**Report No: 07/07/25/ES/EnvAudit_WML Shongweni WMF**
**Report version: Final**

# *EXTERNAL WASTE MANAGEMENT LICENCE COMPLIANCE AUDIT REPORT: ENVIROSERV – SHONGWENI LANDFILL SITE*

*July 2025*

**Prepared by:**

DÖRËAN ENVIRONMENTAL

**Prepared for:**

ENVIROSERV
a SUEZ company


**ENVIRONMENTAL AUDITOR**

Dorean Environmental Services cc
501 Railway Street ext.
Brits
0250

P.O. Box 4643
Brits
0250

Tel: (083) 294 3422
Fax: (086) 690 4878
E-mail: monty@dorean.co.za

**CLIENT**

EnviroServ Waste Management (Pty) Ltd
1 Brickfield Road
Meadowdale
1401

P.O. Box 1547
Bedfordview
2008

Tel: (011) 456 5400
Fax: (086) 505 3874
Email: Greg@enviroserv.co.za

# PROJECT DETAILS

| | |
|---|---|
| **Ref Numbers:** | **12/9/11/L191016090639/4/R** |
| **TITLE:** | **External Environmental Audit Report: Waste Management Licence conditions for EnviroServ – Shongweni Landfill Site** |
| **AUTHOR:** | **Monty van Eeden** |
| **CLIENT:** | **EnviroServ Waste Management (Pty) Ltd** |
| **DOREAN REPORT NUMBER:** | **07/07/25/ES/EnvAudit_WML Shongweni WMF** |

.....

**Monty van Eeden**
Environmental Auditor
Managing Member

## Executive Summary

The on-site visit of the Shongweni Waste Management Facility was undertaken by Dorean Environmental Services on Monday 7 July 2025. This was part of the annual audit for 2025 undertaken in terms of the licence issued in terms of the National Environmental Management: Waste Act, 2008 (Act no 59 of 2008).

The waste licence was reviewed and the reviewed licence (consolidating both the landfill activities 12/9/11/L1200/4 as well as effluent treatment activities 12/9/11/L467/4 & 12/9/11/L467/1/V1) is numbered 12/9/11/L191016090639/4/R and was issued on 26 March 2020.

This is the fifth external audit of the reviewed licence since its approval. Due to the design of the facility, engineering controls implemented and competent staff, the Shongweni Waste Management Facility does not pose a significant environmental risk to the environment. The facility is showing compliance to its licence conditions and the main conclusions from the audit are:

(i) Two internal audits are specified in the licence and these have been conducted and the reports made available to the external auditor.

(ii) One external audit per annum is specified in the licence and this audit meets this requirement.

(iii) Ground- and surface water monitoring was conducted by Jones and Wagner in accordance with the Water Monitoring Protocol numbered W273/20/B196 as required by this licence, the last available monitoring report JW112/25/B196-25-Rev 0 is dated January 2025

(i) Biomonitoring of the Mgoshongweni stream was conducted by GroundTruth in December 2024.

(ii) No significant (reportable) spillages relating to waste disposal occurred in the period under review.

(iii) External complaints received in the formal EnviroServ complaints system for the period under review was recorded into an electronic database.

(iv) The first Monitoring Committee meeting for 2025 has been conducted as required by the Waste Management Licence. Minutes of this meeting was made available as required.

# TABLE OF CONTENTS

**Table of Contents** ..... 4
**1. Introduction** ..... 7
**2. Outline of Environmental Requirements** ..... 8
**3. Audit Objective, Scope and Criteria** ..... 8
**4. Audit Methodology** ..... 8
**5. Audit Findings** ..... 9
5.1 Site security and access control ..... 9
5.1.1 Requirements: ..... 9
5.1.2 Rating: ..... 9
Plate 1: Signage at the main gate ..... 10
5.2 General management ..... 10
5.2.1 Requirements: ..... 10
5.2.2 Rating: ..... 10
5.2.3 Requirements ..... 11
5.2.4 Rating: ..... 11
5.2.5 Requirements ..... 11
5.2.6 Rating: ..... 11
5.3 Designation of a waste Management Control Officer ..... 11
5.3.1 Requirements: ..... 11
5.3.2 Rating: ..... 12
5.4 Emergency preparedness plan ..... 12
5.4.1 Requirements ..... 12
5.4.2 Rating: ..... 13
5.5 Permissible waste ..... 13
5.5.1 Requirements ..... 13
5.5.2 Rating: ..... 13
5.6 Construction of the site ..... 14
5.6.1 Requirements ..... 14
5.6.2 Rating: ..... 14
Plate 2: Contaminated storm water collection pond. Valley 2 ..... 16
5.7 Impact and operation management ..... 16
5.7.1 Requirements: Impact Management ..... 16
5.7.2 Rating: ..... 18
5.8 Runoff management ..... 19
5.8.1 Requirements: ..... 19
5.8.2 Rating: ..... 20
5.9 Leachate management ..... 20
5.9.1 Requirements ..... 20
5.9.2 Rating: ..... 20
5.10 Monitoring ..... 21
5.10.1 Requirements: Monitoring methods and parameters ..... 21
5.10.2 Rating: ..... 21
5.10.3 Requirements: Water quality monitoring ..... 21

5.10.4 Rating: ..... 22
5.10.5 Requirements: Surface water monitoring network ..... 22
5.10.6 Rating: ..... 22
Table 1: Existing Surface Water Positions at the Shongweni Waste Management Facility ..... 23
5.10.7 Requirements: Background monitoring ..... 25
5.10.8 Rating: ..... 26
Figure 1: Electrical Conductivity values within the upstream boreholes at the site ..... 26
Figure 2: Simulated Groundwater Flow Directions ..... 27
5.10.9 Requirements: Detection Monitoring ..... 28
5.10.10 Rating: ..... 28
Table 2: Groundwater monitoring boreholes ..... 29
Table 3: Existing leachate detection monitoring positions ..... 31
5.10.11 Requirements ..... 32
5.10.12 Rating: ..... 32
5.11 Investigations ..... 32
5.11.1 Requirements: ..... 32
5.11.2 Rating: ..... 32
5.12 Recording ..... 32
5.12.1 Requirements ..... 32
5.12.2 Rating: ..... 33
5.13 Reporting ..... 33
5.13.1 Requirements ..... 33
5.13.2 Rating: ..... 34
5.14 Auditing ..... 35
5.14.1 Requirements: Internal audits ..... 35
5.14.2 Rating: ..... 35
5.14.3 Requirements: External audits ..... 35
5.14.4 Rating: ..... 36
5.14.5 Requirements: Departmental audits and inspections ..... 36
5.14.6 Rating: ..... 36
5.15 Monitoring committee ..... 36
5.15.1 Requirements ..... 36
5.15.2 Rating: ..... 37
5.16 Leasing and alienation of the site ..... 37
5.16.1 Requirements ..... 37
5.16.2 Rating: ..... 38
5.17 Transfer of the Waste Management Licence ..... 38
5.17.1 Requirements ..... 38
5.17.2 Rating: ..... 38
5.18 General ..... 38
5.18.1 Requirements ..... 38
5.18.2 Rating: ..... 39
**6. Recommendations ..... 39**
**7. Audit conclusions ..... 41**
Table 4: Summary of Audit Findings ..... 41

**8. Appendices ..... 42**

APPENDIX A: Appointment of the Waste Management Control Officer ..... 42
APPENDIX B: Complaints register ..... 43
APPENDIX C: eThekwini Discharge Permit ..... 49

# 1. Introduction

The Shongweni Class A Landfill Site was originally permitted in terms of section 20 (1) of the Environment Conservation Act, 1989 (Act 73 of 1989) to accept hazardous waste of Hazard Groups 3 and 4 and delisted waste for co-disposal with domestic waste. The original permit for this site, B33/1/1920/P71, was revised and permit number 16/2/7/U602/B3/Y1/P270 was issued on the 28th August 1997. Subsequently, a major revision of this permit was issued on the 28 August 2005. In addition, amendments to condition 7.2.2.2 were made in a letter dated the 28 December 2005 and conditions 4.2.5, 4.5.3 and 11.2 in a letter dated 7th August 2007.

After the publication of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEMWA), the permit originally issued the Shongweni Landfill Site was converted to a Waste Management Licence, No 12/9/11/L1200/4, on the 4th of April 2014.

In addition, the publication of regulations and standards governing the management of hazardous and other waste were promulgated on the 23rd August 2013 and replaced the Minimum Requirements. These new regulations and standards were implemented immediately on the date of publication. Among the important changes in the regulations, a new approach to both the classification of wastes and a revised classification system for landfill sites were introduced.

The waste licence was reviewed in 2019 as part of condition 14.7 and the reviewed licence (incorporating both the landfill activities 12/9/11/L1200/4 as well as effluent treatment activities 12/9/11/L467/4 & 12/9/11/L467/1/V1) is numbered 12/9/11/L191016090639/4/R and was issued on 26 March 2020.

Dorean Environmental Services CC was appointed by EnviroServ to conduct their annual external audit. The on-site audit was conducted on Monday 7 July 2025 at the facility at Shongweni. This document serves as a report on the audit conducted and EnviroServ's compliance with the Waste Management Licence.

In the period under review, Shongweni Waste Management Facility site has complied with the requirements of the reviewed Waste Management Licence.

## 2. Outline of Environmental Requirements

National environmental legislation, local by-laws, the requirements of EnviroServ's Environmental Management System and the conditions as set out in the Waste Management Licence must at all times be complied with. This audit was based only on the Shongweni Landfill Site's reviewed Waste Management Licence issued on 26 March 2020. The Licence number is: 12/9/11/L191016090639/4/R

## 3. Audit Objective, Scope and Criteria

The ***objective*** of the audit is to determine whether or not EnviroServ Waste Management (Pty) Ltd is managing the Shongweni Site in compliance with the conditions as set out in its reviewed Waste Management Licence.

The ***scope*** of the audit encompassed the actual Shongweni Landfill facility and its associated activities within the requirements of the reviewed Waste Management Licence. The audit was conducted by an independent external auditor and thus un-biased observations and findings are reported.

***Criteria*** guiding the external audit was the reviewed Waste Management Licence authorised by the Department of Forestry Fisheries and Environment (DFFE).

## 4. Audit Methodology

The external audit was undertaken by an auditor from Dorean Environmental Services CC. The audit approach was independent and holistic. The compliance to audit criteria – in this case the reviewed Waste Management Licence, was verified by a site visit, reviewing and collection of applicable documentation, records and reports as well as employee interviews.

The audit purpose was to ascertain the *status quo* of EnviroServ's compliance to the Waste Management Licence and not necessarily rating the company's performance. Audit findings are simply reported as either: Full compliance, Partial compliance, Non-compliance or Not Applicable where:

- ***Full compliance*** is allocated to aspects complying fully with the applicable requirement;

- ***Partial compliance*** is allocated to aspects complying partially with the applicable requirement;
- ***Non-compliance*** is allocated to aspects not complying with the applicable requirement; and
- ***Not applicable*** is allocated to requirements not / not yet activated by the Licence holder's activities for the period under review. This period for the purpose of this report is July 2024 to June 2025.

# 5. Audit Findings

The external audit findings are the result of the evaluation of the collected evidence against Waste Management Licence criteria. The audit was conducted by verifying whether EnviroServ's Shongweni Landfill Site is complying with the set conditions in the Waste Management Licence and that proof of this compliance is available. Audit findings and observations of general operational aspects of the facility follow in different sub-sections below.

## 5.1 Site security and access control

### 5.1.1 Requirements:

Conditions 1.3.1 -1.3.3 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"1.3.1 The Licence Holder must ensure effective access control of the waste management facility to prevent unauthorised entry.*
- *1.3.2 Weatherproof, durable and legible signs in English and Zulu must be displayed at each entrance to the Site.*
- *1.3.3. The signs must indicate the risks involved in entering the Site, state the hours of operation and the name, address and telephone number of the Licence Holder and the person responsible for the operation of the Site"*

### 5.1.2 Rating:

The site complies with the signage requirements. Durable weatherproof signs are put up at the main gate for the facility. The site is also fenced and regular patrols are conducted to ensure any damage to site is fixed as a matter of urgency. Twenty four hour security is present at the gate. The local language requirements are also complied with. Please see **Plate 1** of the signage.

***Plate 1: Signage at the main gate***


***Rating: Full Compliance.***

## 5.2 General management

### 5.2.1 Requirements:

Condition 2.1.1 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"2.1.1 The activities shall be managed and operated:*
  - *a) In accordance with an approved Environmental Management Programme (EMPr) that inter alia, identifies and minimises the risk of pollution including those arising from operations maintenance accidents incidents and non-conformance as well as those drawn to the attention of the Licence Holder as a result of complaints;*
  - *b) In accordance with the site operational and maintenance plan;*
  - *c) In accordance with conditions of this Licence and any other written instruction by the Director; and*
  - *d) By an adequate, competent staff complement."*

### 5.2.2 Rating:

The site did develop an Environmental Management Programme (EMPr) EWM-SHONG-EMPR-001, Rev 1, effective 31-05-2023

The operations manual EWM-SHONG-LF-OP-002, Rev 7, effective 05-06-2023 addresses the requirements of 2.1.1(b).

The landfill site is operated according to the requirements of the Waste Management Licence. The site also operates under a under a scheduled trade permit numbered

SA3064 as well as a certified EMS. This EMS includes an aspect register which identifies all potential impacts associated with the activities and services on site.

An adequate and competent staff component (54 employees including security) subscribes to the requirements of the Licence. These employees are all suitably trained for the various positions at the landfill including control of hazardous substances, environmental awareness and HAZOP training. Records of training was available during the audit.

***Rating: Full Compliance***

### 5.2.3 Requirements

Condition 2.1.2 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"2.1.2 Any persons having duties that are or may be affected by this Licence must have convenient access to a copy thereof, which copy must be kept at or near the place where those duties are carried out."*

### 5.2.4 Rating:

The License is accessible to all those staff directly involved with the activities at the Shongweni Landfill. It is kept in the office and on notice boards at the Landfill site. The licence is also available on the company's intranet.

***Rating: Full Compliance***

### 5.2.5 Requirements

Condition 2.1.3 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"2.1.3 A copy of this Licence may be published by the Department, in its discretion on any website or other media."*

### 5.2.6 Rating:

This is a function of the Department and is not applicable for the purposes of this report.

***Rating: Not Applicable***

## 5.3 Designation of a waste Management Control Officer

### 5.3.1 Requirements:

Condition 2.2 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"2.2.1 A Waste Management Control Officer (WMCO) must be designated inwriting to monitor and ensure compliance and correct implementation of all mitigation measures and provisions as stipulated in the licence and standard operation procedures. The licence holder must keep proof of designation of the WMCO.*
- *2.2.2 The WMCO must report any non-compliance with any Licence conditions or requirements or provisions of NEM:WA to the licencing authority.*
- *2.2.3 The duties and responsibility of the WMCO should not be seen as exempting the Licence Holder from any other legal obligations in terms of the NEM:WA*

### 5.3.2 Rating:

Mr Mandla Twala was designated in writing as the WMCO on 06-03-2023. The appointment highlights the responsibilities as set out in the Waste Management Licence. A copy of this designation is attached as **Appendix A**.

***Rating: Full Compliance***

## 5.4 Emergency preparedness plan

### 5.4.1 Requirements

Conditions 2.3.1 & 2.3.2 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"2.3.1 The Licence Holder must maintain and implement an emergency preparedness plan and review it annually when conducting an audit, after each emergency incident and major accident. The plan must, amongst others, include measures to address:*
  - *a) Power failure;*
  - *b) Operational malfunction;*
  - *c) Site fires;*
  - *d) Spillage (on Site); and*
  - *e) Natural disasters such as floods*
- *2.3.2 The plan must include contact details of the nearest police station, ambulance services and the emergency centre as well as the contact details of the on-site emergency response person/s."*

### 5.4.2 Rating:

EnviroServ complies with this requirement by having a documented certified EMS in place. Emergency preparedness and response forms a major component of the EMS. The organisation therefore has a comprehensive emergency procedure in place. The following emergencies have been catered for in one combined procedure EWM-SHONG-LF-WI-006, revision 20, dated 02-06-2025. This procedure caters for:

- Power failure;
- Equipment malfunction;
- Site fires;
- Spillage on site;
- Industrial action; and
- Natural disasters.

The procedure contains the respective contact numbers for authorities dealing with specific emergencies. Emergency scenarios are also tested in the form of emergency drills on a regular basis and the results of these drills are used to refine and enhance the existing emergency plans through the lessons learned during the drills. The emergency procedure is reviewed at least once in 12 months.

***Rating: Full Compliance***

## 5.5 Permissible waste

### 5.5.1 Requirements

Condition 3 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"3.1 Any portion of the Site which has been constructed or developed according to condition 4 below maybe used for the above listed waste activities.*
- *3.2 The acceptance of waste must be according to the Waste Classification and Management Regulations and associated norms and standards·(GN R634, 635, 636 of 23 August 2013).*
- *3.3 Waste streams with a leachable sulfate concentration of <250 mg/l may be disposed of at the Site."*

### 5.5.2 Rating:

Waste accepted, treated and disposed on this site meets the requirements as set out in condition 3.1 - 3.3. The waste assessment process and sampling at the gate and testing in the laboratory on site prior to disposal ensures this process. Waste acceptance and disposal criteria are updated. Discussions with the staff members

showed that the requirements of the waste acceptance procedure EWM-SHONG-LF-WI-001, revision 04, dated 31-05-2023 are adhered to. Valley 2 cell 3 is currently being used for waste activities.

***Rating: Full Compliance***

## 5.6 Construction of the site

### 5.6.1 Requirements

Condition 4 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"4.1 Further construction and development of the waste disposal site must be according to engineering drawings that are approved by a registered professional engineer, as compliant with recognised civil engineering standards and approved by the Chief Director / Director.*
- *4.2 The disposal site design reports and drawings must only be changed under the supervision of a registered professional engineer and upon approval by the Chief Director/ Director.*
- *4.3 The construction of further developments within the Site must be carried out under the supervision of a Professional Registered Engineer*
- *4.4 After construction of the disposal site or future development within the Site, the Professional Registered Engineer must submit a letter to the Director for approval, confirming that the Site has been constructed in accordance with the approved engineering designs before the disposal of waste can commence.*
- *4.5 The disposal facility must be constructed in accordance with recognised engineering practices, with special consideration to stability.*
- *4.6 The slope of the sides of the Site must be constructed and maintained in such a manner that the occurrence of erosion is prevented.*
- *4.7 The maximum height of the Site must not exceed the height as depicted in the engineering designs approved by the Director.*
- *4.8 Contaminated storm water works must be of such a capacity as to maintain a freeboard of half a metre and to accommodate all contaminated storm-water run-off, which could be expected as a result of the estimated maximum precipitation during a period of 24 hours with an average frequency of once in a fifty years (hereinafter referred to as the estimated maximum precipitation").*"

### 5.6.2 Rating:

In the period under review the following further construction occurred on site:

Valley 3 Cell 1 Construction (Earthworks & Barrier System) awarded to Stefanutti Stocks Coastal. Construction underway from March 2024.The design drawings for this project were submitted by EWM to the Department for approval. The construction project was carried out under the supervision of a registered professional engineer.
Planned construction is Valley 2 Pedestrian Safety Walkway and Valley 3 Cell Access Road Upgrade

The slopes of the sides of the site have been constructed to prevent erosion. During the audit the successful results of hydro-seeding the slopes could be seen. The slopes are inspected for erosion on a monthly basis by Ground Water Monitoring Services. A report is generated for each inspection.

Airspace surveys are carried out on a regular basis and the report includes cross sections across the current waste body in relation to the final “design” landform. The approved maximum height is 560m amsl. The latest survey report indicated the following:

According to the Jones and Liquid management model update of March 2025 the following was reported:
Leachate stored at the end of March 2025 was 5 584 $m^3$. The total leachate stored is approximately 77.46% of the combined capacity of the three tanks as well as the new Valley 2 leachate tank.
Stormwater stored at the end of March 2025 for the Stormwater Dam Valley 1 was 7144 $m^3$ and for the Stormwater Dam Valley 2 was 6 055 $m^3$. The stormwater stored in Stormwater Dam Valley 1 and Stormwater Dam Valley 2 is 42.18% of the total capacity of the two dams.

Contaminated storm water collection facilities meet the stated requirements and can handle the runoff of a one in fifty year storm event. Please see **Plate 2** of the one of the contaminated storm water ponds that collects and stores contaminated storm water generated on site. Contaminated storm water is trucked via road tanker to the Southern Waste Water Treatment Plant. Please see **Appendix D** for the permit to discharge the contaminated storm water.

***Plate 2: Contaminated storm water collection pond. Valley 2***

***Rating: Full Compliance***

## 5.7 Impact and operation management

### 5.7.1 Requirements: Impact Management

Condition 5 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"5.1 No waste streams containing aluminium that have the potential for reactivity under landfill disposal conditions may be disposed of at the site.*
- *5.2 No trenching into the existing waste body is allowed.*
- *5.3 No recirculation of leachate or contaminated storm water into the waste body is allowed.*
- *5.4 Waste which is not permissible on site must be dealt with according to the relevant legislation or the Department's policies and practices.*
- *5.5 The Licence Holder must prevent spillages on Site. Where they happen nonetheless, condition 2.3.1 above shall apply and the Licence Holder must ensure the effective and safe cleaning of such spillage.*
- *5.6 The leachate must not impact on a water resource or on any other person's water use, property or land and must not be detrimental to the health and safety of the public and the environment in the vicinity of the activity.*
- *5.7 The Licence Holder must ensure that impact of odour from emissions from the Site is minimised.*

- *5.8 The Licence Holder must minimise the occurrence of nuisance conditions or health hazards.*
- *5.9 The Licence Holder must ensure a system is in place to record and investigate complaints and incidents concerning the activities on site*
- *5.10 The Licence Holder must ensure that contaminated storm water is not discharged to a water source, or to land where it could cause pollution. Contaminated storm water must be contained and disposed of in terms of the relevant legislation.*
- *5.11 The Licence Holder must ensure that all personnel who work with hazardous waste are trained to deal with these potential hazardous situations so as to minimise the risks involved. Records of training and verification of competence must be kept by the Licence Holder.*
- *5.12 The Licence Holder must ensure that all reasonable steps, such as suitable zoning or written agreements with adjacent landowners to establish and maintain an inbuilt "buffer zone" between the Site and the nearest residential and/or light industrial areas during the operative life of the Site. The "buffer zone" must be maintained as follows:*
  *a) 180 metres to the North*
  *b) 600 metres to the East*
  *c) 350 metres to the East and West*
- *5.13 Only compatible land uses may be permitted within the buffer zone.*
- *5.14 The Licence Holder must ensure that records in terms of volume/weight, sources and nature of all waste received, treated and disposed are maintained, kept and supplied to the Department on request.*
- *5.15 Waste disposed of on Site must be compacted and covered on a daily basis with a minimum of 150 millimetres of soil and ash or any other material approved by the Director.*
- *5.16 Reclamation of waste must be done at designated areas under very strict control taking into account that the facility is Class A though general waste is permitted.*
- *5.17 Waste disposed on Site must not be allowed to burn.*
- *5.18 The Licence Holder must apply sufficient dust control measures to prevent windblown dust from causing nuisance conditions.*
- *5.19 The Licence Holder must implement adequate measures to the satisfaction of the Director to ventilate methane gas generated in the waste disposal area; and to prevent the build-up of dangerous concentrations within the Site.*

- *5.20 The recovery and treatment areas must have firm and impermeable bases to prevent contamination of soil and groundwater.*
- *5.21 The Licence Holder must ensure that waste treatment and recovery activities are operated within their design parameters at all times.*
- *5.22 The Licence Holder must register for the storage of waste on Site and comply with the National Norms and Standards for the Storage of Waste, GN 926, dated 29 November2013.*
- *5.23 The Licence holder must register and comply with the National Standards for the extraction, flaring or recovery of landfill gas."*

### 5.7.2 Rating:

In the period under review no waste containing aluminium was accepted. No trenching into the existing waste body occurred in the period under review. No recirculation of leachate or contaminated storm water into the waste body occurred or was allowed in the period under review. The waste assessment process and sampling at the gate and testing in the laboratory on site prior to disposal prevents unacceptable waste being disposed. Discussions with the staff members showed that the requirements of the waste acceptance procedure EWM-SHONG-LF-WI-001, revision 04, dated 31-05-2023 are adhered to. Waste not allowed on site is returned to the generator of the waste.

Small localised spills do occur from time to time but they are not of sufficient significance to warrant reporting to the authorities. Where spillages did occur, they were cleaned up effectively. No significant waste or chemical spillages occurred in the period under review.

Contaminated stormwater is sent to Durban south waste water treatment works.

Leachate (generated by valley 1 (small volume) and valley 2 gets collected, stored and treated by the Leachate Treatment Plant.

EWM manages a national complaints line to report and record complaints. As part of having a certified EMS they also operate an incident management system that records, investigates and corrects incidents as and when they occur. The Shongweni complaints register appended as **Appendix B**. EnviroServ is taking all reasonable steps to minimize nuisance odour.

An adequate and competent staff component (54 employees) is employed on site. These employees are all suitably trained for the various positions at the landfill including HAZOP training. Records of training was available during the audit.

Buffer zones were established around the site as specified in licence. Due to the steep topography of the area in which the site is situated no heavy industries were established in the buffer zones during the period under review. No request for an amendment of the buffer zone was received during the period under review.

Waste volumes/weight are recorded and reported annually as required. These records are available on request. Waste is covered on a daily basis as required. The site uses a temporary cap of geomembrane over unused waste cell areas to prevent water ingress.

No reclamation of waste takes place or is allowed on site.

Fires are not allowed on site and co-disposal is done in such a manner that the chance of exothermic reactions are minimised. Should a fire occur it is doused by smothering the fire with ash.

Active dust suppression is carried out with water carts using contaminated runoff water on the lined areas of the site.

The leachate treatment plant is operated within its design parameters. The plant's design parameters are 5000l/h for reverse osmosis and 5000l/h for ultra-filtration. The plant was run within the design parameters for ultrafiltration and for reverse osmosis.

Waste does not get stored in such a way or volume on site that it triggers the threshold, so this condition is not applicable to Shongweni Waste Management Facility.

The gas flare was registered under number 12/9/11/LGE07/4 on 7 November 2019. Separate annual compliance audits are carried out under the National Standards for the extraction, flaring or recovery of landfill gas.

***Rating: Full Compliance***

## 5.8 Runoff management

### 5.8.1 Requirements:

Condition 6 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"6.1 All runoff water (storm water) arising as a result of precipitation on land adjacent to the site must be prevented from coming into contact with any substance, whether such substance is solid, liquid, vapour or gas, or a combination thereof, which is produced, used, stored, disposed or spilled in the premises, including leachate and must be diverted and drained from the site, by means of works constructed by the Licence Holder in accordance with condition 4.*
- *6.2 All runoff water (storm water)arising as a result of precipitation on the Site, must be prevented from coming into contact with any substance, as enumerated in condition 6.1 and must be diverted and drained from the Site and working face of the Site, by means of works constructed by the Licence Holder in accordance with condition 4.*

- *6.3 In the event that runoff water referred to in condition 6.1 and 6.2 becomes contaminated, it must be contained. Runoff water arising from operational actions must be regarded as contaminated runoff and shall be managed according to condition 7.*
- *6.4 Uncontaminated runoff water must under no circumstances be used to dilute leachate emanating from the site but must be diverted to the Mgoshongweni River."*

### 5.8.2 Rating:

Runoff management is good on the site. Cut off trenches prevent uncontaminated water from coming into contact with waste and is diverted to the Mgoshongweni river. Clean and contaminated runoff is effectively separated. The construction of cell 3 extension includes a very good clean and contaminated cut off system diverting clean water around the waste body.

Contaminated runoff water is directed via drains to the contaminated storm water collection dams shown in **Plate 2.**

Contaminated storm water from the collection pond is sent by road tanker to the eThekwini Southern Waste water treatment works. A permit to discharge was issued on 14 January 2025 and this permit is valid from 1 February 2025 to 31 January 2026. Please see **Appendix D** for the discharge permit.

***Rating: Full Compliance***

## 5.9 Leachate management

### 5.9.1 Requirements

Condition 7 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"7.1 All leachate from the Site must be contained into approved leachate containment tanks from where it must be treated or lawfully manage"*

### 5.9.2 Rating:

Leachate from the cells is collected into leachate tanks constructed for this purpose. These tanks have been upgraded in the last few years. The leachate is treated in the treatment plant.

***Rating: Full Compliance***

## 5.10 Monitoring

### 5.10.1 Requirements: Monitoring methods and parameters

Condition 8.1 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"8.1.1 The Licence Holder must carry out all tests required in terms of this Licence in accordance with internationally published standard methods conducted by laboratories accredited by the South African National Accreditation System (SANAS).*
- *8.1.2 The Licence Holder may use another method of analysis if approved by the Director."*

### 5.10.2 Rating:

The laboratory at Shongweni is operated according to ISO 17025, other tests are conducted at EnviroServ's Rietfontein Laboratory which is SANAS accredited. Specialists conducting studies on behalf of EnviroServ also ensures that any testing conducted is done at accredited laboratories. EnviroServ does not make use of any other methods that need approval from the Director.

***Rating: Full Compliance***

### 5.10.3 Requirements: Water quality monitoring

Condition 8.2 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"8.2.1 Monitoring of ground and surface water quality must be conducted according to the Water Monitoring Protocol in Jones and Wagener Report JW 136/1018196 Rev 00 or its successor as approved by Director.*
- *8.2.2 Monitoring Boreholes where the ground water in the borehole is at an expected higher hydraulic pressure level of the ground water under the Site, shall be considered as background monitoring for ground water quality and must be conducted for each monitoring occasion as per the approved water monitoring protocol.*
- *8.2.3 The established groundwater monitoring network for the site shall be maintained by the Licence Holder to the satisfaction of the Director, so that unobstructed sampling, as required in terms of this Licence can be undertaken.*
- *8.2.4 Monitoring boreholes must be equipped with lockable caps. The Department and the DWS reserves the right to take water samples at any time and to analyse these samples, or to have them analysed."*

**5.10.4 Rating:**

These requirements were complied with. Water monitoring was conducted by Jones and Wagner according to the Water Monitoring Protocol from Jones and Wagner numbered JW136/10/B196 and reported on in JW112/25/B196-25-Rev 0. Background monitoring boreholes are discussed under paragraph 5.10.8.

The Groundwater monitoring network is maintained so that unobstructed access to the boreholes is possible for sampling.

Boreholes are equipped with a lockable cap as required.

The second part of condition 8.2.4 is a departmental function and not a compliance condition for EnviroServ.

***Rating: Full Compliance***

**5.10.5 Requirements: Surface water monitoring network**

Condition 8.3 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"8.3.1 Surface water monitoring shall be performed in the storm water drain adjacent to the Site and at locations selected in conjunction with DWS and at such a frequency as may be determined by the Director.*
- *8.3.2 Surface water monitoring must be conducted as specified in Report No. JW136/10/B196 Rev 00 or its successor as approved by the Director.*
- *8.3.3 Bio-monitoring of the Mgoshongweni stream below the Site, upstream of the road crossing and before the confluence with the tributary must be conducted bi-annually."*

**5.10.6 Rating:**

Conditions 8.3.1 and 8.3.2 have been complied with in terms of the monitoring being carried out. Water monitoring was conducted by Jones and Wagner according to the Water Monitoring Protocol from Jones and Wagner JW136/10/B196 Rev 00. The latest water quality report available is JW112/25/B196-25-Rev 0, dated January 2025. Jones and Wagner came to the following conclusions regarding surface quality water results.

Surface water monitoring points are shown in **Table 1**.

**Valley 1 Stormwater dam**

Since the capping of Valley 1, it no longer serves as a stormwater catchment. The Stormwater Dam now functions primarily as a backup for Valley 2 overflow. Runoff from Valley 1 is diverted via northern and southern stormwater canals, which discharge below the dam and through the train culvert.

***Table 1: Existing Surface Water Positions at the Shongweni Waste Management Facility***

| SURFACE WATER POSITION | COMMENT |
|---|---|
| 13. Valley 1 Contaminated Stormwater Dam | Sampled at number 13 |
| 11. Valley 2 Contaminated Stormwater Dam | Sampled at number 11 |
| 27 | Valley 2: Surface water emanating from the base of the silt trap |
| 29 Valley 2 Stormwater | Stormwater entering the catchment (plus overflow from 24). Sampled in the silt trap |
| SW2 | At gabion baskets above railway line within Valley 1 |
| SW3 | Downstream of Valley 2 (Upstream of Valley 1) |
| SW4 | Downstream of the site above the confluence with the Mgoshongweni |
| SW5 | Downstream of site above the confluence with the Mgoshongweni |
| SW6 | Upstream of Valley 2 |

Water from the Valley 2 Stormwater Dam (V2 SWD) is pumped to the Valley 2 header tanks, then gravity-fed into Valley 1, from where it is pumped via the rising main to the top tanks. In January 2025, an elevated EC value of 295mS/m was recorded in the Valley 1 Stormwater Dam 13. This is attributed to elevated concentrations of ammonia, sodium, chloride, and fluoride.

**Valley 2 Stormwater dam**

The EC value in the Valley 2 Stormwater Dam (11) has shown significant fluctuations over the monitoring period, peaking at 7612 mS/m in July 2017. These elevated values were attributed to intermittent overflows from the Valley 2 leachate tank. Since July 2019, EC levels have declined, suggesting that overflows have ceased. In January 2025, the EC value was 283 mS/m as a result of elevated ammonia, chloride and sodium.

**General Surface Water**

The EC value of SW2, which is located downstream of Valley 1, was below the screening guideline in January 2025.

Sampling position SW6, upstream of Valley 2, recorded an EC value of 20 mS/m in January 2025. The July 2024 detailed analysis showed sodium, sulfate and chloride concentrations of 23 mg/l, 18 mg/l and 42 mg/l, respectively, indicating that these constituents occur naturally in this catchment.

The surface water sample downstream of Valley 2 (SW3) recorded a low EC value of 54 mS/m in January 2025, with no inorganic or trace elements exceeding the screening guidelines. This suggests minimal impact from Valley 2 on the receiving surface water.

Sampling position 27 collects water from the silt trip, a mixture of contaminated stormwater from road runoff and sub-soil seepage beneath the Valley 2 Stormwater

Dam wall. The EC value of this sampling position was below the screening guideline in January 2025.

Water from the silt trap enters the stream between SW6 and SW3. Positions SW4 and SW5 both recorded EC values of 54 mS/m in January 2025, with no inorganic or trace element guideline exceedances in July 2024. SW5 reflects combined influences from both valleys and local farming activities, and SW4 is located further downstream

**Biomonitoring**

Biomonitoring of the Mgoshongweni stream was conducted by GroundTruth in December 2023, report number GT0168_1223. GroundTruth came to the following conclusions:

Large-scale habitat and river channel modifications along the entire length of the Mgoshongweni River occurred following heavy rains and severe flooding in April and May 2022. Subsequent heavy rains in June 2023 further exacerbated these impacts. The system has not yet fully recovered from these disturbances.

Based on in-field observations conducted in December 2023 and June 2024, the upstream monitoring site was relocated approximately 250 m farther upstream to mitigate potential impacts from clearing activities east of the active cell. This relocation led to a notable improvement in SASS scores. This positive change is largely related to there being a greater diversity of sampling habitat at the new location, underscoring the critical role of habitat quality in river ecosystem assessments. The central site has shown some habitat recovery since the 2022/2023 floods, but downstream habitat recovery has been negligible.

The SASS5 results at both the upstream (poor to near natural) and central (fair to good) sites improved compared to June 2024, related to a greater diversity of habitats available for sampling. According to the SASS results, the downstream site remained in a poor condition largely related to the lack of habitat recovery at the site. Diatoms were limited at all three sites with the upstream site having too few cells to run an analysis and the central and downstream sites only having a 100-cell count. The low diatom counts are likely related to scouring from mobilised sediments during increased flows following rainfall events. The diatom results indicated that the central site remained in a poor condition, with most of the species present exhibiting pollution and electrolyte tolerance. The downstream site showed an improvement in the diatom scores from fair to good, with more sensitive species being present. However, the dominant species at

the site still indicated impacts from elevated electrolytes as well as increased flows and temperatures.

The December 2024 data were compared between sites and with June 2024 data, and can be summarised as follows:

- Water quality parameters at the upstream, central, and downstream sites remained within the TWQRs for aquatic ecosystems.
- Electrical conductivity was similar at the upstream and central sites but showed a notable increase at the downstream site between June and December 2024. This increase is likely due to a natural accumulation of dissolved salts from a tributary that joins the Mgoshongweni upstream of the downstream site.
- The pH levels showed less than a 0.5 pH unit shift at all three sites, the upstream site was once again slightly more acidic, but this is likely related to influences from the sugarcane plantations adjacent to the site.
- The biological and *in-situ* water quality results indicate that any potential impacts currently related to the operation of the Shongweni Landfill site are not causing degradation in the Mgoshongweni River.

The lack of habitat improvement at the downstream site and increased electrical conductivity appear to be related to contributions from a newly developed tributary (related to the 2022/2023 floods) and we recommend that the downstream site be moved to upstream of this tributary for future monitoring events.
Sedimentation and runoff emanating from the area under the control of EnviroServ requires continued management and attention. This should ideally be addressed through rehabilitation and revegetation.

While measures have been put in place to mitigate the sedimentation concerns, activities such as clearing of the sediment trap and maintenance of berms, drains, and roads must be undertaken regularly and timeously to prevent unnecessary impacts. The control of alien invasive plants within the riparian areas also needs to be improved upon, and this will require active revegetation to improve the integrity of the riparian zone.

***Rating: Full Compliance***

### 5.10.7 Requirements: Background monitoring

Condition 8.4 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

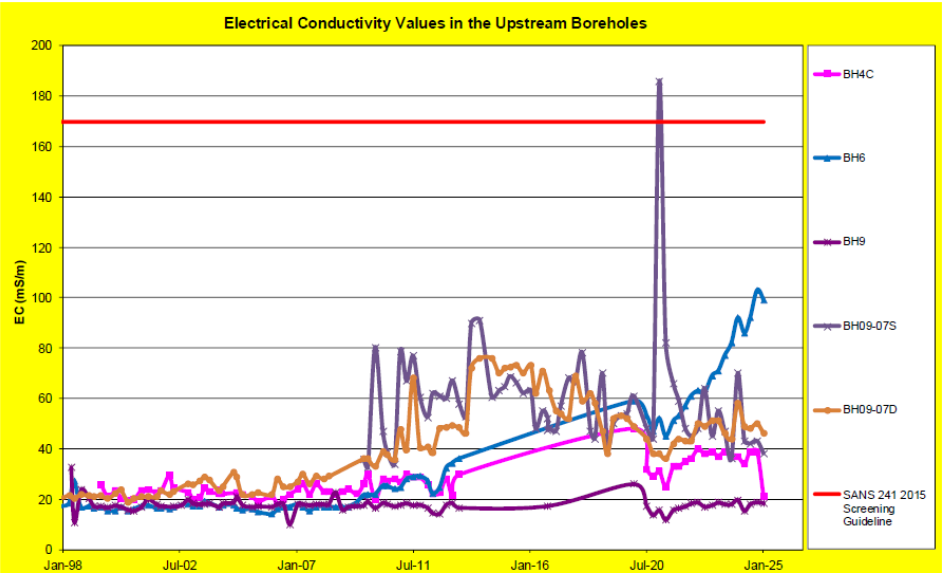
- *"8.4.1 Boreholes located sufficient up-gradient of the site rest water levels (masl) at a higher elevation than those on the site shall be considered as background monitoring boreholes.*
- *8.4.2 Background groundwater monitoring must be conducted annually in terms of the approved water monitoring protocol for water quality variables listed in Annexure I."*

### 5.10.8 Rating:

These requirements are complied with. Boreholes above the groundwater gradient is being used as background values. Jones and Wagner reported the following:
The predicted flow directions shown in Figure 2 indicate that boreholes BH4C, BH6, BH9, BH09-07S and BH09-07D are not likely to be impacted by the waste from either Valley 1 or Valley 2 and are therefore upstream boreholes.

The upstream boreholes are generally characterised by low EC values (Figure 1), ranging between 18 mS/m and 99 mS/m in January 2025. Borehole BH6 is characterised by an increasing EC trend. Since the borehole is located on a watershed, the reason for the increase is not known.

***Figure 1: Electrical Conductivity values within the upstream boreholes at the site***

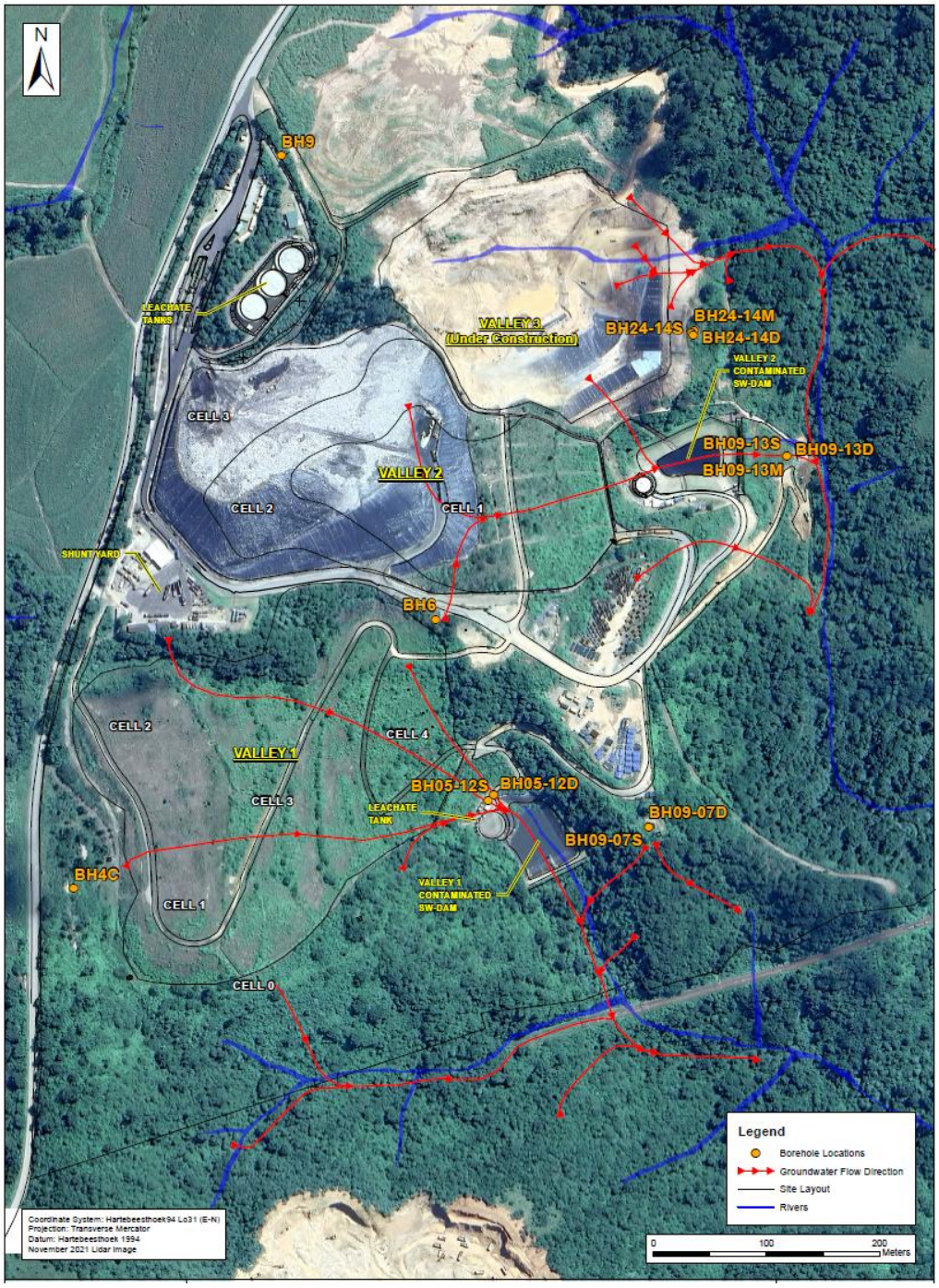



However, BH6 is characterised by a higher chloride and lower sulfate component compared to the other upstream boreholes. This may indicate an impact from the waste body where low oxidation-redox potential (Eh) of the leachate has resulted in a reduction in the sulfate concentrations while the chloride remains unaffected and

accumulates leading to the increased EC. Future trends within this borehole should be reviewed.

Elevated fluoride concentrations were detected in boreholes BH6 and BH9. Fluoride likely originates from the granitic geology of the area.

***Figure 2: Simulated Groundwater Flow Directions***




***Rating: Full Compliance***

### 5.10.9 Requirements: Detection Monitoring

Condition 8.5 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"8.5.1 Monitoring for surface water and groundwater quality must be conducted quarterly for the variables listed in Annexure I and II.*
- *8.5.2 Monitoring of leachate and contaminated runoff water must be conducted quarterly for the water quality variables listed in Annexure I and annually for water quality variables listed in Annexure II.*
- *8.5.3 Leak and Failure Detection Monitoring.*

  *8.5.3.1 The leachate detection system must be monitored as defined in the approved protocol for the occurrence of leakages, and a higher frequency of monitoring, as approved by the Director, must be initiated should a leak be suspected and / or identified.*

  *8.5.3.2 All pipes exposed to the leachate shall be subjected to annual testing for leaks where practical. A record must be made available on request by the Director.*

  *8.5.3.3 Inspections of liners where liners are accessible must be conducted monthly.*

  *8.5.3.4 Should a leak or failure be suspected or detected during monitoring, inspections or test conducted in accordance with conditions or at any time, it must be regarded as an incident according to condition 11.1 and addressed according to condition 8.5.3.5*

  *8.5.3.5 Liners must be repaired when possible, or replaced, when necessary, under the supervision of the Professional Registered Engineer."*

### 5.10.10 Rating:

Surface and groundwater monitoring was conducted by Jones and Wagner according to the Water Monitoring Protocol from Jones and Wagner JW136/10/B196 Rev 00. Surface water monitoring is discussed under paragraph 5.10.6. The reports from Jones and Wagner are also submitted to the DFFE as required.

**Ground water monitoring**

Numerous boreholes have been drilled at the site over the monitoring period; however, several of them have been damaged, destroyed or sealed and covered by the waste cells. The groundwater monitoring boreholes are shown in **Table 2.**

***Table 2: Groundwater monitoring boreholes***

| BOREHOLE ID | X-COORDINATE (CAPE LO31) | Y-COORDINATE (CAPE LO31) | GROUND ELEVATION (MAMSL) | BOREHOLE DEPTH (MBGL) | AQUIFER MONITORED |
|---|---|---|---|---|---|
| **Upstream Monitoring Boreholes** | | | | | |
| BH4C | 24517.23 | 3300943.2 | 532.81 | 61 | (Mixed weathered and fractured Sandstone Aquifer) |
| BH6 | 24225.98 | 3300729.84 | 510.96 | 75 | (Mixed weathered and fractured Granite Aquifer) |
| BH9 | 24363.55 | 3300321.92 | 568.71 | Unknown | (Assumed to be mixed weathered and fractured Sandstone Aquifer) |
| BH09-7D | 24038.36 | 3300912.36 | 485.75 | 80 | Fractured Granite Aquifer |
| BH09-7S | 24036.07 | 3300912.99 | 485.77 | 36 | Weathered Granite Aquifer |
| **Valley 1 Downstream Monitoring Boreholes** | | | | | |
| BH05-12D | 24179.43 | 3300882.53 | 456.15 | 26 | Fractured Granite Aquifer |
| BH05-12S | 24180.37 | 3300883.49 | 455.92 | 3.5 | Weathered Granite Aquifer |
| **Valley 2 Downstream Monitoring Boreholes** | | | | | |
| BH09-13S | 23919.16 | 3300577.54 | 452.9 | 5.0 | Weathered Granite Aquifer |
| BH09-13M | 23919.18 | 3300578.72 | 452.89 | 16 | Fractured Granite Aquifer |
| BH09-13D | 23919.27 | 3300575.87 | 452.90 | 30 | Fractured Granite Aquifer |
| **Valley 3 Downstream Monitoring Boreholes** | | | | | |
| BH24-14S | 24000.41 | 3300477.30 | 486.07 | 4.0 | Weathered Granite Aquifer |
| BH24-14M | 23998.20 | 3300475.26 | 485.78 | 17 | Weathered Granite Aquifer |
| BH24-14D | 23998.90 | 3300479.08 | 485.99 | 30 | Fractured Granite Aquifer |

**Valley 1**

The upstream boreholes generally showed low electrical conductivity values ranging from 18 mS/m to 99 mS/m in January 5. However, an elevated *cis*-1,2-DCE concentration was detected in BH4C during the July 2024 detailed analysis. The Valley 1 downstream borehole pair BH05-12S/D, located between the Stormwater Dam and waste body, has seen historically elevated and fluctuating electrical conductivity values in BH05-12S. This borehole has remained dry since October 2017, likely due to reduced recharge following Valley 1 capping. Any water present is diverted via the sub-soil seepage system to the Stormwater Dam. Groundwater in the fractured aquifer typically exhibits low and stable electrical conductivity values, remaining below the screening guideline; however, BH05-12D marginally exceeded it in January (173 mS/m). The contrast in electrical conductivity and aquifer characteristics indicates poor hydraulic connectivity between the perched and fractured aquifers.

**Valley 2**

Boreholes BH09-13S, M and D at the base of Valley 2 recorded low electrical conductivity values in January (42 mS/m, 99 mS/m and 28 mS/m respectively), similar

to upstream conditions. This suggests that the Valley 2 waste body is not impacting the groundwater due to effective containment systems and steep topography.
In July 2024, elevated fluoride levels were found in the upstream boreholes BH6 and BH9 as well as the downstream boreholes BH05-12D (Valley 1), BH09-13M and BH09-13D. This is attributed to the granitic geology of the area.

**Valley 3**

Three (3) new boreholes (BH24-14S/M/D) drilled in 2024 downstream of Valley 3 showed electrical conductivity values below the screening guideline in January 2025, representing baseline conditions ahead of Valley 3 operations.

**Leachate**

Leachate generation from Valley 1 has decreased due to capping and rehabilitation, with Cell 0 remaining dry since 2014 and Position 18 only resuming flow in late 2021. Despite this, elevated electrical conductivity values were recorded in January 2025 at Position 18 (1 072 mS/m) and in the Valley 1 Leachate Tank (1 318 mS/m), although both show a declining trend since 2017. Seepage from Position 30 also reflects a general electrical conductivity decline. In Valley 2, leachate systems continue to show higher, fluctuating EC values (3761–3988 mS/m), with the Leachate Tank recording 3 515 mS/m in January 2025—likely due to differences in waste composition. Low concentrations of organic compounds were detected in both valleys' leachate in July 2024, with levels decreasing since July 2022.

**Leachate / Leakage Detection Quality**

The leachate detection samples that form part of the monitoring network at the Shongweni Waste Management Facility are listed in **Table 3.**
The Valley 1 leachate/leakage detection network consists of eight (8) leachate and three (3) leakage detection points, several of which have remained dry throughout the monitoring period. Flow volumes declined in January 2025, consistent with long-term reductions expected after capping. However, potential leakage from the Stormwater Dam liner is suspected due to higher water levels during the rainy season. The electrical conductivity values in January 2025 varied: 1 014 mS/m (2 LD4S), 1 162 mS/m (3 LD3), 449 mS/m (4 LD4N), 590 mS/m (8 LD4B) and 1 813 mS/m (Drainage Blanket). Sampling points 5, 6, 7, and 16 were dry, in January 2025. Leakage points 14 and 15 (from the Stormwater Dam) are characterised by fluctuating and slightly elevated electrical conductivity values (242 mS/m and 219 mS/m, respectively, in January 2025).

***Table 3: Existing leachate detection monitoring positions***

| LEACHATE DETECTION POSITION | COMMENT |
|---|---|
| **Valley 1** | |
| 2 LD4S | Valley 1: Leachate detection of Cell 4 south flank slopes, sampled at pipe number 2 |
| 3 LD3 | Valley 1: Leachate detection Cell 1, 2 and 3, sampled at pipe number 3 |
| 4 LD4N | Valley 1: Leachate detection Cell 4 north flank slopes, sampled at pipe number 4 |
| 5 LD3P | Valley 1: Leachate detection extension to Cell 3 pipes, sampled at pipe number 5 |
| 6 SLSD3 | Valley 1: Sub-liner sand drain Cell 3, sampled at pipe number 6 |
| 7 SLSD4 | Valley 1: Sub-liner sand drain Cell 4, sampled at pipe number 7 |
| 8 LD4B | Valley 1: Leachate detection Cell 4 basin sampled at pipe number 8 |
| 12 Drainage blanket | Valley 1: Sampled at pipe number 12 |
| 14 | Valley 1: Leakage Detection Stormwater Dam |
| 15 | Valley 1: Leakage Detection Stormwater Dam |
| 16 | Valley 1: Leakage Detection Embankment Drainage from Stormwater Dam |
| **Valley 2** | |
| 19 | Valley 2: Leachate Detection North Bench |
| 22 | Valley 2: Leachate Detection Main Cell |
| 23 | Valley 2: Leachate Detection South Bench |
| 26 | Valley 2: Leakage Detection Stormwater Dam |

Valley 2 includes three (3) leachate detection points and one (1) leakage detection point. Position 23 (Leachate Detection South Bench), usually dry, yielded a sample with an electrical conductivity value of 2 098 mS/m in January 2025. In addition, the electrical conductivity values in the Leachate Detection North Bench (sampling position 19) and the Stormwater Dam (26) were 1 753 mS/m and 130 mS/m, respectively, in January 2025.

**Sub-soil Seepage**

The sub-soil seepage from Cells 1, 2, and 3 in Valley 1, along with seepage from the Valley 1 Stormwater Dam (sampling point 17), is collected in a sump located downstream of the dam. The electrical conductivity value of the liquids collected from this sump slightly decreased from an average of 417 mS/m in 2024 to 408 mS/m in January 2025.

Sampling point 9 GW123, which monitors the toe drain below the Valley 1 buttress, typically shows elevated electrical conductivity due to high ammonia, chloride, and sodium levels. In January 2025, the electrical conductivity increased to 1133 mS/m, suggesting a larger leachate component. Several organic compounds were also detected in the Valley 1 sub-soil samples during July 2024.

In Valley 2, sampling points 24 (beneath the Main Cell) and 25 (beneath the Stormwater Dam) recorded electrical conductivity values below the screening guideline in January (146 mS/m and 127 mS/m, respectively). The water in both systems is collected via gravity or pumps and transported to the Stormwater Dam.

***Rating: Full Compliance***

### 5.10.11 Requirements

Condition 8.6 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"8.6.1 If, in the opinion of the Director, a water quality variable at any monitoring point listed under the detection monitoring programme, as referred to in condition 8.5.1, shows a significant increasing trend, the Licence Holder shall initiate a monthly monitoring programme for the water quality variables listed in the approved water monitoring protocol."*

### 5.10.12 Rating:

The January 2025 water quality monitoring report (JW112/25/B196-25-Rev 0) was submitted to the Director, and for the period under review, no directive was received from the Director and is therefore currently not applicable.

***Rating: Not Applicable***

## 5.11 Investigations

### 5.11.1 Requirements:

Condition 9 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"9.1 If, in the opinion of the Director, pollution, nuisance or health risks may be or is occurring on the Site, the Licence Holder must initiate an investigation into the cause of the problem or suspected problem.*
- *9.2 Should the investigation carried out as per condition 9.1 above reveal any unacceptable levels of pollution, the Licence Holder must within 14days submit mitigation measures to the satisfaction of the Director."*

### 5.11.2 Rating:

No communication was received from the Department regarding investigations.

***Rating: Not Applicable***

## 5.12 Recording

### 5.12.1 Requirements

Condition 10 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"10.1 All records required or resulting from activities required by this Licence must:*
  *(a) Be legible;*

*(b) Be made as soon as reasonably practicable and should form part of the extremal audit report;*

*(c) If amended, be amended in such a way that the original and any subsequent amendments remain legible and are easily retrievable; and*

*(d) Be retained in accordance with documented procedures.*

- *10.2 Records demonstrating compliance with condition 10.1 and 10.2 must be maintained for five (5) years."*

### 5.12.2 Rating:

Records are kept as part of element 7.5 (Documented information) of the EnviroServ EMS. There is a very good record keeping procedure (SHEQ-NAT-COP-005, revision 9, dated 17-03-2023) that addresses the receipt storage and dispossession of records. This procedure also states a five-year retention period. The procedure also spells out responsibilities for keeping records and record retention times. Records of the waste deposited on the site is kept as part of the operation of the site. Training records are available at the site for all personnel working at the site.

***Rating: Full Compliance***

## 5.13 Reporting

### 5.13.1 Requirements

Condition 11 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"11.1 The Licence Holder must, within 24 hours notify the Director of the occurrence or detection of any incident on the site or incidental to the operation of the site, which has the potential to cause, or has caused pollution of the environment, health risks, nuisance conditions or water pollution,*
- *11.2 The Licence Holder must, within 14 days, or a shorter period of time, if specified by the Director, from the occurrence or detection of any incident referred to in condition 11.1, submit an action plan, which must include a detailed time schedule, and resource allocation signed off by top management, to the satisfaction of the Director of measures taken to:*

  *(a) Correct the impact resulting from the incident;*

  *(b) Prevent the incident from causing any further impact; and*

  *(c) Prevent a recurrence of a similar incident.*
- *11.3 In the event that measures have not been implemented within 21 days of the incident to address impacts caused by the incident referred to in condition 11.1, or measures which have been implemented are inadequate, the Director*

*may implement the necessary measures at the cost and risk of the Licence Holder.*

- *11.4 The Licence Holder must keep an incident report and complaints register, which must be attached to the external audit report, and made available to the Department for audit purposes,*
- *11.5 The Department must be notified, within 24 hours of the occurrence, in the case of the following:*

  *a) Any malfunction, breakdown or failure of equipment or techniques, accident or fugitive emission which has caused, is causing or may cause significant pollution;*

  *b) The breach of this Licence; and*

  *c) Any significant adverse environmental and health effects.*
- *10.6 The Department must be notified within 14 days of the following changes:*

  *a) Licence Holder's trading name, registered name or registered office address;*

  *b) Particulars of the licence Holder's ultimate holding company (including details of an ultimate holding where a Licence Holder has become a subsidiary) and;*

  *c) Steps taken with a view to the Licence Holder, or anyone of them, going into bankruptcy, entering into composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.*
- *11.6 The water quality monitoring reports must be submitted annually to the Director. All monitoring results must be presented graphically as per minimum requirements for monitoring second edition 1998.*
- *11.7 Each external audit report referred to in condition 12.2 below must be submitted to the Director within 30 days from the date on which the external auditor finalised the audit report.*
- *11.8 The Licence Holder must register on the South African Waste Information System (SAWIS) as required and report quantities of waste disposed.*
- *11.9 Monitoring and reporting of the operational studies and efficiency of the landfill gas extraction, treatment and flaring system on a monthly basis."*

### 5.13.2 Rating:

No reportable incidents occurred during the period under review.

The licence holder keeps a complaints and incident register as required. The incident register contains no environmental incidents. The complaints register is appended as **Appendix B.**

EnviroServ -Shongweni Waste Management Facility received a number of external complaints for the period under review - July 2024 to June 2025. The complaints reported on, are those recorded on the formal Shongweni complaints system as required by this Waste Management Licence. The full database is available on site for review.

No change of ownership or holding company occurred in the period under review.

Water monitoring reports are submitted to the Director as required. Monitoring data is shown graphically as required and no correspondence have been received regarding the contents of the monitoring reports.

The 2024 external audit report was submitted to the Department as required.

EWM has registered with the South African Waste Information System (SAWIS) and waste volumes are reported as required.

Monthly reporting on the operation of the gas flare is done as required. Records of these reports are available on site.

***Rating: Full Compliance***

## 5.14 Auditing

### 5.14.1 Requirements: Internal audits

Condition 12.1 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"12.1.1 Internal audits must be conducted biannually by the Licence Holder and on each audit occasion an official report must be compiled by the relevant auditor to report the findings of the audits, which must be made available to the external auditor specified below.*

### 5.14.2 Rating:

The Licence holder has conducted the bi-annual internal audits as required. Copies of these audit reports were made available to the external auditor for review.

***Rating: Full Compliance***

### 5.14.3 Requirements: External audits

Condition 12.2 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"12.2.1 The Licence Holder must appoint an independent external auditor to audit the site annually and the auditor must compile an audit report documenting the findings of the audit, which must be submitted by the licence holder according to condition 12.2.2 below.*

- *12.2.2 The audit report must:*
  - *a) Specifically state whether conditions of this licence are adhered to;*
  - *b) Include an interpretation of all available data and test results regarding the operation of the site and all its impacts on the environment;*
  - *c) Specify target dates for the implementation of the recommendations by the Licence Holder to achieve compliance;*
  - *d) Contain recommendations regarding non-compliance or potential non-compliance and must specify target dates or the implementation of the recommendations by the Licence Holder and whether corrective action taken for the previous audit non-conformities was adequate; and*
  - *e) Show monitoring results graphically and conduct trend analysis."*

### 5.14.4 Rating:

The previous audit was conducted in 2024 by Dorean Environmental Services against the WML. The report was sent to the DFFE as required in condition 9.8 of that specific WML. This report will meet the requirements of condition 12.2.2.

***Rating: Full Compliance***

### 5.14.5 Requirements: Departmental audits and inspections

Condition 12.3 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"12.3.1 The Department reserves the right to audit and/or inspect the Site without prior notification at any time and frequency as may be determined by the Director.*
- *12.3.2 The Licence Holder must make any records or documentation available to the Director upon request as well as any other information he/she may require."*

### 5.14.6 Rating:

Condition 12.3.1 relates to Departmental actions and is therefore not applicable for the purposes to this report.

Records have been made available as and when required during the period under review. No Departmental audits or inspections occurred in the period under review.

***Rating: Not applicable***

## 5.15 Monitoring committee

### 5.15.1 Requirements

Condition 13 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"13.1. The Licence Holder must maintain and ensure the continued functioning of a Monitoring Committee for the normal operative lifetime of the Site, or such longer period as may be determined by the Director.*
- *13.2. The Monitoring Committee must formulate Terms of Reference (ToR) and a code of conduct, according to the latest edition of the Environmental Monitoring Committees (EMCs), Integrated Environmental Management (IEM) Information Series 21.*
- *13.3. The Monitoring Committee must be representative of relevant Interested and Affected Persons (I&APs) as recommended in the latest Environmental Monitoring Committees (EMCs), Integrated Environmental Management (IEM) Information Series 21.*
- *13.4. The Monitoring Committee must meet at least once every six (6) months. The latest external audit report must be presented in the meetings.*
- *13.5. The Licence Holder must keep minutes of all meetings of the Monitoring Committee and distribute the minutes to all members of the Monitoring Committee, including the Director within 30 days after the meeting."*

### 5.15.2 Rating:

A very active Monitoring Committee is maintained by EnviroServ. The committee established a code of conduct and terms of reference as required. Meeting minutes are distributed accordingly as required. The required monitoring committee meetings for 2024 were conducted as required. The first 2025 monitoring committee meeting was conducted and copies of the minutes distributed as required.

***Rating: Full Compliance***

## 5.16 Leasing and alienation of the site

### 5.16.1 Requirements

Condition 14 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"14.1 Should the Licence Holder want to alienate or lease the site, he/she must notify the Director in writing of such an intention at least 120 days prior to the said transaction*
- *14.2 Should the approval be granted, the subsequent Licence Holder shall remain liable for compliance with all licence conditions."*

### 5.16.2 Rating:

Currently there are no plans to alienate or lease the site and therefore the condition do not apply for the period under review so for the purpose of this report is not auditable.

***Rating: Not Applicable***

## 5.17 Transfer of the Waste Management Licence

### 5.17.1 Requirements

Condition 15 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"15.1 Should the Licence Holder want to transfer the Licence, he/she must apply in terms of Section 52 of the National Environmental Management: Waste Act, 2008 (Act No 59 of 2008).*
- *15.2 Any subsequent Licence Holder shall be bound by conditions of the licence."*

### 5.17.2 Rating:

Currently there are no plans to transfer the licence and therefore the condition do not apply for the period under review so for the purpose of this report is not auditable.

***Rating: Not Applicable***

## 5.18 General

### 5.18.1 Requirements

Condition 16 of the WML (Ref No. 12/9/11/L191016090639/4/R), dated 26-03-2020:

- *"16.1 This WML is not transferable unless such transfer is subject to condition 15.1 above.*
- *16.2 This WML must not be construed as exempting the Licence Holder from compliance with the provisions of the National and Provincial Legislations and any relevant Ordinance, Regulation, By-law or relevant National Norms and Standards.*
- *16.3 Transgression of any condition of this Licence may result in the Licence being withdrawn by the Department.*
- *16.4 Non-compliance with a condition of this Licence may result in criminal prosecution or other actions provided for in Section67 (1) of the National Environmental Management: Waste Act, 2008.*
- *16.5 In terms of section 28 and 30 of the NEMA and section 19 and 20 of the National Water Act No.36 of 1998, any costs incurred to remedy environmental*

*damage must be borne by the person responsible for the damage. It is therefore imperative that the Licence Holder reads through and understands the legislative requirements pertaining to the project. It is the Applicant's responsibility to take reasonable measures which include informing and educating contractors and employees about the environmental risks of their work and training them to operate in an environmentally acceptable manner.*

- *16.6 This Licence is valid for a period of ten (10) years and shall be reviewed within two (2) years from the date of issue or at any time before or after that date. Based on the results of the review, especially compliance to Licence conditions or recommendations from the audit reports and or changing legislation, the Licence could be amended or withdrawn or the validity thereof extended."*

### 5.18.2 Rating:

Condition 16 is a number of statements and not conditions to which EnviroServ can comply and is therefore not auditable.

***Rating: Not applicable***

# 6. Recommendations

The following is recommended based on the findings of the most recent chemical analyses and the biomonitoring assessment conducted by GroundTruth:

- Addition of a surface water monitoring position (SW7) upstream of Valley 3.
- Monitor the *cis*-1-2-dichloroethene concentrations in the upstream borehole BH4C.
- On-going active management of the Valley 1 and Valley 2 sumps.
- Continuation and improvement of the sediment trap clearing, maintenance of the berms, drains and roads, and control of alien invasive plants within the riparian areas. In addition, sedimentation and run-off emanating from the area under the control of EnviroServ requires continued management and attention.
- On-going quarterly water monitoring.

Jones and Wagner recommended the following:

- There is sufficient capacity in both Stormwater Dam Valley 1 and Valley 2, with 42% of the combined dam volume being utilised. This is adequate storage capacity for a 1:50 24 hr storm event.

- Measures implemented to reduce the leachate levels on site have been successful, however, these should continue to be monitored to ensure efficiency. Furthermore, the LMM data should continue to be collected and assessed.
- The following is recommended based on the findings of the most recent chemical analyses.
  - Addition of a surface water monitoring position (SW7) upstream of Valley 3.
  - Monitor the *cis*-1-2-dichloroethene concentrations in the upstream borehole BH4C.
  - On-going active management of the Valley 1 and Valley 2 sumps.
  - On-going quarterly water monitoring.

# 7. Audit conclusions

The audit shows that the landfill is in compliance with its Waste Management Licence Conditions. In addition, the site is continually showing improvement in its design, construction and operation, in line with its licence requirements and the SHEQ policy of the company. A summary of the audit findings can be seen in **Table 4** below:

***Table 4: Summary of Audit Findings***

| PARAGRAPH IN THE REPORT | SPECIFIC CONDITIONS AUDITED | RATINGS | | |
|---|---|---|---|---|
| | | *Full Compliance* | *Partial Compliance* | *Non Compliance* |
| 5.1.2 | 1.3.1 -1.3.3 | X | | |
| 5.2.2 | 2.1.1 | X | | |
| 5.2.4 | 2.1.2 | X | | |
| 5.2.6 | 2.1.3 | NA | | |
| 5.3.2 | 2.2 | X | | |
| 5.4.2 | 2.3.1 & 2.3.2 | X | | |
| 5.5.2 | 3.1 – 3.3 | X | | |
| 5.6.2 | 4.1 – 4.8 | X | | |
| 5.7.2 | 5.1 – 5.23 | X | | |
| 5.8.2 | 6.1 – 6.4 | X | | |
| 5.9.2 | 7.1 | X | | |
| 5.10.2 | 8.1 | X | | |
| 5.10.4 | 8.2 | X | | |
| 5.10.6 | 8.3 | X | | |
| 5.10.8 | 8.4 | X | | |
| 5.10.10 | 8.5 | X | | |
| 5.10.12 | 8.6 | NA | | |
| 5.11.2 | 9 | NA | | |
| 5.12.2 | 10 | X | | |
| 5.13.2 | 11 | X | | |
| 5.14.2 | 12.1 | X | | |
| 5.14.4 | 12.2 | X | | |
| 5.14.6 | 12.3 | NA | | |
| 5.15.2 | 13 | X | | |
| 5.16.2 | 14 | NA | | |
| 5.17.2 | 15 | NA | | |
| 5.18.2 | 16 | NA | | |

# 8. Appendices

## APPENDIX A: Appointment of the Waste Management Control Officer

| ENVIROSERV WASTE MANAGEMENT | Title | Document No. | Revision No. |
|---|---|---|---|
| | NATIONAL ENVIRONMENTAL MANAGEMENT WASTE ACT (2008) SECTION 49(1)(a) – WMCO APPOINTMENT | EWM-COMPL-AF-AAA | 00 |

*Mandla Thwala*

I, (***Nico Vermeulen***), the (***16.2***) appointee and Operations Director of (***TDS***), hereby appoint you, (***Mandla Thwala***), as the **Waste Management Control Officer (WMCO)** for (***Shongweni Landfill***) as per NEMWA Sec 49 (1)(a).

Your duties as WMCO are to:

a) *Take all reasonable steps to ensure compliance by the holder of the waste management licence conditions and requirements and the provisions of the Act and*

b) *Promptly report any non-compliance with any licence conditions or requirements or provisions of this Act to the licensing authority through the most effective means reasonably available.*

Yours faithfully,

*For and on behalf of EnviroServ Waste Management (PTY) Ltd*

.....

NICO VERMEULEN
OPERATIONS DIRECTOR

06 / 03 / 2023
Date

Kindly confirm your acceptance of this appointment by completing the following:

ACCEPTANCE

I, Mandla Thwala understand the implications of the appointment as detailed above and confirm my acceptance thereof.

.....

Signature (Mandla Thwala)

07 / 03 / 2023
Date

Page 1 of 1

## APPENDIX B: Complaints register

| Date | Complaint | CAS Number |
|---|---|---|
| 03 07 2024 | Again Awful smell this morning. Burning throats and eyes as well as headaches. | CAS-124291-N5J8X4 |
| 02 07 2024 | Air pollution | CAS-124186-K0V5Z5 |
| 02 07 2024 | Awful smell coming this morning | CAS-124191-S8P6J1 |
| 02 07 2024 | FW: Air Pollution Complaints Form [#234139] | CAS-124247-K1B8W7 |
| 02 07 2024 | FW: Air Pollution Complaints Form [#234140] | CAS-124269-V8X2Y9 |
| 01 08 2024 | Good morning Makgabo , I just want to report bad smell. | CAS-127445-N6V9Q0 |
| 01 07 2024 | Hi there is a very bad smell in Benares Road for a couple of days...this smell goes up the main road towards the Spar.. . please can you look into this | CAS-124125-J8N2F6 |
| 19 07 2024 | Pse be advised there is a nauseating smell this morning. Mrs H Buckle D69C Woodville Lane Summerveld | CAS-126400-M8D4J7 |
| 22 07 2024 | se be advised there is a nauseating smell this morning. Mrs H Buckle D69C Woodville Lane Summerveld | CAS-126545-T8G1Y0 |
| 03 07 2024 | The smell has not reached us for quite a while but it's just come through with a strong, typical ES smell now Summerveld No wind | CAS-124356-B8R6F6 |
| 01 07 2024 | We are in Bothas Hill, and we are getting a horrible chemical smell from SPRAY PAVE OR SOME OTHER SOURCE. IT IS VERY TOXIC 8 Ridge Road, Bothas Hill. Diane Gien | CAS-124123-Z4K2X7 |
| 18 09 2024 | I have noticed the recognisable smell return over the past week Especially today | CAS-130219-B1K6X7 |
| 21 09 2024 | New form response - Contact form | CAS-130391-J1N1W1 |
| 26 09 2024 | Pretty bad right now Light breeze from the SE as per the usual direction when it hits us | CAS-130616-J7K8L0 |
| 28 09 2024 | Smell at 9 Bowles Rd Assagay 12.50 pm 28/09/24 | CAS-130732-Q1L5W9 |
| 30 09 2024 | This morning the smell is extremely strong. It is even noticeable through the air filters in my car. I have just driven past the polo pony garage. Many people on one of the groups are also mentioning | CAS-130728-S7R8P9 |
| 30 09 2024 | Terrible EnviroServ stink Winston park! We have been smelling EnviroServ almost daily for the last week!! | CAS-130826-D9P4Z0 |
| 30 09 2024 | Terrible EnviroServ stink Winston park! We have been smelling EnviroServ almost daily for the last week!! | CAS-130826-D9P4Z0 |
| 02 10 2024 | Smell is obvious now I'm Summerveld. Steady breeze from the SE | CAS-130939-F8X4T3 |
| 11 10 2024 | Hello EnviroServ. The smell of ether has been getting stronger since this morning what is happening ? | CAS-131929-R1T4M9 |
| 13 10 2024 | EnviroServ smell in Winston park, Alexander Drive | CAS-131938-G8H8Q6 |
| 17 10 2024 | Report of landfill site in Summerveld's now. Calm | CAS-131933-L9L0Q7 |
| 20 10 2024 | The stench from EnviroServ last night woke up my household with burning sinuses and sore throats probably cos of the fog. We live in Summerveld. | CAS-132023-Q2C9R0 |

| | | |
|---|---|---|
| 22 10 2024 | Smell really bad on Bowles road this morning | CAS-132083-Z1N0R0 |
| 22 10 2024 | Morning We are at 2 Hawkstone rd and can smell the awful stench from Cliffdale rd. Look what that burning 🔥 of tyres did to our pool and gutter water | CAS-132069-X3S0H5 |
| 22 10 2024 | Bad Odour coming through to Summerveld from your site | CAS-132066-B9H0N1 |
| 22 10 2024 | Not so lovely waking up after the rain to the fresh smell of landfill here in Summerveld 😥. It really is depressing. | CAS-132056-X5C9L1 |
| 22 10 2024 | Another smell this afternoon in Bowles road | CAS-132120-S5V6B9 |
| 31 10 2024 | Smell coming through how in Summerveld. It's misty and calm. | CAS-132687-V4V6V9 |
| 05 11 2024 | Good day we are getting lots of complaints on the above company What is being done | CAS-132870-S0N3P8 |
| 07 11 2024 | The smell coming through has been noticeable today. How is the landfill holding up with all the rain? | CAS-133087-C2H4X3 |
| 10 11 2024 | Horrific smell on Bowles road | CAS-133462-R1L1H1 |
| 10 11 2024 | Very strong wave coming through now. It's raining and misty but not very windy. Summerveld. | CAS-133461-R6D5N1 |
| 14 11 2024 | Smelling now. Summerveld Misty | CAS-133553-V9G3W7 |
| 15 11 2024 | Smell is very strong right now. Summerveld Barely noticeable breeze | CAS-133680-R2Q7F4 |
| 17 11 2024 | Odour report Summerveld Light breeze | CAS-133681-M5L5P5 |
| 25 11 2024 | It smells as though the landfill site is in the back yard right now, Very hot day Calm, very light breeze | CAS-134119-V3J2M0 |
| 26 11 2024 | Odour report Summerveld Misty with light breeze. | CAS-134141-V5F3G8 |
| 26 11 2024 | The odour is coming through again now. It's been on and off all day in Summerveld | CAS-134287-X1G6C2 |
| 27 11 2024 | Extremely strong EnviroServ smell!! Alexander Drive Winston park | CAS-134286-J1P0G2 |
| 16 12 2024 | Odour detectable now in Summerveld. Light SE wind and rain | CAS-135459-T0G0N8 |
| 17 12 2024 | Terrible EnviroServ smell this morning!! Alexander Drive Winston park | CAS-135460-X5W2V8 |
| 20 12 2024 | go almost daily to various parts of Shongweni .today I COULD NOT BREATHE. 8 have NEVER seen the dump so full. There are mountains and mountains. . I was accosted and chased on but I have shut down so | CAS-135461-D4D4J7 |
| 24 12 2024 | Bad Odour from your towards Summerveld | CAS-135598-N4V7W0 |
| | Horrible smell and inconsiderate operations! | CAS-136834-N7W7X7 |
| 24 12 2024 | Bad Odour from your towards Summerveld | CAS-135598-N4V7W0 |
| 07 01 2025 | The smell is strong tonight in Summerveld. It has lingered since early this evening but is very strong right now Misty conditions Headache and very unpleasant | CAS-135802-P0C3H5 |
| 10 01 2025 | Reporting the dump smell at: 7am in Hillcrest with the wind at SSW… | CAS-135949-L4Z2G0 |
| 11 01 2025 | This morning I can smell the dump. 6 Cliffdale road | CAS-136026-D4Y2N1 |
| 13 01 2025 | Bad smell 9 Bowles Rd Assagay 15.15 pm on 13/01/25 | CAS-136059-R1K8X6 |

| | | |
|---|---|---|
| 13 01 2025 | Strong chemical smell in Bowles Road . | CAS-136060-Y7M5S2 |
| 19 01 2025 | Good day, I would like to report the bad smell coming from the dump in the Summerveld area. | CAS-136728-F2K4X3 |
| 19 01 2025 | Good afternoon Joyce, Happy Sunday . Just so you know the smell off the landfill particularly strong today. Similar to when it was super sour before. I got this same smell on site | CAS-136727-D1B0M8 |
| 20 01 2025 | Good day, there is a really strong smell today in Key Ridge rd, off Cliffdale rd. | CAS-136729-P5W8C7 |
| 01 02 2025 | Terrible odour all around Summerveld and on the drive to Shongweni market. Depressing | CAS-137157-L9D8D9 |
| 03 02 2025 | Odour very obvious on Summerveld now. It's been in the air for the last 2 days but particularly prevalent now | CAS-137238-L7N5N7 |
| 03 02 2025 | Good day, I would like to report the bad smell coming from the dump in the Summerveld area. | CAS-137237-R9H7T0 |
| 09 02 2025 | Reporting the dump smell at: 6am in Hillcrest with the wind at S… | CAS-137494-J6B1N7 |
| 09 02 2025 | Reporting the dump smell at: 6.30am in Hillcrest with the wind at SSW… | CAS-137822-S1K8R4 |
| 14 02 2025 | Smell has been around the last few days but particularly strong right now. Summerveld - SE wind direction. | CAS-138064-J1Q3L1 |
| 17 02 2025 | Smell again in Summerveld again now. It was also reported in other areas this morning on another group I'm on. | CAS-138119-P5N9W0 |
| 25 02 2025 | TERRIBLE ENVIROSERVE SMELL IN WINSTON PARK ALEXANDER DRIVE THIS MORNING!!! | CAS-138657-J0F9B9 |
| 11 03 2025 | Good day, I would like to report the bad smell coming from the dump in the Summerveld area. | CAS-139642-Q5Z5K0 |
| 18 03 2025 | The odour is currently strong in Summerveld. No obvious wind. Cloud cover | CAS-140161-S0F0T3 |
| 18 03 2025 | EnviroServ smell again in Winston park. This last week has been terrible! | CAS-140027-Y8K2Y1 |
| 23 03 2025 | It stinks in Summerveld. | CAS-140439-S9T8G4 |
| 23 03 2025 | Good day, I would like to report the bad smell coming from the dump in the Summerveld area. | CAS-140446-H2T9K1 |
| 23 03 2025 | Smell is strong in Summerview place in Summerveld | CAS-140452-Q4C9S0 |
| 23 03 2025 | Wow, the smell pollution from the fertiliser factory down Macintosh drive terrible today. I think it maybe EnviroServ as we can smell in Keyridge. It is the same smell as when I cycle past it - so I k | CAS-140438-R8N4W2 |
| 23 03 2025 | Bad odour from your site coming into Summerveld | CAS-140450-C1Q9S3 |
| 23 03 2025 | Loads of odour reports coming from Summerveld today | CAS-140436-C1H2V1 |
| 24 03 2025 | Another report from my side on the smell Summerveld | CAS-140447-K3C1C8 |
| 24 03 2025 | Hi . I reside in Winston park , Gillits. Last night and this morning there was a terrible smell in the area. Caused irritation to my chest. | CAS-140443-X8G7F9 |
| 24 03 2025 | Complaint to EnviroServ 24 March 2025. Good day I am a Winston Park resident. Have been living here for 8 years now. I am fully aware of when the bad smell is coming from the dump. And it's come | CAS-140444-C6R6R4 |
| 28 03 2025 | Bad smell in Winston Park this morning. | CAS-140811-N8N1B3 |
| 28 03 2025 | Good morning I'd like to report that the EnviroServ stench is extremely bad this morning. Woke up at 6am to the house filled with this vile stench. It burns the nasal passages. 29 Van Riebeeck Rd. Ro | CAS-140815-Y2S3M5 |

| | | |
|---|---|---|
| 28 03 2025 | 14 Mountbatten Place Winston Park - the dump stench is horrific | CAS-140816-P0Z2T9 |
| 28 03 2025 | To whom It May Concern, The smell from the dumping site has been particularly pungent this last few days in Winston Park. It is at times eye watering! | CAS-140817-Z5T6G3 |
| 28 03 2025 | The smell is very strong this morning in Poole Place Winston Park | CAS-140818-S8R6P8 |
| 28 03 2025 | ENVIROSERVE STENCH HAS BEEN SO BAD THIS WEEK!!!! WOKE UP TO OUR HOUSE STINKING SO STRONG OF ENVIROSERVE DUMP AGAIN THIS MORNING!!!!! | CAS-140825-N2P7N5 |
| 28 03 2025 | Good morning. Over the last few days we have been hit with a toxic smell. This morning it has hit us again. We have noticed a marked increase in severe headaches and sinus issues. Have had to make a | CAS-140824-K6D8Z3 |
| 28 03 2025 | Hi I would like to report EnviroServ chemical smell. 45 Montgomery drive, Winston park. Wind direction North West. | CAS-140814-S7S0K9 |
| 28 03 2025 | What is this ridiculous smell in Montgomery Drive Winston Park? | CAS-140810-N2S5T3 |
| 28 03 2025 | Awful EnviroServ stench this morning. All the way down Jan Smuts avenue to Alexander drive in Winston Park. Really bad | CAS-140823-Z0F0B3 |
| 28 03 2025 | EnviroServ smell affecting my chest with asthma this morning . Winston park . 118 Jan Smuts avenue. | CAS-140812-Y0C6T2 |
| 28 03 2025 | Extremely bad smell 56b Jan smuts Ave WINSTON PARK. whole family is coughing | CAS-140821-X4J2D2 |
| 28 03 2025 | Complaint to EnviroServ 28 March 2025. Good morning Another rotten garbage smell from the damp. Been in the air since 5am this morning. Regards Nqobile Winston Park resident | CAS-140826-J4F6L3 |
| 28 03 2025 | Horrendous stench from the direction of the dump with the recent overcast conditions. 13 Alexander Drive. | CAS-140808-M6T8F0 |
| 28 03 2025 | Good morning. Bad smell from dump in Winston Park | CAS-140809-C1R2G5 |
| 28 03 2025 | Reporting the dump smell | CAS-140827-G3G2K7 |
| 28 03 2025 | Guys, your dump is spewing toxic chemicals into the environment. The smell has been terrible these past weeks. Going on 24/7 My self and family members all suffering from bad skin allergies. There s | CAS-140819-K9Z4B5 |
| 28 03 2025 | Very toxic smell in Winston park. Causing headaches and heavy chest. Kids are also suffering with upper respiratory issues. We are experiencing this toxic fumes almost daily. This will definitely cau | CAS-140822-Q7Y0V9 |
| 28 03 2025 | Morning Makgabo, this morning it is so extremely bad again! IT STINKS EXACTLY LIKE ENVIROSERVE OUTSIDE AND IN OUR HOUSE!! STRONG! My throat and sinuses are burning, my chest is tight and sore, battl | CAS-140820-G8V3S8 |
| | Fwd: Delivery Status Notification (Delay) | CAS-141989-R1X2F9 |
| 31 03 2025 | Wow. Just arrived at Westown and the smell from ES was the first thing that hit me. | CAS-141027-L3N9K9 |
| 02 04 2025 | Summerveld now. Breeze from SE Strong smell | CAS-141057-H7Q2Y3 |
| 05 04 2025 | Do we have to complain about this now every weekend. Our eyes are burning and I have 2 5 month olds here - I pay a fortune to live here and will be laying a major complaint of burning at the dump. Thi | CAS-141277-Y6Z8Y1 |
| 05 04 2025 | Hi EnviroServ smell report | CAS-141276-Z0J3T9 |

| | | |
|---|---|---|
| 05 04 2025 | Morning. Once again, overcast and horrendous smell from the direction of the dump. | CAS-141279-V6M8T9 |
| 05 04 2025 | Winston Park STINKING of EnviroServ again this morning!!! | CAS-141278-Z0D9X9 |
| 05 04 2025 | Absolutely disgusting smell from EnviroServ throughout Winston Park this morning. I, who never get headaches, developed the most dreadful headache. Everyone complaining. | CAS-141332-K5T4T6 |
| 06 04 2025 | The dump stinks often now. Will be recording tvoc readings from next week to build evidence | CAS-141335-Y1Y8S6 |
| 06 04 2025 | There's that terrible stink again | CAS-141339-K8B4B5 |
| 07 04 2025 | Smell is strong again today Wind direction supports this | CAS-141360-G7W6S9 |
| 09 04 2025 | The smell is evident in Summerveld now - pretty much daily at this point | CAS-141565-Q4M1M9 |
| 11 04 2025 | The smell is out and about in Summerveld again today. | CAS-141718-W4M5J1 |
| 15 04 2025 | WINSTON PARK STINKS SO STRONG OF ENVIROSERVE RUBBISH DUMP!!!! 🤢 IT IS SO BAD!!!! | CAS-141900-L0P7R0 |
| 16 04 2025 | My guess is Its H2S emissions. Nose burns, eyes itchy. Wind is currently North easterly today, coming from the dump. My device measures TVOC and HCH0. On misty and rainy days it will worsen. | CAS-141988-K7F8L3 |
| 20 04 2025 | Terrible chemical smell in the air. | CAS-142124-P8X5H1 |
| 20 04 2025 | Reporting the dump smell at: 9.30pm in Hillcrest with the wind at SW… | CAS-142118-Y3Y7Z7 |
| 21 04 2025 | Terrible smell from dump. | CAS-142116-P5L3S7 |
| 21 04 2025 | Dump stinks today. Summerveld . | CAS-142111-Q8X6L4 |
| 21 04 2025 | We can smell the landfill in Summerveld today. | CAS-142117-J0Q7Q6 |
| 22 04 2025 | Good day, there's a revolting smell in Key Ridge rd/Cliffdale road. The worst it's been for ages. | CAS-142167-Z3S7K0 |
| 22 04 2025 | It stinks again today 🙄 | CAS-142162-K8Q4W1 |
| 22 04 2025 | Good day Please note the air smells again today. | CAS-142130-D2Z3X2 |
| 23 04 2025 | Very strong smell from the dump today in Winston Park | CAS-142248-F5N5S8 |
| 23 04 2025 | Good morning I'd like to report that the horrible stench is here again. Feel like I am breathing in poison. 👺 | CAS-142249-N1C0Z5 |
| 24 04 2025 | Disgusting acrid EnviroServ smell here- D102C Summerhill Avenue, Summerveld. And all through last night - which woke me up. Intolerable. | CAS-142346-X8W9S3 |
| 24 04 2025 | Bad odour | CAS-142351-X7Q7D3 |
| 24 04 2025 | Lots of complaints coming through at the moment. I'm not home but it was bad last night. | CAS-142344-P3Q3Y8 |
| 24 04 2025 | Bad odour from your site coming into Summerveld | CAS-142341-M4L0D6 |
| 25 04 2025 | Reporting a dump smell. | CAS-142430-V5P5Z0 |
| 30 04 2025 | Morning Esmé Horrendous stench in Van Riebeeck Rd at the moment. Very strong. | CAS-142576-Z1G8Q6 |
| 01 05 2025 | Good evening bad odour Summerveld. | CAS-142666-H2L9D0 |
| 01 05 2025 | EnviroServ acrid stench is clouding us for the las two hours. So over paying for your profits | CAS-142664-H2X1R6 |

| | | |
|---|---|---|
| 01 05 2025 | Bad smell today. | CAS-142665-C8T3J8 |
| 03 05 2025 | Very bad odour from your site coming into Summerveld | CAS-142736-F7R9M1 |
| 03 05 2025 | EnviroServ acrid stench clouding us at D102c Summerhill Avenue Summerveld for the last hour at least | CAS-142738-L3N5N1 |
| 03 05 2025 | 5:52 coming out of Westown. Spelling | CAS-142737-P0P3D8 |
| 07 05 2025 | Good day, I would like to report the bad smell coming from the dump in the Summerveld area. | CAS-142987-X7K0F9 |
| 08 05 2025 | Good day, I would like to report the bad smell coming from the dump in the Summerveld area. | CAS-143083-F9S9R9 |
| 09 05 2025 | Overcast and typically poor air quality. | CAS-143114-F8P9N3 |
| 15 05 2025 | The smell is really bad right now in Summerveld. No detectable wind direction as usual. | CAS-143523-R8W3P8 |
| 17 05 2025 | Terrible rotten garbage /EnviroServ smell in Winston park Alexader drive | CAS-143678-W7R5K5 |
| 19 05 2025 | Good day, I would like to report the bad smell coming from the dump in the Summerveld area. | CAS-143733-H4W8Z2 |

# APPENDIX C: eThekwini Discharge Permit

ETHEKWINI MUNICIPALITY

TRADING SERVICES
Water & Sanitation Unit
3 Prior Road, Durban 4001
P O Box 1038, Durban, 4000
Tel: 031 311 8077, Fax: 031 311 8080
www.durban.gov.za

Enviroserv Waste Management (Pty) Ltd (Shongweni)
P.O. Box 15005
Ashwood
3608

**PERMIT TO DISCHARGE TREATED CONTAMINATED STORM WATER DELIVERED BY ROAD HAULAGE TO SOUTHERN WASTEWATER TREATMENT WORKS (SWWTW)**

**Name of Company** : Enviroserv Waste Management (Pty) Ltd

**Physical Address** : 8 Main Road 461 (Shongweni Dam Road)

A. Enviroserv Waste Management (Pty) Ltd is hereby permitted in terms of Section 25/1 of the eThekwini Municipal Sewage Disposal Bylaws to discharge treated contaminated storm water resulting from Enviroserv's Semi Hazardous Landfill Site delivered by Abusanele, to the trade effluent tanker disposal facility at Southern Wastewater Treatment Works at a total monthly discharge volume not exceeding 12 000 kℓ/month subject to the conditions of this permit.

B. Number of tanker loads permitted for the period of permit: 400 loads per month.

C. This permit is valid for the period from 01 February 2025 to 31 January 2026.

D. The permitted vehicle as per the tanker and volume registered with eThekwini Water & Sanitation Pollution and Environment Branch.

E. Special Limits : None

F. Relaxations : None

G. Special Conditions : The conditions embodied in the attached schedule require certain actions to be completed. The Professional Technologist: Mobile Effluent Division of the Municipality reserves the right to carry forward any outstanding actions required in these conditions into any future permits.
Permit subject to signed indemnity agreement by both hauler and the source company that is acceptable to the Municipality.
Permit subject to compliance with Regulations for the Operation of Road Haulage (Attached).

LANGA NGCOBO
**PROFESSIONAL TECHNOLOGIST (MEMS)**
Date : 14 January 2025
Enquiries : Andisiwe Cele
Telephone : 031 322 9688
Reference : 9064

**ANNEXURE TO SECTION G OF THE ENVIROSERV WASTE MANAGEMENT (PTY) LTD PERMIT TO DISPOSE OF LANDFILL SITE TREATED CONTAMINATED STORM WATER BY AN APPROVED ROAD HAULIER TO THE SOUTHERN WASTEWATER TREATMENT WORKS (SWWTW) SEA OUTFALL**

G.1 This permit is subject to compliance with the regulations and/or procedures for the operation of road haulage vehicles within eThekwini Municipal facilities as may be amended from time to time.

G.2 The permit holder shall ensure that pH, Temperature, sulphides, conductivity and toxicity tests are carried out (per batch sent) by a suitably qualified laboratory acceptable to the Municipality on the landfill site's treated contaminated storm water in order to ascertain the minimum acceptable toxicant dilution (Toxicity) using gametes of the sea urchin. The results shall be forwarded in a signed Certificate of Analysis to the Professional Technologist – Mobile Effluent Division, Pollution and Environment Branch prior to acceptance of the batch by the Municipality. Any changes to the volume and/or composition of the batch which was the subject of the tests, must be approved prior to discharge by the Professional Technologist for the Mobile Effluent Division.

G.3 The permit holder shall analyse water quality variables at a frequency detailed in Table 1 below. The highlighted determinants/limits are adopted from the Coastal Water Discharge Permit (CWDP) for SWWTW and Schedule B Limits from eThekwini Municipal Sewage Disposal Bylaws.

Table 1: Parameters to be monitored and their frequency

| ITEM | WATER QUALITY VARIABLE | FREQUENCY | Limits from Schedule B | Limits from CWDP | UNIT |
|---|---|---|---|---|---|
| 1 | pH | Per Load | 5.5<pH<9.5 | | - |
| 2 | **EC** | Per Load | | **5000** | mS/m |
| 3 | **Chemical Oxygen Demand** | Monthly | | **9139** | $mgO_2/\ell$ |
| 4 | **Suspended Solids** | Monthly | | **1866** | mg/ℓ |
| 5 | Sulphides | Monthly | 1 | | mg/ℓ |
| 6 | Heavy Metals (Cr, Mn, Co, Cu, Ni, Zn, Pb, As, Cd) | Monthly | As per attached Schedule B limits | | mg/ℓ |
| 7 | **Free & Saline Ammonia as N** | Monthly | | **57.9** | mgN/ℓ |
| 8 | Sulphates | Monthly | 250 | | mg/ℓ |
| 9 | **Phenol** | Monthly | | **3** | mg/ℓ |
| 10 | Total Cyanide | Monthly | 10 | | mg/ℓ |
| 11 | Soap, Oil and Grease | Monthly | 50 | | mg/ℓ |
| 12 | BTEX | Quarterly | 4 | | mg/ℓ |
| 13 | Toxicity | Quarterly | 200 | | MATD |
| 14 | Temperature | Per Load | 44 | | °C |

| | | | | | |
|---|---|---|---|---|---|
| 15 | **Orthophosphate** | Monthly | | **13.3** | mg/ℓ |
| 16 | Mercury (Hg) | Monthly | 0.05 | | mg/ℓ |
| 17 | Settleable Solids | Monthly | 2 | | mg/ℓ |

The permit holder shall ensure that all sampling techniques and analytical methods are performed in agreement with the Professional Technologist – Mobile Effluent Division, Pollution and Environment Branch, and P O Box 1038, Durban 4000.

G.4 The permit holder shall ensure that no leachate or untreated contaminated storm water is discharged via the SWWTW. This includes provision of certificate of cleanliness for each tanker before commencing with hauling of treated contaminated storm water.

G.5 The results of water resource monitoring in the vicinity of the site, as performed for the requirements of the Department of Environmental Affairs' Landfill Site Licence, shall be submitted to the Professional Technologist – Mobile Effluent Division, Pollution and Environment Branch by 30 December each year.

G.6 Enviroserv Waste Management (Pty) Ltd is to commission an appropriately-qualified independent consultant to assess the liquid management plan site every six months, to formulate a report and an action plan to deal with the recommendations thereof.

G.7 The permit holder shall ensure that the treated contaminated storm water fully complies with Schedule B of the Sewage Disposal Bylaws (annexed hereto) and does not compromise the Coastal Water Discharge Permit (CWDP) issued to SWWTW by the Department of Environmental Affairs.

G.8 The permit is subject to a signed indemnity agreement acceptable to the Municipality by both hauler and the permit holder.

G.9 No treated contaminated storm water shall be accepted for discharge into the sea outfall unless it complies with the conditions stated in this permit. The effluent shall not contain concentrations of substances in excess of those stated above. Failure to comply with the stated requirements will result in the **REVOCATION OF DISCHARGE PERMIT** with immediate effect.

## SCHEDULE B
## ACCEPTANCE OF TRADE EFFLUENT FOR DISCHARGE EITHER DIRECTLY OR INDIRECTLY INTO SEA OUTFALLS

No trade effluent shall be accepted for discharge into the sea outfall unless it complies with the following conditions. The effluent shall not contain concentrations of substances in excess of those stated below—

| ***SEA OUTFALL QUALITY LIMIT*** | | | ***UNIT*** |
|---|---|---|---|
| 1. | Temperature | 44 | °C |
| 2. | pH | 5,5 < pH < 9,5 | |
| 3. | Settleable solids | 2 | mg/ℓ |
| 4. | Oils, greases and waxes of mineral origin | 50 | mg/ℓ |
| 5. | Arsenic (expressed as As) | 5 | mg/ℓ |
| 6. | Cadmium (expressed as Cd) | 1,5 | mg/ℓ |
| 7. | Total chromium (expressed as Cr) | 3 | mg/ℓ |
| 8. | Copper (expressed as Cu) | 3 | mg/ℓ |
| 9. | Lead (expressed as Pb) | 5 | mg/ℓ |
| 10. | Mercury (expressed as Hg) | 0,05 | mg/ℓ |
| 11. | Cyanides (expressed as CN) | 10 | mg/ℓ |
| 12. | Nickel (expressed as Ni) | 10 | mg/ℓ |
| 13. | Zinc (expressed as Zn) | 20 | mg/ℓ |
| 14. | Sulphide (expressed as $S^{2-}$) | 1 | mg/ℓ |
| 15. | Sulphates in solution (expressed as $SO_4$) | 250 | mg/ℓ |
| 16. | Toxicity as Minimum Acceptable Toxicant Dilution | 200 | Number of dilutions |
| 17. | Benzene, Toluene, Ethyl Benzene and Xylene | 4 | mg/ℓ |