Lepelle-Nkumpi Local Municipality Integrated Waste Management Plan (IWMP)



Final Integrated Waste Management Plan Report

2024

Sponsored By	Prepared by:
LIMPOPO PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA	Mamadi & Company I SA
DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM	



DOCUMENT TITLE:	Final IWMP Report
	•

DOC NO: MC.LEDET.IWMPs.2024



PROJECT INFORMATION

Title	Development of Integrated Waste Management Plan (IWMP) for Lepelle-Nkumpi Local Municipality
Submission Date	3 rd September 2024
Classification	Company Confidential
Our Reference	MC.LEDET.IWMP.2024

VERSION AND AMENDMENT SCHEDULE

Version	Version date	Author	Description of Amendments
1	August 2024	Stanford Mugeri (Environmental Consultant)	Final IWMP Report for the Development of IWMP

APPROVAL AND CONTROL SCHEDULE

Approved by	Designation	Responsibility	Signature	Date approved
Stanford Mugeri	Environmental Consultant	Compiler	400	29 August 2024
Legion Mazibuko	Senior Environmental Consultant	Review	Down	30 August 2024
Ronaldo Retief	Environmental Manager	Senior Review	Salar Sa	02 September 2024
Ike Rampedi	Chief Operational Officer	Approval	æ	02 September 2024

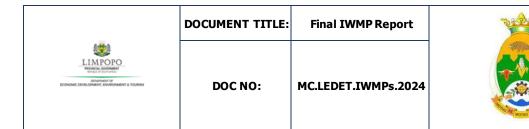
CLIENT APPROVAL

NAME	DESIGNATION	DATE	SIGNATURE

Copyright © 2024 Mamadi & Company SA (Pty) Ltd)

All rights reserved. No part of this document may be reproduced, translated, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written approval of Mamadi & Company SA (Pty) Ltd

REPORT STATUS	DRAFT	FINAL	✓	
			•	



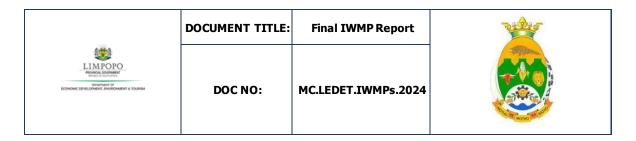
EXECUTIVE SUMMARY

Limpopo Department of Economic Development, Environment and Tourism (LEDET) has embarked on a project to support Lepelle-Nkumpi Local Municipality (LNLM) within Capricorn District Municipality in developing their Integrated Waste Management Plan (IWMP) as per the requirement of the National Environmental Management Waste Act, Act 59 of 2008 (NEMWA), as amended. All spheres of government responsible for waste management except for National are expected to develop and review their IWMPs. Municipalities must submit their IWMP to the Council for approval and to the Member of Executive Council (MEC) for endorsement, and the endorsed IWMP must be incorporated into Municipal Integrated Development Plan (IDP). As such Mamadi and Company SA (Pty) Ltd (hereafter referred to as Mamadi) has been appointed to assist LNLM in developing their IWMP.

The IWMP will assist the Municipality in improving the current waste management practices which mainly focuses on waste collection and disposal to a more improved waste management practice which promotes green economy and sustainable development, as the waste value-chain would be planned for and managed through the IWMP. The overall objective of an IWMP is to ensure that there is integration and optimisation of general waste, to maximize efficiency and minimise the associated environmental impacts while simultaneously improving the quality of life of the people within the Municipality.

The LNLM is currently collecting waste from 26 781 households. The LNLM has one operational landfill site (Lepelle-Nkumpi Landfill site) which is managed by the Municipality, and it has a WML. The Lepelle-Nkumpi landfill site has a weighbridge which is currently non-functional due to lack of electricity. Landfill site has been registered on SAWIS; however, No report of the last reporting. The landfill site does meet the minimum requirements of waste disposal. Waste recycling is limited within the Municipality as numerous waste recyclables are still disposed at the landfill site.

The analyses of the current waste management system have led to the identification of gaps and needs, these are addressed with the overarching goals, objectives, and targets in this Section.



The main goals for integrated waste management in LNLM can be summarized as follows:

- To ensure effective solid waste service delivery.
- To promote waste minimization and recycling.
- To ensure safe and integrated management of hazardous waste.
- To improve waste education and public awareness.
- To ensure sound budgeting for integrated waste management.
- To improve regulatory compliance; and
- To improve waste information management.

For these goals to be met, a series of implementation instruments (action plans) will need to be implemented. These action plans are detailed in the Implementation Plan in this Section of this report. It is imperative for the LNLM to act on the items proposed in the Implementation Plan as this will directly result in improved waste management of the Municipality.

As part of the development of the IWMP, the consultants have engaged with stakeholders and members of the community. Stakeholders and interested and affected parties (I&APs) were notified that the Draft IWMP was out for commenting. The comments on the Draft LNLM IWMP were incorporated into the Final LNLM IWMP.



DOCUMENT TITLE:	Final IWMP Report
-----------------	-------------------



MC.LEDET.IWMPs.2024

TABLE OF CONTENTS

EXEC	UTIVE SUMMARYII		
LIST C	OF FIGURESVIII		
LIST C	OF TABLESIX		
ABBREVIATIONSXI			
1	INTRODUCTION1		
2	LEGISLATIVE REQUIREMENTS2		
2.1	THE CONSTITUTION OF THE REPUBLIC OF SOUTH AFRICA (ACT NO. 108 OF 1996)		
2.2	THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998)3		
2.3	NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT (ACT NO. 59 OF 2008)5		
2.4 2014)	NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE AMENDMENT ACT (ACT NO. 26 OF 7		
	2.4.1 List of Waste Management Activities that have or are likely to have, a Detrimental Effect on the Environment (GN 921 of 2013)		
	2.4.2 Regulations Regarding the Exclusion of Waste or a Portion of a Waste Stream from the Definition of Waste (GNR 715 of 2018)		
2.5	THE NATIONAL WATER ACT, ACT 36 OF 1998 (NWA)8		
2.6	THE NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT 39 OF 20049		
2.7	THE NATIONAL HEALTH ACT (ACT 61 OF 2003)9		
2.8	HAZARDOUS SUBSTANCES ACT, ACT 15 OF 19739		
2.9	THE FERTILIZERS, FARM FEEDS, AGRICULTURAL REMEDIES AND STOCK REMEDIES ACT		



DOCUMENT	TITLE:	Final	IWMP	Report



DOC NO: MC.LEDET.IWMPs.2024

2.10 THE OCCUPATIONAL HEALTH AND SAFETY ACT (ACT 85 OF 1993)
2.11 THE WHITE PAPER ON INTEGRATED POLLUTION AND WASTE MANAGEMENT FOR
SOUTH AFRICA (1999)
2.12 WASTE TYRE REGULATION GNR 149 OF 200910
2.13 THE NATIONAL WASTE MANAGEMENT STRATEGY GNR 2020
2.14 THE NATIONAL POLICY FOR THE PROVISION OF BASIC REFUSE REMOVAL SERVICES TO INDIGENT HOUSEHOLDS (GN 413 OF 2011)
2.15 THE NATIONAL DOMESTIC WASTE COLLECTION STANDARDS (GNR 21 OF 2011)12
2.16 THE NATIONAL NORMS AND STANDARDS FOR THE REMEDIATION OF CONTAMINATED LAND AND SOIL QUALITY IN THE REPUBLIC OF SOUTH AFRICA (GN 467 OF 2013)12
2.17 THE NATIONAL WASTE INFORMATION REGULATION (GNR 625 OF 2012)13
2.18 THE WASTE CLASSIFICATION AND MANAGEMENT REGULATIONS (GNR 634 OF 2013)13
2.19 THE NATIONAL NORMS AND STANDARDS FOR THE ASSESSMENT OF WASTE FOR LANDFILL DISPOSAL (GNR 635 OF 2013)
2.20 THE NATIONAL NORMS AND STANDARDS FOR THE SCRAPPING OR RECOVERY OF MOTOR VEHICLES GNR 925 OF 2013
THE NATIONAL NORMS AND STANDARDS FOR DISPOSAL OF WASTE TO LANDFILL GNR 636 OF 2013
THE NATIONAL NORMS AND STANDARDS FOR THE STORAGE OF WASTE GNR 926 OF 2013
223 THE NATIONAL NORMS AND STANDARDS FOR ORGANIC WASTE COMPOSTING GN 561 OF 202116
224 NATIONAL NORMS AND STANDARDS FOR THE SORTING, SHREDDING, GRINDING, CRUSHING, SCREENING OR BAILING OF GENERAL WASTE (GNR 1093 OF 2017)16





2.26	MUNICIPAL SYSTEMS ACT (ACT NO. 32 OF 2000)	18
2.27	MUNICIPAL WASTE MANAGEMENT BY-LAWS	18
3	INTEGRATED WASTE MANAGEMENT PLANNING PROCESS	18
4	WASTE SITUATION ASSESSMENT	20
4.1	SITUATI ONAL ANALYSIS METHODOLOGY	20
4.2	GEOGRAPHICAL AREA	20
	4.2.1 Locality	21
43	DEMOGRAPHICS AND POPULATION GROWTH	23
	4.3.1 Future Population	24
	4.3.2 LNLM Income Status	26
	4.3.3 Dwelling Types	27
4.4	WASTE MANAGEMENT SYSTEMS	27
	4.4.1 Waste Generation and Characterisation	27
	4.4.2 Waste Collection	31
	4.4.3 Waste Recycling, Treatment and Disposal	32
	4.4.4 Determining current domestic waste generation per capita	37
	4.4.5 Estimating Future Waste Generation Rates and Quantities	41
	44.6 Financing of Waste Management	42
	4.4.7 Mainstreaming Key Principles of the National Waste Management Strategy	45
	44.8 Waste Pickers Integration	45
	44.9 Circular Economy	46





5	GAP AND NEEDS ANALYSIS	46
5.1	WASTE SERVICE DELIVERY	47
5.2	WASTE MINIMISATION, RECYCLING AND RE-USE I NITIATIVES	48
5.3	ORGANIC WASTE MANAGEMENT	49
5.4	HAZARDOUS WASTE MANAGEMENT	50
5.5	WASTE MANAGEMENT FACILITIES	51
5.6	WASTE MANAGEMENT COLLECTION FLEET, PLANT AND EQUIPMENT	54
5.7	WASTE MANAGEMENT INFORMATION	54
5.8	WASTE EDUCATION AND PUBLIC AWARENESS	55
5.9	HUMAN AND FINANCIAL RESOURCE MANAGEMENT	56
5.10	STRATEGIC PLANNING	57
6	DESIRED END STATE	58
7	THE NATIONAL WASTE MANAGEMENT STRATEGY (NWMS) GOAL	S. 58
7.1	NATIONAL WASTE MANAGEMENT STRATEGY 2020	58
7.2	LIMPOPO PROVI NCIAL INTEGRATED WASTE MANAGEMENT PLAN (PIWMP)	59
7.3	GOALS IDENTIFIED FOR THE LNLM'S IWMP	60
8	ALIGNMENT WITH THE NWMS 2020 AND LIMPOPO PIWMP GOALS.	61
9 LNLM	SETTING STRATEGIC GOALS, OBJECTIVES, AND TARGETS FOR T	'HE
10	IMPLEMENTATION PLAN	64
11	MONITORING AND REVIEW OF THE IWMP	77



DOCUMENT TITLE: Final IWMP Re	Report
-------------------------------	--------



12	PUBLIC PARTICIPATION PROCESS	79
13	CONCLUSION	80
REFI	ERENCES	82
A PPI	ENDIX: STAKEHOLDER ENGAGEMENT REPORT	84



- Indiana Report	DOCUMENT TITLE:	Final IWMP Report
------------------	-----------------	-------------------

MC.LEDET.IWMPs.2024



LIST OF FIGURES

Figure 2-1: Waste Management Hierarchy	5
Figure 3-1: Integrated Waste Management Planning process	.19
Figure 4-1: Locality Map of LNLM Municipality	.22
Figure 4-2: Sub-Categories of Waste Generated in LNLM	28
Figure 4-3: Waste Stream Analysis from Lepelle-Nkumpi LM Residential in kg	.30
Figure 4-4: Lepelle-Nkumpi Landfill Site	22
rigure 4-4. Lepelle-Inkumpi Lanumi Site	.50
Figure 4-5: Demographics for LNLM (Stats SA, 2022)	.38



DOCUMENT TITLE:	Final IWMP Report
-----------------	-------------------

MC.LEDET.IWMPs.2024



LIST OF TABLES

Table 2-1: Applicable national legal requirements and obligations2
Table 2-2: Summary of waste management related powers allocated in terms of the Constitution
Table 2-3: Summary of municipal waste management responsibilities as defined in the NEMWA Act No. 59 of 2008
ACCINO. 59 01 2000
Table 2-4: Landfill disposal requirements as per waste type14
Table 2-5: Landfill disposal requirements for listed waste types as per section 2(a)14
Table 2-6: Landfill disposal requirements for listed waste types as per section 2(b)15
Table 2-7: Landfill disposal requirements for categorized hazardous waste ratings15
Table 4-1: Growth and Demographic Profiles24
Table 4-2: LNLM Population Growth Projections25
Table 4-3:LNLM's Number of Households Projections (Stats SA,2011/2022)26
Table 4-4 Income status of Municipality within LNLM (Stats SA, 2011)26
Table 4-5 Households Dwelling Types (Stats SA 2022:)27
Table 4-6: Waste Stream Analysis from Lepelle-Nkumpi LM Town29
Table 4-7: Status of waste collection in LNLM (2022 Draft IWMP)31
Table 4-8: Waste Management Fleet in LNLM31
Table 4-9: Status of Lepelle-Nkumpi waste disposal site
Table 4-10: Status of Wastewater Treatment Facilities within LNLM (Status Quo Sewage
facilities in Limpopo Report 2021)



DOCUMENT TITLE: Final IWMP Rep	ort
--------------------------------	-----



Table 4-11: Waste recycling companies and their status	37
Table 4-12: Yearly Estimated Waste Quantities for LNLM (Stats SA, 2011/2022)	40
Table 4-13: Estimation of Future Waste Volumes (in 10 Years/2031) Produced per Capita LNLM	
Table 4-14: Estimation of future waste volumes (in 20 years/2041) produced per capita in LNL	
Table 4-15: Estimation of future waste volumes (in 30 years/2051) produced per capita in LNL	
Table 4-16: Waste Management Budgeting	42
Table 4-17: Organizational and Institutional matters	43
Table 5-1 Waste service delivery gaps and needs identified	47
Table 5-2: Waste minimisation, recycling and re-use initiatives gaps and needs identified	48
Table 5-3: Organic waste management gaps and needs identified	49
Table 5-4: Hazardous waste gaps and needs identified	50
Table 5-5: Waste management facilities gaps and needs identified	51
Table 5-6: Waste management collection fleet and equipment gaps and needs identified	54
Table 5-7: Waste management information gaps and needs identified	54
Table 5-8: Waste education and initiatives gaps and needs	55
Table 5-9: Staff and financial management gaps and needs identified	56
Table 5-10: Strategic planning gaps and needs identified	57
Table 7-1: Alignment of LNLM goals with the NWMS 2020 and Limpopo PIWMP goals	61



DOCUMENT TITLE:	Final IWMP Report	4
		1
DOC NO:	MC.LEDET.IWMPs.2024	



Table 9-1: Implementation plan legend	64
Table 9-2: Implementation Plan	66



DOCUMENT '	TITLE:	Final	IWMP	Report

MC.LEDET.IWMPs.2024



ABBREVIATIONS

Abbreviation	Description
DFFE	Department of Forestry Fisheries and the Environment
DWCS	Domestic Waste Collections Standards
DWS	Department of Water and Sanitation
EPIP	Environmental Protection and Implementation Programme
EPR	Extended Producer Responsibility
HDPE	High Density Polyethylene
IDP	Integrated Development Plan
IWMP	Integrated Waste Management Plan
K2C	Kruger to Canyons
LEDET	Limpopo Department of Economic Development, Environment and Tourism
MEC	Member of Executive Council
MIG	Municipal Infrastructure Grant
LNLM	Lepelle-Nkumpi Local Municipality
NDWCS	National Domestic Waste Collections Standards
NEM: AQA	National Environmental Management Air Quality Act (Act 39 of 2004)
NEMA	National Environmental Management Act (Act No 107 of 1998)
NEMWA	National Environmental Management Act (Act 59 of 2008)
NWA	National Water Act (Act No 36 of 1998)
NWMS	National Waste Management Strategy
PET	Polyethylene terephthalate



DOC NO: MC.LEDET.IWMPs.2024



Abbreviation Description		
SA SoER	South African State of Environment Report	
SAWIS	South African Waste Information System	
WML	Waste Management License	
WML	Waste Management Licenses	
WMO	Waste Management Officer	



DOC NO: MC.LEDET.IWMPs.2024



DEFINITIONS

Word	Definition
Building and Demolition Waste	Means waste, excluding hazardous waste, produced during the construction, alteration, repair, or demolition of any structure, and includes rubble, earth, rock, and wood displaced during that construction, alteration, repair or demolition.
Business Waste	Means waste that emanates from premises that are used wholly or mainly for commercial, retail, wholesale, entertainment, or government administration purposes.
By-laws	Regulations made by a local authority.
Circular Economy	Circular Economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible.
Desired End State	Entails identifying priorities and goals that a Municipality wishes to attain with regards to waste management.
Disposal	Means the burial, deposit, discharge, abandoning, dumping, placing or release of any waste into, or onto, any land.
Domestic Waste	Means waste, excluding hazardous waste, emanates from premises that are used wholly or mainly for residential, educational, health care, sport or recreation purposes.
Environment	The surroundings in which humans exist and includes the land, water and atmosphere. In addition, it includes the interrelationships, combinations, properties and conditions of all organisms that exist within the surroundings.
Environment Conservation Act	Means the Environment Conservation Act, 1989 (Act No. 73 of 1989).
Environmental Authorisation	Authorisation by a competent authority of a listed activity or specified activity, in terms of this NEMA, and includes a similar authorisation contemplated in a. Specific Environmental Management Act (SEMA).
Environmental Impact Assessment	Environmental Impact Assessment in planning law, in some circumstances where a development is likely to have significant effects on the environment,





DOC NO: MC.LEDET.IWMPs.2024

Word	Definition
	a necessary examination of environmental issues before planning can be granted.
Fleet	A number of vehicles or aircraft operating together or under the same ownership.
General Waste	Means waste that does not pose an immediate hazard or threat to health or to the environment, and includes— (a) domestic waste. (b) building and demolition waste. (c) business waste; and (d) inert waste.
Hazardous Waste	Means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment.
Industrial symbiosis	Is a free facilitation service that promotes the exchange of residual resources of one company with another company that can make use of it.
Integrated Waste Management Plan	Is a statutory requirement of the NEMWA that has been promulgated and came into effect on 1 July 2009, with the goal to transform the current methodology of waste management, i.e. collection and disposal, to a sustainable practice focusing on waste avoidance and environmental sustainability. The IWMP is a critical sector plan to form part of the Integrated Development Plan.
Interested and Affected Parties	Interested and Affected Party for the purposes of Chapter 5 of the NEMA and in relation to the assessment of the environmental impact of a listed activity or related activity, means an interested and affected party contemplated in Section 24(4)(a)(v) of the NEMA and which includes — a) any person, group of persons or organisation interested in or affected by such operation or activity; and b) any organ of stale that may have jurisdiction over any aspect of the operation or activity.





DOC NO:

Word	Definition
Landfill site	This means any site or premise used for the accumulation of waste with the purpose of disposing of that waste at that site or on that premise.
Limpopo Department of Economic Development Environment and Tourism	Means the Provincial Department or component responsible for Environmental Management.
MEC	Means the Member of the Executive Council of a province who is responsible for waste management in the province.
Minimisation	When used in relation to waste, means the avoidance of the amount and toxicity of waste that is generated and, in the event where waste is generated, the reduction of the amount and toxicity of waste that is disposed of.
Municipal Systems Act	Means the Local Government: Municipal Systems Act, 2000 (Act No. 32 of 2000).
Municipality	Means a Municipality established in terms of the Local Government: Municipal Structures Act, 1998 (Act No. 117 of 1998).
National Environmental Management Act	Means the National Environmental Management Act, 1998 (Act No. 107 of 1998).
National Environmental Management Waste Act	Is the primary legislation that governs waste management in South Africa.
National Waste Management Strategy	The National Waste Management Strategy (NWMS) is a legislative requirement of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), the "Waste Act". The purpose of the NWMS is to achieve the objects of the Waste Act. Organs of state and affected persons are obliged to give effect to the NWMS.
Partnerships	An association of two or more people as partners.
Projection	Is a potential future evolution of a quantity or set of quantities, often computed with the aid of a model.







DOC NO:

Word	Definition
Recovery	Means the controlled extraction of a material or the retrieval of energy from waste to produce a product.
Recycle	Means a process where waste is reclaimed for further use, which process involves the separation of waste from a waste stream for further use and the processing of that separated material as a product or raw material.
Recycling	Means a process where waste is reclaimed for further use, which process involves the separation of waste from a waste stream for further use and the processing of that separated material as a product or raw material.
Re-use	Means to utilise articles from the waste stream again for a similar or different purpose without changing the form or properties of the articles.
Risk	The potential of consequences where something of value is at stake and where the outcome is uncertain, recognising the diversity of values. Risk is often represented as a probability of occurrence of hazardous events or trends multiplied by the impacts if these events or trends occur. Risk results f rom the interaction of vulnerability, exposure, and hazard. In this context, the term <i>risk</i> is used primarily to refer to the risks of climate change impacts.
Stakeholder	A person or an organisation that has a legitimate interest in a project or entity or would be affected by a particular action or policy.
Status Quo	The existing state of affairs, especially regarding social or political issues.
Storage	Means the accumulation of waste in a manner that does not constitute treatment or disposal of that waste.
Treatment	Means any method, technique or process that is designed to— (a) change the physical, biological or chemical character or composition of a waste; or (b) remove, separate, concentrate or recover a hazardous or toxic component of a waste; or (c) destroy or reduce the toxicity of a waste,





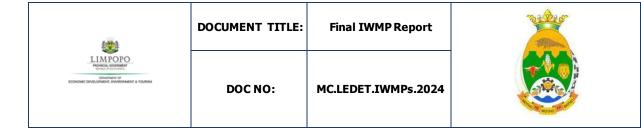
Word	Definition
	in order to minimise the impact of the waste on the environment prior to further
	use
	or disposal;
	Means any substance, whether or not that substance can be reduced, re-
	used, recycled and recovered— (a) that is surplus, unwanted, rejected, discorded, shandened or disposed of:
	(a) that is surplus, unwanted, rejected, discarded, abandoned or disposed of;(b) which the generator has no further use of for the purposes of production;
	(c) that must be treated or disposed of; or
Waste	(d) that is identified as a waste by the Minister by notice in the Gazette,
	and includes waste generated by the mining, medical or other sector, but—
	(i) a by-product is not considered waste; and
	(ii) any portion of waste, once re-used, recycled and recovered, ceases to be
	Waste.
Waste characterisation	The process by which the composition of different weets atracms is analyzed
Waste Characterisation	The process by which the composition of different waste streams is analysed
	Someone who collects re-usable and recyclable materials from residential and
Waste Pickers	commercial waste bins, landfill site and open spaces in order to revalue them
	and generate an income.
	The creation of a formally planned recycling system that values and improves
	the present role of waste pickers, builds on the strengths of their existing
Waste picker	system for collecting and revaluing materials, and includes waste pickers as
integration	key partners in its design, implementation, evaluation and revision. Waste picker integration requires changes in a number of spheres and includes the
	integration of waste pickers' work, as well as the political, economic, social,
	legal and environmental integration of waste pickers.
	This means any site or premise used for the accumulation of waste with the
Waste Disposal Facility	purpose of disposing of that waste at that site or on that premise.
Waste Management	Means any activity listed in Schedule 1 or
	published by notice in the Gazette under section 19, and includes—
Activity	(a) the importation and exportation of waste;
	(b) the generation of waste, including the undertaking of any activity or process
	that is likely to result in the generation of waste;





DOC NO:

Word	Definition
	(c) the accumulation and storage of waste;
	(d) the collection and handling of waste;
	(e) the reduction, re-use, recycling and recovery of waste;
	(f) the trading in waste;
	(g) the transportation of waste;
	(h) the transfer of waste;
	(i) the treatment of waste; and
	(j) the disposal of waste.
Wasto Managament	This is a license that is issued by a competent authority which authorises an
Waste Management License	individual/organisation to commence, undertake or conduct a waste
License	management activity under the waste listed activities.
	An individual appointed by a local Municipality to coordinate waste
Waste Management	management within that Municipality. This individual performs a regulatory
Officer	function overseeing adherence to national norms and standards and
	achieving the objectives of the Waste Act.
Waste Management Services	Means waste collection, treatment, recycling and disposal services.
Waste Minimisation	This means a programme that is intended to promote the reduced generation
Programme	and disposal of waste.
Waste Transfer Facility	Means a facility that is used to accumulate and temporarily store waste before
or Station	it is transported to a recycling, treatment or waste disposal facility.
Waste Treatment	Means any site that is used to accumulate waste for the purpose of storage,
Facility	recovery, treatment, reprocessing, recycling or sorting of that waste.



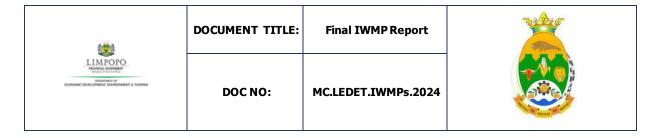
1 INTRODUCTION

The South African Constitution of the Republic, 1996 (Act 108 of 1996), under Chapter 2 Section 24, stipulates that everyone has the right to an environment that is not harmful to their health or well-being and to have the environment protected through reasonable legislative and other measures that prevent pollution and ecological degradation. LEDET has a duty to support struggling municipalities that do not have relevant capacity to ensure that waste services delivery is improved, as such LEDET has embarked on this project to assist LNLM as one of the municipalities within Capricorn District Municipality to developing their IWMP.

LNLM is a Category B Municipality which covers an area of 3 463,3 km². LNLM is the second largest Municipality in terms of population contribution in the Capricorn District Municipality. The Municipality is predominantly rural with 30 wards. The main town is Lebowakgomo, and the key main economic sector is agriculture. According to Stats 2022, the total population is 284 404, which is the second largest population within the district. The Municipality's total households are 78 217 with an average of 3,6 household size.

NEMWA is the primary legislation that the governs waste management in South Africa, Section 11 (1) of NEMWA, as amended requires all spheres of government responsible for waste management except for DFFE to prepare and review the IWMP. Each Municipality must submit the IWMP that has been approved by the municipal council to the MEC for endorsement, the endorsed IWMP must then be incorporated into IDP. As a result, Mamadi has been appointed as a service provider to assist LNLM in developing their IWMP.

The IWMP is developed in line with the updated LEDET guidelines for the development of IWMP and aligned with the 2020 National Waste Management Strategy (NWMS) as well as the District and Provincial IWMP. The goal of the IWMP is to transform the current methods of waste management, i.e. collection and disposal, to a sustainable practice focusing on waste circular economy and environmental sustainability. The status quo /situation analysis covers the legislative framework, demographics, waste quantities and types, as well as the current waste management systems such as waste collection, recycling, treatment waste disposal, key principles on NWMS, waste pickers, circular economy, and waste management funding. Information was gathered by reviewing existing waste management documents, questionnaire, ground truthing as well as by conducting interviews.



2 LEGISLATIVE REQUIREMENTS

This section provides a comprehensive list of applicable National and Provincial legislations, policies, and Guidelines concerning management of solid waste within the Municipalities.

An understanding of the applicable legal framework is essential when evaluating options for the management of waste. The latest versions of legislation captured here, and their respective amendments can be downloaded from the webpage of the South African Waste Information Centre (SAWIC: http://sawic.environment.gov.za/?menu=13

The following legal requirements and obligations have an impact on the management of waste within municipalities.

Table 2-1: Applicable national legal requirements and obligations

2.1 The Constitution of the Republic of South Africa (Act No. 108 of 1996)

The Constitution of the Republic of South Africa (Act 108 of 1996) is the supreme law of the country and provides the legal foundation for every law developed. Section 24 of the Constitution states that everyone has a right to an environment that is not harmful to their health or well-being and to have the environment protected, for the benefit of present and future generations, through reasonable legislation development and implementation and other measures that prevent pollution and ecological degradation, promote conservation and secure ecologically sustainable development. As such, fundamental right in the Constitution must be taken into consideration during waste management planning.

Constitution provides the legal basis for allocating powers to different spheres of government and is thus relevant to the institutional regulation of integrated pollution and waste management.

The Table 2-2 below provides a summary of duties relevant to the Municipalities in terms of the Constitution.



DOCUMENT TITLE:	Final IWMP Report

DOC NO: MC.LEDET.IWMPs.2024



Table 2-2: Summary of waste management related powers allocated in terms of the Constitution.

The Division in Section 84(1) and (2) of the Municipal Structures Act		
Description of Services	District Municipality -	Local Municipality -
	Section 84(1)	Section 84(2)
Provision of service to clean and	No powers	Full powers in the area
maintain public streets and public		of jurisdiction
places and the regulation and		
control thereof		
Establishment, operation,	Solid waste disposal site,	Remaining powers in
management, control and	insofar as it relates to -	the area of jurisdiction,
regulation of a system for the	(i) the determination of a	including the
removal refuse	waste disposal strategy	establishment,
	(ii) the regulation of	operation,
Establishment, operation,	waste disposal	management, control
management, control and	(iii) the establishment,	and regulation of refuse
regulation of refuse dumps and	operation and control of	dumps and of solid
solid waste disposal site	waste disposal site, bulk	waste disposal site that
	waste transfer facilities	serve the area of local
	and waste disposal	Municipality
	facilities for more than	
	one local Municipality in	
	the district	
	Provision of Services Provision of service to clean and maintain public streets and public places and the regulation and control thereof Establishment, operation, management, control and regulation of a system for the removal refuse Establishment, operation, management, control and regulation of refuse dumps and	Description of Services District Municipality - Section 84(1) Provision of service to clean and maintain public streets and public places and the regulation and control thereof Establishment, operation, management, control and regulation of a system for the removal refuse Establishment, operation, management, control and regulation of refuse dumps and solid waste disposal site, operation and control of waste disposal site, operation and control of waste disposal site, bulk waste transfer facilities and waste disposal facilities for more than one local Municipality in

Waste management service delivery is a local government function in terms of schedule 5B of the Constitution of Republic of South Africa (Act No.108 of 1996). Furthermore, Section 152 (1) of the Constitution states that one of the responsibilities of local government is to ensure that the provision of services to communities is done in a sustainable manner.

2.2 The National Environmental Management Act (Act 107 of 1998)

The National Environmental Management Act (Act No.107 of 1998) (NEMA) as amended is the f ramework Act dealing with environmental management in South Africa. It imposes a duty of care on every person who causes environmental degradation to put measures in place to stop, reduce or rectify the pollution as it occurs. The environmental impact assessments that are required for the establishment and management of waste facilities



DOCUMENT TITLE:	Final IWMP Report
-----------------	-------------------

MC.LEDET.IWMPs.2024



are conducted under this legislation. The national environmental management principles in Section 2 of the Act provide for the sound management of the environment, which includes waste aspects such as the polluter pays, duty of care, proximity, and regionalization and cradle to grave principles. Section 24 of the Act makes provision for the application and enforcement of waste management licenses. The duty of care and the remediation of environmental damage are addressed in Section 28 of the Act. The principles enunciated in the NEMA need to inform waste management decision making and practices.

A key aspect of NEMA is that it provides a set of environmental management principles including Precautionary, Polluter pays and Prevention and duty of care as well as the Waste Management Hierarchy (Figure 2-1) that apply throughout the Republic to the actions of all organs of state that may significantly affect the environment. In addition, Section 28 of NEMA, affectionately known as the "duty of care" provision, requires persons which are defined in the section to take reasonable measures to combat pollution or degradation of the environment.

The Rio Declaration on Environment and Development (1992) defined the Precautionary Principle as "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

- ² The polluter pays principle states that "whoever is responsible for damage to the environment should bear the costs associated with it." It is entrenched in Principle 16 of the Rio Declaration on Environment and Development (1992).
- ³ The Prevention and duty of care principle holds the that environmental protection must be undertaken, first and foremost, in the form of preventive measures,



DOC NO: MC.LEDET.IWMPs.2024



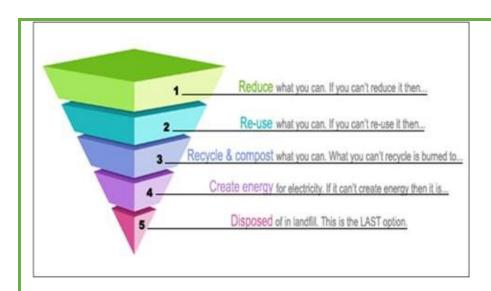


Figure 2-1: Waste Management Hierarchy

2.3 National Environmental Management: Waste Act (Act No. 59 of 2008)

The National Environmental Management Act: Waste Act (Act 59 of 2008) (NEMWA) as amended regulates waste management in order to protect health and the environment by providing reasonable measures for the prevention of pollution and ecological degradation, and for securing ecologically sustainable development. This is aimed to provide for institutional arrangements and planning matters; to provide for national norms and standards for regulating the management of waste by all spheres of government; to provide for specific waste management measures; to provide for the licensing and control of waste activities; to provide for the remediation of contaminated land; to provide for the national waste information system; to provide for compliance and enforcement; and to provide for matters connected therewith.

Section 12 of the NEMWA, as amended, elaborates on the contents of waste management plans, while Section 13 provides the requirements for the implementation and reporting of IWM P. The municipal responsibilities as defined by the NEWWA are summarised in the Table 2-3 below.

Table 2-3: Summary of municipal waste management responsibilities as defined in the NEMWA: Act No. 59 of 2008

Relevant	Municipal	Responsibilitie
Section		



DOCUMENT TITLE: Fina	I IWMP Report
----------------------	---------------



Chapter 2	National Waste Management Strategy, Norms and Standards
Waste se	rvice standards
(9)	 (1) A Municipality must exercise its executive authority to deliver waste management services, including waste removal, waste storage and waste disposal services, in a manner that does not conflict with Section 7 or 8 of this Act. (2) Each Municipality must exercise its executive authority and perform its duty in relation to waste services, including waste collection, waste storage and waste disposal services, by – a) adhering to all national and provincial norms and standards; b) integrating its waste management plans with its integrated development plans; c) ensuring access for all to such services; d) providing such services at an affordable price, in line with its tariff policy referred to in Chapter 8 of the Municipal Systems Act; e) ensuring sustainable services through effective and efficient management; f) Keeping separate financial statements, including a balance sheet of the services provided. (3) In exercising its executive authority contemplated in subsection (1), a Municipality may furthermore, amongst other things, set— a) local standards for the separation, compacting and storage of solid waste that is collected as part of the municipal service or that is disposed of at a municipal waste disposal facility; b) local standards for the management of solid waste that is disposed of by the Municipality, including requirements in respect of the avoidance and minimisation of the generation of waste and the re-use, recycling and recovery of solid waste; c) local standards in respect of the directing of solid waste that is collected as part of the municipal service or that is disposed of by the Municipality or at a municipal waste disposal facility to specific waste treatment and disposal facilities; and d) Local standards in respect of the control of litter. (5) (a) Whenever a Municipality intends passing a by-law so as to give effect to subsection (1), it must follow a consultative process provided for in Chapter 4 of the Municipal Systems Act. (b) Paragraph (a) need
Chapter 3	montaining matters



DOCUMENT TITLE:	Final IWMP Report
-----------------	-------------------

MC.LEDET.IWMPs.2024



Designation of waste management officers			
(10)	(3) Each Municipality authorised to carry out waste management services by the Municipal Structures Act, 1998 (Act No. 117 of 1998), must designate in writing a waste management officer from its administration to be responsible for co-ordinating matters pertaining to waste management in that Municipality.		
Certain org	ans of state to prepare integrated waste management plans		
	(4) (a) Each Municipality must— (23)Submit its integrated waste management plan to the MEC for approval and (ii) include the approved integrated waste management plan in its integrated development plan		
(11)	contemplated in Chapter 5 of the Municipal Systems Act. (7) (b) A Municipality must, before finalising its integrated waste management plan, follow		

Chapter 4 Waste Management Measures

Waste collection services

(23)

(2) Every Municipality must, subject to this Act, and as far as is reasonably possible, provide containers or receptacles for the collection of recyclable waste that are accessible to the public.

the consultative process contemplated in Section 29 of the Municipal Systems Act, either as a separate process or as part of the consultative process relating to its integrated

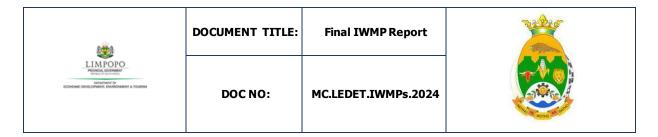
2.4 National Environmental Management: Waste Amendment Act (Act No. 26 of 2014)

development plan contemplated in that section.

2.4.1 List of Waste Management Activities that have or are likely to have, a Detrimental Effect on the Environment (GN 921 of 2013)

The listed waste activities under Sections 19 and 20 of Chapter 4 of NEMWA are published in Government Notice 921 of 2013 as Category A; activities requiring a Basic Assessment (BA) process (applicable to general waste), Category B; activities requiring a Scoping and Environmental Impact Assessment (EIA) process (applicable to hazardous waste) set out in Section 24(5) of NEMA (Act No. 107 of 1998), as part of the waste management license application contemplated in Section 45 read with Section 20(b) of the Act. The main activities in terms of Categories A and B for which a waste license may be required, fall within the following broad categories:

- Storage of waste;
- · Recycling or recovery of waste;



- Treatment of waste;
- Disposal of waste; and
- Construction, expansion or decommissioning of waste facilities.

Commencement of Category C activities requires compliance with relevance standards as determined by the Minister and they include:

- Norms and standards for storage of waste, 2013; or
- Standards for extraction, flaring or recovery of landfill gas, 2013; or
- Standards for scraping or recovery of motor vehicles, 2013.
- Norms and standards for waste sorting, shredding, Grinding, Crushing, Screening, Chipping or Baling
 of general waste, 2017.

2.4.2 Regulations Regarding the Exclusion of Waste or a Portion of a Waste Stream from the Definition of Waste (GN R 715 of 2018)

The purpose of these regulations are as follows:

- Prescribe the manner in which a person or a category of persons may apply to the Minister for exclusion of a waste stream or a portion of waste for beneficial use from the definition of waste;
- Exclude permitted uses of a waste stream or a portion of waste from the definition of waste; and
- Promote diversion of waste from landfill disposal to its beneficial use.

2.5 The National Water Act, Act 36 of 1998 (NWA)

The National Water Act (Act No. 36 of 1998) (NWA) contains a number of provisions that impact on waste management, including the disposing of waste in a manner, which detrimentally impacts on a water resource and the discharge of waste into a water resource. The Act allows the Minister to make regulations for:

- Prescribing waste standards, which specify the quantity, quality and temperature of waste that may be discharged or deposited into or allowed to enter a water resource; and
- Prescribe the outcome or effect, which must be achieved through management practices for the treatment of waste before it is discharged or deposited into or allowed to enter a water resource.

This Act requires that waste discharged or deposited into or allowed to enter a water resource be monitored and analysed according to prescribed mechanisms.



DOCUMENT TITLE:	Final IWMP Report
-----------------	-------------------

MC.LEDET.IWMPs.2024



The National Environmental Management: Air Quality Act 39 of 2004

The National Environmental Management: Air Quality Act 39 of 2004 (NEM:AQA) as amended reforms the law regulating air quality in order to protect the environment by providing measures for the prevention of pollution and ecological degradation and for securing ecologically sustainable development while promoting justifiable economic and social development; provides for national norms and standards regulating air quality monitoring, management and control of all spheres of government; for specific air quality measures; and for matters incidental thereto. This Act is furthermore relevant to the management of waste as it may impact on air quality and ultimately contribute to the mitigation of climate change.

2.7 The National Health Act (Act 61 of 2003)

The National Health Act (Act No. 63 of 2003) provides measures for the promotion of health and Section 20 of the Act sets out the duties and powers of local authorities. It provides that every local government is obliged to take measures to maintain its district in a clean and hygienic condition and to prevent the occurrence of any nuisance, unhygienic or offensive condition or any other condition, which could be of danger to the health of any person. A "nuisance" includes any accumulation of refuse or other matter that is offensive or is injurious or dangerous to health. The local government is obliged to abate the nuisance or remedy the condition and to prevent the pollution of any water intended for the use of the inhabitants of its district. The National Environmental Health Norms and Standards [Government Gazette No. 39561 (2003)] clearly outlines monitoring standards for the delivery of quality Environmental Health Services, as well as acceptable standards for the control of environmental conditions constituting a danger to health. In terms of the proposed Norms and Standards, registration is required for carrying out a scheduled trade, including waste incineration, waste (including medical waste) disposal site and waste collecting, sorting, treating or processing site. The Act also assigns the Municipality the responsibility of facilitating the provision of indoor and outdoor environmental pollution control services, managing pharmaceutical and medical waste and disposal of all deceased in the community.

2.8 Hazardous Substances Act, Act 15 of 1973

This legislation aims to address substances that are deemed hazardous, in order to regulate and prohibit the importation, manufacture, sale, use, operation, application, modification, disposal or dumping of such substances. In terms of waste management, Section 29 of the Hazardous Substances Act stipulates that the Minister has the designated authority to authorise, regulate or prohibit the dumping of hazardous substances.



DOCUMENT TITLE:	Final IWMP Report
-----------------	-------------------

MC.LEDET.IWMPs.2024



Industries that generate hazardous waste must produce an industrial waste management plan. The industries such as small-scale mines and other industries within the municipalities are expected to comply with this Act and the By-laws must incorporate this in their systems.

2.9 The Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act 36 of 1947)

The Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act 36 of 1947) The Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, Act 36 of 1947 regulates the importation, sale, acquisition, disposal or use of fertilizers, farm feeds, agricultural remedies and stock remedies. This Act has relevance to compost where it is intended for use as a fertilizer and digestate from anaerobic digestion plants intended as fertilizers. It also regulates the disposal of farm feeds and fertilizers.

2.10 The Occupational Health and Safety Act (Act 85 of 1993)

The Occupational Health and Safety Act, Act 85 of 1993 contains provisions that protect waste workers f rom harm during the waste management process. There are regulations protecting workers and the public f rom exposure to asbestos, hazardous chemicals and lead. The Occupational Health and Safety Act and its regulations are of importance to the management of the health and safety of workers responsible for the handling of waste. This Act could also be applicable to waste harvesters, if they are allowed by a Municipality to reclaim waste.

2.11 The White Paper on Integrated Pollution and Waste Management for South Africa (1999)

The White Paper on Integrated Pollution and Waste Management for South Africa (1999) represents formal government policy regarding integrated pollution and waste management.

2.12 Waste Tyre Regulation GNR 149 of 2009

Waste Tyre Regulation regulates the management of waste tyres by providing for the regulatory mechanisms.



DOCUMENT TITLE:	Final IWMP Report	
DOC NO:	MC.LEDET.IWMPs.2024	

2.13 The National Waste Management Strategy GNR 2020

The National Waste Management Strategy (NWMS,2020) is a legislative requirement of NEMWA. The purpose of the NWMS is to give effect in achieving the objectives outlined in the NEMWA. The 2020 NWMS is a revision and update of the 2020 NWMS. Organs of state and affected persons are obliged to give effect to the NWMS. The 2020 NWMS is structured around central implementation themes that are described in terms of strategic objectives and actions:

- Theme 1: Waste Minimisation
- Theme 2: Effective and Sustainable Waste Services
- Theme 3: Waste Awareness and Compliance

The NWMS overall aim is to reduce the generation and environmental impacts associated with poor waste management. It presents a plan on how to achieve the desired goals outlined in the document which will ultimately promote a cleaner, healthier environment within South Africa.

2.14 The National Policy for the provision of Basic Refuse Removal services to indigent households (GN 413 of 2011)

The National Policy on Free Basic Refuse Removal (FBRR) aims to address the need for f ree basic refuse removal among impoverished households. Many municipalities experience number of challenges with respect to delivering an effective and sustainable waste service to all households. Some of the problems currently experienced by municipalities in terms of waste management are insufficient budget allocation, lack of equipment, skilled staff and poor access to service areas.

There are three objectives of the National Policy on FBRR. The f irst, being to establish a f ramework for the development, identification and management of indigent households that can be enrolled for the FBRR service within the Municipality. The second is to set broad principles, resulting in the adoption of By-laws for the implementation and enforcement of tarif f policies that will support the FBRR service within the concerned municipalities. The last of these principals is to educate and raise awareness within municipalities regarding proper handling of domestic waste for FBRR as well as for the need to minimise waste and promote recycling.

The main criteria for determining recipients that require FBRR services is to be registered on a Municipality's indigent register. Other criteria that can be used in the absence of being registered on a Municipality's indigent register include level of income, residence status, special considerations, value of property as well as any



DOCUMENT TITLE:	Final IWMP Report
-----------------	-------------------

DOC NO: MC.LEDET.IWMPs.2024



other criteria as determined by the specific Municipality. The required f inance to implement such a service can be attained via internal sources (i.e. revenues f rom local tariffs and other taxes levied), and external sources (i.e. f rom the national f iscus).

The National FBRR Policy also states that upon implementation of the FBRR service, there should also be efficient monitoring by the Municipality. Section 12 stipulates that the Municipality must prepare an implementation plan for the FBRR services, and must contain aspects such as monitoring, targets and evaluation. In order to meet the aims and objectives of the FBRR, the district is required to align its policies to relevant legislation, indigent policies and f inancial management systems, while being mind ful of the need to ensure that there is uniformity when dealing with various cases of the indigent households.

2.15 The National Domestic Waste Collection Standards (GNR 21 of 2011)

This notice aims to standardize waste service delivery to ensure that this service be available to all while complying with current health and safety legislations as well as minimally changing those waste collection processes that function effectively and efficiently. The National Domestic Waste Collections Standards (NDWCS) also specifies that recyclables which are not collected at households should be deposited at drop-off centres which must be easily accessible to households. These drop-off centres must promote recycling, ensure user f riendliness and also collection must be done at regular intervals so that it does not cause a nuisance.

The NDWCS defines that there should be mechanisms in place to ensure that there be transparent communication between different stakeholders. This document stipulates that the service provider must create awareness amongst households about waste collection services offered, source separation, composting and the consequences of illegal dumping. This notice also outlines the role of the Waste Manag ement Officer (WMO) regarding waste awareness and the handling of complaints are prescribed.

2.16 The National Norms and Standards for the Remediation of Contaminated Land and Soil Quality in the Republic of South Africa (GN 467 of 2013)

The purpose of the norms and standards is to provide for a uniform, national approach relating to the remediation of contaminated land.



DOCUMENT TITLE:	Final IWMP Report
-----------------	-------------------

MC.LEDET.IWMPs.2024



2.17 The National Waste Information Regulation (GNR 625 of 2012)

This notice illustrates the regulations for the collections of data and information to fulf il the objectives of the National Waste Information System (SAWIS) set out in Section 61 of the NEMWA. The list of activities requiring registration and reporting on the SAWIS includes general waste disposal facilities that receive more than 150 tons of waste per day, recycling and treatment facilities, hazardous waste being exported or imported as well as energy recovery facilities.

2.18 The Waste Classification and Management Regulations (GNR 634 of 2013)

The purpose of this Regulation is to regulate the classification and management of waste in manner which supports and implements the provisions of NEMWA; to establish a mechanism and procedure for the listing of waste management activities that do not require a Waste Management License; to prescribe requirements for the disposal of waste to a landfill; to prescribe general duties of waste generators, transporters and managers.

2.19 The National Norms and Standards for the Assessment of Waste for Landfill Disposal (GNR 635 of 2013)

The National Norms and Standards for the Assessment of Waste for Landfill Disposal prescribes the requirements for the assessment of waste prior to its disposal to landfill in terms of Regulation 8(1)(a) of the regulations. It is the responsibility of the Municipality to ensure compliance with the waste quality prior to its disposal at landfill.

2.20 The National Norms and Standards for the Scrapping or Recovery of Motor Vehicles GNR 925 of 2013

The National Norms and Standards for the Scrapping or Recovery of Motor Vehicles aim at controlling the scrapping or recovery of motor vehicles at a facility with an operational area in excess of 500 m² in order to prevent or minimize potentially negative impacts on the biophysical and socio-economic environment.

2.21 The National Norms and Standards for Disposal of Waste to landfill GNR 636 of 2013

These Norms and Standards determine the requirements for the disposal of waste to landfills as contemplated in regulation Section 8(1) (b) and (c) of the Waste Classification and Management Regulations. Chapter 2



DOCUMENT TITLE:	Final IWMP Report



outlines and illustrates Landfill Classification and Containment Barrier Design. Waste assessed in terms of the Norms and Standards for Assessment of Waste for Landfill Disposal in terms of Section 7(1) of the Act must be disposed to a licensed landfill as shown in Table 2.4 below:

MC.LEDET.IWMPs.2024

Table 2-4: Landfill disposal requirements as per waste type

Disposal to landfill not allowed
Disposal at Class A landfill or H:h/H:H landfill as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Edition, Dept. of Water Affairs and Forestry, 1998)
Disposal at Class B landfill or G: L: B+ landfill as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Edition, Dept. of Water Affairs and Forestry, 1998)
Disposal at Class C landfill or G: L: B+ landfill as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Edition, Dept. of Water Affairs and Forestry, 1998)
Disposal at Class D landfill or G: L: B landfill as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Edition, Dept. of Water Affairs and Forestry, 1998)

The waste listed in Section 2(a) of Annexure 1 to the Regulations must be disposed Table 2-5 below Table 2-5: Landfill disposal requirements for listed waste types as per section 2(a)

Listed Waste	Landfill Disposal Requirements
Domestic waste; business waste not containing	Disposal at Class B landfill or G: L: B+ landfill as
hazardous waste of hazardous chemicals; non-	specified in the Minimum Requirements for Waste
infectious animal carcasses; garden waste.	Disposal by Landfill (2nd Edition, Dept. of Water
	Affairs and Forestry, 1998)
Post-consumer packaging; waste tyres.	Disposal at Class C landfill or G: L: B+ landfill as
	specified in the Minimum Requirements for Waste
	Disposal by Landfill (2nd Edition, Dept. of Water
	Affairs and Forestry, 1998)
Building and demolition waste not containing	Disposal at Class D landfill or G: L: B landfill as
hazardous waste or hazardous chemicals;	specified in the Minimum Requirements for Waste
Excavated earth material not containing	Disposal by Landfill (2nd Edition, Dept. of Water
hazardous waste or hazardous chemicals.	Affairs and Forestry, 1998)



DOCUMENT TITLE:	Final IWMP Report	
DOC NO:	MC.LEDET.IWMPs.2024	



The following waste included in Section 2(b) of Annexure 1 to the Regulations must be disposed as shown in Table 2-6 below, unless assessed in terms of the Norms and Standards for Assessment of Water for Landfill Disposal set in terms of Section 7(1) of the Act and disposed of in terms of Section 4(1) of these Norms and Standards.

Table 2-6: Landfill disposal requirements for listed waste types as per section 2(b)

Asbestos waste; Expired, spoilt or unusable Disposal at Class A landfill or H:h/H:H landfill as hazardous products; PCBs; General waste, specified in the Minimum Requirements for Waste excluding domestic waste, which contains Disposal by Landfill (2nd Edition, Dept. of Water hazardous waste or hazardous chemicals; Mixed, Affairs and Forestry, 1998) hazardous chemical wastes f rom analytical labs and labs f rom academic institutions in containers less than 100 litres.

The waste that has been classified in terms of the Minimum Requirements for the Handling, Classification and Disposal of Hazardous Waste (2nd Edition, Dept. of Water Affairs and Forestry, 1998) prior to the Regulations coming into operation, may be accepted and disposed of as set out below in Table 2-7 for a period not exceeding 3 years after the date of coming into operations of the Regulations:

Table 2-7: Landfill disposal requirements for categorized hazardous waste ratings

Waste Landfill	Disposal Requirements
Hazardous Waste – Hazard Rating 1 or 2	Disposal at Class A landfill or H:h/H:H landfill as specified in the Minimum Requirements for Waste
	Disposal by Landfill (2nd Edition, Dept. of Water Affairs and Forestry, 1998)
Hazardous Waste – Hazard Rating 3 or 4	Disposal at Class A landfill or H:h/H:H landfill as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Edition, Dept. of Water Affairs and Forestry, 1998)
Hazardous Waste – Delisted	Disposal at Class B landfill or G: L: B+ landfill as specified in the Minimum Requirements for Waste Disposal by Landfill (2nd Edition, Dept. of Water Affairs and Forestry, 1998)



DOCUMENT TITLE:	Final IWMP Report

DOC NO: MC.LEDET.IWMPs.2024

General Waste	Disposal at Class B landfill or G:S/M/L: B/B+ landfill
	as specified in the Minimum Requirements for
	Waste Disposal by Landfill (2nd Edition, Dept. of
	Water Affairs and Forestry, 1998)

The notice also lists prohibitions and restrictions on the disposal of waste to landfill which comes into effect after the timeframes indicated for each waste and activities from the date of Regulations coming into operation. It is the responsibility of the Province and Municipalities to ensure that all its landfill site is designed and operated as per the requirements of these Norms and Standards. It is therefore important to separate and classify waste in order to avoid disposing of waste that not suitable for a particular landfill site as indicated in the Tables above.

2.22 The National Norms and Standards for the Storage of Waste GNR 926 of 2013

The purpose of these norms and standards is to provide a uniform national approach to the management of waste facilities and to ensure that best practice in the management of waste storage facilities is achieved. This document also outlines to provide the minimum standards for the design and operation of new and existing waste storage facilities.

Part 1 of this document outlines the requirements for registration, what factors to consider when selecting a location and finally the requirements for the construction and design of the proposed waste storage facility.

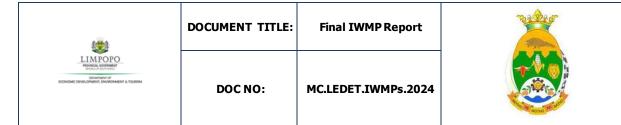
Part 2 of these norms and standards outlines the requirement for the management of waste storage facilities. Aspects such as access control, notices/signage, waste storage containers and minimum requirements for above and underground waste storage facilities are outlined in this section. This is applicable to facilities such as the landfill site.

2.23 The National Norms and Standards for Organic Waste Composting GN 561 of 2021

The National Norms and Standards for Organic Waste Composting (draft) aim at controlling the composting of organic waste at a facility that falls within the threshold of these norms and standards in order to prevent or minimize potentially negative impacts on the bio-physical and socio-economic environment.

2.24 National Norms and Standards for the Sorting, Shredding, Grinding, Crushing, Screening or Bailing of General Waste (GNR 1093 of 2017)

The purpose of these Norms and Standards is to provide a uniform national approach relating to the management of waste facilities that sort, shred, grind, crush, screen, chip or bale general waste, with an



operational area that is 1000m2 and more. Waste facilities with less than 1000m2 are to comply with Section 4(4) of the Norms and Standards only, which requires that the facility must be registered with the Competent Authority and comply with the principles of the duty of care as contained in Section 28 of the NEMA.

The Norms and Standards require that the Municipality ensure-

- All new waste facilities must be registered 90 days prior to any construction taking place;
- Existing waste facilities must register within 90 days of the publishing of the Norms and Standards (i.e. on or before 09 January 2018);
- Those waste facilities that are already registered do not need to re-register but must comply with the Norms and Standards from 11 October 2017; and
- A waste facility that is less than 1000m2 must, inter alia, register in terms of the Norms and Standards.

2.25 Municipal Solid Waste Tariff Strategy (2012)

The Municipal Solid Waste Tariff Strategy (2012) provides guidelines to assist municipalities in improving the financial sustainability of waste services within their jurisdiction. The strategy covers areas such as:

- Scope of services and services levels;
- Financial and subsidy framework;
- Revenue streams and tarif f approaches;
- Costing of services;
- Principles of municipal solid waste tariff setting;
- Municipal solid waste tariff options (e.g. flat rate vs waste generated) and
- Implementation

The purpose of the Municipal Solid Waste Tariff Strategy is to provide a f ramework and guidance for municipalities in setting solid waste tariffs that align with the intentions of the NWMS. The NWMS recognizes the importance of full cost accounting as the foundation of f inancial sustainability, which is critical in the delivery of effective and efficient waste services and in the promotion of waste minimization, reuse, recycling and recovery. Full cost accounting considers all operational and capital expend iture pertaining to solid waste services. The introduction of cost-recovery tariffs enables municipalities to fund the "maintenance, renewal and expansion of solid waste infrastructure" (NWMS, 2011). The under-pricing of waste services sends inappropriate signals to households and waste generators and discourages waste minimisation. Inadequacies in municipal solid waste tariff setting have been raised by National Treasury (National Treasury, 2011). The strategy aims to reflect the principles that need to be adhered to in solid waste tariff setting and provides guidance in achieving the correct balance between appropriate subsidization and full cost recovery.



DOCUMENT TITLE:	Final IWMP Report

MC.LEDET.IWMPs.2024



2.26 Municipal Systems Act (Act No. 32 of 2000)

DOC NO:

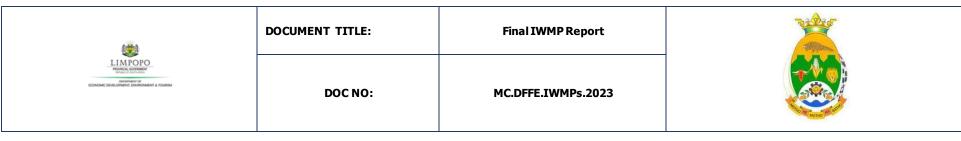
Section 25 of the MSA, requires each municipal council to within a prescribed period after the start of its election term, adopt a single, inclusive and strategic IDP, for the development of the Municipality. In relation to waste management, the IDP is required to include sectorial environmental plans which would be an IWMP for waste management. In their IDP's municipalities are required to ensure proper resources allocation to achieve the targets set in the respective plans. Section 13 of the Act provides for the publication of relevant By-laws by the municipal council in the Provincial Gazette and where feasible in a local newspaper or in any other practical way to bring the contents of the By-law to the attention of the local community.

2.27 Municipal Waste Management By-Laws

The objective of the By-laws are to: (a) give effect to the right contained in Section 24 of the Constitution by regulating waste management within the area of the Municipality's jurisdiction; (b) provide, in conjunction with any other applicable law, an effective legal and administrative f ramework, within which the Municipality can manage and regulate waste management activities; (c) ensure that waste is avoided, or where it cannot be altogether avoided, minimised, re-used, recycled, recovered, and disposed of in an environmentally sound manner; (d) promote and ensure an effective delivery of waste services and provide effective monitoring and, (e) enforcement of waste management within the Local Municipality. All Municipality should develop a waste management By-law. The By-laws need to take into consideration the management of medical and hazardous waste and address waste management holistically. It is important that once the By-laws are gazetted, a copy is immediately sent to the provincial department.

3 INTEGRATED WASTE MANAGEMENT PLANNING PROCESS

The primary objective of IWMP is to integrate and optimise waste management planning in order to maximise efficiency and minimise the associated environmental impacts and financial costs, and to improve the quality of life for all South Africans. The diagram below (Figure 3-1) summarises the integrated waste management planning process that has been adopted for this process.



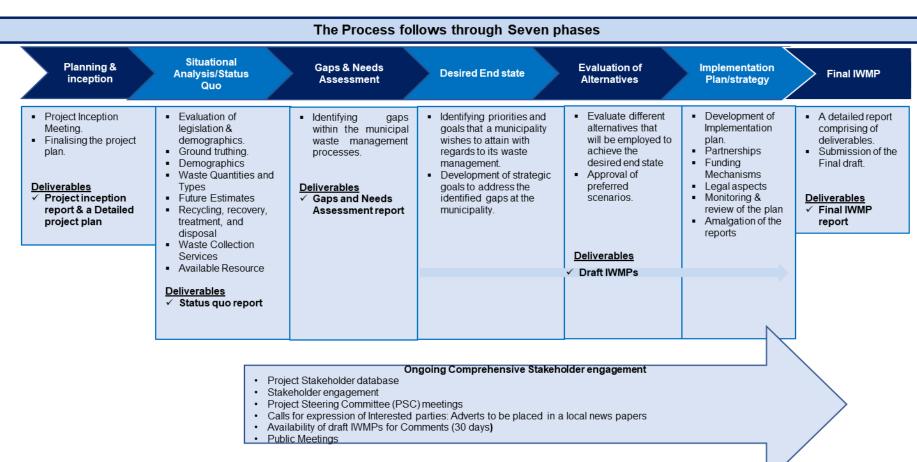
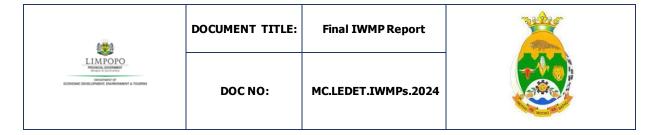


Figure 3-1: Integrated Waste Management Planning process.



4 WASTE SITUATION ASSESSMENT

The development of an IWMP includes a situation analysis which entails a description of the population and development profiles of LNLM which the plan relates, an assessment of waste quantities and types of waste generated within the Municipality, a description of the services that are re available for the collection, minimisation, re-use, recycling, and recovery, treatment and disposal of waste. Moreover, the situation analysis is also completed in terms of institutional, financial, legal and physical conditions which must also be translated into the desired end state.

The situation analysis considered the status with regards to the delivery of waste services, demographic profile and socio-economic composition. It also includes the quantities and type of waste that is being generated, recycled, recovered, treated and disposed. Information on resources i.e. financial and human capital, including equipment, are also indicated under this section.

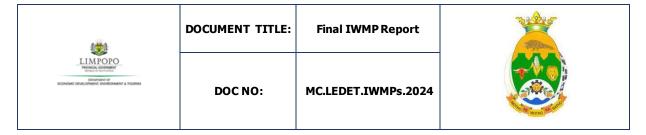
4.1 Situational Analysis Methodology

The information for compiling of the status quo report was collected from the following sources:

- Lepelle-Nkumpi Local Municipality Integrated Development Plan 2022/23;
- Lepelle-Nkumpi waste disposal site Licence;
- Draft IWMP 2022;
- Interviews with key stakeholders e.g. waste pickers, service provider managing the landfill site manager and municipal officials;
- Status quo report of sewage facilities in Limpopo 2021;
- Site visits; and
- Stats SA (2011 and 2022).

4.2 Geographical Area

This section describes the location and demographics of LNLM with the aim to provide a comprehensive background.



4.2.1 Locality

LNLM is situated in the southern part of Capricorn District in the Limpopo province. It is bordered by the Ba-Phalaborwa Municipality and Great Tzaneen Municipality to the East, and Tubatse Municipality and Makhuduthamaga Municipality to the south. LNLM has large game farms, and it also boasts of the East gate Airport through which promote its tourism status and ensure direct access to other provinces. LNLM is a category B Municipality which covers an area of 3 463 km². The Municipality is predominantly rural with 29 wards. The main town is Lebowakgomo with a key economic sector is being agriculture. According to Stats 2022, the total population is 284 404, which is the second largest population within the CDM. LNLM's total households is 78 217 with an average of 3.6 household size.

•



DOCUMENT TITLE:	Final IWMP Report

MC.LEDET.IWMPs.2024

DOC NO:



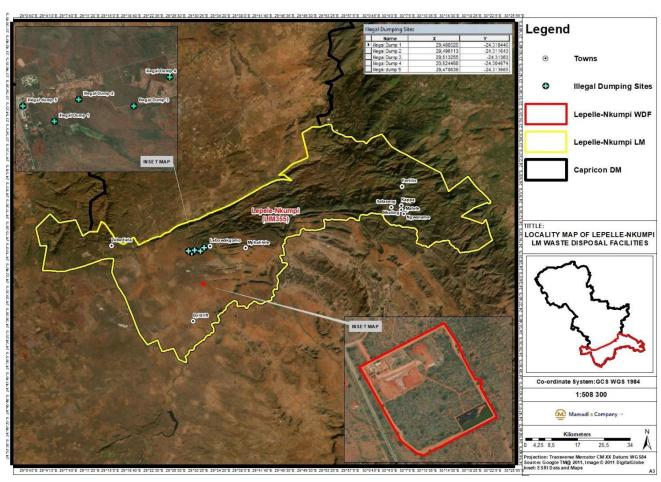


Figure 4-1: Locality Map of LNLM Municipality

(8)	DOCUMENT TITLE:	Final IWMP Report	
LIMPOPO PROMES DOMENTO PROMES DOMENTO PROMES DOMENTO BOOMCOMENT, ENWOMENT & TOURSM	DOC NO:	MC.LEDET.IWMPs.2024	

4.3 Demographics and Population Growth

This section highlights the socio-economic aspects such as population, education, employment, and income at LNLM. According to the LEDET IWMP Guidelines, demographic data is required to calculate projections of current and future waste quantities. Furthermore, this information is required to:

- Assess the required resources to provide effective waste management services and infrastructure;
- Ensure that previously un-serviced areas, such as informal settlements (i.e. high-density
 areas, usually on the periphery of urban areas that are characterised by structures such
 as "shacks") and rural (low density areas usually a greater distance from urban areas and
 also referred to as "villages") or sparsely populated areas are considered;
- Evaluate the potential for financial recovery; and
- Form the basis for projected waste volumes and types.

Understanding the demographic profile of the Municipality will provide a clear indication of the socio-economic factors that influence waste generation, in particular population (which gives direct indication of waste generation values), education (which may have a bearing on awareness and waste management education), employment and income (which indicates access to waste management services). Aspects within demographics also allow for analysis of factors that may influence attitudes and behaviours relating to waste management. Importantly, socio-economic factors emphasise the level of user affordability, which serves as a key aspect to be considered for appropriate budgeting and costing. This also shows areas which require more attention and financial assistance. Table 4-1 below details the demographic profiles for LNLM.



DOCUMENT TITLE:	Final IWMP Report



DOC NO: MC.LEDET.IWMPs.2024

Table 4-1: Growth and Demographic Profiles

Population Growth		
Municipality Total Population (Stats SA, Census 2022)	284 404	
Estimated Population Growth rate (%) (Stats SA, Census 2022)	2.09%	
Municipality Total Population (Stats SA, Census 2011)	231 239	
Estimated Population Growth rate (%) (Stats SA, Census 2011)	0.04	
Municipality Total Population (Stats SA, Census 2001)	230 350	
Demographic Profiles		
Age		
Young	32.7%	93000
Middle Age/ Working Age	58.8%	167230
Old Age	8.5%	24174
Gender		
Male	46.6%	132532
Female	53.4%	151872
Education		
No Schooling	12.4%	35266
Tertiary	10.9%	31000

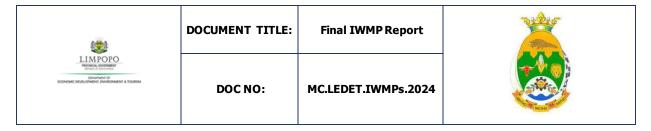
4.3.1 Future Population

If the current population of LNLM grows at a constant rate of 2.09.% per decade (Statistics SA, 2022), over a five-year period, the population of this Municipality is estimated to be 315 393 persons as per the calculation below:

Popfuture = Poppresent
$$(1+i)^n$$

Popfuture = 284 404 $((1+(2.9/100))^5$
=284 404 (1.154)
=315 393

Calculation Index:



Pop_{future}- Future Population

Poppresent- Present Population as per (Stats SA, 2022)

i - Growth rate as per Stats SA, 2022

n - No of years

The equation below was used to calculate future population over a 10-year period for the years 2021, 2031 and 2041 (up to 30 years) for LNLM in Table 4-2 below.

Table 4-2: LNLM Population Growth Projections

Census (2022)	Estimated (2031)	Estimated (2041)	Estimated (2051)
284 404	349 758	430 130	528 971

With a population estimate of 349 758 people in 2031, it is evident that an additional of 65 354 will be generating waste. This population growth will ultimately result in an increase in the number of households within LNLM requiring waste management services as projected in Table 4-3 below.

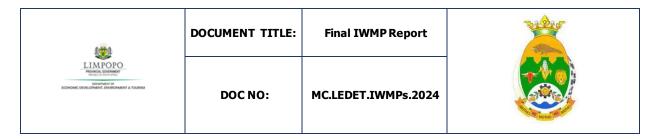


Table 4-3:LNLM's Number of Households Projections (Stats SA,2011/2022)

Census 2011 Statistics:	Census 2022 Statistics:	The HH increased in 10yrs by
24 689	31 968	7 279
2031	2041	2051
(HH in 10 years)	(HH in 20 years)	(HH in 30 years)
43 803	60 020	82 244

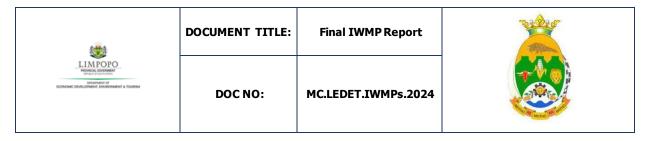
Note: Baseline year used for estimates is 2011

4.3.2 LNLM Income Status

Stats SA, 2022 doesn't averaged household income statistics, as a result Stats SA 2011 averages were used with the assumption that all income groups grew at the same rate. Most (24.70%) of LNLM's residents earn between R9 601 - R19 600. This is followed by 21.10% which earns R19 601 - R38 200 and then 15.4% which earns no income. Tables 4-4 indicate that most population earnings are within these three income groups.

Table 4-4 Income status of Municipality within LNLM (Stats SA, 2011)

Income	Lepelle-Nkumpi LM
No income	15,4%
R1 - R4,800	6.00%
R4,801 - R9,600	11.90%
R9,601 - R19,600	24.70%
R19,601 - R38,200	21.10%
R38,201 - R76,4000	7.70%
R76,401 - R153,800	5.90%
R153,801 - R307,600	4.50%
R307,601 - R614,400	2.20%
R614,001 - R1,228,800	0.40%
R1,228,801 - R2,457,600	0.10%
R2,457,601+	0.10%



4.3.3 Dwelling Types

According to Stats SA 2022, LNLM has 78 217 households Table 4-5 details households dwelling types based on Stats SA 2022.

Table 4-5 Households Dwelling Types (Stats SA 2022:)

Dwelling Types		
Formal dwelling	75 987	97.1%
Traditional dwelling	890	1,1%
Informal dwelling	1 071	1.4%
Other	269	0.3%

4.4 Waste Management Systems

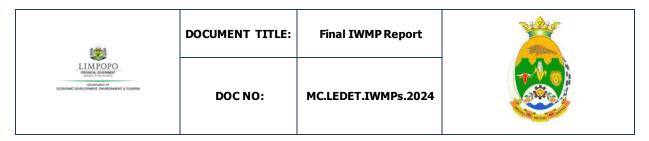
Existing waste management systems within the LNLM have been explored to determine the quantities and the types of waste generated in its area of jurisdiction. This involves establishing the current quantities of waste generated, recycled, treated and disposed to highlight the gaps and challenges within the Municipality.

4.4.1 Waste Generation and Characterisation

Waste generated in LNLM can generally be categorised as follows:

- **General domestic and commercial waste:** This consists of paper, plastic, metal, glass, putrescible /food waste, garden refuse and building rubble.
- Medical waste: This includes health care risk waste such as sharps.
- Hazardous waste: Includes waste such as used motor oils, sewage sludge, electronic waste and waste from funeral parlours.
- Organic waste- This includes garden waste, fruits and vegetables.

Figure 4-2 below shows the main waste subgroups generated, thus constituting waste streams within LNLM.



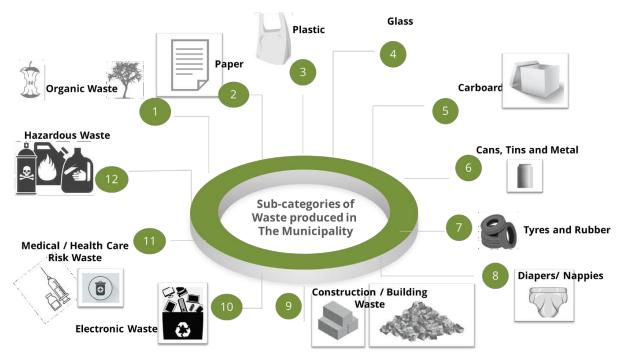


Figure 4-2: Sub-Categories of Waste Generated in LNLM.

4.4.1.1 Waste Stream Analysis

LNLM in collaboration with LEDET conducted the waste characterization workshop on 18 January 2024 at Lepelle-Nkumpi landfill site. Waste samples were collected from Lebowakgomo town. A sample was analysed from this area to give a presentation of the total waste streams within the Municipality. This will provide an indication of the potential recyclable waste materials that can be diverted from being landfilled within the Municipality.

The following method was used to analyse/characterize waste streams:

- A sample was taken from a refuse truck from the above area.
- Waste was then sorted into different waste streams and placed in refuse bags according to their waste stream; and
- Sorted waste streams were then weighed (kg) using the scale.

The waste stream composed of sixteen (16) categories, namely, High Density Polyethylene (HDPE) Plastic, Polyethylene Terephthalate (PET), Electronic, Film Plastic, Organic Waste (Food Waste), Card Boxes, Aluminium, Polystyrene, Paper, Glass, Container Plastic, Textile,



DOCUMENT TITLE:	Final IWMP Report

DOC NO:



Health Care Risk Waste (HCRW), Sanitary Waste, Metal Cans and other Metal. Table 4-6 and Figure 4-4 details waste stream analysis from the above-mentioned residential areas.

MC.LEDET.IWMPs.2024

Table 4-6: Waste Stream Analysis from Lepelle-Nkumpi LM Town

Waste Stream	Mass (kg)	Annual Mass Estimate (kg)	Annual Mass Estimate (tons)	Percentage (%)	
Plastic HDPE	8.22	2170.08	2.17	6.50	
PET	11.8	3115.2	3.12	9.33	
Electronic	0	0	0	0	
Film plastic	6.55	1729.2	1.73	5.18	
Organic waste	6.25	1650	1.65	4.94	
Card Boxes	23.98	6330.72	6.33	18.96	
Aluminum Cans	5.88	1552.32	1.55	4.65	
Polystyrene	4.11	1085.04	1.09	3.25	
paper	er 4.89 129		1.29	3.87	
Glass	15.89	4194.96 4.19		12.57	
Conta. Plastic	9.97 2632.08 2.63		2.63	7.88	
Textile	0	0 0		0	
HCRW	0	0	0	0	
Garden	4.89	1290.96	1.29	3.87	
Sanitary waste	8.98	2370.72	2.37	8.19	
Metal cans	1.83	483.12	0.48	1.45	
TOTAL	109.61	31307.76	31.31	94.87	

€ Ž A	DOCUMENT TITLE:	Final IWMP Report	
LIMPOPO PRODUCES, CONTENEED ROUNDAMENT OF THE PRODUCES OF T	DOC NO:	MC.LEDET.IWMPs.2024	

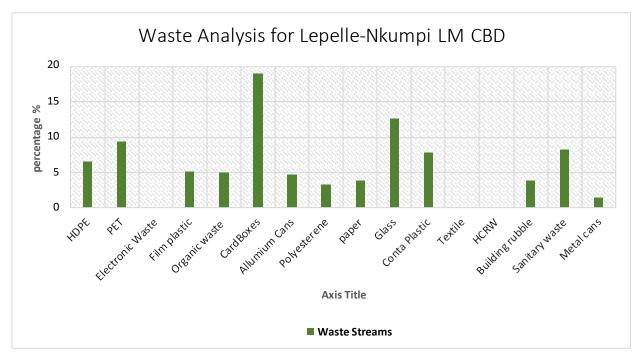


Figure 4-3: Waste Stream Analysis from Lepelle-Nkumpi LM Residential in kg.



DOCUMENT TITLE:	Final IWMP Report
DOC NO:	MC.LEDET.IWMPs.2024



4.4.2 Waste Collection

Waste collection includes areas that receive waste collection services and areas that do not receive waste services as well as serviced and un-serviced indigent households. Table 4-7 below details basic waste collection services, including indigent households.

Table 4-7: Status of waste collection in LNLM (2022 Draft IWMP)

Lepelle-	-Nkumpi LM
Total Number of Households (Stats SA 2022)	78 217
Serviced Households	26 781
Un-serviced Households	51 436
Number of Indigent Households	Unknown
Serviced Indigent Households	Unknown
Un- Indigent Households	Unknown

4.4.2.1 Waste Management Fleet

To achieve effective waste management collection, it is necessary that the Municipality is equipped with sufficient and efficient waste management fleet to carry out waste collection and waste disposal services. Table 4-8 below details the fleet that is currently available to render waste management services within LNLM.

Table 4-8: Waste Management Fleet in LNLM

Different vehicles available for waste management	Age	Average breakdowns per months (days per month)
SKIP Truck X2	2010 and 2014	Once
Compactor Truck X7	2010,2014 & 2015	twice
Grap Truck	2013	none



DOCUMENT TITLE:	Final IWMP Report	3	
DOC NO:	MC.LEDET.IWMPs.2024		



4.4.3 Waste Recycling, Treatment and Disposal

4.4.3.1 Status of Waste Disposal Facilities

Waste disposal includes number of waste disposal facilities, and their status. LNLM has one operational landfill site namely Lepelle-Nkumpi Landfill. Table 4.9 details the status of Lepelle-Nkumpi waste disposal site.

Table 4-9: Status of Lepelle-Nkumpi waste disposal site

Position of site:	(Co-ordinates: 24°24'35.98"S and 29°31'10.03"E).
Permit/License:	Yes
Year issued:	2013
Classification of site:	G.M. B
Type of operation (end – tip, trench, cell):	Cell
Estimated size of site:	256 376 m ²
Estimated remaining lif e of site:	40 years
Separation of fresh and contaminated water:	None
Groundwater monitoring:	None
Volumes per day, week, or month:	350-400 tons per month
Is cover material available?	Yes
Is the drainage sufficient?	None
Is there access control?	None
Is the site fenced?	Yes
Does the site have a sufficient buffer zone?	Yes
Type of equipment utilised on site:	Front End Loader
Operating hours:	07H30-16H30
Site facilities, i.e. ablutions, guard house:	There is a ablution facility next to the guard house
Weighbridge	Yes
Reporting on SAWIS	Yes



DOC NO:

MC.LEDET.IWMPs.2024



Estimating cost for closure:

R25 474 365,00



Figure 4-4: Lepelle-Nkumpi Landfill Site

4.4.3.1.1 Compliance with Waste Management License Conditions

The NEMWA has a comprehensive legal framework for waste management, its provisions will be meaningless without measures to monitor and, where necessary enforce compliance. As part of compliance, LNLM must monitor issues of compliance in the disposal facility by conducting both internal audits and external audits as per conditions of their Waste Management Licenses (WML). Landfill site audit reports are used to assess the level of compliance of the facilities in terms of their WML conditions.



DOCUMENT TITLE:

Final IWMP Report

DOC NO:

MC.LEDET.IWMPs.2024



The Department of Limpopo Economic Development, Environment and Tourism (LEDET) and the Department of Water and Sanitation (DWS) as the competent authorities reserves the right to audit or inspect disposal facilities to monitor whether the site is complying with conditions of WMLs and minimum requirements of a waste disposal facility. According to the WML conditions, internal audits must be conducted quarterly while external audits must be conducted biannually, and audit reports complied should show audit findings after each audit. LNLM is conducting internal inspections/audits of the landfill, the formal inspection/audit reports were compiled in 2nd quarter 2021/2022 financial year. To provide a broad overview of the level of compliance a site visit was conducted at Lepelle-Nkumpi waste disposal site. Overview of challenges at the landfill site includes:

- external audits are not conducted;
- Ground water monitoring networks are not well established,
- Ground water and surface monitoring are not conducted;

4.4.3.1.2 Air Quality within the landfill site

The air quality within the Lepelle-Nkumpi landfill site is poor due to the decomposition of waste, which releases pollutants into the air. Air quality issues at Lepelle-Nkumpi Landfill site include Volatile organic compounds (VOCs) these are Gases from decomposing waste, such as methane and hydrogen sulphide and there are unpleasant smells from decomposing waste. These pollutants have a negative impact on the environment since its contribution to climate change, air pollution, and nuisance odours.

4.4.3.1.3 Illegal Dumping

Illegal dumping is common all over the municipal area especially a problem in the former townships. The Municipality is collecting this waste at an unnecessary cost. Illegal dumping ranges from instances of litter found on roadsides to large vacant plots of land utilised as a dumpsite. Illegal dumpsites have numerous negative impacts on the environment and human health. The causes of illegal dumping could be attributed to poor waste removal services within a specific area and lack of public awareness on the issue. LNLM has implemented measures to combat illegal dumping that include community clean-up operations, adopt-a-spot, placing of warning notices at illegal dumping site and continually creating awareness on the benefits of a clean environment. The monthly program to clean illegal dumps is in place in collaboration with



DOCUMENT TITLE:

Final IWMP Report

DOC NO:

MC.LEDET.IWMPs.2024



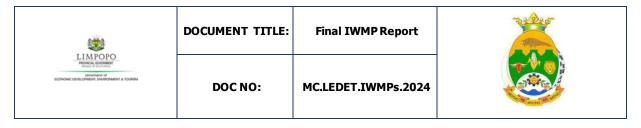
DFFE and LEDET. LNLM has recognised the need for environmental education and is clearing illegal dumps monthly coupled with awareness campaigns.



Figure 4-6: One of Illegal dumping in Lepelle-NKumpi residential area

4.4.3.1.4 Hazardous and Health Care Risk Care Waste Disposal

The responsibility managing hazardous waste and HCRW waste does not lie with municipalities, however it is important for the Municipality know whether the waste within its jurisdiction is managed properly. HCRW from health care facilities such as hospitals, surgeries and clinics is managed and collected by Buhle Waste (Pty) Ltd and is disposed at Holfontein hazardous waste landfill site in Gauteng province. Currently the Municipality is not aware as to how hazardous waste e.g. from mechanism is managed.



4.4.3.2 Wastewater Treatment Facilities

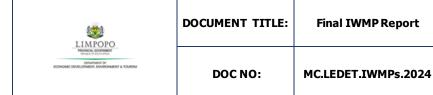
This section provides the status of wastewater treatment facilities within the LNLM. There are two wastewater treatment facilities that are owned and maintained by the municipality. Table 4-10 details wastewater treatment facilities status quo.

Table 4-10: Status of Wastewater Treatment Facilities within LNLM (Status Quo Sewage facilities in Limpopo Report 2021)

Name of a Facility	Ownership	Status	Action Required
1. Olifantspoort WTW	Capricorn District Municipality public work	 No License No Operational Plan Inadequate equipment No ablution facilities Effluent analysis not done 	 Application for License Operational Plan Clearance of vegetation Ablution facilities Effluent analysis Equipment
2. Lepelle North water	Capricorn District Municipality	 No License No Operational Plan Inadequate equipment No ablution facilities 	 Application for License Operational Plan Clearance of vegetation Ablution facilities Equipment

4.4.3.3 Status of Waste Recycling

Recycling is a key component of waste minimisation which is practised within LNLM by private companies and local entrepreneurs. The level of recycling initiatives ranges from small scale street collection to large business enterprises that have collection, storage and processing facilities. The Municipality through its information sharing and workshops has seen many community-based recycling projects being established. No recycling initiatives are implemented directly by the LNLM. The Municipality supports the waste recyclers by allowing them to reclaim waste from the landfill site and by arranging information sessions. LNLM intend to intensify the recycling program through partnerships with organisations such as Petco, Mondi and many other recyclable buyers. Capricorn District through Environmental Protection and Implementation Programme (EPIP) funding developed the buy-back centre at Lepelle-Nkumpi waste disposal site which is currently operational.





Composting of waste is taking place within the LNLM through the municipality. Garden waste collected from households and business areas is taken to composting site in Lepelle-Nkumpi landfill site. The landfill site compost garden leaves and waste from residential place and town. The garden waste is mixed with horse or chicken droppings and watered regularly for composing process to take place. It takes three to four months for waste to be converted into manure, which is then sold for R200.00 per ton.

Table 4-11 below highlight recycling initiatives within LNLM, their registration status, and the type of recyclable materials being recycled.

Recycling Companies Registration Status Recyclable Materials Operations **Status** Rojack Operational Trading and No Unknown Projects Richardo trading No Unknown Unknown Ramajele Trading Operational Unknown and No Projects Bagodumo Trading and No Operational Unknown **Projects** Polokwane Scrap Metal No Operational Unknown Dikakapa Recycling No Operational Unknown

Table 4-11: Waste recycling companies and their status

4.4.4 Determining current domestic waste generation per capita

The DFFE IWMP Guidelines suggests various techniques that can be adopted for estimating waste generation rates and characteristics. These include:

- Modelling techniques generally an inexpensive technique based on generic data but only provides a general idea of the waste volumes and types;
- Physical sampling techniques A more accurate method but a more time-consuming and expensive exercise; and
- Direct measurement techniques even more costly than physical sampling.

For the purposes of the LNLM's IWMP, a model approach was adopted to estimate waste generation for all income categories. The South African State of Environment Report (SA SoER, 2018) estimated that each individual person generates about 0.7 kg of waste each day. This is further broken down according to income category as follows:

LIMPOPO	DOCUMENT TITLE:	Final IWMP Report	
"SOURCE OF ORDERED" PRINCIPLE OF ORDERED BOWNINGS BOW	DOC NO:	MC.LEDET.IWMPs.2024	

- Low income=0.41kg/person/day or (0.41kgx365 days) =149.65kg/person/year
- Middle income=0.74kg/person/day or (0.74kgx 365days) = 270.1kg/person/year
- High income=1.29 kg/person/day or (1.29kgx365days) = 470.85kg/person/year

The referenced waste generation averages for different income levels were applied to income categories sourced from Stats SA 2011 data. An average density of 330kg/m³ of compacted wastes was used. Figure 4-6 shows LNLM specific demographic information used to calculate future waste generation is presented in Tables 4-13 for LNLM.

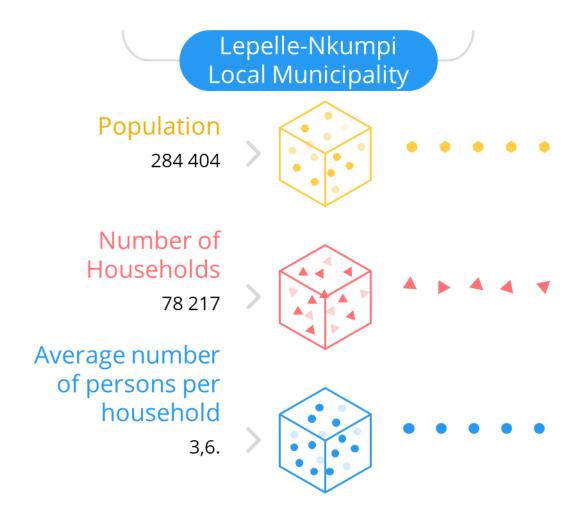
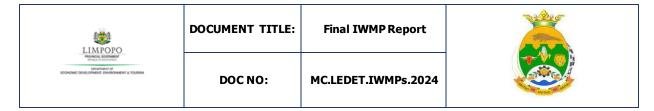


Figure 4-5: Demographics for LNLM (Stats SA, 2022)



Stats SA, 2022 doesn't averaged household income statistics, as a result Stats SA 2011 averages were used with the assumption that all income groups grew at the same rate. Table 4-13 below summarises waste generation for LNLM.



DOCUMENT TITLE: Final IWMP Report DOC NO: MC.LEDET.IWMPs.2024



Table 4-12: Yearly Estimated Waste Quantities for LNLM (Stats SA, 2011/2022)

Monthly Househo	old income	%	People	Households	All persons by income group	Income group	SA SoER (kg/capita/day)	Daily Mass (kg/day)	Total tons per year	Waste density (kg/m³)	Volume (m³/day)
No income		15.40	20400	5514							
1.00	4 800	6.00	7948	2148	76831.44	LOW	0.41	31500.89	11497.82	330.00	95.46
4801.00	9600.00	11.90	15764	4260							
9601.00	19600.00	24.70	32720	8843							
19601.00	38200.00	21.10	27951	7554							
38201.00	76400.00	7.70	10200	2757	45966.40	MIDDLE	0.74	34015.13	12415.52	330.00	103.08
76401.00	153800.00	5.90	7816	2112							
153801.00	307600.00	4.50	5961	1611	788 9670.16						
307601.00	614400.00	2.20	2914	788		HIGHER	1.29	12474.51	4553.20	330.00	37.80
614001.00	1228800.00	0.40	530	143	9070.10	HIGHER	1.29	12474.51	4555.20	330.00	37.60
1228801.00	2457600.00	0.10	132	36							
2457601.0	0	0.10	132	36							
	132468		·	Total kg pe	r day	77990.54			236.33		
					Total kg pe	r year	28466545.28	28466.55		86262.26	
					Total tons	per year	28466.55				

ased on the analysis in Table 4-13 above, it is estimated that the domestic waste per year for LNLM is about 28466.551 tons.



DOCUMENT TITLE:	Final IWMP Report
DOC NO:	MC.LEDET.IWMPs.2024



4.4.5 Estimating Future Waste Generation Rates and Quantities

Estimating future waste trends using information collected on the domestic waste generation rates for each socio-economic category/type i.e. the population, population distribution, and commercial and industrial waste generation rates. With a growth rate of 2.09% (Stats SA, 2022) per year, the population is expected to increase over the next five (5) years. It is envisaged that the most probable driver of waste generation will be future developments and the change in the socio-economic profile of LNLM's population. The main change to the profile of waste collection in LNLM will be the expansion of the urban centres because of rural to urban migration and the development of these urban areas. This could manifest itself in the following manner:

- Business development across the LNLM;
- Urbanisation;
- Tourist attractions; and
- Agricultural activities.

Estimation of future waste generation in LNLM for the next 10, 20 and 30 are presented in Table 4-14, Table 4-15 and Table 4-16.

Table 4-13: Estimation of Future Waste Volumes (in 10 Years/2031) Produced per Capita In LNLM

Type of settlement	Base population (2011)	Future Population estimates	Current domestic waste generation rates per capita	Future domestic waste generation rates per capita (in 10 years)
Low Income	76831.44	81966	11498	81966 x 11498 kg/person/year= 942430 Metric tons
Middle Income	45966.40	49038	12416	49 038 x 12 416 kg/person/year= 608836 Metric tons
High Income	9670.16	10316	4553	10 316 x 4553 kg/person/year= 46973 Metric tons



DOCUMENT TITLE:	Final IWMP Report
DOC NO:	MC.LEDET.IWMPs.2024



Table 4-14: Estimation of future waste volumes (in 20 years/2041) produced per capita in LNLM.

Type of settlement	Base population (2022)	Future Population estimates	Current domestic waste generation rates per capita	Future domestic waste generation rates per capita (in 10 years)
Low Income	81966	87443.64633	11497.82	87 443 x 11 498 kg/person/year= 1005411.74 Metric tons
Middle Income	49038	52315.42289	12415.52	52 315 x 12 413 kg/person/year= 649523.37 Metric tons
High Income	10316	11005.83825	4553.20	11 006 x 4553 kg/person/year 50111.75 Metric tons

Table 4-15: Estimation of future waste volumes (in 30 years/2051) produced per capita in LNLM.

Type of settlement	Base population (2022)	Future Population estimates	Current domestic waste generation rates per capita	Future domestic waste generation rates per capita (in 10 years)
Low Income	87443.64633	93287.38	11497.82	93 287 x 11 498 kg/person/year= 1072601.98 Metric tons
Middle Income	52315.42289	55811.59	12415.52	55 812 x 12 416 kg/person/year=692930.09 Metric tons
High Income	11005.83825	11741.34	4553.20	11 741 x 4 553 kg/person/year= 53460.64 Metric tons

Table 4-13, Table 4-14 and Table 4-15 above are on future waste volumes are based on the following assumptions:

• Assuming that the population growth rates will remain constant for the next 30 years.





- Assuming that the per capita waste generation rates would be according to the 2018
 State of the Environment Report for all income categories:
 - ✓ Low income=0.41kg/person/day
 - √ Middle income=0.74kg/person/day,
 - √ High income=1.29 kg/person/day
- Assuming that the waste generation rates would be according to the 2018 State of Environment figures in 30 years' time.

4.4.6 Financing of Waste Management

4.4.6.1 Budgeting for Waste Services

Municipal Systems Act, Act No 32 of 2000, municipalities must ensure adequate budgeting to fulfil their constitutional mandate of providing waste management services. Table 4-17 details categories of waste management cost drivers within LNLM.

Table 4-16: Waste Management Budgeting

Item	Amount	
Collection		
Transportation	Unknown	
Capex-purchase (vehicles)	R 5 000 000	
Maintenance	Unknown	
Fuel	Unknown	
Receptacles	R 1 500 000	
General	None	
Subtotal	R 6 500 000	
Governance		
Staff (remuneration)	R 7 000 000	
Education and awareness	Operational	
IWMP	None	
By-laws	None	
Subtotal	R7 000 000.00	
Disposal		
Transfer station	R 5 000 000	



DOCUMENT TITLE:	Final IWMP Report

DOC NO:

MC.LEDET.IWMPs.2024



Disposal site	Unknown
Acquisition of land, equipment	None
Regulatory compliance, EIA's and licence	Unknown
Subtotal	R 5 000 000
Total	R18 500 000
Revenue Sources	
Funding sources	Internal Funding
Municipal Infrastructure Grant (MIG) Funding	None
Equitable share funding	Unknown
Revenue from waste disposal fees (Monthly/yearly)	R 100 000
Total	R 100 000

4.4.6.2 Organisational and Institutional Matters

This section details the current organisational structure and institutional matters to determine the available human resources to deliver waste services within LNLM. To ensure continued service and effective skills transfer and to also ensure that the correct functions are put in place to fulfil NEMWA's requirements, as the successful implementation of IWMP is dependent on the availability of qualified personnel. Continuous training and succession planning are crucial to maintain a competent and capable pool of employees to ensure that positions are not left vacant.

Table 4-18 details the current institutional matters within LNLM.

Table 4-17: Organizational and Institutional matters

Department Responsible for Waste Management	By-laws Status/Waste Policy	Waste Tariffs	Private Sector Involvement in waste Management	Designation of (WMO)	EMIS
Community Services	Waste Management By-laws under review	Yes	Landfill Maintenance	Not Designated	Yes



DOC NO: MC.LEDET.IWMPs.2024



4.4.6.3 Designation of WMO

In terms of Section 10(1-3) of NEMWA, any organ of state that is authorised to carry out waste management services must designate in writing a WMO to coordinate waste management at each level of government, this is to ensure that there is a dedicated authority in each sphere of government that is responsible for implementing the policy and regulations of the NEMWA.

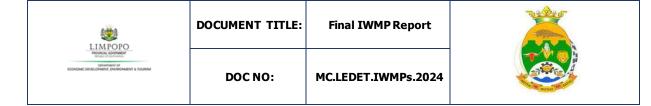
The duties and responsibilities that NEMWA and the NWMS assign to each sphere of government define the roles and powers of their WMOs. LNLM does not have a designated WMO. It is important that the municipality appoints a WMO to perform regulatory functions and should be allocated functional divisions separate from service-delivery functions where possible. Guidelines for designating WMOs detail the roles and responsibilities of WMOs.

Roles and responsibilities of Municipal WMO

- Policy development and bylaws
- Financial planning and management
- Integrated waste management planning and reporting
- Infrastructure development
- Waste services provision arrangements.
- Performance management and regulatory capacity
- Health and hygiene promotion
- Asset management and legal matters
- Service authority structural and organisational issues (capacity building)

4.4.6.4 Development and Enforcement of By-Laws

LNLM does not have waste management By-laws. Waste management By-Laws are crucial for maintaining a clean, healthy environment and ensuring responsible waste handling within the Municipality. They promote sustainable practices that protect both people and the environment. LNLM currently has and designated EMIs. The municipality may enforce these By-Laws either through local or regional authorities through designated EMIs. To increase capacity to enforce



municipal by-laws; municipalities can explore training Metro police/ local enforcement agencies on waste-related matters so that they too are equipped and can issue fines on waste management transgressions. EHPs could also be trained on waste matters to administer the enforcement of waste by-laws.

4.4.7 Mainstreaming Key Principles of the National Waste Management Strategy

4.4.7.1 Waste Minimisation and Prevention

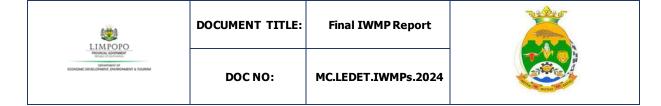
This section focuses on the identification of existing waste minimization and prevention initiatives. The most preferred methods of waste management, as indicated by the waste hierarchy, are waste minimization and prevention. This waste management methods are important as they lower waste management expenses. The identification of current waste minimization and prevention measures will assist the Municipality to promote waste minimization and prevention activities through advocacy and education to ensure that residents participate as much as possible as well as exploring opportunities for expanding the initiatives throughout the Municipality. Currently there are no waste minimization and prevention initiatives.

4.4.7.2 Environmentally Sound Socio-Economic Growth and Development

This section focuses on identifying existing efforts to ensure environmentally sound socioeconomic growth and development, this includes identifying waste management jobs in the Municipality, efforts to support locally owned small businesses and entrepreneurs such as cooperatives and waste pickers. This information will help identify gaps in areas where there are new functions that must be performed. LNLM has waste pickers reclaiming the recyclable materials from the landfill site and these recyclable materials are sold to entrepreneurs involved in recycling.

4.4.8 Waste Pickers Integration

This section focuses on identifying existing initiatives aimed at integrating the waste pickers in the Municipality, the number of waste pickers operating in the Municipality, the areas they operate as well as their working conditions. LNLM has no registered waste pickers working at the landfill site. During the interview waste pickers indicated they need PPE, most of the waste pickers were working without the necessary protective clothing.



4.4.9 Circular Economy

Incorporating circular waste economy in the municipal planning process is crucial to for implementing NWMS. This section focuses on identifying the existing circular economy activities undertaken in the Municipality. This includes activities such as promoting behavioral change through education and awareness, implementing Extended Producer Responsibility (EPR) and increasing collection of material for recycling. LNLM has partnered with DFFE whereby awareness campaigns are conducted on quarterly bases at pay points within villages.

5 GAP AND NEEDS ANALYSIS

This section presents the gaps and needs identified through the status quo analysis review. The gap and needs analysis aim to identify gaps and needs arising from the current waste management practices within the Municipality. Identifying the waste management priorities and goals that the Municipality wants to achieve includes the following:

- Identifying key waste management gaps.
- Developing strategic goals for the Integrated Waste Management Plan (IWMP);
- Developing an implementation plan; and
- Identifying the different alternatives that can be employed to achieve the desired end state it should indicate the different approaches to achieve the targets.

Gaps and needs related to waste management in the LNLM have been identified in terms of each of the following waste management activities:

- Waste service delivery;
- Waste minimisation, recycling and re-use initiatives;
- · Organic waste management;
- Hazardous waste management;
- Waste management facilities;

LIMPOPO	DOCUMENT TITLE:	Final IWMP Report	
TORONOM SOCIAL STATE OF THE STATE OF T	DOC NO:	MC.LEDET.IWMPs.2024	

- · Waste management collection fleet, plant and equipment;
- Waste management information;
- Waste education and public awareness;
- Human and financial resource management; and
- Strategic planning.

5.1 WASTE SERVICE DELIVERY

Table 5-1provides the gaps identified as well as the resulting needs for waste service delivery in the LNLM.

Table 5-1 Waste service delivery gaps and needs identified.

THEME		GAP IDENTIFIED	RESULTING NEED
Waste	collection	 Kerbside collection is offered as well as skips bins being distributed in some villages and businesses. Waste collection services are not rendered in other areas falling within the LNLM jurisdiction particularly rural areas. 	
Waste schedules	collection	 A weekly schedule has been developed for townships. 	A waste collection schedule must be formally developed by the LNLM. This will create a visual representation of the collection routes which will allow for future



DOCUMENT TITLE:

DOC NO:

Final IWMP Report



MC.LEDET.IWMPs.2024



ТНЕМЕ	GAP IDENTIFIED	RESULTING NEED
		improvements for greater service efficiency.
Illegal dumping	 Illegal dumping is predominant, even in areas receiving waste collection. 	The LNLM should implement the clean-up campaign more frequently during each quarter.

WASTE MINIMISATION, RECYCLING AND RE-USE INITIATIVES 5.2

Table 5-2 provides the gaps identified as well as the resulting needs for waste minimisation, recycling, and re-use initiatives in the LNLM.

Table 5-2: Waste minimisation, recycling and re-use initiatives gaps and needs identified.

THEME	GAP IDENTIFIED	RESULTING NEED
Separation at source initiatives	 There is no separation of waste at source i.e. (residential, industrial and Town areas) which take place. There is a great deal of recyclable materials that goes to landfill site (e.g. glass, cardboard, paper, plastic, metal etc.), as such there is limited recycling, considering the amount of recyclable material at the landfill site. 	separation at source initiatives in order to promote the separation of waste. This will further promote recycling initiatives which will reduce the amount of waste entering landfill. The LNLM should start a pilot programme at household/school level and evaluate the results in order to implement this on a Municipal



DOCUMENT TITLE:	

Final IWMP Report

DOC NO:

MC.LEDET.IWMPs.2024



THEME	GAP IDENTIFIED	RESULTING NEED
		implementation of waste separation at source.
Lack of recycling at landfill	LNLM rely only on privately owned recycling initiatives, not much effort is given to waste minimization, reuse, and recycling.	Once the approval for recycling at the Lepelle-Nkumpi Landfill is received from the Competent Authority, the LNLM must ensure that a proper recycling programme is established and maintained. The development of this programme should be designed and approved whilst the recycling approval is pending. The LNLM should seek more waste collectors who are able to buy all waste streams from the landfill site.

5.3 ORGANIC WASTE MANAGEMENT

Table 5-3 provides the gaps identified as well as the resulting needs for organic waste management in the LNLM.

Table 5-3: Organic waste management gaps and needs identified.

THEME	GAP	IDENTIFIED	RESULTING NEED
organic v diversion	waste •	Organic waste diversion is there but not in use	It is important for the LNLM to use and maintain an organic waste diversion as this will





Final IWMP Report



DOC NO:

MC.LEDET.IWMPs.2024

THEME	GAP IDENTIFIED	RESULTING NEED	
		reduce the organic waste being disposed of in the landfill.	
Home composting	Lack of knowledge on home composting	Awareness campaigns should be conducted to educate the public on composting at home and its benefits.	
composting facilities	 Lack of composting facilities 	The LNLM should develop composting facilities near the landfill.	

5.4 HAZARDOUS WASTE MANAGEMENT

Although local municipalities are legally not responsible for the management and safe disposal of hazardous waste generated by major businesses and industries within their area of jurisdiction, they do need to ensure that no hazardous waste is disposed of on municipal landfill that are not licenced, developed, and operated to the required standards. In terms of the duty-of-care principle as required in NEMWA, generators of hazardous waste are responsible for the legally compliant management, treatment, and disposal of such hazardous waste generated.

Table 5-4 provides the gaps identified in terms of hazardous waste management with the associated needs.

Table 5-4: Hazardous waste gaps and needs identified.

THEME	GAP IDENTIFIED	RESULTING NEED
Hazardous waste	 Lack of knowledge on hazardous waste 	The LNLM should conduct awareness campaigns around hazardous waste in order to educate the public about this type of waste and the different



Final IWMP Report

DOC NO:

MC.LEDET.IWMPs.2024



THEME	GAP IDENTIFIED	RESULTING NEED
		forms that it comes in. These
		campaigns should encourage
		households to return medical
		waste to medical centres
		instead of disposing them as
		domestic waste. Households
		should also be made aware of
		e-waste and how to properly
		dispose of it. And there should
		be designated areas for the
		household hazardous waste at
		Municipal waste disposal
		facilities. The hazardous
		waste should then be
		transported to a hazardous
		landfill site or collected by an
		authorised hazardous waste
		transporter.
Screening of waste at	• No corponing of weets of	All waste must be screened
landfill	 No screening of waste at landfill site 	before entering the landfill. All
io. ioi iii	and in Sic	hazardous waste should not
		be allowed in the landfill site.
		So allowed in the landing site.

5.5 WASTE MANAGEMENT FACILITIES

Table 5-5 provides the gaps identified in terms of waste management facilities within the LNLM.

Table 5-5: Waste management facilities gaps and needs identified.



Final IWMP Report



DOC NO:

THEME	GAP IDENTIFIED	RESULTING NEED
Groundwater and surface water monitoring.	Lack of groundwater and surface water monitoring.	A groundwater and surface water monitoring network must be set up to monitor groundwater and surface water accurately and regularly for the landfill site.
Stormwater infrastructure	Lack of stormwater infrastructure	Stormwater infrastructure must be installed at the landfill to improve drainage. Contaminated water and stormwater should be separated and treated/disposed/reused accordingly.
Facilities at Lepelle- Nkumpi landfill	 weighbridge is available at the landfill site. However not operational. 	The weighbridge must be made operational.
Waste volume tracking	Waste is currently being tracked manually.	All waste volumes entering the landfill must be logged in a waste register. As there is no weighbridge, this can be done manually using the estimated weight of the disposing vehicles.

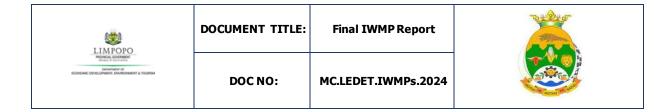


Final IWMP Report



DOC NO:

THEME	GAP IDENTIFIED	RESULTING NEED		
Waste pickers/reclaimers	 Reclaimers have challenges about waste transportation, as recyclables are only recycled in Gauteng 	The LNLM must integrate waste pickers as part of the landfill operations.		
Reporting on SAWIS	Reporting on SAWIS is done on a monthly basis.	All waste logs, for the landfill, must be reported onto SAWIS monthly.		
Internal and external auditing	 Annual external audits are not conducted. Internal Audits are conducted which were last conducted for 2nd Quarter 2021/2022 financial year. 	External auditing must be done as per the relevant condition in the respective WMLs.		
Cover materials	No cover material at Lepelle-Nkumpi landfill site	Cover material must be sourced internally or externally for regularly covering and compaction at Lepelle-Nkumpi landfill site.		
Equipment at Lepelle- Nkumpi Landfill site	There is Lack of equipment at Lepelle-Nkumpi Landfill site	Basic equipment must be made available at Lepelle-Nkumpi Landfill site for daily operations such as a TLB and compactor.		
Drop-off facilities	Lack of drop-off facilities	The LNLM must develop more drop-off facilities and make the public aware of these to prevent illegal dumping.		



5.6 WASTE MANAGEMENT COLLECTION FLEET, PLANT AND EQUIPMENT

Table 5-6 provides the gaps identified in terms of the waste management collection fleet and equipment within the LNLM.

Table 5-6: Waste management collection fleet and equipment gaps and needs identified.

THEME	GAP IDENTIFIED	RESULTING NEED
Vehicle, plant, and equipment maintenance plan	Inadequate waste management fleet, some of the available fleets are old with frequency breakdown	The LNLM must develop a maintenance plan to proactively manage the waste vehicles, plant, and equipment which will avoid delays in waste collection and operations and source other funding mechanisms such as MIG funding to purchase machinery and equipment

5.7 WASTE MANAGEMENT INFORMATION

Table 5-7 provides the gaps identified in terms of waste management information within the LNLM.

Table 5-7: Waste management information gaps and needs identified.

THEME	GAP IDENTIFIED	RESULTING NEED
Industrial general and hazardous waste	 Lack of information or industrial general and hazardous waste 	



Final IWMP Report

DOC NO:

MC.LEDET.IWMPs.2024

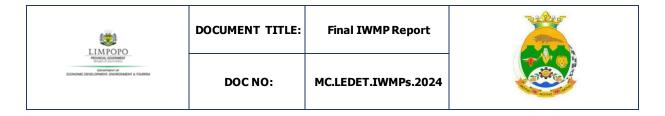


THEME	GAP IDENTIFIED RESULTING NEED	
Major waste generators within the LNLM	 Lack of information on major waste generators within the LNLM 	Major waste generators must be identified, and their waste logs must be received, monitored, and analysed.
Waste management By-laws	Waste Management By-laws are not gazetted, and this hinders enforcement as they By-laws are not legally binding.	The LNLM must develop waste management By-laws which are aligned with amended waste legislations and the 2020 waste management strategy and implement them accordingly once approved.

5.8 WASTE EDUCATION AND PUBLIC AWARENESS

Table 5-8: Waste education and initiatives gaps and needs

THEME	GAP IDENTIFIED	RESULTING NEED
Education and awareness	 Few partnerships with educational facilities such as schools. Public understanding of ethical and sustainable waste management practices should be emphasized in the 70 appointed awareness campaigns. 	The LNLM should conduct awareness within the schools and have a partnership. Communities should be educated about the ethical and sustainable waste management practices.



5.9 HUMAN AND FINANCIAL RESOURCE MANAGEMENT

Table 5-9 provides the gaps identified in terms of staff and financial management within the LNLM.

Table 5-9: Staff and financial management gaps and needs identified.

THEME	GAP IDENTIFIED	RESULTING NEED
Education and awareness and awareness budget	No budget for education and awareness	The LNLM must allocate a sufficient budget for education and awareness.
Vacancies in staff structure	 Organisational structures that are not conducive to efficient waste management. There is no information on vacant post for waste management. WMO to carry waste management functions are not appointed. Limited finances and resources some of the officials not having basic resources such as laptops, phones etc. 	It is important that all roles in the waste department's structure is filled therefore the LNLM must review the staff structure and appoint competent personnel for the relevant/vacant roles.
budget provision for operational management	 Inadequate budget allocation for waste management services in the municipalities. 	The LNLM must ensure that there is sufficient provision made for the effective



Final IWMP Report

DOC NO:

MC.LEDET.IWMPs.2024



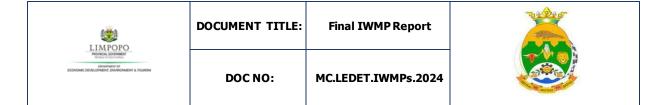
THEME	GAP IDENTIFIED	RESULTING NEED			
		management	of	all	waste
		management f	acili	ties.	

5.10 STRATEGIC PLANNING.

Future planning is essential in ensuring that a waste management service can meet the changing requirements of the LNLM and comply with changing legislation and best practice guidelines. **Table 5-10** provides the gaps identified in terms of the strategic waste management planning with the associated need to effectively address the gap.

Table 5-10: Strategic planning gaps and needs identified.

THEME	GAP IDENTIFIED	RESULTING NEED
Update of IWMP every 5 years	 There are no waste minimisation targets that considers available resources in the LNLM. LNLM have not developed short, medium, and long-term solutions to address waste management challenges within the LNLM. There are no plans as to how waste collection will be rolled to areas not receiving waste collections. LNLM have not developed waste management 	The LNLM must ensure that there is sufficient budget set aside for the review and update of the IWMP every 5 years. There should be a plan in place on how will waste from areas not receiving waste collection. and there should also be waste implementation management strategies.



THEME	GAP IDENTIFIED	RESULTING NEED
	implementation strategies and realistic timeframes.	

6 DESIRED END STATE

The desired end state entails identifying waste management priorities and goals that the Municipality wishes to attain. This will assist the Municipality in its strategic planning and prioritisation efforts to ensure that the Municipality receives the help and support they need to achieve its intended end state. Information from the status quo report is used to develop strategic goals to address the gaps and needs of the communities within the Municipality and respond to NEM: WA's objectives. A fully costed implementation plan, that will include strategic goals will then be developed.

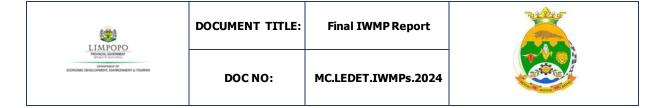
7 THE NATIONAL WASTE MANAGEMENT STRATEGY (NWMS) GOALS

The National Waste Management Strategy (NWMS) 2011 was established to achieve the NEM: WA objectives. NWMS 2011 was based on eight goals, each with one or more associated targets, however in 2018 the NWMS was revised and updated to focus on three overarching goals that are intended to articulate the core objectives of the NEM: WA. This was then gazetted as the NWMS 2020 which provides a simpler conceptual structure based on three main implementation themes framed as overarching goals informed by global emerging trends in waste management. The associated targets have been replaced with a set of strategic objectives for each goal, which will be monitored in terms of performance indicators.

7.1 National Waste Management Strategy 2020

The three goals of the NWMS 2020 that will be used to align this IWMP are as follows:

 Goal 1: Waste Minimisation - the aim is to prevent waste and where waste cannot be prevented, 40% should be diverted from landfill within 5 years through reuse, recycling,



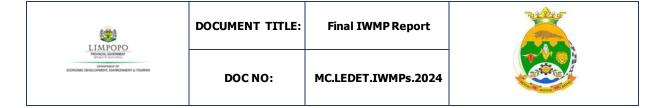
recovery, and alternative waste treatment: 25% of waste reduction in waste generation and 20% waste reused in the economic value chain.

- Goal 2: Effective and Sustainable Waste Services this would see all South Africans living in clean communities with waste services that are well managed and financially sustainable.
- Goal 3: Waste Awareness and Compliance the aim is to create a culture of compliance with zero tolerance of pollution, litter and illegal dumping.

7.2 Limpopo Provincial Integrated Waste Management Plan (PIWMP)

The Limpopo Province developed a PIWMP in 2019. This plan sets objectives to satisfy the needs for a reasonable plan to address waste management shortcomings. The goals from the Limpopo PIWMP that will be used to align this IWMP are as follows:

- Goal 1: Expansion of Waste Services and Cost Recovery
- Goal 2: Establishment of Licensed and Well-Managed Waste
- Goal 3: Encourage Waste Minimization Initiatives and Promoting Recycling Initiatives
- Goal 4: Hazardous Waste Management
- Goal 5: Strengthening Institutional Capacity for Waste Management
- Goal 6: By-Law Development and Strengthening Enforcement Capacity
- Goal 7: Education and Awareness on Waste Issues
- Goal 8: Facilitate and guide Regionalization.
- Goal 9: Risk Assessment, Monitoring and Evaluation
- Goal 10: Research and Development into Emerging Issues



7.3 Goals identified for the LNLM's IWMP

In order to align the LNLM's goals with the Limpopo PIWMP as well as the NWMS 2020, the following goals have been formulated:

- Goal 1: Effective solid waste service delivery.
- Goal 2: Promote waste minimisation and recycling.
- Goal 3: Ensure safe and integrated management of hazardous waste.
- Goal 4: Improved waste education and public awareness.
- **Goal 5**: Ensure sound budgeting for integrated waste management.
- Goal 6: Improve regulatory compliance.
- Goal 7: Improve waste information management.

LIMPOPO	DOCUMENT TITLE:	Final IWMP Report	
PROJECT (STATE OF THE PROJECT OF THE	DOC NO:	MC.LEDET.IWMPs.2024	

8 ALIGNMENT WITH THE NWMS 2020 AND LIMPOPO PIWMP GOALS

Table below outlines how the goals of the LNLM IWMP align with the NWMS 2020 and Limpopo PIWMP goals.

Table 8-1: Alignment of LNLM goals with the NWMS 2020 and Limpopo PIWMP goals

LNLM GOAL	LIMPOPO PIWMP GOAL	NWMS 2020 GOALS
Goal 1: Effective solid waste service delivery.	Goal 1: Expansion of Waste Services and Cost Recovery	Goal 2 : Effective and Sustainable Waste Services - this would see all South Africans living in clean communities with waste services that are well managed and financially sustainable.
Goal 2: Promote waste minimisation and recycling.	Goal 3: Encourage Waste Minimization Initiatives and Promoting Recycling Initiatives	Goal 1: Waste Minimisation - the aim is to prevent waste and where waste cannot be prevented, 40% should be diverted from landfill within 5 years through reuse, recycling, recovery and alternative waste treatment: 25% of waste reduction in waste generation and 20% waste reused in the economic value chain.



DOC NO:

Final IWMP Report



LNLM GOAL	LIMPOPO PIWMP GOAL	NWMS 2020 GOALS
Goal 3: Ensure safe and integrated management of hazardous waste.	Goal 4: Hazardous Waste Management	Goal 2 : Effective and Sustainable Waste Services - this would see all South Africans living in clean communities with waste services that are well managed and financially sustainable.
Goal 4: Improved waste education and public awareness.	Goal 7: Education and Awareness on Waste Issues	Goal 3 : Waste Awareness and Compliance - the aim is to create a culture of compliance with zero tolerance of pollution, litter and illegal dumping.
Goal 5: Ensure sound budgeting for integrated waste management.	Goal 1: Expansion of Waste Services and Cost Recovery	Goal 2 : Effective and Sustainable Waste Services - this would see all South Africans living in clean communities with waste services that are well managed and financially sustainable.
Goal 6: Improve regulatory compliance.	Goal 6: By-Law Development and Strengthening Enforcement Capacity	Goal 3 : Waste Awareness and Compliance - the aim is to create a culture of compliance with zero tolerance of pollution, litter and illegal dumping.



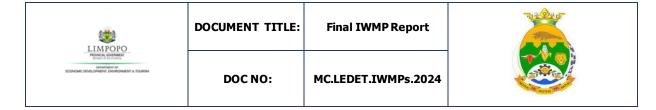
DOCUMENT TITLE: Final IWMP Report

MC.LEDET.IWMPs.2024

DOC NO:



LNLM GOAL	NLM GOAL LIMPOPO PIWMP GOAL					
	Goal 2: Establishment of Licensed and Well-Managed Waste					
Goal 7: Improve waste information management.	Goal 9: Risk Assessment, Monitoring and Evaluation Goal 10: Research and Development into Emerging Issues	Goal 2: Effective and Sustainable Waste Services - this would see all South Africans living in clean communities with waste services that are well managed and financially sustainable.				



9 SETTING STRATEGIC GOALS, OBJECTIVES, AND TARGETS FOR THE LNLM

The achievement of the strategic goals and targets within the allotted timeframes from the date the IWMP is approved must have a quantifiable target date and precise timeframe. The targets date for each strategic goal can also be allocated to the following three broad timeframes as follows:

- Short term Targets (Attainable within 0 to 1 years)
- Medium Term Targets (Attainable within 1 to 3 years)
- Long Term Targets (longer than 4 years)

The strategic goals that must be accomplished are listed in Table 9-2below. The strategic goals are informed by waste management issues and observations identified during the status quo analysis. The waste management hierarchy serves as a guide for the established strategic goals, which are based on waste legislation and policies. To assess the achievement of accomplishing a goal, key performance indicators are also included for the relevant goals. The instruments to be utilized are given, and the sphere of government responsible for implementation are identified and listed, given the fact that responsibilities pertaining to waste management differ throughout government structures. Lastly, an estimated budget is provided to allow for appropriate financial planning.

10 IMPLEMENTATION PLAN

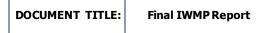
An implementation strategy to help the LNLM achieve the goals and targets mentioned in the gap and needs analysis is provided in the following section.

The implementation plan outlines several initiatives and related tasks that, if carried out correctly, ought to help the LNLM meet its goals. The projects that have been selected have been ranked in order of priority and cover the years 2024–2028. The plan for implementation is outlined in **Table 10-2**below.

The implementation plan's legend is shown in the Table 10-1 below.

Table 10-1: Implementation plan legend







DOC NO: MC.LEDET.IWMPs.2024

TERM	IMPORTANCE
Short-term	
Medium-term	
Long-term/continuous	



DOCUMENT TITLE:	Final IWMP Report
DOC NO:	MC.LEDET.IWMPs.2024



Table 10-2: Implementation Plan

GOAL	OBJECTIVE ACTIVITY	ACTIVITY	TIMEFRAME					ESTIMATED BUDGET
			2025	2026	2027	2028	2029	
Goal 1: Effective solid waste service delivery	Objective 1: Update waste collection schedule	Revised collection schedule which improves efficiency.						Internal expenditure as determined by operations.
	Objective 2: Evaluate waste management fleet	Vehicle/plant/equipment Maintenance Plan, and Vehicle/plant/equipment Replacement Plan.						Internal expenditure as determined by operations.
	Objective 3: Prevent illegal dumping	Cleaning campaigns and awareness on illegal dumping						Internal expenditure as determined by operations.



Final IWMP Report

DOC NO:



GOAL	OBJECTIVE ACTIVITY TIMEFRAME				ESTIMATED BUDGET			
			2025	2026	2027	2028	2029	REQUIRED
		Increased number of skip bins provided.						R20k per skip bin
	Objective 4: Expansion of waste service area	Increase number of serviced households.						Internal expenditure as determined by operations.
	Objective 5: Establish drop-off facilities	Development and operation of multiple drop-off facilities within the NLM.						Internal expenditure as determined by operations.
Goal 2: Promote waste minimisation and recycling	Objective 1: Develop separation at source programmes	Development and implementation of separation at source programmes.						Internal expenditure as



Final IWMP Report

DOC NO:



GOAL	OBJECTIVE	ACTIVITY	TIME		ESTIMATED BUDGET			
			2025	2026	2027	2028	2029	REQUIRED
								determined by operations.
	Objective 2: Prevent and minimize organic waste generation							Internal expenditure as determined by operations.
	Objective 3: Integration of waste pickers	Register waste pickers at landfills.						Internal expenditure as determined by operations.



Final IWMP Report

DOC NO:



GOAL	OBJECTIVE ACTIVITY		TIMEFRAME					ESTIMATED BUDGET
			2025	2026	2027	2028	2029	REQUIRED
	Objective 4: Establishment of drop-off facilities/buy-back centres	Development and operation of drop- off facilities and buy-back centres within the LNLM.						Internal expenditure as determined by operations.
	Objective 5: Promote recycling	Promote recycling through campaigns and collect data. Recycling to be implemented at landfills.						Internal expenditure as determined by operations.
Goal 3: Ensure safe and integrated management of hazardous waste	household hazardous	Provide containers for hazardous waste.						R2k per hazardous waste bin.



DOCUMENT TITLE: Final IWMP Report

The state of the s

DOC NO: MC.LEDET.IWMPs.2024

GOAL	OBJECTIVE ACTIVITY		TIME	FRAME	ESTIMATED			
			2025	2026	2027	2028	2029	BUDGET REQUIRED
	as transport and appropriate disposal of all hazardous waste generated in and around LNLM Objective 2: Registration of major hazardous waste generators on SAWIS							Internal expenditure as determined by operations. Internal expenditure as determined by
								operations.
	Objective 3: Screening of waste at landfills for hazardous waste	Waste must be screened and logged before entering the landfills.						Internal expenditure as determined by operations.



DOCUMENT TITLE: Final IWMP Report

DOC NO: MC.LEDET.IWMPs.2024



GOAL	OBJECTIVE ACTIVITY		TIME	FRAME	ESTIMATED BUDGET			
			2025	2026	2027	2028	2029	
	Objective 4: Establish a partnership with hazardous waste collection and disposal services	The LNLM must partner with major hazardous waste collection and disposal service providers (e.g. The ROSE Foundation).						Internal expenditure as determined by operations.
Goal 4: Improved waste education and public awareness	waste awareness	Conduct awareness campaigns throughout the LNLM.						Internal expenditure as determined by operations.
	Objective 2: Create or gain access to appropriate training programmes for waste management	Conduct training programme for internal staff.						Internal expenditure as determined by operations.



Final IWMP Report

DOC NO:



GOAL	OBJECTIVE	ACTIVITY		FRAME	ESTIMATED				
			2025	2026	2027	2028	2029	BUDGET REQUIRED	
	Objective 3: Improve hazardous waste awareness and management expertise.	Conduct internal and external hazardous waste awareness campaigns throughout the LNLM.						Internal expenditure as determined by operations.	
Goal 5: Ensure sound budgeting for integrated waste management	Objective 1: Evaluate staff structures, adjust where required and obtain approval for reallocation of existing / appointment of new staff.	Complete the department's organogram by appointed the relevant personnel to fill vacant positions.						Internal expenditure as determined by operations.	
	Objective 2: Ensure availability of sufficient budget for landfill	Set up a budgeting plan for the potential landfill extension, or rehabilitation and closure.						Internal expenditure as	



Final IWMP Report

DOC NO:

GOAL	OBJECTIVE ACTIVITY		TIME	FRAME	ESTIMATED			
			2025	2026	2027	2028	2029	BUDGET REQUIRED
	extension, or rehabilitation and closure							determined by operations.
	Objective 3: Waste awareness budget	Set up budget for awareness campaigns on an annual basis.						Internal expenditure as determined by operations.
Goal 6: Improve regulatory compliance	Objective 1: Review and develop appropriate waste management by-laws based on proposed new circumstances	Approve, publish, and enforce the by- laws.						Internal expenditure as determined by operations.
	Objective 2: Conduct external landfill audits as							R50k per audit.



Final IWMP Report

DOC NO:

GOAL	OBJECTIVE ACTIVITY		TIME	FRAME	ESTIMATED BUDGET			
			2025	2026	2027	2028	2029	REQUIRED
	per landfill licence requirements and implement remedial actions in accordance with a schedule approved by both the municipality as well as the regulating authority	per the conditions in the respective WML.						
Goal 7: Improve waste information management		Keep logs of all waste volumes and types that enter and is disposed at the landfills.						Internal expenditure as determined by operations.
	Objective 2: Updating SAWIS	All waste data must be uploaded onto SAWIS monthly.						Internal expenditure as



DOC NO:

Final IWMP Report



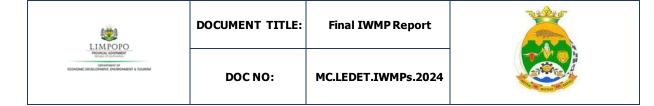
GOAL	OBJECTIVE	ACTIVITY	TIMEFRAME					ESTIMATED	
		20		2026	2027	2028	2029	BUDGET REQUIRED	
								determined by operations.	
	Objective 3: Develop industry waste database with regular and accurate data reporting.	industry waste generators in LNLM.						Internal expenditure as determined by operations.	
	Objective 4: Designation of a Waste Management Officer (WMO)	Appointment of a WMO.						Internal expenditure as determined by operations.	



DOCUMENT TITLE:	Final IWMP Report
DOC NO:	MC I FDFT TWMPs 2024



GOAL	OBJECTIVE	ACTIVITY		TIMEFRAME				ESTIMATED BUDGET				
						2025	2026	2027	2028	2029	REQUIRED)
	Objective 5: Environmental Management Inspectorate (EMI) Basic Training	Basic comple	EMI eted	Training	courses						R10k course.	per



11 MONITORING AND REVIEW OF THE IWMP

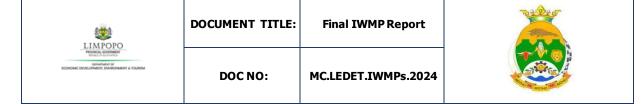
It is necessary to continuously and regularly monitor the Implementation Plan to make sure the IWMP's targets, goals, and objectives are met within the allotted time limits.

According to Section 13(2) of The National Environmental Management Waste Act (Act 59 of 2008), performance reports on the implementation of the integrated waste management plan must be prepared in terms of Section 46 of the Municipal Systems Act and must contain the following information:

- The extent to which the plan has been implemented during the period;
- The waste management initiatives that have been undertaken during the reporting period;
- The delivery of waste management services and measures taken to secure the efficient delivery of waste management services, if applicable;
- The level of compliance with the plan and any applicable waste management standards;
- The measures taken to secure compliance with waste management standards;
- The waste management monitoring activities;
- The actual budget expended on implementing the plan; and
- The measures that have been taken to make any necessary amendments to the plan.

The LNLM must appoint a Waste Management Officer (WMO) who will be responsible for implementing and managing the IWMP. The LNLM's progress toward achieving the aims, targets, and objectives specified in the Implementation Plan of the IWMP must be summarized in an Annual Performance Report which must be compiled by the WMP. The following should be included in the report:

 Strategic Issues: The effectiveness of the LNLM and its advancement toward achieving its short-, medium-, and long-term goals, objectives, and targets.



- Financial Issues: Budget forecasts reporting, securing adequate funds, and budgetary restrictions concerning both current waste management operations and this IWMP's implementation.
- IWMP Amendments: Modifications to the IWMP required by the findings of financial restrictions, feasibility studies, etc.
- Communication: Informing people, important stakeholders, and council members about the status of the IWMP's meeting.

The next review of the IWMP should take place in 2029, as it is a component of the Integrated Development Plan mandated by Chapter 5 of the Municipal Systems Act.

In order to continuously improve on the current level of waste management services in the LNLM, the thorough review will update the status quo, assess overall progress in relation to the goals, objectives, and targets specified in this IWMP, examine any gaps and needs, and reformulate the goals and objectives as necessary to further advance the waste management services provided by the LNLM.



DOCUMENT TITLE:	Final IWMP Report



DOC NO: MC.LEDET.IWMPs.2024

12 PUBLIC PARTICIPATION PROCESS

As part of the development of the IWMP, the consultants have engaged with stakeholders and members of the community. Stakeholders and interested and affected parties (I&APs) were notified that the Draft IWMP was out for commenting. The comments on the Draft LNLM IWMP were incorporated into the Final LNLM IWMP.



DOCUMENT	TTTI F.
DOCUMENT	IIILL.

DOC NO:

Final IWMP Report





13 CONCLUSION

The purpose of this report is to analyse and quantify all aspects related to current waste management services and practices carried out by the LNLM with the view of using such information as a baseline for future planning.

Based on current information, from Stats SA, 2022, there has been an increase in population growth from 231 239 which was recorded in 2011 to 284 404 recorded in 2022. Total number of households increased from 59 885 to 78 217. The increased population puts more pressure with regards to the service delivery expected from the Municipality. The municipality is currently collecting waste from 26 781 households, and all register indigent households are being serviced.

The Municipality has one landfill site which is managed by the municipality. The landfill site has a WML with one buy back center within the landfill site which is operational. The landfill site has a weighbridge, and estimates are used to record waste disposal volumes which are reported on SAWIS. Waste recycling is limited within the Municipality. Illegal dumping is a challenge, however; the Municipality has partnered with other stakeholders to conduct clean up campaigns and awareness campaigns. Challenges that the Municipality encounters include amongst others includes limited human resources, and waste management resources, such as waste management vehicles, poor infrastructure, absence of electricity and water supply in the landfill site.

The LNLM is currently collecting waste from 26 781 households. The LNLM has one operational landfill site (Lepelle-Nkumpi Landfill site) which is managed by the Municipality, and it has a WML. The Lepelle-Nkumpi landfill site has a weighbridge which is currently non-functional due to lack of electricity. Landfill site has been registered on SAWIC; however, No report of the last reporting. The landfill site does meet the minimum requirements of waste disposal. Waste recycling is limited within the Municipality as numerous waste recyclables are still disposed at the landfill site.

The Municipality's overall waste management challenges collection challenges includes a shortage of waste bins for the community to store their waste in until the truck arrives to pick it up, waste collection vehicles are insufficient and unreliable due to frequent failures causing delays in waste collection services insufficient general workers, infrastructure, non-compliance



DOC NO:

Final IWMP Report





with the conditions of the waste management disposal facility's license, a lack of specialized waste management fleet, limited landfill airspace, and a shortage of experienced and qualified waste management personnel. The impacts of waste management facilities are strongly linked to environmental pollution and climate change since inappropriate waste disposal leads to surface and groundwater pollution as well as GHG emissions.

The gaps and needs identified within the municipality related to waste management have been identified in terms of each of the following waste management activities; waste service delivery; waste minimization, recycling, and re-use initiatives; organic waste management; hazardous waste management; waste management facilities; waste management collection fleet and equipment; waste management information; waste education and public awareness; human and financial resource management; and strategic planning. The resulting need will help the Municipality to close the identified gaps for sustainable waste management practices

As part of the development of the IWMP, the consultants have engaged with stakeholders and members of the community. Stakeholders and interested and affected parties (I&APs) were notified that the Draft IWMP was out for commenting. The comments on the Draft LNLM IWMP were incorporated into the Final LNLM IWMP.



DOCUMENT TITLE:	Final IWMP Report
-----------------	-------------------

DOC NO: MC.LEDET.IWMPs.2024



REFERENCES

Department of Environmental Affairs Integrated Waste Management Plan Guidelines (2022).

Department of Environmental Affairs, 2011. National Domestic Waste Collection Standards (GG No. 33935 GN. No. 21). Pretoria: Government Printers.

Department of Environmental Affairs, 2020. National Waste Management Strategy. Pretoria: Government Printers.

Department of Water Affairs and Forestry, 1998. Minimum Requirements for Waste Disposal by Landfill.

Limpopo SAWIS Waste Report 2021.

Lepelle-Nkumpi Local Municipality 2023/24. Integrated Development Plan.

Republic of South Africa, 1996. The Constitution of the Republic of South Africa (Act No. 108 of 1996).: Government Printers.

Republic of South Africa, 1998. National Water Act, No. 36 of 1998.

Republic of South Africa, 2000. Local Government: Municipal Systems Act (Act No. 32 of 2000).: Government Printers.

Republic of South Africa, 2008. National Environmental Management Act: Waste Act (Act No. 59 of 2008).: Government Printers.

Republic of South Africa, 2012. Government Gazette No. 35583 No. 625 National Waste Information Regulations.

Republic of South Africa, 2013 Government Gazette No. 36784 No. 635 National Norms and Standards for the Assessment of Waste for Landfill Disposal.

Republic of South Africa, 2013 Government Gazette No. 36784 No. 636 National Norms and Standards for the Assessment of Waste for Landfill Disposal.



Final IWMP Report



DOC NO:

MC.LEDET.IWMPs.2024



Republic of South Africa. 1998, Government Gazette No 19519 Volume 401, National Environmental Management Act (Act 107 of 1998). 27 November 1998 No 1540.

Republic of South Africa. 2004, Government Gazette No 26595 Volume 469, National Health Act (Act 61 of 2003). 23 July 2004 No 869.

Statistics South Africa. 2011 Census.

Statistics South Africa. 2022 Census.

The Council for Scientific and Industrial Research, 2020. Revision of the Municipal Integrated Waste Management Planning Guidelines.



DOCUMENT TITLE:	Final IWMP Report
DOC NO:	MC.LEDET.IWMPs.2024



APPENDIX: STAKEHOLDER ENGAGEMENT REPORT

Appendix A - Project Stakeholder Engagement Report:

Lepelle-Nkumpi Local Municipality Integrated Waste

Management Plan









Stakeholder Engagement Report

DOC NO: MC.MDM. SER.001



PROJECT INFORMATION

Title	Stakeholder Engagement Report for Development of Lepelle-Nkumoi Local Municipality Integrated Waste Management Plan
Submission Date	02 September 2024
Classification	Company Confidential
Our Reference	MC.LEDET.IWMP.2024

VERSION AND AMENDMENT SCHEDULE

Version	Version date	Author	Description Amendments	of
1	August 2024	Stanford Mugeri (Environmental Consultant)	Original Document	

APPROVAL AND CONTROL SCHEDULE

Approved by	Designation	Responsibility	Signature	Date approved
Stanford Mugeri	Environmental Consultant	Compiler		10 August 2024
Neelan Maduray	Environmental Consultant	Review		20 August 2024
Ike Rampedi	Chief Operational Officer	Approval		25 August 2024

CLIENT APPROVAL

NAME	DESIGNATION	DATE	SIGNATURE
Nsovo Makelana	Environmental Management Inspector		

Copyright © 2022 Mamadi & Company SA (Pty) Ltd)

All rights reserved. No part of this document may be reproduced, translated, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written approval of Mamadi & Company SA (Pty) Ltd

REPORT STATUS	DRAFT	FINAL	*



Stakeholder Engagement Report



DOC NO:

MC.MDM. STR.001

Table of Contents

1.	COMMUNICATION AND STAKEHOLDER PARTICIPATION	1
1.1.	STAKEHOLDER ENGAGEMENT APPROACH	1
2.	AWARENSS CONSULTATION WITH KEY STAKEHOLDERS	3
2.1.	PUBLIC MEETING	3
22. 23.	NEWSPAPER ADVERTISEMENTSAVAILABILITY OF THE IWMP DRAFT	
3.	COMMENTS AND RESPONSE TRAIL	7
4.	CAPPRICORN DISTRICT MUNICIPALITY IWMP DATA BASE	11
	Figures 1-1: Public participation process undertaken	2
	2-1: Key Stakeholders	
Figure	2-2: Adverts tear sheets	5
Figure	2-3: Advert	6
List of	Tables	
Table 2	2-1: Public Meeting	4
Table 3	3-1: Comments and Response trail	8
Table 4	4-1: Proiect Data Base	12



Stakeholder Engagement Report

DOC NO:

MC.MDM. STR.001



1. COMMUNICATION AND STAKEHOLDER PARTICIPATION

The stakeholder consultation and Public Participation Process (PPP) was done in accordance with Section 11(1& 4) read with Section 73 of the National Environmental Management: Waste Act (Act No. 59 of 2008) as amended (NEM: WA). The purpose of this report is therefore to present the stakeholder approach, identified stakeholders and the consultative processes undertaken during the development of an Integrated Waste Management Plan (IWMP). The stakeholder engagement was an ongoing process throughout the IWMP development. The process involved the participation and contribution of two "groups" of stakeholders – A smaller and more focused group i.e., Project Steering Committee (PSC) and a larger group of stakeholders (The general public). The process focused strongly on the direct and productive involvement of stakeholders in developing the plan.

Stakeholders were identified and consulted during the development of this plan, per the DFFE IWMP guidelines published in 2009. The following should be included in the report:

- A summary of the stakeholders that have been consulted; their issues, concerns, views and inputs;
- Responses to the concerns and issues raised by stakeholders; and
- A record on details of the stakeholders and their inputs.

1.1. STAKEHOLDER ENGAGEMENT APPROACH

A consultative process was followed throughout the development of the IWMP, and the following steps were followed to ensure that stakeholders were provided with an opportunity to comment on the draft IWMP.

- **Identification of role players:** Key role players that contribute to waste management and inform current waste management practices within the district were identified. Key role players are listed in section 2.
- Role Player Database: After all the role players were identified, a data base was developed and updated throughout the IWMP process.
- Public Participation: A "Call for Expression of Interest" i.e. an advert was placed in at least one newspaper namely Sekhukhune times to inform the public about the availability of the draft IWMP for review (for a period of 30 days) and also to invite the



DOCUMENT	TITLE.	
DOCUMENT	IIILE:	

Stakeholder Engagement Report



Mamadi & Company I SA

DOC NO: MC.MDM. STR.001

public to attend the various public meetings so they be informed of the development of the IWMP and have an opportunity to comment as well as give inputs on the IWMP.

Figure 1-1 below summarizes the steps that were followed when undertaking stakeholder engagement:

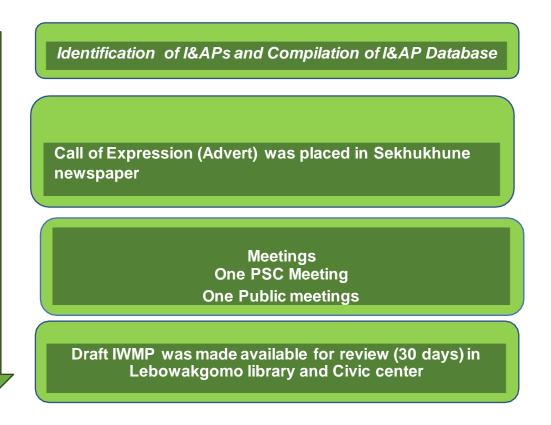


Figure 1-1: Public participation process undertaken



DOC NO:

Stakeholder Engagement Report

MC.MDM. STR.001



2. AWARENSS CONSULTATION WITH KEY STAKEHOLDERS

The identified key stakeholders included but not limited to the following:



Figure 2-1:Key Stakeholders

Consultation with the key stakeholders was in the form of written emails, telephonic communication. Key stakeholders were invited via emails to attend the PSC and were given an opportunity to give inputs and comments on the daft IWMP. One PSC meeting was held on the 14th of June 2024 at the Cultural Centre. PSC consisted of Mamadi technical team, Lepelle-Nkumpi's waste management officials, LEDET officials and DFFE officials. The purpose of the PSC was to discuss the progress of the project. See attached PSC minutes Appendix A.

2.1. PUBLIC MEETING

One public meeting was held for the Lepelle-NKumpi Local Municipality (LNLM). The purpose of the public meetings was to engage Interested and Affect Parties (I&Aps), to give them an opportunity to comment and give inputs on the draft IWMP. Meeting invites were sent by LNLM to key stakeholders inviting them to the public meetings while an advert inviting the public was placed in one newspaper. See attached Appendix B for public meeting minutes



DOCUMENT TITLE: Stakehold

Stakeholder Engagement Report



DOC NO: MC.MDM. STR.001

The public meeting was held as follows:

Table 2-1:Public Meeting

Municipality	Date	Time	Venue	Availability of Report
Lepelle-Nkumpi	14 June 2024	10;00 a.m.	Cultural Centre	Lebowakgomo Library



Stakeholder Engagement Report

DOC NO: MC.MDM. STR.001



2.2. NEWSPAPER ADVERTISEMENTS

Notice notifying, I&APs was given in terms of Section 11(1& 4) read with Section 73 of the National Environmental Management: Waste Act (Act No. 59 of 2008) as amended (NEM: WA). The advert was placed in one newspaper i.e., Sekhukhune Times. See Figure 2-3 for advert tear sheet and Figure 2-4 for the advert.

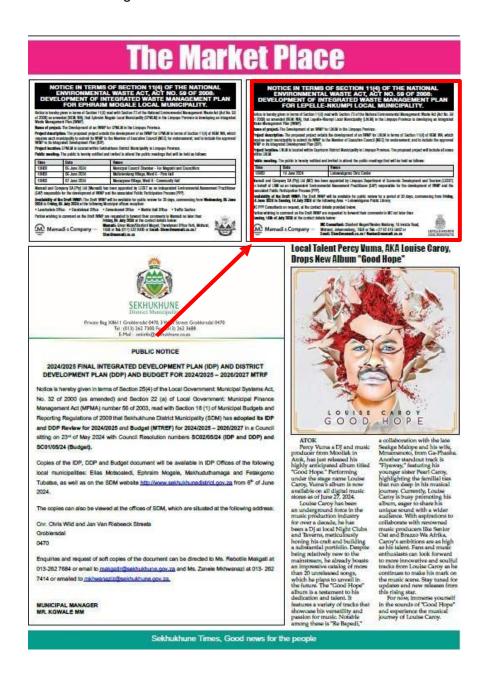


Figure 2-2: Adverts tear sheets



DOC NO:

Stakeholder Engagement Report

MC.MDM. STR.001



NOTICE IN TERMS OF SECTION 11(4) OF THE NATIONAL ENVIRONMENTAL WASTE ACT, ACT NO. 59 OF 2008: DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT PLAN FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY.

Notice is hereby given in terms of Section 11(4) read with Section 73 of the National Environmental Management: Waste Act (Act No. 59 of 2008) as amended (NEM: WA), that Lepelle-Nkumpi Local Municipality (LNLM) in the Limpopo Province is developing an Integrated Waste Management Plan (IWMP).

Name of project: The Development of an IWMP for LNLM in the Limpopo Province.

Project description: The proposed project entails the development of an IWMP for LNLM in terms of Section 11(4) of NEM: WA, which requires each municipality to submit its IWMP to the Member of Executive Council (MEC) for endorsement; and to include the approved IWMP in its Integrated Development Plan (IDP).

Project location: LNLM is located within Capricorn District Municipality in Limpopo Province. The proposed project will include all areas within LNLM

Public meeting: The public is hereby notified and invited to attend the public meetings that will be held as follows:

32	Time	Date	Venue
553	10H00	14 June 2024	Lebowakgomo Civic Center

Mamadi and Company SA (Pty) Ltd (MC) has been appointed by Limpopo Department of Economic Development and Tourism (LEDET) on behalf of LNM as an independent Environmental Assessment Practitioner (EAP) responsible for the development of IWMP and the associated Public Participation Process (PPP).

Availability of the Draft IWMP: The Draft IWMP will be available for public review for a period of 30 days, commencing from Friday, 14 June 2024 to Sunday, 14 July 2024 at the following Area: • Lebowakgomo Public Library.

MC PPP Consultants on request, at the contact details provided below.

Parties wishing to comment on the Draft IWMP are requested to forward their comments to MC not later than Sunday, 14th of July 2024 at the contact details below:





Figure 2-3:Advert



Stakeholder Engagement Report

DOC NO: MC.MDM. STR.001



2.3. AVAILABILITY OF THE IWMP DRAFT

All IA&Ps and stakeholders were notified of the availability of the IWMP Draft report. The Draft IWMP was available for public review for a period of 30 days, which commenced from Friday, the 14th of July 2024 to Monday, the 15th of July 202e4 within the Municipality. Hard copies of Draft IWMP reports were placed at Lebowakgomo Public Library and Lepelle-Nkumpi Civic Centre listed in Table 2-1 above, and via email upon request. Parties wishing to comment on the Draft IWMP were requested to forward their comments to Mamadi & Company (Pty) Ltd no later than Monday, the 15th of July 2024.

3. COMMENTS AND RESPONSE TRAIL

The technical issues, comments and concerns received during the public participation process were noted and captured in the comments and response report in Table 3-1 below.



DOCUMENT TITLE:	Stakeholder Engagement Report
DOC NO:	MC.MDM. STR.001



Table 3-1: Comments and Response trail

Organisation Issues raised/ Concerns		Response	
	ity-Public Meeting		
Community Member	We will appreciate if the municipality can develop the landfill site to ensure proper waste disposal within the municipality.	The issue has been presented to the council and awaiting decision and budget allocation.	
Community Member	Issue of disposal of diapers is a problem in the community and this diapers end-up in the nearby rivers.	The community is encouraged to refrain from illegally dumping waste and encouraged to use the provided skip bins.	
Community Member	The municipality must conduct awareness on proper waste disposal.	The municipality has been inviting the community to planned awareness initiatives, however, most of the community members are reluctant to attend.	
Community Member	Lack of groundwater monitoring but did not mention anything about air quality?	Waste disposal at landfill sites can significantly impact air quality in several ways, one of them is the Volatile Organic Compounds (VOCs), so waste decomposition also releases VOCs, which can react with other pollutants to form ground-level ozone and particulate matter. (Comment noted).	
Local Municipality	29 wards- its 30 wards	Comment Noted	



Stakeholder Engagement Report

Mamadi & Company I SA

DOC NO:

MC.MDM. STR.001

Organisation	Issues raised/ Concerns	Response
Local Municipality	EMI is appointed	Comment noted
Local Municipality	Weighbridge	The municipality is busy trying to fix the computer connect to the weighbridge to function
Local Municipality	The issue of waste collection in regard to the yellow fleets	Yellow fleets- two compactor trucks purchase in process, 7 compactors, 3 grab trucks no 1 and 2 skip trucks
Local Municipality	The municipality do not have drivers, they need to add more drivers	The municipality will need at least three to six Truck operators
Community Member	Do you work with the Municipality for efficient service delivery	We are working with them to recommend things which they can do to maximize the waste service delivery within the municipality.
Ledet	More than 6 recyclers, 2 were registered in the last four months and there were more which were registered before	Comment noted
Ledet	Recycler received funding for turning saw dust to firewood, still waiting for the machinery	Comment noted
Community Member	Too much illegal dumping activities in Lebowakgomo	The Municipality should hire the EMI in order to deal legally with the people who are dumping illegal.



Stakeholder Engagement Report



DOC NO:

MC.MDM. STR.001

Organisation	Issues raised/ Concerns	Response
Local Municipality	The organisational structure must be suggested to the municipality	Comment noted
Ledet	Industrial hazardous information must be included	
Community Member	Where must separation at source start?	Separation at source must at least start within one ward so that it can be monitored if is being conducted then expand to a larger scale.
Local Municipality	Waste tariffs	The municipality should log type of waste which is being disposed in the landfill site and also measure volumes to charger the tariffs on waste which are disposed on a personal level.
Community Member	Registration of recycling norms and standards	The recycling companies should be reregistered with the National waste management agency or the Lepelle-Nkumpi Local Municipality
Local Municipality	Mathibela's information must also be added for example.	Comment Noted
LEDET	The issue of building rubbles within the Municipality	There is a national project under Green mineral South Africa that deals with building rubble, the project is commencing



DOCUMENT TITLE:	Stakeholder Engagement Report
DOC NO:	MC.MDM. STR.001



Organisation	Issues raised/ Concerns	Response
		from 2025 January so the municipality should sign a consent letter so that they can be included in the project
Community Member	The IWMP is focusing on then township	
Community Member	The Community need to have environmental officer to give tickets to whoever dump illegally	Comment Noted
Community Member	Place the skip bins to areas where there are illegal dumps.	The skip bins will be having to be placed in all the areas accessible to the communities including town

4. CAPPRICORN DISTRICT MUNICIPALITY IWMP DATABASE

A project database has been established and updated throughout the project based on the interaction with key stakeholders and I&Aps. Table 4-1 below details the project stakeholder database.



DOCUMENT TITLE:	Stakeholder Engagement Report
DOC NO:	MC.MDM. STR.001



Table 4-1:Project Data Base

NAME & SURNAME	ORGANISATION	DESIGNATION	CONTACT DETAILS
1. Ike Rampedi	Mamadi and Company SA (Pty) Ltd	Chief Operating Officer	Email: <u>lke@mamadi.co.za</u> Cell:079 058 2847
Stanford Mukhethwa Mugeri	Mamadi and Company SA (Pty) Ltd	Environmental Consultant	Email: <u>Stan@mamadi.co.za</u> 062 416 5442
3. Neelan Maduray	Mamadi and Company SA (Pty) Ltd	Environmental Consultant	Email: <u>Neelan@mamadi.co.za</u> Cell:071 682 1858
4. Given Nkosi	Mamadi and Company SA (Pty) Ltd	Environmental Consultant	Email <u>Given@mamadi.co.za</u> Cell:078 336 0054
5. Thabang Moleke	Lebowakgomo Zone F	Waste Campagner	071 590 2775 <u>ThabangHlakudi@gmail.com</u>
6. Sharon Mashilo	Lebokgomo Zone B	+	072 1554 469 Stm.mashilo@gmail.com
7. Elizabeth malope	1426 Zone S Lebowakgomo	+	061 637 1105 elizabethmalope@gmail.com
8. Mogau Penelope Ntimbane	Lebowakgomo Zone F	Environmental Management graduate Campaigner	063 749 8835 Penelopemogau@gmail.com
9. Mothapo Mahlatse	Lebowakgomo Zone F	Waste campaigner	072 108 5280 Mahlatsemoth27@icloud.com
10. Ramoshaba Minor	Lebowakgomo Zone P	Waste Campaigner	067 360 2765 Minorramoshaba@gmail.com
11. Mafane Keletso	Lebowakgomo Zone F	Waste Campaigner	076 897 5134 <u>Mafanekeletso@gmail.com</u>
12. Ramashala 13. Mpho	Jerkyland	Environmental education & Awareness Campaigner	071 512 3698 Mphomakgwale518@gmail.com



DOCUMENT TITLE:	Stakeholder Engagement Report
DOC NO:	MC.MDM. STR.001



14. Inama 15. Lincon	Mamaolo	Waste campaigner	069 959 0789 <u>Linconinama@gmail.com</u>
16. Leshilo Ramogohlo Lesedi	Lebowakgomo Zone F	Waste campaigner	076 691 7191 Leshilolesedi@gmail.com
17. Kale Perfect	Madisha Ditoro	Waste campaigner	060 457 9659 Kaleperfect@gmail.com
18. Panie Molapo	Satnf No 20248 Makurung Ga-Mphahlele 0736	Lepelle-Nkumpi Local Municipality	067 313 8697 <u>Daniele.exhausting@gmail.com</u>
19. Bridget Mogotle	Stand No:30130 Makurung 0736	Leplelle-Nkumpi Local Municipality	079 026 9277
20. Mabotha PJ	Pololage	LEDET	076 205 8996 <u>Mabothapj@ledet.gov.za</u>
21. Mphahlele RC	Malemutsi	Ledet	063 247 5521 Cliffordmphalhele@gmail.com
22. Moshomane Matete	House No:1074 Mamatonya GA Mphahlele	Lepelle-Nkumpi	060 723 2250 Matetebash@gmail.com
23. Ramaroka Hector	284 kwenamelo	CDN	063 614 7014
24. Raedni Lutendo	256 Bendor EXT 100 East	Capricorn District Municipality	068 485 8008
25. Thema M.K	Mankweng	CDM	076 629 3179
26. Nakedi Muela	Lebowakgomo Zone A	Lepelle-Nkumpi	066 425 2172
27. Sebopa Lebogang Lekuru	Zebediela Ga Rakgoatha	Lepelle-Nkumpi	071 153 3604 <u>Sebopa197@gmail.com</u>
28. Arnot Ravele	Capricorn District Municipality	Capricorn District Municipality	071 686 5002 Ravele@CDM.org.za
29. Sebopa Lesedi Mokibelo	Zebediela Garakgoatha	Lepelle-Nkumpi	076 998 7946 Sebopamokibelo@gmail.com
30. Itumeleng Tema	House 3210 Zone B,Lebowakgomo	Lepelle-Nkumpi Local Municipality	073 411 1726 Temaitu.k@gmail.com



DOCUMENT TITLE: Stakeholder Engagement Report

Mamadi & Company I SA

DOC NO:

MC.MDM. STR.001

	0737		
31. Rejoice Makaleng	House no 2649 Zone B Lebowakgomo 0737	Lepelle-Nkumpi Local Municipality	0608242206 makalengrejoiceo@gmail.co.za
32. Moipone Kgasago	Stand no 20 Success Mathabatha 0733	Lepelle NM	0791532712 kgasagomo@gmail.com
33. Martha Thobejane	Stand no 46 Mafefe 0738	Lepelle Nkumpi	0631578184 thobejanemoitshephi@gmail.com
34. Mnisi Lena	House no 1997 Lebowakgomo Zone A	Lepelle-Nkumpi Municipality	0792984940 Mnisilena90@gmail.com
35. Kgaka Lerato	House no 606 Zone A Lebowakgomo	Lepelle-Nkumpi Municipality	0798611947 leratokgaka@yahoo.com
36. Marline Manokwana	House no 24 Gamogotlane	Lepelle-Nkumpi Municipality	0635119403 Marlinemanokwana@gmail.com
37. Mokwatedi Melda	Ward 10 Ga-mogotlane	Lepelle-Nkumpi Municipality	0722971788 Meldamokgethi07@gmail.com
38. Seipati Chauke	408 Makotse EXT	Lepelle-Nkumpi Municipality	0763415002 Katechauke7@gmail.com
39. Makhubelo Tebogo	Mathibela Phase 3 House no 20408	Lepelle-Nkumpi Municipality	0795630537 Makhibela02@gmail.com
40. Tsehlakgolo Monica	Mathibela Phase 5 House no 20810	Lepelle-Nkumpi Municipality	0715572524 tsehlakgomonica@gmail.com



DOCUMENT TITLE:	Stakeholder Engagement Report
DOC NO:	MC.MDM. STR.001



41. Matsetela Lerato	House no 128 Mathibela P3 Groothoek 0628	Lepelle-Nkumpi Municipality	0760546582 leratowmatsetela@gmail.com
42. Kgomotso Thobejane	House 391 Lebowakgomo Zone A	Lepelle-Nkumpi Municipality	0769732698 thobeshown@gmail.com
43. Katlego Maselela	189 Zone P Lebowakgomo	Lepelle-Nkumpi Municipality	0822147054 ktjibogo@gmail.com



Stakeholder Engagement Report

Mamadi & Company I SA

DOC NO:

MC.MDM. SER.001

Public Meeting Minutes

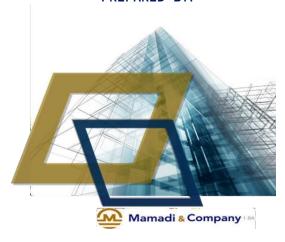
APENDIX B: PUBLIC CONSULTATION MEETING MINUTES:

DEVELOPMENT OF IWMP FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY WITHIN THE CAPRICORN DISTRICT MUNICIPALITY, LIMPOPO PROVINCE

PREPARED FOR:



PREPARED BY:





Project Introduction Minutes DOCUMENT TITLE:

DOC NO:

001



Item No	Agenda Items (Meet	ing Agenda attached	as Appendix A)	Actions
1	OPENING AND V The meeting was de (MML), and all v	Mamadi		
	ATTENDEES			
	Names and Surname	Institution	Role	
	Legion Mazibuko	Mamadi	Environ men tal Consultan t	
	Masopo Mametja	Lepelle-Nku m pi Local Municipality	Acting executive manager at Lepell e-Nku mpi commu n i t y services	
	Lwaleng Kanyane	Lepelle-Nku m pi Local Municipality	Waste management officer	
	Lerato Melopo	LEDET	Waste Managem ent	
	Miss Lehlogon ol o	LEDET	Waste managem ent	
	Stanford Mugeri	Mamadi	Environmen tal Consultant	
	Phuti Maboth a	LEDET	Waste Managem ent	
2	• All attendee	s introduced themse	lves.	ALL
3	APOLOGIES			Mr Kanyane
	 Finance sent colleague. LED and plar former colleague. 	nning sent apologies a gue.	re atten ding a Funeral of a former as they are attending a Funeral of a	
4	ADOPTION OF T	HE AGENDA		ALL



DOCUMENT	TITLE:	Project Introduction Minutes
		, and the second



Item No	Agenda Items (Meeting Agenda attached as Appendix A)	Actions
	The agenda was adopted with no additions. Refer to Appendix A	
5	PURPOSE OF THE MEETING To present the draft IWMP for Lepelle-Nkumpi, and to get comments and inputs on the project from the stakeholders.	MM
6	PROJECT PRESENTATION Mamadi presented the following Information • Project Background • Project Approach, which covered the following: ✓ Planning and Inception ✓ Legal Framework ✓ Integrated Waste Management Plan (IWMP) ■ Status Quo ■ Gaps and needs assessment ■ IWMP Goals	MM
7	 ▶ Stakeholder Engagement ▶ DISCUSSIONS The following comments and questions were raised during the meeting: • Question: The is nothing mentioned about air quality within the landfill site, so are you saying that waste disposal does not impact the air quality? Answer: The air quality within the Lepelle-Nkumpi landfill site is poor due to the decomposition of waste, which releases pollutants into the air. Air quality issues at Lepelle-Nkumpi Landfill site include Volatile organic compounds (VOCs) these are Gases from decomposing waste, such as methane and hydrogen sulphide and there is unpleasant smells from decomposing waste. These pollutants have a negative impact on the environment since it contribution to climate change, air pollution, and nuisance odors. • Comment: At the beginning of the presentation, you advised that the municipality has 29 wards of which there are 30 Wards. Answer: Comment Noted and changes were made regarding that. • Suggestion: Municipality suggest that we need to give a suggestion on the organogram on how to run waste management services successfully, for examplethe municipality should hire how many personnel or if they need to add more trucks or add more staff 	ALL



DOCUMENT TI	ΓLE:	Project Introduction Minutes
-------------	------	---------------------------------



Item No	Agenda Items (Meeting Agenda attached as Appendix A) Actions
	Suggestion: Regarding the copies of the document the Municipality will need six more copies so that they can be placed in the traditional authority offices.
	Inputs by the Municipality: Vote of thanks to the LEDET effort
	that they madesure that Mamadicame and review the IWMP since
	it was not reviewed together with the community to come and add some inputs
	Comment by Municipality: Municipality is on a process to appoint
	a service provider to run/operate the landfill site since they don't
	have capacity to run the landfill site.
	Comment by Municipality: The municipality is busy trying to fix
	the computer connect to the weighbridge to function.
	Comment by the Municipality: The municipality is about to finalize the process of procuring two compactor trucks.
	Comment by the Municipality: The municipality is conducting
	waste management awareness in communities.
	Comment by Municipality: The Waste management trucks are
	breaking down every now and then and it's costing the municipality
	over million for the trucks to be fixed in a year.
	Consents by the Municipality: After few days of clearing illegal dumping the compunity will still dump on the compunity and
	dumping the community will still dump on the same spot and burning the provided skip bins.
	Consent by the Municipality: The municipality will need at least
	three to six Truck operators.
	Advise by ledet: There is a collaboration called industrial
	symbiosis, the waste that is produced at a specific company can
	be reused by someone else, waste streams to create new product
	using for example there are company companies dealing with
	timbers, so that timber offcutscan be used to makefurniture. This
	aims to
	Reduce waste and emissions
	2. Improve resource efficiency
	3. Enhance innovation and competitiveness



DOCUMENT	TITLE:	Project Introduction Minutes
----------	--------	---------------------------------



Item No Agenc	da Items (Meeting Agenda attached as Appendix A)	Actions
4.	Foster sustainable development	
	Question: Do Mamadiassist the municipality with ideas on how to deal with waste management? Answer: We are working with them to recommend things which they can do to maximize the waste service delivery within the municipality. Question: The report is focusing much on the communities and landfill site, but the real problem is in complex since there are not enough bins there and not enough bins in taxi ranks and street vendors. Answer: This is one of the recommendations that the municipality should have the skip bins even in town and accessible to the community. Comments: There are more than six recycling companies within the municipality, and they are registered since last four month we registered two and before that there more registered previously.	
	Comment: The issue of the disposal facility compliance should be considered since is covered during the internal audits of the landfill site, what we canfocus on can be the lifespan of the landfill site the so that we plan for another landfill site and development of the drop off facilities and transfer centers Comment: Mamadi and company need to propose an organizational structure for the municipality. Comment: The report should include the industrial hazardous waste. Comment: The implementation plan should be put in order with the National Waste Management Strategy (NWMs) of 2021. Question: is it free to take waste to the landfill site or is free? Question: does the municipality collect waste for free or can one also render a waste collection service and charge the community since there is no waste collection services where I stay?	



DOCUMENT TITLE	Project Introduction Minutes
----------------	---------------------------------

Mamadi & Company I SA

Item No	Agenda Items (Meeting Agenda attached as Appendix A)	Actions
	Question: what is a landfill site can one maketheir own landfill site	710110110
	and charge for waste disposals?	
	Comment: The recycling companies should be registered with a	
	specific register to advise what types of recycling they are and	
	where are they located. State what types of equipment are there	
	and what is happening on that specific recycling.	
	Consent-Question: there is a lot of ruble illegal dumping within	
	Lepelle Nkumpi Local Municipality what you can say about that	
	Answer: There is a national project to deal with building ruble, is	
	being run by Green Mineral South Africa, will start in 2025 January,	
	which the municipality need to sign the consent letter which say	
	they accept the project.	
	Question: you talked about awareness please elaborate	
	Answer: when we talk about education and awareness it goes	
	beyond even households where the municipality should educates	
	the community about recycling composting and reuse, people do	
	not understand the impact of illegal dumping, so the community	
	needs to be educated about such things	
	Question: what about the issue of Bottles which the bottle store	
	throws all over can we fine those ones or is there a legislation	
	which can make that person to be fined?	
	Answer: LEDET has issued a notice to the Liquor restaurant as	
	effective from April, that the liquor store should provide four waste	
	disposal invoices each and every month.	
8	WAY FORWARD	ALL
	Mamadimust schedule another meeting, preferably the first week	ALL
	of June 2024.	
	Mamadi must send a meeting invite 7 daysbefore to ensure that it is extended to the relevant people in time.	
	is extended to the relevant people in time.To create a WhatsApp group that includes Mamadi and	
	Councillors to facilitate better communication.	
10	CLOSURE	Mamadi
	Mrs Legion Mazibuko gave a vote of thanks and closed the	
	meeting.	

DOCUMENT TITLE:	Project Introduction Minutes
DOC NO:	001

APENDIX C: Introduction Meeting Agenda

		Project Refer	LEDET IWMPs		
Mamadi & Company 1 SA		Circulation:	LEDET IWMP DRAFT- Lepelle-		
		Circulation:	Nkumpi local Municipality		
		Compiled by:	Mamadi COO		
		Revision:	Version 1.0		
		Date:	14 TH JUNE 2024		
Decument Type					
Document Type: Meeting Agenda					
Title:			ed Waste Management Plan		
	(IWMPs) for a Period of 6 (Six) Months.				

Venue:	Teams Meeting	Date	14 June 2024
Chair:		Time	10h00 -11h00

FOCUS		ITEM	PRESENTER
	1.	Opening and welcome	LEPELLE
Walaama aad	2.	Introductions	All
Welcome and Administration	3.	Apologies	All
7.0	4.	Adoption of the agenda	All
	5.	Purpose of the meeting	LEDET
Presentation	6.	Draft IWMP Presentation	Mamadi
Discussion	7.	Discussions	All
Way Forward	8.	Way forward	All
Closure	9.	Closure	All

DOCUMENT T	ITLE:	Project Introduction Minutes
DOC NO:		001

Appendix D: Attendance Register

PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY



FRIDAY, 14 JUNE 2024 IN LEBOWAKGOMO CIVIC CENTER, LIMPOPO PROVINCE



ATTENDANCE REGISTER



Name and Surname	Physical Address	Organisation	Tel	Mobile	Email	Signature
Stanford Mugeri	First Floor Softbrand Thandanani Office Park 16 Invicta Road Midrand, 1658	Mamadi and Company (Pty) Ltd	011 532 8659	062 416 5442	Stan@mamadi.co.za	
Legion Mazibuko	First Floor Softbrand Thandanani Office Park 16 Invicta Road Midrand, 1658	Mamadi and Company (Pty) Ltd	011 532 8659	073 789 1846	Legion@mamadi.co.za	
ITUMELENGA TEMPA	HOUSE 32ND SONE B LEBONAKOBOO 0737	LEPELLE- NKUMPÍ LUCKOL NUMICIANTY	-	0734111702	terraitu Kegraii kon	Dane
REJOICE MAKALENG	HOUSE NO JOSQ ZONE BAKGOMO LERG WAKGOMO 0737	LEPTLE -NKUMB LOCAU NIUNICIPALITY	-	0608242206	makaengrejoiccologmenta	eQ.
Esta Bours	Successive	cepelle non	1	गर १८३२७१	legas agumoin	(Da)
MARTHA THORETA	0.131	NEUMPI	-	0631578184	thougheremoistechie	(4)



Project Introduction Minutes



DOC NO: 001

PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY

minisi teng	House No 1997 Lebowalgono	Repelle-Nkuppi municipality	_	0792984940	mnishenagoagma,)·com	THINGS:
KUAKA LERATO	HOUSE NO 606 Zone A LEBUNAKUOMO	LEPELLE- NEUMPI MUNICIPALITY	_	0798611947	loratistyata@yahoo.com	Alexander
Marline Manokwana	House no 24 Sa most attack	Municipal &	-	063511940	Marlinemande d'aron Colymon I. Com	D.W.
Merda	ward 10 Ga-nogotiane	Lepelle. Newari Wanicpaley		C12 2471	medamokgetnovognovik	100
SEIPHTI CHAUKE	HOS WHYOLZE ON	MUNICI PALITY MUNICI PALITY	-	5002	Lovernouke 7 Egnicillar	Sting.
Makubela Tebego	Mathibela Phuse 3 How 10:2840	Le perio Mkvnp munn		0108630	Grazusela OZG groi Com	IN
Tselvacoto Monica	Mathibela Phase 5	Lepelle Municipality	_	071657	tsehangotomoniaratymo	M
Matsetela Lerafo	House No 128 Mathibela P3 Groothoek 0628	Lepelle Nkumpi. Municipality	-	C760516582	lerotowmatsetela egmailco	Lno
Kgomotso Thobejone	House 391 Lebourakgomo Zone A	Lepelle Nkumi Municipality	-	076973 2698	UnbeShownagmail.	1
Katlego Maselela	LEBOWAKLOMO	Lepelle-Nkum Pi Municipality	2	7054	ktilibr go@gmail com	Moselela





Project Introduction Minutes

Millutes



DOC NO: 001

PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY

Kale Perfect	Madisha Ditoro	Waste Campaigner	9659		Kaleperpect® gmail-com	Haled
Leshilo Lesedi	Zone-f	o waste compaigner	07669171		leshilo lesedi @	R.L.Builo
I nama Lincon	MAMADLO	WASTE CAMPAIGNER	0129 061 439		linean nama@jmau'i com	the
KAMASHALA MPH 0	JERKYLAND	Environmental eclucations; awareness compaigner	071 512 3698		mphomakywalesiso	ARamosta
MAFANE KELETSO	Lebowakgomo Zone f	Waste Campaignet	0768975134	0168975134	Mafanekelelso@gmail.com	al.
R4mosh+BA MHJF	lebounkaano Zere P	LASTE (AMPHICAGE	07647685°	067 36 2765	Minoramolas & grailon	8
MATHAPS MATHATSE	SOUE L	WASTE	072 10 85290	80	mahlatemeth, 10 icloud	Hotel.
Megau Peneron HTIMBANE	ZONE 7	ENVIRONMENTAL MANAGENEME GRADUATE CAMPAIGNICE		063749883	penetopentogau 5/10 gmail cost	Atto





Project Introduction Minutes

DOC NO: 001



PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY

Masho mane Matere	House no 10/24 mamatonya-42- mphakiele	HEPECLE- MKUMPI	_	06072322	Matetobash@gmail.	AND TO THE PARTY OF THE PARTY O
BAMARGLA HECTOR	284 KINEMAMORE	COM	-	06761000		fermionente
RAEDANI LUTENDO	256 Bandor Ext 100 EAST	Capricary DISTRKT MUNKIPALITY		RACOAT OBSUSSEDON		
Therng M.K	Mankwerg, Poloknane	CDM		076 629		A Brai
Makedi Maeloi	Le hoower tegar	no Lepelle. Mkamp.		066		Machas
SFBOPA EBOGANG ELURU	ZEBEOIE CA CA-RAKGOATHA	LE PE WE HRUMP!	-	071 153 3604	Sebapa 1 9769 mail- com	(E)
ARNOT RAVELE	CAPRICORN DITRICE Municipality	CAPICIORIE DISTRICE MUNICIPALITY	1019	071686 5002	ravelea occlon-org-za	Ann
ES OPA ESEDI	ZEBEDIE LA URRAK GOATHA	LEP B LLE Neumpi		0769917946	Deboramozisettelegna i cam	SLE





Project Introduction Minutes

DOC NO: 001



PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY



FRIDAY, 14 JUNE 2024 IN LEBOWAKGOMO CIVIC CENTER, LIMPOPO PROVINCE

Mamadi - Company

ATTENDANCE REGISTER



Name and	Physical Address	Organisation	Tel	Mobile	Email	Signature
Surname						
Stanford Mugeri	First Floor Softbrand Thandanani Office Park 16 Invicta Road Midrand, 1658	Mamadi and Company (Pty) Ltd	011 532 8659	062 416 5442	Stan@mamadi.co.za	
Legion Mazibuko	First Floor Softbrand Thandanani Office Park 16 Invicta Road Midrand, 1658	Mamadi and Company (Pty) Ltd	011 532 8659	073 789 1846	Legion@mamadi.co.za	
LILLY Morgohlon	Stand no. 193 LENTING GA-MPHAHLELE	LEPELLE-HKUMPI (DEFE)		079 506 8384	uniquewaterlilly@gmail.com	Motgoldon, M L
Tshephisu Malepa	stand no: 30089 Hudestaning Ga-Mphahlelp	(DETE)		076 275 4962	tenephisumalepedymaileum	Toutof.
Send Revual Pega Bohlalc	Statro 652 zorea Let anatgomo 2278 Zone A Lebanatgomo	Lepelle	1		monthercutallegroullands, bohlalepetiaegma	







Project Introduction Minutes

DOC NO: 001



PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY

CHUENE	ZONE B UNT B 3460 LEBOWAKGOMO	NEPELLE NEUMPI		0187756149	makgokagillian. mgagmo	
Leshilo Mpho	Morotse Village Ga Miphahiele	Neumpi		07123 49 53	Mpholeshi 1095@gmail.com	Leshilo.m
WELTE	STANDIO: 20140 MOROTSE SA-MPHANCEL	LE PELLE Mkump i		07 54965103	poluicompuante ograj	Basiere
Ramorasni	zone A stand	Lepelle- Hkumpi		083692 1614	gramorasnia gmailicom	Bamordani
Madigoe Seseng	mphantere majjane village	LAM		060783 5111	margoesesenga guni.	Ez.
Ranalwe Mamalbolo	Mariado	Lefelte-Hump Lexal Municipal	056334612	072133:513/ cl92871034	reneilwerramaboles lettlerkumbigev-Zq	RHomable
Mudky Eulander	Polokisine	LEDET			eulandernasindiqs@g mel(1:covi)	Mucky
Lerato	polohuane	LEDE7	08205	71818 4	erato mupat	

mahlatsesebatomahlatse@gmail.com. tumishoserudu@gmail.com. tMakhubela026@gmail.com

Appendix A - Project Stakeholder Engagement Report:

Lepelle-Nkumpi Local Municipality Integrated Waste

Management Plan







Stakeholder Engagement Report

DOC NO: MC.MDM. SER.001



PROJECT INFORMATION

Title	Stakeholder Engagement Report for Development of Lepelle-Nkumoi Local Municipality Integrated Waste Management Plan
Submission Date	02 September 2024
Classification	Company Confidential
Our Reference	MC.LEDET.IWMP.2024

VERSION AND AMENDMENT SCHEDULE

Version	Version date	Author	Description of Amendments
1	August 2024	Stanford Mugeri (Environmental Consultant)	Original Document

APPROVAL AND CONTROL SCHEDULE

Approved by	Designation	Responsibility	Signature	Date approved
Stanford Mugeri	Environmental Consultant	Compiler	61	29 August 2024
Legion Mazibuko	Senior Environmental Consultant	Review	Sour-	30 August 2024
Ronaldo Retief	Environmental Manager	Senior Review	G W	02 September 2024
Ike Rampedi	Chief Operational Officer	Approval	4	02 September 2024

CLIENT APPROVAL

NAME	DESIGNATION	DATE	SIGNATURE
Nsovo Makelana	Environmental Management Inspector		

Copyright © 2022 Mamadi & Company SA (Pty) Ltd)

All rights reserved. No part of this document may be reproduced, translated, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the written approval of Mamadi & Company SA (Pty) Ltd

REPORT STATUS	DRAFT	FINAL	~



Stakeholder Engagement Report

M



DOC NO: MC.MDM. STR.001

Table of Contents

1.	COMMUNICATION AND STAKEHOLDER PARTICIPATION	1
1.1.	STAKEHOLDER ENGAGEMENT APPROACH	1
2.	AWARENSS CONSULTATION WITH KEY STAKEHOLDERS	3
2.1. 22. 23.	PUBLIC MEETING NEWSPAPER ADVERTISEMENTSAVAILABILITY OF THE IWMP DRAFT	5
3.	COMMENTS AND RESPONSE TRAIL	7
4.	CAPPRICORN DISTRICT MUNICIPALITY IWMP DATA BASE	11
List of F	Figures	
Figure 2	1-1: Public participation process undertaken	3 5
List of 7	Tables	
Table 3	2-1: Public Meeting 3-1: Comments and Response trail	8



Stakeholder Engagement Report

DOC NO: MC.MDM. STR.001



1. COMMUNICATION AND STAKEHOLDER PARTICIPATION

The stakeholder consultation and Public Participation Process (PPP) was done in accordance with Section 11(1& 4) read with Section 73 of the National Environmental Management: Waste Act (Act No. 59 of 2008) as amended (NEM: WA). The purpose of this report is therefore to present the stakeholder approach, identified stakeholders and the consultative processes undertaken during the development of an Integrated Waste Management Plan (IWMP). The stakeholder engagement was an ongoing process throughout the IWMP development. The process involved the participation and contribution of two "groups" of stakeholders — A smaller and more focused group i.e., Project Steering Committee (PSC) and a larger group of stakeholders (The general public). The process focused strongly on the direct and productive involvement of stakeholders in developing the plan.

Stakeholders were identified and consulted during the development of this plan, per the DFFE IWMP guidelines published in 2009. The following should be included in the report:

- A summary of the stakeholders that have been consulted; their issues, concerns, views and inputs;
- Responses to the concerns and issues raised by stakeholders; and
- A record on details of the stakeholders and their inputs.

1.1. STAKEHOLDER ENGAGEMENT APPROACH

A consultative process was followed throughout the development of the IWMP, and the following steps were followed to ensure that stakeholders were provided with an opportunity to comment on the draft IWMP.

- Identification of role players: Key role players that contribute to waste management and inform current waste management practices within the district were identified. Key role players are listed in section 2.
- Role Player Database: After all the role players were identified, a data base was developed and updated throughout the IWMP process.
- Public Participation: A "Call for Expression of Interest" i.e. an advert was placed in at least one newspaper namely Sekhukhune times to inform the public about the availability of the draft IWMP for review (for a period of 30 days) and also to invite the



DOCUMENT TITLE:	
DOCUMENT TITLE:	

Stakeholder Engagement Report



Mamadi & Company ISA

DOC NO: MC.MDM. STR.001

public to attend the various public meetings so they be informed of the development of the IWMP and have an opportunity to comment as well as give inputs on the IWMP.

Figure 1-1 below summarizes the steps that were followed when undertaking stakeholder engagement:

Call of Expression (Advert) was placed in Sekhukhune newspaper

Meetings
One PSC Meeting
One Public meetings

Draft IWMP was made available for review (30 days) in Lebowakgomo library and Civic center

Figure 1-1: Public participation process undertaken



Stakeholder Engagement Report

DOC NO: MC.MDM. STR.001



2. AWARENSS CONSULTATION WITH KEY STAKEHOLDERS

The identified key stakeholders included but not limited to the following:



Figure 2-1:Key Stakeholders

Consultation with the key stakeholders was in the form of written emails, telephonic communication. Key stakeholders were invited via emails to attend the PSC and were given an opportunity to give inputs and comments on the daft IWMP. One PSC meeting was held on the 14th of June 2024 at the Cultural Centre. PSC consisted of Mamadi technical team, Lepelle-Nkumpi's waste management officials, LEDET officials and DFFE officials. The purpose of the PSC was to discuss the progress of the project. See attached PSC minutes Appendix A.

2.1. PUBLIC MEETING

One public meeting was held for the Lepelle-NKumpi Local Municipality (LNLM). The purpose of the public meetings was to engage Interested and Affect Parties (I&Aps), to give them an opportunity to comment and give inputs on the draft IWMP. Meeting invites were sent by LNLM to key stakeholders inviting them to the public meetings while an advert inviting the public was placed in one newspaper. See attached Appendix B for public meeting minutes



DOC NO:

Stakeholder Engagement Report

MC.MDM. STR.001



The public meeting was held as follows:

Table 2-1:Public Meeting

Municipality	Date	Time	Venue	Availability of Report
Lepelle-Nkumpi	14 June 2024	10;00 a.m.	Cultural Centre	Lebowakgomo Library



Stakeholder Engagement Report

DOC NO:

MC.MDM. STR.001



2.2. NEWSPAPER ADVERTISEMENTS

Notice notifying, I&APs was given in terms of Section 11(1& 4) read with Section 73 of the National Environmental Management: Waste Act (Act No. 59 of 2008) as amended (NEM: WA). The advert was placed in one newspaper i.e., Sekhukhune Times. See Figure 2-3 for advert tear sheet and Figure 2-4 for the advert.

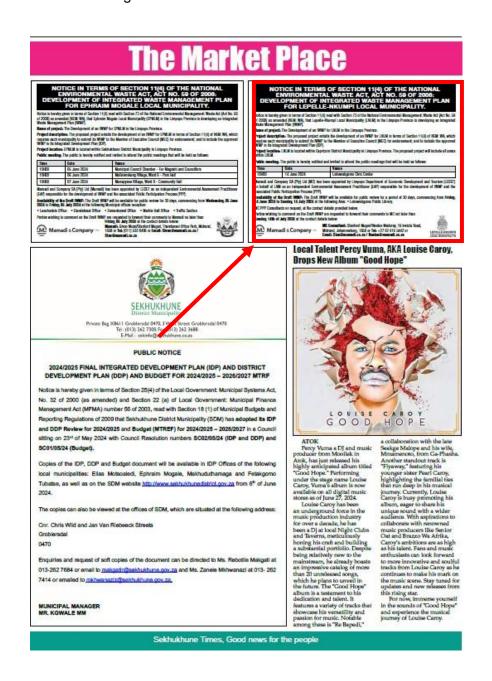


Figure 2-2: Adverts tear sheets



Stakeholder Engagement Report

DOC NO: MC.MDM. STR.001



NOTICE IN TERMS OF SECTION 11(4) OF THE NATIONAL ENVIRONMENTAL WASTE ACT, ACT NO. 59 OF 2008: DEVELOPMENT OF INTEGRATED WASTE MANAGEMENT PLAN FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY.

Notice is hereby given in terms of Section 11(4) read with Section 73 of the National Environmental Management: Waste Act (Act No. 59 of 2008) as amended (NEM: WA), that Lepelle-Nkumpi Local Municipality (LNLM) in the Limpopo Province is developing an Integrated Waste Management Plan (IWMP).

Name of project: The Development of an IWMP for LNLM in the Limpopo Province.

Project description: The proposed project entails the development of an IWMP for LNLM in terms of Section 11(4) of NEM: WA, which requires each municipality to submit its IWMP to the Member of Executive Council (MEC) for endorsement; and to include the approved IWMP in its Integrated Development Plan (IDP).

Project location: LNLM is located within Capricorn District Municipality in Limpopo Province. The proposed project will include all areas within LNLM.

Public meeting: The public is hereby notified and invited to attend the public meetings that will be held as follows:

- 23	Time	Date	Venue
	10H00	14 June 2024	Lebowakgomo Civic Center

Mamadi and Company SA (Pty) Ltd (MC) has been appointed by Limpopo Department of Economic Development and Tourism (LEDET) on behalf of LNM as an independent Environmental Assessment Practitioner (EAP) responsible for the development of IWMP and the associated Public Participation Process (PPP).

Availability of the Draft IWMP: The Draft IWMP will be available for public review for a period of 30 days, commencing from Friday, 14 June 2024 to Sunday, 14 July 2024 at the following Area: • Lebowakgomo Public Library.

MC PPP Consultants on request, at the contact details provided below.

Parties wishing to comment on the Draft IWMP are requested to forward their comments to MC not later than Sunday, 14th of July 2024 at the contact details below:





Figure 2-3:Advert



Stakeholder Engagement Report

DOC NO: MC.MDM. STR.001



2.3. AVAILABILITY OF THE IWMP DRAFT

All IA&Ps and stakeholders were notified of the availability of the IWMP Draft report. The Draft IWMP was available for public review for a period of 30 days, which commenced from Friday, the 14th of July 2024 to Monday, the 15th of July 202e4 within the Municipality. Hard copies of Draft IWMP reports were placed at Lebowakgomo Public Library and Lepelle-Nkumpi Civic Centre listed in Table 2-1 above, and via email upon request. Parties wishing to comment on the Draft IWMP were requested to forward their comments to Mamadi & Company (Pty) Ltd no later than Monday, the 15th of July 2024.

3. COMMENTS AND RESPONSE TRAIL

The technical issues, comments and concerns received during the public participation process were noted and captured in the comments and response report in Table 3-1 below.



DOCUMENT TITLE:	Stakeholder Engagement Report
DOC NO:	MC.MDM. STR.001



Table 3-1: Comments and Response trail

Organisation Issues raised/ Concerns		Response
	Comments from Lepelle-Nkumpi Local Municipali	ity-Public Meeting
		The issue has been presented to the council and awaiting decision and budget allocation.
Community Member	Issue of disposal of diapers is a problem in the community and this diapers end-up in the nearby rivers.	The community is encouraged to refrain from illegally dumping waste and encouraged to use the provided skip bins.
Community Member	The municipality must conduct awareness on proper waste disposal.	The municipality has been inviting the community to planned awareness initiatives, however, most of the community members are reluctant to attend.
Community Member	Lack of groundwater monitoring but did not mention anything about air quality?	Waste disposal at landfill sites can significantly impact air quality in several ways, one of them is the Volatile Organic Compounds (VOCs), so waste decomposition also releases VOCs, which can react with other pollutants to form ground-level ozone and particulate matter. (Comment noted).
Local Municipality 29 wards- its 30 wards		Comment Noted



DOCUMENT TITLE:	Stakeholder Engagement Report

Mamadi & Company I SA

DOC NO: MC.MDM. STR.001

Organisation	Issues raised/ Concerns	Response
Local Municipality	EMI is appointed	Comment noted
Local Municipality	Weighbridge	The municipality is busy trying to fix the computer connect to the weighbridge to function
Local Municipality	The issue of waste collection in regard to the yellow fleets	Yellow fleets- two compactor trucks purchase in process, 7 compactors, 3 grab trucks no 1 and 2 skip trucks
		The municipality will need at least three to six Truck operators
		We are working with them to recommend things which they can do to maximize the waste service delivery within the municipality.
Ledet More than 6 recyclers, 2 were registered in the last four months and there were more which were registered before		Comment noted
Ledet	Recycler received funding for turning saw dust to firewood, still waiting for the machinery	Comment noted
Community Member	Too much illegal dumping activities in Lebowakgomo	The Municipality should hire the EMI in order to deal legally with the people who are dumping illegal.



DOCUMENT TITLE: Stakeholder Engagement Report

Mamadi & Company I SA

DOC NO:

MC.MDM. STR.001

Organisation	Issues raised/ Concerns	Response
Local Municipality	The organisational structure must be suggested to the municipality	Comment noted
Ledet	Industrial hazardous information must be included	
		Separation at source must at least start within one ward so that it can be monitored if is being conducted then expand to a larger scale.
Local Municipality Waste tariffs		The municipality should log type of waste which is being disposed in the landfill site and also measure volumes to charger the tariffs on waste which are disposed on a personal level.
Community Member Registration of recycling norms and standards		The recycling companies should be reregistered with the National waste management agency or the Lepelle-Nkumpi Local Municipality
Local Municipality	Mathibela's information must also be added for example.	Comment Noted
LEDET	The issue of building rubbles within the Municipality	There is a national project under Green mineral South Africa that deals with building rubble, the project is commencing



DOCUMENT TITLE:	Stakeholder Engagement Report
DOC NO:	MC.MDM. STR.001



Organisation	Issues raised/ Concerns	Response
		from 2025 January so the municipality should sign a consent letter so that they can be included in the project
Community Member The IWMP is focusing on then township		
Community Member The Community need to have environmental officer to give tickets to whoever dump illegally		Comment Noted
Community Member Place the skip bins to areas where there are illegal dumps.		The skip bins will be having to be placed in all the areas accessible to the communities including town

4. CAPPRICORN DISTRICT MUNICIPALITY IWMP DATA BASE

A project database has been established and updated throughout the project based on the interaction with key stakeholders and I&Aps. Table 4-1 below details the project stakeholder database.



DOCUMENT TITLE:	Stakeholder Engagement Report	
DOC NO:	MC.MDM. STR.001	



Table 4-1:Project Data Base

NAME & SURNAME	ORGANISATION	DESIGNATION	CONTACT DETAILS
1. Ike Rampedi	Mamadi and Company SA (Pty) Ltd	Chief Operating Officer	Email: <u>lke@mamadi.co.za</u> Cell:079 058 2847
Stanford Mukhethwa Mugeri	Mamadi and Company SA (Pty) Ltd	Environmental Consultant	Email: <u>Stan@mamadi.co.za</u> 062 416 5442
3. Neelan Maduray	Mamadi and Company SA (Pty) Ltd	Environmental Consultant	Email: <u>Neelan@mamadi.co.za</u> Cell:071 682 1858
4. Given Nkosi	Mamadi and Company SA (Pty) Ltd	Environmental Consultant	Email <u>Given@mamadi.co.za</u> Cell:078 336 0054
5. Thabang Moleke	Lebowakgomo Zone F	Waste Campagner	071 590 2775 <u>ThabangHlakudi@gmail.com</u>
6. Sharon Mashilo	Lebokgomo Zone B	+	072 1554 469 Stm.mashilo@gmail.com
7. Elizabeth malope	1426 Zone S Lebowakgomo	+	061 637 1105 elizabethmalope@gmail.com
8. Mogau Penelope Ntimbane	Lebowakgomo Zone F	Environmental Management graduate Campaigner	063 749 8835 Penelopemogau@gmail.com
9. Mothapo Mahlatse	Lebowakgomo Zone F	Waste campaigner	072 108 5280 Mahlatsemoth27@icloud.com
10. Ramoshaba Minor	Lebowakgomo Zone P	Waste Campaigner	067 360 2765 Minorramoshaba@gmail.com
11. Mafane Keletso	Lebowakgomo Zone F	Waste Campaigner	076 897 5134 <u>Mafanekeletso@gmail.com</u>
12. Ramashala 13. Mpho	Jerkyland	Environmental education & Awareness Campaigner	071 512 3698 Mphomakgwale518@gmail.com



DOCUMENT TITLE:	Stakeholder Engagement Report	
DOC NO:	MC.MDM. STR.001	



14. Inama 15. Lincon	Mamaolo	Waste campaigner	069 959 0789 Linconinama@gmail.com
16. Leshilo Ramogohlo Lesedi	Lebowakgomo Zone F	Waste campaigner	076 691 7191 Leshilolesedi@gmail.com
17. Kale Perfect	Madisha Ditoro	Waste campaigner	060 457 9659 Kaleperfect@gmail.com
18. Panie Molapo	Satnf No 20248 Makurung Ga-Mphahlele 0736	Lepelle-Nkumpi Local Municipality	067 313 8697 <u>Daniele.exhausting@gmail.com</u>
19. Bridget Mogotle	Stand No:30130 Makurung 0736	Leplelle-Nkumpi Local Municipality	079 026 9277
20. Mabotha PJ	Pololage	LEDET	076 205 8996 Mabothapj@ledet.gov.za
21. Mphahlele RC	Malemutsi	Ledet	063 247 5521 Cliffordmphalhele@gmail.com
22. Moshomane Matete	House No:1074 Mamatonya GA Mphahlele	Lepelle-Nkumpi	060 723 2250 Matetebash@gmail.com
23. Ramaroka Hector	284 kwenamelo	CDN	063 614 7014
24. Raedni Lutendo	256 Bendor EXT 100 East	Capricorn District Municipality	068 485 8008
25. Thema M.K	Mankweng	CDM	076 629 3179
26. Nakedi Muela	Lebowakgomo Zone A	Lepelle-Nkumpi	066 425 2172
27. Sebopa Lebogang Lekuru	Zebediela Ga Rakgoatha	Lepelle-Nkumpi	071 153 3604 <u>Sebopa197@gmail.com</u>
28. Arnot Ravele	Capricorn District Municipality	Capricorn District Municipality	071 686 5002 Ravele@CDM.org.za
29. Sebopa Lesedi Mokibelo	Zebediela Garakgoatha	Lepelle-Nkumpi	076 998 7946 Sebopamokibelo@gmail.com
30. Itumeleng Tema	House 3210 Zone B,Lebowakgomo	Lepelle-Nkumpi Local Municipality	073 411 1726 Temaitu.k@gmail.com



DOCUMENT TITLE: Stakeholder Engagement Report

Mamadi & Company I SA

DOC NO: MC.MDM. STR.001

	0737		
31. Rejoice Makaleng	House no 2649 Zone B Lebowakgomo 0737	Lepelle-Nkumpi Local Municipality	0608242206 makalengrejoiceo@gmail.co.za
32. Moipone Kgasago	Stand no 20 Success Mathabatha 0733	Lepelle NM	0791532712 kgasagomo@gmail.com
33. Martha Thobejane	Stand no 46 Mafefe 0738	Lepelle Nkumpi	0631578184 thobejanemoitshephi@gmail.com
34. Mnisi Lena	House no 1997 Lebowakgomo Zone A	Lepelle-Nkumpi Municipality	0792984940 <u>Mnisilena90@gmail.com</u>
35. Kgaka Lerato	House no 606 Zone A Lebowakgomo	Lepelle-Nkumpi Municipality	0798611947 leratokgaka@yahoo.com
36. Marline Manokwana	House no 24 Gamogotlane	Lepelle-Nkumpi Municipality	0635119403 Marlinemanokwana@gmail.com
37. Mokwatedi Melda	Ward 10 Ga-mogotlane	Lepelle-Nkumpi Municipality	0722971788 Meldamokgethi07@gmail.com
38. Seipati Chauke	408 Makotse EXT	Lepelle-Nkumpi Municipality	0763415002 Katechauke7@gmail.com
39. Makhubelo Tebogo	Mathibela Phase 3 House no 20408	Lepelle-Nkumpi Municipality	0795630537 Makhibela02@gmail.com
40. Tsehlakgolo Monica	Mathibela Phase 5 House no 20810	Lepelle-Nkumpi Municipality	0715572524 tsehlakgomonica@gmail.com



DOCUMENT TITLE:	Stakeholder Engagement Report	
DOC NO:	MC.MDM. STR.001	



41. Matsetela Lerato	House no 128 Mathibela P3 Groothoek 0628	Lepelle-Nkumpi Municipality	0760546582 leratowmatsetela@gmail.com
42. Kgomotso Thobejane	House 391 Lebowakgomo Zone A	Lepelle-Nkumpi Municipality	0769732698 thobeshown@gmail.com
43. Katlego Maselela	189 Zone P Lebowakgomo	Lepelle-Nkumpi Municipality	0822147054 ktjibogo@gmail.com



Stakeholder Engagement Report

DOC NO: MC.MDM. SER.001



Public Meeting Minutes

APENDIX B: PUBLIC CONSULTATION MEETING MINUTES:

DEVELOPMENT OF IWMP FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY WITHIN THE CAPRICORN DISTRICT MUNICIPALITY, LIMPOPO PROVINCE

PREPARED FOR:



PREPARED BY:





DOCUMENT TITLE:	Project Introduction Minutes
-----------------	---------------------------------

Mamadi & Company I SA

Item No	Agenda Items (Meet	ing Agenda attached	as Appendix A)	Actions
1	OPENING AND WELCOME			Mamadi
	The meeting was declared open by Mrs Mazibuko Mthavini Legion (MML), and all were welcomed.			
	(MIMIL), and all V	were welcomea.		
	ATTENDEES			
	Names and Surname	Institution	Role	
	Legion Mazibuko	Mamadi	Environmental Consultant	
	Masopo Mametja	Lepelle-Nkumpi Local Municipality	Acting executive manager at Lepelle-Nkumpi community services	
	Lwaleng Kanyane	Lepelle-Nkumpi Local	Waste management officer	
		Municipality		
	Lerato Melopo	LEDET	Waste Management	
	Miss Lehlogon olo	LEDET	Waste management	
	Stanford Mugeri	Mamadi	Environmental Consultant	
	Phuti Maboth a	LEDET	Waste Management	
2	• All attendee	s introduced themsel	ves.	ALL
3	APOLOGIES	caacca (nomicol		Mr Kanyane
	 Finance sent colleague. 	nning sent apologies a	e attending a Funeral of a former as they are attending a Funeral of a	
4	ADOPTION OF T	•		ALL



DOCUMENT TITLE: Project Introduction Minutes



Item No	Agenda Items (Meeting Agenda attached as Appendix A)	Actions
	The agenda was adopted with no additions. Refer to Appendix A	
5	PURPOSE OF THE MEETING To present the draft IWMP for Lepelle-Nkumpi, and to get comments and inputs on the project from the stakeholders.	MM
6	PROJECT PRESENTATION Mamadi presented the following Information • Project Background • Project Approach, which covered the following: ✓ Planning and Inception ✓ Legal Framework ✓ Integrated Waste Management Plan (IWMP) ♣ Status Quo ♣ Gaps and needs assessment ♣ IWMP Goals	MM
7		ALL
	 Question: The is nothing mentioned about air quality within the landfill site, so are you saying that waste disposal does not impact the air quality? Answer: The air quality within the Lepelle-Nkumpi landfill site is poor due to the decomposition of waste, which releases pollutants into the air. Air quality issues at Lepelle-Nkumpi Landfill site include Volatile organic compounds (VOCs) these are Gases from decomposing waste, such as methane and hydrogen sulphide and there is unpleasant smells from decomposing waste. These pollutants have a negative impact on the environment since it contribution to climate change, air pollution, and nuisance odors. Comment: At the beginning of the presentation, you advised that the municipality has 29 wards of which there are 30 Wards. Answer: Comment Noted and changes were made regarding that. Suggestion: Municipality suggest that we need to give a suggestion on the organogram on how to run waste management services successfully, for example the municipality should hire how many personnel or if they need to add more trucks or add more staff Point of correction: The municipality do have a designated EMI. 	



DOCUMENT	TITLE:	Project Introduction Minutes
----------	--------	---------------------------------



Item No	Agenda Items (Meeting Agenda attached as Appendix A)	Actions
	 Suggestion: Regarding the copies of the document the Municipality will need six more copies so that they can be placed in the traditional authority offices. 	
	Inputs by the Municipality: Vote of thanks to the LEDET effort	
	that they made sure that Mamadi came and review the IWMP since	
	it was not reviewed together with the community to come and add	
	some inputs	
	Comment by Municipality: Municipality is on a process to appoint	
	a service provider to run/operate the landfill site since they don't	
	have capacity to run the landfill site.	
	Comment by Municipality: The municipality is busy trying to fix	
	the computer connect to the weighbridge to function.	
	Comment by the Municipality: The municipality is about to	
	finalize the process of procuring two compactor trucks.	
	Comment by the Municipality: The municipality is conducting	
	waste management awareness in communities.	
	Comment by Municipality: The Waste management trucks are	
	breaking down every now and then and it's costing the municipality	
	over million for the trucks to be fixed in a year.	
	Consents by the Municipality: After few days of clearing illegal	
	dumping the community will still dump on the same spot and	
	burning the provided skip bins.	
	Consent by the Municipality: The municipality will need at least	
	three to six Truck operators.	
	Advise by ledet: There is a collaboration called industrial	
	symbiosis, the waste that is produced at a specific company can	
	be reused by someone else, waste streams to create new product	
	using for example there are company companies dealing with	
	timbers, so that timber offcuts can be used to make furniture. This	
	aims to	
	Reduce waste and emissions	
	2. Improve resource efficiency	
	Enhance innovation and competitiveness	



DOCUMENT TITLE: Project In

Project Introduction Minutes



Item No	Agenda Items (Meeting Agenda attached as Appendix A)	Actions
	Foster sustainable development	
	Question: Do Mamadi assist the municipality with ideas on how to	
	deal with waste management?	
	Answer: We are working with them to recommend things which	
	they can do to maximize the waste service delivery within the	
	municipality.	
	Question: The report is focusing much on the communities and	
	landfill site, but the real problem is in complex since there are not	
	enough bins there and not enough bins in taxi ranks and street	
	vendors.	
	Answer: This is one of the recommendations that the municipality	
	should have the skip bins even in town and accessible to the	
	community.	
	Comments: There are more than six recycling companies within	
	the municipality, and they are registered since last four month we	
	registered two and before that there more registered previously.	
	Comment: The issue of the disposal facility compliance should	
	be considered since is covered during the internal audits of the	
	landfill site, what we can focus on can be the lifespan of the landfill	
	site the so that we plan for another landfill site and development of	
	the drop off facilities and transfer centers	
	Comment: Mamadi and company need to propose an	
	organizational structure for the municipality.	
	 Comment: The report should include the industrial hazardous waste. 	
	 Comment: The implementation plan should be put in order with 	
	the National Waste Management Strategy (NWMs) of 2021.	
	Question: is it free to take waste to the landfill site or is free?	
	Question: does the municipality collect waste for free or can one	
	also render a waste collection service and charge the community	
	since there is no waste collection services where I stay?	



DOCUMENT TITLE: Project Introduction Minutes



Item No	Agenda Items (Meeting Agenda attached as Appendix A)	Actions
	Question: what is a landfill site can one make their own landfill site	
	and charge for waste disposals?	
	• Comment: The recycling companies should be registered with a	
	specific register to advise what types of recycling they are and	
	where are they located. State what types of equipment are there	
	and what is happening on that specific recycling.	
	Consent-Question: there is a lot of ruble illegal dumping within	
	Lepelle Nkumpi Local Municipality what you can say about that	
	• Answer: There is a national project to deal with building ruble, is	
	being run by Green Mineral South Africa, will start in 2025 January,	
	which the municipality need to sign the consent letter which say	
	they accept the project.	
	 Question: you talked about awareness please elaborate 	
	Answer: when we talk about education and awareness it goes	
	beyond even households where the municipality should educates	
	the community about recycling composting and reuse, people do	
	not understand the impact of illegal dumping, so the community	
	needs to be educated about such things	
	• Question: what about the issue of Bottles which the bottle store	
	throws all over can we fine those ones or is there a legislation	
	which can make that person to be fined?	
	Answer: LEDET has issued a notice to the Liquor restaurant as	
	effective from April, that the liquor store should provide four waste	
	disposal invoices each and every month.	
8	WAY FORWARD	ALL
	Mamadi must schedule another meeting, preferably the first week	
	 of June 2024. Mamadi must send a meeting invite 7 days before to ensure that it 	
	is extended to the relevant people in time.	
	 To create a WhatsApp group that includes Mamadi and 	
40	Councillors to facilitate better communication.	More sel:
10	CLOSUREMrs Legion Mazibuko gave a vote of thanks and closed the	Mamadi
	meeting.	
	meeting.	

DOCUMENT TITLE:	Project Introduction Minutes
DOC NO:	001

APENDIX C: Introduction Meeting Agenda

Mamadi & Company 1 SA		Project Refer	LEDET IWMPs	
		Circulation:	LEDET IWMP DRAFT— Lepelle- Nkumpi local Municipality	
		Compiled by:	Mamadi COO	
		Revision:	Version 1.0	
			14 TH JUNE 2024	
Document Type: Meeting Agenda				
Title:	Development of Lepelle-Nkumpi Integrated Waste Management Plan (IWMPs) for a Period of 6 (Six) Months.			

Venue:	Teams Meeting	Date	14 June 2024
Chair:		Time	10h00 -11h00

FOCUS		ITEM	PRESENTER
	1.	Opening and welcome	LEPELLE
Walassassas	2.	Introductions	All
Welcome and Administration	3.	Apologies	All
7.4	4.	Adoption of the agenda	All
	5.	Purpose of the meeting	LEDET
Presentation	6.	Draft IWMP Presentation	Mamadi
Discussion	7.	Discussions	All
Way Forward	8.	Way forward	All
Closure	9.	Closure	All

DOCUMENT TITLE:	Project Introduction Minutes
DOC NO:	001

Appendix D: Attendance Register

PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY



FRIDAY, 14 JUNE 2024 IN LEBOWAKGOMO CIVIC CENTER, LIMPOPO PROVINCE



ATTENDANCE REGISTER



Name and Surname	Physical Address	Organisation	Tel	Mobile	Email	Signature
Stanford Mugeri	First Floor Softbrand Thandanani Office Park 16 Invicta Road Midrand, 1658	Mamadi and Company (Pty) Ltd	011 532 8659	062 416 5442	Stan@mamadi.co.za	
Legion Mazibuko	First Floor Softbrand Thandanani Office Park 16 Invicta Road Midrand, 1658	Mamadi and Company (Pty) Ltd	011 532 8659	073 789 1846	Legion@mamadi.co.za	
ITUMELENGA TEMPA	HOUSE 32ND ZONF B LEBONAKOBODO 0737	LEPELLE- NEUMPÍ LUCKEL NUMICIARY	~	0734111702	terraitu Kegraii kon	Mane
REJOICE MAKALENG	HOUSE NO JEST OF JONE BANGEMO	LEPTLE -NKUMP LOCAC NUNICIPALITY	_	0608242206	makangrejoiccolognorika	eQ.
Eso Bours	Successive	cepeile non	1	2125516	क्षित्र वयुवनकार्यः इ.स.चा	(Da)
MARTHA THOSES	0.133	LEPELLE	_	0631578184	thologramoishedhi@	(0)



Project Introduction Minutes



DOC NO:

001

PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY

minist Leng	House Ho 1997 Lebourgono	lepelle-Nkupp municipality	_	0792984940	musienagoagerailicom	AMMOS.
KUAKA LGRATO	HOUSE NO 606 ZONE A LEBUWAKUOMU	LEPELLE- NEUMPI MUNICIPALITY	_	0798611947	loratilyata@yahoo.com	Alexander
Marline Manbkwana	House no 24 Sa most others	Manciela Manciela		063511940	Marlinemarous ward	S. P.
Morwatedi Merda	ward 10 Ga-nogotiane	Lepelle. Newnfi Wanicpaley		C12 2471	madamokgetnov@gmaik	100
SEIPHTI CHAUKE	HOS WAKOLZEEN	MUNICI PALITY MUNICI PALITY	20	5002	Konechouke 7 Egovailla	Sim
Makinbela Tebego	Madribela Phuse 3 How 10: 2840	Ceperio Mkvnp munn	_	0198630	Grazusela OZG gmol Com	TON
Tselvacoto Monica	Mathibela Phase 5	Lepelle Municipality		2524	tsehlabyotomoniarogmo	M
Matsetela Lerato	House No 128 Mathibela P3 Groothoek 0628	Lepelle Nkumpi. Municipality	-	C160516582	leratowmatsetela egmailca	Ln
Kgomotso Thobejone	House 391 Lebourakgomo Zone A	Lepelle Nkumi Municipality	_	076973 2698	thobeShownagmail.	1
Katlego Masslela	LEBOWAKLOMO	1 enelle-Nkum	2	7054	ktilibrgo@gmail.com	Al Beelela



DOCUMENT TITLE: Project I

Project Introduction Minutes



DOC NO: 001

PROJECT: INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY

Kale Perfect	Madisha Ditoro	Waste Campaigner	9659		Kaleperfect® gmail-com	Daled
Leshilo Lesedi	Zonef Zone	ompaigner compaigner	07669171		leshilo lesedi @	R.L.Builo
I nama	MAMAOLO	WASTE CAMPAIGNER	0189 061 439		linean nama@jmau'i com	Le
KAMASHALA MPH 0	JERKULAND	Environmental eclucations; awareness compaigner	071 512 3698		mphomakywalesiso	Mamosh
MAFANE KELETSO	Lebowakgomo Zone f	Waste Campaignet	0768975134	0768975134	Matanekelelso@gmail.com	Q(
RAMOSHABA MINOF	leBounkaomo Zerre P	LASTE (AMPHICACE	O7647685\$	067 366 2765	Минической В диания	8
MATHAPS MATHATSE	SOUE Ł	(ANPAIGHER	072 10 85290	07210832	mahlatemeth, 10 icloud	Holio-
MEGAU PEMELOR	SONE +	EMMEDMENTA MANAGENCHT GRADUATE TAMPAIGNEE	35	063749883	ponetopentogau3710 gmail:cost	Atto



Project Introduction Minutes



DOC NO:

001

PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY

Masho mane Matere	House no loizy mamatonya-4A- mphakeete	HEPELLE- MKUMPI	_	06072322	matetobash@gmail.	Republicano P
BAMARGLA HECTOR	284 KINEMAMORE	COM	-	06761000		fermen out
RACDANI LUTENDO	256 Bandor Ext 100 EAST	EMPRICORN DISTRKT MUNKIPALITY		RACEAT OBSUSSED		
Therng M.K	Mankweng, Poloknane	CDM		076 629		(Dana)
Make di Mae la	Le boower legar	no Lepelle. Mkump.		066		Machos
SEBOPA LEBOGANG LELURU	ZEBEOIE LA CA-RAKGOATHA	LE PE WE HEUMP!	_	071 153 3604	Sebapai 9789 mail-com	CHH-
ARNOT RAVELE	CAPRICORN DITRICE MunicipaLity	CAPICIONE DISTRICT MUNICIPACITY	015294	071686 5002	ravelea@cdm.org.za	Ann
LESEDI LESEDI	ZEBEDIE LA URRAKGOATHA	LEP B LLE NKUMPI		0769917946	Deboranozibeladagna I com	SLE



Project Introduction Minutes

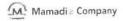


DOC NO: 001

PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY



FRIDAY, 14 JUNE 2024 IN LEBOWAKGOMO CIVIC CENTER, LIMPOPO PROVINCE



ATTENDANCE REGISTER



Name and	Physical Address	Organisation	Tel	Mobile	Email	Signature
Surname Stanford Mugeri	First Floor Softbrand Thendanani Office Park 16 Invicta Road Midrand, 1658	Mamadi and Company (Pty) Ltd	011 532 8659	062 416 5442	Stan@mamadl.co.za	
Legion Mazibuko	First Floor Softbrand Thandanani Office Park 16 Invicta Road Midrand, 1658	Mamadi and Company (Pty) Ltd	011 532 8659	073 789 1846	Legion@mamadi.co.za	
LILLY Mokgohloa	Stand no. 193 LENTING GA-MPHAHLELE	LEPELLE-HKUMPI (DEFE)		079 506 8384	uniquewaterlilly@gmail.com	Morgoldon, M t
Tshephisu Malepa	Stard no: 30089 Hudestanding Ga-Mphahrelp	Lepelle - Hkumpi (DFfe)		076 273 4962	tenephisumalepeggmailtum	Touty.
Send Revual Pega Bohlalc	Statro bszzorea Lebanatgomo 2278 Zone a Lebanatgoma	(DFFE) Lepelle	1		hundercuralbograllon bohlacpetiaegma	





Project Introduction Minutes



DOC NO: 001

PROJECT:INTERGRATED WASTE MANAGEMENT PLAN DRAFT FOR LEPELLE-NKUMPI LOCAL MUNICIPALITY

CHUENE	ZONE B UNT B 3460 LEBOWAKGOMO	NEPELLE NEUMPI		0187756149	makgokugutian. mgagmo	
Leshilo Mpho	Morotse Village Ga Miphahiele	Nkumpi		071234953	Mpholeshi 1095@gmail.com	Leshilo.m
WELTIC	STANDIO: 20140 morotse ya-mphancet	LE PELLE Mkump i		07 54965103	poluicopuauere ognal	Basiere
Ramorasni Annita	zone A stond No. 1442	Lepelle- Mkumpi		083692 1614	gramorasivia gmailicom	Bamorasni
Madigoe Sesens	mphantere majjane vi Hage	LAM		060783 5111	masigoesesenga gusi.	Be.
Ranaliwe Namaliab	Margado Village	Lefelle-Hung Lexal Municipal	056334612	072 <i>133:513/</i> ol9 <i>2</i> 87 <i>1</i> 034	reneilwe.mamabolo.co. latelle.nkumbergev.zq	RHomable
Mudky Eulander	Polokisine	LEDET			eulandemasindiqs@g mel(1:com)	Muor
Lerato Inoiot	polohuane	LEDE7	08205	71818 4	erato mupat	

mahlatsesebatomahlatse@gmail.com. tumishosenduegmail.com. tMakhubela02 Gigmail.com