ENVIRONMENTAL
COMPLIANCE CONSULTANCY






ECC-99-313-REP-15-D

ENVIRONMENTAL MANAGEMENT & CONTINGENCY PLAN

TRANSPORTATION OF INDUSTRIAL SULPHURIC ACID FROM THE NAMZINC REFINERY, WITHIN NAMIBIA TO LOCAL CONSUMERS, AND TO THE SKORPION ZINC WAREHOUSE AT THE PORT OF LÜDERITZ, IN THE !KARAS REGION, NAMIBIA

PREPARED FOR

skorpion zinc

JUNE 2021

TITLE AND APPROVAL PAGE

Project Name:	The transportation of industrial sulphuric acid from the Namzinc refinery, within Namibia to local consumers, and to the Skorpion Zinc warehouse at the Port of Lüderitz, in the !Karas Region, Namibia
Project Number:	ECC-99-313-REP-15-D
Client Name:	Skorpion Zinc (Namzinc) (Pty) Ltd
Authors:	Lester Harker, Laina Wilhelm and Jessica Bezuidenhout
Ministry Reference:	APP-002306
Status of Report:	Final for Government submission
Date of issue:	June 2021
Review Period:	

Environmental Compliance Consultancy Contact Details:
We welcome any enquiries regarding this document and its content. Please contact:

Stephan Bezuidenhout
Environmental Consultant & Practitioner
Tel: +264 81 699 7608
Email: stephan@eccenvironmental.com
www.eccenvironmental.com

Jessica Bezuidenhout (Mooney)
Environmental Consultant & Practitioner
Tel: +264 81 699 7608
Email: jessica@eccenvironmental.com
www.eccenvironmental.com

Confidentiality

Please note at ECC we care about lessening our footprint on the environment, therefore all documents are printed double-sided.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

DEFINITIONS AND ABBREVIATIONS

ECP	Environmental Contingency Plan
ECC	Environmental Compliance Consultancy
EIA	Environmental Impact Assessment
ESIA	Environmental and Social Impact Assessment
I&APs	Interested and Affected Parties
ZnS	Zinc Sulphide

1 INTRODUCTION

1.1 PROJECT BACKGROUND

Environmental Compliance Consultancy (ECC) was engaged by Skorpion Zinc (Namzinc) (Pty) Ltd and to compile a contingency plan in accordance with the Environmental Management Act, No. 7 of 2007. Skorpion Zinc (Namzinc) (Pty) Ltd herein referred to as 'Namzinc' propose to transport 314 000 tonnes of zinc sulphide concentrate from their sister company Black Mountain Mining (Pty) Ltd for processing at their Namzinc Refinery located in Rosh Pinah, Namibia. A distance of 120 kilometres, from the Namibian-South Africa border, using interlink trucks.

The processing of this material will produce an excess of 75 000 tonnes per annum of sulphuric acid as a by-product. This would then be transported within Namibia to local consumers, and to the Skorpion Zinc warehouse at the Port of Lüderitz for export, by road over a distance of 293 kilometres. Within the existing warehouse at the port, a purpose-built storage facility will be constructed to store 15 000 tonnes of sulphuric acid.

The Namzinc Refinery is located in the !Karas Region of Namibia, approximately 100 km north-east of Oranjemund and 20 km north-west of Rosh Pinah. Sulphuric acid is a by-product of the zinc refining process. The Namzinc Refinery is situated inside the eastern boundary of the Tsau //Khaeb (formally known as the Sperrgebiet) National Park. The route from the Namzinc Refinery to the Port of Lüderitz is indicated in the locality map below for the proposed transportation (Figure 1).

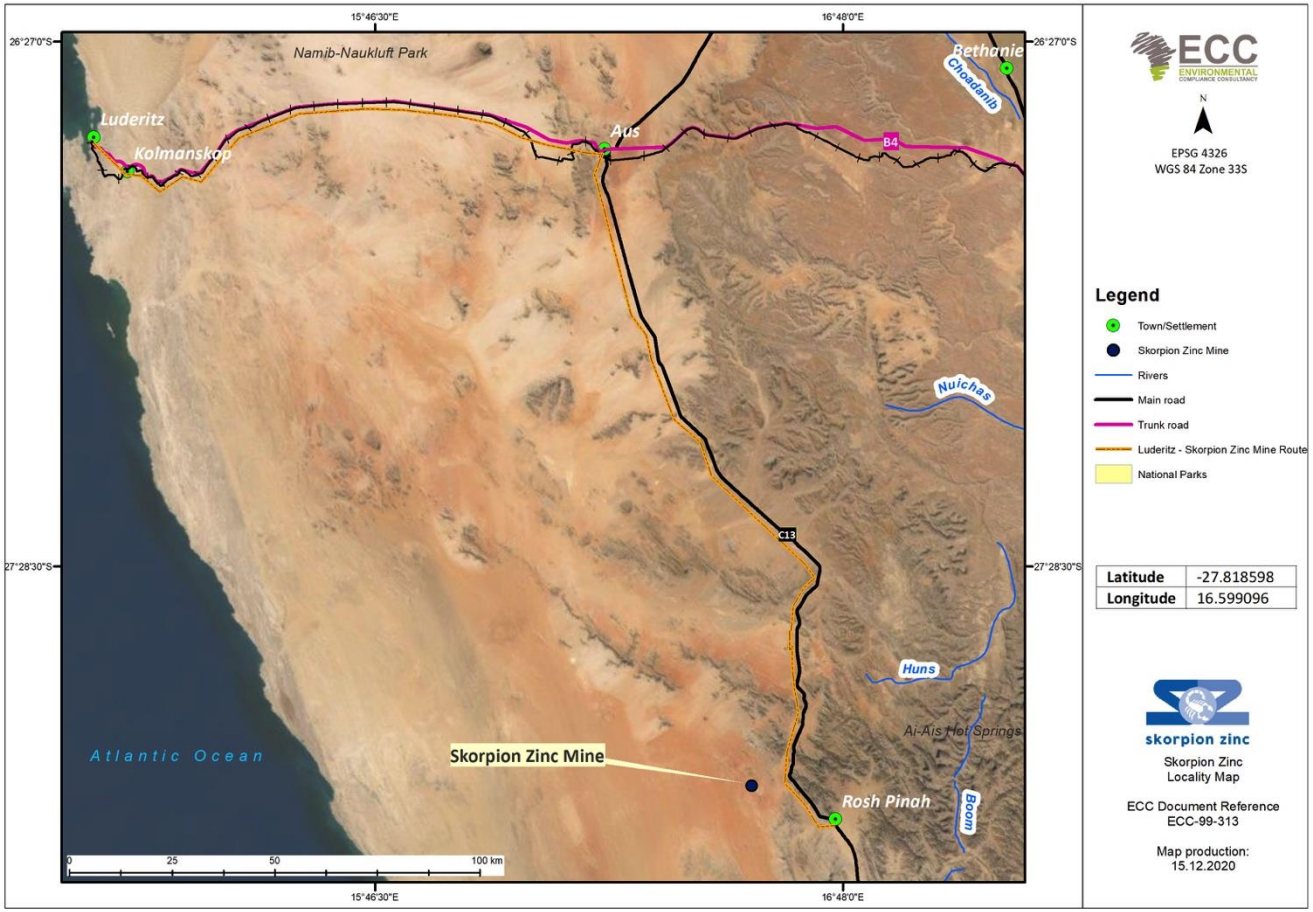

FIGURE 1 – LOCALITY MAP OF THE PROPOSED PROJECT

The Skorpion Zinc mine was placed under Care and Maintenance in May 2020 following slope failures in the open pit. This was deemed to have an economic impact on both the Rosh Pinah community and the Namibian economy as a whole. To prolong the life of the Skorpion Zinc facilities and to reduce the economic and social impacts of a full-scale closure of the site, the operation proposed to convert the asset into a toll smelter, by converting it to process zinc sulphide concentrates, instead of zinc oxide ores. An application for an environmental clearance certificate was submitted for the conversion of the Skorpion Zinc Refinery. This was granted by the Ministry of Environment, Forestry and Tourism (MEFT) on the on the 31 August 2020 to 31 August 2023. The conversion and modification to the Skorpion Zinc (Namzinc) Refinery will enable the treatment of zinc sulphide (ZnS) concentrate that will be transported from their sister company Black Mountain Mining (Pty) Ltd, Gamsberg Mine, Northern Cape, South Africa.

The modification of the existing refinery involves the construction of a roaster, gas cleaning, acid plant and leaching facilities. The Roaster converts the zinc sulphide concentrate into zinc oxide which would then be leached in the proposed leaching facility before being integrated with the existing refinery.

Sulphuric acid is a hazardous, clear colourless material that may emit choking fumes when hot. The material is non-flammable but when in contact with reactive materials may result in a fire or exothermic reactions. The major use of sulphuric acid is in the production of fertilizers, manufacturing of chemicals, in the petroleum refining process as well as in the processing of metals. Some of the risks associated with the sulphuric acid exposure is its corrosivity to metal and biological tissue, of which the latter may cause severe skin burns and eye damage and should therefore be handled cautiously.

Namzinc will manage the program for the proposed project and engage with their business partners to ensure that the norms of health, safety and environment are met.

The proposed development is expected to generate income and job opportunities for the local community. It is estimated direct and indirect employment opportunities could be created for the transportation activities.

1.2 Environmental Regulatory Requirements

In terms of the Environmental Impact Assessment (EIA) Regulations and the Environmental Management Act, No. 7 of 2007, the proposed operations qualify as a listed activity. Therefore, an application for an environmental clearance certificate is to be submitted to the Directorate of Environmental Affairs. An Environmental Scoping Report and contingency plan are required to be submitted as part of the application process, as well as to support the decision-making process.

This report presents the Environmental Contingency Plan (ECP) and has been undertaken in terms of the requirements of the act and its regulations.

Unauthorised and unforeseen releases of hazardous and/or polluting substances can present an immediate and unacceptable short-term or long-term threat to the environment and persons. Similarly, a natural event that arises external to construction or operational activities can present immediate and unacceptable short-term or long-term threats to assets (including environmental assets) and persons. Dependent on the risks to environmental values or proximity to sensitive receptors, such releases require timely or immediate action – emergency action – for coordinating and implementing countermeasures to protect the environment, persons and assets from adverse effects and for notifying appropriate stakeholders and authorities.

The supporting Contingency Plan for Emergency Environmental Incidents aims to provide an overview of management practices in place to minimise environmental harm during emergency environmental incidents. The ECP identifies potential emergency environmental incidents and details of a response to an emergency environmental incident, including escalation, communication, reporting and monitoring (as provided in Appendix A).

1.3 Purpose And Scope Of This Report

The purpose of this contingency plan is to provide a management framework for the proposed activities so that the potential environmental impacts identified through the scoping process are avoided, minimised and mitigated as far as reasonably practicable, and that statutory requirements and other legal obligations are fulfilled.

This contingency plan also presents protocols, procedures, roles and responsibilities to ensure the management arrangements are appropriately and effectively implemented. This contingency plan forms an appendix to the environmental assessment report and has been based on the findings of the assessment; therefore, the environmental assessment report should be referred to for further information on the proposed project, assessment methodology, applicable legislation, and assessment findings.

This contingency plan is a live document and shall be reviewed at predetermined intervals, and or updated when the scope of works alters, or when further data or information can be added. All personnel working on the project will be legally required to comply with the standards set out in this contingency plan.

As part of the contingency plan an emergency response plan is required in cases of involving spill of chemicals for the follow purposes:

- Provide the required means to protect people's health
- Make personnel familiar with the emergency procedures and response measures
- Provide the best organizational arrangements to support the operations
- Response tasks are efficiently coordinated and managed
- Provide a procedure for resuming the normal operations.

The scope of this contingency plan includes all transportation and operational activities carried out for this project.

1.4 MANAGEMENT OF THIS CONTINGENCY PLAN

The proponent, Skorpion Zinc (Namzinc) (Pty) Ltd will hold the environmental clearance certificate for the proposed project and will be responsible for the implementation and management of this contingency plan. The implementation and management of this contingency plan and thus the monitoring of compliance shall be undertaken through daily duties and activities and monthly inspections.

1.5 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS OF THIS CONTINGENCY PLAN

This contingency plan does not include measures for compliance with statutory occupational health and safety requirement, which includes the component, fire safety management. This will be provided in the overall Health and Safety Management Plan (HSMP) to be developed by the proponent.

Where there is any conflict between the provisions of this contingency plan and any business partners obligations under their respective contracts, including statutory requirements (such as licences, project approval conditions, permits, standards, guidelines, and relevant laws), the contract and statutory requirements are to take precedence.

The information contained in this contingency plan has been based on the project description as provided in the environmental scoping report. Where the design or transportation methods alter, this contingency plan may require updating and potential further assessment to be undertaken.

1.6 ENVIRONMENTAL CONSULTANCY

Environmental Compliance Consultancy (ECC), a Namibian consultancy with registration number 2013/11401, has prepared this contingency plan on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across southern Africa, in the public and private sectors. ECC is independent of the proponent and has no vested or

financial interest in the proposed project, except for fair remuneration for professional services rendered.

All compliance and regulatory requirements regarding this document should be forwarded by email or posted to the following address:

Environmental Compliance Consultancy
PO BOX 91193
Klein Windhoek, Namibia
Tel: +264 81 669 7608
Email: info@eccenvironmental.com

2 PROJECT MANAGEMENT PERSONNEL

This contingency plan provides measures, guidelines, and procedures for managing and mitigating potential environmental impacts. The contingency plan also indicates monitoring and reporting requirements and sets responsibilities for those carrying out management and mitigation measures. Namzinc shall provide a project team to oversee activities and responsibilities.

2.1 Organisational Structure, Roles, and Responsibilities

The proponent shall be responsible for:

- Ensuring all members of the project team, including business partners, comply with the procedures set out in this contingency plan;
- Ensuring that all persons are provided with sufficient training, supervision, and instruction to fulfil this requirement; and
- Ensuring that any person's allocated specific environmental responsibilities are notified of their appointment and confirm that their responsibilities are clearly understood.

The proponent and business partners shall be responsible for ensuring and demonstrating that all personnel employed by them are compliant with this contingency plan, and meet the responsibilities listed above.

The key personnel and environmental responsibilities of each role are presented in Table 1.

TABLE 1 - KEY ROLES AND RESPONSIBILITIES

ROLE	RESPONSIBILITY & DUTIES
Proponent	– Overall responsibility for the implementation and management of this contingency plan; – Ensure the environmental policy is communicated to all personnel throughout the proposed project and ensure that employees, business partners and visitors understand and adhere to the contingency plan; – Responsible for providing the required resources (including financial and technical) to complete the required tasks; – May appoint a project manager and a site manager (or nominated supervisor), to who they may delegate tasks and responsibilities within the mandate of the proponent; – Ensure that all employees, business partners and visitors are inducted on environmental measures.
Site Manager (or nominated supervisor)	– Responsible for ensuring compliance with this contingency plan including overseeing all day-to-day activities during the duration of the project, including routine and non-routine maintenance works, as well as decommissioning tasks;

ROLE	RESPONSIBILITY & DUTIES
	– Ensure adequate resources are made available for implementation of this contingency plan; – Responsible for the management, maintenance and revisions of this contingency plan; – Ensure all personnel are aware of the commitments made in this contingency plan and any other relevant regulatory requirements applicable to the project; – Ensure all employees and business partners participate in a site induction process prior to commencing work on the project; – Maintain the community issues and concern register, and keep records of complaints; – Ensure that best environmental practice is undertaken throughout the duration of the project; and – Report any non-compliance or incidents to the regulatory authority. – Ensure that all employees, business partners and visitors to the site are conversant with the requirements of this contingency plan, relevant to their roles on site and adhere to this contingency plan at all times; – Provide environmental awareness / management training and site inductions for all employees, business partners and visitors; – Monitor daily operations and ensure adherence by personnel to the contingency plan; – Receive, respond to and record complaints; and – Report any non-compliance or incidents to the proponent.
Employees (and business partners and visitors where applicable)	– Responsible for being compliant with this contingency plan throughout the project; – Adhere to this contingency plan at all times; – Ensure attendance of project inductions; – Ensure appropriate briefings for certain activities have been provided and are fully understood; and – Report any operations and conditions that deviate from the contingency plan or any non-compliant issues or incidents to the site manager and proponent.

2.2 BUSINESS PARTNERS

All business partners involved during the operation of the project (including partners appointed for maintenance activities) shall be compliant with this contingency plan, and shall be responsible for the following:

- Undertaking activities in accordance with this contingency plan as well as relevant policies, procedures, management plans, statutory requirements, and contract requirements;
- Implement appropriate environmental and safety management measures;

- Report environmental issues, including actual or potential environmental incidents and hazards, to the proponent; and
- Ensure appropriate corrective or remedial action is taken to address all environmental hazards and incidents reported.

2.3 EMPLOYMENT

The proponent should ensure that a locals first policy be adopted on the project pertaining to employment opportunities during the transportation and operational phase of the project. The following shall be complied with:

- In liaison with the relevant authorities, the proponent shall ensure that local people have access to information about job opportunities and are considered first for contract employment positions;
- The number of job opportunities shall be made known together with the associated skills and qualifications;
- The maximum length of time the job is likely to last for shall be clearly indicated;
- Foreign employees with no proof of permanent legal residence shall not be hired; and
- Every effort shall be made to recruit from the pool of the unemployed living in the local area.

3 COMMUNICATIONS AND TRAINING

To ensure potential risks and impacts are minimised, it is vital that personnel are appropriately informed and trained on operational procedures that include the above mitigation measures. It is also important that regular communications are maintained with all the stakeholders and made aware of potential impacts and how to minimise or avoid them. This section sets out the framework for communication and training in relation to the contingency plan.

3.1 COMMUNICATIONS

During the entire project, the proponent and / or site manager (or nominated site supervisor) shall communicate site-wide environmental issues to the project team through the following means (as and when required):

- Sites and project induction;
- Site Notices
- Audits and inspections;
- Toolbox talks, including instruction on incident response procedures; and
- Briefings on key project-specific environmental issues.

This contingency plan shall be distributed to the project team, including business partners, to ensure that the environmental requirements are communicated effectively. Key activities and environmentally sensitive operations shall also be briefed to employees and business partners.

During the entire project regular communications between the management team shall include discussing any complaints received and actions to resolve them; any inspections, audits or non-conformance with this contingency plan and any objectives or target achievements.

3.2 ENVIRONMENTAL EMERGENCY AND RESPONSE

Table 2 contains a list of numbers to be contacted in case of an emergency. All personnel will be made aware of these numbers.

TABLE 2 - EMERGENCY CONTACT DETAILS

TOWN	EMERGENCY CONTACT	POLICE / FIRE	AMBULANCE	Namport SHEQ
Lüderitz	Mr. Nicolaas De Wee Tel: +264 63 207 846 Cell: +264 811 601 114 nico@ltc.com.na	+264 (63) 202 255	+264 (63) 202 446	Mr. Stefanus Gariseb Tel: 0642082206 Cell: 0811672175 s.gariseb@namport.com.na

Namzinc (Pty) Ltd	Mr. Tshiningayamwe Eliakim ETshiningayamwe@vedantaresources.co.na 063 2712381

For large-scale spills and other significant environmental incidents, the fire services should be contacted as required and the MEFT office informed of the incident (telephone +264 61 284 2111). All correspondence with MEFT should be undertaken by the General Manager as guided by the SHE Representative.

3.3 RESPONSE CONCEPT

Possible incidents involving spill of hazardous chemical substances may include:

- Release of hazardous chemicals as a result of tankers incidents;
- Release as a result of capsized or damaged tanks with chemical liquid (sulphuric acid);
- Accompanied by fire, explosives, property damage and involving environmental pollution; with corrosive or toxic products resulting from vehicle collision; and
- As a result of handling of chemical substances while in transit.

Road incidents may occur at point of section the Namzinc refinery – Port of Lüderitz roads corridor while the sulphuric acid is being transport and such incident may potentially impose threats on the health and lives of communities living along the route (should such occurs near/within inhabited areas) as well as on the natural environment.

3.4 COMPLAINTS HANDLING AND RECORDING

Any complaints received verbally or in writing by any personnel on the project site shall be recorded by the receiver. Information recorded should include:

- The name and contact details of the complainant;
- Date and time of the complaint; and
- The nature of the complaint.

The information shall be given to the proponent who is overall responsible for the management of complaints and will provide a written response to the complainant. The proponent shall inform employees of issues, concerns or complaints.

The proponent shall maintain a complaint register that will detail the name and contact details of the complainant, date and time of the complaint, nature of the complaint, action is taken to resolve issues, and date of complaint handover. The proponent shall be responsible for nominating the correct personnel to coordinate and resolve the issue.

The workforce shall be informed about the complaints register, its location and the person responsible, in order to refer local residents or the general public who wish to lodge a complaint. The complainant shall be informed in writing of the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken, the reasons are to be recorded in the register.

The complaints register shall be kept for the duration of the project and will be available for government or public review upon request.

3.5 Training And Awareness

All personnel working on the project shall be competent to perform tasks that have the potential to cause an environmental impact. Competence is defined in terms of appropriate education, training and experience.

3.6 Site Induction

All personnel involved in the project, business partners and visitors shall be inducted to the site with specific environmental and social awareness training, and health and safety issues. The environment and social awareness training shall ensure that everybody on site is familiar with the principles of this contingency plan, the environment and social aspects and impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.

The proponent shall ensure a register of completed training is maintained.

The site induction should include, but not limited to the following:

- A general site-specific induction that outlines:
  - What is meant by “environment” and “social”;
  - Why the environment needs to be protected and conserved;
  - How transportation activities can impact on the environment; and
  - What can be done to mitigate against such impacts;
- The inductee’s role and responsibilities with respect to implementing the contingency plan;
- The site environmental rules and policies;
- Details of how to deal with, and who to contact if environmental problems should occur;

- Focal themes such as compliance, reporting of incidents and incidents, good housekeeping and standard procedures for waste management;
- The potential consequences of non-compliance with this contingency plan and relevant statutory requirements; and
- The role of responsible people for the project;
- Emergency response training.

4 EMERGENCY RESPONSE PLANS AND PROCEDURES

Namzinc emergency preparedness plans for potential emergency environmental incidents shall be implemented. All plans may include the following minimum content:

- Clearly defined roles and responsibilities of relevant emergency response personnel through Duty Cards;
- Emergency response procedures;
- Resources to be used in response to an emergency environmental incident;
    - Availability of emergency response documentation and procedures;
    - Site specific Emergency response training;
    - Emergency response and management teams;
    - Emergency equipment;
- Monitoring (including procedures for accessing monitoring locations during emergency environmental incidents);
- Communication procedures and coordination with stakeholders (e.g. emergency services, local government and state government);
- Notifications and reporting;
- Incident investigation; and
- Site clean-up and remediation.

4.1 EMERGENCY RESPONSE PROCEDURES

Emergency response procedures are provided in the relevant emergency preparedness plans in the form of Emergency Situation Checklists. These Emergency Situation Checklists are scenario based and act as a guide to assist the relevant emergency response personnel when responding to a specific emergency. Variations to the checklists will be based upon sound emergency response management, engineering judgement and operational experience, and are at the discretion of the response leaders (e.g. the site manager or nominate site supervisor).

The emergency response and management teams will serve a critical role in controlling an incident. The emergency response and management teams may meet regularly to review the emergency response procedures and to update the procedures as site conditions warrant.

Additionally, if improvements in the response procedures are identified, the ECP and other relevant emergency preparedness plans will be updated accordingly.

4.2 Emergency Response Actions

4.2.1. General Response to an Emergency Environmental Incident

The general measures provided in the sections below apply to all environmental incident scenarios. These measures will be executed in response to an environmental emergency to:

- Reduce the threat to human life or injury;
- Protect against environmental damage; and
- Preserve infrastructure, product, and equipment.

More specific response actions will be dependent on the type and location of the emergency environmental incident and detailed in the relevant emergency preparedness and response plan.

4.2.2. General Response Measures

1. Evacuate (all non-essential personnel);
2. Eliminate (sources of ignition, sparks, etc.);
3. Stop and Coordinate (stop source of the incident (e.g. spill) and coordinate shut down of relevant equipment, if possible);
4. Notify (internal and external notifications):
    - All emergency environmental incidents must be reported to the site manager immediately upon discovery; and
    - Conduct regulatory or emergency services report, as required.
5. Identify (material (if unknown) and identify PPE, hazards, and response procedures using SDSs);
6. Contain / Isolate (contain released material / incident using emergency response equipment and/or set up perimeter to isolate area);
7. Stabilise and Neutralise (neutralise / stabilise spilt material (where relevant), use absorbents to stabilise other released materials etc);
8. Clean up (remove released materials, spill response materials, any affected media etc.); and
9. Evaluate, document and Investigate and Remediate (if necessary).

If initial monitoring conducted in response to an environmental release indicates the potential for environmental impact, a Contaminated Site Assessment is to be conducted to assess whether the site contamination poses a potential risk to human health and/or the environment (either on or off the site), and if the release is of sufficient magnitude to warrant remediation or a management control appropriate to the current or proposed land use.

On the basis of the release and potential area of impact, an investigation work plan will be developed. This work plan will consider the fluids / chemical released, the media impacts (land and/or water), and the environmental setting.

Once the situation has stabilised, refer to the following sections for additional information:

- Section 3 – Communication: ensure that the proper notifications are made;
- Section 5 – Environmental Monitoring: coordinate and implement the appropriate monitoring regimen, determined on a case-by-case basis.

5 REPORTING, COMPLIANCE, AND ENFORCEMENT

5.1 Environmental Inspections and Compliance Monitoring

Environmental monitoring will be conducted to ensure compliance to the EMP and Environmental authorisation conditions as well as in response to an emergency environmental incident. Compliance monitoring will consist of daily, weekly and monthly inspections. These inspections will be conducted against commitments made in the EMP and compliance conditions as stipulated in the environmental authorisation.

5.1.1. Emergency Monitoring

The specific aspects of the environmental monitoring activities, including suitable monitoring locations, will vary depending on the nature of the incident and will be determined at the time of the incident. Typical monitoring that will be required may include:

- Visual inspections to determine the nature and extent of impacts and ongoing response actions;
- Vapour monitoring associated with the release of gases and petroleum hydrocarbon and/or chemical vapours to atmosphere;
- Field measurements of pH and conductivity in released waters, waters contained within temporary containment structures or tanks and receiving waters; and/or
- Laboratory measurements to identify constituents of concern in affected media where required (e.g., waters, soils).

More robust sampling and analysis may be conducted in the post incident investigation, assessment and, if required, remediation activities. This will include the implementation of receiving environment monitoring programs where contaminants have been released to land or water, so as to determine the extent of any environmental impact.

5.1.2. Daily Compliance Monitoring

A copy of this contingency plan shall be on-site throughout the duration of the project and shall be available upon request. It is the responsibility of the proponent and site manager (or nominated site supervisor) to ensure this contingency plan is complied with through their daily roles. Daily and weekly inspections will be undertaken. Daily and weekly inspections should include as a minimum the following:

- Housekeeping inspections;

- Condition of emergency response equipment such as spill kits;
- Integrity of containment facilities;
- Condition of signage;
- Condition of transport tankers;
- Couplings and line integrity during stevedoring;
- Condition and capacity of waste management facilities.

Inspection records will be kept by the site manager. Any environmental problems or risks identified shall be notified to the proponent and actioned as soon as is reasonably practicable.

5.1.3. Monthly Compliance Monitoring

Monthly inspections shall be undertaken by the site manager to check that the standards and procedures set out in this contingency plan are being complied with and pollution control measures are in place and working correctly. Any non-conformance shall be recorded, including the following details: a brief description of non-conformance; the reason for the non-conformance; the responsible party; the result (consequence); and the corrective action taken and any necessary follow up measures required. As a minimum monthly inspection should include:

- Storm water management infrastructure;
- Sumps and bunds;
- Illumination especially around offloading area;
- Integrity of protective infrastructure at offloading facilities;
- Storage tank integrity; and
- Condition of couplings.

5.2 Reporting

There shall be a requirement to ensure that any incident or non-compliance, including any environmental issue, failure of equipment or incident, is reported to the proponent immediately.

Faulty automated or mechanical accessories safety measures on the tankers used for the transportation of the acid may potentially cause spills of dangerous amounts of hazardous chemicals.

When chemicals are spilled on the road (tar), the liquid starts to evaporate. The evaporation rate is proportional to ambient temperature and the size of the opening/crack, which releases the liquid. However, with large amount of acid spill on the natural environment i.e. vegetation alongside the road, the impact is different as the acid is corrosive and thus will destroy any vegetation or living microorganisms that it comes into contact with. Equally, if the spill occurs in large amount the tarred surface of the road some significant effect of corrosion might as well occur and cause damage to the road surface.

5.3 Environmental Permits

The proponent will apply for the relevant permits and shall operate in accordance with any conditions stipulated.

5.4 Non-compliance

Where it has been identified that activities are not compliant with this contingency plan, the proponent shall employ corrective actions so that the activities return to being compliant as soon as possible. In instances where the requirements of the contingency plan are not upheld, a non-conformance and corrective action notice shall be produced. The notice shall be generated during the inspections and the proponent shall be responsible for ensuring a corrective action plan is established and implemented to address the identified shortcoming.

A non-compliance event / situation, for example, is considered if:

- There is evidence of the contravention of this contingency plan and associated indicators or objectives;
- The proponent and / or site manager (or nominated supervisor) have failed to comply with corrective or other instructions issued by the proponent or qualified authority; or
- The proponent and /or site manager (or nominated supervisor) fail to respond to complaints from the public

Activities shall be stopped in the event of a non-compliance until corrective action(s) has been completed.

5.5 Incident Reporting

The proponent must ensure that an incident (including minor or near-miss) reporting system is maintained so that all applicable statutory requirements are covered. For any serious incident involving a fatality, or permanent disability, the incident scene must be left untouched until witnessed by a representative of the police. This requirement does not preclude immediate first

aid being administered and the location being made safe. For a serious environmental incident, the required statuary reporting needs to be adhered to.

The proponent with the site manager or nominated supervisor shall investigate the cause of all safety and environmental significant incidents and must provide the results of the investigation and recommendations on how to prevent a recurrence of such incidents. A formal root-cause investigation process should be followed.

5.6 Disciplinary Action

This contingency plan is a legally binding document and non-compliance with it shall result in disciplinary action being taken against the perpetrator/s. Such action may take the form of (but is not limited to):

- Fines / penalties;
- Legal action;
- Monetary penalties imposed by the proponent on the business partners;
- Withdrawal of license/s; and
- Suspension of work.

The disciplinary action shall be determined according to the nature and extent of the transgression or non-compliance, and penalties are to be weighed against the severity of the incident.

6 ENVIRONMENTAL AND SOCIAL MANAGEMENT

6.1 Objectives and Targets

Environmental objectives for the project are as follows:

- Zero pollution incidents;
- Minimal disturbance to traffic;
- Minimise noise pollution;
- Minimise light pollution (the correct placement of lights);
- Minimise dust pollution; and
- Minimise the generation and disposal of waste.

6.2 Register Of Environmental Risks And Issues

An environmental review of the proposed project has been completed to identify all the commitments and agreements made within the environmental assessment report. From this, a list of environmental commitments and risks were produced, which details deliverables including measures identified for the prevention of pollution or damage to the environment during the project.

6.3 Impacts Identified For Further Actions

6.3.1. Change in ambient noise levels along the B4 and within Rosh Pinah and Lüderitz's designated road networks

Transportation activities and related increases in traffic flow along the designated route, from the Refinery to the Port of Lüderitz will change as a result of an increase in noise levels emanating from the road use. A noise impact assessment was conducted out to determine baseline conditions and suitable mitigation measures to manage noise related impacts.

The recommended mitigation measures include restricting operation hours, traffic calming measures, defined routes to and from the sites, maintaining designated road networks. The speed of the trucks should be adhering to 40km/h within town centres and through residential areas and 80 km/h on the highways.

6.3.2. Additional heavy traffic load on the C13 and B4 roads within and from Rosh Pinah to Lüderitz via Aus

A traffic impact assessment was conducted out to determine baseline conditions and suitable mitigation measures to manage traffic related impacts. During transportation, increased traffic may disrupt normal traffic flow for the affected towns of Rosh Pinah, Lüderitz and Aus. Local

residents might find the need to find alternative routes through the area may be necessitated, increasing traffic flow times. This may result in the increased traffic congestion on the road to the port and within, increase in the risk of incidents, result in deterioration of road surfaces, and cause vibration related damage to existing infrastructure. The proponent is responsible for ensuring a practical traffic management plan is implemented to manage the potential effects on traffic conditions surrounding the port of Lüderitz and the proposed designated route.

Vehicles such as trucks and tankers, during operation, should not be allowed to obstruct any traffic or access points to any businesses and facilities on the routes through to Lüderitz. If any extraordinary traffic impacts are anticipated, traffic management should be performed in conjunction with local traffic department, to prevent these. Traffic regulation on the national road should be adhered to.

6.3.3. DE- CONTAINMENT OF SULPHURIC ACID ALONG THE TRANSPORTATION ROUTE

Any potential incident occurring during the transport of dangerous goods can lead to catastrophic consequences. The uncontrolled or incidental spillage of sulphuric acid during operation and transportation activities were considered to be a significant impact for this project, which could result in hazardous contaminants entering the environment, with potential impact to biodiversity, soil and groundwater system. All spillages should be contained and managed as quick as possible to reduce contaminated surface area and further spread. The potential impacts likely to occur from the de-containment of sulphuric acid on the existing baseline environment may include, contamination to sensitive receptors (water and soil) along the route chosen to transport the sulphuric acid through Rosh Pinah to the warehouse in the port of Lüderitz.

Spillages are possible when transported goods are not properly handled (during loading and offloading). Other possible spillage triggers may occur as a result of the incomplete closing of valves at the point of departure at the Refinery.

Explosions and fire risks may occur due to human error. When sulphuric acid comes into with an incompatible chemical, it can release a flammable gas and create an explosion hazard. In an event of a spillage incident, careful handling of a hazardous substance is important because the magnitude of the involved risk is not always obvious to those performing the tasks. The recommended trucks capacity volume, as well as, the load size should always be adhered to.

Hazardous properties of goods being transported (sulphuric acid) should be clearly stated as dangerous or hazardous goods so that similar road users during all stages of the transport chain are aware of them. The transportation/cargo should always have indicative and warning signage

so that operators, employees and other road users can recognize and avoid incidental mishandling and have the right kind of personal protection at their disposal in case of leakage.

Table 3 provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as the responsible person. This register will be subject to regular review by the proponent and updated when necessary. The proponent will use this register to undertake monthly inspections to ensure the project is compliant with this contingency plan.

TABLE 3 - ENVIRONMENTAL RISKS AND ISSUES, AND MITIGATION AND MONITORING MEASURES

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
TRANSPORTATION ACTIVITIES				
General transportation activities	– Potential pollution to the environment – Potential risk to the occupational health and safety of transportation crew and project operation business partners. – Potential nuisance effect on community and surrounding communal areas	– Develop and implement an operation manual or procedures to conduct work and implement monitoring programmes thereafter; – Conduct site toolbox talks before shifts commence; – Maintain continuous communication with I&APs to identify concerns and mitigation measures; – Compliance with all applicable laws and agreements; – Training and raise awareness to sensitize employees about contentious issues like working in urban spaces and control of pollutants; – Ensure appropriate supervision of all activities; – Incidents need to be reported to the proponent and recorded in the incident register; – Preventative measures will be in place when service and maintenance activities are done (drip trays, non-porous surfaces, funnels, non-damaged tankers); and – Refuelling will be done in areas with designated preventative measures in place. – Employees should be shifted as the project works require so as to avoid a large concentration of employees at any given moment. – Access to the beach should be restricted at all times during work hours; – Security personnel to be stationed at access points to the site at all times during transportation to manage pedestrian and vehicle entry to and exit from the site; and – A visitor's register should be placed at the main entrance of the facilities.	Weekly, monthly	Site manager or the nominated site supervisor

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
	– Movement of heavy equipment and vehicles, – Nuisance (noise) pollution – Light disturbances	– Restrict speed of vehicles to national traffic and road use regulations and speed limits within the port; – All vehicles and machinery / equipment to be shut down between periods of use; – Control of noise emissions may include the use of silencers for machinery, equipment and noise barriers; – No load music is allowed to be played on site; – Vehicle horns are only allowed to be used in safety situations and not for any other purpose on facilities during operation hours; – If noise cannot be reduced to acceptable levels, personal hearing protection measures would be necessary; – Continuous engagement with residents to identify any concerns or issues, and appropriate mitigation and management measures agreed upon;	Daily throughout the transportation period	
	– Dust and emissions	– Use one identified access route only with appropriate turning circles and delivery zones; – Apply dust suppression measures where possible as a proactive measure to avoid dust creation; – Restrict speed of vehicles; – Specific activities that may generate dust and impact on nearby stakeholders shall be avoided during high wind events; and	Daily, weekly	

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
	– Loss of soil quality due to potential incidental spills	– Avoid activities during windy conditions; – Equipment and vehicles must be in a good condition to ensure that incidental oil spills do not occur and contaminate soil; and – In the event of spills and leaks, polluted soils must be collected and disposed of at an approved hazardous waste site. – Contract competent drivers with the provision of awareness on the potential impacts that ay result from incidents. The impacts that may occur as a result of poor consideration of further damage to the environment during the rehabilitation of contaminated sites – Aggregate material to be obtained for rehabilitation must be obtained from authorised borrow pits and disposal of contaminated overburden removed from an incident site must be at an approved sites and under supervision of the relevant local authority. – A contingency plan (Emergency Response Intervention Plan), which includes a step-by-step guide on procedures to be followed during an incident involving a tanker transporting the acid concentrate. – In case the drivers are able to contain a spill at an incident scene, the sulphuric acid must be safely contained or blinded with an agent that reduces its corrosively. Where a blending agent is not accessible the spill must be contained by ponding (creation of an earthen walled pond) to minimize broader spreading of the chemical.	Weekly	
	Disruption to traffic flow in the immediate vicinity	– Set up appropriate vehicle movement signage on local roads/intersections surrounding the project site to direct traffic flow in a safe manner; – Whenever feasible, transportation and trucks should avoid leaving the site at peak traffic periods (07:00 to 08:30 AM, 12:00PM to 14:00PM and (17:30PM to 18:30 PM); – Delivery vehicles or trucks should not be allowed to park off site, except in dedicated parking spaces (off site) as may be agreed upon between the	Daily	

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		proponent and the local authority; – All necessary reflective and lighting signs should be placed on project and transportation vehicles to maximize visibility and reduce potential incidents that may have occurred otherwise. – Operators of hazardous substances must be vigilant at all times while on duty or operating the tankers, therefore it is key that no driver should operate the tankers on public roads while under the influence of any toxic substance. Sufficient sleep where necessary must be afforded at safe demarcated rest areas along their route.		
	Loss / alteration of terrestrial habitat	– Compulsory toolbox talks and induction of employees; – Always determine the line / route of activity beforehand and restrict all activities to a demarcated area; and – Reinstate and rehabilitate where necessary.	Depending on active activity on site	
Hazardous substances handling and storage, maintenance on equipment, machinery and vehicles	– Soil contamination – Groundwater contamination – Nuisance (visual impacts, litter)	– Good housekeeping; – Training and awareness through toolbox talks and induction; – Raise awareness about the importance of responsible waste management, including wastewater management; – Implement a culture of correct waste collection, waste segregation and waste disposal; – Avoid the disposal of hazardous waste into the environment; and – All fuel and petrochemical products are to be stored on an impermeable, bunded and covered surface that is clearly marked and access controlled.	Daily	Site manager or the nominated site supervisor
Transport Safety And Security Compliance	Risks of fire occurrences. Fire risks may result in property damage, possible	– The proponent shall develop a fire rescue and management procedure in collaboration with the local authority for the site and implement its provisions. – A fire rescue and management procedure should be in collaboration with the local authority of the route and facilities and implement its provisions	Daily	Site manager or the nominated site supervisor

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
	injury/death and impacts of uncontrolled fires and explosions on site	including monitoring; – All personnel and business partners on the site should comply with the fire management, emergency preparedness and occupational health and safety plans in its entirety, as developed by the proponent; – Fire extinguishers must be kept on site at strategic locations, easily accessed and maintained in good working order; – Regular fire toolkits talks to be conducted and attendance performance is to be recorded; – Adequate safety signage should be displayed on all levels of the facilities and vehicles as per the proponent's health and safety management plan principles and national regulations in this regard; – All firefighting systems to be tested and maintained regularly as well as firefighting equipment; and – All emergency escape routes to be kept uncluttered and unblocked to allow easy escape.		
	Impacts on the Safety and Security of personnel and business partners	– The proponent should implement its health and safety management plan stringently; – Ensure that the appropriate PPE is adhered to at all times – Ensure all entrances and exits are structurally sound and safe to use at all times; – Ensure security personnel are adequately trained and visible throughout the public spaces within and outside the facilities; and – Ensure that effective complaints recording procedures are in place. – Verify that safety marks for the dangerous substances have been correctly displayed on vehicles and points of delivery – Ensure the awareness on safety procedures in the event of an incident – Ensure that the load complies with the appropriate load and dimension standards.	Daily	Site manager or the nominated site supervisor

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		– Ensure that drivers are aware to comply with traffic rules as per the national road authority regulation. – Maintain a reliable communication system that makes it possible to reach at all times, transport crew and staff handling the concentrate at delivery points. – Maintain a sound information exchange network with other industry stakeholders.		
	– Increased traffic flow in the immediate vicinity Additional heavy traffic volume and flow within the storage site and via the designated route to the Port	– During operations restrict movement to agreed upon operation hours; – Establish traffic calming measures and defined routes to and from the site – The developer is responsible for ensuring a practical traffic management plan is implemented to manage the potential effects on traffic conditions surrounding the site so as to reduce the impact. – It was recommended that truck circulation on-site should only occur in a forward direction. Any reversing of trucks should be kept to a minimum and only within areas that are closed off to general public movements.	Monthly	Site manager or the nominated site supervisor
	Soil and water contamination due to inadequate control and storage or incidental release of hazardous substances on site	**Storage** – Label chemicals appropriately – Chemicals with different hazard symbols should not be stored together - clear guidance on the compatibility of different chemicals can be obtained from the Materials Safety Data Sheets (MSDS) which should be readily available – Store chemicals in a dedicated, enclosed, and secure facility with a roof where appropriate and a paved/concrete floor. – Chemical tanks should be completely contained within secondary containment such as bunding	Weekly, Monthly	Site manager or the nominated site supervisor

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		– Storage and handling of fuels and chemicals shall be in compliance with relevant legislation and regulations – Fuels, lubricants, and chemicals are to be stored within appropriately sized, impermeable bunds or trays with a capacity not less than 110% of the total volume of products stored **Spills** The kits with the following items as a minimum should be made available on site: – Absorbent materials according to the chemical type – Heavy-duty plastic bags – Protective clothing (e.g. gloves and overalls) – Major servicing of equipment shall be undertaken offsite or in appropriately equipped workshops – For small repairs and required maintenance activities all reasonable precautions to avoid spills must be taken (e.g. spill trays, impervious sheets). – Provision of adequate and frequent training on spill management, spill response and refuelling must be provided to all onsite staff – Vehicles and machinery are to be regularly serviced to minimise oil and fuel leaks – All major petroleum product spills (spill of more than 200 litres per spill) should be reported to the Ministry of Mines and Energy (MME) on Form PP/11 titled “Reporting of major petroleum product spill’, attached as Appendix B. **In an event of a spill the following points therefore apply to all areas on the**		

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		site: – Assess the situation for potential hazards. – Notify trained personnel immediately, such as the company fire officer or the local fire department. Untrained persons or those without proper personal protective equipment must not enter areas with high concentrations of sulphuric acid. – Evacuate and restrict people from the hazardous area of a sulphuric acid release. – Do not come into contact with the spilled substance until it has been characterised and necessary personal protective equipment (PPE) is provided. – Stop or control the source of exposure. – Isolate the area as required. – Collect or confine the spill. Dilute and neutralize the spill and dispose in a secured landfill. Sulphuric acid may be absorbed in vermiculite, dry sand, or similar material. **The following measures are to be implemented in response to a spill:** – Spills are to be stopped at source as soon as possible (e.g. close valve or upright drum) – Spilt material is to be contained to the smallest area possible using a combination of absorbent material, earthen bunds or other containment methods – Spilt material is to be recovered as soon as possible using appropriate equipment. – Acid spills should be neutralized and then cleaned up. Do not use a		

ACTIVITY	POTENTIAL IMPACTS	MANAGEMENT / MITIGATION MEASURES	MONITORING REQUIREMENTS	RESPONSIBILITY
		strong base, to neutralize a strong acid. – All contaminated materials recovered subsequent to a spill, including soils, absorbent pads and sawdust, are to be disposed of at an appropriately licensed facility A written Incident Report must be submitted to the general manager and local authority or the Port of Lüderitz management.		
Job creation, skills development and business opportunities	Beneficial socio-economic impacts on a local and regional scale.	– Maximise local employment and local business opportunities; – Enhance the use of local labour and local skills as far as reasonably possible; – Ensure that goods and services are sourced from the local and regional economy as far as reasonably possible.	Quarterly	Site manager or the nominated site supervisor
Waste Management	Environmental pollution (littering and poor storage of waste)	– Implement a waste management plan as per the waste hierarchy, covering all aspects of waste generated on sites or points of delivery – Training and toolbox talk about importance of waste management – Solid waste shall be stored in an appointed area in covered, tip-proof metal drums/skips for collection and disposal to an approved waste management site. – Return packaging of hazardous and non-hazardous materials (wherever possible), such as empty bags, to farmers for reuse – See the material safety data sheets available from suppliers for disposal of contaminated products and empty containers – Liaise with the municipality regarding the waste and handling of hazardous waste. – Hydrocarbon and chemical contaminated solids have the potential to cause contamination to the soil, ground and/or surface water, thus correct storage and disposal methods are required.	Daily	– Site manager or the nominated site supervisor – All staff members

7 IMPLEMENTATION OF THE CONTINGENCY PLAN

All transportation activities will be carried out in compliance with the relevant legal requirements. Whilst the transportation and operation of the proposed project does not fall under the listed activities of the EMA, No. 7 of 2007 it is recognised that as an indirect consequence of the project, some activities may infer to the act – therefore the contingency plan considers the relevant guidelines and requirements of the act.

No significant impacts are anticipated for the activities that have been identified and management and mitigation measures are in place for potential risks.

This contingency plan:

- Has been prepared pursuant to a contract with the proponent
- Has been prepared on the basis of information provided to ECC up to May 2021
- Is for the sole use of the proponent, for the sole purpose of an contingency plan
- Must not be used (1) by any person other than the proponent or (2) for a purpose other than an contingency plan, and
- Must not be copied without the prior written permission of ECC.

ECC has prepared the contingency plan on the basis of information provided by the proponent and the environmental and social impact assessment report

APPENDIX A - AN EXAMPLE OF THE CONTINGENCY FOR EMERGENCY ENVIRONMENTAL INCIDENTS (ECP) DOCUMENTS

INCIDENT REPORT FORM

DEPARTMENT		DATE & TIME	

TYPE OF INJURY / INCIDENT
☐ LTI ☐ NEAR MISS ☐ ENVIRONMENTAL INCIDENT ☐ UNSAFE ACT
☐ UNSAFE CONDITION ☐ DAMAGE TO PROPERTY ☐ MINOR INJURY ☐ FATALITY

PERSON INJURED / INVOLVED/ WITNESSING THE INCIDENT							
NAME		DESIGNATION					
Employee		Temporary Worker		Contractor		Other (visitors,delivery personnel, etc)	

Section 1	Completed by the person/persons witnessing the Incident – Description of Incident
LOCATION OF THE INCIDENT	

Section 2	Root Cause – What was the underlying root cause of the Incident
Corrective/ Preventive Action (What is the action taken to reduce the likelihood of a reoccurrence?)	
Actioned by:	Action date:

Reported By:		Signature	
Departmental Supervisor		Signature	
Departmental Manager		Signature	
Health, Safety & Environmental Officer		Signature	

APPENDIX B - REPORTING OF MAJOR PETROLEUM PRODUCT SPILL FORM PP/11

FORM PP/11

MINISTRY OF MINES AND ENERGY

PETROLEUM PRODUCTS AND ENERGY ACT, 1990
PETROLEUM PRODUCTS REGULATIONS (2000)

REPORTING OF MAJOR PETROLEUM PRODUCT SPILL

(Regulation 49(1))

(Please note that where form is completed by hand it must be completed in capital letters)

1. Name of licence/certificate-holder/person .....
.....
*(*Delete whichever is not applicable)*

2. Postal address .....
.....

3. Physical address .....
.....

4. Telephone Number (including code) .....

5. Facsimile Number (including code) .....

6. Licence/certificate* number and date of issue, if applicable .....
.....
*(*Delete whichever is not applicable)*

7. Date of petroleum product spill .....

8. Location of petroleum product spill .....
.....
.....
.....

9. Reasons for petroleum product spill .....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

10. Type of petroleum product involved in petroleum product spill .....
.....
.....
.....

11. Quantity of the petroleum product spill .....
.....
.....
.....

12. Indicate whether the petroleum product has or will have any negative effect on the environment and the safety and health of person or the property of persons .....
.....
.....
.....
.....
.....
.....
.....
.....

13. Provide full details of all remedial actions taken to minimise risks associated with petroleum product spills and all cleaning-up operations taken in connection therewith .....
.....
.....
.....
.....
.....
.....
.....
.....

DECLARATION

I, ...,
hereby declare that the information submitted by me in this application is true and correct.

....
Signature *Place* *Date*

APPENDIX C - TEMPLATE FOR MONITORING

INSPECTION DATE: _____

INSPECTION COMPLETED BY: _____

SUMMARY OF ACTIVITIES OCCURRING:

_____

_____

_____

_____

Ref No.	Item	Requirements	Responsibility	Compliant	Notes / Action Taken / Corrective Action Required

Ref No.	Item	Requirements	Responsibility	Compliant	Notes / Action Taken / Corrective Action Required
1	Noise	– Is the facility avoiding noise generating activities at night? – Is scheduling of works to avoid disturbance between the hours of 22pm and 5 am in place? – Are Saturday operational periods from 8 am – 12 noon, when near residential areas? – Are procedures for receiving complaints from nearby land users or residents in place and mitigation measures implemented should operations generate excessive noise?	– SHE Representative	Yes☐ No☐ N/A☐	
2	Operations of mechanical equipment and engines	– Are regular checks of all equipment conducted routinely? – Are equipment services up to date? – Are spill kits and/or drip trays available?	– SHE Representative, and – General Manager	Yes☐ No☐ N/A☐	
3	Production and effluent discharge	– Is the domestic and industrial effluent discharged off into approved systems? – If not, are regular water quality samples taken to ensure the treated wastewater complies to the prescribed general standards as set out in the Water Resources Management Act, 2004 (Act No. 24 of 2004)?	– SHE Representative, and – General Manager	Yes☐ No☐ N/A☐	

Ref No.	Item	Requirements	Responsibility	Compliant	Notes / Action Taken / Corrective Action Required
4	Solid waste generation	– Has the waste management plan and the application of the waste management hierarchy implemented? – Are suitable collection points in place for waste collection at the factory? – Is waste collected regularly and transported correctly? – Is hazardous waste such as waste oil/lubricant stored in a hazardous waste storage area and disposed of by accredited hazardous waste handlers such as Rent A Drum?	– SHE Representative, and – General Manager	Yes☐ No☐ N/A☐	
5	Lighting	– Are energy-efficient light bulbs installed? – Is unnecessary lighting avoided where possible? – Are lights switched off at night?	– SHE Representative, and – General Manager	Yes☐ No☐ N/A☐	
7	Air Emissions	– Are the dust extractors cleaned regularly? – Are vehicles serviced regularly to reduce emissions? – Is there dust monitoring system in place?	– SHE Representative	Yes☐ No☐ N/A☐	
8	PPE	– Are personnel wearing the correct PPE? – Is PPE in good condition? – Are there any complaints on the health of employees	– SHE Representative	Yes☐ No☐ N/A	

APPENDIX D - COMPLAINTS REGISTER TEMPLATE

NAME	CONTACT DETAILS	DATE AND LOCATION OF COMPLIANT	NATURE OF COMPLIANT	ACTION TAKEN TO RESOLVE	NOMINATED PERSON TO RESOLVE ISSUE *(Signature)*	DATE OF RESOLUTION/ CLOSED OUT COMPLAINT

APPENDIX E - MONTHLY INTERNAL COMPLIANCE CERTIFICATE

FOR THE PERIOD …… TO ……

MANAGEMENT REPRESENTATIVE:	SIGN:
SHE Representative:	SIGN:

Date of Submission: _____

Key activities on site during the month: _____

NON-CONFORMANCE:

Area of activity: _____

Reason:
Responsible party:
Results:

Correction action taken:	

Intended follow-up:	

GOOD PERFORMANCE:

Description of activity or action in which the area/person went beyond compliance towards responsible care for the environment:

ADDITIONAL COMMENTS:
