ENVIRONMENTAL CONSULTING

# AGRIMARK (PTY) LTD

# PROPOSED INSTALLATION OF THREE 83M$^3$ (249M$^3$) ABOVEGROUND DIESEL STORAGE TANKS ON ERF 601, STASIE ROAD, LUTZVILLE, WESTERN CAPE.

**JULY 2025**

**DEAD&DP REFRENCE: W-BA-EIA-L07**
**SEC REFRENCE: 024053**

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# *List of Acronyms*

| | |
|---|---|
| BA | Basic Assessment |
| EA | Environmental Authorisation |
| EAP | Environmental Assessment Practitioner |
| ECO | Environmental Control Officer |
| EO | Environmental Officer (Engineer's Representative) |
| ESO | Environmental Site Officer (Construction Contractor's Representative) |
| EIA | Environmental Impact Assessment |
| EMPr | Environmental Management Programme |
| DEA & DP | Department of Environmental Affairs & Development Planning |
| GN | Government Notice |
| GPR | Ground Probing Radar |
| NEMA | National Environmental Management Act, Act 107 of 1998, as amended |
| SABS | South African Bureau of Standards |
| SANS | South African National Standards |
| SEC | Sillito Environmental Consulting |
| AST | Aboveground Storage Tank |

## 1. DETAIL AND EXPERIENCE OF THE EAP WHO PREPARED THE EMPR

This report was prepared by Jonathan Lassen and reviewed by Chantel Müller of Sillito Environmental Consulting (Pty) Ltd.

Chantel has a BA Social Dynamics and obtained her MPhil Environmental Management at the University of Stellenbosch in October 2008. Chantel is a registered EAP with EAPSA as well as a member of the International Association for Impact Assessment (IAIA). Chantel is also an Accredited Professional with the Green Building Council of South Africa.

Jonathan Lassen obtained his Advanced Diploma in Marine Sciences from the Cape Peninsula University of Technology and is a Candidate Registered EAP with EAPASA as well as a professional member of IASA South Africa.

SEC has extensive experience in environmental impact assessment (EIA) procedures and has completed numerous such applications in most provinces of South Africa since 1998.

## 2. INTRODUCTION

The applicant, Agrimark (Pty) Ltd, proposes to expand their site by adding three 83m³ (249m³) above-ground diesel storage tanks in the northern section, as outlined in the attached Site Development Plan (SDP) (Appendix I). This expansion will include the construction of a bund floor with new stairs (covering 1.14 m²), a new petrol dispenser area (22.5 m²), a spill slab (120 m²), and an additional bund floor area (237.17 m²). The total area covered by the expansion will be 380.81 m².

The site located on Erf 601, Stasie Road, Lutzville, in the West Coast District, spans a total area of 17,130.38 m². Currently, existing developments occupy only 17.57% of the site, covering 3,009.7 m². The infrastructure on the site includes a fuel service station with a forecourt area, a convenience store, a gas storage facility, a mini substation, an Agrimark retail store, and two Agrimark warehouses. Additionally, the site features 80 designated parking bays for visitors and staff.


**Figure 1:** Locality map of the facility (development area outlined in red).

This Environmental Management Programme (EMP) has been compiled in terms of the requirements of the National Environmental Management Act, 1998 (Act 107 of 1998) and the Environmental Impact Assessment Regulations, 2014, as amended.

This EMPr is intended to ensure compliance with the principles of sound Environmental Management and the general "Duty of Care" specified in the National Environmental Management Act, so as to avoid or minimize potential negative impacts on the natural environment during the pre-construction, construction and operational phases of the proposed expansion activity.

This document provides measures that should be implemented to ensure that any environmental degradation that may be associated with the expansion activity is avoided, or where such impacts cannot be avoided entirely, are minimized and mitigated appropriately.

This EMPr forms part of the contractual obligations to which all persons including but not limited to, contractors/sub-contractors or employees involved in construction, operation, or maintenance work, must be committed. It also serves as a baseline information document for the project applicant and any entity working on behalf of the applicant, during the various phases of the proposed activity. The EMPr aims to comply with Section 24N of the National Environmental Management Act No. 107 of 1998, as amended (NEMA), as well as any additional specific information requested by any government department, including the regulating authority for this specific project, the DEA&DP.

The overall objective of the EMPr is to direct and guide all responsible parties, binding all contractors, sub-contractors, and all other persons working on the site to adhere to the terms and conditions of the EMPr during the construction, operation, and maintenance phases of the project. The overall outcome of the EMPr is to prevent avoidable damage and/or minimize or mitigate unavoidable environmental damage associated with the construction, operation, and maintenance phases of the proposed project. The specific outcomes of the EMPr will be achieved by ensuring that the mitigation and management measures detailed in the EMPr are implemented and adhered to throughout the project duration. Compliance monitoring and independent assessment/auditing allow the verification of achievement of the EMPr outcomes and ultimately, fulfilment of the EMPr objectives.

The EMPr:

- identifies project activities that could cause actual environmental damage (or potential environmental risks) and provides a summary of actions required;
- identifies persons responsible for ensuring compliance with the EMPr;
- provides standard procedures to avoid and/or minimize the identified negative environmental impacts and to enhance the positive impact of the project on the environment;
- provides the site and project-specific rules and actions required, including a site plan/s showing:
    - areas where construction, maintenance, or demolition work may be carried out;
    - areas where any material or waste may be stored;
    - allowed access routes, parking, and turning areas for construction or construction-related vehicles;
- forms a written record of procedures, responsibilities, requirements, and rules for contractor/s, their staff, and any other person who must comply with the EMPr;
- provides a monitoring and auditing program to track and record compliance and identify and respond to any potential or actual negative environmental impacts; and
- provides a monitoring program to record any mitigation measures that are implemented

## 3. PROJECT DESCRIPTION

The site located on Erf 601, Stasie Road, Lutzville, in the West Coast District, spans a total area of 17,130.38 m². Currently, existing developments occupy only 17.57% of the site, covering 3,009.7 m². The infrastructure on the site includes a fuel service station with a forecourt area, a convenience store, a gas storage facility, a mini substation, an Agrimark retail store, and two Agrimark warehouses. Additionally, the site features 80 designated parking bays for visitors and staff.

The proposed expansion involves adding three 83m³ (249m3) above-ground diesel storage tanks in the northern section of the site, as shown in the attached Site Development Plan (SDP) (Appendix I). The development will include the construction of a bund floor with new stairs (1.14 m²), a new petrol dispenser area (22.5 m²), a spill slab (120 m²), and a new bund floor area (237.17 m²). The total ground coverage of the expansion will be 380.81 m².

## 4. DESCRIPTION OF ENVIRONMENTAL SETTING AND SENSITIVITY

The proposed site for fuel storage expansion is an existing, fully transformed area located within a built-up zone, surrounded by commercial businesses and residential homes. It is not designated for agricultural use, and no agricultural activities currently take place. As a result, the site has a ‘Low’ agricultural sensitivity. The area has been significantly altered by anthropogenic activities, including previous clearance and current operations such as a fuel service station, warehouses, a mini substation, and a convenience store. There is no indigenous vegetation or fauna, making the site unsuitable for supporting listed species. Therefore, the site has a ‘Low’ sensitivity rating for plant, terrestrial and animal species.

The site lies approximately 70 meters east of a non-perennial river that is in a poor ecological state and functions primarily as a stormwater channel. While the national environmental screening tool originally classified the site as having "Very High" terrestrial biodiversity sensitivity due to the nearby Ecological Support Area (ESA 2), a detailed on-site biodiversity verification by Nicolaas Hanekom refuted this classification. The ESA 2 was falsely mapped and there are therefore not ESA or CBA areas within the general vicinity of the site. The habitat classified as Namaqualand Heuweltjieveld and listed as "Least Concern" was found to be highly disturbed and of low ecological importance, negating the need for a full biodiversity impact assessment or mitigation. The site is located in an area of low paleontological significance and has been previously transformed, so the proposed expansion is unlikely to affect paleontological resources, resulting in a ‘Low’ sensitivity rating for this theme.

## 5. ASPECTS COVERED BY THIS EMPR

This proposal entails the installation of three 83m$^3$ (249m$^3$) aboveground diesel storage tanks as described above. The potentially significant impacts identified associated with the expansion activity are as follows:

### Construction phase:

- **Soil & Groundwater Contamination & Pollution:** Fuel, oil, lubricants, and other pollutants may leak from vehicles/ machinery and contaminate the soil. Pollution and soil contamination could also occur from chemical toilets, cement mixing directly on the soil and stormwater runoff may flow over the site camp area and carry contaminants off-site.

- **Fire, Health & Safety Risk:** Exposure through breathing vapours, swallowing hazardous substances or skin contact may have possible health effects. There is a minor risk of a hydrocarbon pool fire and toxic combustion gases if an incident occurs at the existing facility while construction takes place for the upgrade.

- **Dust & Noise Impacts:** As a result of the construction phase, noise and dust impacts are expected to occur in the area due to an increase in construction vehicles and road tankers for the duration of the construction phase while materials are being transported to the site and excavations are being made.

- **Traffic, Safety and Access Impacts:** As a result of the construction phase, traffic impacts are expected to occur in the area due to an increase in construction vehicle and truck traffic in the area for the duration of the construction phase while materials are being transported to the site. Road safety impacts and road condition impacts could also occur.

- **Visual Impacts:** The construction phase is associated with temporary disturbance as a result of construction (vehicles, machinery, fencing & signage) that may have a negative visual impact on the public.

- **Socio-economic – Creation of employment opportunities:** Temporary employment opportunities will be provided during the construction phase to those residing in the geographical area. This will be a positive, socio-economic impact.

### Operational phase:

- **Soil & Groundwater Contamination & Pollution:** During the operational phase of the proposed expansion activity soil and groundwater contamination could result due to fuel spills associated with re-filling of the aboveground storage tanks. In addition, if stormwater is not managed correctly there is the potential for the unmanaged stormwater runoff to impact negatively on the environment, potentially causing pollution and contamination. The aboveground fuel storage tanks could leak and contaminate the soil and groundwater.

- **Traffic & Safety Impacts:** Although traffic impacts are expected to occur for the duration of the operational phase, the site is currently operating as a retail store, fuel service station as well as other infrastructure and therefore has existing traffic-related impacts. This will reduce the significance of any traffic-related impact due to the existing traffic associated with the operation of the site.

- **Fire, Health & Safety Impact:** Exposure through breathing vapours, swallowing hazardous substances or skin contact may have possible health effects. The hazardous events identified that could occur at the facility could be

an uncontrolled diesel or petrol leak from a bulk storage tank or an uncontrolled leak of diesel or petrol from the delivery road tanker. As a result of the hazardous events, the identified potential major incidents could be a diesel or petrol pool fire at the storage tanks or the delivery road tanker and toxic effect of diesel or petrol combustion gases in case of a pool fire at the storage tanks.

- **Air Quality Impact:** Fuel vapour emissions may cause an odour nuisance or health impacts to adjacent residents, staff on site or to users of the fuel depot. It must be noted that this is an existing impact due to the presence of existing fuel stored on site.

- **Visual Impact:** Based on the nature of this proposal (i.e. fuel expansion), any visual impacts associated with the fuel service station will remain the same. This is therefore a negligible impact as the expansion of the fuel storage capacity on site will not compromise/ increase the significance of any visual impact.

- **Socio Economic Benefit:** Due to the increase in fuel storage capacity, current permanent employees' jobs are more likely to be retained. Some permanent employment opportunities may be created to service the increase in traffic expected to be utilizing the fuel service station.

In order to minimise any negative impacts associated with the proposed expansion activity it is imperative that the lifecycle of the expansion activity, as well as all aspects of the expansion activity (infrastructure and buildings) and operation are subject to the conditions set out in this EMP. The conditions directly address the identified potential impacts, in order to ensure that the health, safety and environmental risks associated with the service station and retail centre can be avoided or minimised.

## 6. LEGAL FRAMEWORK

This Environmental Management Programme (EMPr) has been compiled in fulfilment of the requirements of the National Environmental Management Act, Act No. 107 of 1998 (as amended) (NEMA). The contents of this EMPr comply with the requirements for EMP's as contained in Appendix 4 to the 2014 EIA Regulations.

The following activities in Listing Notice 1 of the 2014 EIA Regulations, as amended, published under the NEMA are triggered by the proposed upgrade:

***Listing Notice 1, Activity 51****: The expansion of facilities for the storage, or for the storage and handling, of a dangerous good, where the capacity of such storage facility will be expanded by more than 80 cubic meters.*

A Basic Assessment EIA Process is therefore required with the aim of receiving an Environmental Authorisation to undertake the listed activities in the 2014 EIA Regulation published under NEMA.

This EMP has been compiled in fulfilment of the requirements of NEMA. The contents of this EMP comply with the requirements for EMP's as contained in Appendix 4 to the 2014 EIA Regulations.

The EMP should also adhere to the local authority by-law requirements as well as any other obligatory environmental and other legal requirements.

Changes to this EMP can only occur with the written approval of the DEA&DP and an updated version should also be forwarded to all parties once the amended EMP has been approved by the DEA&DP.

It is understood that Agrimark (Pty) Ltd or any future development entity (where transfer of ownership occurs) will be fully responsible for this EMPr and its requirements including any environmental rehabilitation that may be needed. This is required in terms of Section 28 (*Duty of Care and Remediation of Damage*) of the National Environmental Management Act, (Act No. 107 of 1998), as amended.

The applicant should adhere to all statutory requirements which may be relevant to the expansion activity, contained in, *inter alia*, the following legislation:

- The National Environmental Management Act, Act 107 of 1998, as amended (NEMA).
- National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) as amended (NEM: AQA) –Section 35 (2) of the National Environmental Management: Air Quality Act (NEMAQA) 39 dated 2004 as amended – Chapter 4, Part 6: Measures in respect of offensive odours.
- Fire Brigade Services Act, 99 of 1987.
- Disaster Management Act, 57 of 2002.
- Occupational Health and Safety Act,85 of 1993.
- Major Hazardous Installations (MHI) Regulations issued in terms of the Occupational Health and Safety Act.
- National Water Act, Act 36 of 1998, as amended.
- National Environmental Management Waste Act, Act 59 of 2008.
- National Building Regulations and Building Standards Act, 1977 (Act no. 107 of 1977).
- Relevant SANS codes for the installation of aboveground ground storage tanks.
- The Operational Health and Safety Act, Act 85 of 1993.
- The National Environmental Management Air Quality Act, Act No. 39 of 2004.
    - National Dust Control, Regulation 827 dated 01 November 2013
    - (NEM: AQA) -Part 6: Measures in respect or dust, noise and offensive odours
    - Section 35 (2) - Chapter 4, Part 6: Measures in respect of offensive odours.
- National Heritage Resources Act, 1999 (Act No. 25 of 1999).
- “National Norms and Standards for the Storage of Waste” in terms of Government Notice No. 926 of 29 November 2013.
- National Dust Control, Regulation 827 dated 01 November 2013 promulgated in terms of the National Environmental Management: Air Quality Act 39 of 2004 (NEM: AQA) as amended.
- Any other relevant guidelines, permit requirements and/or legislation.

## ENVIRONMENTAL OBJECTIVES, OUTCOMES AND IMPACT MANAGEMENT ACTIONS

### 8.1. PLANNING & DESIGN PHASE

No direct environmental impacts are associated with the planning and design phase. However, poor planning or inappropriate design decisions in this phase may result in environmental impacts arising during subsequent phases of the project.

Planning and design activities must therefore take into account the environmental constraints and opportunities identified during the Environmental Impact Assessment process, in order to avoid or minimise the potential future impacts of the expansion activity.

**The environmental management objectives (goals) listed below should take place during the detailed design phase, prior to the construction phase:**

1. Appoint an Environmental Control Officer.
2. Implement the Stormwater Management Plan.
3. Atmospheric Emissions
4. Compile / Update the Spill Contingency Plan.
5. Compile a Fire Plan.
6. Update the Existing Emergency Response & Evacuation Plan.
7. Update Preventative Maintenance Plans.
8. Demarcation of Working Areas and No-Go Areas.
9. Establishment of Site Camp and Associated Site Facilities.
10. Pre-construction ECO visit.

These environmental management objectives, as well as the management actions (mitigation measure) that should be implemented to achieve the desired objective and to avoid/minimize potential impacts are discussed in more detail below.

#### 8.1.1. Objective 1: Appoint an Environmental Control Officer (ECO)

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| **Impact Management Outcome:** | The requirements of the EMPr are implemented and monitored during all phases of the expansion activity, which will promote sound environmental management on site. | |
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. A suitably qualified and experienced Environmental Control Officer must be appointed before any activities commence on site.<br>2. The ECO should inspect the site **biweekly for the duration of the construction phase.**<br>3. The appointed ECO must be advised on the construction start date before any activities commence on site so that the ECO can perform a pre-commencement inspection and plan for environmental awareness training of construction workers. | Agrimark (Pty) Ltd | During design Phase |
| **Performance Indicator** | A qualified ECO is appointed prior to the commencement of any construction activities taking place on site. | |

### 8.1.2. Objective 2: Compile/Update a Stormwater Management Plan

| **Impact Management Outcome:** | To avoid contaminated stormwater from the service station and retail centre from flowing off site and / or polluting the soil and / or groundwater. | |
|---|---|---|
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. A comprehensive stormwater management system must be designed by a qualified engineer and must comply with established stormwater management principles.<br>2. All fuel (hydrocarbons) stored on-site at any phase of the project must be contained within a purpose-built, impermeable bunded area capable of holding at least 110% of the potential spill volume. This bunded area must be sloped towards catch pits that are connected to the site's separator system.<br>3. During the construction of the common bunded area designated for fuel storage and related infrastructure, a competent and experienced contractor must be appointed. The contractor is responsible for ensuring all material handling protocols are strictly followed to minimize the risk of incidents.<br>4. All fuels, chemicals, lubricants, and hazardous substances must be securely covered and stored in bunded areas with an approved impermeable liner or other appropriate secondary containment measures.<br>5. The facility must be designed to prevent overland water flow from neighbouring properties into the fuel storage areas.<br>6. All fuel dispenser pumps must be installed on dedicated pump islands surrounded by hardstand surfaces. These surfaces must prevent vertical seepage and encourage horizontal flow toward catch pits that are connected to the separator system.<br>7. The area surrounding tank filling points must be graded to direct any spillage or runoff into a catch pit that is connected to the separator system, ensuring all contaminants are effectively contained.<br>8. In the event of an emergency spill, a trained clean-up contractor must be engaged to manage the incident. Any hazardous waste generated, including absorbent materials used for cleanup, must be properly contained and handled by a certified contractor using appropriate personal protective equipment and approved temporary storage containers for hazardous waste. | Agrimark (Pty) Ltd | During design Phase |
| **Performance Indicator:** | A storm water management plan has been designed by a suitably qualified engineer where contaminated stormwater from the service station and retail centre flows into a separator system. Contaminated run-off captured in grease trap tanks from the bunded areas may not be discharged into the local stormwater system. | |

### 8.1.3. Objective 3: Atmospheric Emissions

| **Impact Management Outcome:** | To minimise potential air quality impacts during construction and operational related activities. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Design and operation requirements listed under Sub-Category 2.2. of the Minimum Emission Standards (Government Gazette No. 33064) for listed activities in terms of Section 21 of the National Environmental Management: Air Quality Act, No. 39 of 2004, which applies to the storage and handling of petroleum products, must be implemented.<br>2. Vent pipe should be remotely located to as to avoid or minimise fuel vapour impacts during product delivery. | Agrimark (Pty) Ltd | During design Phase |
| **Performance Indicator:** | Ensure compliance with the local authority by-laws and any other statutory requirements relating to air quality. | |

### 8.1.4. Objective 4: Compile a Spill Contingency Plan for the Service station and Retail centre

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| **Impact Management Outcome:** | In the event of a petrol or diesel spill (either a large scale or small-scale spill) the procedure and response plan is clear and understood by all, which results in the incident having a low environmental, health and / or safety impact. | | |
| **IMPACT MANAGEMENT ACTIONS:** | | | |
| **Mitigation Measure** | | **Responsible** | **Time Period** |
| 1. A Spill Contingency Plan must be produced. This should be a stand-alone operational procedure). It should be compiled prior to the construction phase of the extension to the fuel depot and included as an Annexure to the EMP.<br>2. The Spill Contingency Plan should include the measures listed in the Emergency Plan as well as the relevant mitigation measures listed in Objective 1 under the Operational Phase in this EMP.<br>3. If an "incident[5]" takes place on site, the owner of the facility must within 14 days of the incident, report to the Director General, provincial head of department and municipality such information as is available to enable an initial evaluation of the incident, including (refer to footnote below for definition of "incident"):<br>o the nature of the incident.<br>o the substances involved and an estimation of the quantity released and their possible acute effect on persons and the environment and data needed to assess these effects.<br>o initial measures taken to minimise impacts.<br>o causes of the incident, whether direct or indirect, including equipment, technology, system or management failure.<br>o measures taken and to be taken to avoid a recurrence of such incident.<br>4. In the event of any incident the facility must ensure containment by the responsible person and report the incident to the DEADP (Ms. Amina Sulaiman, (021) 483 2571, Email: Amina.Sulaiman@westerncape.gov.za. | | Agrimark (Pty) Ltd | During design Phase |
| **Performance Indicator:** | A Spill Contingency Plan is submitted to the ECO for inspection prior to construction taking place. | | |

### 8.1.5. Objective 5: Compile/Update a Fire Plan for the existing development

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| **Impact Management Outcome:** | In the event of a fire at the facility the procedure and response plan are clear and understood by all, which results in a low health and / or safety impact. | | |
| **IMPACT MANAGEMENT ACTIONS:** | | | |
| **Mitigation Measure** | | **Responsible** | **Time Period** |
| 1. A Fire Plan schematic (layout plan) and supporting narrative must be compiled/updated (whichever is applicable) that shows the location of the fire extinguishers, hydrants, ingress, exits, assembly points, bund walls etc. | | Agrimark (Pty) Ltd | During design Phase |

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| 2. The Fire Plan should include provision of water and safety of the emergency response agencies, the public and surrounding businesses.<br>3. The Fire Plan should be included as an Annexure to the EMP.<br>4. The Fire Plan should be approved by the Chief Fire Officer. | | |
| **Performance Indicator:** | A Fire Plan is submitted to the ECO for inspection prior to construction taking place. | |

### 8.1.6. Objective 6: Compile/Update Emergency Response & Evacuation Plan

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| **Impact Management Outcome:** | • To compile and Emergency Response & Evacuation Plan that takes into account the "on-site" and "off-site" aspects in response to a disaster event.<br>• Ensure coordinated organizational and institutional arrangements. This is to prevent or reduce any of the hazards from occurring and to prepare and respond if a hazard cannot be avoided.<br>• Guide the tactical and operational co-ordination mechanism between all the relevant stakeholders, both pro-actively and reactively.<br>• Provide for the safety and evacuation or sheltering of the workers as well as that of the public.<br>• The outcome of the plan should prompt emergency response and relief that will:<br>a) Save lives,<br>b) Reduce further risk exposure,<br>c) A reduce suffering,<br>d) Protect property,<br>e) Protect the environment,<br>f) Reduce economic and social losses, and<br>g) Provide for the safety and health of all responders. |

| **IMPACT MANAGEMENT ACTIONS:** | | |
|---|---|---|
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. The Emergency Response & Evacuation Plan must be considered a "work in progress" or "live document" which requires regular review and adjustment due to circumstances.<br>2. The Plan must include "On-Site" and "Off-Site" aspects.<br>3. The On-Site Emergency Plan should:<br>o Anticipate the likely types of emergencies, both from within the organisation or adjacent sources, and their possible impact.<br>o Identify the vulnerable areas and people.<br>o Provide for appropriate prevention, risk reduction and mitigation strategies.<br>o Identify and address weaknesses in capacity to deal with possible emergencies.<br>o Facilitate maximum emergency preparedness.<br>o Provide for the allocation of responsibilities to the various stakeholders, and coordination in carrying out those responsibilities.<br>o Provide for prompt emergency response and relief that will:<br>▪ Save lives,<br>▪ Reduce further risk exposure,<br>▪ A reduce suffering, | Agrimark (Pty) Ltd | During design Phase |

| | | |
|---|---|---|
| ▪ Protect property,<br>▪ Protect the environment,<br>▪ Reduce economic and social losses, and<br>▪ Provide for the safety and health of all responders.<br>• Provide for disaster recovery, business continuity and rehabilitation, which are again focused on risk elimination and/or mitigation efforts.<br>• Provide for the procurement of essential goods and services.<br>• Provide for the establishment of strategic communication links, and the dissemination of information.<br>4. The Off-Site Emergency Plan should include:<br>• The operational procedure for business and the community in their immediate surrounds in order to ensure business continuity, services, sheltering, etc.<br>• Institutional arrangements with relevant authorities.<br>5. The Emergency Plan has to be compiled / updated with the input and cooperation of both the employer and the local government.<br>6. The Emergency Response Plan (ERP) must comprehensively address the following elements:<br>• Record of revisions<br>• General site information, including operational hours and responsible personnel<br>• External emergency contact details<br>• Identification of potential incidents<br>• Stated objectives of the ERP<br>• Tactical response plan for incident scenarios<br>• Designated Emergency Assembly Areas<br>• Defined roles and responsibilities<br>• Security contact information<br>• General procedures for immediate response following incident detection, reporting, or alarm activation<br>• Measures to ensure staff and public safety<br>• First aid response protocols<br>• Training requirements and schedules<br>7. The ERP must also account for incidents beyond KaapAgri's direct control that may disrupt fuel delivery or site operations. These include:<br>• Fires on adjacent properties<br>• Sabotage of plant infrastructure or equipment<br>• Power outages<br>• Disruption of water supply to the fire protection system<br>• Unavailability of spare parts leading to transfer equipment failure<br>• Mechanical damage to critical machinery or storage tanks<br>• Delayed delivery of essential components or spares<br>• Labour strikes affecting operations<br>• Public unrest outside the facility<br>• Bomb threats<br>8. The ERP must be formally reviewed and approved by the relevant regulatory department prior to the commencement of any site activities. | | |

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| 9. The following conditions and standards must be strictly adhered to:<br>• Full compliance with SANS 10400 (2020 edition) and the Community Fire Safety By-law as published in Provincial Gazette 5832 (including amendments dated 29 June 2007 and 21 August 2015)<br>• Submission of plans for diesel tank installations in accordance with SANS 10089 Part 1<br>• Completion of a risk assessment as per the Major Hazardous Installation Regulations, under the Occupational Health and Safety Act (Act 85 of 1993)<br>• Application by the site owner or responsible party for a Flammable Substance Certificate<br><br>10. In the event of a fire at the depot:<br>• Activate the foam fire-extinguishing system at the affected diesel tank bund<br>• Notify the local fire brigade immediately<br>• Initiate the site's emergency plan without delay<br>• Use a suitable public address system (e.g., megaphone) to instruct residents of the adjacent informal settlement to evacuate the area promptly | | |
| **Performance Indicator:** | • The Municipallity approves the Emergency Plan.<br>• The Plan must provide for the safety and evacuation or sheltering of the workers as well as that of the public.<br>• Emergency drills should take place to test the performance of the Emergency Response & Evacuation Plan.<br>• The plans need to be tested every year as a minimum.<br>• The Emergency Plan must be updated each year. | |

**8.1.7. Objective 7: Update Preventative Maintenance Plans.**

| **Impact Management Outcome:** | Prevent leaks, prevent health & safety risk and maintain good housekeeping. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Update Operational Maintenance Procedures for vehicles, infrastructure and equipment to prevent leaks, prevent health & safety risk and maintain good housekeeping.<br>2. The Maintenance Plan must be updated for all the equipment used on the facility. The Plan must contain at least the following:<br>o List of all equipment and facilities on the facility.<br>o Maintenance frequency.<br>o Particulars of maintenance activities that must be performed on the listed equipment.<br>o Responsible person.<br>3. All hazardous equipment and facilities on the facility must be inspected on a weekly basis by means of an Inspection Register. The Register must contain at least the following:<br>o List of all equipment and facilities on the facility.<br>o Equipment items that must be inspected.<br>o Facilities that must be inspected.<br>o Areas that must be inspected.<br>o Inspection findings.<br>o A responsible person who carried out the inspection. | Agrimark (Pty) Ltd | During Design Phase |

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| **Performance Indicator:** | Preventative maintenance plans are kept on file and implemented to avoid health & safety impacts. |

### 8.1.8. Objective 8: Demarcation of Working Areas & NO-GO Areas

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| **Impact Management Outcome:** | Construction activities will be restricted to within the designated areas & NO-GO areas will be protected from disturbance. | |
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| The following areas should be clearly demarcated on site during the pre-construction or construction phases of the expansion activity, as appropriate.<br><br>a) <u>Construction Working Area</u><br><br>• Prior to the commencement of any land-clearing or construction activities, the outer boundary of the development area must be surveyed, pegged and fenced off. If deemed necessary by the ECO, the outer boundary of the working area can be enclosed with fencing, shade netting, droppers or wire, or similar – as feasible and practical. The fencing should be retained and maintained for the duration of the construction period and must not be moved once approved during construction unless agreed otherwise with the ECO.<br>• This demarcation boundary is to ensure that land-clearing activities are restricted to only that area strictly required for the proposed expansion activity, and to prevent unnecessary disturbance of soil surfaces and vegetation outside of the development footprint.<br><br>b) <u>Construction Site Camp & Associated Facilities</u><br>The following site camp areas must be identified and demarcated during the pre-construction phase of the expansion activity:<br>• Access Route.<br>• Site camp and site office.<br>• Laydown area.<br>• Ablution area.<br>• Eating area and rest area.<br>• Vehicle & equipment maintenance yard.<br>• Refueling area.<br>• Stockpile area (for stockpiling topsoil, cleared vegetation, spoil material etc.).<br>• Waste storage area. | Construction Contractor in consultation with the ECO | Pre-construction phase<br>(prior to arrival of construction equipment, machinery, or workers on site) |
| **Performance Indicator:** | No-go areas, working areas and areas for site camp facilities have been identified and appropriately demarcated to the satisfaction of the ECO, before construction activities commence on site. | |

### 8.1.9. Objective 9: Establishment of Site Camp and Associated Site Facilities

| **Impact Management Outcome:** | Before the start of the construction phase a site camp must be established with all the required ablutions, waste management infrastructure and firefighting equipment where the vehicles and equipment can be stored. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. The following general management measures pertaining to the set-up, operation and closure of a site camp should be applied where appropriate, reasonable and practicable:<br>• **Fencing & Security:** The site camp area should be secured to prevent unauthorised individuals from entering the site camp and possibly getting injured or posing a safety and/or security risk. Adequate signage must be in place, the site camp and associated areas should be fenced off along the demarcated boundaries of these areas, preferably with shade netting or Bonnox fencing or similar.<br>• **Fire Fighting Equipment:** No less than 2 fire extinguishers should be present in the site camp. The extinguishers should be in a working condition and recently serviced. A fire extinguisher should always be present wherever any "hot works" (e.g., welding, grinding etc.) are taking place. It is recommended that all construction workers receive basic training in fire prevention and basic fire-fighting techniques and are informed of the emergency procedure to follow in the event of accidental fires. No open fires may be made on the construction site during any phase of the project. No smoking should be allowed on the construction site. In the case of accidental fires, the contractor shall alert the Local Authority's Fire Department as soon as a fire starts and not wait until the fire can no longer be controlled.<br>• **Waste Storage Area:** Sufficient bins for the temporary storage of construction-related waste should be provided inside the site camp and/or at the working area.<br>• **Hazardous Substances Storage Area:** Fuels, chemicals, lubricants and other hazardous substances must be covered and bunded with an approved impermeable liner or have some form of secondary containment. Signage should be posted outside the storage area and within the site camp.<br>• **Potable Water:** An adequate supply of potable water must be provided to construction workers at the site camp.<br>• **Ablution Facilities:** Chemical toilet facilities or other approved toilet facilities (at least 1 toilet for every 15 workers) must be provided and located on the site in such a way that the toilets will not cause any form of pollution of the site. Toilets should be placed within the site camp. Toilets should be placed well outside of any surface drainage/ storm-water canals. The toilets must be placed on a level surface and secured to prevent them from blowing over. The toilets must be serviced regularly and kept in an orderly state. The contractor must ensure that no spillage occurs when the toilets are cleaned, serviced or moved. Performing ablutions outside of the provided toilet facilities is strictly prohibited. The ECO would need to regularly | Construction Contractor in consultation with the ECO | Pre-construction phase |

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| inspect the state of the chemical toilets.<br>• **Eating Area & Rest Area:** A dedicated area within which construction workers can rest and eat during breaks must be provided within the site camp. Seating and shade should be provided.<br>• **Vehicle & Equipment Maintenance Yard:** Where possible, construction vehicles and equipment that require repair should be removed from site and taken to a workshop for servicing. If emergency repairs and/or basic maintenance of construction vehicles or equipment are necessary on site, such repair work should be undertaken within the designated maintenance yard area. Repairs should be conducted on an impermeable surface, and/or a tarpaulin and/or drip trays must be laid down prior to emergency repairs taking place, to prevent any fuel/ oil/ lubricant spillages from contaminating the environment.<br>• **Housekeeping:** the site camp and related site camp facilities must be kept neat and orderly at all times, to prevent potential safety risks and to reduce the visual impact of the site during construction. | | |
| **Performance Indicator:** | The site camp and facilities are established to the satisfaction of the ECO, before construction activities commence on site. | |

### 8.1.10. Objective 10: Undertake Pre-Construction ECO Visit

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| **Impact Management Outcome:** | An ECO undertakes the first inspection prior to construction commencing to monitor the applicant's compliance to the pre-construction mitigation measures listed above and the EA. | | |
| **IMPACT MANAGEMENT ACTIONS:** | | | |
| **Mitigation Measure** | | **Responsible** | **Time Period** |
| 1. An ECO should be appointed to conduct a pre-construction ECO inspection.<br>2. The ECO should undertake Environmental Awareness Training with the contractors and subcontractors prior to land clearing. | | Agrimark (Pty) Ltd and the ECO | Prior to commencement of construction |
| **Performance Indicator:** | An ECO inspection and short report is undertaken before construction commences. | | |

## 8.2. CONSTRUCTION PHASE

During the construction phase of the proposed fuel storage expansion project, dust, noise and traffic impacts are likely to occur. However, these impacts will transpire for the duration of the construction phase only. Other impacts related to the construction phase are visual impacts associated with the construction activity and contamination or pollution of the soil and groundwater as a result of leaking vehicles and /or construction machinery and/ or inappropriate waste management practices.

**The environmental management objectives (goals) for this phase:**

1. Social Considerations.
2. Avoid Contamination and Pollution of the Soil and Groundwater.
3. Limit Noise, and Dust Impacts.
4. Limit Traffic Impacts to Existing Road Users, Pedestrian Safety & Damages to Road Infrastructure
5. Reduce the Visual Impact of the Construction Phase Activities.
6. Avoid Fire, Health & Safety Risk
7. Enhance Business & Employment Opportunities.

### 8.2.1. Objective 1: Social Considerations

| **Impact Management Outcome:** | To minimise social impacts (e.g., nuisance factors) related to the construction of the site through effective communications with abutting neighbours. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. All abutting neighbours (or as required) must be notified of the proposed construction phase activities at least two weeks before they commence.<br>2. A Complaints Register must be kept in the environmental register for inspection by the ECO of any complaints on the project that may have been received.<br>3. The Contractor must record and repair any damage that the construction works may cause to neighbouring properties.<br>4. The ECO must be notified in writing of any incidents relating to the above. | Agrimark (Pty) Ltd and the Construction Contractor in consultation with the ECO | Construction Phase |
| **Performance Indicator:** | • To ensure compliance with the local authority by-laws and any other statutory requirements relating to site construction impacts.<br>• To ensure all complaints received are addressed. | |

### 8.2.2. Objective 2: Avoid Contamination and Pollution of the Soil and Groundwater

Construction activities will generate waste. In addition, fuel, oil, lubricants and other pollutants may leak from vehicles/ machinery and contaminate the soil. Pollution and soil contamination could also occur from chemical toilets, cement mixing directly on the soil and stormwater runoff may flow over the site camp area and carry contaminants off-site.

| **Impact Management Outcome:** | To avoid the contamination of soil and groundwater by inappropriate waste management practices, fuel and oil spills, chemical toilet spills and inappropriate cement mixing. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. A Spill Contingency Plan must be produced/ updated. This should be a stand-alone operational procedure). It should be compiled prior to the construction phase of the extension to the fuel depot and included as an **Annexure** to the EMP. | Agrimark (Pty) Ltd and the Construction Contractor in consultation with the ECO | Construction Phase |

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| 2. A storm water management system must be designed by a suitably qualified engineer & must adhere to the principles of storm water management.<br>3. The appointed Environmental Control Officer (ECO) must undertake at least one site inspection weekly, for the duration of the construction phase, and to produce a short ECO report monitoring the compliance of the property developer with the conditions of the approved EMP.<br>4. During the construction phase an experienced contractor must appointed, and it must be ensured that the correct protocols will be followed that relate to the handling of materials, thereby minimising the likelihood of such an incident(s) occurring.<br>5. Adequate training of construction personnel will ensure that incidents resulting in product spills are minimised and that the correct actions are taken in the event of an incident.<br>6. In the event of such an emergency condition, a suitably trained clean-up contractor will be appointed to clean up the spill. Hazardous waste may be generated where absorbent materials are used to mop up a product spill. This will be suitably contained and handled by a specialist contractor using the correct personal protective equipment and hazardous waste temporary storage receptacles.<br>7. Should any pollution of water resources or soil be detected during construction and operational phase; the Department: Water & Sanitation: Western Cape Region must be informed immediately, and appropriate remediation process must take place in consultation with this Department.<br>8. Disposal of such waste must take place at a registered hazardous disposal facility with chain-of-custody documentation provided by the contractor as proof of end recipient.<br>9. The ECO will supervise any remediation procedures in order to ensure that the correct material is treated.<br>10. If the location of any existing service lines is not known, a Ground Probing Radar (GPR) survey will be required to take place prior to construction to map out the existing service on site. The objective is to avoid accidental damage of service lines which may cause impacts to the receiving environment.<br><br>In addition, the following general management measures will be implemented to avoid contamination of soil and groundwater:<br><br><u>Waste Management:</u><br>1. Hazardous waste bins must be kept on an impermeable bunded surface capable of holding at least 110% of the volume of the bins.<br>2. Skips/ bins must be provided with secure lids or covering that will prevent scavenging and windblown waste or dust.<br>3. Waste bins/skips must be regularly emptied and must not be allowed to overflow.<br>4. Construction workers must be instructed not to litter and to place all waste in the appropriate waste bins provided on site.<br>5. All waste (hazardous and general) generated from the proposed activities must be disposed of appropriately at a licensed Waste Disposal Facility (WDF). Waste receipts are required as proof of safe disposal and must be kept on site and made available to the ECO or competent authority on request. | | |

Pollution Management – hydrocarbons (oil, fuel etc.)

1. Vehicles and machinery must be in good working order and must be regularly inspected for leaks.
2. If a vehicle or equipment is/are leaking pollutants it must, as soon as possible, be taken to an appropriate location for repair.
3. Repairs to vehicles/ machinery may take place on site, within a designated maintenance area at the site camp. Drip trays, tarpaulin or other impermeable layer must be laid down prior to undertaking repairs.
4. Refueling of vehicles/ machinery may only take place at the site camp or vehicle maintenance yard. Where refueling must occur, drip trays should be utilised to catch potential spills/ drips.
5. Drip trays must be utilised during decanting of hazardous substances and when refilling chemical/ fuel storage tanks.
6. Drip trays must be placed under generators (if used on site) water pumps and any other machinery on site that utilizes fuel/ lubricant, or where there is risk of leakage/spillage.
7. Soil contaminated by hazardous substances must be excavated and disposed of as hazardous waste.

Pollution Management – Ablution facilities

1. Chemical toilets should be kept at the site camp, on a level surface and secured from blowing over.
2. Toilets must be located well outside of any storm water drainage lines and may not be linked to the storm water drainage system in any way.
3. Chemical toilets must be regularly emptied, and the waste disposed of at an appropriate wastewater disposal/ treatment site. Care must be taken to prevent spillages when moving or servicing chemical toilets.
4. Waste disposal receipts are required as proof of safe disposal.

Cement Batching:

1. Cement batching must take place on an impermeable surface large enough to retain any slurry or cement water run-off. If necessary, plastic/ bedim lined detention ponds (or similar) should be constructed to catch the run-off from batching areas. Once the water content of the cement water/ slurry has evaporated the dried cement should be scraped out of the detention pond and disposed of at an appropriate disposal facility authorised to deal with such waste
2. Cement batching should take place on already transformed areas within the footprint of the facility.
3. Unused cement bags must be stored in such a way that they will be protected from rain. Empty cement bags must not be left lying on the ground and must be disposed of in the appropriate waste bin.
4. Washing of excess cement/concrete into the ground is not allowed. All excess concrete/ cement must be removed from site and disposed of at an appropriate location.

Hydrocarbon Spillage Management:

1. Incident Reporting: Any hydrocarbon spill must be reported immediately upon detection to ensure prompt and appropriate

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| response.<br>2. Spill Response and Clean-up: A trained and qualified clean-up contractor must be appointed to manage any hydrocarbon spill incident. The use of absorbent materials during cleanup may generate hazardous waste, which must be securely contained and disposed of by a specialist contractor. Appropriate personal protective equipment (PPE) and designated hazardous waste receptacles must be used.<br>3. Spill Kit Availability and Staff Training: A fully stocked spill response kit must be maintained on-site and remain easily accessible at all times. All site personnel must be trained in the proper procedures for containing and cleaning up minor hydrocarbon spills.<br>4. Fuel Storage Requirements: Hydrocarbons stored on-site at any project phase must be housed in a purpose-built, impermeable bunded area with a containment capacity of at least 110% of the largest possible spill volume. These bunded areas must be graded to direct flow to a series of catch pits connected to the site's separator system.<br>5. Emergency Procedures: Emergency management procedures must be established and available on-site for all phases of the project—construction, operation, and closure. The current Emergency Response Plan (ERP) must be maintained on-site and made readily accessible to all personnel.<br>6. Bund Area Construction Protocols: During the construction of the shared bunded area for the fuel storage tank and associated infrastructure, a competent contractor must be appointed. The contractor must follow best practices for material handling to minimize the risk of hydrocarbon-related incidents.<br>7. Containment of Hazardous Substances: All fuels, chemicals, lubricants, and hazardous substances must be stored under cover and within bunded areas lined with an approved impermeable barrier or equipped with secondary containment systems.<br>8. Design to Prevent Overland Flow: The facility must be engineered to prevent surface water from adjacent properties from entering fuel storage areas.<br>9. Dispenser Pump Design: All dispenser pumps must be installed on raised pump islands surrounded by hardened, impermeable surfaces. These surfaces must prevent downward seepage and instead direct any spill to catch pits connected to the separator system.<br>10. Tank Filler Point Drainage: The area surrounding tank filler points must be sloped to direct any spillage or runoff into a catch pit linked to the separator system, ensuring containment.<br>11. Oil-Water Separation: An oil-water separator must be installed on-site to treat runoff. The treated discharge must be directed to the municipal sewer system, ensuring compliance with local water quality standards. | | |

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| **Performance Indicator:** | • The ECO will monitor the site to check that the measures have been implemented.<br>• The environment is not polluted or contaminated as a result of construction activities on site.<br>• Spillage incidents are effectively contained and do not lead to pollution of the soil or water resources.<br>• Waste is reduced, reused, and recycled where possible. |

### 8.2.3. Objective 3: Limit Noise and Dust Impacts

As a result of the construction phase, noise and dust impacts are expected to occur in the area due to an increase in construction vehicles and road tankers for the duration of the construction phase while materials are being transported to the site and excavations are being made.

| **Impact Management Outcome:** | The surrounding environment, land users, residents and passers-by do not experience significant nuisance impacts related to dust, noise and vibration. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| <u>Dust Mitigation:</u><br><br>1. If dust issues occur, dust can be suppressed on access roads and the construction site during dry periods by the regular application of non-potable water or a biodegradable soil stabilisation agent. Under no circumstances should potable water be used for dust suppression. Potable water should not be used for anything besides drinking.<br>2. Dust suppression measures such as the wetting down of sand heaps as well as exposed areas around the site should be implemented especially on windy days.<br>3. No potable water may be used for dust suppression purposes.<br>4. The use of straw worked in the sandy areas may also help and the ECO must advise when this is necessary.<br>5. If dust appears to be a continuous problem the option of using shade cloth to cover open areas may be necessary or the erecting of shade netting above the fenced off may need to be explored.<br>6. All vehicles transporting sand need to have tarpaulins covering their loads which will assist in any windblown sand occurring off the trucks.<br>7. Dust levels specified in the National Dust Control Regulations (GN 827 of November 2013) may not be exceeded.<br>8. A Complaints Register must be available at the site office for inspection by the ECO of dust complaints that may have been received.<br>9. The appointed Environmental Control Officer (ECO) must undertake regular site inspections for the duration of the construction phase, and produce regular ECO monitoring audit reports, auditing on the compliance of the approved EMP.<br><br>*Contingency Actions in windy conditions:*<br><br>10. If visible, dust emissions occur from the site or the site access road during windy conditions, the client and main contractor will need to investigate the cause and implement necessary control to prevent further emissions. | Agrimark (Pty) Ltd and the Construction Contractor in consultation with the ECO | Construction Phase |

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| 11. If visible dust emissions occur from the site due to operation processes, the client and main contractor will need to investigate the cause and implement necessary control to prevent further emissions.<br><br>Noise Mitigation:<br><br>12. A noise complaints register must be opened.<br>13. Excavations and earth-moving activities should be restricted to normal construction working hours (7:30 – 17:30) as far as possible.<br>14. Vehicles and equipment should be kept in good working condition. If deemed necessary, machinery and equipment should be fitted with mufflers/ exhaust silencers. No unnecessary disturbances should be allowed to emanate from the construction site.<br>15. Noise levels must comply with the relevant health & safety regulations and SANS codes and should be monitored by the Health & Safety Officer as necessary and appropriate.<br>16. The appointed Environmental Control Officer (ECO) must undertake regular site inspections for the duration of the construction phase, and produce regular ECO monitoring audit reports, auditing on the compliance of the approved EMP. | | |
| **Performance Indicator:** | • The appointed Environmental Control Officer (ECO) must undertake regular site inspections for the duration of the construction phase, and produce regular ECO reports monitoring the compliance of the property developer with the conditions of the approved EMP.<br>• Excessive dust does not arise from the site.<br>• No dust or noise complaints are received from any member of the community. | |

### 8.2.4. Objective 4: Limit Traffic Impacts to Existing Road Users, Pedestrians & Road Infrastructure

As a result of the construction phase, traffic impacts are expected to occur in the area due to an increase in construction vehicle and truck traffic in the area for the duration of the construction phase while materials are being transported to the site. Road safety impacts and road condition impacts could also occur.

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| **Impact Management Outcome:** | During the construction phase while materials are being delivered to the site, damages to road infrastructure does not occur and the safety to pedestrians is not at unacceptable risk. | | |
| **IMPACT MANAGEMENT ACTIONS:** | | | |
| **Mitigation Measure** | | **Responsible** | **Time Period** |
| 1. The contractor must provide a traffic marshal for situations where heavy construction traffic may impede normal traffic flows on any roads adjacent to the site.<br>2. All drivers and machinery operators must exercise due caution when entering/ exiting the site.<br>3. Construction vehicles must adhere to the load carrying capacity of road surfaces and adhere to all other prescriptive regulations regarding the use of public roads by construction vehicles.<br>4. The Contractor must ensure that any large or abnormal loads (including hazardous materials) that must be transported to/ from the site are routed appropriately, and that appropriate safety precautions are taken during transport to prevent road accidents.<br>5. All vehicles will be legally compliant.<br>6. All drivers will be competent and in possession of an appropriate valid driver's license.<br>7. All vehicles travelling on site will adhere to the specified speed limits.<br>8. The movement of all vehicles will be controlled such that they remain on designated routes.<br>9. No member of the workforce will be permitted to drive a vehicle under the influence of alcohol or narcotic substances.<br>10. Warning signage (i.e., "trucks turning") must be erected near the access point to the site.<br>11. A traffic marshal should be posted at the entrance to the site to assist with the safe and smooth flow of vehicles on the road whilst heavy construction traffic is entering and exiting the site.<br>12. No construction traffic may access the site after normal working hours as defined by the local authority. | | Agrimark (Pty) Ltd and the Construction Contractor in consultation with the ECO | Construction Phase |
| **Performance Indicator:** | • The ECO will monitor these mitigation measures to ensure they are implemented.<br>• No safety incidents occur to pedestrians. | | |

### 8.2.5. Objective 5: Reduce the Visual Impact of the Construction Phase Activities

The construction phase is associated with temporary disturbance as a result of construction (trench excavations, vehicles, machinery, fencing & signage) that may have a negative visual impact on the public.

| **Impact Management Outcome:** | Sensitive receptors are not significantly impacted upon by construction activities taking place. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Consult with the ECO when determining the appropriate site for the site camp prior to the establishment of the site camp on site.<br>2. The site camp must be kept neat and tidy and free of litter at all times.<br>3. Waste must be managed according to the EMPr.<br>4. Good housekeeping practices on site must be maintained to ensure the site is kept neat and tidy.<br>5. The site camp, storage facilities, stockpiles, waste bins, and any other temporary structures on site should be located in such a way that they will present as little visual impact to surrounding residents and road users as possible.<br>6. Work on site must be well-planned and well-managed so that work proceeds quickly and efficiently, thus minimizing the disturbance time.<br>7. The site camp will require visual screening via shade cloth or other suitable material.<br>8. Special attention should be given to the screening of highly reflective material.<br>9. Use of lighting (if required) should take into account surrounding land users and should present little or no nuisance. Downward facing, spill-off type lighting is recommended.<br>10. Construction vehicles must enter and exit during working hours.<br>11. The appointed Environmental Control Officer (ECO) must undertake at least one site inspection weekly for the duration of the construction phase, and to produce a short ECO report monitoring the compliance of the property developer with the conditions of the approved EMP. | Agrimark (Pty) Ltd and the Construction Contractor in consultation with the ECO | Construction Phase |
| **Performance Indicator:** | ➢ The ECO will monitor the performance of the impact management actions.<br>➢ Good “housekeeping” is evident on site.<br>➢ The site does not pose a visual impact to the surrounding community. | |

### 8.2.6. Objective 6: Avoid Fire, Health & Safety Risk

Exposure through breathing vapours, swallowing hazardous substances or skin contact may have possible health effects. There is a minor risk of a hydrocarbon pool fire and toxic combustion gases if an incident occurs at the existing facility while construction takes place for the proposed expansion activity.

| **Impact Management Outcome:** | Fuel delivery, storing and dispensing activities are undertaken responsibly and in in line with the National Standards so that risk of explosion or exposure to hazardous vapours and liquids is avoided. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. The mitigation measures listed under the operational phase to avoid fire, health and safety risks are also applicable to be implemented during the construction phase seeming as there are existing tanks on the site.<br>2. A Fire Plan schematic (layout plan) and supporting narrative must be compiled that shows the location of the fire extinguishers, hydrants, ingress, exits, assembly points, bund walls etc.<br>3. The Emergency Plan has to be compiled / updated with the input and cooperation of both the employer and the local government.<br>4. The installation of Aboveground Storage Tanks and associated pipework must be implemented in accordance with the relevant South African National Standards (SANS), specifically (not exclusive to) the following standards:<br>o ***SANS 1535: Storage tank manufacture standards.***<br>o ***SANS 10 400TT (Fire Protection) 53 Sections 1-6 (The application of the National Building Regulations- Installation of Liquid Fuel Dispensing Pumps and Tanks);***<br>o ***SANS 10087-3 (2008) (English): The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations Part 3: Liquefied petroleum gas installations involving storage vessels of individual water capacity exceeding 500 L.***<br>5. The installation of the Aboveground Storage Tanks and associated pipework must comply with the National Building Regulations and Standards Act No. 103 of 1977.<br>6. The installation must comply with local authority bylaws and all procedures and equipment used must be in accordance with the Occupational Health & Safety Act (No. 85 of 1993).<br>7. Upon completion of the UST installation, an engineer is to inspect and verify that the tanks and the associated infrastructure have been installed as per all required SABS / SANS standards and applicable legislation.<br>8. The careful location and elevation of the vent pipes to allow for the maximum dispersion of vapour.<br>9. The Fuel storage system Vent Pipes must be so positioned, fully maintained and fully operational at all times to prevent odour emissions from causing nuisances.<br>10. In the event of odour nuisances being reported to the City, the Air Quality Officer reserves the right to call for the installation of odour | Construction Contractor, Resident Engineer and Applicant | Construction Phase |

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| abatement equipment or a vapour recovery system to be installed.<br>11. Best available methodology for the control of fugitive vapour emissions during the refueling of tank operations, be investigated and considered i.e., the use of bottom loading; and a system to return displaced tank vapour to tanker, be considered.<br>12. The operation and positioning of the standby generator must not pose any air pollution nuisances to abutting neighbours and receptors in the receiving environment.<br>13. When Section 30 (emergency incident) of the National Environmental Management Act 107 of 1998, is triggered - the Act defines an emergency incident as 'an unexpected sudden and uncontrolled release of a hazardous substance, including from a major emission, fire or explosion, that causes, has caused or may cause significant harm to the environment, human life or property', the City's Air Quality Management Unit must be notified in writing within the prescribed timeframes, of such incidents that involve emissions to atmosphere. Any emergency incident, originating at the facility, which falls within the definition of section 30(1)(a) of the National Environmental Management Act (NEMA), Act 107 of 1998, must be dealt with by the facility in accordance with Section 30 of NEMA. In the event of any incident the facility must ensure containment by the responsible person and report the incident to the DEADP (Mrs. Amina Sulaiman, contact number: 021-4832571, email: Amina.Sulaiman@westerncape.gov.za).<br>14. Adequate training in emergency response situations of the contractor and personnel undertaking the construction activities will be carried out. All workers on site will be informed of the emergency procedure to follow in the event of accidental fires.<br>15. No open fires will be allowed on the construction site during any phase of the project. No smoking will be allowed on the construction site.<br>16. Minimisation of hot work by using alternative methods and equipment such as air driven tools, cold cutting and pre-fabrication off site.<br>17. The use of appropriate shielding and screening such as blanketing with firefighting foam and water screens to minimise fire risk.<br>18. Minimisation through spark quenching by wetting down and/or using construction power tools such as jack hammers under sprayed water.<br>19. All people working on site are responsible for their own safety on site. Contractors and Principal Agent/s shall at all times comply with the relevant statutory requirements including the Occupational Health and Safety Act, Act 85 of 1993.<br>20. A comprehensive site specific first aid kit must be available on site at all times.<br>21. At least one person trained in safety and first aid and familiar with the first aid equipment on site must be present on the site at all times.<br>22. Emergency procedures will be established prior to the start of construction works on site.<br>23. Awareness training of personnel at the site and for road tanker drivers delivering fuel to site will be conducted.<br>24. There should be adequate hazard signage for employees, customers and visitors to the premises to create awareness of | | |

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| possible hazards and to cultivate and encourage risk conscious behavior. | | |
| **Performance Indicator:** | No health incidents, explosions, or disasters take place on site. | |

### 8.2.7. Objective 7: Enhance Business & Employment Opportunities

Skilled and unskilled employment opportunities are expected to be created during the construction phase.

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| **Impact Management Outcome:** | The expansion activity provides a benefit to the local community in terms of job provision and skills development opportunities. | |
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Preference should be given to historically disadvantaged individuals from the local and surrounding communities when appointing employees for construction work. | Agrimark (Pty) Ltd and the Construction Contractor in consultation with the ECO | Construction Phase |
| **Performance Indicator:** | Employment opportunities are created of which preference is given to the local community. | |

## 8.3. POST CONSTRUCTION REHABILITATION PHASE

After all construction activities have ceased, the site must be cleared of all construction related equipment, materials, facilities and waste. In addition, all disturbed surfaces – including disturbed areas around the new facilities and all areas utilised for site facilities – must be stabilized and rehabilitated.

**The environmental management objective (goal) for this phase is to:**

1. Rehabilitate & ensure environmentally sensitive closure of the construction site.

### 8.3.1. Objective 1: Rehabilitate disturbed areas & ensure environmentally sensitive site closure

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| **Impact Management Outcomes:** | • The site is neat and tidy, and all exposed surfaces are suitably covered/ stabilized.<br>• There is no construction-related waste or pollution remaining on site. | | |
| **IMPACT MANAGEMENT ACTIONS:** | | | |
| **Enhancement Measure** | | **Responsible** | **Time Period** |
| 1. On completion of the construction operations, the site camp area must be cleared of all site camp facilities, ablution facilities, fencing, signage, waste and surplus material.<br>2. Surfaces are to be checked for waste products from activities such as concreting or asphalting and cleared in a manner approved in writing by the ECO.<br>3. Any contaminated soil must be collected and disposed of as hazardous waste. Due to the limited landfill airspace available it is important that the developer / owner investigate alternative treatment methods before final disposal at a hazardous waste disposal facility.<br>4. All construction waste, litter and rubble are to be removed from the site and re-used elsewhere or recycled/disposed of at an appropriate facility. Burying or burning of waste or rubble on site is prohibited.<br>5. Any topsoil, subsoil or other excavated material that cannot be utilized during site rehabilitation should be removed from the site and reused elsewhere in the Municipality or disposed of at an appropriate disposal site.<br>6. Final landscaping and rehabilitation of the site must be done to the satisfaction of the ECO and signed off by the ECO. | | Agrimark (Pty) Ltd and the Construction Contractor in consultation with the ECO | Post-Construction rehabilitation<br><br>*(some rehabilitation measures can be applied during the construction phase, as construction activities are completed in each area)* |
| **Performance Indicator:** | • All construction-related materials, equipment, facilities and waste have been removed from the site.<br>• All residual construction-related waste, pollution and contaminated soils have been removed from site. | | |

## 8.4. OPERATIONAL PHASE

The operation phase of the proposed expansion activity can have impacts to surrounding residents if not managed appropriately. With a large amount of fuel being stored on site there is the potential for health & safety impacts, air quality impacts due to fuel vapours and soil and groundwater contamination if environmental management measures are not implemented. In addition, traffic & safety impacts are associated with a service station and retail centre due to the increase in vehicle trips in and out.

**The environmental management objectives (goal) for this phase:**

1. Avoid Soil & Groundwater Contamination and Indirect Human Health Impacts
2. Waste Management
3. Water Management
4. Energy Management
5. Noise and Vibration
6. Avoid Air Quality Impacts
7. Avoid Fire, Health & Safety Impacts
8. Limit Traffic & Safety Impacts from Occurring
9. Reduce Visual Impact
10. Enhance Socio Economic Benefit

### 8.4.1. Objective 1: Avoid Soil & Groundwater Contamination

During the operational phase of the proposed fuel expansion project soil and groundwater contamination could result due to fuel spills associated with re-filling of the above ground storage tanks. In addition, if stormwater is not managed correctly there is the potential for the unmanaged stormwater runoff to impact negatively on the environment, potentially causing pollution and contamination. The aboveground fuel storage tanks could leak and contaminate the soil and groundwater.

| **Impact Management Outcome:** | No soil or groundwater contamination occurs. | |
|---|---|---|
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| The following precautionary measures will be followed on site:<br><br>1. Fuel storage records must be kept on site (incoming & outgoing fuel) to account for fuel leaks and spills.<br>2. Drip trays will be available for any vehicles that may be potentially leaking.<br>3. Emergency spill kits will be kept on site. All employees must be trained in how to effectively utilize the spill kit in emergency situations. Spill kits must be kept clean, and any spilled waste being stored in the bin must be removed and disposed of as hazardous waste at a registered hazardous disposal facility. Waste receipts are required as proof of safe disposal.<br>4. The storage tanks will be regularly inspected for any leaks.<br>5. The installation of Aboveground Storage Tanks and associated pipework must be implemented in accordance with the relevant South African National Standards (SANS), specifically (not exclusive to) the following standards:<br>o ***SANS 10131(2004): Fuel storage tanks for petroleum products.***<br>o ***SANS 10 400TT (Fire Protection) 53 Sections 1-6 (The application of the National Building Regulations- Installation of Liquid Fuel Dispensing Pumps and*** | Agrimark (Pty) Ltd | Operational Phase |

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| ***Tanks);***<br>○ ***SANS 10087-3 (2008) (English): The handling, storage, distribution and maintenance of liquefied petroleum gas in domestic, commercial, and industrial installations Part 3: Liquefied petroleum gas installations involving storage vessels of individual water capacity exceeding 500 L***<br><br>7. The installation of the Aboveground Storage Tanks and associated pipework must comply with the National Building Regulations and Standards Act No. 103 of 1977.<br>8. The installation must comply with local authority bylaws and all procedures and equipment used must be in accordance with the Occupational Health & Safety Act (No. 85 of 1993).<br>9. Upon completion of the AST installation, an engineer is to inspect and verify that the tanks and the associated infrastructure have been installed as per all the required SABS / SANS standards and applicable legislation.<br>10. All containment manholes must be regularly inspected as part of the normal management procedures at the service station.<br>11. Observation wells must be inspected regularly, and water samples recovered during winter and summer for Macro chemistry and Hydrocarbon analysis.<br>12. An Emergency Response Plan & Spill Contingency Plan must be produced (or any existing plans updated) prior to the operation of the upgrade and included as an Annexure to the EMP.<br>13. If an "incident[6]" takes place on site, the owner of the facility must within 14 days of the incident, report to the Director General, provincial head of department and municipality such information as is available to enable an initial evaluation of the incident, including (refer to footnote below for definition of "incident"):<br>a) the nature of the incident.<br>b) the substances involved and an estimation of the quantity released and their possible acute effect on people and the environment and data needed to assess these effects.<br>c) initial measures taken to minimise impacts.<br>d) causes of the incident, whether direct or indirect, including equipment, technology, system or management failure.<br>e) measures taken and to be taken to avoid a recurrence of such an incident.<br>14. Should any pollution of water resources or soil be detected during the construction and operational phase; the Department: Water & Sanitation: Western Cape Region must be informed immediately, and an appropriate remediation process must take place in consultation with this Department.<br>15. In the event of any incident the facility must ensure containment by the responsible person and report the incident to the DEADP (Mr. Simon Botha, 021-4830752, Simon.Botha@westerncape.gov.za). | | |
| **Performance Indicator:** | The groundwater is not polluted with hydrocarbons. | |

### 8.4.2. Objective 2: Waste Management

If waste is not managed correctly during the operational phase there is the potential for the unmanaged waste to impact negatively on the environment, potentially causing pollution and contamination.

| **Impact Management Outcome:** | To minimise the disposal to landfill of any general waste generated at the site and to minimise the potential health, safety and environmental risks associated with the incorrect disposal of hazardous waste. | |
|---|---|---|
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| a) <u>General Waste:</u><br><br>1. The Applicant should consider waste separation for each type of recyclable waste (separation-at-source has historically proven to be the most cost-efficient means of waste sorting for recycling purposes).<br>2. The Applicant should choose a private waste collection contractor who is able to keep the recyclable and non-recyclable waste streams separate during transportation and ensure that the end users for the recycled materials are recognised recycling operations.<br>3. In terms of waste minimisation, the Applicant should wherever possible encourage suppliers, such as the supplying oil company, to as far as possible utilise packaging materials which are recyclable, and which are manufactured from recycled materials.<br>4. Solid waste must only be disposed of to an authorised licensed landfill facility.<br>5. The applicant must ensure that recycling takes place where possible and that there is separation of recyclable material at source.<br>6. Bins to temporarily store recyclable material must be made available.<br>7. Good housekeeping must be maintained for the temporary storage of recyclable materials<br>8. Good housekeeping must be maintained for the temporary storage of general wastes<br>9. The premises must be rodent proofed in accordance with the Government Rodent proofing regulations.<br>10. It is encouraged that the applicant supports local SMME's in the recycling sector by making recyclable material available for beneficiation purposes.<br><br>b) <u>Hazardous Waste:</u><br><br>1. Adequate training of personnel operating the refueling facilities must take place in order to ensure that incidents resulting in product spills etc. are minimised and that the correct actions are taken in the event of an incident.<br>2. The temporary storage of hazardous household materials such as batteries, compact fluorescent lamps (CFL's) and chemicals must be provided for. The disposal thereof must be administered in a responsible manner. Prior to disposal of these hazardous household materials, the owner must identify any possible treatment technology before any disposal at a hazardous waste | Agrimark (Pty) Ltd | Ongoing during Operational Phase |

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| disposal facility.<br>3. In the event of such an emergency condition, a suitably trained and approved clean-up contractor must be appointed to clean up the spill or other such incident. Hazardous waste may be generated where absorbent materials are used to mop up a product spill. This will be suitably contained and handled by a specialist contractor using the correct personal protective equipment and hazardous waste temporary storage receptacles.<br>4. Disposal of such waste at a suitable hazardous landfill site must take place, with chain-of-custody documentation provided by the contractor as proof of end recipient. | | |
| **Performance Indicator:** | • Effective waste management practices must be implemented throughout the operational phase.<br>• Collection of general, hazardous and recyclables should take place on a weekly basis. | |

### 8.4.3. Objective 3: Water Management

During the operational phase, water must be managed and used efficiently at all times on site.

| **Impact Management Outcome:** | To minimise potable (e.g., drinking) water usage and to maximise the efficiency with which all water is used on site | |
|---|---|---|
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Water efficiency technologies are to be implemented on all facilities on site with which the use of water (potable or non-potable) is associated.<br>2. The above may include but is not limited to drip irrigation, dual flush toilets, waterless urinals and low flow taps.<br>3. Xeriscaping (i.e., use of water conserving indigenous gardens) should be strongly encouraged.<br>4. A tenant/owner education programme demonstrating the above should also be implemented in order to raise awareness to the operational requirements of the development.<br>5. No pollution of surface or groundwater resources may occur due to any activity on the site.<br>6. All relevant sections and regulations of the National Water Act, 1998 (Act No. 36 of 1998) must be adhered to.<br>7. Storm water runoff must be controlled to ensure that on-site activities do not result in off-site pollution.<br>8. Measures to control illegal dumping (including visible signage) of construction waste must be implemented to prevent pollution of surface water run-off. | Agrimark (Pty) Ltd | Ongoing during Operational Phase |
| **Performance Indicator:** | Ensure compliance with the local authority by-laws and any other statutory requirements relating to water efficiency. | |

### 8.4.4. Objective 4: Energy Management

During the operational phase, energy must be managed and used efficiently at all times on site.

| **Impact Management Outcome:** | To minimise energy usage and maximise the efficiency with which all energy (e.g., electricity) is used on site. | |
|---|---|---|
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Energy efficiency technologies are to be implemented on all facilities on site with which the use of electricity is associated.<br>2. The above may include (as appropriate) but is not limited to solar hot water geysers, passive heating, cooling and ventilations systems, and energy efficient lighting and machinery for example.<br>3. A tenant/owner education programme demonstrating the above should also be implemented in order to raise awareness as to the operational requirements of the expansion activity. | Agrimark (Pty) Ltd | Ongoing during Operational Phase |
| **Performance Indicator:** | To ensure compliance with the local authority by-laws and any other statutory requirements relating to energy efficiency. | |

### 8.4.5. Objective 5: Noise and Vibration

An increase in noise and vibration during the operational phase of the proposed expansion activity may cause a nuisance or impact adjacent residents, staff on site or users of the service station and retail centre.

| **Impact Management Outcome:** | To minimise any potential noise impacts related to the operations of the site. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Every attempt must be made to reduce noise levels to ensure minimum nuisance by the noise source.<br>2. The site operator must use appropriate, modern equipment, which produces the least noise.<br>3. Any unavoidably noisy equipment must be identified and located in an area where it has least impact.<br>4. Air compressors that will be used to inflate motor vehicle tyres must be located in a unit that will mitigate its noise impacts.<br>5. The use of noise shielding screens should be considered by the project team as and when required. This would be applicable to items such as air conditioning units, compressors and refrigeration equipment.<br>6. The provisions of **SANS 1200 Sub clause 4.1** regarding "built-up areas" shall apply to all areas within audible distance of residents whether in urban, peri-urban or rural areas.<br>7. No amplified music shall be allowed on site. The use of radios, tape recorders, compact disc players, television sets etc. shall not be permitted unless the volume is kept sufficiently low as to avoid any intrusion on members of the public within range.<br>8. Any contractors working on the site shall not use sound amplification equipment on site unless for the purposes of site safety and communications and in emergency situations.<br>9. No on-site noise generating work, such as routine maintenance and repairs, is to be conducted outside of approved working | Agrimark (Pty) Ltd | Ongoing during Operational Phase |

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| hours unless in consultation with the local authority and advised to the adjacent property owners/occupants prior to works taking place.<br>10. During fuel delivery, the engine of the fuel delivery truck is to be switched off to avoid unnecessary noise during this process. | | |
| **Performance Indicator:** | Ensure compliance with all legal requirements, including the local authority by-laws and any other statutory requirements relating to noise impacts. | |

### 8.4.6. Objective 6: Avoid Air Quality Impact

Fuel vapour emissions may cause an odour nuisance or health impacts to adjacent residents, staff on site or to users of the service station and retail centre.

| **Impact Management Outcome:** | Fuel vapour emissions do not cause an odour nuisance or health impacts to adjacent properties or to users of the fuel depot. | |
|---|---|---|
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Awareness training of personnel at the site and for road tanker drivers delivering fuel to site will be conducted.<br>2. Contractors and Principal Agent/s shall at all times comply with the relevant statutory requirements including the Occupational Health and Safety Act, Act 85 of 1993.<br>3. Site-specific protocols with regard to delivery and use of products and use of the relevant SANS procedures.<br>4. The careful location and elevation of the vent pipes to allow for the maximum dispersion of vapour.<br>5. The careful location and elevation of the vent pipes to allow for the maximum dispersion of vapour.<br>6. The Fuel storage system Vent Pipes must be so positioned, fully maintained and fully operational at all times to prevent odour emissions from causing nuisances.<br>7. In the event of odour nuisances being reported to the City, the Air Quality Officer reserves the right to call for the installation of odour abatement equipment or a vapour recovery system to be installed.<br>8. Best available methodology for the control of fugitive vapour emissions during the refueling of tank operations, be investigated and considered i.e., the use of bottom loading; and a system to return displaced tank vapour to tanker, be considered.<br>9. The operation and positioning of the standby generator must not pose any air pollution nuisances to abutting neighbours and receptors in the receiving environment.<br>10. If Section 30 (emergency incident) of the National Environmental Management Act 107 of 1998, is triggered - the Act defines an emergency incident as '*an unexpected sudden and uncontrolled release of a hazardous substance, including from a major emission, fire or explosion, that causes, has caused or may cause significant harm to the environment, human life or property'*, the City's Air Quality Management Unit must be notified in writing within the prescribed timeframes, of such incidents that involve emissions to atmosphere. | Agrimark (Pty) Ltd | Ongoing during Operational Phase |

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| **Performance Indicator:** | No incidents occur. No air quality or odour complaints are received. |

### 8.4.7. Objective 7: Avoid Fire, Health & Safety Impacts

Exposure through breathing vapours, swallowing hazardous substances or skin contact may have possible health effects. The hazardous events identified that could occur at the facility could be an uncontrolled diesel or petrol leak at the service station from a bulk storage tank or an uncontrolled leak of diesel or petrol from the delivery road tanker. As a result of the hazardous events, the identified potential major incidents could be a diesel or petrol pool fire at the storage tanks or the delivery road tanker and toxic effect of diesel or petrol combustion gases in case of a pool fire at the storage tanks.

| **Impact Management Outcome:** | The fuel depot is operated in a safe and responsible manner in line with the legislative requirements for the operation of a fuel depot. | |
|---|---|---|
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Two mobile foam pourers of 100 kg should each be placed on the northern and southern sides of the service station.<br>2. No flammable materials, such as wooden pallets, must be stored near the bulk diesel tanks or near the area where the road tanker parks for fuel deliveries.<br>3. The emergency management plan must be updated at least once per year.<br>4. Operating procedures must be updated for the facility, to include preventative measures against hydrocarbon leaks.<br>5. All possible ignition sources near areas where fuel is stored and handled at the facility must be eliminated. Guidelines for the control of ignition sources are as follows:<br>a. Use only electrical equipment that is certified to be flameproof and spark proof.<br>b. Control static electricity.<br>c. Ensure that vulnerable equipment is properly bonded to ground.<br>d. Prohibit smoking, open flames and sparks.<br>e. Prevent mechanical sparks and friction.<br>f. Use separator devices to remove foreign materials capable of igniting from process materials.<br>g. Separate heated surfaces from dust.<br>h. Separate heating systems from dust.<br>i. Select and use industrial trucks properly.<br>j. Use cartridge activated tools properly.<br>k. Implement an equipment preventative maintenance programme.<br>6. The outcome of the risk assessment must be brought to the attention of all the employees at the facility.<br>7. The fuel storage tanks, and all pipelines and fittings must be protected against corrosion, to prevent hydrocarbon leaks.<br>8. The Maintenance Plan must be updated for all the equipment used on the facility. The Plan must contain at least the following:<br>a. List of all equipment and facilities on the facility.<br>b. Maintenance frequency.<br>c. Particulars of maintenance activities that must be performed on the listed equipment. | Agrimark (Pty) Ltd | Operational Phase |

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| d. Responsible person.<br>9. All hazardous equipment and facilities on the facility must be inspected on a weekly basis by means of an Inspection Register. The Register must contain at least the following:<br>a. List of all equipment and facilities on the facility.<br>b. Equipment items that must be inspected.<br>c. Facilities that must be inspected.<br>d. Areas that must be inspected.<br>e. Inspection findings.<br>f. Responsible person who carried out the inspection.<br>10. Detailed operating procedures must be updated at least annually for all sections of the service station, in collaboration with the equipment suppliers. All authorised operators must be trained in the application of the procedure. Special attention must be given to the offloading of diesel via road tankers on the premises.<br>11. Material safety data sheets (MSDS) for the following hazardous materials must be available on site at all times:<br>a. Diesel.<br>b. Petrol.<br>12. All operating personnel at the facility must be made aware and kept aware of the dangers involving diesel.<br>13. Access to the facility must be controlled 24 hours per day. The safety guard on duty must comply with the following requirements:<br>a. The guard must be trained in the potential major incidents that could occur at the site as well as the emergency procedure that must be followed.<br>b. The guard must be linked via safety management system or cellular phone with a responsible standby person of the operating company.<br>c. The guard must be able to contact the local Fire Department immediately.<br>14. The Emergency Evacuation Procedure aimed at workers must be updated at least once per year in collaboration with the emergency services of City of Saldanha Bay Municipality.<br>15. The Emergency Response Plan and Emergency Evacuation Procedure must be tested at least once every 12 months by means of mock emergencies. The Fire Department of Saldanha Bay Municipality must preferably participate in such tests.<br>16. Customer parking bays must be located in an area where public vehicles will not cause obstruction of emergency vehicles.<br>17. Adequate space must be provided for the road tankers to enter, exit and park safely for delivery of diesel to the bulk storage tanks.<br>18. The bulk storage tanks must be adequately earthed against lightning.<br>19. All workers and tank drivers must be informed of the emergency procedure to follow in the event of accidental fires.<br>20. Effective measures must be implemented to prevent overfilling of the storage tanks and the resultant spillage of diesel.<br>21. In order to minimise the risk of hydrocarbon spillages, the delivery road tanker may not reverse or man oeuvre on site.<br>22. No open fires will be allowed on the site.<br>23. A dedicated smoking area will be designated; no smoking is to take place outside of the dedicated smoking area. | | |

24. Firefighting facilities will be to Oil Industry standards, which will include hand-held fire extinguishers and a hose reel. These facilities must be approved by the local fire department.
25. All people working on site are responsible for their own safety on site. Contractors and Principal Agent/s shall at all times comply with the relevant statutory requirements including the Occupational Health and Safety Act, Act 85 of 1993.
26. A comprehensive site specific first aid kit must be available on site at all times.
27. At least one person trained in safety and first aid and familiar with the first aid equipment on site must be present on the site at all times.
28. There should be adequate hazard signage for employees, customers and visitors to the premises to create awareness of possible hazards and to cultivate and encourage risk conscious behavior.

***Prevention of an incident:***

- A foam fire-extinguishing system must be installed at the bunds of all diesel storage tanks.
- Communication must be established with the Ward Councillor responsible for the informal settlement. The emergency plan for the facility must be explained to him/her.
- A warning sign must be placed at the entrance to the site, to warn the local community about a possible diesel fire.
- The layout of the fuel storage facilities must be approved by the local emergency services.
- The emergency management plan must be updated when personnel changes or contact details occur, in accordance with the guidelines given in this report.
- Operating procedures for the site must be kept up to date to include preventative measures against the uncontrolled release of diesel from the storage tanks and the delivery road tankers.
- The outcome of the risk assessment must be brought to the attention of all the employees at the site.
- A Maintenance Plan must be compiled and kept up to date for all the diesel equipment used in the facility.
- All hazardous equipment and facilities on the facility must be inspected on a regular basis by means of an Inspection Register.
- All authorised operators must be trained in the application of the operating procedures applicable to their jobs.
- All operating personnel at the facility must be made aware and kept aware of the dangers involving fuel.
- The facility must remain under safety and security access control for 24 hours per day.
- The Emergency Evacuation Procedure aimed at workers and visitors must be updated at least annually in collaboration with the emergency services of the Municipality.
- The fuel delivery road tankers must never reverse on-site.
- The fuel road tankers must be inspected when it comes

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| onto the site, for possible overheated tyres, the smell of heated rubber, diesel leaks or other defects that can place the site at risk of fire.<br>• The Emergency Management Plan and Emergency Evacuation Procedure must be tested at least once every 12 months by means of mock emergencies. The emergency services of the municipality must be invited to participate in these tests.<br>• Customer and staff parking bays must be located in an area where public vehicles will not cause obstruction of emergency vehicles.<br>• All staff must be trained in emergency preparedness for a Diesel leak, in collaboration with the fire department.<br><br>***In case of a fire at the facility:***<br><br>• The foam fire-extinguishing system at the affected tank bund must be activated.<br>• The local fire brigade must immediately be informed.<br>• The emergency plan must be activated.<br>• Inhabitants of the informal settlement closest to the depot must be informed with a suitable megaphone to evacuate away from the depot. | | |
| **Performance Indicator:** | • The Emergency Evacuation Procedure is updated annually.<br>• The Emergency Response Plan and Emergency Evacuation Procedure must be tested at least once every 12 months by means of mock emergencies. The Fire Department of Saldanha Bay Municipallity must preferably participate in such tests.<br>• Health & safety impacts to humans are avoided.<br>• Incidents are avoided on site. | |

### 8.4.8. Objective 8: Limit Traffic & Safety Impacts from Occurring

Limited traffic impacts are expected to occur for the duration of the operational phase of the activity as existing traffic impacts are associated with the currently operating fuel service station. This could lead to safety impact or damage to road infrastructure.

| **Impact Management Outcome:** | • To ensure that any damages to the road network are maintained.<br>• To avoid traffic accidents or delays as a result of heavy traffic. | |
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| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| 1. Damages to the road network should be monitored and repaired as they occur.<br>2. All vehicles must be legally compliant.<br>3. All drivers must be competent and in possession of an appropriate valid driver's license.<br>4. All vehicles travelling on site must adhere to the specified speed limits.<br>5. The movement of all vehicles must be controlled such that they remain on designated routes.<br>6. No member of the workforce is permitted to drive a vehicle under the influence of alcohol or narcotic substances. This is strictly prohibited and is punishable by law.<br>7. Warning signage (i.e., "trucks turning") must be erected near the access point to the site. | Agrimark (Pty) Ltd | Construction Phase & Ongoing during Operational Phase |
| **Performance Indicator:** | An increase in traffic (due to proposed expansion activities) is not expected to occur due to the currently operating fuel service station already existing. Existing traffic should not cause damage to road infrastructure or traffic nuisances and significant delays in traffic. | |

### 8.4.9. Objective 9: Reduce the Visual Impact of the Proposed Expansion activity

Visual impacts associated with the operational phase of this proposal are envisaged to be negligible as the site consists of a large scale warehouse/retail centre as well as a existing fuel service station This proposal is therefore envisaged not to increase the severity of any visual-related impact during operation.

| **Impact Management Outcome:** | Sensitive receptors are not significantly impacted upon once the service station and retail centre has been built. | |
|---|---|---|
| **IMPACT MANAGEMENT ACTIONS:** | | |
| **Mitigation Measure** | **Responsible** | **Time Period** |
| The following mitigation measures should be implemented if not already carried out on site:<br>1. Preventative Maintenance Plans for the facility should be implemented to ensure good housekeeping of the infrastructure.<br>2. Avoid the use of bright materials and colours that may draw attention to the proposed expansion activity. Use exterior colours that have low reflectivity value and blend with the surroundings as far as possible.<br>3. Lighting should be designed appropriately along the following guidelines:<br>• Use low level lighting around buildings and along paths and streets.<br>• Avoid neon, spot, or up-lighting.<br>• Screen and filter lights sources as far as possible.<br>• Shield external lights on buildings to cast light only upon the area required to be illuminated.<br>• Ensure that naked light sources are not visible from beyond the site.<br>• Ensure that no light is emitted into the sky.<br>4. Ensure that fencing is visually permeable, contextually appropriate and softened with planting to provide visual screening. Use appropriate colours such as dark grey, charcoal, and black that are visually recessive.<br>5. Make allowance for on-going landscape maintenance to allow site vegetation to mature sufficiently to allow the environment to achieve maximum VAC.<br>6. Keep reflective surfaces to a minimum or ensure that these areas are shaded by roof overhangs, where possible.<br>7. Ensure that non-reflective paving surfaces are used as far as possible.<br>8. Place services underground, where possible. | Agrimark (Pty) Ltd | Operational |
| **Performance Indicator:** | • The ECO will monitor the performance of the impact management actions.<br>• Good “housekeeping” is evident on site.<br>• The site does not pose a visual impact to the surrounding community. | |

### 8.4.10. Objective 10: Enhance Business & Employment Opportunities

New and existing permanent employment opportunities are proposed to be created and retained, respectively.

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| **Impact Management Outcome:** | The expansion activity provides a benefit to the local community in terms of job provision, skills development opportunities, and retention of existing, permeant jobs. | | |
| **IMPACT MANAGEMENT ACTIONS:** | | | |
| **Mitigation Measure** | | **Responsible** | **Time Period** |
| 1. Preference should be given to historically disadvantaged individuals from the local and surrounding communities, when appointing permanent employees for the operational phase. | | Agrimark (Pty) Ltd | Operational Phase |
| **Performance Indicator:** | New employment (and skills development) opportunities are provided of which preference is given to the local community. | | |

## 9. IMPLEMENTATION OF THE EMP

### 9.1. Roles and Responsibilities, including Monitoring and Auditing

Environmental Control Officer ("ECO")

The ECO must be appointed prior to commencement of any construction activities.

The responsibilities of the ECO and the contractor will include monitoring of compliance with the EMPr by the applicant and any sub-contractors during the construction phase. The frequency of the site inspections will be **bi-weekly** until the completion of the construction phase. Pictorial reports will be submitted weekly, and a full audit report will be submitted when the construction phase has been completed.

The ECO has the authority to recommend the cessation of works on any portion of construction related activity to the applicant. This will be triggered if in his/her opinion the activity has caused or will imminently cause significant damage and/or harm to the environment or is in contravention of the relevant environmental legislation/permits/authorisations applicable to the site and/or activity/ies.

If the applicant fails to show adequate consideration to the EMPr or the recommendations of the ECO, then the ECO may recommend to the authorities that the aspect of operations to which non-compliance relates, ceases until the non-compliance is adequately rectified.

During the operational phase, it is not foreseen that any ECO Audit Reports are required.

**Duties of the ECO**

1. Ensuring that the EMPr conditions are always adhered to and taking action where the specifications are not being followed.
2. Ensuring that environmental impacts are kept to a minimum.
3. Reviewing and approving method statements in consultation with the Principal Agent.
4. Advising the contractor on environmental issues and assisting in developing environmentally responsible solutions to problems.
5. Reporting to the applicant on a regular basis and advising of any environmental impacts.
6. Attending site meetings (when necessary) and giving a report back on the environmental issues at these meetings and other meetings that may be called regarding environmental matters.
7. Inspecting and auditing the site and surrounding areas regularly.
8. Establishing and monitoring an on-going environmental awareness program in conjunction with the contractor.
9. Requesting the removal of person(s) and/or equipment not complying with the specifications.
10. Keeping both a written and photographic record of progress on site from an environmental perspective, and an ad hoc record of all incidents or events on site with environmental ramifications. These records should be dated and accurately catalogued in the onsite logbook, and separate audit reports.

**The Client - Agrimark (Pty) Ltd**

This EMPr, once approved by the authority should be seen as binding to the Applicant, and any person acting on the Applicant's behalf, including but not limited to agents, employees, associates, contractors and service providers.

The Applicant and all other persons who may utilize, maintain or service the facilities are also bound by their general Duty of Care, as stated in Section 28 of the National Environmental Management Act, 1998:

> ***Duty of Care:***
> *"Every person who causes, has caused, or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm cannot reasonably be avoided or stopped, to minimize and rectify such pollution or degradation of the environment"*

The Client – the client is responsible for employing the ECO, Contractor and any Sub-contractors for the lifecycle of the facility. It is the client responsibility to ensure that all appointed parties fulfil their obligations in terms of this EMPr, i.e., the implementation of this EMPr is the Client's responsibility, and the Client must ensure that all activities taking place on the site are conducted in an environmentally responsible manner and in accordance with the requirements of this EMPr.

**The Engineer**

The engineer representing the developer on site is responsible for the technical and contractual implementation of the works to be undertaken. The engineer will oversee site work and liaise with both the contractor and the ECO.

**The Contractor**

The contractor is responsible for implementation and compliance with the requirements of the EMPr, conditions of the contract and relevant environmental legislation. The Contractor must ensure that all sub-contractors have a copy of and are fully aware of the content and requirements of this EMPr. The contractor is required, where specified, to provide Method Statements setting out in detail how the management actions contained in the EMPr will be implemented.

**Environmental Site Officer**

The ESO is employed by the Contractor as his/her environmental representative to monitor, review and verify compliance with the EMPr by the contractor. This is not an independent appointment; rather the ESO must be a respected member of the contractor's management team.

### 9.2. Documentation and Record Keeping

(a) Auditing

In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Report must be prepared by an independent person with the relevant environmental auditing expertise and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).

(b) List of onsite documentation

An environmental register must be kept at the site, which must include the following:

- A copy of the Environmental Decision and any other relevant permits/licenses
- An accident and incident register.
- Complaints register.
- Site evacuation plan/maps.
- Method statements.
- Signed Environmental Training register.
- Waste Disposal Certificates.
- Material safety data sheets of chemicals utilized on site.
- Routine maintenance activities on aboveground storage tanks, pipes and leak detection systems. This will ensure early detection of faults, remedial action and continuous quality assurance

In addition, this EMPr must be kept at the site. The right of the public to information shall be respected in accordance with relevant legislation.

(c) Environmental Register

The environmental register should be used to record any relevant daily information related to the operations and current status of the site, including the following information:

- Details of audits and inspections carried out by the ECO and/or as detailed in this EMPr and follow-ups.
- Instances of non-conformances found in terms of the EMPr, the date of their occurrence, date of corrective action, and date of completion of preventive action.
- Details of chain of custody documentation.
- Any other relevant/pertinent daily events.
- The environmental register should also contain the accident and incident register and/or the complaints register.

(d) Accident and Incident Register

An accident and incident register must be kept and should include the following information:

- Time, date and place of the accident and/or incident.
- Who and what was involved.
- A detailed description of the accident or incident.

(e) Complaints register

A complaints register must be kept for the recording of all complaints lodged regarding the service station and retail centre. It is important that the complainant feels that their concerns have been listened to and that appropriate action (within reason) has been taken to address these.

The complaints register must include:

- Detail of the complaint in clear, well-structured language.
- Time and date of complaint and details of complainant for follow-up purposes.
- Name of the person who received the complaint.
- Description of action that was taken to address the complaint, including date and time of action.

(f) Method statements

Method Statements (a template for these purposes is appended to this EMPr) will be required for activities that may result in significant impacts according to the ECO.

These must address the following aspects:

- *What* – a brief description of the work to be undertaken
- *How* – a detailed description of the process of work, methods and materials
- *Where* – a description of the location of the work (if applicable)
- *When* – the sequencing of actions with commencement and completion date estimates

All Method Statements (MS) must be in place at least **5 working days prior to the relevant construction activities** taking place and must be approved by the ECO prior to being implemented.

### 9.3. Environmental Awareness and Training

The Contractor should make allowance for all construction site staff, including all subcontractors that will be working at the site, to attend environmental awareness training sessions (undertaken by the ECO) before commencing any work on site. During this training, the ECO will explain the EMPr and the conditions contained therein. Attention will be given to the construction process and how the EMPr fits into this process. Other items relating to sound environmental management which should be discussed and explained during the environmental awareness training sessions include:

- The demarcated “No-Go” areas.
- General do’s and don’ts of the site.
- Making of fires.
- Waste management, use of waste receptacles and littering. Includes awareness raising on minimising waste.
- Use of the toilets provided.
- Use and control of building materials and equipment etc.
- Control, maintenance and refueling of vehicles.
- Methods for cleaning up any spillage.
- Access and road safety.
- Emergency procedures (e.g., in case of fire, spillage etc.).
- General “best practice” principles, as regards the protection of environmental resources.

Environmental awareness training and education should be ongoing throughout the construction phase and should be undertaken regularly if deemed necessary (especially if it becomes apparent that there are repeat contraventions of the conditions of the EMPr), or as new workers come to site. Translators should be utilized where needed.

### 9.4. Matters Pertaining to Non-Conformance onsite

“Non-conformances” would occur when there are deviations from any of the requirements of this EMP. This may also include non-compliance with the relevant environmental regulations.

Non-conformances and corrective action must be recorded in the environmental register and included in the audit reports compiled by the ECO.

The developer its contractors, sub-contractors and employees are legally bound by *Section 24(h) National Environmental Management Second Amendment Act, Act No. 107 of 1998,* which states that it is “an offence for any person to contravene conditions applicable to any environmental authorization granted for a listed activity. A person convicted of an offence is liable to a fine not exceeding R5 million or to imprisonment for a period not exceeding ten years, or to both such fine and such imprisonment”

This EMP, when approved, constitutes a Condition applicable to an EA and any transgression would thus trigger Section 24(h) of the above-mentioned Act.

The table below specifies the transgressions for which the Construction Contractor may incur financial penalties (to be issued by the ECO and specified in the weekly ECO), and the amount of the fines that may be levied. The ECO will however provide a warning and a notification of intent to submit a fine to allow the contractors to rectify a transgression before being fined.

For repeat offences of the same/ similar transgression by the same party, the value of the fine shall be doubled for each subsequent repeat offence to a maximum value of **R50 000.00** per offence.

Note: “Provisions”, as stated in the table below, relates to the requirements specified in this EMP, as well as any other requirements governing the environmental management aspects of the expansion activity, which the Contractor is responsible for implementing.

| # | Finable Transgression | Min Fine | Max Fine |
|---|---|---|---|
| 1 | Failure to comply with the provisions relating to the demarcation of the working area, site camp and associated facilities, and the maintenance of the demarcated boundaries. | R1 000 | R5 000 |
| 2 | Failure to comply with the provisions relating to the demarcation of all “no-go” areas, and the maintenance of the demarcated boundaries. | R2 000 | R5 000 |
| 3 | Failure to adhere to designated access routes; | R1 000 | R5 000 |
| 4 | Movement of vehicles and/or construction workers in no-go areas; | R1 000 | R10 000 |
| 5 | Parking or storage of vehicles, machinery, tools and other materials or equipment related to the Contractors operations, within designated “no-go” areas. | R1 000 | R10 000 |
| 6 | Parking or storage of vehicles, machinery, tools and other materials or equipment related to the Contractors operations, outside of the areas demarcated for such parking/storage. | R500 | R5 000 |
| 7 | Failure to comply with the provisions relating to the management of topsoil and subsoil | R1 000 | R5 000 |
| 8 | Failure to comply with the provisions relating to waste management on site. | R500 | R5 000 |
| 9 | Failure to comply with the provisions relating to the storage, use and management of hazardous substances and fuels on site and/or the spillage of hydrocarbons or hazardous substances on site leading to environmental damage | R1 000 | R10 000 |
| 10 | Mixing cement or concrete on bare ground and/or failure to comply with any other provision regarding cement/ concrete batching | R1 000 | R5 000 |
| 11 | Failure to comply with the provisions relating to storm water control and erosion management | R500 | R5 000 |
| 12 | Failure to provide adequate fire-fighting equipment (in working order) on site at all times and/or failure to comply with the provisions relating to fire prevention and/or the occurrence of unattended or out of control fires. | R500 | R5 000 |
| 13 | Refueling of vehicles, machinery, or equipment outside of the designated refueling area. | R500 | R2 000 |
| 14 | Maintenance of vehicles, machinery, or equipment outside of the designated maintenance yard, except in emergencies | R500 | R2 000 |
| 15 | Failure to undertake refueling or repairs over a drip tray or other impermeable bunded surface to collect spilled hydrocarbons (fuels, lubricants, oils etc.) and other hazardous substances; failure to provide drip trays under fuel burning equipment (including pumps and generators) where there is a risk of hydrocarbon leakage. | R500 | R2 000 |
| 16 | Prolonged obstruction (>20 minutes) of the movement of other road users with failure to provide an established route by which the road user can safely bypass the area of obstruction and/or endangering the safety of other road users. | R1 000 | R10 000 |
| 17 | Failure to adhere to the provisions relating to traffic management and road safety. | R1 000 | R10 000 |
| 18 | Failure to produce a required method statement/s to the engineer’s and ECO’s satisfaction prior to undertaking the activity concerned and/or failure to adhere to an approved method statement | R1 000 | R5 000 |
| 19 | Excessive dust or noise emanating from the site | R1 000 | R5 000 |
| 20 | Failure to adhere to the provisions relating to environmental awareness training of construction workers, including sub-contractors and service providers rendering a service to the construction site | R1 000 | R5 000 |

This report was compiled by Jonathan Lassen and reviewed by Chantel Müller.

| Lead Author: | Report Reviewer: |
|---|---|
|  |  |
| Jonathan Lassen<br>Environmental Consultant<br>Adv. Diploma Marine Sciences | Chantel Müller<br>Senior Environmental Consultant<br>MPhil Environmental Management |

**SILLITO ENVIRONMENTAL CONSULTING (PTY) LTD**

# *ANNEXURE A*
# *SITE LAYOUT PLAN*

# *ANNEXURE B*
# *EMERGENCY RESPONSE PLAN & EVACUATION PLAN*

# *ANNEXURE C*
# *SPILL CONTINGENCY PLAN*

# *ANNEXURE D*
# *FIRE PLAN*

# *ANNEXURE E*
# *POSSIBLE METHOD STATEMENT TEMPLATE FOR CONSTRUCTION PHASE*

# *METHOD STATEMENT FOR THE:*

……..

**This method statement is to be completed by the Contractor (in consultation with the ECO) at least 5 working days prior to the proposed commencement date of the said work and represents a binding agreement to the Method Statement by all site Contractors and Subcontractors involved in the work for which the Method Statement is submitted.**

**DATE OF SUBMISSION:…….**

**CONTRACTOR:…….**

**SUBCONTRACTORS (IF RELEVANT):……**

A) Describe in detail ***what*** work is to be undertaken?

| |
|---|
| |

B) Describe in detail ***where*** on the site the works are to be undertaken and the ***extent***? Provide sketch plan and grid block reference.

| |
|---|
| |

C) ***When*** will the works start and what is the anticipated finishing date of these works?

| |
|---|
| |

D) ***How*** are the works to be undertaken?

1) Lead supervisor/ foreman name and contact details:

2) Number of personnel:

3) Construction activities:

4) Plant and machinery to be used:

5) Materials to be stored (specify hazardous materials):

6) Other:

E) What ***environmental impacts are anticipated and what precautions*** are proposed to prevent these impacts? (refer to the relevant sections of the EMPr for guidance and provide a general camp layout)

| |
|---|
| Camp site demarcation: |
| Toilet facilities: |
| Litter: |
| Security: |
| Plant/machinery (operation, servicing, management, storage, refueling etc.): |
| Emergencies and fire: |
| Hazardous materials (handling, management, storage etc.): |
| Have all personnel involved been through an environmental induction course? |
| Hazardous substances spill remediation and containment measures: |
| Other: |

DECLARATIONS BY PARTIES

1) CONTRACTOR

I UNDERSTAND THE CONTENTS OF THE METHOD STATEMENT AND THE SCOPE OF THE WORKS REQUIRED OF ME. I FURTHER UNDERSTAND THAT THE METHOD STATEMENT MAY BE AMENDED ON APPLICATION TO THE ABOVE SIGNATORIES, AND THAT THE ENVIRONMENTAL CONTROL OFFICER WILL AUDIT MY COMPLIANCE WITH THE CONTENTS OF THIS METHOD STATEMENT.

_____ (PRINT NAME)

_____ (SIGNED) DATED: _____

2) ENVIRONMENTAL CONTROL OFFICER (ECO)

THE WORK DESCRIBED IN THIS METHOD STATEMENT, IF CARRIED OUT ACCORDING TO THE METHODOLOGY DESCRIBED, IS SATISFACTORILY MITIGATED TO PREVENT AVOIDABLE ENVIRONMENTAL HARM.

_____ (PRINT NAME)

_____ (SIGNED) DATED: _____

3) PRINCIPAL AGENT

THE WORK DESCRIBED IN THIS METHOD STATEMENT, IF CARRIED OUT ACCORDING TO THE METHODOLOGY DESCRIBED, IS SATISFACTORILY MITIGATED TO PREVENT AVOIDABLE ENVIRONMENTAL HARM.

_____ (PRINT NAME)

_____ (SIGNED) DATED: _____

# *ANNEXURE G*
# *INCIDENT REGISTER AND BASIC ACCIDENT REGISTER TEMPLATES*

# INCIDENT REGISTER (EXAMPLE)

| **"*Incident*"** means - an unexpected sudden occurrence, including a major emission, fire or explosion leading to serious danger to the public or potentially serious pollution of or detriment to the environment, whether immediate or delayed | | | | | |
|---|---|---|---|---|---|
| **Date** (yyyy/mm/dd) | **Incident** | **Comments** *(Include any possible explanations for current condition and possible responsible parties. Include photographs, records etc. if available)* | **Corrective Action Taken** (*Give details and attach documentation as far as possible)* | **Reference no. for On-Site Logbook** (e.g. Rv 6/12 Inc 1) | **Signature** |
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## BASIC ACCIDENT REGISTER (EXAMPLE)

| **Date** (yyyy/mm/dd) | **Accident** | **Names of Persons Involved** | **Comments, Including Injuries Sustained** *(Include any possible explanations for current accident. Include photographs, records etc. if available)* | **Corrective Action Taken** (*Give details and attach documentation as far as possible)* | **Reference no. for OHS Documentation and Attachments** *(e.g. Rv 6/12 Acc 1)* | **Signature** |
|---|---|---|---|---|---|---|
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# *ANNEXURE H*
# *STORMWATER MANAGEMENT PLAN*