

1 PURPOSE

The purpose of this procedure to mitigate compliance breaches during exploration activities arising from vegetation clearing and ground disturbance associated with access and drilling site preparation.

2 SCOPE

This procedure shall apply to all Juno Minerals Limited (Juno) exploration activities.

3 RELEVANT LEGISLATION

Environmental Protection Act 1986

Environmental Protection (Clearing of Native Vegetation) Regulations 2004

4 RESPONSIBILITIES

Exploration Manager

Shall be accountable for ensuring the requirements of this procedure are adhered to and that all Project Geologists are trained or supervised on the requirements of this procedure. They shall also ensure that:

- Each **Exploration Proposal** (whether drilling and sampling or work proposals) complies with Juno Minerals Limited procedures, environmental and heritage management plans and all statutory requirements such as, but not limited to tenement conditions and Programme of Works (POW) requirements.
- Sign off the final **Exploration Proposal** authorising the implementation of the program.

Health Safety and Environment (HSE) Manager

Will facilitate the development of any Exploration Environmental Management Plans where required and liaise with Government Departments to ensure that the management plans meet their requirements.

Environmental Coordinator

Shall be responsible for:

- Conducting (and documenting) desktop Environmental Impact Assessments (EIA's) of proposed Exploration Proposal work areas.
- Compile all external regulatory approval documents (e.g. POWs) and ensure they meet Juno and Department of Mines, Industry Regulation and Safety (DMIRS) requirements prior to submission.
- Provide advice and support where approvals in addition to POWs are required.
- Provide advice and manage environmental surveys required to ensure legal obligations relating to ground disturbance, land clearing and pertaining to threatened species protection can be met.

- Ensure resources are available to manage the Geographic Information System (GIS) layer used to ensure compliance with exploration approvals.

Project Geologist

Shall be responsible for:

- Compiling Exploration Proposals.
- Ensuring that all relevant approvals are obtained prior to the commencement of any land and vegetation disturbance.
- Ensuring that all ground disturbance is conducted in accordance with all approvals and implemented as outlined in the authorised documented work/drill proposal.

Senior Field Technician

Responsible for ground truthing and flagging all ground disturbance proposals under the supervisor of the Project Geologist, track logging all cleared access tracks and sending through GIS/track log data to the Database Manager.

Site Environmental Advisor

Is responsible for supervising all machine operators and ensuring they are aware of all program requirements and approval conditions prior to ground disturbance commencing.

Database Manager

Shall be responsible for:

- Maintaining GIS layers including the Threatened Flora, Threatened Fauna, Baseline Surveys and Archaeological or Potential Sites and Archaeological sites buffer layers.
- Ensure that the proposed drill holes are included in the Drilling Database.

Machine Operators

Shall conduct the clearing as per Juno procedures as outlined in the authorised Exploration Proposal.

Image 1: Ground Disturbance Workflow



5 PLANNING

5.1 The Project Geologist is to provide the Environmental Coordinator with details of the **proposed** Exploration Proposal (whether drilling and sampling or works proposals). The Project Geologist must also provide the Environmental Coordinator with maps of proposed work/drill program, shape files of all proposed disturbance areas, GPS coordinates of all drill sites and any other additional information.

5.2 Upon receipt of the proposed program data, the Environmental Coordinator is to conduct a desktop assessment and provide a written EIA summary. The EIA will identify any of the following in the proposed disturbance area and these will be clearly communicated to field personnel and equipment operators, and if necessary, demarcated prior to the commencement of any disturbance activity:

- Declared Rare or Specially Protected Flora and Fauna (DRF) that are gazette under the WA Wildlife Conservation Act 1950.
- Threatened Flora and Fauna that are listed under the Commonwealth Environmental Protection and Biodiversity Act 1999.
- Aboriginal and Non-Aboriginal Heritage or Cultural sites.
- Sites of environmental conservation significance.

5.3 Project Geologists are to compile a Draft Exploration Proposal document. The proposal will document:

- GIS coordinates of drill holes.
- Map of proposed clearing program.
- The EIA that the HSE department have completed.
- Any work/drill program specific information.

5.4 The Draft Exploration Proposal is to be provided to the Senior Field Technician, Site Geologist and/or Site Environmental personnel, and the proposed work program is to be ground truthed and flagged (as outlined under Section 8.0 below). Any access or potential operational issues (e.g. cut and fill drill pads needed, proposed access not achievable) **MUST** be identified and alternatives suggested (GPS coordinates provided of the new drill disturbance sites and alternative access tracks provided in the form of track logs). All alternatives are to be pegged and flagged (as per the flagging standard outlined in Section 8.0 of this procedure).

5.5 The Project Geologist is to update the Draft Exploration Proposal document with any suggested changes from the pegging/ground truthing phase.

5.6 Once updated the Exploration Manager is to authorise and sign off on the Exploration Proposal and circulate to all required parties.

PLEASE NOTE: No ground or vegetation disturbing activities can commence until all external approvals have been obtained from the necessary regulatory departments and third parties.

6 EXTERNAL APPROVALS

6.1 The Environmental Coordinator is to submit and obtain a Programme of Work (POW) approval from the required regulatory body (and any other environmental approvals required for the work/drilling program that were identified in the desktop EIA).

6.2 The Environmental Coordinator is responsible for ensuring the planned exploration work is discussed with stakeholders who may be impacted by or have a vested interest in the activities. This may include:

- Communities living in close proximity to the area or work that may be impacted by noise, dust or visual amenity.
- Pastoralists, particularly where there are impacts in relation to stock watering areas, fences, gates or other property infrastructure.
- Traditional owners or native title parties who may have a cultural or legal interest in the area.

Any complaints from stakeholders are to be reported to the Exploration and/or HSE Manager and work ceased until approval to continue has been given.

7 INTERNAL APPROVALS

7.1 Once all external approvals have been received, the Environmental Coordinator is to complete a Juno Ground Vegetation Disturbance (GVD) Permit for the authorised drill/work program and circulate to all required parties.

7.2 The Project Geologist is responsible for obtaining all necessary signatures for the internal GVD Permit.

Ground clearing/disturbance can only occur once all of the following has occurred:

- **Exploration Manager has authorised the final Exploration Proposal document.**
- **All signatures have been received on the GVD Permit (must include signed site preparation plans if for drilling).**
- **The work area has been ground truthed and flagged as per the authorised Exploration Proposal.**

8 GROUND TRUTHING AND FLAGGING STANDARD

The proposed area to be cleared (as outlined in the draft Exploration Proposal is to be pegged and flagged by Field Assistants and/or Project Geologists using the flagging standards below:

8.1 All access tracks are to be walked to ensure accessibility is possible and demarcated with pink flagging tape. The flagging tape is to be placed at head height and flagging should be visible at all times as the access is walked (see Figure 1). If the track is to continue beyond a drill pad, 3 flags of pink tape are to be shown in the required direction in quick succession (see Figure 1). If the track is not to continue beyond the drill pad, pink tape is to be strung in a horizontal line to display the end of the required clearing (see Figure 2).

8.2 Drill Hole locations are to be pegged as per the drill/work proposal document. Each hole peg is to be flagged with yellow and blue flagging and contain the following information clearly on the peg:

- Drill Hole number
- Drill hole coordinates
- The azimuth of the planned hole
- The dip of the planned hole
- The approximate end of hole

All drill hole data is to be obtained from the Exploration Proposal.

8.3 Drill pads are measured out (when preparing RC or Diamond Drill rigs) as per the dimensions in the Exploration Proposal, and one peg with blue and yellow flagging placed in each corner. Yellow and blue flagging is then to be placed at regular intervals along each boundary of the pad at head height, clearly demarcating the boundary of the drill pad (see Figure 3).

8.4 Sensitive areas, including priority flora and heritage areas, are to be demarcated with orange and red flagging tape as per the instructions in the Exploration Proposal document.

8.5 At the completion of pegging each drill site (access track, hole collar and drill pad boundaries), and prior to continuing on to the next drill site/access track, a Site Preparation Work Plan (see Attachment 2) is to be completed (whilst ground truthing the access tracks/drill pads). Each drill hole/pad **MUST** have a Site Preparation Work Plan. Each Site Preparation Work Plan must clearly display:

- Hole location
- Proposed sample storage area (and core rack location if applicable)
- Topsoil storage area
- Vegetation topsoil area
- Sump location
- Proposed drill rig location
- Support and water truck location
- Location of cyclone
- Location of any mud tanks
- Location of any other work equipment

8.6 Once confirmed, each Site Preparation Work Plan needs to be signed off by the Geologist, Site Environmental Coordinator and the Senior Driller. It is strongly advised that the Drilling Supervisor/Senior Driller inspects the proposed drill sites prior to any ground disturbance so alterations to Site Work Plans can be made if required.

8.7 Any access or potential operational issues (e.g. cut and fill drill pads needed, proposed access not achievable) **MUST** be identified and alternatives suggested to the Project Geologist ASAP (GPS coordinates of new drill/disturbance sites are required and alternative access tracks must be provided in the form of track logs. All alternatives are to be pegged and flagged.

9 IMPLEMENTATION

9.1 The Draft Exploration Proposal is to be updated to incorporate any alternatives suggested from section 8.0 of the procedure.

9.2 The Exploration Manager is to review and sign off on the Exploration Proposal (which must contain all required internal and external approval documents) and circulate for all required parties for implementation.

9.3 All work is to be conducted and implemented on the ground as outlined and in accordance with the authorised Exploration Proposal document under the supervision of the Project Geologist/Site Environmental Advisor.

9.4 The Earthworks Operator is to be provided with a copy of the signed internal GVD Permit which must include all signed Site Preparation Work Plans. The Site Environmental Advisor is responsible for going through each individual Site Preparation Work Plan with the machine operator prior to ground disturbance commencing. Once explained and agreed, the machine operator is to sign off on all Site Preparation Work Plans signalling that they are aware of what is required and are aware of any restrictions.

Once the above steps have been completed, ONLY THEN can clearing commence.

9.5 After the area has been cleared, and prior to the operator moving from the area, the Senior Driller needs to revisit the cleared pad to sign off on the completed works (on each Site Preparation Work Plan).

9.6 at the completion of clearing the Field Technicians are to drive and track log all installed tracks and provide the track logs to the Database Manager for uploading into the database.

10 CLEARING METHODOLOGY

- Clearing should be kept to a minimum.
- Use of existing cleared areas and tracks should be used where available.
- Clearing should only be approved after reasonable access alternatives have been considered not practicable.
- All clearing is to avoid environmentally sensitive areas i.e. there is to be no clearing within 200m of known Malleefowl mounds or 50m away from known Drosera populations.
- Significant vegetation e.g. large trees are to be avoided and favour natural clearings wherever possible to minimise damage to vegetation.
- Machinery blades shall be set above ground level so as to minimise disturbance to topsoil and rootstock and to reduce erosion when clearing.
- All clearing shall progress in a slow, systematic manner so as to not confuse or trap evacuating fauna.
- Fauna must be looked out for during clearing. If fauna is sighted, all machinery is to stop work to allow fauna safe egress from the work area.

10.1 Access Tracks

- Access tracks should be as straight as practicable to minimise clearing.
- Avoid tight bends, close proximity to trees and boggy areas when planning access tracks.
- Where possible, low-rise vegetation (<0.5m) e.g. grasses/shrubs etc. should be rolled rather than cleared. Taller vegetation requiring stripping shall be stockpiled on cleared ground for use in rehabilitation (do not stockpile on native vegetation as it will cause damage).
- If overhanging branches (less than 5m high) need to be removed for access, they should be removed in a manner that does not damage the remainder of the tree.
- The creation of windrows which have the potential to block or channel water flow along tracks causing erosion will be avoided.
- Grading of tracks should be minimised and only performed on excessively rough tracks. Where grading is necessary, the risk of erosion can be minimised by breaking windrows to allow drainage, cambering tracks to channel overland flow and avoiding deep cutting into the soil profile. Any damage caused during wet conditions will be repaired when the ground has dried out.
- Vehicles must drive on existing roads. No short cuts or deviations from the tracks will be tolerated. Off road access is prohibited unless in an emergency (e.g. bushfire).
- During wet and boggy conditions, all vehicle movement will be kept to a minimum.
- The width of access tracks is to be confined to 3.5 – 4 metres.

10.2 Drill Site Preparation

- Drill pad sizes must be in compliance with the area as specified on the approved POW and in accordance with the GVD specifications. Juno standard pad sizes are:
 - Reverse Circulation (RC) and Diamond drill holes – 25m x 20m.
 - Aircore (AC) drillholes – on existing tracks (see Figure 3).
 - Water exploration boreholes – case dependent.

10.3 Drilling Sumps

- Sumps are to be located away from significant vegetation and water courses.
- Sumps are appropriate size/design to contain all drilling fluids during drilling
 - RC and Diamond (situated on the drill pad) 2m x 2m x 1m.
 - AC are case dependent. If required, 2m x 2m x 1m (situated on the drill pad).
 - Water exploration boreholes – case dependent.
- Any loss of containment of drilling fluids outside of the sump and/or works limit must be reported to the HSE Department.
- Should groundwater be intercepted whilst drilling, appropriate measures must be taken to contain any material being discharged (into sumps or tanks). Drilling must cease immediately upon discharge of water until the appropriate and approved containment facilities have been implemented or the water quality is tested and deemed acceptable for discharge.

10.4 Topsoil and Vegetation Management

- All clearing and stockpiling of topsoil and vegetation must occur within the approved drill pad (within the pegs). No disturbance is to occur outside this area.
- Vegetation and topsoil stockpiles are to be located away from drainage lines and access tracks.

- Topsoil (top 50mm) is to be stripped from drill pads and stockpiled separately on the pad (preferably uphill) for use in rehabilitation. **Note:** Avoid overhandling topsoil. Any additional subsoil from sump excavation not used in windrows should be stockpiled separately to topsoil.

11 REPORTING

- All ground disturbance and exploration activities (including POWs submitted) are to be included in the Annual Environmental Report (AER) and submitted to the Department of Mines, Industry Regulation and Safety (DMIRS).
- Rehabilitation reports are to be generated against each POW approval at the completion of rehabilitation (6 months from completing the exploration proposal work).
- If Priority Flora species are required to be removed, authorisation will be sought from the department of Environment and Conservation (DEC) reporting requirements will be discussed during the consultation phase of obtaining their approval. At a minimum the DEC will be provided with details of Priority Flora that is to be removed (number, size of population) and information on other known populations to allow an assessment of the impacts on the conservation significance of the species by the disturbance.

12 FIGURES 1-3



Figure 1: Access Track clearly flagged at head height



Figure 2: Pink tape demonstrating end of required clearing

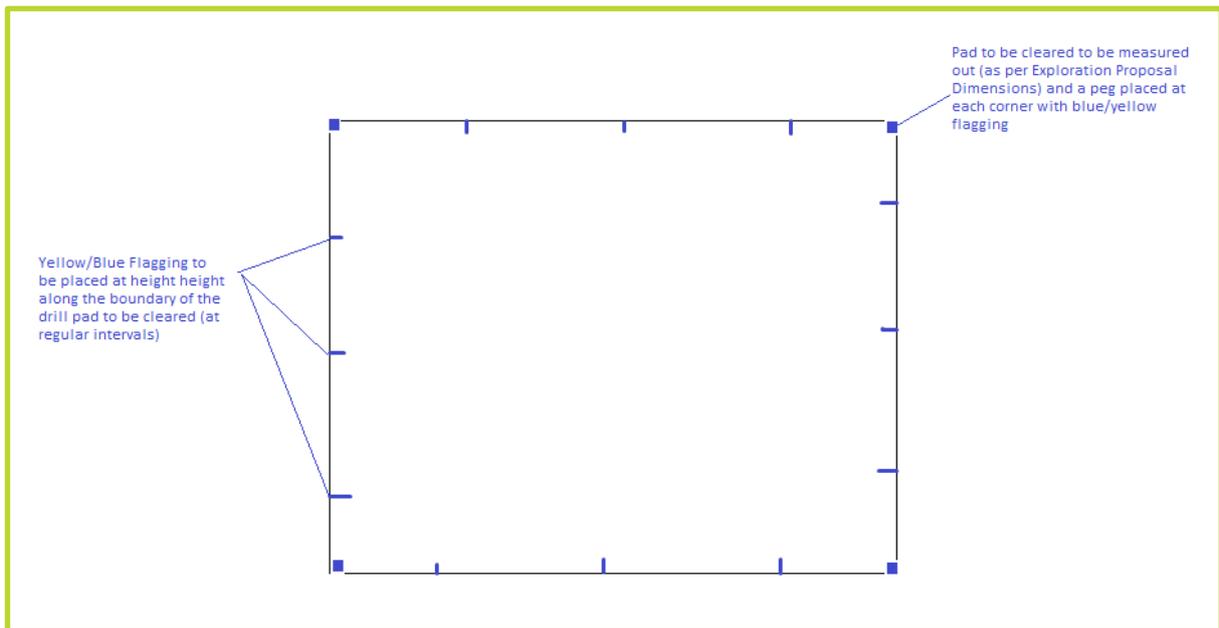


Figure 3: Pegging and flagging layout/standard for RC/Diamond drill pads

ATTACHMENT 1: Site Preparation Work Plan



SITE PREPARATION WORK PLAN
GEO-FM-001

HOLE ID:		DATE:		AUTHOR:	
DIP:		AZIMUTH:		DEPTH:	
↑ N					
SITE PLAN INCLUSIONS			<i>NB. Scale: 1 grid square = 1m² / Drill pad not to exceed 20x25m</i>		
Collar peg	Sighter pegs	Boundary pegs			
Rig	Support truck	Humpy (diamond only)			
Mud tank (diamond) / cyclone (RC)	Sump(s), including windrow	Vegetation stockpile			
Rod truck (diamond) / compressor (RC)	Core racks (diamond) / sample bags (RC)	Topsoil stockpile			
COMMENTS					
APPROVALS		Signature		Date	
Drilling Supervisor					
Earthworks Contractor					
Company Environmental Representative					
Senior Geologist					

Doc No: GEO-FM-001

Issue date: 23/08/2021

Review date: 23/08/2022

Version 1

Page 1 of 1

ATTACHMENT 2: Ground & Vegetation Disturbance Permit

juno minerals limited		GROUND AND VEGETATION DISTURBANCE PERMIT ENV-FM-002	
			GVD No. <input type="text"/>
PART A: GENERAL INFORMATION OF WORKS (Geologist to complete)			
Company Name: <input type="text"/>		Applicant Name: <input type="text"/>	
Lease No. & Name: <input type="text"/>		Location description: <input type="text"/>	
Date: <input type="text"/>		Proposed area to be disturbed (ha): <input type="text"/>	
Area previously disturbed (circle):	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A	Location Map & coordinates attached:	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> N/A
No. of pads to be cleared: <input type="text"/>		Length of tracks to be cleared (km): <input type="text"/>	
Proposed start date: <input type="text"/>		Proposed finish date: <input type="text"/>	
Description/Reason for works: <input type="text"/>			
PART B: EXTERNAL APPROVALS (Site Environmental Coordinator to complete)			Yes N/A
DMIRS POW approval required/obtained?			<input type="checkbox"/> <input type="checkbox"/>
DWER approvals required/obtained (e.g. 26D license)?			<input type="checkbox"/> <input type="checkbox"/>
Pastoral owner permission granted/advised of works?			<input type="checkbox"/> <input type="checkbox"/>
Any other approvals required (e.g. DEC; Shire etc.)? <input type="text"/>			<input type="checkbox"/> <input type="checkbox"/>
PART C: PLANNING CONTROLS (Site Environmental Coordinator to complete)			Yes N/A
Disturbance >200m from known active Malleefowl mounds?			<input type="checkbox"/> <input type="checkbox"/>
Disturbance >50m from known Drosera populations?			<input type="checkbox"/> <input type="checkbox"/>
Disturbance outside of cultural heritage sites?			<input type="checkbox"/> <input type="checkbox"/>
Applicant work procedures comply with the Exploration Environmental Performance Standards & POW?			<input type="checkbox"/> <input type="checkbox"/>
PART D: PRE-START WORK CONTROLS (Site Environmental Coordinator to complete with Geologist)			Yes N/A
Disturbance area surveyed and demarcated?			<input type="checkbox"/> <input type="checkbox"/>
Weed hygiene certificate received for all ground engaging machinery?			<input type="checkbox"/> <input type="checkbox"/>
Job Hazard Analysis (JHA)/Risk Assessment prepared/approved (ensure fire & emergency response included)?			<input type="checkbox"/> <input type="checkbox"/>
Site Preparation Work Plan(s) approved by all signatories?			<input type="checkbox"/> <input type="checkbox"/>
PART E: PERMIT APPROVAL		NAME	SIGNATURE
All ground disturbing activities will be undertaken strictly in accordance with this permit:			
Geologist		<input type="text"/>	<input type="text"/>
Site Environmental Coordinator		<input type="text"/>	<input type="text"/>
Authorisation to proceed with land clearing/disturbance under the conditions prescribed on this permit:			
HSE Manager		<input type="text"/>	<input type="text"/>
Exploration Manager		<input type="text"/>	<input type="text"/>
PART F: POST DISTURBANCE CONTROLS			Yes N/A
	SIGNATURE	DATE	
Post disturbance inspection complete	Site Environmental Coordinator	<input type="text"/>	<input type="checkbox"/> <input type="checkbox"/>
Post disturbance survey complete	Surveyor or delegate	<input type="text"/>	<input type="checkbox"/> <input type="checkbox"/>
Disturbance register updated	HSE Manager	<input type="text"/>	<input type="checkbox"/> <input type="checkbox"/>
Total area disturbed (ha): <input type="text"/>	Veg clearing (ha): <input type="text"/>	Pre-disturbed (ha): <input type="text"/>	
Doc No: ENV-FM-002	Issue date: 23/08/2021	Review date: 23/08/2022	Version 1 Page 1 of 1