

BASIC ASSESSMENT REPORT

(For official use only)

File Reference Number:

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Application Number:

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Date Received:

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Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2006

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2006 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. The report must be typed within the spaces provided in the form. The size of the spaces provided are not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
3. Where applicable **tick** the boxes that are applicable or **black out** the boxes that are not applicable in the report.
4. An incomplete report may be returned to the applicant for revision.
5. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
6. This report must be handed in at offices of the relevant competent authority as determined by each authority.
7. No faxed or e-mailed reports will be accepted.
8. The report must be compiled by an independent environmental assessment practitioner.
9. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed. In addition, if it is clear to the EAP that because of the particular circumstances of the case it is not sensible to complete any of the sections indicated under paragraph 3 of this report, he or she may apply for exemption from completing that part of the report in the spaces provided in the report. It must however be noted that if the application for exemption is turned down, the report may have to be resubmitted.

SECTION A: APPLICATION FOR EXEMPTION

The relevant parts of this section must be completed if the environmental assessment practitioner (EAP) on behalf of the applicant wishes to apply for exemption from completing or complying with certain parts of this basic assessment report.

1. APPLICATION FOR EXEMPTION FROM ASSESSING ALTERNATIVES:

At least two alternatives (site or activity) should be assessed. If that is not possible, the applicant should apply for exemption from having to assess alternatives. Such exemption will, however, not apply to the no-go alternative that must be assessed in all cases.

Provide a detailed motivation for not considering alternatives including an explanation of the reason for the application for exemption (supporting documents, if any, should be attached to this report):

I declare that the above motivation is accurate and, hereby apply for exemption in terms of regulation 51 of the Environmental Impact Assessment Regulations, 2006, from having to assess alternatives in this application as required in section 24(4)(b) in the National Environmental Management Act, 1998 (Act No. 107 of 1998)

Signature of the EAP: _____ Date: _____

2. APPLICATION FOR EXEMPTION FROM COMPLYING WITH PARTS OF REGULATION 23(2) REGARDING THE CONTENT OF THIS BASIC ASSESSMENT REPORT:

Application for exemption from certain parts of regulation 23(2) regarding the completion of certain parts of this basic assessment report may be made by completing the relevant sections below.

Indicate the numbers of the sections of this report for which exemption is applied for:

Section B:	7(a)	7(b)	7(c)	7(d)	8	9	10(c)	10(e)	10(f)	10(g)	10(h)	10(j)	10(k)	12
Section C:	1	2	3	4	5	6								
Section D:	1(a)	1(b)	1(c)	1(d)	1(f)	1(g)	3							

Provide a detailed motivation including an explanation of the reason for the application for exemption (supporting documents, if any, should be attached to this report):

I declare that the above motivation is accurate and, hereby apply for exemption in terms of regulation 51 of the EIA Regulations, 2006, from having to complete the indicated sections of the Basic Assessment Report.

Signature of the EAP: _____ Date: _____

SECTION B: ACTIVITY INFORMATION

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for in detail (A1):

Basic Assessment for the Above-Ground Storage of Dangerous Goods, Proposed Expansion of Existing Facilities, Temporary Storage of Hazardous Waste, Recovery of Hazardous Waste, and Execution of Scheduled Processes

2. ALTERNATIVES

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

2(a) Site alternatives:

Describe site alternative 1 (S1), for the activity described above, or for any other activity alternative:

The proposed site for development is an existing industrial site that has all the necessary infrastructure required for the activities that are applied for and therefore no alternative site was considered.

Describe site alternative 2 (S2), if any, for the activity described above, or for any other activity alternative:

Describe site alternative 3 (S3), if any, for the activity described above, or for any other activity alternative:

(2)(b) Activity alternatives:

Describe activity alternative 2 (A2), if any, for any or all of the site alternatives as appropriate:

Industrial Distillers and Refiners would like to expand their operations to include the distillation of heavy solvent naphtha into different fractions and possibly also Coal Tar Naphtha. The process involves splitting naphtha into different fractions containing C10+alkyl aromatics mixtures. Some of the heavier fractions would be reacted to form resins e.g. Poly naphthalene condensate SP and Coumarone resin.

They are considering sulphonating naphthalene to produce a different polymer (NaSP40). Another application is the separation of Shellsol AB and butyl Oxitol from printing ink by distillation. Their planned storage capacity is 980 m³.

The hazardous material and waste will be stored on site prior to processing. During the distillation process scrubbers will be used to reduce the concentration of the pollutants that will be released into the atmosphere by more than 90 %.

Describe activity alternative 2 (A2), if any, for any or all of the site alternatives as appropriate:

The second alternative is to continue with the proposed activity on this similar site but use a different technology of knock out pots and filter bags; however this is less efficient than the proposed scrubbers and will result in more pollutants being released to the atmosphere.

Describe activity alternative 2 (A2), if any, for any or all of the site alternatives as appropriate:

The third option would be to store the dangerous goods off site and transport them in by a road tanker when they are needed.

4. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

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Alternative:

Alternative S1¹ (preferred or only site alternative)

Latitude (S):

Longitude (E):

26°	19.188 °	28°	8.069 °
°	'	°	'
°	'	°	'

Alternative S2 (if any)

Alternative S3 (if any)

In the case of linear activities:

Alternative:

Alternative S1 (preferred or only route alternative)

• Starting point of the activity

• Middle point of the activity

• End point of the activity

Alternative S2 (if any)

• Starting point of the activity

• Middle point of the activity

• End point of the activity

Alternative S3 (if any)

• Starting point of the activity

• Middle point of the activity

• End point of the activity

Latitude (S):

Longitude (E):

°	'	°	'
°	'	°	'
°	'	°	'

°	'	°	'
°	'	°	'
°	'	°	'

°	'	°	'
°	'	°	'
°	'	°	'

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

5. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Alternative A1² (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the activity:

980m ²
980m ²
980m ²

Length of the activity:

m
m
m

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the site/servitude:

15000m ²

6. SITE ACCESS

Does ready access to the site exist, or is access directly from an existing road?

YES	NO
m	

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

Include the position of the access road on the site plan.

7. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

7(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

YES	NO
m ³	

If yes, what estimated quantity will be produced per month?

How will the construction solid waste be disposed of (describe)?

Where will the construction solid waste be disposed of (describe)?

Will the activity produce solid waste during its operational phase?

YES	NO
1 ton	

If yes, what estimated quantity will be produced per month?

How will the solid waste be disposed of (describe)?

The waste will be collected by the original producer from the recovery site for re-use or final disposal in a licensed hazardous waste disposal site

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

¹ "Alternative S.." refer to site alternatives.

² "Alternative A.." refer to activity, process, technology or other alternatives.

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The waste will be re-used by the original waste producer or disposed in a licensed hazardous waste disposal site

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, the application should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation? YES NO

If yes, inform the competent authority and request a change to an application for scoping and EIA.
Is the activity that is being applied for a solid waste handling or treatment facility? YES NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Describe the measures, if any, that will be taken to ensure the optimal reuse or recycling of materials:

Has a specialist been consulted to assist with the completion of this section? YES NO

If YES, please complete:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

7(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system? YES NO

If yes, what estimated quantity will be produced per month? _____ m³

Will the activity produce any effluent that will be treated and/or disposed of on site? Yes NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility? YES NO

If yes, provide the particulars of the facility:

Facility name: _____

Contact person: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

Has a specialist been consulted to assist with the completion of this section? YES NO

If YES, please complete:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

7(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere? YES NO

If yes, is it controlled by any legislation of any sphere of government? YES NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

Has a specialist been consulted to assist with the completion of this section? YES NO

If YES, please complete:

Name of the specialist: Victor von Reiche

Qualification(s) of the specialist: _____

Postal address: P.O.Box 5260 Halfway House

Postal code: 1685

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Telephone:

011 805 1940

 Cell:

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E-mail:

--

 Fax:

011 805 7010

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

--

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____ Date:

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7(d) Generation of noise

Will the activity generate noise?

YES	NO
-----	----

If yes, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

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Has a specialist been consulted to assist with the completion of this section?

YES	NO
-----	----

If YES, please complete:

Name of the specialist:

--

Qualification(s) of the specialist:

--

Postal address:

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Postal code:

--

Telephone:

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 Cell:

--

E-mail:

--

 Fax:

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Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

--

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____ Date:

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8. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es)

municipal	water board	groundwater	river, stream, dam or lake	other	the activity will not use water
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

	liters
--	--------

Does the activity require a water use permit from the Department of Water Affairs and Forestry?

YES	NO
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If yes, please submit the necessary application to the Department of Water Affairs and Forestry and attach proof thereof to this application if it has been submitted.

9. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

All heated tanks and pipes are insulated to conserve energy

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

Coal fired boilers are used to generate steam

10. SITE OR ROUTE PLAN

- A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document. The site or route plans must indicate the following:
- 10(a) The scale of the plan which must be at least a scale of 1:500;
 - 10(b) the property boundaries and numbers of all the properties within 50m of the site;
 - 10(c) the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
 - 10(d) the exact position of each element of the application as well as any other structures on the site;
 - 10(e) the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
 - 10(f) all trees and shrubs taller than 1.8m;
 - 10(g) walls and fencing including details of the height and construction material;
 - 10(h) servitudes indicating the purpose of the servitude;
 - 10(i) sensitive environmental elements within 100m of the site or sites including (but not limited thereto):
 - rivers;
 - the 1:100 year flood line (where available or where it is required by DWAF);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or invested with alien species);
 - 10(j) for gentle slopes the 1m contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
 - 10(k) the positions from where photographs of the site were taken.

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11. SITE PHOTOGRAPHS

Colour photographs from the center of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this form. It should be supplemented with additional photographs of relevant features on the site, if applicable.

12. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

13. ACTIVITY MOTIVATION

13(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure or is it a public amenity?

How many new employment opportunities will be created in the development phase of the activity?

What is the expected value of the employment opportunities during the development phase?

What percentage of this will accrue to previously disadvantaged individuals?

How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?

R
R
YES NO
None
R
%
None- the existing staff will be used to carry out operations
R
%

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		<i>facilities with individual tank capacities of at least 1 000 cubic meters each.</i>
Atmospheric Pollution Prevention Act (Act 45 of 1965)	APPA Scheduled Process 16	<i>Tar Processes: That is to say, processes in which tar, creosote or any other product of the distillation of tar is distilled or is heated in any manufacturing process.</i>

SECTION C: SITE/AREA DESCRIPTION

Important note: For linear activities (pipelines etc) as well as activities that cover very large sites, it may be necessary to complete Section C for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. A):
(complete only when appropriate)

1. GRADIENT OF THE SITE

Indicate the general gradient of the sites.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S2:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S3:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site.

Alternative S1:

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front
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Alternative S2:

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front
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Alternative S3:

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front
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3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)?

	Alternative S1:		Alternative S2:		Alternative S3:	
	YES	NO	YES	NO	YES	NO
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

Has a specialist been consulted to assist with the completion of this section?

YES	NO
-----	----

If YES, please complete:

Name of the specialist:	P. Badenhorst		
Qualification(s) of the specialist:	Geohydrologist		
Postal address:	P.O. Box 38384 Garsfontein East		
Postal code:	0060		

Telephone:	(0)12 804 8120	Cell:	
E-mail:		Fax:	(0)12 804 8140

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:
If YES, is such a report(s) attached?

YES	NO
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Signature of specialist: _____ Date: _____

4. GROUNDCOVER

Tick the types of groundcover present on the site.

Alternative S1:

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an ^E "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: Mr C.L.COOK* (MSc. Zool.)

Qualification(s) of the specialist: _____

Postal address: P. O. Box 39357
Uvongo

Postal code: _____

Telephone: 4270 Cell: 082 688 9585

E-mail: BULLFROG@HIGHVELDMAIL.CO.ZA Fax: _____

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites? YES NO

If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on any of the alternative sites? YES NO

If YES, specify and explain:

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify:

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Alternative S2:

Natural veld - good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an ^E "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites? YES NO

If YES, specify and explain:

Are there any special or sensitive habitats or other natural features present on any of the alternative sites? YES NO

If YES, specify and explain:

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify:

If YES, is such a report(s) attached? YES NO

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Signature of specialist: _____ Date: _____
 The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Alternative S3:

Natural veld – good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an “E” is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____
 Qualification(s) of the specialist: _____
 Postal address: _____
 Postal code: _____
 Telephone: _____ Cell: _____
 E-mail: _____ Fax: _____

Are there any rare or endangered flora or fauna species (including red data species) present on any of the alternative sites? YES NO

If YES, specify and explain: _____

Are there any special or sensitive habitats or other natural features present on any of the alternative sites? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____
 The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

5. LAND USE CHARACTER OF SURROUNDING AREA

Black out land uses and/or prominent features that does not currently occur within a 500m radius of the site

Alternative S1:

Natural area	Low density residential	Medium density residential	High density residential	Informal residential ^A
Retail	Commercial & warehousing	Light industrial	Medium industrial ^{AN}	Heavy industrial ^{AN}
Power station ^A	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam ^A	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center	School	Tertiary education facility	Church	Old age home
Sewage treatment plant ^A	Train station or shunting yard ^N	Railway line ^N	Major road (4 lanes or more) ^N	Airport^N
Harbour	Sport facilities	Golf course	Polo fields	Filling station ^H
Landfill or waste treatment site ^A	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archeological site
Other land uses (describe):	_____			

If any of the boxes marked with an “N” are ticked, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____
 Qualification(s) of the specialist: _____
 Postal address: _____
 Postal code: _____
 Telephone: _____ Cell: _____

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E-mail: Fax:

Will the ambient noise level have a negative impact on the proposed activity? YES NO

If YES, specify and explain:

Are any further specialist or studies recommended by the specialist? YES NO

If YES, specify:

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date:

If any of the boxes marked with an ^{“Au”} are ticked, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone: Cell:

E-mail: Fax:

Will the ambient air pollution level have a negative impact on the proposed activity? YES NO

If YES, specify and explain:

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify:

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date:

If any of the boxes marked with an ^{“Hu”} are ticked, please consult an appropriate health assessment specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone: Cell:

E-mail: Fax:

Will the surrounding land use pose any unacceptable health risk on the proposed activity? YES NO

If YES, specify and explain:

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify:

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date:

Alternative S2:

Natural area	Low density residential	Medium density residential	High density residential	Informal residential ^A
Retail	Commercial & warehousing	Light industrial	Medium industrial ^{AN}	Heavy industrial ^{AN}
Power station ^A	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam ^A	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center	School	Tertiary education facility	Church	Old age home
Sewage treatment plant ^A	Train station or shunting yard ^N	Railway line ^N	Major road (4 lanes or more) ^N	Airport ^N
Harbour	Sport facilities	Golf course	Polo fields	Filling station ^H
Landfill or waste treatment site ^A	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archeological site
Other land uses (describe):				

BASIC ASSESSMENT REPORT

If any of the boxes marked with an "N" are ticked, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient noise level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "A" are ticked, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the ambient air pollution level have a negative impact on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

If any of the boxes marked with an "H" are ticked, please consult an appropriate health assessment specialist to assist in the completion of this section.

Has a specialist been consulted? YES NO

If YES, please complete the following:

Name of the specialist: _____

Qualification(s) of the specialist: _____

Postal address: _____

Postal code: _____

Telephone: _____ Cell: _____

E-mail: _____ Fax: _____

Will the surrounding land use pose any unacceptable health risk on the proposed activity? YES NO

If YES, specify and explain: _____

Are any further specialist studies recommended by the specialist? YES NO

If YES, specify: _____

If YES, is such a report(s) attached? YES NO

Signature of specialist: _____ Date: _____

Alternative S3:

Natural area	Low density residential	Medium density residential	High density residential	Informal residential ^A
Retail	Commercial & warehousing	Light industrial	Medium industrial ^{AN}	Heavy industrial ^{AN}
Power station ^A	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam ^A	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center	School	Tertiary education facility	Church	Old age home
Sewage treatment plant ^A	Train station or shunting yard ^N	Railway line ^N	Major road (4 lanes or more) ^N	Airport ^N
Harbour	Sport facilities	Golf course	Polo fields	Filling station ^H

BASIC ASSESSMENT REPORT

Landfill or waste treatment site ^A	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archeological site
Other land uses (describe):				

If any of the boxes marked with an "N" are ticked, please consult an appropriate noise specialist to assist in the completion of this section.

Has a specialist been consulted?

YES	NO
-----	----

If YES, please complete the following:

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone: Cell:

E-mail: Fax:

Will the ambient noise level have a negative impact on the proposed activity?

YES	NO
-----	----

If YES, specify and explain:

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____ Date:

If any of the boxes marked with an "A" are ticked, please consult an appropriate air quality specialist to assist in the completion of this section.

Has a specialist been consulted?

YES	NO
-----	----

If YES, please complete the following:

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone: Cell:

E-mail: Fax:

Will the ambient air pollution level have a negative impact on the proposed activity?

YES	NO
-----	----

If YES, specify and explain:

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

If YES, is such a report(s) attached?

YES	NO
-----	----

Signature of specialist: _____ Date:

If any of the boxes marked with an "H" are ticked, please consult an appropriate health assessment specialist to assist in the completion of this section.

Has a specialist been consulted?

YES	NO
-----	----

If YES, please complete the following:

Name of the specialist:

Qualification(s) of the specialist:

Postal address:

Postal code:

Telephone: Cell:

E-mail: Fax:

Will the surrounding land use pose any unacceptable health risk on the proposed activity?

YES	NO
-----	----

If YES, specify and explain:

Are any further specialist studies recommended by the specialist?

YES	NO
-----	----

If YES, specify:

If YES, is such a report(s) attached?

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Signature of specialist: _____ Date:

6. CULTURAL/HISTORICAL FEATURES

Alternative S1

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?

YES	NO
NO	

BASIC ASSESSMENT REPORT

If YES, explain:

If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist:

Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

Alternative S2

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?

YES	NO
Uncertain	

If YES, explain:

If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist:

Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

Alternative S3

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?

YES	NO
Uncertain	

If YES, explain:

If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist:

Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

SECTION D: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The environmental assessment practitioner must follow any relevant guidelines adopted by the competent authority in respect of public participation and must at least –

- 1(a) Fix a notice in a conspicuous place, on the property where it is intended to undertake the activity which states that an application will be submitted to the competent authority in terms of these regulations and which provides information on the proposed nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations on the application may be made.
- 1(b) inform landowners and occupiers of adjacent land of the applicant's intention to submit an application to the competent authority
- 1(c) inform landowners and occupiers of land within 100 metres of the boundary of the property where it is proposed to undertake the activity and whom may be directly affected by the proposed activity of the applicant's intention to submit an application to the competent authority;
- 1(d) inform the ward councillor and any organisation that represents the community in the area of the applicant's intention to submit an application to the competent authority;
- 1(e) inform the municipality which has jurisdiction over the area in which the proposed activity will be undertaken of the applicant's intention to submit an application to the competent authority; and
- 1(f) inform any organ of state that may have jurisdiction over any aspect of the activity of the applicant's intention to submit an application to the competent authority; and
- 1(g) place a notice in one local newspaper and any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these regulations.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

Advertisements and notices must indicate that an application will be submitted to the competent authority in terms of the EIA regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made;

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for site alternatives where appropriate.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

6. LOCAL AUTHORITY PARTICIPATION

Local authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

Has any comment been received from the local authority?

YES	NO
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If "YES", briefly describe the feedback below (also attach any correspondence to and from the local authority to this application):

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BASIC ASSESSMENT REPORT

7. CONSULTATION WITH OTHER STAKEHOLDERS

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

YES	NO
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If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

1. Gauteng Department of Agriculture and Rural Development requested an investigation of existence of *lithops lesliei* and wetlands on site.
2. Department of Agriculture, Forestry and Fisheries has no comment
3. Department of Water Affairs will comment on receipt of the Assessment report
4. ESKOM has no comments

SECTION E: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2006, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the issues raised by interested and affected parties.

1. Stormwater contamination from the storage of the hazardous goods
2. Concerns with air pollution from the proposed scheduled processes
3. Geotechnical study request
4. The inclusion of the exact guidelines on the full disposal of all hazardous by-product waste

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):

1. Recommendations to improve the management of stormwater have been included in the EMP.
2. The Air quality license application will be lodged with the Ekurhuleni Metropolitan Municipality and the listed or scheduled processes will be undertaken in accordance with the conditions contained in the Waste License. Additionally the applicant will install scrubbers to reduce the concentration of the emitted substances.
3. A desktop geohydrology study was conducted for the site to determine the geology of the site. It should be noted that these activities will be undertaken on an existing industrial site no construction of new structures will be undertaken. All the storage will be above ground and it is recommended on the EMP that the storage facility should be on hard surface to ensure that there is no contamination of the groundwater. It is further recommended that the groundwater boreholes be established to determine the baseline groundwater quality on site and to continuously monitor the impact of the activity on the groundwater resource.

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

List the potential site alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, including impacts relating to the choice of site alternatives.

Alternative S1 (preferred alternative)

Direct impacts:

Indirect impacts:

Cumulative impacts:

Alternative S2

Direct impacts:

Indirect impacts:

Cumulative impacts:

Alternative S3

Direct impacts:

Indirect impacts:

Cumulative impacts:

No-go alternative (compulsory)

Direct impacts:

Indirect impacts:

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Cumulative impacts:

Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

Alternative S1	Alternative S2	Alternative S3

List the potential activity/technology alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase:

Alternative A1 (preferred alternative)

Direct impacts:

Indirect impacts:

Cumulative impacts:

Alternative A2

Direct impacts:

Indirect impacts:

Cumulative impacts:

Alternative A3

Direct impacts:

Indirect impacts:

Cumulative impacts:

No-go alternative (compulsory)

Direct impacts:

Indirect impacts:

Cumulative impacts:

Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

Alternative A1:	Alternative A2:	Alternative A3:

3. IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION PHASE

List the potential site alternative related impacts (as appropriate) that are likely to occur as a result of the construction phase:

Alternative S1 (preferred alternative)

Direct impacts:

Indirect impacts:

Cumulative impacts:

Alternative S2

Direct impacts:

Indirect impacts:

Cumulative impacts:

Alternative S3

Direct impacts:

Indirect impacts:

Cumulative impacts:

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No-go alternative (compulsory)
<i>Direct impacts:</i>
<i>Indirect impacts:</i>
<i>Cumulative impacts:</i>

Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

Alternative S1	Alternative S2	Alternative S3

List the potential activity/technology alternative related impacts (as appropriate) that are likely to occur as a result of the construction phase:

Alternative A1 (preferred alternative)
<i>Direct impacts:</i>
<i>Indirect impacts:</i>
<i>Cumulative impacts:</i>

Alternative A2
<i>Direct impacts:</i>
<i>Indirect impacts:</i>
<i>Cumulative impacts:</i>

Alternative A3
<i>Direct impacts:</i>
<i>Indirect impacts:</i>
<i>Cumulative impacts:</i>

No-go alternative (compulsory)
<i>Direct impacts:</i>
<i>Indirect impacts:</i>
<i>Cumulative impacts:</i>

Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

Alternative A1:	Alternative A2:	Alternative A3:

4. IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

List the potential site alternative related impacts (as appropriate) that are likely to occur as a result of the operational phase:

Alternative S1 (preferred alternative)
<i>Direct impacts:</i> Groundwater Resource
The shallow water table associated with the geology of the area increases the possibility of groundwater pollution.
Impacts on biodiversity
The site and surrounding industrial areas are completely transformed habitats of low conservation for both fauna and flora.
Indirect impacts:
<i>Cumulative impacts:</i> None

Alternative S2
<i>Direct impacts:</i>
<i>Indirect impacts:</i>

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Cumulative impacts:
Alternative S3
Direct impacts:
Indirect impacts:
Cumulative impacts:
No-go alternative (compulsory)
Direct impacts: The site will have to be closed since it is an already existing industrial site
Indirect impacts: The current employees will be retrenched and that will indirectly affect the socio-economic status of the area
Cumulative impacts: none

Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

Alternative S1	Alternative S2	Alternative S3
<ul style="list-style-type: none"> All the goods that might impact on the groundwater quality should be stored on impervious surfaces in bunded areas with bund walls which can accommodate 110% of the spillage. Proper storm water management measures should be implemented which include separation of stormwater arising from dirty areas and clean areas. Prevent any damming of water on site ensure that the stormwater channels are not blocked and there is unobstructed flow of water. 		

List the potential activity/technology alternative related impacts (as appropriate) that are likely to occur as a result of the operational phase:

Alternative A1 (preferred alternative)

<p>Direct impacts:</p> <p>Health and safety The introduction of hazardous material and increased capacity for storage of dangerous goods might increase the health and safety risk of workers if proper preventive measures are not put in place.</p> <p>Soil and water pollution Improper handling and disposal of waste, stormwater and raw products that will be used in the proposed processes might pollute soil and water. Pollution of water is a higher risk on site, since the site has a high water table.</p> <p>Soil erosion Insufficient stormwater control measures on site may result in soil erosion in areas that are not covered by any vegetation or the buildings.</p> <p>Impacts due to storage facilities</p>
--

Mismanagement and improper location of storage facilities might result in negative impacts.

Waste Storage

Improper waste management practices may lead to environment pollution

Fire Risk

Negligence on the part of the workers might result in fires and explosions.

Indirect impacts:

Traffic and road safety

There is a possibility of occurrence of accidents and spillages during the transportation of hazardous materials that will be processed in the proposed activity

Cumulative impacts:

Some of the proposed expansion activities will emit pollutants to the atmosphere adding to the existing pollutants in the area.

Illegal discharges of polluted stormwater into the stormwater channel will contribute to the existing pollution in the Natalspruit, which is a nearby watercourse in which the stormwater is discharged.

Alternative A2

Direct impacts:

Traffic and road safety

The probability of occurrence of accidents and spillages will be increased with the frequent transportation of hazardous materials being used for processing.

Air pollution

Some of the proposed expansion activities will emit pollutants to the atmosphere.

Soil erosion

Insufficient stormwater control measures on site may result in soil erosion in areas that are not covered by any vegetation or the buildings.

Soil and water pollution

Improper handling and disposal of waste, stormwater and raw products that will be used in the proposed processes might pollute soil and water. Pollution of water is a higher risk on site, since the site has a high water table.

Impacts due to storage facilities

Mismanagement and improper location of storage facilities might result in negative impacts.

Fire Risk

Negligence on the part of the workers might result in fires and explosions.

Health and safety

The introduction of hazardous material and increased capacity for storage of dangerous goods might increase the health and safety risk of workers if proper preventive measures are not put in place

Indirect impacts: None

Cumulative impacts: Some of the proposed expansion activities will emit pollutants to the atmosphere adding to the existing pollutants in the area.

Illegal discharges of polluted stormwater into the stormwater channel will contribute to the existing pollution in the Natalspruit, which is a nearby watercourse in which the stormwater is

released to the environment.

Alternative A3

Direct impacts:

Air pollution

Some of the proposed expansion activities will emit pollutants to the atmosphere.

Soil erosion

Insufficient stormwater control measures on site may result in soil erosion in areas that are not covered by any vegetation or the buildings.

Soil and water pollution

Improper handling and disposal of waste, stormwater and raw products that will be used in the proposed processes might pollute soil and water. Pollution of water is a higher risk on site, since the site has a high water table.

Impacts due to storage facilities

Mismanagement and improper location of storage facilities might result in negative impacts.

Waste Management

Improper waste management practices may lead to environment pollution

Fire Risk

Negligence on the part of the workers might result in fires and explosions.

Health and safety

The introduction of hazardous material and increased capacity for storage of dangerous goods might increase the health and safety risk of workers if proper preventive measures are not put in place.

Traffic and road safety

There is a possibility of occurrence of accidents and spillages during the transportation of hazardous materials that will be processed in the proposed activity

Indirect impacts:

Traffic and road safety

There is a possibility of occurrence of accidents and spillages during the transportation of hazardous materials that will be processed in the proposed activity

Cumulative impacts: Some of the proposed expansion activities will emit pollutants to the atmosphere adding to the existing pollutants in the area.

Illegal discharges of polluted stormwater into the stormwater channel will contribute to the existing pollution in the Natalspruit, which is a nearby watercourse in which the stormwater is released to the environment

No-go alternative (compulsory)

Direct impacts: The waste material that will be recovered or treated on this site will have to be disposed off at a hazardous landfill site taking up more air space and contribution to the ground and surface water pollution associated with landfill sites

Indirect impacts: The loss of employment will have a negative impact to the socio-economic status of the area.

Cumulative impacts: The waste disposed at a landfill site will contribute to pollution of the ground and surface water resource.

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Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

Alternative A1	Alternative A2	Alternative A3
<p>Air Pollution</p> <ul style="list-style-type: none"> ▪ The installation of distiller scrubbers will reduce the concentration of emissions released to the atmosphere ▪ An emergency procedure should be compiled and implemented in case of failures in technology or operations to prevent the emissions of high concentration of pollutants into the atmosphere <p>Health and Safety</p> <ul style="list-style-type: none"> ▪ The site manager must implement the standards set out in the OHS Act (No. 85 of 1993). This act aims at protecting workers with regards to their activities at work. ▪ The site manager must ensure that emergency procedures applicable are set up prior to commencing work. Emergency procedures shall include, but are not limited to, fire, spills, contamination of the ground, accidents involving employees, use of hazardous substances, etc. ▪ Workers must be provided with appropriate Personal Protection Equipment (PPE). ▪ Proper signage must be strategically placed in the area of the construction site. ▪ Workers are not allowed to drink alcohol during working hours. ▪ The site manager must respect the workers' right to refuse to work in an unsafe and unhealthy environment. ▪ Provide first aid equipment and have a qualified first aid practitioner on site 	<p>Traffic and road safety</p> <ul style="list-style-type: none"> ▪ Vehicle drivers that will be transporting the hazardous materials should comply with Chapter 8 of the National Road Traffic Act and its regulations on Transportation of dangerous goods and substances. ▪ All accidents and incidents resulting in injury or death during operation are to be recorded by the Site manager and reported in accordance with the requirements of the Occupational Health and Safety Act 85 of 1993, and any other statutory requirements. <p>Air Pollution</p> <ul style="list-style-type: none"> ▪ The installation of distiller scrubbers will reduce the concentration of emissions released to the atmosphere ▪ An emergency procedure should be compiled and implemented in case of failures in technology or operations to prevent the emissions of high concentration of pollutants into the atmosphere <p>Soil Erosion</p> <ul style="list-style-type: none"> ▪ Measures should be implemented to distribute storm water discharge as evenly as possible to avoid point sources of erosion ▪ The stormwater channels on site must be upgraded and formalised <p>Soil and Water pollution</p> <ul style="list-style-type: none"> ▪ An emergency response and spillage kit must be in place and training should 	<p>Air Pollution</p> <ul style="list-style-type: none"> ▪ The installation of distiller scrubbers will reduce the concentration of emissions released to the atmosphere ▪ An emergency procedure should be compiled and implemented in case of failures in technology or operations to prevent the emissions of high concentration of pollutants into the atmosphere <p>Soil Erosion</p> <ul style="list-style-type: none"> ▪ Measures should be implemented to distribute storm water discharge as evenly as possible to avoid point sources of erosion ▪ The stormwater channels on site must be upgraded and formalised <p>Soil and Water pollution</p> <ul style="list-style-type: none"> ▪ An emergency response and spillage kit must be in place and training should be provided to all personnel in order to handle chemical spillages ▪ All spillages must be rectified immediately. This is necessary to prevent the spillage from spreading and to mitigate the impact of the spillage on the environment. ▪ Proper stormwater control should be implemented on all areas on site. ▪ Dirty areas should be separated from clean areas and the stormwater arising from these areas should be handled separately ▪ Inspect storage containers and transport vehicles regularly for leaks. ▪ All hazardous waste produced during

BASIC ASSESSMENT REPORT

<p>during operation.</p> <ul style="list-style-type: none"> ▪ All work to be carried out under strict supervision and according to best practices. ▪ All dangerous or no-go-areas on site should be clearly marked as such, including areas for storing dangerous materials. ▪ Keep record of injuries on site. <p>Soil and Water pollution</p> <ul style="list-style-type: none"> ▪ An emergency response and spillage kit must be in place and training should be provided to all personnel in order to handle chemical spillages ▪ All spillages must be rectified immediately. This is necessary to prevent the spillage from spreading and to mitigate the impact of the spillage on the environment. ▪ Proper stormwater control should be implemented on all areas on site. ▪ Dirty areas should be separated from clean areas and the stormwater arising from these areas should be handled separately ▪ Inspect storage containers and transport vehicles regularly for leaks. ▪ All hazardous waste produced during processing activities should be disposed of at a registered hazardous landfill site. ▪ All containers for chemicals that will be used in the proposed processing activity should be placed on an impermeable surface within a bund wall. <p>Soil Erosion</p> <ul style="list-style-type: none"> ▪ Measures should be implemented to distribute storm water discharge as evenly as possible to 	<p>be provided to all personnel in order to handle chemical spillages</p> <ul style="list-style-type: none"> ▪ All spillages must be rectified immediately. This is necessary to prevent the spillage from spreading and to mitigate the impact of the spillage on the environment. ▪ Proper stormwater control should be implemented on all areas on site. ▪ Dirty areas should be separated from clean areas and the stormwater arising from these areas should be handled separately ▪ Inspect storage containers and transport vehicles regularly for leaks. ▪ All hazardous waste produced during processing activities should be disposed of at a registered hazardous landfill site. ▪ All containers for chemicals that will be used in the proposed processing activity should be placed on an impermeable surface within a bund wall <p>Storage Facilities</p> <ul style="list-style-type: none"> ▪ The storage area should be the minimum size reasonably required and cause the least disturbance to the surroundings. ▪ The area should be securely fenced. ▪ Construct walls and floors of the storage areas with impervious material. ▪ The area should be bunded with bund walls to accommodate 110% of the storage capacity of the storage tanks ▪ Suitably covered receptacles must be available at all times and should be placed conveniently for the disposal of waste. ▪ Proper storm water 	<p>processing activities should be disposed of at a registered hazardous landfill site.</p> <ul style="list-style-type: none"> ▪ All containers for chemicals that will be used in the proposed processing activity should be placed on an impermeable surface within a bund wall <p>Storage Facilities</p> <ul style="list-style-type: none"> ▪ The storage area should be the minimum size reasonably required and cause the least disturbance to the surroundings. ▪ The area should be securely fenced. ▪ Construct walls and floors of the storage areas with impervious material. ▪ The area should be bunded with bund walls to accommodate 110% of the storage capacity of the storage tanks ▪ Suitably covered receptacles must be available at all times and should be placed conveniently for the disposal of waste. ▪ Proper storm water management measures should be implemented <p>Waste Storage</p> <ul style="list-style-type: none"> ▪ The bi-products that will be produced during the proposed activities must be stored in a closed container in a bunded area with a concrete floor prior to collection and disposal by the original waste generator <p>Fire Hazard</p> <ul style="list-style-type: none"> ▪ Hold fire prevention talks and reminders regularly with the staff on fire prevention. ▪ Ensure adequate fire fighting equipment on site and in all major working
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<p>avoid point sources of erosion</p> <ul style="list-style-type: none"> ▪ The stormwater channels on site must be upgraded and formalised <p>Storage Facilities</p> <ul style="list-style-type: none"> ▪ The storage area should be the minimum size reasonably required and cause the least disturbance to the surroundings. ▪ The area should be securely fenced. ▪ Construct walls and floors of the storage areas with impervious material. ▪ The area should be bunded with bund walls to accommodate 110% of the storage capacity of the storage tanks ▪ Suitably covered receptacles must be available at all times and should be placed conveniently for the disposal of waste. ▪ Proper storm water management measures should be implemented <p>Waste Storage</p> <ul style="list-style-type: none"> ▪ The bi-products that will be produced during the proposed activities must be stored in a closed container in a bunded area with a concrete floor prior to collection and disposal by the original waste generator ▪ Quantities of waste entering the site for processing until it leaves the site as recovered product and bi-product should be recorded. These records should be safely kept and produced when required by the authorities. ▪ The site manager has to submit a method statement for the storage 	<p>management measures should be implemented</p> <p>Fire Hazard</p> <ul style="list-style-type: none"> ▪ Hold fire prevention talks and reminders regularly with the staff on fire prevention. ▪ Ensure adequate fire fighting equipment on site and in all major working areas and train workers on how to use it. ▪ Ensure that all workers on site know the proper procedure in case of a fire incidence on site. ▪ Smoking must not be permitted in those areas considered a fire hazard. ▪ Smoking should only be allowed in designated areas. ▪ “No-smoke” signs must be placed at areas with high fire risk. <p>Waste Storage</p> <ul style="list-style-type: none"> ▪ The bi-products that will be produced during the proposed activities must be stored in a closed container in a bunded area with a concrete floor prior to collection and disposal by the original waste generator ▪ Quantities of waste entering the site for processing until it leaves the site as recovered product and bi-product should be recorded. These records should be safely kept and produced when required by the authorities. <p>Health and Safety</p> <p>The site manager must implement the standards set out in the OHS Act</p> <ul style="list-style-type: none"> ▪ No. 85 of 1993). This act aims at protecting workers with regards to their 	<p>areas and train workers on how to use it.</p> <ul style="list-style-type: none"> ▪ Ensure that all workers on site know the proper procedure in case of a fire incidence on site. ▪ Smoking must not be permitted in those areas considered a fire hazard. ▪ Smoking should only be allowed in designated areas. ▪ “No-smoke” signs must be placed at areas with high fire risk. <p>Health and Safety</p> <ul style="list-style-type: none"> ▪ The site manager must implement the standards set out in the OHS Act (No. 85 of 1993). This act aims at protecting workers with regards to their activities at work. ▪ The site manager must ensure that emergency procedures applicable are set up prior to commencing work. Emergency procedures shall include, but are not limited to, fire, spills, contamination of the ground, accidents involving employees, use of hazardous substances, etc. ▪ Workers must be provided with appropriate Personal Protection Equipment (PPE). ▪ Proper signage must be strategically placed in the area of the construction site. ▪ Workers are not allowed to drink alcohol during working hours. ▪ The site manager must respect the workers’ right to refuse to work in an unsafe and unhealthy environment. ▪ Provide first aid equipment and have a qualified first aid practitioner on site during operation. ▪ All work to be carried out under strict supervision
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<p>of hazardous materials and the emergency procedures to be taken in case of an emergency.</p> <ul style="list-style-type: none"> ▪ Material Safety Data Sheets (MSDSs) must be available on site for all chemicals and hazardous substances to be used on site, including information on their ecological impacts and how to minimise their impacts in case of leakage. <p>Fire Hazard</p> <ul style="list-style-type: none"> ▪ Hold fire prevention talks and reminders regularly with the staff on fire prevention. ▪ Ensure adequate fire fighting equipment on site and in all major working areas and train workers on how to use it. ▪ Ensure that all workers on site know the proper procedure in case of a fire incidence on site. ▪ Smoking must not be permitted in those areas considered a fire hazard. ▪ Smoking should only be allowed in designated areas. ▪ “No-smoke” signs must be placed at areas with high fire risk. <p>Traffic and road safety</p> <ul style="list-style-type: none"> ▪ Vehicle drivers that will be transporting the hazardous materials should comply with Chapter 8 of the National Road Traffic Act and its regulations on Transportation of dangerous goods and substances. ▪ All accidents and incidents resulting in injury or death during operation are to be recorded by the Site manager and reported in accordance with the requirements of 	<p>activities at work.</p> <ul style="list-style-type: none"> ▪ The site manager must ensure that emergency procedures applicable are set up prior to commencing work. Emergency procedures shall include, but are not limited to, fire, spills, contamination of the ground, accidents involving employees, use of hazardous substances, etc. ▪ Workers must be provided with appropriate Personal Protection Equipment (PPE). ▪ Proper signage must be strategically placed in the area of the construction site. ▪ Workers are not allowed to drink alcohol during working hours. ▪ The site manager must respect the workers’ right to refuse to work in an unsafe and unhealthy environment. ▪ Provide first aid equipment and have a qualified first aid practitioner on site during operation. ▪ All work to be carried out under strict supervision and according to best practices. ▪ All dangerous or no-go-areas on site should be clearly marked as such, including areas for storing dangerous materials. ▪ Keep record of injuries on site. 	<p>and according to best practices.</p> <ul style="list-style-type: none"> ▪ All dangerous or no-go-areas on site should be clearly marked as such, including areas for storing dangerous materials. ▪ Keep record of injuries on site. <p>Traffic and road safety</p> <ul style="list-style-type: none"> ▪ Vehicle drivers that will be transporting the hazardous materials should comply with Chapter 8 of the National Road Traffic Act and its regulations on Transportation of dangerous goods and substances. ▪ All accidents and incidents resulting in injury or death during operation are to be recorded by the Site manager and reported in accordance with the requirements of the Occupational Health and Safety Act 85 of 1993, and any other statutory requirements.
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the Occupational Health and Safety Act 85 of 1993, and any other statutory requirements.		
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5. IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE

List the potential site alternative related impacts (as appropriate) that are likely to occur as a result of the decommissioning or closure phase:

Alternative S1 (preferred alternative)

Due to the nature of activities that will be undertaken on this site, the closure of the site might require a separate environmental authorisation process which will be undertaken prior to closure.

Alternative S2

Direct impacts:

Indirect impacts:

Cumulative impacts:

Alternative S3

Direct impacts:

Indirect impacts:

Cumulative impacts:

No-go alternative (compulsory)

Direct impacts:

Indirect impacts:

Cumulative impacts:

Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

Alternative S1	Alternative S2	Alternative S3

List the potential activity/technology alternative related impacts (as appropriate) that are likely to occur as a result of the decommissioning and closure phase:

Alternative A1 (preferred alternative)

Direct impacts:

Indirect impacts:

Cumulative impacts:

Alternative A2

Direct impacts:

Indirect impacts:

Cumulative impacts:

Alternative A3

Direct impacts:

Indirect impacts:

Cumulative impacts:

No-go alternative (compulsory)

Direct impacts:

Indirect impacts:

Cumulative impacts:

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Indicate mitigation measures that may eliminate or reduce the potential impacts listed above:

Alternative A1	Alternative A2	Alternative A3

6. PROPOSED MANAGEMENT OF IMPACTS AND MITIGATION

Indicate how identified impacts and mitigation will be monitored and/or audited.

Alternative S1	Alternative S2	Alternative S3

Alternative A1	Alternative A2	Alternative A3

7. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that sums up the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative S1 (preferred alternative)

Due to fact that this is an existing facility and no additional structures will be constructed or erected on site; most of the impacts are related to the operational activities that will be undertaken on the site.
The Geology of the site increases the susceptibility of groundwater to pollution due to the shallow water table.

Alternative S2

Alternative S3

Alternative A1 (preferred alternative)

The main environmental impacts associated with the proposed activity are air pollution as well as water and soil pollution. The proposed mitigation measures include the use of scrubbers that will reduce the concentration of the emissions by 90 %, which is a considerable value. The emergency procedures in case of failures of the technology will be put in place to ensure that the atmospheric emissions are kept at minimum.

The proper management of stormwater around the storage area and the separation of clean and dirty areas will prevent the surface water contamination. The availability of emergency procedures for spillage cleanup and the storage of waste materials in concrete surfaces and bunded areas will prevent the pollution of the soil and groundwater.

Alternative A2

The impacts associated with alternative two are similar to those of alternative 1 the only difference is with the mitigation measures of air quality pollution. The knockout pots and air bag filters will be used for the reduction of emissions. This technology is less efficient than the scrubbers which reduces the concentration of pollutants by 90%,

Alternative A3

The impacts associated with alternative 3 are similar to those of alternative 1, however in this case it is proposed that the dangerous goods be stored offsite. The off site storage of dangerous goods will reduce the cost associated with upgrading the storage facilities to meet requires standards and the period of exposure of the employees to the materials to only during the usage of such materials. However, the probability of occurrence of accidents and spillages will be increased with the frequent transportation of dangerous goods that are required for processing and the applicant will not have control at the place where the material will be stored to ensure that all the mitigation measures are implemented.

No-go alternative (compulsory)

The No Go option will result in more waste being transported and disposed in the hazardous landfill sites increasing the demand of space for the establishment of landfill and increasing

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the environmental impacts that are associated with hazardous landfill sites.

Socio- Economic Impact

The business will be shut down since there is no market for the current trade which is the primary reason of introducing new activities that have a market demand. This will result to the retrenchment of employees adding to the current unemployment numbers.

8. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner).

YES	NO
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If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

If "YES", please list any recommended conditions, including mitigation measures, that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

It is recommended that the following be implemented during the operation of the proposed activity:

- Air quality monitoring;
- Proper Stormwater Management;
- Groundwater monitoring;
- Development of a waste management guideline ; and
- Strict adherence to Health and Safety policies

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Information in support of applications for exemption

Appendix G: Other information