

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, for six of the drill sites (completed in/before 2011), vegetation had successfully re-established (BH7025, BH7599, BH7600, BH7856, BH7799, BH7608). For the remaining two drill sites (BH8062 and BH8063 completed in 2012 and 2014), re-vegetation was almost complete with a few small patches of exposed soil. However, the exposure of soil is seen throughout the surrounding area. The BH8063 drill hole area was more vegetated compared to pre-drilling conditions and thus is considered successfully re-established. Ongoing livestock activities e.g. over-grazing, have likely hampered the full re-establishment of vegetation at drill hole BH8062. The general area around the property looks similar to this prospecting site i.e. the presence of exposed soil; this area is thus considered successfully re-established.

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). For all drill sites, vegetation is considered to have successfully re-established

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		
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 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 six of the drill sites (completed in/before 2011), vegetation had successfully re-established. For the remaining two drill sites (BH8062 and BH8063 completed in 2012 and 2014), re-vegetation was almost complete with a few small patches of exposed soil. However, the exposure of soil is seen throughout the surrounding area. The BH8063 was more vegetated compared to pre-drilling conditions and thus is considered successfully re-established. Ongoing livestock activities e.g. over-grazing, have likely hampered the full re-establishment of vegetation at BH8062. The general area around the property looks similar to this prospecting site i.e. the presence of exposed soil; this area is thus considered successfully re-established. With the re-vegetation of the drill sites, the pre-prospecting land uses on and surrounding the drill sites can continue. Mismanagement or overuse of the area e.g. over-grazing 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 from prospecting activities 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 – LAND USE

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 activities (overgrazing) within the drill site areas would contribute to cumulative impacts on land uses.	
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 and infrastructure such as a windmill and a cement water tank). Prospecting activities disturbed relatively small pieces of land (less than 0.04 ha per drill site) and did not take place in close proximity to roads, houses or community activities (see Section 7.4.1). This has limited the potential change to and scaring of the landscape. 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 six of the drill sites (completed in/before 2011), vegetation had successfully re-established. For the remaining two drill sites (BH8062 and BH8063 completed in 2012 and 2014), re-vegetation was almost complete with a few small patches of exposed soil. However, the exposure of soil is seen throughout the surrounding area. The BH8063 was more vegetated compared to pre-drilling conditions and thus is considered successfully re-established. Ongoing livestock activities e.g. overgrazing, have potentially hampered the full re-establishment of vegetation at BH8062. The general area around the property looks similar to this prospecting site i.e. the presence of exposed soil; this area is thus considered successfully re-established. With the revegetation of the drill sites, the visual landscape would return to a pre-prospecting state. Mismanagement or overuse of the area e.g. over-grazing could hamper long term visual landscape and result in ongoing exposed areas. 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.

TABLE: IMPACT/RISK SUMMARY – SOCIO-ECONOMIC

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	With adequate communication structures negative impacts can be controlled and positive	

reversed	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.