

1. IMPACT ASSESSMENT METHODOLOGY

The impacts will be ranked according to the methodology described below. Where possible, mitigation measures will be provided to manage impacts. In order to ensure uniformity, a standard impact assessment methodology will be utilised so that a wide range of impacts can be compared with each other. The impact assessment methodology makes provision for the assessment of impacts against the following criteria, as discussed below.

1.1 Nature of the impact

Each impact should be described in terms of the features and qualities of the impact. A detailed description of the impact will allow for contextualisation of the assessment.

1.2 Extent of the impact

Extent intends to assess the footprint of the impact. The larger the footprint, the higher the impact rating will be. The table below provides the descriptors and criteria for assessment.

Table 1: Criteria for the assessment of the extent of the impact.

Extent Descriptor	Definition	Rating
Site	Impact footprint remains within the boundary of the site.	1
Local	Impact footprint extends beyond the boundary of the site to the adjacent surrounding areas.	2
Regional	Impact footprint includes the greater surrounds and may include an entire municipal or provincial jurisdiction.	3
National	The scale of the impact is applicable to the Republic of South Africa.	4
Global	The impact has global implications	5

1.3 Duration of the impact

The duration of the impact is the period of time that the impact will manifest on the receiving environment. Importantly, the concept of reversibility is reflected in the duration rating. The longer the impact endures, the less likely it is to be reversible. See Table 2 for the criteria for rating duration of impacts.

Table 2: Criteria for the rating of the duration of an impact.

Duration Descriptor	Definition	Rating
Construction / Decommissioning phase only	The impact endures for only as long as the construction or the decommissioning period of the project activity. This implies that the impact is fully reversible.	1
Short term	The impact continues to manifest for a period of between 3 and 5 years beyond construction or decommissioning. The impact is still reversible.	2
Medium term	The impact continues between 6 and 15 years beyond the construction or decommissioning phase. The impact is still reversible with relevant and applicable mitigation and management actions.	3
Long term	The impact continues for a period in excess of 15 years beyond construction or decommissioning. The impact is only reversible with considerable effort in implementation of rigorous mitigation actions.	4
Permanent	The impact will continue indefinitely and is not reversible.	5

1.4 Potential intensity of the impact

The concept of the potential intensity of an impact is the acknowledgement at the outset of the project of the potential significance of the impact on the receiving environment. For example, SO₂ emissions have the potential to result in significant adverse human health effects, and this potential intensity must be accommodated within the significance rating. The importance of the potential intensity must be emphasised within the rating methodology to indicate that, for an adverse impact to human health, even a limited extent and duration will still yield a significant impact.

Within potential intensity, the concept of irreplaceable loss is taken into account. Irreplaceable loss may relate to losses of entire faunal or floral species at an extent greater than regional, or the permanent loss of significant environmental resources. Potential intensity provides a measure for comparing significance across different specialist assessments. This is possible by aligning specialist ratings with the potential intensity rating provided here. This allows for better integration of specialist studies into the environmental impact assessment. See Table 3 and Table 4 below.

Table 3: Criteria for impact rating of potential intensity of a negative impact.

Potential Intensity Descriptor	Definition of negative impact	Rating
High	Significant impact to human health linked to mortality/loss of a species/endemic habitat.	16
Moderate-High	Significant impact to faunal or floral populations/loss of livelihoods/individual economic loss.	8
Moderate	Reduction in environmental quality/loss of habitat/loss of heritage/loss of welfare amenity	4
Moderate-Low	Nuisance impact	2
Low	Negative change with no associated consequences.	1

Table 4: Criteria for the impact rating of potential intensity of a positive impact.

Potential Intensity Descriptor	Definition of positive impact	Rating
Moderate-High	Net improvement in human welfare	8
Moderate	Improved environmental quality/improved individual livelihoods.	4
Moderate-Low	Economic development	2
Low	Positive change with no other consequences.	1

It must be noted that there is no HIGH rating for positive impacts under potential intensity, as it must be understood that no positive spinoff of an activity can possibly raise a similar significance rating to a negative impact that affects human health or causes the irreplaceable loss of a species.

1.5 Likelihood of the impact

This is the likelihood of the impact potential intensity manifesting. This is not the likelihood of the activity occurring. If an impact is unlikely to manifest then the likelihood rating will reduce the overall significance. Table 5 provides the rating methodology for likelihood.

The rating for likelihood is provided in fractions in order to provide an indication of percentage probability, although it is noted that mathematical connotation cannot be implied to numbers utilised for ratings.

Table 5: Criteria for the rating of the likelihood of the impact occurring

Likelihood Descriptor	Definition	Rating
Improbable	The possibility of the impact occurring is negligible and only under exceptional circumstances.	0.1
Unlikely	The possibility of the impact occurring is low with a less than 10% chance of occurring. The impact has not occurred before.	0.2
Probable	The impact has a 10% to 40% chance of occurring. Only likely to happen once in every 3 years or more.	0.5
Highly Probable	It is most likely that the impact will occur and there is a 41% to 75% chance of occurrence.	0.75
Definite	More than a 75% chance of occurrence. The impact will occur regularly.	1

1.6 Cumulative Impacts

Cumulative impact are reflected in the in the potential intensity of the rating system. In order to assess any impact on the environment, cumulative impacts must be considered in order to determine an accurate significance. Impacts cannot be assessed in isolation. An integrated approach requires that cumulative impacts be included in the assessment of individual impacts.

The nature of the impact should be described in such a way as to detail the potential cumulative impact of the activity.

1.7 Significance Assessment

The significance assessment assigns numbers to rate impacts in order to provide a more quantitative description of impacts for purposes of decision making. Significance is an expression of the risk of damage to the environment, should the proposed activity be authorised.

To allow for impacts to be described in a quantitative manner in addition to the qualitative description given above, a rating scale of between 1 and 5 was used for each of the assessment criteria. Thus the total value of the impact is described as the function of significance, which takes cognisance of extent, duration, potential intensity and likelihood.

Impact Significance = (extent + duration + potential intensity) x likelihood

Table 6 provides the resulting significance rating of the impact as defined by the equation as above.

Table 6: Significance rating formulas.

Score	Rating	Implications for Decision-making
< 3	Low	Project can be authorised with low risk of environmental degradation
3 - 9	Moderate	Project can be authorised but with conditions and routine inspections. Mitigation measures must be implemented.
10 - 20	High	Project can be authorised but with strict conditions and high levels of compliance and enforcement. Monitoring and mitigation are essential.
21 - 26	Fatally Flawed	Project cannot be authorised

An example of how this rating scale is applied is shown below in Table 15.

Table 7: Example of Rating Scale

Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
SO2 emissions	<u>Direct Impact:</u>	Existing	3	4	16	1	23 - FLAW	With mitigation (FGD) the residual air quality impact will be reduced due to a lower probability of SO2 emission from Medupi Power Station.	Ambient air quality is high impact for the area.
	SO2 emissions on air quality within an area of high priority air pollution.	Cumulative	2	4	16	0,2	4 - MOD		Air quality will remain high impact with Medupi coming on-line
		Residual	5	4	16	0,5	13 - HIGH		With mitigation (FGD) the residual air quality impact will be reduced due to a lower probability of SO2 emission from Medupi Power Station.

1.8 Notation of Impacts

In order to make the report easier to read the following notation format is used to highlight the various components of the assessment:

- Extent- *in italics*
- Duration – in underline
- Potential intensity – IN CAPITALS
- Likelihood - in **bold**

Please note that the impact rating system may change slightly to accommodate ease of use. However, the basic principle of the rating system will remain the same.

Proposal: Impact Rating

PRE-CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
Appointment of construction contractor	<u>Direct Impact:</u>	Existing	2	1	2	0.75	4 - MOD	Ensure that unskilled labour required for the construction and installation of equipment are predominately South Africans from the surrounding communities.	
	Economic benefit to local economy	Cumulative	2	1	2	1	5 - MOD		
		Residual	2	1	2	1	5 - MOD		

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
Transportation, handling, and storage of construction materials	<u>Direct Impact:</u>	Existing	1	1	1	0.2	1 - LOW	Ensure that proper road signage is used. Limit access to the construction site to construction vehicles only.	The traffic impact is low in the area.
	Additional vehicle traffic	Cumulative	1	1	1	0.2	1 - LOW		The cumulative impact will remain low with the proposed construction at Prima.

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
		Residual	1	1	1	0.2	1 - LOW		With mitigation, the residual impact on traffic as a result of construction activities will remain the same.
Transportation, handling, and storage of construction materials	Direct Impact:	Existing	1	1	1	0.2	1 - LOW	Establish a chemical storage area that is suitably designed to contain all spills. Ensure that hydrocarbons are stored in a bunded area with a capacity of 110% of storage volume. Ensure that the bunded area is suitably designed to allow for cleaning and prevent spillage to the environment.	Pollution as a result of chemical or hydrocarbon spills at the site is low.
	Pollution from chemical / hydrocarbon spills	Cumulative	1	1	1	0.5	2 - LOW		Due to increased use of vehicles (construction vehicle), the impact will increase as a result of construction at Prima site but will remain low.
		Residual	1	1	1	0.2	1 - LOW	Ensure that all vehicles, storage, and usage areas have	With mitigation, the residual impact on the soil as a result of chemical/hydroca

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
								<p>suitable spill kits. Develop a chemical and hydrocarbon spill procedure. Ensure that chemical and hydrocarbon usage is controlled.</p>	<p>Carbon spill will be reduced.</p>
Transportation, handling, and storage of construction materials	<u>Indirect Impact:</u>	Existing	1	1	2	0.2	1 - LOW	<p>Establish a chemical storage area that is suitably designed to contain all spills. Ensure that hydrocarbons are stored in a bunded area with a capacity of 110% of storage volume.</p>	<p>Pollution on surface water is low as there is no surface water identified in close proximity to the Prima site.</p>
	Pollution may enter ground / surface water	Cumulative	1	1	2	0.2	1 - LOW	<p>Ensure that the bunded area is suitably designed to allow for cleaning and</p>	<p>The cumulative impact will remain low during the construction activities at Prima.</p>

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
		Residual	1	1	2	0.2	1 - LOW	prevent spillage to the environment. Ensure that all vehicles, storage, and usage areas have suitable spill kits. Develop a chemical and hydrocarbon spill procedure. Ensure that chemical and hydrocarbon usage is controlled.	With mitigation, the residual impact on surface and/or groundwater as a result of construction activities at Prima will remain low.
Excavation for replacement equipment and/or footings as well as installation activities.	Direct Impact:	Existing	1	1	1	0.1	0 - LOW	Soil stock piling to be done at the designated area.	No erosion has been observed in the area.
	Erosion and loss of soil resources	Cumulative	1	1	1	0.5	2 - LOW		Soil erosion and loss of soil is likely to occur at the Prima site as a result of the construction activities. Cumulative impacts will increase as a result of the

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
									proposed construction but will remain low due to the fact that excavations will occur inside the existing building infrastructure and also due to low probability.
		Residual	1	1	1	0.2	1 - LOW		With mitigation, soil erosion and loss of soil will be reduced and remain low.
Excavation for replacement equipment and/or footings as well as installation activities.	Direct Impact:	Existing	2	1	1	0.1	0 - LOW	Limit construction activities to daylight working hours.	The noise levels at the area are low
	Increased noise	Cumulative	2	1	2	0.2	1 - LOW		Cumulative noise impact due to construction activities will increase but remain low and limited to the site.

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
		Residual	1	1	1	0.2	1 - LOW		Noise impacts will remain the same i.e. low and limited to the site after mitigation.
Excavation for replacement equipment and/or footings as well as installation activities.	Indirect Impact:	Existing	1	1	1	0.1	0 - LOW	Soil stock piling to be done at the designated area.	Pollution on surface water is low as there is no surface water identified in close proximity to Prima.
	Sedimentation, siltation, and increased turbidity in surface water	Cumulative	1	1	1	0.2	1 - LOW		The cumulative impact will remain low during the construction activities at Prima.
		Residual	1	1	1	0.2	1 - LOW		With mitigation implemented on site during construction, the impact will remain low.

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
Excavation for replacement equipment and/or footings as well as installation activities.	<u>Direct Impact:</u>	Existing	1	1	2	0.2	1 - LOW	No servicing of vehicles onsite. Regular inspection and servicing of vehicles. Develop a spill management procedure for vehicles that may leak accidentally. Have a waste management plan.	Pollution of soil as a result of litter, cement/chemical/hydrocarbon spills is low on site but likely to occur due to unpaved roads.
	Pollution of soils by cement spills, litter, waste metals, hydrocarbons and chemicals	Cumulative	1	1	2	0.5	2 - LOW	Ensure that concrete spills are cleaned up. Ensure litter is cleared regularly to designated waste areas.	The cumulative impact on soil will increase as a result of the proposed construction but will remain low due to low probability.
		Residual	1	1	2	0.2	1 - LOW		With mitigation, impact on the soil will be reduced and remain low.
Installation of the proposed	<u>Direct Impact:</u>	Existing	1	1	1	0.1	0 - LOW	Undertake monitoring to determine if fires	Impact due to fires is low in the

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
equipment	Uncontrolled activities may lead to fires	Cumulative	1	1	1	0.2	1 - LOW	have any impact on the surrounding environment, suitable rehabilitation is to be undertaken where necessary. A fire management plan to be established prior to construction commencing. Any materials that are likely to catch fire must be removed in areas where welding is undertaken to prevent fires from occurring. Fire breaks along the servitude are to be established. Suitable firefighting equipment and training is to be provided.	area as there is no vegetation.
		Residual	1	1	1	0.1	0 - LOW		With mitigation, impact due to fires will be very low.
Fugitive dust emissions	Direct Impact:	Existing	1	1	4	0.5	3 - MOD	With mitigation the air quality impact	Fugitive dust emissions will be short-lived and

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
								intensity will reduce.	cease once construction ceases. Impacts are anticipated to be limited to the site and are unlikely to be anything more than a nuisance.
	Fugitive dust concentrations resulting in the degradation of the ambient air quality and creating a nuisance.	Cumulative	1	1	1	0.2	1 - LOW		Construction dust will be largely limited to the site and is therefore not likely to have a cumulative impact on ambient air quality beyond the Prima fence line.
		Residual	1	1	1	0.2	1 - LOW		With mitigation implemented on site during construction, the impact will remain low.

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
Particulate matter emissions	<u>Direct Impact:</u>	Existing	2	4	8	0.5	7 - MOD		According to the 2016 stack emissions sampling Prima's PM contributions from the F-A1 and F-A2 stacks are low at 8% and 16% of the maximum emissions standard. The Prima Silica and Short Extraction (F-10) stack contributions were higher at 56% and 95% of the maximum emissions standard. Prima's PM emissions are therefore anticipated to have a moderate impact on the local ambient air

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
									quality.
	Particulate matter emissions resulting in the degradation of the ambient air quality.	Cumulative	2	4	8	0.5	7 - MOD		Ambient air quality in the region is considered to be poor. The cumulative impact of the project within 500 m of the site is anticipated to be moderate.
		Residual	2	1	1	0.1	0 - LOW		Particulate emissions will cease once the operation of the facility ceases.
Particulate matter emissions	<u>Direct Impact:</u>	Existing	2	4	1	0.5	4 - MOD	With mitigation the air quality impact intensity will reduce.	According to the 2016 stack emissions sampling Prima's PM contributions from the F-A1 and F-A2 stacks

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
									are low at 8% and 16% of the maximum emissions standard respectively. The Prima Silica and Short Extraction (F-10) stack contributions were comparatively higher at 56% and 95% of the maximum emissions standard respectively. Prima's PM emissions are therefore anticipated to have low impact intensity at the closest sensitive receptor.

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
	Ambient PM concentrations resulting from Prima's emissions with the potential to affect human health at an identified receptor location.	Cumulative	2	4	1	0.5	4 - MOD		Ambient air quality in the region is considered to be poor. The cumulative impact of the site at the closest sensitive receptor anticipated to be moderate.
		Residual	2	1	1	0.1	0 - LOW		Particulate emissions will cease once the operation of the facility ceases.
Sulphur dioxide emissions	<u>Direct Impact:</u>	Existing	2	4	1	0.1	1 - LOW	With mitigation the air quality impact intensity will reduce.	According to the 2016 stack emissions sampling Prima's SO ₂ contributions are negligible. It is therefore

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
									anticipated that the project's SO ₂ emissions will have a low impact within 500 m of the site.
	SO ₂ emissions concentrations resulting in the degradation of the ambient air quality.	Cumulative	2	4	1	0.1	1 - LOW		Ambient air quality in the region is considered to be poor however; according to the 2016 stack emissions sampling Prima's SO ₂ contributions are negligible. It is therefore anticipated that the project's SO ₂ emissions will have a low cumulative impact within 500 m of the site.

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
		Residual	2	1	1	0.1	0 - LOW		SO ₂ emissions will cease once the operation of the facility ceases.
Sulphur dioxide emissions	Direct Impact:	Existing	2	4	1	0.1	1 - LOW	With mitigation the air quality impact intensity will reduce.	According to the 2016 stack emissions sampling Prima's SO ₂ contributions are negligible. It is therefore anticipated that the project's SO ₂ emissions will have a low impact at the nearest sensitive receptor.
	Ambient SO ₂ concentrations resulting from Prima's emissions with the potential to affect human health at an	Cumulative	2	4	1	0.1	1 - LOW		Ambient air quality in the region is considered to be poor however; according to the 2016 stack emissions

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
	identified receptor location.								sampling Prima's SO ₂ contributions are negligible. It is therefore anticipated that the project's SO ₂ emissions will have a low cumulative impact on the closest sensitive receptor.
		Residual	2	1	1	0.1	0 - LOW		SO ₂ emissions will cease once the operation of the facility ceases.
Oxides of nitrogen emissions	Direct Impact:	Existing	2	4	1	0.1	1 - LOW	With mitigation the air quality impact intensity will reduce.	According to the 2016 stack emissions sampling Prima's NO _x contributions are negligible. It is therefore anticipated that the project's NO ₂ emissions will

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
									have a low impact within 500 m of the site.
	NO ₂ emissions concentrations resulting in the degradation of the ambient air quality.	Cumulative	2	4	1	0.1	1 - LOW		Ambient air quality in the region is considered to be poor however; according to the 2016 stack emissions sampling Prima's NO ₂ contributions are negligible. It is therefore anticipated that the project's NO ₂ emissions will have a low cumulative impact within 500 m of the site.
		Residual	2	1	1	0.1	0 - LOW		NO ₂ emissions will cease once the operation of the facility ceases.

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
Oxides of nitrogen emissions	Direct Impact:	Existing	2	4	1	0.1	1 - LOW	With mitigation the air quality impact intensity will reduce.	According to the 2016 stack emissions sampling Prima's NO _x contributions are negligible. It is therefore anticipated that the project's NO ₂ emissions will have a low impact at the nearest sensitive receptor.
	Ambient NO ₂ concentrations resulting from Prima's emissions with the potential to affect human health at an identified receptor location.	Cumulative	2	4	1	0.1	1 - LOW		Ambient air quality in the region is considered to be poor however; according to the 2016 stack emissions sampling Prima's NO ₂ contributions are negligible. It is

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
									therefore anticipated that the project's NO ₂ emissions will have a low cumulative impact at the nearest sensitive receptor.
		Residual	2	1	1	0.1	0 - LOW		NO ₂ emissions will cease once the operation of the facility ceases.
Inspection and maintenance of the proposed upgrade equipment.	Direct Impact:	Existing	1	1	1	0.2	1 - LOW	Ensure that a site clean-up is undertaken at the end of every maintenance cycle to ensure that no pollution has occurred. Where this has happened, appropriate remedial action is to be taken.	The impact will be very low and limited to the site for the duration of the facility operation.

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
	Pollution from litter, waste metals, vehicle spills / hydrocarbon spills during maintenance activities.	Cumulative	1	1	2	0.2	1 - LOW		Due to the extent and the intensity of the impact, the cumulative impact of pollution as a result of operational and maintenance activities will be low.
		Residual	1	1	1	0.2	1 - LOW		With mitigation, the residual impact of pollution as a result of operational and maintenance activities will be reduced due to a lower intensity of maintenance activities.

DECOMMISSIONING PHASE

Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
Fugitive dust emissions	<u>Direct Impact:</u>	Existing	2	1	8	0.5	6 - MOD	With mitigation the air quality impact intensity will reduce.	Fugitive dust emissions will be short-lived and cease once decommissioning ceases. Impacts are anticipated to be limited to the local scale and are unlikely to be anything more than a nuisance.
	Fugitive dust concentrations resulting in the degradation of the ambient air quality and creating a nuisance.	Cumulative	2	1	8	0.5	6 - MOD		Fugitive dust will be largely limited to the local environment and is therefore not likely to have a cumulative impact on regional air quality.
		Residual	2	1	1	0.1	0 - LOW		Fugitive dust emissions associated with decommissioning will cease once decommissioning

DECOMMISSIONING PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
									ceases.
Decommissioning of infrastructure: this will involve the reversal of the construction phase. The end result of the decommissioning phase will be a positive impact on the environment. The decommissioning phase was not assessed as part of this application and will be the focus of a separate application nearer to the time.									

No Go Alternative: Impact ratings

PRE-CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
No activities undertaken.									

CONSTRUCTION PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
No construction activities undertaken.									

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
Activities for the current operations to remain the same.	<u>Direct Impact:</u>	Existing	2	4	2	0.75	6 - MOD	Air Quality Monitoring and Reporting to the relevant authorities.	Ambient air quality in the area is Moderate.
	Negative Environmental impacts will remain the same as for the current operations.	Cumulative	2	4	2	0.75	6 - MOD		Cumulative ambient air quality will remain low if no proposed activities are undertaken.
		Residual	2	4	2	0.75	6 - MOD		There will be no residual impacts as operations will remain the same.
Project does not proceed.	<u>Direct Impact:</u>	Existing	2	5	2	1	9 - MOD	Authorise and implement the proposed project activities.	Prima production capacity will remain the same.
	No opportunity for contributing to the local economic development, for	Cumulative	2	5	2	1	9 - MOD		There will be no cumulative impacts if the project is not authorised.

OPERATIONAL PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
	Prima to meet their consumer's demand and improvement on livelihood of the local communities.	Residual	2	4	2	0.75	6 - MOD		Positive residual impacts will increase as a result of increase in Prima's production capacity.

DECOMMISSIONING PHASE									
Activity	Nature of Impact	Impact type	Extent	Duration	Potential Intensity	Likelihood	Rating	Mitigation	Interpretation
No decommissioning activities undertaken.									