# Detailed assessment of potential impacts

Decommissioning and rehabilitation of each drill site was undertaken once drilling of each site was completed (as outlined in Section 3.2). This assessment therefore focusses on potential residual impacts/risks as a result of the rehabilitation phase only. Potential environmental and socio-economic residual impacts/risks have been identified by SLR. The sequence in which these issues are listed are in no order of priority or importance. The criteria used to rate each impact is outlined in Section 7.6.

The potential impacts/risks have been assessed against the prospecting right closure objective which is to return any areas disturbed by prospecting activities to the pre-project state. A summary of the impact assessment is provided in Section 11.1 of the main report. The assessment of the unmitigated scenario takes into account that decommissioning and rehabilitation activities have already been implemented in line with the management measures outlined in the approved prospecting EMPr. The mitigated scenario is where additional mitigation measures are deemed necessary.

# ISSUE: LOSS OF FLORA AND FAUNA THROUGH LACK OF OR POOR REHABILITATION

# **Description of impact**

A lack of or poor rehabilitation at the drill sites would result in the loss of flora and fauna at the drill site. This could cause a proliferation of alien invasive species and have edging effects on surrounding areas.

# Assessment of impact

Vegetation and related habitat and faunal species have been influenced to varying degrees by livestock grazing. Prospecting activities disturbed relatively small pieces of land (less than 0.04 ha per drill site). Rehabilitation activities have been undertaken at all drill sites, the sites have been cleared of waste and contaminated soils and the soils were prepared for re-vegetation. At the time of the 2019 site visit conducted, for thirteen of the drill sites (completed in/before 2012), vegetation had successfully re-established. For the remaining drill site (completed in 2014), re-vegetation was almost complete (90%) with a small patch of exposed soil. Ongoing community livestock activities e.g. grazing and cattle sleeping in the area, has likely hampered the re-establishment of vegetation in this area (refer to Figure 4). There was also the proliferation of alien invasive species on site. This was seen throughout the broader area.

The loss of flora and fauna through a lack of or poor rehabilitation is considered to be of **VERY LOW** significance even without mitigation (see table below).

## Mitigation and monitoring

No additional mitigation or monitoring is deemed necessary.

## TABLE: IMPACT/RISK SUMMARY - FLORA AND FAUNA

Issue: Loss of flora and fauna through lack of or poor rehabilitation Phases: Closure				
Intensity	Low change or disturbance (L)	-		
Duration	Short term (L)	-		
Extent	A part of the site (VL)	-		
Consequence	Low	-		
Probability	Conceivable (L)	-		
Significance	Very Low	-		
Nature of cumulative impacts	Ongoing community activities (overgrazing) within the drill site areas would contribute to			

	cumulative impacts on the flora and fauna.	
Degree to which impact can be reversed	Over-time and with adequate rainfall and controlled livestock grazing, any potential impacts could be reversed.	
Degree to which impact may cause irreplaceable loss of resources	Very Low	
Degree to which impact can be mitigated	Possible	
Residual impacts	None expected.	

# ISSUE: LOSS OF PRE-PROSPECTING LAND USES THROUGH LACK OF OR POOR REHABILITATION

# **Description of impact**

A lack of or poor rehabilitation at the drill sites would result in the loss of pre-prospecting land uses. This could affect the livelihoods of communities who rely on the land for subsistence purposes. In addition, this could result in ongoing dust emissions from exposed areas which could cause a nuisance to surrounding land uses.

## Assessment of impact

Land uses in the prospecting right area include livestock grazing. Prospecting activities disturbed relatively small pieces of land (less than 0.04 ha per drill site). Rehabilitation activities have been undertaken at all drill sites, the sites have been cleared of waste and contaminated soils and the soils were prepared for re-vegetation. At all drill sites, a standpipe and/or concrete beacon marks the location of the drilled borehole. This is to allow for easy identification. At the time of the 2019 site visit, for thirteen of the drill sites (completed in/before 2012), vegetation had successfully re-established. For the remaining drill site (completed in 2014), re-vegetation was almost complete (90%) with a small patch of exposed soil. Ongoing community livestock activities e.g. grazing and cattle sleeping in the area, has likely hampered the re-establishment of vegetation in this area (refer to Figure 4). There was also the proliferation of alien invasive species on site. With the re-vegetation of the drill sites (partly or wholly), the pre-prospecting land uses on and surrounding the drill sites can continue. Where re-vegetation is still in progress, mismanagement or overuse of the area could hamper long term use of the land and result in ongoing exposed areas.

The loss of pre-prospecting land uses through a lack of or poor rehabilitation is considered to be of **VERY LOW** significance even without mitigation (see table below).

## Mitigation and monitoring

No additional mitigation or monitoring is deemed necessary.

Issue: Loss of pre-prospecting land use through lack of or poor rehabilitation				
Phases: Closure				
Criteria	Without Mitigation	With Mitigation		
Intensity	Low change or disturbance (L)	-		
Duration	Short term (L)	-		
Extent	A part of the site (VL)	-		
Consequence	Low	-		
Probability	Conceivable (L)	-		
Significance	Very Low	-		
Nature of cumulative impacts	Ongoing grazing activities within the drill site areas would contribute to cumulative impacts on land uses.			

## TABLE: IMPACT/RISK SUMMARY - LAND USE

Degree to which impact can be reversed	With adequate rainfall and controlled livestock grazing, land uses could continue indefinitely.
Degree to which impact may cause irreplaceable loss of resources	Very Low
Degree to which impact can be mitigated	Possible
Residual impacts	None expected.

# ISSUE: CHANGE IN THE VISUAL LANDSCAPE OF THE AREA

# **Description of impact**

A lack of or poor rehabilitation could alter the natural visual landscape and result in scaring.

## Assessment of impact

The landscape is rural in nature and dominated by community land uses (such as livestock grazing). Rehabilitation activities have been undertaken at all drill sites, the sites were cleared of any waste or contaminated soils and the soils prepared for revegetation. At all drill sites, a standpipe and/or concrete beacon marks the location of the drilled borehole. This is to allow for easy identification. At the time of the 2019 site visit conducted, for thirteen of the drill sites (completed in/before 2012), vegetation had successfully re-established. For the remaining drill site (completed in 2014), re-vegetation was almost complete (90%) with a small patch of exposed soil. With the revegetation of the drill sites, the visual landscape would return to a pre-prospecting state. During the April 2019 site visit, prospecting drill sites were not obvious in the landscape and no visible scaring was noted.

The change in the landscape is considered to be **INSIGNIFICANT** even without mitigation (see table below).

## Mitigation and monitoring

No additional mitigation or monitoring is deemed necessary.

#### TABLE: IMPACT/RISK SUMMARY – VISUAL LANDSCAPE

#### Issue: Change in the visual landscape of the area

Phases: Closure		
Criteria	Without Mitigation	With Mitigation
Intensity	Negligible change or disturbance (VL)	-
Duration	Very short term (VL)	-
Extent	A part of the site (VL)	-
Consequence	Very Low	-
Probability	Unlikely (VL)	-
Significance	Insignificant	-
Nature of cumulative impacts	Ongoing grazing activities within the drill site areas would contribute to cumulative impacts on landscape.	
Degree to which impact can be reversed	With adequate rainfall and controlled livestock grazing, the pre-prospecting landscape could continue indefinitely.	
Degree to which impact may cause irreplaceable loss of resources	Not applicable.	
Degree to which impact can be mitigated	Not required.	
Residual impacts	None expected.	

# ISSUE: NEGATIVE AND POSITIVE SOCIO-ECONOMIC IMPACTS

# **Description of impact**

Closure of a prospecting right has the potential to result in both negative and positive socio-economic impacts. Where a third party applies for the mineral rights in the same area, related socio-economic impacts would occur.

# Assessment of impact

Closure of the prospecting right would preclude Impala/RBRP joint venture from undertaking further prospecting activities, which would result in a loss of income for the appointed contractor. It is however assumed that a contractor in the normal course of business would find alternative contracts to continue his business. Where a contractor made use of local communities, the temporary and short-term employment opportunities would no longer exist. As the nature of prospecting activities is to determine the presence of exploitable mineral resources and is not associated with generating a revenue, social related benefits are thus not applicable. With Impala/RBRP joint venture abandoning and exiting from the prospecting project, the mineral resource becomes available for third party applications.

When considering the potential negative socio-economic impacts together with the opportunity that is created for third party applicants the overall impact is considered to be of **VERY LOW** significance even without mitigation (see table below).

## Mitigation and monitoring

No additional mitigation or monitoring is deemed necessary.

Issue: Change in the visual landscape of the area				
Phases: Closure				
Criteria	Without Mitigation	With Mitigation		
Intensity	Negligible change or disturbance (VL)	-		
Duration	Short term (L)	-		
Extent	Affecting immediate neighbours (M)	-		
Consequence	Low	-		
Probability	Conceivable (L)	-		
Significance	Very Low	-		
Nature of cumulative impacts	No cumulative impacts expected.			
Degree to which impact can be reversed	With adequate communication structures negative impacts can be controlled and positive impacts can be enhanced.			
Degree to which impact may cause irreplaceable loss of resources	Not applicable.			
Degree to which impact can be mitigated	Possible.			
Residual impacts	None expected.			

# TABLE: IMPACT/RISK SUMMARY – SOCIO-ECONOMIC