Environmental Management Plan

A. Introduction

An Environmental Management Plan is a written document with the purpose to provide mitigation measures and principles for the management of sites in order to reduce potential impacts to the environment and receptors in a sustainable and economically viable way. A well-developed Environmental Management Plan, together with proper monitoring and record keeping of implementation, will result in improved environmental performance.

This Environmental Management Plan has been developed for the handling and storage of fuels and will cover the following items:

- Health and Safety
- Training and Awareness
- Emergency Response
- Fire Prevention and Control
- Tank, Pump and Pipelines
- Fuel Deliveries and Dispensing
- Effluent Handling and Storm Water Management
- Hazardous Substances Management
- Air Emissions
- Noise
- Waste Management

B. Environmental Management Plan

ASPECT	MITIGATION MEASURES	RESPONSIBILITY	PROOF
Health and Safety	• All relevant Health and Safety legislation as required in South Africa should be strictly adhered to, including but not limited to the Occupational Health and Safety Act, 1993 (No. 85 of 1993); • Site Manager to ensure compliance with TOTAL's Health and Safety / Emergency Plans / Procedures / Manuals; and • The site should be fitted with the required health and safety warning and information signage that is required and suitable for such installations.	Site Manager	Site Audits, Department Inspections, Visual Inspections
Training and Awareness	• A generic induction training course should be delivered to all new employees. • Induction training should include coverage of the Emergency Response Plan and Evacuation Procedures. In addition, training should include basic first aid and fire fighting and spill clean-up training (to appointed representatives). • A refresher training course should be delivered annually to all staff (depending on appointments). • Records of all training course should be kept on site.	Site Manager	Training Register, Certificates (if applicable), Appointment Letters, Emergency Response Plan
Emergency Response	• All incidents and emergencies must be addressed in line with the Emergency Response Plan for the site. • All incidents (fires, explosions, spillages, leakages, crimes) must be reported immediately to the TOTAL SA; and • Record(s) of incidents should be maintained and communicated to TOTAL SA. • A contact list must be in place at the site in order to contact Emergency Response as it is required.	Site Manager, Filling Station Staff, TOTAL SA Representative	Emergency Response Plan, Incident Registers, Correspondence, Reports, Emergency Contact List

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Fire Prevention and Control	• Smoking should be prohibited in the vicinity of flammable substances; • Ensure the availability of sufficient firewater tie-in points; • Any welding or other sources of heating of materials should be done in a controlled environment and under appropriate supervision and with the approval of TOTAL SA (through PTW system) • Training should be provided in the use of the appropriate fire-fighting equipment; • Ensure availability of fire extinguishers and maintain regularly; • All employees must be aware of Emergency Response Plans to ensure an understanding of the hazards and procedures required during an emergency situation. • Ensure electrical systems, such as pumps, are properly maintained to prevent sparks • Ensure fuel lines, hoses, valves and nozzles are in good repair. • Ensure that gasoline is not used as a cleaning or degreasing agent (has inherent fire risk).	Site Manager	Visual Inspection, Training Register, Certificates (if applicable), Appointment Letters, Emergency Response Plan, PTW System, Maintenance Register
Tank, Pump and Pipelines	• Daily checks on fuel levels in the tank together with a balance sheet must be used to determine if there are unaccounted losses from the tank. • Monthly inspection must include visual inspections of all above ground fuel dispensing equipment on the site to check for wear or damage. Visual and olfactory checks for possible product leaks should also be carried out across the site (look for evidence of surface staining, dead vegetation, product odours etc). • Any suspected leaks or spillages (including unexplained variances) must be reported to TOTAL SA immediately. Should any discrepancies in fuel volumes be recorded, a detailed assessment must be undertaken and remedial measures implemented. • Any leaks from pipelines or tanks must be attended to immediately, the leak isolated, spill and contaminated materials recovered and the general area treated with an absorbing agent.	Site Manager, TOTAL SA Representative, TOTAL SA Engineering, Hazardous Waste Contractor	Visual Inspections, Maintenance Records, Integrity Tests, Site Plans, Stock Reconciliation Figures, Correspondence, Hazardous Waste Register, Waste Manifests

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Tank, Pump and Pipelines (continued)	• Integrity testing of the tank must take place 5 years after installation, with repetition on a 5-year cycle thereafter. • Records of leak tests must be kept; • All pipelines, tanks and associated fuel transference systems are to be inspected routinely and maintained in a leak free condition; • Visual and olfactory inspection of observation wells must be conducted on a monthly basis.	Site Manager, TOTAL SA Representative, TOTAL SA Engineering, Hazardous Waste Contractor	Visual Inspections, Maintenance Records, Integrity Tests, Site Plans, Stock Reconciliation Figures, Correspondence, Hazardous Waste Register, Waste Manifests
Fuel Deliveries and Dispensing	To reduce spills and avoid fires, the following procedures must be used when dispensing fuels: • Never leave the area unattended when refuelling even if automatic shut-off nozzles are being used. • Do not allow smoking in the forecourt and workshop area, especially when handling fuels. • Turn off vehicles while refuelling. • Support small containers so that they don't tip over during filling. • During fuel tanker delivery, the tanker driver must be present at all times during product offloading. • Connect a bonding line between the storage tank and vehicle before starting fill-up – a flexible, copper conductor, 12 gauge or larger is recommended. • Perform all fuel transfers outdoors to prevent fumes from building up and creating a dangerous explosive environment. • Follow Bulk Delivery Driver Manual for deliveries of fuel (applicable to Delivery Vehicle Operators) • Any cracks in the paving, which expose the underlying soils, must be repaired immediately to prevent the ingress of small spills of fuel into the shallow soils.	Site Manager, Delivery Vehicle Operators, and Filling Station Staff	Visual Inspection, Bulk Delivery drive Manual, Emergency Response Plan

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Effluent Handling / Storm water Management	• All surface spillages must be contained on-site to an appropriate oil/water separator system/ sump of sufficient capacity; • The oil interceptor system should be inspected on a monthly basis to ensure its correct function, and emptied when required by the site operator. The product removed from the separator should be disposed of at a suitable waste disposal site with the chain of custody document kept on site for record purposes. • No fuels/ oils must be allowed to discharge directly into storm water pipes or drains and sewage manholes/pipes; • Litter blocking the storm water system must be removed • The storm water and sewer system must be inspected and damaged areas repaired if necessary. • All waste oils, greases, fuels, chemicals etc. should be collected and disposed of in an appropriate manner off site. The contents of grease traps or other waste oil, grease and/ or fuel disposal/ storage containers should under no circumstances be emptied and dumped to the surrounding area. Waste Manifests must be provided to the Site Manager as proof of safe disposal/end destination.	TOTAL SA, Site Manager, Hazardous Waste Contractor	Visual Inspection, Hazardous Waste Disposal Register, Hazardous Waste Manifests

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Hazardous Substances Management	• Hazardous substances should be disposed of at an appropriate classified waste site (unless it is to be recycled by approved methods), as per the National Environmental Management Waste Act 59 of 2008; • Waste from the oil interceptors must be disposed of to a suitable waste-handling contractor where Safe Disposal Certificates are to be issued; • All product spills within the bunded area must be appropriately cleaned up (as applicable); • All contaminated spill fighting material such as fibres, soil, sandbags, etc. must be disposed of in an appropriate hazardous waste landfill site. Proof of this must be made available upon request; • In the event of a spill, hazardous material may be generated. Such material must be disposed of at a suitable licensed waste disposal facility, with chain of custody documentation supplied as proof of end recipient; • Suitable, leak-proof drums for the disposal of oils and greases should be positioned at areas where such materials are likely to be generated. • Any spillages and leakages must be reported to TOTAL SA	Site Manager, Hazardous Waste Contractor, TOTAL SA Representative	Visual Inspection, Hazardous Waste Disposal Register, Hazardous Waste Manifests, Emergency Response Plan, Correspondence
Noise	• Staff should not make excessive noise especially during late hours. • Equipment used in the operation of the facility must be kept in good state of maintenance so that noise is minimised.	Site Manager, Filling Station Staff	Visual Inspection, Maintenance Registers
Waste Management	• General waste and hazardous waste separation must be conducted on site. • Where possible, waste must be reduced, reused and/or recycled. • Disposal of all general waste must be undertaken by the local council. • Litter bins must be placed at strategic points around the service station	Site Manager	Visual Inspection