officer. As part of the process vegetation is assessed, this can include walking the proposed area and/or the assessment of spatial data, if any significant vegetation is identified it will be outlined on the map as an exclusion area which accompanies the GDAP, and if necessary GPS coordinates. The information will be communicated to staff via; flagging, walking the site with operators, verbally at morning meetings and via the GDAP (Permit).

Very low level radioactive materials are stored in drums in the coreyard at King River camp. Sample material which exceeds a grade of 500 ppm $U_3O_8/e U_3O_8$ is stored in one of the designated and sign-posted radiation storage containers located at the rear of the core yard.

Contaminated sediment and water generated from the wash-down of vehicles, earth-moving equipment etc is collected in one of two designated sumps. At regular intervals, or as required, the dried sediment in these two sumps is scraped up (using a loader) and buried in the King River lay-down area, under > 1m of clean soil in a disposal pit. The locations of the buried pits is recorded on Vimy's GIS system under: S:\GIS\VIMY\ARP\Environment\Rehabilitation\KR Camp Buried Waste Pit Locations.

Records of weeds identified on site are kept under:

S:\GIS\VIMY\ARP\Environment\Weed Monitoring\Weed Register

6.1 Justification and Alternative Environmental Management Measures

Vimy agrees to follow the Department's minimum environmental standards listed and checked in Table 6; there are no alternate environmental management measures proposed.

7. Remediation and Closure

Vimy agrees to implement the following minimum remediation standards at the WR & KR project.

Table 7: Minimum Remediation Standards

7.1	Y	Drill holes plugged below ground level at a minimum depth of 0.4 metres and soil mounded to prevent subsidence, within 6 months of completion of drilling
7.2	Y	Drill samples/spoil returned down drill holes, buried in sumps, or removed from site
7.3	Y	All drill hole and access markers including flagging tape, wooden markers and star pickets will be removed from site
7.4	Y	Re-contouring of cut and fill drill pads will be consistent with the surrounding terrain
7.5	Y	Ripping/scarifying of drill pads, and compacted areas along the contour (on sloping ground) and cross-ripping (zig-zag) along tracks

7.6	Y	Tracks will be remediated, including pushing in all wind-rows
7.7	Y	Appropriate erosion and sediment controls will be installed where erosion is evident or likely to occur
7.8	Y	All tracks will be remediated unless otherwise agreed in writing by the landholder or appropriate third party
7.9	Y	Access through watercourses will be removed and banks restored
7.10	Y	No erosion is occurring in disturbed areas, on tracks and in remediated areas
7.11	Y	All excavations backfilled within 6 months of completion of drilling
7.12	Y	All water bores decommissioned unless otherwise agreed in writing by the landholder or appropriate third party. The bore must comply with the Minimum Construction Requirements for Water Bores in Australia and may require permits or licenses under the <i>Water Act</i>
7.13	Y	All rubbish and infrastructure will be removed from site
7.14	Y	Replacement of topsoil and vegetation
7.15	Y	Contaminated soils (e.g. hydrocarbon or hazardous chemicals) will be remediated or removed from site
7.16	Y	Monitoring will be undertaken following the wet season or a significant rainfall event

7.1 Justification and Alternative Management Measures

Vimy agrees to follow the Department's minimum environmental standards listed and checked in Table 7; there are no alternate environmental management measures proposed.

8. Required Attachments

Included as attachments to this document in Appendix 8 are the following:

- The Security Calculation Spreadsheet
- Coordinate details of the polygon of the proposed project work areas for drill holes
- Mapping data
 - Camp site and access tracks (included above)
 - Topo map showing
 - current and proposed disturbances
 - Title boundaries
 - Drill holes
 - Tracks
 - Rehabilitated areas
 - Camp sites



- Sacred/heritage sites
- Environmental constraints
- Remediation register
- Radiation Management Plan

Before and after photographs of completed works (remediation) for the 2018 exploration have not been included in the attachments for this MMP; photos will be included in future closure reports, the latest submitted to the DPIR and Supervising Scientist on 27 May 2020.

9. Declaration

I Xavier Moreau (General Manager Geology and Exploration), 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: 27 August 2020