



**BASIC ASSESSMENT FOR THE PROPOSED DEVELOPMENT
OF POLOKWANE WASTE TYRE PRE-PROCESSING DEPOT
LOCATED IN POLOKWANE LOCAL MUNICIPALITY WITHIN
LIMPOPO PROVINCE**

LEDET REF: 12/4/10/8/S24G-A/2/C1

DRAFT BASIC ASSESSMENT REPORT

Public Review Period:
17 February 2017 to 21 March 2017

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LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

BASIC ASSESSMENT REPORT - EIA REGULATIONS, 2014

Basic Assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

File Reference Number:

NEAS Reference Number:

Date Received:

Due date for acknowledgement:

Due date for acceptance:

Due date for decision

Kindly note that:

(For official use only)

1. The report must be compiled by an independent Environmental Assessment Practitioner.
2. The report must be typed within the spaces provided in the form. The size of the spaces provided is 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 in the report.
4. 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 Department of Economic Development, Environment and Tourism as the competent authority (Department) for assessing the application, it may result in the rejection of the application as provided for in the regulations.
5. An incomplete report may be returned to the applicant for revision.
6. Unless protected by law, all information in the report will become public information on receipt by the department. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.

7. The Act means the National Environmental Management Act (No. 107 of 1998) as amended.
8. Regulations refer to Environmental Impact Assessment (EIA) Regulations of 2014.
9. The Department may require that for specified types of activities in defined situations only parts of this report need to be completed. No faxed or e-mailed reports will be accepted.
10. This application form must be handed in at the offices of the Department of Economic Development, Environment and Tourism:-

<u>Postal Address:</u> The Director Integrated Pollution and Waste Management P. O. Box 55464 POLOKWANE 0700	<u>Physical Address:</u> Office 9 Environmental Affairs Building Corner Suid and Dorp Streets POLOKWANE 0699
Queries should be directed to the Central Administration Office: Integrated Pollution Management:- For attention: Ms Lerato Maesela Tel: (015) 290 7129 / (015) 290 7098 Fax: (015) 295 4836 Email: MaeselaLB@ledet.gov.za / MaselelaT@ledet.gov.za	

View the Department's website at <http://www.ledet.gov.za/> for the latest version of the documents.

PROJECT DETAILS

- Title** : Environmental Basic Assessment Process
Basic Assessment for the Polokwane Waste Tyre Pre-Processing Depot located in Polokwane Local Municipality within Limpopo Province
- Report compiled by** : Company Name: Envirolution Consulting
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- Client** : Phasha Property Investments CC
- Report Status** : Draft Basic Assessment Report for public review

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APPENDIXES

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: Environmental Management Programme (EMPr)

Appendix F2: Emergency Preparedness Plan

Appendix G: Other information

- Appendix G1: Proof of site notice
- Appendix G2: Proof of Stakeholder Consultation
- Appendix G3: Proof of newspaper advertisements
- Appendix G4: Authority Consultation
- Appendix G5: Database
- Appendix G6: Comments from I&APs on the application (N/A)
- Appendix G7: Minutes of any Public/Stakeholder Meetings (N/A)

Appendix H: Supporting Documentation

- Appendix H1: Storm water Management Information
- Appendix H2: Eskom Agreement for Supply of Electricity to the Depot
- Appendix H3: EAP expertise & CVs

SECTION A: ACTIVITY INFORMATION

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

	NO
--	----

If YES, please complete the form entitled "Details of specialist and declaration of interest" or appointment of a specialist for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail¹:

Phasha Property Investments CC, a small, medium and micro enterprise (SMME) supported by the Recycling and Economic Development Initiative South Africa NPC (REDISA), is currently operating a Waste Tyre Pre-processing Depot on Farm Plot 10 in Geluk outside Polokwane (off R71 towards Tzaneen); S: 23° 54' 15.09" E: 29° 32' 2.42", Limpopo Province (refer to Figure 2). The activities being undertaken on site involve baling of tyres in a waste management facility that has a total operational area of ±10500m² (of which ±200m² is the baling area/ warehouse and ±10300m² is the storage area). The types of tyre waste being handled on site include the following:

- Passenger vehicle tyres
- Truck tyres
- Motorbike tyres and
- 4x4 vehicle tyres
- Light commercial vehicle tyres
- Off-The-Road tyres (OTR) with <35inch/89cm diameter.

The waste management activities on site commenced in and around December 2014. The operations is mechanized and involve the following process:

Storage

Receiving, offloading and sorting of waste tyres at the temporary storage area, according to tyre sizes. Waste tyres are offloaded manually/by use of support vehicles, e.g. forklift, depending on size of tyres; stacked and stored according to the requirements of the Waste Tyre Regulations, R. No. 149 of 13 February 2009. Once tyres have been stockpiled and stored on site, they subject to the following pre-processing activities:

Baling

The baling of waste tyres is through mechanised processes. The baling is designed for compaction of waste tyres. The machine is placed on a flat base on a 3m x 3m floor space, operating from a 415V 3-phase supply. The material is then deposited in the large capacity loading chamber and then compressed by the twin vertical rams. When enough material exists in the chamber to form a bale, the wire is then secured around the material and a bale

¹ Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description.

material is produced. Bales are then moved from the baling area using a forklift vehicle and baled tyres are temporarily stored in the storage area. The material on average is compressed to 1/5 (average) of its original volume.

Bales and Waste Tyres

The bales and other tyres are removed from site on a daily basis by approved transporters and delivered to approved processors for recycling purposes. Please refer to Figure 1 below for the process flow diagram.

Infrastructures available at the depot include an administration building with a staff change room, ablution facilities area and a shaded area for baling activities. The depot is operated by Dinotshi Waste Into Worth Projects Pty and employs 9 permanent staff members.

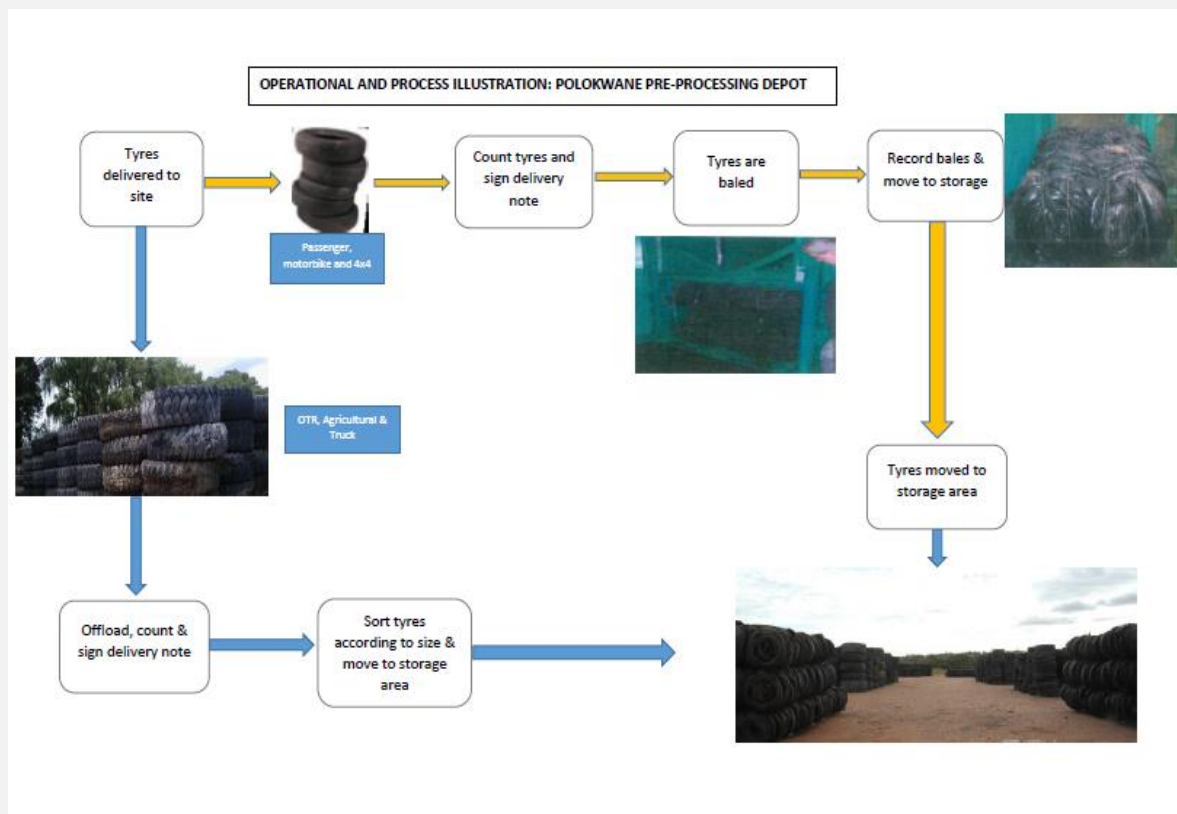


Figure 1: Operational and Process Flow Diagram

The National DEA undertook a Blitz in December 2015, and provided a pre-compliance notice which instructed Phasha Property Investments CC (and REDISA) to engage with the Limpopo Department of Economic Development, Environment and Tourism (LEDET) to determine the need for a Waste Management License (WML). The LEDET confirmed that Phasha Property Investments CC commenced with certain activities which at the time (i.e. December 2014) was (and still is) listed in terms of section 19, read with section 20, of the National Environmental Management: Waste Act, 2008 (Act No.36 of 2008) (NEM: WA) as activities that require a WML before they may lawfully be undertaken. In addition, the LEDET undertook a site visit on 8 February 2016. Please refer to Appendix G4 (Authority Consultation) for the formal letter from LEDET in this regard.

This rectification application concerns the following listed activities in terms of the NEM: WA:

Activity A (2): The sorting, shredding, grinding, crushing, screening or bailing of general waste at a facility that has an operational area in excess of 1000m².

The activities on site include the sorting of tyres and then bailing in a waste management facility that has a total operational area of approximately ±10500m².

Activity A (12): The construction of facility for a waste management activity listed in Category A of this Schedule (not is isolation to associated waste management activity).

A waste tyre pre-processing facility and its associated infrastructure has been constructed and is existing on site.

The application for rectification had been submitted to the LEDET in July 2016. The LEDET provided a letter of acknowledgement dated 13 July 2016, with a reference number **12/4/10/8/S24G-A/2/C1**. In September 2016, the LEDET issued Phasha Property Investments CC with an administrative fine of R125 000 which was thereafter reduced to R50 000 after consultation with the department, in order for the department to consider the application further. Following payment of the fine, the department instructed the applicant to proceed with the submission of the Basic Assessment Report (BAR) in terms of Regulation 19 of the Environmental Impact Assessment (EIA) Regulations, 2014 – which is the intended purpose of this report. Please refer to Appendix G (Authority Consultation) for the formal letter from LEDET, dated 11 November 2016.

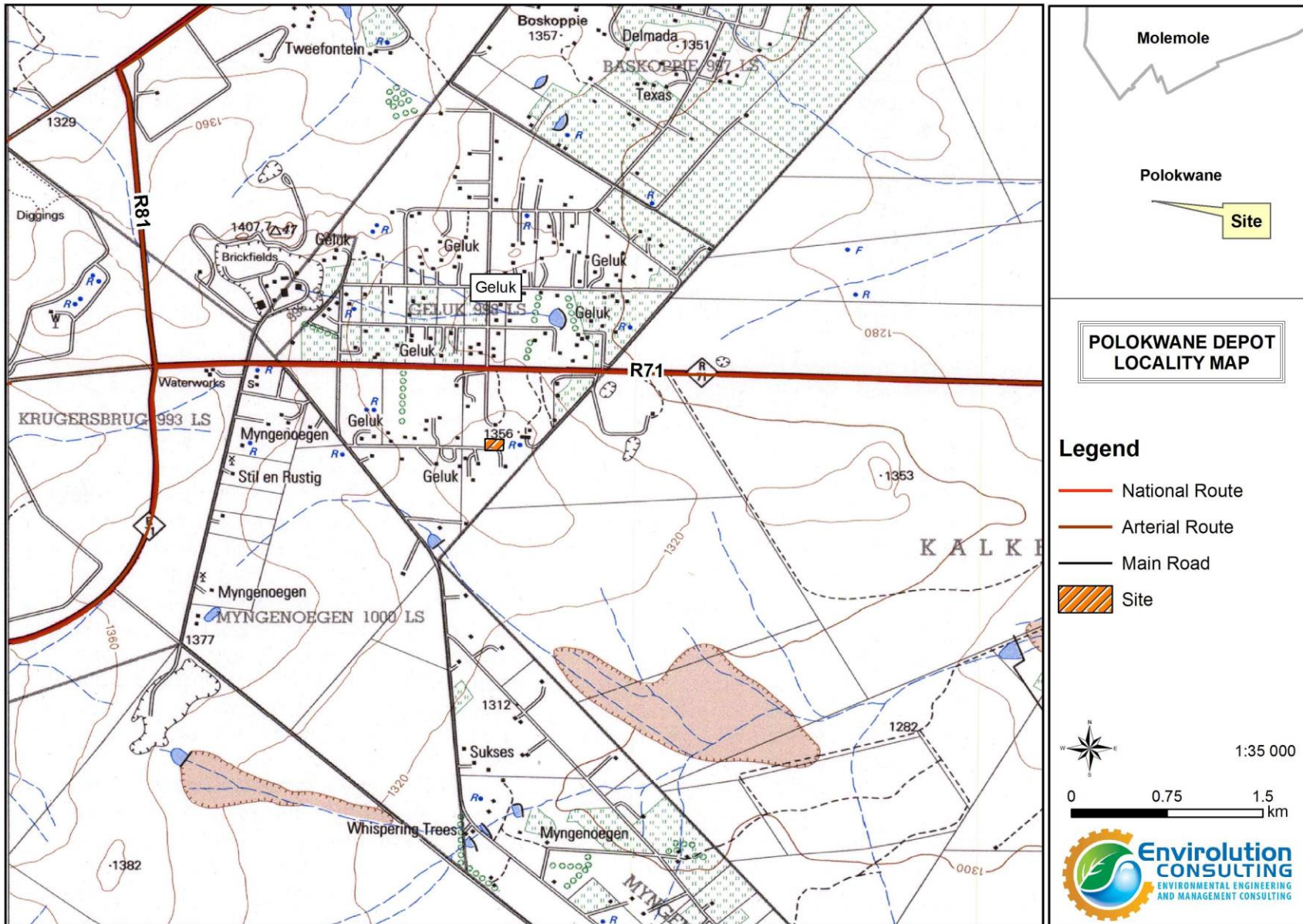


Figure 2: Locality Map showing the project study area.

2. FEASIBLE AND REASONABLE ALTERNATIVES

“alternatives”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- a) the property on which or location where it is proposed to undertake the activity;
- b) the type of activity to be undertaken;
- c) the design or layout of the activity;
- d) the technology to be used in the activity;
- e) the operational aspects of the activity; and
- f) the option of not implementing the activity.

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 Department 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.

Waste management activities commenced in December 2014, therefore this site is in its operational stage. The purpose of this application is to rectify the unlawful activities and obtain the required permits to continue operations. It is therefore in this light that alternatives are not considered nor assessed for this project.

Paragraphs 3 – 13 below should be completed for each alternative.

3. 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, minutes and seconds. The projection that must be used in all cases is the Hartebeeshoek 94 WGS84 spheroid in a national or local projection.

List alternative sites, if applicable.

Alternative:

Latitude (S):

Longitude (E):

Alternative S1² (preferred or only site alternative)

23°	54'	15.09"	29°	32'	2.42"

Alternative S2 (if any)

Alternative S3 (if any)

In the case of linear activities:

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"

Alternative S2 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"

Alternative S3 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"

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.

² "Alternative S." refer to site alternatives.

4. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:

Alternative A1³ (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:

±10500m ²

Length of the activity:

--

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:

±10500m ²

5. SITE ACCESS

Does ready access to the site exist?

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

Describe the type of access road planned:

YES	

No roads have been constructed. The site made use of existing local roads (i.e. the R71).

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

³ "Alternative A.." refer to activity, process, technology or other alternatives.

6. 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:

- 6.1 the scale of the plan which must be at least a scale of 1:500;
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- 6.5 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;
- 6.6 all trees and shrubs taller than 1.8 metres;
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres 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 Department of Water Affairs);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.10 for gentle slopes the 1 metre 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
- 6.11 the positions from where photographs of the site were taken.

Please refer to **Appendix A** for the locality map.

7. SITE PHOTOGRAPHS

Colour photographs from the centre 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 must be supplemented with additional photographs of relevant features on the site, if applicable.

Please refer to **Appendix B** for the site photographs.

8. 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.

Please refer to Appendix C for the facility sketch.

9 ACTIVITY MOTIVATION

9 (a) Socio-economic value of the activity

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

R 270 000

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

R151 2000

Will the activity contribute to service infrastructure?

NO

Is the activity a public amenity?

NO

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

n/a; depot is operational.

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

n/a; depot is operational.

What percentage of this will accrue to previously disadvantaged individuals?

n/a; depot is operational.

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

9

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

R 6 726 651

What percentage of this will accrue to previously disadvantaged individuals?

100%

9 (b) Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

NEED:		
i.	Was the relevant municipality involved in the application?	YES
ii.	Does the proposed land use fall within the municipal Integrated Development Plan?	YES
	The study area falls within the Polokwane Municipality Capricorn District Municipality. Waste Management among other municipal services is highlighted in the 2014/-2015 IDP as priority issues warranting attention. The project will not compromise the IDP objectives but would rather assist the municipality in achieving these targets as the facility will ensure on going waste management not only in the local area but the province as a whole. Additionally, the facility has created job opportunities not only to the	

	facility but also indirectly via waste collector, transporters and other service providers associated with the facility. Thus, increased employment and skills transfer is aligned with the municipal IDP.		
iii.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:		

DESIRABILITY:			
i.	Does the proposed land use / development fit the surrounding area?		NO
ii.	Does the proposed land use / development conform to the relevant structure plans, Spatial development Framework, Land Use Management Scheme, and planning visions for the area?		NO
iii.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	
iv.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation: The site is zoned agriculture and rezoning or consent use approval will be required to be obtained by the applicant from the relevant authority.		
v.	Will the proposed land use / development impact on the sense of place?		NO
vi.	Will the proposed land use / development set a precedent?		NO
vii.	Will any person's rights be affected by the proposed land use / development?		NO
viii.	Will the proposed land use / development compromise the "urban edge"?		NO
ix.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		

BENEFITS:			
i.	Will the land use / development have any benefits for society in general?	YES	
ii.	Explain: The waste management facility creates the following benefits for society: <ul style="list-style-type: none"> • Job creation – 9 jobs have been created at the Polokwane Depot • Upskilling SMMEs who would not get such an opportunity – Phasha has received and will be receiving training from REDISA on an ongoing basis, thereby empowering Phasha to continue with business and grow within the industry. • Supporting transporters and collectors – 5 transporters who have also created job opportunities for labourers and drivers (app. 19) and collectors have an income as they service the Polokwane depot and the Limpopo Province as a whole. In Limpopo, there are 100 dealerships registered through REDISA, who are serviced and the tyres are taken to the Polokwane depot (as well as the Nelspruit depot which became operational end Nov 2016). • Redirecting waste tyres from landfill therefore creating more landfill space – since the depot started up to December 2016, 7079 tonnes of waste tyres have been redirected from landfill. • Avoidance of waste tyres from being burnt which creates air pollution that affects human health. • Aiding in supporting smaller SMMEs who use waste tyres to create products, as well as processors who use waste tyres in their processing plants. 		

	<p>As noted above, the depot, just like all other depots, supports and promotes tyre recycling, providing the collection and depot infrastructure needed to collect waste tyres from across the country and deliver them to approved recyclers. The existing Polokwane depot therefore assist the province to reduce the waste that is disposed to licensed waste disposal sites, that take up landfill air space (which is already a problem in the province). The existing depot will aid the Capricorn District Municipality in achieving its goals in terms of integrated waste management and create a clean environment for its communities. Following the aforementioned benefits, this means, there is a definite need for the existing depot to continue with operations to communities within the municipality and the province as a whole.</p>		
<p>iii.</p>	<table border="1"> <tr> <td data-bbox="215 569 1271 653"> <p>Will the land use / development have any benefits for the local communities where it will be located?</p> </td> <td data-bbox="1271 569 1459 653"> <p>YES</p> </td> </tr> </table>	<p>Will the land use / development have any benefits for the local communities where it will be located?</p>	<p>YES</p>
<p>Will the land use / development have any benefits for the local communities where it will be located?</p>	<p>YES</p>		
<p>iv.</p>	<p>Explain:</p> <p>Waste tyres are increasingly used in communities for illegal heating purposes and also illegal recycling to obtain steel. This, in most cases result in harmful impacts such as health hazards and safety risks as waste tyres can create a fire hazard (once a stockpile catches alight it is almost impossible to extinguish it and depending on its size, a stockpile of tyres can burn for days or several weeks, releasing vast amounts of toxins into the air.), as well as a breeding site for mosquitoes and vermin, leading to the spread of disease. When burnt for their meagre scrap metal content, it can create air pollution both from the black smoke and toxic fumes that are emitted, particularly harmful dioxins and carbon monoxide.</p> <p>The Depot promotes tyre recycling, providing the collection and depot infrastructure needed to collect waste tyres from across the province and deliver them to approved recyclers/pyrolysis plants. From being operational, up to December 2016, the existing depot diverted 7079 tonnes of waste tyres which would have otherwise ended up in landfills, or burnt, or illegally resold.</p> <p>In addition, the depot provides permanent employment to local people within a province with a high rate of unemployment. While on a national scale the number of job opportunities may seem insignificant, on a local scale this potentially provide job security (and the benefits thereof) not only for employed individuals but for 9 households. The existing depot irrefutably provides an economic stimulus to the local economy through the establishment of other small businesses (waste collectors and transporters), creating additional indirect jobs in both urban and rural areas. There are currently five transporters contracted to service the depot for the collection of tyres from 100 registered dealerships, these transporters have also created job opportunities for labourers and drivers (app. 19) from the previously disadvantaged communities, and more households are benefitting from this initiative.</p> <p>The depot will thus in the long run have an overall positive economic impact for the receiving area, together with the roll-out of similar waste tyre management facilities in other areas, the cumulative impact can be considered to be of high significance.</p>		

10 APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations:

Title of legislation, policy or guideline (Promulgation Date)	Applicable Requirements	Administering Authority	Description of compliance
National Environmental Management Act (Act No. 107 of 1998) (NEMA)	<ul style="list-style-type: none"> ▪ NEMA requires, inter alia, that: ▪ Developments must be socially, environmentally, and economically sustainable. ▪ Disturbance of ecosystems and loss of biological diversity are avoided, or, where they cannot be altogether avoided, are minimized and remedied. ▪ A risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions.” ▪ The EIA Regulations, 2014, have been promulgated in terms of Chapter 5. Listed activities which may not commence without an environmental authorisation are identified within these Regulations. ▪ In terms of S24(1) of NEMA, the potential impacts on the environment associated with these listed activities must be considered, investigated, assessed and reported on to the competent 	<ul style="list-style-type: none"> ▪ National DEA ▪ LEDET 	This Basic Assessment (BA) process (BAR and EMPr) is undertaken in accordance with the requirements of Government Notice R982 of December 2014, as required in terms of the NEM: Waste Act, 2008.

Title of legislation, policy or guideline (Promulgation Date)	Applicable Requirements	Administering Authority	Description of compliance
NEMA, 1998	<p>authority identified by NEMA with granting of the relevant environmental authorisation.</p> <ul style="list-style-type: none"> ▪ A project proponent is required to consider a project holistically and to consider the cumulative effect of potential impacts. ▪ In terms of the Duty of Care provision in S28(1) the project proponent must ensure that reasonable measures are taken throughout the life cycle of this project to ensure that any pollution or degradation of the environment associated with a project is avoided, stopped or minimised. 	<ul style="list-style-type: none"> ▪ National DEA ▪ LEDET 	<ul style="list-style-type: none"> ▪ While no permitting or licensing requirements arise directly, the holistic consideration of the potential impacts of the operational phase of the waste management facility has found application in the BA Process. ▪ The implementation of mitigation measures is included as part of the Operational EMPr and will continue to apply throughout the life cycle of the project.
National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEM: WA)	<ul style="list-style-type: none"> ▪ The Minister may by notice in the Gazette publish a list of waste management activities that have, or are likely to have, a detrimental effect on the environment. ▪ In terms of the regulations published in terms of this Act (GN921 of November 2013), a BA or EIA is required to be undertaken for identified listed activities. ▪ Any person who stores waste must at least take steps, unless otherwise provided by this Act, to ensure that <ul style="list-style-type: none"> a) The containers in which any waste is stored, are intact and not 	<ul style="list-style-type: none"> ▪ DEA (hazardous waste) ▪ LEDET (general waste) 	<ul style="list-style-type: none"> ▪ The BA process is being undertaken in accordance with the Listed Waste Management activities in Category A of GN921 in terms of the NEM: WA, 2008. ▪ Waste handling, storage and disposal during operation is required to be undertaken in accordance with the requirements of this Act, as detailed in the Operational EMPr, as well as in accordance with the relevant sections of the National Norms and Standards for the Storage of Waste, 2013.

Title of legislation, policy or guideline (Promulgation Date)	Applicable Requirements	Administering Authority	Description of compliance
	<p>corroded or in any other way rendered unfit for the safe storage of waste;</p> <p>b) Adequate measures are taken to prevent accidental spillage or leaking;</p> <p>c) The waste cannot be blown away;</p> <p>d) Nuisances such as odor, visual impacts and breeding of vectors do not arise; and</p> <p>e) Pollution of the environment and harm to health are prevented.</p>		
National Norms and standards for the Storage of Waste (2013)	The Norms and Standards specify requirements for storage of waste (specifically section 16).	<ul style="list-style-type: none"> ▪ DEA ▪ LEDET 	The Operational EMPr has been drafted taking into consideration the requirements of the National Norms and Standards, 2013.
National Environmental Management: Air Quality Act (Act No. 39 of 2004) (NEM: AQ)	<ul style="list-style-type: none"> ▪ S18, S19 and S20 of the Act allow certain areas to be declared and managed as “priority areas”. ▪ Declaration of controlled emitters (Part 3 of Act) and controlled fuels (Part 4 of Act) with relevant emission standards. ▪ The Act provides that an air quality officer may require any person to submit an atmospheric impact report if there is reasonable suspicion that the person has failed to comply with the Act. ▪ Dust control regulations promulgated in November 2013 	<ul style="list-style-type: none"> ▪ DEA ▪ LEDET ▪ Polokwane Local Municipality 	<ul style="list-style-type: none"> ▪ While no permitting or licensing requirements arise from this legislation for the depot, this Act will find application during the operational phase. ▪ The implementation of dust mitigation measures is included as part of the Operational EMPr and will continue to apply throughout the operation of the depot.

Title of legislation, policy or guideline (Promulgation Date)	Applicable Requirements	Administering Authority	Description of compliance
	may require the implementation of a dust management plan.		
Environmental Conservation Act (Act No. 73 of 1989); Waste Tyre Regulations, 2009 (WTRs)	The purpose of the WTRs is to regulate the management of waste tyres by providing for the regulatory mechanisms. Part 6: Regulation 16 of the WTRs specifies requirements for the storage of waste tyres.	<ul style="list-style-type: none"> ▪ DEA ▪ LEDET ▪ Polokwane Local Municipality 	The Depot is required to comply with the storage requirements as per Regulation 16 of the WTRs.
National Heritage Resources Act (Act No. 25 of 1999)	S38 states that Heritage Impact Assessments (HIAs) are required for certain kinds of development including <ul style="list-style-type: none"> ▪ Any development or other activity <i>which will change</i> the character of a site exceeding 5000 m² in extent 	<ul style="list-style-type: none"> ▪ South African Heritage Resources Agency (SAHRA) ▪ Limpopo Heritage Resources Agency (LIHRA) 	The development is pre-existing, with no other upgrades planned, and therefore the character of the site is not being changed. This BAR will be uploaded onto the SAHRIS website and sent to the LIHRA for comments. Comments received will be taken into consideration and included in the Final BAR submitted to the LEDET.
Hazardous Substances Act (Act No. 15 of 1973)	<ul style="list-style-type: none"> ▪ This Act regulates the control of substances that may cause injury, or ill health, or death due to their toxic, corrosive, irritant, strongly sensitizing, or inflammable nature or the generation of pressure thereby in certain instances and for the control of certain electronic products. To provide for the rating of such substances or products in relation to the degree of danger; to provide for the prohibition and control of the importation, manufacture, sale, use, operation, modification, disposal or dumping of such substances and products. 	<ul style="list-style-type: none"> ▪ DEA (Hazardous Waste) ▪ LEDET 	This act will find application in the proper storage of hydrocarbons on site e.g. diesel, if any.

Title of legislation, policy or guideline (Promulgation Date)	Applicable Requirements	Administering Authority	Description of compliance
	<ul style="list-style-type: none"> ▪ It is necessary to identify and list all the Group I, II, III, and IV hazardous substances that may be on the site and in what operational context they are used, stored or handled. 		
Promotion of Access to Information Act, 2000 (Act No 2 of 2000)	Legislation that allows the public access to information about activities that influence their well-being and to make contributions to decision making.	<ul style="list-style-type: none"> ▪ DEA ▪ LEDET 	No permitting is required the act finds applicability during the public participation process phase of the BA process.
Occupational Health and Safety Act (Act No. 85 of 1993) (OHS)	The OHS Act provides for the health and safety of persons at work and for the health and safety of persons indirectly associated with the daily operation of the depot; the protection of persons other than persons at work, against hazards to health and safety arising out of or in connection with the activities of persons at work.	<ul style="list-style-type: none"> ▪ Department of Labour (DoL) 	While no permitting or licensing requirements arise from this legislation, this Act will find application during the construction phase of the project. H&S precautions measures must be put in place for the construction crew and the general public (e.g. protection of workers on site through provision of Personal Protective Equipment (PPE) and appropriate training.
Conservation of Agricultural Resources Act (Act No 43 of 1983) (CARA)	Regulation 15 of GNR 1048 provides for the declaration of weeds and invader plants, and these are set out in Table 3 of GNR 1048.	<ul style="list-style-type: none"> ▪ Department of Agriculture, Forestry and Fisheries (DAFF) 	Alien plant species proliferate in disturbed area. The Operational EMPr has provided mitigation measures for management of invasive plant species that may establish on site during the operational phase.
National Environmental Management: Biodiversity Act (Act 10 of 2004) (NEM: BA)	The NEM: BA provides management and conservation of South Africa's biodiversity, the protection of species and ecosystems that warrants national protection and the sustainable use of indigenous biological resources. GNR 985; the alien and invasive species (AIS) regulations provides for	<ul style="list-style-type: none"> ▪ DEA 	This act will find application throughout the life cycle of the project. In this regard soil erosion prevention and soil conservation strategies must be developed and implemented. In addition, a weed control and management measures provided in this Operational EMPr must be implemented.

Title of legislation, policy or guideline (Promulgation Date)	Applicable Requirements	Administering Authority	Description of compliance
	declaration of weeds and invader plants.		
National Waste Management Strategy of the NEM: WA, 2008 (NWMS)	<p>The NWMS presents Government's strategy for integrated waste management in South Africa. Waste avoidance is the primary focus of the NWMS, and as such must be the priority of any municipal Integrated Waste Management Plan (IWMP).</p> <p>Waste avoidance is defined as the action that avoids the entry of material into the waste stream that is when the generator of the potential waste material exercises the decision to do something else with that material rather than to put it out for waste collection. Waste reduction can also be achieved through the recovery and/or recycling of waste after collection.</p>	<ul style="list-style-type: none"> ▪ DEA 	<p>The depot will support and promote waste tyre recycling, providing the collection and depot infrastructure required to collect waste tyres across the province and deliver them to approved recyclers - in turn reducing waste tyres from the environment.</p>
Capricorn District Development Plan (IDP) 2016/2017-2020/2021:	<p>The Capricorn District IDP identifies (i) illegal dumping and littering and (ii) lack of infrastructure and resources for waste management throughout the district as two challenges faced.</p>	<ul style="list-style-type: none"> ▪ Capricorn District Municipality 	<p>The Polokwane Depot can be seen as a solution to the two challenges as it provides infrastructure and resources for waste tyre management and aids in the prevention of illegal dumping of waste tyres. This will assist the municipality to meet its objectives for waste management.</p>

11 WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11 (a) Solid waste management

Will the activity produce solid construction waste during the construction/ initiation phase?		NO
If yes, what estimated quantity will be produced per month?		
How will the construction solid waste be disposed of (describe)?	Not applicable – depot is operational.	
Where will the construction solid waste be disposed of (describe)?	Not applicable.	
Will the activity produce solid waste during its operational phase?	YES	
If yes, what estimated quantity will be produced per month?	The exact amount is unknown. It is anticipated that only minimal volumes of domestic waste will be generated during operation.	
How will the solid waste be disposed of (describe)?	All waste generated from the facility is fed into the municipal system (registered landfill). No waste is generated from the baling of the tyres; all tyres received at the depot are taken offsite to recycling facilities for further processing.	
Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?	Not applicable – all solid waste is fed into the municipal system.	
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, then the applicant should consult with the department 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?		NO
If yes, inform the department 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	
If yes, then the applicant should consult with the Department to determine whether it is necessary to change to an application for scoping and EIA.		
This application serves to comply with the waste management regulations stemming from the NEM: WA, 2008. The construction and operation of the depot triggered Category A waste management activities under Government Notice 921. The activity being applied for is a solid waste handling activity, and the facility will be used for storage and pre-processing of waste. These activities trigger a BA process due to their nature and magnitude and a WML is required to for the depot to continue being operational – this was confirmed during a site visit with the officials from the competent authority (LEDET).		

11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

	NO
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If yes, what estimated quantity will be produced per month?

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Will the activity produce any effluent that will be treated and/or disposed of on site?

	NO
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If yes, the applicant should consult with the Department 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?

	NO
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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:

Not applicable.

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

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

	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:

Even though the operational activities release emissions into the atmosphere, this depot is a waste tyre storage and pre-processing facility and will not release any toxic pollutants to the environment. As such, the applicant does not require an Air Emissions License (AEL) nor do they need to consult with the competent authority to determine the necessity to change this application into a Scoping and EIA. Negligible emissions are expected from machinery (fork lift, tyre delivery trucks) and dust generated during operation (trucks delivering waste tyres), which are limited only to working hours (i.e. 7:30am- 4:30pm).

11(d) Generation of noise

Will the activity generate noise?

	NO
--	----

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

	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:

The operational activities produce noise associated with a “place of work”. The noise stems from traffic from vehicles coming on and off site, as well as the machinery when it is in use. The noise levels however have a negligible impact on the surrounding receptors, especially since the noise levels are restricted to the operating hours (i.e. between 7:30am and 4:30pm). As such, there will be no need for a scoping and EIA.

12 WATER USE

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

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:

N/A

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

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

13 ENERGY EFFICIENCY

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

Depot operations take place during daylight hours (i.e. between 7:30am and 4:30pm) reducing the need for lighting. Where lighting is required, energy efficient lighting is used as far as practical. In addition, the premise comes with an electrical connection of 60 Amps 3-phase power which is sufficient supply for the efficient functioning of the pre-processing machinery (i.e. baling machines) and the depot as a whole.

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

Not applicable.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section 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):

2. Paragraphs 1 - 6 below must be completed for each alternative.

3. Has a specialist been consulted to assist with the completion of this section? **NO**

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed. All specialist reports must be contained in Appendix D.

There are no sensitive environments on site to warrant the need of any specialist studies, the site is transformed by previous anthropogenic activities (agriculture) and current activities (waste management facility).

Property description/physical address:

Farm Plot 10 in Geluk outside Polokwane (off R71 towards Tzaneen); S: 23° 54' 15.09" E: 29° 32' 2.42",

(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Current land-use zoning:

The site is zoned agriculture and rezoning or consent use approval will be required to be obtained by the applicant from the relevant authority.

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to this application.

Is a change of land-use or a consent use application required? **Yes**

It has been established that the Municipality will exempt any activities such as the proposed that operate along the road verges to operate without change in land use.

Must a building plan be submitted to the local authority?

NO

It is assumed that since the depot is not a new development, building plans for the warehouse/shed would have been previously submitted to the relevant authority for approval prior to the landowner undertaking construction, and thus no further interventions from the applicant are required with regards to building plans or approval as the applicant is leasing the property. It is recommended that the LEDET provide any additional comments should the above not suffice.

Locality map: An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.) The map must indicate the following:

- an indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection).

Refer to **Appendix A** for the Locality Map.

1 GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat

Alternative S2 (if any):

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 (if any):

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:

- | | | | |
|---------------------------------|--|----------------------------------|--|
| 2.1 Ridgeline | | 2.6 Plain | |
| 2.2 Plateau | | 2.7 Undulating plain / low hills | |
| 2.3 Side slope of hill/mountain | | 2.8 Dune | |
| 2.4 Closed valley | | 2.9 Seafront | |
| 2.5 Open valley | | | |

X

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

4 GROUNDCOVER

Indicate the types of groundcover present on the site:

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

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.

According to the Vegetation Map the site falls within the Polokwane Plateau Bushveld. This vegetation type can be described as, false grassland to open savanna characterized by open clumps of woody vegetation with *Acacia tortilis subsp. Heteracantha* and *Acacia rehmanniana* as the dominant tree element and *Themeda triandra* dominating the grass layer (Acocks 1953; Low and Rebelo 1996; Mucina & Rutherford 2006).

NB: This site is completely transformed with the existing waste management facility on site and is void of vegetation which was cleared during site preparations.

5 LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

5.1 Natural area	X	5.22 School	
5.2 Low density residential		5.23 Tertiary education facility	
5.3 Medium density residential		5.24 Church	
5.4 High density residential		5.25 Old age home	
5.5 Medium industrial ^{AN}		5.26 Museum	
5.6 Office/consulting room		5.27 Historical building	
5.7 Military or police base/station/compound		5.28 Protected Area	
5.8 Spoil heap or slimes dam ^A		5.29 Sewage treatment plant ^A	
5.9 Light industrial		5.30 Train station or shunting yard ^N	

5.10 Heavy industrial ^{AN}		5.31 Railway line ^N	
5.11 Power station		5.32 Major road (4 lanes or more)	X
5.12 Sport facilities		5.33 Airport ^N	
5.13 Golf course		5.34 Harbour	
5.14 Polo fields		5.35 Quarry, sand or borrow pit	
5.15 Filling station ^H		5.36 Hospital/medical centre	
5.16 Landfill or waste treatment site		5.37 River, stream or wetland	
5.17 Plantation		5.38 Nature conservation area	
5.18 Agriculture	X	5.39 Mountain, koppie or ridge	
5.19 Archaeological site		5.40 Graveyard	
5.20 Quarry, sand or borrow pit		5.41 River, stream or wetland	
5.21 Dam or Reservoir		5.42 Other land uses (describe)	

If any of the boxes marked with an "N" are ticked, how will this impact / be impacted upon by the proposed activity?

[Redacted]

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity?

If YES, specify and explain:
If NO, specify:

[Redacted]

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:
If NO, specify:

[Redacted]

6 CULTURAL/HISTORICAL FEATURES

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?

NO

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

The development is pre-existing, with no other upgrades planned, and therefore the character of the site is not being changed. This BAR will be uploaded onto the SAHRIS website and sent to the LIHRA for comments. Comments received will be taken into consideration and included in the Final BAR submitted to the LEDET.

Will any building or structure older than 60 years be affected in any way?

NO

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

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 C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the department) at a place conspicuous to the public at the boundary or on the fence of—
 - (i) the site where the activity to which the application relates is or is to be undertaken; and
 - (ii) any alternative site mentioned in the application;
- (b) giving written notice to—
 - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
 - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
 - (v) the municipality which has jurisdiction in the area;
 - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
 - (vii) any other party as required by the department;
- (c) placing an advertisement in—
 - (i) one local newspaper; or
 - (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the department, in those instances where a person is desiring of but unable to participate in the process due to—
 - (i) illiteracy;
 - (ii) disability; or
 - (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—
 - (i) that the application has been submitted to the department in terms of these Regulations, as the case may be;
 - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;
 - (iii) the nature and location of the activity to which the application relates;
 - (iv) where further information on the application or activity can be obtained; and
 - (v) the manner in which and the person to whom representations in respect of the application may 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 department 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 these Regulations. Advertisements and notices must make provision for all alternatives.

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 department 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 these Regulations and be attached to this application. The comments and response report must be attached under **Appendix E**.

6. AUTHORITY PARTICIPATION

Please note that a complete list of all organs of state and or any other applicable authority with their contact details must be appended to the basic assessment report or scoping report, whichever is applicable.

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.

Name of Authority informed	Comments received (Yes or No)
<p>Polokwane Local Municipality Contact Person: Mr Phineas Tjikana Address: Civic Centre, Corner Landros Mare and Bodenstein Street, Polokwane P.O. Box 4100 Polokwane, 0700 (015) 290 2000 Email: PhineasT@polokwane.gov.za Fax: 015 2914297</p>	<p>No comments have been received on the Draft BAR yet. Once the PPP is complete, the EAP will ensure that all comments are captured and included in the Final BAR.</p>
<p>Polokwane Municipality Fire and Emergency Services Address: Vermiculite Street Laboria, Polokwane Contact details: Doctor Dorcus Shai Deputy Director Tel: (015) 290-2623 Fax: (086) 613-9750 Email: dorcuss@polokwane.org.za</p>	
<p>Local Ward Councillor Councillor – Mapula Salome Phoshoko Cell: 076 953 3013 Ward 6 – ANC Email address: mapulaphosh@gmail.com</p>	
<p>Provincial Authority: LEDET Contact Person: Ms. Lerato Maesela Department of Economic Development Environment & Tourism Directorate: Integrated Pollution & Waste Management Sub-directorate: General Waste Management Tel: 015 290 7098 / 7129 Fax: 015 295 4836 / 086 696 3430 Cell: 082 057 1818 Email: MaeselaLB@ledet.gov.za</p>	

7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that subregulation to the extent and in the manner as may be agreed to by the department.

Proof of any such agreement must be provided, where applicable.

Has any comment been received from stakeholders?

NO

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application)

No comments have been received on the Draft BAR yet. Once the PPP is complete, the EAP will ensure that all comments are captured and included in the Final BAR.

Throughout the BA process, public participation receives high priority. Public participation is one of the most important elements of the development process; therefore, interested and affected parties (I&APs), were identified as part of the Public Participation Process, including occupiers of the property, owners and occupiers of land adjacent to the site, municipal officials and relevant State Departments.

In order to canvass the issues and concerns of the broader public and to ensure that all I&APs are afforded the opportunity to comment on the development, the public participation was undertaken as follows:

- Identification of stakeholders, including occupiers of the property, owners and occupiers of land adjacent to the site, municipal officials and relevant State Departments as part of the Public Participation Process. All respondents have been placed on the project database. This database will be supplemented by I&APs that will contact the EAP directly, to be included on the database. The database will be updated on an on-going basis during the BA process and used throughout the process to inform the stakeholders of the project. This is attached within Appendix G5
- Placement of site notices, (size A2) advertising the BA process and displaying the contact details of the EAP were prepared and displayed on-site. Refer to Appendix G1
- Letters of notification, including a Comments and Registration Sheet, were prepared and emailed to Organs of state and stakeholders. Refer to Appendix G4
- Letters of notification were hand-delivered to adjacent landowners in close proximity of the boundary of the property (See Appendix G2b for the signed acknowledgements of receipt) and sent via email to I&APs, including Organs of State, on the project database (See Appendix G4 for the e-mail delivery reports)
- An advertisement was placed in two newspapers, viz.: the Capricorn Voice Newspaper (local) and The Citizen Newspaper (national) on 15 February 2017 to notify the public about the Basic Assessment process and availability of the Draft Basic Assessment Report (Draft BAR) for the 30-day public review period from [17th February, 2017] to [21 March, 2017] and provided an invitation for the public to register as I&APs on the project's database. Proof of the newspaper will be attached within **Appendix G3** of the FBAR

Public Participation post release of Draft BAR:

- All comments received during the 30-day public review period of the Draft BAR as well as responses provided will be captured and recorded within the Comments and Response Report in the Final Basic Assessment Report (Final BAR) that will be submitted to LEDET (to be attached as **Appendix E**).
- Once LEDET has made a decision on issuing of a Waste Management License: The registered I&APs, stakeholders and organs of state will be notified of the department's decision.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, 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 main issues raised by interested and affected parties.

No comments have been received on the Draft BAR yet. Once the PPP is complete, the EAP will ensure that all comments are captured and included in the Final BAR.

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 as Annexure E):

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

The following methodology and criteria was used in assessing impacts related to the development:

- **Nature:** A description of what causes the effect, what will be affected, and how it will be affected.
- **Extent:** Wherein it is indicated whether the impact will be local (limited to the immediate area or site of development), regional, national or international. A score of between 1 and 5 is assigned as appropriate.
 - » 1= Site specific
 - » 2= Local (site + immediate surrounds)
 - » 3= Regional
 - » 4= National
 - » 5= International
- **Duration:** Wherein it is indicated whether:
 - » The lifetime of the impact will be of a very short duration (0–1 years) – assigned a score of 1;
 - » The lifetime of the impact will be of a short duration (2-5 years) - assigned a score of 2;
 - » Medium-term (5–15 years) – assigned a score of 3;
 - » Long term (> 15 years) - assigned a score of 4; or;
 - » Permanent - assigned a score of 5.
- **Magnitude:** Quantified on a scale from 0-10, where a score is assigned:
 - » 0 is small and will have no effect on the environment;
 - » 2 is minor and will not result in an impact on processes;
 - » 4 is low and will cause a slight impact on processes;
 - » 6 is moderate and will result in processes continuing but in a modified way;
 - » 8 is high (processes are altered to the extent that they temporarily cease); and

» 10 is very high and results in complete destruction of patterns and permanent cessation of processes.

▪ **Probability:** Probability of occurrence, which describes the likelihood of the impact actually occurring. Probability is estimated on a scale, and a score assigned:

» Assigned a score of 1–5, where 1 is very improbable (probably will not happen);

» Assigned a score of 2 is improbable (some possibility, but low likelihood);

» Assigned a score of 3 is probable (distinct possibility);

» Assigned a score of 4 is highly probable (most likely); and

» Assigned a score of 5 is definite (impact will occur regardless of any prevention measures).

▪ **Significance**, which is determined through a synthesis of the characteristics described above (refer formula below) and can be assessed as low, medium or high.

» The status, which is described as positive, negative or neutral.

» The degree to which the impact can be reversed.

» The degree to which the impact may cause irreplaceable loss of resources.

» The degree to which the impact can be mitigated.

The significance is determined by combining the criteria in the following formula:

$$S = (E + D + M) P$$

Where:

» S = Significance weighting

» E = Extent

» D = Duration

» M = Magnitude

» P = Probability

The significance weightings for each potential impact are as follows:

» **< 30 points:** Low (i.e. where this impact would not have a direct influence on the decision to develop in the area),

» **30-60 points:** Medium (i.e. where the impact could influence the decision to develop in the area unless it is effectively mitigated),

» **>60 points:** High (i.e. where the impact must have an influence on the decision process to develop in the area).

List the potential direct, indirect and cumulative property/ activity/ design/ technology/ operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/ activity/ technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

Alternative A (preferred alternative): Mechanized Technology (downsizing the tyres using bailing machinery)

Table 1: Impacts associated with the operational phase

Potential impacts:	Proposed mitigation:	Risk of the impact and mitigation not being implemented
<p>1. IMPACT ON HERITAGE There are no important cultural heritage resources or graves near the study site. However, some of these heritage resources such as graves occur below ground and the potential of these being exhumed is negligible as no construction or excavations is envisaged as the waste management facility already exists. The heritage impact will therefore not be assessed further in this report.</p>		
Potential impacts:	Proposed mitigation:	Risk of the impact and mitigation not being implemented
<p>2. IMPACT ON BIODIVERSITY (Fauna) None occurs on site and therefore this impact will not be assessed further in this report.</p>		
Potential impacts:	Proposed mitigation:	Risk of the impact and mitigation not being implemented
<p>3. IMPACT ON BIODIVERSITY (Wetland) During the site visit, no watercourse was recorded on site or within 500 m from the edge of the development and therefore this impact will not be assessed further in this report.</p>		
<p>4. IMPACT ON BIODIVERSITY (Loss of indigenous vegetation outside of the waste management facility/ surrounding vegetation) According to the vegetation map shown in Figure 2, the site falls within the Polokwane Plateau Bushveld. This vegetation type can be described as, false grassland to open savannah characterized by open clumps of woody vegetation with <i>Acacia tortilis subsp. Heteracantha</i> and <i>Acacia rehmanniana</i> as the dominant tree element and <i>Themeda triandra</i> dominating the grass layer (Acocks 1953; Low and Rebelo 1996; Mucina & Rutherford 2006). This site cannot be a representative of the Polokwane Plateau Bushveld as the vegetation has been cleared from previous agriculture activities and also the existing waste management facility during site preparations. Nonetheless, there is some vegetation outside of the waste management facility, towards the north and north-west boundary which could be impacted upon if site activities are not managed within the demarcated site boundaries.</p>		

<p>Activities such as illegal dumping of waste in the immediate surroundings, accidental fires etc. could impact on the identified vegetation. The anticipated impact is assessed to be very <u>low without mitigation</u> and with mitigation it is assessed to be <u>near negligible</u>.</p>																							
Potential impacts:	Proposed mitigation	Risk of the impact and mitigation not being implemented																					
<p>Direct impacts: Loss of indigenous vegetation outside of the waste management facility/ surrounding vegetation</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #cccccc;">Description</th> <th style="background-color: #cccccc;">Without Mitigation</th> <th style="background-color: #cccccc;">With Mitigation</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Local (2)</td> <td>Local (2)</td> </tr> <tr> <td>Duration</td> <td>Medium-term (3)</td> <td>Short-term (1)</td> </tr> <tr> <td>Magnitude</td> <td>Minor (2)</td> <td>Small (0)</td> </tr> <tr> <td>Probability</td> <td>Improbable (2)</td> <td>Very Improbable (1)</td> </tr> <tr> <td>Significance</td> <td style="background-color: #c6e0b4;">Low (14)</td> <td style="background-color: #c6e0b4;">Low (3)</td> </tr> <tr> <td>Status (positive or negative)</td> <td>Negative</td> <td>Negative</td> </tr> </tbody> </table>	Description	Without Mitigation	With Mitigation	Extent	Local (2)	Local (2)	Duration	Medium-term (3)	Short-term (1)	Magnitude	Minor (2)	Small (0)	Probability	Improbable (2)	Very Improbable (1)	Significance	Low (14)	Low (3)	Status (positive or negative)	Negative	Negative	<ul style="list-style-type: none"> ▪ Operational activities must be limited to the site. ▪ Firebreaks must be maintained to avoid run-away fires from the depot to surrounding area. ▪ No dumping of waste into the adjacent areas identified. ▪ No release of pollutants/ effluent into adjacent areas that could destroy vegetation (i.e. certain chemicals can burn vegetation). ▪ Maintain storm water drainage to prevent run-off which could remove vegetation if flow of run-off is high. 	<p>Very low without mitigation and near negligible with mitigation.</p>
Description	Without Mitigation	With Mitigation																					
Extent	Local (2)	Local (2)																					
Duration	Medium-term (3)	Short-term (1)																					
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Significance	Low (14)	Low (3)																					
Status (positive or negative)	Negative	Negative																					
<p>Indirect impact: Increased erosion risk as a result of loss of vegetation that has been cleared on site.</p>	<ul style="list-style-type: none"> ▪ Maintain storm water drainage on an on-going basis. ▪ Site maintenance must ensure that all hard-packed areas on site remain in that state to minimize soil disturbance. 	<p>Very low without mitigation and near negligible with mitigation.</p>																					
<p>Cumulative impacts: If the suggested mitigation measures are not adhered to, there will be loss of and further fragmentation of nearby natural grassland and associated ecosystem.</p>	<p>Adhere to mitigation measures detailed above.</p>	<p>Near negligible with or without mitigation.</p>																					
<p>5. IMPACT ON BIODIVERSITY (Introduction and spread of exotic vegetation to the surrounding/ adjacent area</p> <p>Invasive species could colonise the disturbed soils onsite if left un managed and allowed to grow.</p>																							
Potential impacts:	Proposed mitigation:	Risk of the impact and mitigation not being implemented																					
<p>Direct impacts: Introduction and spread of exotic vegetation to the surrounding and adjacent area.</p>	<ul style="list-style-type: none"> ▪ Ensure that the site is cleared of vegetation on an on-going basis. 	<p>Low with or without mitigation.</p>																					

Description	Without Mitigation	With Mitigation		
Extent	Local (2)	Local (2)	<ul style="list-style-type: none"> Do not dump cleared vegetation into the surrounding/ adjacent areas. Alien and invasive species must be eradicated immediately and not be allowed to spread to adjacent natural vegetation. 	
Duration	Medium term (3)	Short-term (1)		
Magnitude	Minor (2)	Minor (2)		
Probability	Probable (3)	Improbable (2)		
Significance	Low (21)	Low (10)		
Status (positive or negative)	Negative	Negative		
<p>Indirect impact: Replacement of indigenous vegetation in the surrounding/ adjacent areas by the establishment of alien and invasive vegetation.</p>			<ul style="list-style-type: none"> Ensure that the site is cleared of vegetation on an on-going basis. Do not dump cleared vegetation into the surrounding/ adjacent areas. Alien and invasive species must be eradicated immediately and not be allowed to spread to adjacent natural vegetation. 	Low with or without mitigation.
<p>Cumulative impacts: If the suggested mitigation measures are not adhered to, possible increase in and spread of alien invasive species beyond the site if mitigation measures are not implemented.</p>			<ul style="list-style-type: none"> Adhere to mitigation measures detailed above. 	Low with or without mitigation.
6. POTENTIAL FIRE IMPACTS				
<p>Whole tyres are flammable and when they are stored together in large volumes, they can create a fire hazard. This can significantly cause damage to property, cause air pollution that can impact on human health (from noxious smoke), create run-off of toxic oil, dangerous heavy metals and soot causing soil pollution/ contamination.</p>				
Potential impacts:			Proposed mitigation:	
Risk of the impact and mitigation not being implemented				
<p>Direct impact: Accidental fire incidents may occur due to the temporary storage of waste tyres on site.</p>			<ul style="list-style-type: none"> No fires permitted on site. A security attendant trained in fire prevention must be on site at all times, as per the requirements of the Waste Tyre Regulations, 2009. Ensure adequate firefighting equipment is available on site and serviced according to requirements. 	Medium without mitigation and low with mitigation.
Description	Without Mitigation	With Mitigation		
Extent	Local (2)	Local (2)		

Duration	Short-term (2)	Short-term (2)	<ul style="list-style-type: none"> ▪ Ensure that the waste management facility is in possession of a fire clearance certificate issued by the local municipal fire department. ▪ An Emergency Response Plan to be developed and implemented should emergency incidents occur. A copy of this should be kept on site and all depot personnel should be trained on the plan. ▪ Telephone numbers of emergency services, including the local firefighting service to be clearly displayed in the depot manager's office near a telephone. ▪ Notices are to be placed around the facility specifying 'NO SMOKING' within the bounds of the depot. ▪ Ensure that a minimum of two employees onsite are trained in fire-fighting. ▪ No single stockpile of waste tyre may exceed 3 meters in height, a length of 20 meters and a width of 10 meters. ▪ The edges of the stockpiles must be 8 meters from the perimeter fence, and any buildings, and the area between the stockpiles and fence and buildings must be clear of any debris and vegetation ▪ All interior firebreaks between piles of waste tyres must be at least 5 meters wide. ▪ The Depot Manager must ensure that all site personnel are aware of the fire risks and how to deal with any fires that occur. This shall include, but not be limited to: <ul style="list-style-type: none"> ○ Regular fire prevention talks during toolbox talks. ▪ In the event of a fire break out, the Depot Manager must be informed immediately, along with the REDISA Regional Manager and Environmental Compliance, and then ultimately the relevant authority notified in line with the notification stipulation for emergency incidents set out in Section 30 of the NEMA.
Magnitude	High (8)	Low (4)	
Probability	Probable (3)	improbable (2)	
Significance	Medium (36)	Low (16)	
Status (positive or negative)	Negative	Negative	
Indirect impact: None	-	-	
Cumulative impact: None	-	-	
7. POTENTIAL NOISE IMPACTS			

<p>The operations at the depot generates minimal noise during their continued operations; the only noise anticipated is normal traffic noise which will occur during operation hours (i.e. between 7:30am and 4:30pm) due to movement of delivery vehicles collecting and transporting waste tyres to and from site. The traffic noise from movement of haulage trucks is below 85 decibels and is negligible as the proposed development will be located in area far from any potentially noise sensitive receptors. Therefore, there is no risk of a noise disturbance that will be created by the development and the impact will not be assessed further.</p>																							
Potential impacts:	Proposed mitigation:	Risk of the impact and mitigation not being implemented																					
<p>Direct impacts: Noise pollution</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Description</th> <th style="text-align: center;">Without Mitigation</th> <th style="text-align: center;">With Mitigation</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Local (2)</td> <td>Site (1)</td> </tr> <tr> <td>Duration</td> <td>Very Short-term (1)</td> <td>Very Short-term (1)</td> </tr> <tr> <td>Magnitude</td> <td>Low (4)</td> <td>Small (2)</td> </tr> <tr> <td>Probability</td> <td>Highly Probable (4)</td> <td>Improbable (2)</td> </tr> <tr> <td>Significance</td> <td style="background-color: #d4edda;">Low (28)</td> <td style="background-color: #d4edda;">Low (8)</td> </tr> <tr> <td>Status (positive or negative)</td> <td>Negative</td> <td>Negative</td> </tr> </tbody> </table>	Description	Without Mitigation	With Mitigation	Extent	Local (2)	Site (1)	Duration	Very Short-term (1)	Very Short-term (1)	Magnitude	Low (4)	Small (2)	Probability	Highly Probable (4)	Improbable (2)	Significance	Low (28)	Low (8)	Status (positive or negative)	Negative	Negative	<ul style="list-style-type: none"> ▪ All vehicles must be road-worthy and drivers must be qualified and made aware of the potential road safety issues and need for strict speed limits. ▪ No unnecessary hooting ▪ Complaints register will be maintained, in which any complaints from the neighbouring landowners will be logged. Complaints will be investigated and, if appropriate, acted upon. 	<p>The risk is low with or without mitigation</p>
Description	Without Mitigation	With Mitigation																					
Extent	Local (2)	Site (1)																					
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Status (positive or negative)	Negative	Negative																					
Indirect impact: None	-	-																					
Cumulative impact: None	-	-																					
8. POTENTIAL SOIL AND GROUNDWATER CONTAMINATION IMPACTS																							
<p>Most of the site is bare ground and soil and groundwater pollution may occur due to:</p> <ul style="list-style-type: none"> ▪ Hydrocarbon leaks from site operation equipment e.g. (fork lift/Bobcat; bailer machine and from heavy duty vehicles that will assess site; ▪ Inappropriate handling and storage of hydrocarbons on site ▪ The waste storage facility may be an additional potential source of subsurface contamination. ▪ Accidental fires from the burning of tyres resulting in soil pollution 																							
Potential impacts:	Proposed mitigation:	Risk of the impact and mitigation not being implemented																					
Direct impacts: Most of the site is bare ground and soil	<ul style="list-style-type: none"> ▪ Transportation vehicles and operation machinery (e.g. 	Due to the nature and scale of																					

<p>and groundwater pollution may occur due to:</p> <ul style="list-style-type: none"> Hydrocarbon leaks from site operation equipment e.g. (fork lift/Bobcat) and from heavy duty vehicles that will assess site for the delivery and collection of waste tyres and bales; Inappropriate handling and storage of hydrocarbons on site Accidental fires from the burning of tyres resulting in soil pollution <table border="1" data-bbox="107 508 772 922"> <thead> <tr> <th>Description</th> <th>Without Mitigation</th> <th>With Mitigation</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Local (2)</td> <td>Site (1)</td> </tr> <tr> <td>Duration</td> <td>Medium-term (3)</td> <td>Medium-term (3)</td> </tr> <tr> <td>Magnitude</td> <td>Low (4)</td> <td>Minor (2)</td> </tr> <tr> <td>Probability</td> <td>Highly probable (5)</td> <td>Probable (3)</td> </tr> <tr> <td>Significance</td> <td>Medium (45)</td> <td>Low (18)</td> </tr> <tr> <td>Status (positive or negative)</td> <td>Negative</td> <td>Negative</td> </tr> </tbody> </table>	Description	Without Mitigation	With Mitigation	Extent	Local (2)	Site (1)	Duration	Medium-term (3)	Medium-term (3)	Magnitude	Low (4)	Minor (2)	Probability	Highly probable (5)	Probable (3)	Significance	Medium (45)	Low (18)	Status (positive or negative)	Negative	Negative	<p>forklift/Bobcat) are to be maintained in good working order, to avoid the probability of leakages of fuels and lubricants.</p> <ul style="list-style-type: none"> Any hazardous material must be stored in the necessary containers/bunded areas and in demarcated areas to prevent a spill or contamination of the site. Site maintenance must ensure that all hard-packed areas on site remain in that state. No washing of vehicles or equipment should be undertaken on site outside of a designated zone/ wash bay. All site personnel, contractors and visitors that access site must use provided toilets/ablution facilities. No ablution will be permitted outside the designated facilities. Spill kits must be available in the areas where chemicals are stored and used during operation and the operation crew must be trained in the procedure to clean up a spill as indicated by a manufacturer or supplier of the spill kit in line the appropriate material safety data sheet for the particular chemical. Remediation of spillages must be conducted within 24hours of spillage; 	<p>the development site, the risk will be low</p>
Description	Without Mitigation	With Mitigation																					
Extent	Local (2)	Site (1)																					
Duration	Medium-term (3)	Medium-term (3)																					
Magnitude	Low (4)	Minor (2)																					
Probability	Highly probable (5)	Probable (3)																					
Significance	Medium (45)	Low (18)																					
Status (positive or negative)	Negative	Negative																					
<p>Indirect impact: None</p>	<p>-</p>	<p>-</p>																					
<p>Cumulative impact: Overall loss of agricultural land in the region however the significance is low due to the limited agricultural potential of the sites in the area.</p>	<p>-</p>	<p>-</p>																					

9. POTENTIAL STORM WATER IMPACTS

An assessment of the site carried out by an engineer from Ground truth, on 23 June 2016 reported that the site was generally well drained with surface runoff discharging into adjacent veld areas in a diffuse manner. Based on the findings of the site visit and subsequent desktop analyses of the site, as well as the absence of the local legislation, it is the opinion of the specialist that no additional storm water management measures are necessary on site.

However, it is worth noting that tyres are temporary stored on site and during the rainy season, uncompressed tyres tend to collect rain water in their cavities this may result in pooling of storm water in storage and operation areas. Contamination of storm water may occur, management of storm water on site during the rainy conditions will therefore, be required. The section below provides a guideline for the management of storm water on site.

Potential impacts:			Proposed mitigation:	Risk of the impact and mitigation not being implemented																					
<p>Direct impacts: Contamination of storm water</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Without Mitigation</th> <th>With Mitigation</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Local (2)</td> <td>Site (1)</td> </tr> <tr> <td>Duration</td> <td>Short-term (2)</td> <td>Very short-term (1)</td> </tr> <tr> <td>Magnitude</td> <td>Low (4)</td> <td>Minor (2)</td> </tr> <tr> <td>Probability</td> <td>Highly Probable (4)</td> <td>Improbable (2)</td> </tr> <tr> <td>Significance</td> <td>Low (32)</td> <td>Low (8)</td> </tr> <tr> <td>Status (positive or negative)</td> <td>Negative</td> <td>Negative</td> </tr> </tbody> </table>			Description	Without Mitigation	With Mitigation	Extent	Local (2)	Site (1)	Duration	Short-term (2)	Very short-term (1)	Magnitude	Low (4)	Minor (2)	Probability	Highly Probable (4)	Improbable (2)	Significance	Low (32)	Low (8)	Status (positive or negative)	Negative	Negative	<ul style="list-style-type: none"> ▪ Maintain storm water drainage on an on-going basis. ▪ Unprocessed waste tyres should be stored in a way that no water will collect in the cavities or tyres should be turned to drain out stored water. 	Low with or without mitigation.
Description	Without Mitigation	With Mitigation																							
Extent	Local (2)	Site (1)																							
Duration	Short-term (2)	Very short-term (1)																							
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Probability	Highly Probable (4)	Improbable (2)																							
Significance	Low (32)	Low (8)																							
Status (positive or negative)	Negative	Negative																							
<p>Indirect impacts: None</p>			N/A.																						
<p>Cumulative impact: None anticipated</p>																									
<p>10. POTENTIAL VISUAL IMPACTS FROM INAPPROPRIATE WASTE HANDLING AND MANAGEMENT, AND GENERAL/ DOMESTIC WASTE</p>																									
<p>The storage and handling of the waste tyres and domestic waste generated on site may potentially lead to visual nuisance/unsightliness, contamination e.g. soil pollution of the site due to inappropriate waste management practices This may lead to the depot becoming unsightly should the waste not be stored, managed and disposed of properly. Impacts are expected to be of low significance which, in most instances could be reduced to a lower impact through appropriate mitigation.</p>																									
Potential impacts:			Proposed mitigation:	Risk of the impact and mitigation not being implemented																					
<p>Direct impacts: Potential visual impact and soil pollution from inappropriate waste handling on site</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Without Mitigation</th> <th>With Mitigation</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Local (2)</td> <td>Site (1)</td> </tr> <tr> <td>Duration</td> <td>Medium-term</td> <td>Medium- term (3)</td> </tr> </tbody> </table>			Description	Without Mitigation	With Mitigation	Extent	Local (2)	Site (1)	Duration	Medium-term	Medium- term (3)	<ul style="list-style-type: none"> ▪ Ensure good housekeeping at all times. ▪ Waste bins must be readily available for litter disposal and general housekeeping. ▪ Bins to have secured lids to prevent waste from being blown into the surrounding area. ▪ All general/ domestic waste must be disposed of at the nearest licensed landfill or collected by the local 	Medium without mitigation, low with mitigation.												
Description	Without Mitigation	With Mitigation																							
Extent	Local (2)	Site (1)																							
Duration	Medium-term	Medium- term (3)																							

	(3)		
Magnitude	Low (4)	Minor (2)	
Probability	Highly probable (4)	Probable (3)	
Significance	Medium (36)	Low (18)	
Status (positive or negative)	Negative	Negative	
			<p>municipality.</p> <ul style="list-style-type: none"> ▪ General and hazardous waste must be stored in separate waste receptacles. ▪ The waste containers must be appropriate to the waste type contained therein and where necessary should be lined and covered. This will be managed through the site specific EMP and monitored by the Depot Manager. ▪ All hazardous material must be carefully stored and then disposed of (or collected by) offsite at a licensed hazardous landfill site ▪ Ensure that no litter, refuse, waste, generated on the premises be placed, dumped or deposited on adjacent or surrounding properties including road verges, roads or public places and open spaces ▪ Burning or burying of waste material will not be permitted on site. ▪ Documentation (waste manifest) must be maintained detailing the quantity, type of tyre waste brought to site for pre-processing and that taken offsite to recycling facilities. ▪ Waste tyre management records must be available for review at any time. ▪ A waste manifest must be maintained detailing the quantity, type of tyre waste brought to site for pre-processing and that taken offsite to recycling facilities. ▪ Waste generated on site must be recycled and re-used as far possible. ▪ Waste generation must be minimized by, for example, providing re-usable items and refillable containers (e.g. for drinking water). ▪ Waste generated by workers must be collected and disposed of when full at the nearest registered landfill. ▪ A stockpile of waste tyres must not exceed 3 meters in height, a length of 20 meters and a width of 10 meters.
Indirect impact: None		-	-
Cumulative impact: None		-	-

11. MANAGEMENT OF HAZARDOUS MATERIALS

Potential surface and subsurface pollution and pollution to storm water may occur from inappropriate management and storage of hazardous chemicals such hydrocarbon materials to be used on site (e.g. diesel to be used in operation machinery such as the Bob cats, bailer machine, and also potential hydrocarbon leaks from operation vehicles and haulage trucks etc.)

Potential impacts:			Proposed mitigation:	Risk of the impact and mitigation not being implemented																					
Direct Impacts: Surface and subsurface pollution <table border="1" data-bbox="107 477 751 857"> <thead> <tr> <th>Description</th> <th>Without Mitigation</th> <th>With Mitigation</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Local (2)</td> <td>Site (1)</td> </tr> <tr> <td>Duration</td> <td>Short-term (2)</td> <td>Very short-term (1)</td> </tr> <tr> <td>Magnitude</td> <td>Moderate (6)</td> <td>Low (4)</td> </tr> <tr> <td>Probability</td> <td>Highly Probable (4)</td> <td>Probable (3)</td> </tr> <tr> <td>Significance</td> <td>Medium (40)</td> <td>Low (24)</td> </tr> <tr> <td>Status (positive or negative)</td> <td>Negative</td> <td>Negative</td> </tr> </tbody> </table>			Description	Without Mitigation	With Mitigation	Extent	Local (2)	Site (1)	Duration	Short-term (2)	Very short-term (1)	Magnitude	Moderate (6)	Low (4)	Probability	Highly Probable (4)	Probable (3)	Significance	Medium (40)	Low (24)	Status (positive or negative)	Negative	Negative	<ul style="list-style-type: none"> ▪ If hazardous chemicals are stored at the depot, establish an appropriate Hazardous Store which is in accordance to the Hazardous Substance Amendment Act, No. 53 of 1992 this should include but not limited to: <ul style="list-style-type: none"> ○ Designated area; ○ All applicable safety signage; ○ Firefighting equipment; ○ Enclosed by an impermeable bund; (ideally with a sump and outlet pipe) ○ Protected from the weather elements, ○ Lockable; ○ Ventilated; and ○ Has adequate capacity to contain 110% of the largest container contents. An appropriate hydrocarbon spill kit must be available on site for the clean-up of spillages on site ▪ A spill kits must be clearly marked and visible when utilizing hazardous or dangerous materials to ensure all spills can be immediately cleaned. ▪ Remediation of spillages must be conducted within 24rs of spillage. ▪ Contaminated soil is considered to be hazardous waste and must be disposed of accordingly. 	Medium without mitigation and low with mitigation.
Description	Without Mitigation	With Mitigation																							
Extent	Local (2)	Site (1)																							
Duration	Short-term (2)	Very short-term (1)																							
Magnitude	Moderate (6)	Low (4)																							
Probability	Highly Probable (4)	Probable (3)																							
Significance	Medium (40)	Low (24)																							
Status (positive or negative)	Negative	Negative																							
Indirect impact: None			-	-																					
Cumulative impact: None anticipated			-	-																					

12. SOCIAL POSITIVE IMPACTS

The waste management facility has created approximately 9 permanent employment opportunities. Job opportunities are available to skilled personnel (e.g. management and supervisory), semi-skilled personnel (e.g. equipment operators), and low-skilled staff (e.g. security personnel, tyre handlers and cleaners). Positive direct social impacts are expected to be of low significance while the indirect impacts are expected to have a medium significance with or without

enhancement.				
Potential impacts:			Proposed mitigation:	Risk of the impact and mitigation not being implemented
Direct impacts:	Without Enhancement	With Enhancement	Enhancement: <ul style="list-style-type: none"> ▪ It is recommended that the depot manager adopt a local employment policy to maximize the opportunities made available to the local labor force. ▪ Where reasonable and practical the depot manager should appoint local service providers and implement a (local first) policy e.g. security company and transporters of waste tyres to and from site, site personnel 	The impact is positive and will be low with or without mitigation.
Extent	Local (2)	Local (2)		
Duration	Medium-term (3)	Medium-term (3)		
Magnitude	Small (0)	Minor (2)		
Probability	Probable (3)	Probable (3)		
Significance	Low (18)	Low (21)		
Status (positive or negative)	Positive	Positive		

<p>Indirect impact: Positive indirect social impacts associated with the operation phase of the Pre-processed Waste Tyre Depot include:</p> <ul style="list-style-type: none"> Economic multiplier effects from the use of local service providers and development of waste recycling-related businesses such as waste tyre pickers, pyrolysis facilities and waste transporters. This will also result in the creation of indirect job opportunities in the region. 	<p>Enhancement:</p> <ul style="list-style-type: none"> It is recommended that local service providers are used to maximize the opportunities made available to the local labor force. 	<p>is The impact is medium positive with or without enhancements</p>																					
<table border="1"> <thead> <tr> <th>Description</th> <th>Without Enhancement</th> <th>With Enhancement</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Local (3)</td> <td>Local-Regional (4)</td> </tr> <tr> <td>Duration</td> <td>Medium-term (3)</td> <td>Medium-term (3)</td> </tr> <tr> <td>Magnitude</td> <td>Moderate (6)</td> <td>Moderate (6)</td> </tr> <tr> <td>Probability</td> <td>Probable (3)</td> <td>Highly Probable (4)</td> </tr> <tr> <td>Significance</td> <td>Medium (36)</td> <td>Medium (52)</td> </tr> <tr> <td>Status (positive or negative)</td> <td>Positive</td> <td>Positive</td> </tr> </tbody> </table>			Description	Without Enhancement	With Enhancement	Extent	Local (3)	Local-Regional (4)	Duration	Medium-term (3)	Medium-term (3)	Magnitude	Moderate (6)	Moderate (6)	Probability	Probable (3)	Highly Probable (4)	Significance	Medium (36)	Medium (52)	Status (positive or negative)	Positive	Positive
Description	Without Enhancement	With Enhancement																					
Extent	Local (3)	Local-Regional (4)																					
Duration	Medium-term (3)	Medium-term (3)																					
Magnitude	Moderate (6)	Moderate (6)																					
Probability	Probable (3)	Highly Probable (4)																					
Significance	Medium (36)	Medium (52)																					
Status (positive or negative)	Positive	Positive																					
<p>Cumulative impact: economic boost</p>																							

13. AIR QUALITY IMPACTS

The site is levelled and compacted (bare ground) and movement of heavy duty vehicles and machinery on site generates dust. Limited gaseous or particulate emissions (e.g. exhaust emissions) are anticipated from operation equipment on-site and delivery vehicles that will access the site. The overall impact on the environment as a result of the operation is likely to be of low significance as the bailing process will not release emissions into the atmosphere and impacts associated with dust and vehicle exhaust emissions will be localised.

Potential impacts:	Proposed mitigation:	Risk of the impact and mitigation not being implemented									
<p>Direct impacts: Air pollution</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Without Mitigation</th> <th>With Mitigation</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Local (2)</td> <td>Local (2)</td> </tr> <tr> <td>Duration</td> <td>Medium-term (3)</td> <td>Medium-term (3)</td> </tr> </tbody> </table>	Description	Without Mitigation	With Mitigation	Extent	Local (2)	Local (2)	Duration	Medium-term (3)	Medium-term (3)	<ul style="list-style-type: none"> The depot manager must comply with WTRs, 2009 to maintain the storage site as being flattened and hard packed. An effective dust suppression/control management programme must be implemented to reduce dust in the operational phase. This is especially applicable during the dry and windy 	<p>Low with or without mitigation.</p>
Description	Without Mitigation	With Mitigation									
Extent	Local (2)	Local (2)									
Duration	Medium-term (3)	Medium-term (3)									

Magnitude	Minor (2)	Small (0)	occasions. ▪ The speed of heavy duty vehicles to be restricted to 25km/h within the depot set up area. ▪ Vehicles used during this phase must be regularly serviced and well-maintained as required																						
Probability	Highly Probable (4)	Probable (3))																							
Significance	Low (28)	Low (15)																							
Status (positive or negative)	Negative	Negative																							
Indirect impact: None			-	-																					
Cumulative impact: None																									
14. RECOVERY OF WASTE TYRES FROM THE ENVIRONMENT (POSITIVE IMPACTS)																									
The waste management facility currently ensures on going waste management from recovery and diverting tyres from landfill through recycling and the promotion of treatment and processing technologies in Limpopo Province. The redirect of waste tyres also reduces illegal activities such as resale of second hand tyres (which poses danger), burning of waste tyres for heating purposes and recovery of steel that result in health hazards, atmospheric pollution and soil pollution within the broader Limpopo Province. This promotes a clean and healthy natural environment as well as much needed airspace in provincial landfills that are fast filling up.																									
Potential impacts:			Proposed mitigation:	Risk of the impact and mitigation not being implemented																					
Direct impact: Improved waste management for the province and the region at large <table border="1"> <thead> <tr> <th>Description</th> <th>Without Enhancement</th> <th>With Enhancement</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Regional (3)</td> <td>Regional (3)</td> </tr> <tr> <td>Duration</td> <td>Medium-term (3)</td> <td>Medium-term (3)</td> </tr> <tr> <td>Magnitude</td> <td>High (8)</td> <td>Very High (10)</td> </tr> <tr> <td>Probability</td> <td>Definite (5)</td> <td>Definite (5)</td> </tr> <tr> <td>Significance</td> <td>High (70)</td> <td>High (80)</td> </tr> <tr> <td>Status (positive or negative)</td> <td>Positive</td> <td>Positive</td> </tr> </tbody> </table>			Description	Without Enhancement	With Enhancement	Extent	Regional (3)	Regional (3)	Duration	Medium-term (3)	Medium-term (3)	Magnitude	High (8)	Very High (10)	Probability	Definite (5)	Definite (5)	Significance	High (70)	High (80)	Status (positive or negative)	Positive	Positive	Enhancement: It is recommended that local the waste tyre facility be authorized to continue with operations as it recycles waste and reduce waste tyres that would end up at landfills or communities were the tyres are burnt for heating purposes or scrap metal recovery polluting the environmental and pose health hazards.	None, it is a medium positive without enhancements and high positive with enhancements.
Description	Without Enhancement	With Enhancement																							
Extent	Regional (3)	Regional (3)																							
Duration	Medium-term (3)	Medium-term (3)																							
Magnitude	High (8)	Very High (10)																							
Probability	Definite (5)	Definite (5)																							
Significance	High (70)	High (80)																							
Status (positive or negative)	Positive	Positive																							
Indirect impact: Reduced air emissions from burning of waste tyres and being discarded in landfills.																									
Cumulative impact: Achieved waste management goals.																									

15. POTENTIAL HEALTH AND SAFETY IMPACTS

The depot workers' health and safety may be compromised by unsafe working conditions on site.

Potential impacts:			Proposed mitigation:	Risk of the impact and mitigation not being implemented																					
<p>Direct Impact: Injuries and near misses related with occupational work</p> <table border="1"> <thead> <tr> <th>Description</th> <th>Without Mitigation</th> <th>With Mitigation</th> </tr> </thead> <tbody> <tr> <td>Extent</td> <td>Site (1)</td> <td>Site (1)</td> </tr> <tr> <td>Duration</td> <td>Short-term (1)</td> <td>Short-term (1)</td> </tr> <tr> <td>Magnitude</td> <td>Low (4)</td> <td>Small (2)</td> </tr> <tr> <td>Probability</td> <td>Highly Probable (4)</td> <td>Improbable (2)</td> </tr> <tr> <td>Significance</td> <td>Low (24)</td> <td>Low (8)</td> </tr> <tr> <td>Status (positive or negative)</td> <td>Negative</td> <td>Negative</td> </tr> </tbody> </table>			Description	Without Mitigation	With Mitigation	Extent	Site (1)	Site (1)	Duration	Short-term (1)	Short-term (1)	Magnitude	Low (4)	Small (2)	Probability	Highly Probable (4)	Improbable (2)	Significance	Low (24)	Low (8)	Status (positive or negative)	Negative	Negative	<ul style="list-style-type: none"> ▪ Protection of workers on site through provision of Personal Protective Equipment's; Training and other health and safety amenities. ▪ Comply with the requirements of the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993). ▪ Emergency preparedness and response plan for the operations must be developed and approved. ▪ Adequate toilet facilities must be provided for all staff members as standard health and safety practice. ▪ Strict access to site must be implemented by the presence of security to control authorized access into the facility. ▪ All flammable substances must be stored in dry area which does not pose an ignition risk to the said substances. ▪ Ensure all operation vehicles and machinery is under the control of competent personnel. ▪ No fires must be allowed on site. ▪ Employees should be trained/ educated in better housekeeping ▪ Provide induction training to new employees on site and old employees to be provided with refresher training via regular toolbox talks (health safety and environmental related issues e.g. housekeeping etc.) ▪ A risk assessment must be undertaken for any activity that may pose risk to workers 	<p>Medium without mitigation and low with mitigation.</p>
Description	Without Mitigation	With Mitigation																							
Extent	Site (1)	Site (1)																							
Duration	Short-term (1)	Short-term (1)																							
Magnitude	Low (4)	Small (2)																							
Probability	Highly Probable (4)	Improbable (2)																							
Significance	Low (24)	Low (8)																							
Status (positive or negative)	Negative	Negative																							

Indirect impact: None expected	-	-
Cumulative impact: None expected		

IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE

The decommissioning and closure phase has not been considered as part of this application. If the decommissioning phase is considered in future, the applicant must undertake the required actions to apply for decommissioning. The decommissioning must be undertaken in compliance with the requirements of the relevant authorities at the time.

NO-GO OPTION

This is the option of not undertaking the proposed activities.

Table 3: Impacts associated with the “No-go” alternative

POTENTIAL IMPACTS	SIGNIFICANCE RATING OF IMPACTS (POSITIVE OR NEGATIVE)	PROPOSED MITIGATION	SIGNIFICANCE RATING OF IMPACTS AFTER MITIGATION	RISK OF THE IMPACTS AND MITIGATION NOT BEING IMPLEMENTED
Impact on Fauna: None and will not be assessed further	N/A	N/A	N/A	N/A
Impact on Ecology (Flora): The site had already been cleared of vegetation. However, the establishment of exotic plant is possible.	Neutral	N/A – environment remains the same.	N/A	Proliferation of alien plants on site
Noise Pollution: No noise pollution was recorded during the site visit from the surrounding environment	Neutral	N/A - No-go would mean the baseline conditions on site continue.	N/A	Status quo remains the same
Visual: Storage of waste tyres is not a listed activity only norms and standard for storage of waste will apply. No-go would mean the facility stops the bailing of tyres however continue to be used as a waste tyre storage depot	Negative: Low	N/A	N/A	The site will only store tyres, no pre-processing activities (baling)

POTENTIAL IMPACTS	SIGNIFICANCE RATING OF IMPACTS (POSITIVE OR NEGATIVE)	PROPOSED MITIGATION	SIGNIFICANCE RATING OF IMPACTS AFTER MITIGATION	RISK OF THE IMPACTS AND MITIGATION NOT BEING IMPLEMENTED
Safety and security on the site: No-go would mean no change to the safety and security status of the area.	Neutral	N/A	N/A	Status quo remains the same
Management of waste: No-go would mean status quo remains the same - the site will remain as a storage area and no bailing would occur.	Negative – Low	Whole tyres take up considerable space in haulage vehicles. The proposed development should be authorized to continue with bailing activities as the transportation cost and carbon foot print of the applicant is reduced by bailing.	Negative – Low	The recovery of waste tyres from the environment will be slow the environment and pose a risk of waste tyres ending up at landfills and others illegally burnt for heating purposes and extraction of scrap metal by the community which is a health hazard and also risk to the environment.
Social impacts: No-go Option would mean jobs related to bailing i.e. baler operator will be lost.	Negative – Low	The proposed development should be implemented	Positive – Low	Lost opportunity cost of Job creation in the Municipality where unemployment is high.
Air Quality Impacts: No-go would mean study site status quo is maintained.	Neutral	N/A	N/A	No risk
Waste Tyre Recovery No-go would mean no efficient waste tyre recovering from the environment resulting in the following impacts: <ul style="list-style-type: none"> ▪ Waste tyres will not be recovered efficiently as required and would eventually end up at licensed waste disposal landfill. This would be a negative impact on landfills as tyres take up considerable amount of landfill airspace ▪ Burning of tyres by local 	Negative – High	The proposed development should be implemented	Positive – High	Loss Opportunity of the Limpopo Province to have a waste facility that ensures waste management for problematic tyre waste.

POTENTIAL IMPACTS	SIGNIFICANCE RATING OF IMPACTS (POSITIVE OR NEGATIVE)	PROPOSED MITIGATION	SIGNIFICANCE RATING OF IMPACTS AFTER MITIGATION	RISK OF THE IMPACTS AND MITIGATION NOT BEING IMPLEMENTED
<p>communities to recover steel for recycling, resulting in toxic air emissions, soil contamination will continue</p> <ul style="list-style-type: none"> ▪ Fire and health hazards in communities where tyres are burnt for warmth especially in winter will continue. ▪ Unsightly tyre stockpiles which prevent other land uses will continue. ▪ Waste tyres can create a fire hazard, as well as a breeding site for mosquitoes and vermin, leading to the spread of disease. The No go Option will not prevent such safety hazards from occurring. ▪ Increased transportation cost of whole tyres and carbon footprint for the applicant ▪ The Municipality Integrated Waste Management Plan (IWMP) will not be achieved and in turn targets and objectives of the provincial and municipal planning documents will be hindered. ▪ A lost opportunity of Limpopo Province to have a waste tyre management facility in the province that will ensure on going waste management from recovery and diverting tyres from landfill through bailing and the promotion of treatment and processing 				

POTENTIAL IMPACTS	SIGNIFICANCE RATING OF IMPACTS (POSITIVE OR NEGATIVE)	PROPOSED MITIGATION	SIGNIFICANCE RATING OF IMPACTS AFTER MITIGATION	RISK OF THE IMPACTS AND MITIGATION NOT BEING IMPLEMENTED
<p>businesses in Limpopo Province.</p> <ul style="list-style-type: none"> ▪ According to the National Development plan 2030, South Africa aims to achieve among others environmental sustainability and resilience and also the need to progress towards achieving an absolute reduction in the total volume of waste disposed to landfill. The implementation of the no go alternative will result in a lost opportunity for the Municipality to contribute towards this national objective. 				
<p>This option will result in limited impacts occurring on the environment as the facility will only store waste tyres according to the norms and standards of waste and will not bale tyres. It would be undesirable option from an environmental perspective as the company's process involves the pre-processing of waste which is encouraged by fundamentals of the waste hierarchy which is contained within the principles of the Waste Act. From a social economic point of view some employees such as the baler operator(s) would lose their jobs.</p> <p>This would result in negative impacts of forgone opportunities at a local and regional scale from a social and economic perspective in terms of limiting employment opportunities and ensuring that waste tyres are not recovered and eventually end at licensed waste disposal landfill that are already struggling with holding airspace. The proposed development occurs on a site previously used for agriculture purposes and is not pristine it has been fragmented from previous anthropogenic activities and also current industrial activities on site. In addition, there are no sensitive features on site. It is costly to transport uncompressed tyres as they take up considerable amount of space in haulage vehicles resulting in regular transportation. The baling of tyres prior to transportation reduces on transportation cost and carbon footprint of the applicant.</p> <p>The negative impacts of this option are therefore expected to outweigh the benefits. The No Go Option is therefore not preferred</p>				

3. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises 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.

It is worth noting that the waste management activities on site commenced in December, 2014, therefore this site is in its operational stage. The purpose of this application is to rectify the unlawful activities on this site so a proper authorisation for these activities is acquired. It is therefore in this light that alternatives are not considered nor assessed for this project.

Existing Waste Tyre Pre-processing Facility

Approximately eleven million tyres are scrapped every year and only six percent are recycled in South Africa (Human, 2006). Unutilized or inappropriate disposal of these substances present a major ecological hazard since they are not biodegradable and disposal is a serious challenge since most landfills do not accept them, as they cannot be compacted and require significant airspace relative to their weight (Mahlangu, 2009). As a consequence, waste tyres litter the countryside and they are often illegally burnt for the generation of heat and recovery of steel for recycling; presenting a health hazard, release of noxious gases into the environment causing atmospheric pollution and leaving environmentally damaging residues in soil (Mahlangu, 2009).

Positive socio-economic impacts such as minimised waste that goes to landfill, job creation and development of related business such as pyrolysis facilities, security services, and transportation companies are expected with the authorisation of the facility to continue operations. As shown in Table 4, the identified **negative impacts** for the **operation phase** are of medium to low significance which can be reduced to very low significance (with mitigations) through the implementation of practical and appropriate mitigation measures.

Table 4: Impact Summary table

Negative Impacts	Significance without Mitigation	Significance with Mitigation
Loss of indigenous vegetation	Low (14)	Low (3)
Introduction and spread of exotic vegetation	Low (21)	Low (10)
Fire Risk	Medium (36)	Low (16)
Soil and groundwater contamination	Medium (45)	Low (18)
Impact on Storm Water	Low (32)	Low (8)
Pollution from Inappropriate of Waste Handling and Management	Low (36)	Low (18)
Hazardous Materials	Medium (40)	Low (24)
Air Quality	Low (28)	Low (15)
Health and Safety Impacts	24 (Low)	8 (Low)

Positive Impacts	Without Enhancement	With Enhancement
Recovery of Waste	Medium (70)	High (80)
Social (positive)	Low (18)	Low (21)
indirect social impacts (multiplier effects)	Medium (36)	Medium (52)

Based on the findings of the BA process, from an environmental perspective the proposed development can be authorised to continue its operations as it is deemed to be environmentally appropriate within the context of the receiving environment as detailed in this basic assessment report. No impacts of high significance or environmental fatal flaws will result from the granting of a waste License (under the NEM: WA, 2008) for the proposed Polokwane Waste Tyre Pre-processing Depot in Limpopo Province. The identified impacts can be mitigated through the implementation of practical and appropriate mitigation measures as detailed in this report and contained in the Environmental Management Programme in **Appendix F**.

No-go alternative (compulsory)

This option will result in no additional impacts occurring as it maintains the current status quo. This alternative would represent a lost opportunity for the Polokwane Local Municipality and the broader region as follows:

- Waste tyres being discarded into landfill sites that are already struggling for capacity of which placing tyres into the landfill sites increases the capacity constraints at the landfill sites.
- Burning of tyres has a harmful impact on the environment.
- Waste tyres being incinerated in kilns, which has a harmful impact on the environment
- A lost opportunity in the loss of the benefits to the local community and economy associated with the creation of employment opportunities and the establishment of new related businesses such as transporting, waste collection, security services and also recycling companies.
- A lost opportunity of Limpopo Province to have a waste tyre management facility in the province that will ensure on going waste management from recovery and diverting tyres from landfill through recycling and the promotion of treatment and processing technologies in Limpopo Province.
- National goals: According to the NDP-2030, South Africa aims to achieve among others environmental sustainability and resilience and also the need to progress towards achieving an absolute reduction in the total volume of waste disposed to landfill. The implementation of the no go alternative will result in a lost opportunity for the municipality to contribute towards this national objective.
- The NWMS presents Government's strategy for, integrated waste management for South Africa. in order to ensure that the NWMS is implemented, Municipalities across the country have developed IWMPs. This alternative would hence result in Polokwane Municipality and other municipalities not to achieve their set objectives and targets.

The No-Go alternative is, therefore, not preferred.

SECTION E: 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

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 department in respect of the application:

Based on the outcomes of the Environmental Impact Assessment, conducted as part of this BA process, the following recommendations are made:

- Envirolution Consulting (Pty) Ltd recommends that the LEDET favorably considers this application for rectification of the unlawful commencement and continuation of a listed activity in terms of section 24G of NEMA (No 107 of 1998. The development (the operation of the waste tyre pre-processing depot) should be authorized and allowed to proceed on the preferred site located at Plot 10, Geluk outside Polokwane (off R71 towards Tzaneen); S: 23° 54' 15.09" E: 29° 32' 2.42". It is costly to transport uncompressed tyres as they take up considerable amount of space in haulage vehicles. The baling of tyres prior to transportation reduces transportation cost and carbon footprint for the applicant. The following mitigation measures are recommended.
 - A final site development plan must be submitted to the fire chief for approval.
 - The mitigation measures proposed in this report and the draft EMPr must be implemented during the operational phase.
 - The certificate for consent land use must be obtained from the relevant Municipality and kept on site.
 - All operational activities shall be managed and operated in accordance with WTRs, 2009 and National Norm and Standards for Waste Storage, 2013.
 - A suitably qualified license holder employee must be mandated with the task of monitoring compliance, and correct implementation of all mitigation measures and provisions as stipulated in the WML once issued, EMPr and standard operation procedures.
 - The license holder must ensure that the emergency preparedness plan is implemented.
 - The proposed site must be flat and hard-packed to comply with the WTRs, 2009.
 - In the event of a major incident (e.g. fire causing damage to property and environment, major spill or leak of contaminants), the relevant authorities should be notified as per the notification of emergencies/ incidents, as per the requirements section 30 of NEMA.

Is an EMPr attached?

Yes

The EMPr must be attached as Appendix F.

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: Environmental Management Programme (EMPr)

- Appendix F2: Emergency Preparedness Plan

Appendix G: Other information

- Appendix G1: Proof of site notice
- Appendix G2: Proof of Stakeholder Consultation
- Appendix G3: Proof of newspaper advertisements
- Appendix G4: Authority Consultation
- Appendix G5: Database
- Appendix G6: Comments from I&APs on the application (N/A)
- Appendix G7: Minutes of any Public/Stakeholder Meetings (N/A)

Appendix H: Additional Supporting Documentation

- Appendix H1: Storm water Management Information
- Appendix H2: Eskom Agreement for Supply of Electricity to the Depot
- Appendix H3: EAP expertise & CVs

SECTION G: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, _____ declare that I –

- (a) act as the independent environmental practitioner in this application;
- (b) do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014;
- (c) do not have and will not have a vested interest in the proposed activity proceeding;
- (d) have no, and will not engage in, conflicting interests in the undertaking of the activity;
- (e) undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the Environmental Impact Assessment Regulations, 2006;
- (f) will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- (g) will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the Department in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the Department may be attached to the report without further amendment to the report;
- (h) will keep a register of all interested and affected parties that participated in a public participation process; and
- (i) will provide the Department with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.

Signature of the Environmental Assessment Practitioner:

Name of company:

Date: