

ENVIRONMENTAL MANAGEMENT PLAN (EMP)

EIA FOR UNION MARINE PROPERTIES' PROPOSED STORAGE,
TRANSPORTION AND HANDLING OF CHEMICALS IN THE UFE
WAREHOUSE.

AUGUST 2022



EXPERTISE AND DECLARATION OF INDEPENDENCE

CONSULTANT'S EXPERTISE

I.N.K Enviro Consultants cc is the independent firm of consultants that has been appointed by the Union Marine Properties (Pty) Ltd to undertake the environmental impact assessment process.

Immanuel N. Katali, the EIA Lead Practitioner holds a B.Arts (Honors) in Geography, Environmental Studies and Sociology and has over six years of relevant experience in conducting/managing Environmental Impact Assessments (EIAs), Socio-Economic Impact Assessments (SIA) and compiling Environmental Management Plans (EMPs) in Namibia. Immanuel is certified as an environmental practitioner under the Environmental Assessment Professionals Association of Namibia (EAPAN).

DECLARATION OF INDEPENDENCE AND DISCLAIMER

The consultant herewith declare that this report represents an independent, objective assessment of the environmental impacts associated with the amendment activities of the proposed storage of chemicals, reagents and copper concentrates.

I.N.K has prepared this report based on an agreed scope of work and acts in all professional matters as an independent environmental consultant to UMP (Pty) Ltd and exercises all reasonable skill and care in the provision of its professional services in a manner consistent with the level of care and expertise exercised by members of the environmental profession.

I.N.K does not express an opinion as to the accuracy or completeness of the information provided, the assumptions made by the parties that provided the information or any conclusions reached. I.N.K has based this Report on information received or obtained, on the basis that such information is accurate and, where it is represented to I.N.K as such, complete.

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LIST OF ACRONYMS, ABBREVIATIONS AND UNITS

DEA	Department of Environmental Affairs
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
I.N.K	I.N.K Enviro Consultants cc
MEFT	Ministry of Environment, Forestry and Tourism

1 INTRODUCTION

1.1 Introduction to the Proposed Project

Union Marine Properties (Pty) Ltd (herein after referred to as UMP) intends on applying for an Environmental Clearance Certificate (ECC) for the transportation, handling and storage of 23 different chemicals from the port, which will be off-loaded from the ships, to UMP's existing United Fishing Enterprise (UFE) Warehouse and vice-versa. The proposed project is located in the industrial area of Walvis Bay, approximately 1.08 km from Namport (Figure 1).

A separate Environmental Impact Assessment (EIA) was previously conducted for the transportation, handling and storage of the same chemicals in the UFE, but under a different company. UNP therefore intend to have the ECC and relevant documentation and EIA reports, under their own name, hence this EIA process.

UMP will not collectively store all the 23 chemicals at once within the UFE Warehouse. The objective for the assessment of the potential impacts associated with the 23 chemicals, is to place UMP in a position to transport, handle and store any of the chemicals, at any given time and depending on the requests of their clients.

Prior to the commencement of the proposed project, an application will be submitted to the MEFT for a decision in terms of the Environmental Management Act, 7 of 2007 and associated EIA Regulations (2012). The content of the report has been based on the previous impact assessment undertaken in 2021 for chemical storage in the UFE.

I.N.K Enviro Consultants cc has been appointed by UMP as the Independent Environmental Assessment Practitioner based in Namibia to undertake the EIA process.

1.2 Details of the persons who compiled this EMP

I.N.K Enviro Consultants cc is the independent firm of environmental consultants that has been appointed by UMP to compile the EMP.

Immanuel N. Katali, the EIA project manager and lead practitioner holds a B.Arts (Honours) Degree in Geography, Environmental Studies and Sociology and has over six years of relevant experience in conducting/managing EIAs, compiling EMPs and Socio-Economic Studies. Immanuel is certified as an environmental practitioner under the Environmental Assessment Professionals Association of Namibia (EAPAN).

Johann Venter, REH&S Risk Manager for TPS: BBA Degree (Unisa) LLB Degree Unisa; EH&S Associate Auditor (Nosa) and has twenty-five years of experience in Risk Assessment gained while employed by DOW Chemicals, Safripol (Sasolburg) Karbochem Sasolburg), Basil Read (Rössing), Areva (Trekopje), NOSA (Okoruso Mine) ABB (Dundee Precious Metals



Figure 2: Location of the UFE Storage Facility in the Walvis Bay Context

2 RESPONSIBILITIES

This section describes the roles and responsibilities for implementing the actions plans contained in this EMP.

2.1 UMP General Managers, Managers and Operations Managers

The General Managers, Managers and Operations Managers have overall responsibility for environmental management on the storage and handling of the chemicals and reagents and associated facility and for ensuring this EMP is implemented. To assist them, UMP will have a Safety, Health and Environmental (SHE) Officer (i.e. responsible person) that will be dedicated to managing and monitoring the environmental issues associated with the activities.

2.2 SHE Responsible person(s)

The SHE Responsible Person will be responsible for assisting the General Managers, Managers and Operations Managers in all environmental issues, and specifically to ensure that the commitments as set out in this EMP are implemented

In addition to the above, the SHE Responsible Person is responsible for ensuring that all persons involved comply with this EMP.

The SHE Responsible Person will be responsible for the following aspects related to compliance of this EMP:

- Regular inspections and auditing compliance to this EMP and any other relevant legal requirements e.g. permits, authorisations, conditions of the Environmental Clearance Certificate.
- Conduct environmental awareness training during induction training and on an ad hoc basis thereafter.
- Ensure compliance to this EMP and permits and authorisations issued to UMP by relevant authorities. Ensure responsibilities and target dates are developed for each one of the commitments in this EMP. This will be through one of the following mechanisms:
 - Design requirements; or
 - Specific work instructions and procedures; or
 - Action plans (as required by the Integrated Management System).
- Ensure that contractor staff is controlled through the implementation of appropriate security measures.
- Carefully manage the storage and handling of hydrocarbons and other hazardous materials.
- Monitor for excessive dust and noise and implement control measures if necessary.
- Implement a waste management strategy.
- Monitoring of maintenance equipment and machinery.
- Ensure the maintenance of hygienic conditions of sanitation facility.
- Implement an environmental awareness plan.

- Installation of emergency plans (fire, evacuation etc.) and first-aid procedures.
- Control of traffic safety and road conditions.
- Ensure that surface runoff is controlled and impacts on water resources are prevented.

3 MANAGEMENT AND MITIGATION MEASURES

The measures required to manage and/or mitigate the potential impacts are detailed in this section. Only the operational phase is addressed below, as no construction is required (except for certain modifications required as presented in the risk assessment, also covered in the section below); and the activities and impacts associated with the decommissioning phase are not relevant as the UMP facility will not be decommissioned upon termination of the contract with Swakop Uranium and the various companies/clients.

3.1 Operations phase

3.2 TRANSFER OF REAGENTS AND CHEMICALS TO THE VARIOUS COMPANIES/CLIENTS

All bagged reagents and chemicals will be loaded onto interlink flatbed trucks by forklifts or cranes and transported to the various companies/clients as and when required.

The transporting operation is planned to be conducted on a 24/7 basis. Where possible, transportation at night will be avoided.

3.2.1 Traffic – inside and outside the port

The project will generate two main streams of traffic during operations as follows:

1. The movement of trucks from the discharge berth to the UMP storage facility during offloading of a shipment. This movement will occur periodically whenever a shipment arrives in the port.
2. The daily movement of trucks from the UMP facility to various companies/clients. This movement will occur throughout the year.

3.2.2 Access roads to UFE warehouse location

Consideration had been given to the possibility that offloading and transportation of chemicals may be taking place after-hours.

Lighting condition throughout the immediate is very good and does not impede the movement of vehicles from within the Port's area and the immediate surrounding area. However, extremely thick mist, which is typical of Walvis Bay, makes road visibility towards the outskirts leading to the UFE very difficult. This should be born in mind in the event of chemicals being conveyed after-hours to the UFE.

The following measures are required with regard to the management of Transportation and receipt of chemicals to the warehouse (traffic-related impacts):

- Proper care should be taken when crossings railways in the vicinity of the site.
- All drivers must adhere to the speed limit of Namport, while travelling inside the port.
- Ensure implementation of a detailed safety code of conduct for transport contractor; to be closely monitored with penalties enforced if necessary.
- Ensure the trucks keep their distance from one another, to allow other road users to pass safely.

- Install tracking devices in trucks to monitor speed and location.
- Ensure that an Emergency Response Plan is in place, in event of an accident.
- Assisting in road safety campaigns during December holidays.
- MSDS obtained prior to purchase/order of chemicals
- Risk assessment of area where chemicals are delivered
- Training provided for workers who receive chemical deliveries
- Rationalizing chemical storage to ensure:
 - accepting adequate quantities
 - compatibility of chemicals
 - adequate storage facility and space available
 - all required signage and PPE are available
- Proper sign-off strategies for chemicals received, as well as condition in which received
- Safe delivery areas and equipment for offloading chemicals
- Chemical training for workers
- Use personal protective equipment as described in the MSDS
- Local induction and emergency training
- Emergency procedures in place
- Spill kits available
- First aid kits and trained first aiders/safety representatives

The following measures are not specifically for the various companies/clients/UMP to implement as it is the responsibility of the Roads Authority/Walvis Bay Municipality. However, the various companies/clients/UMP must engage with the Roads Authority or Walvis Bay Municipality to inform them about the project and the importance of implementing these measures.

- Upgrading of the Anna Mupetami/3rd Street intersection to a signalized intersection.
- Based on limited information available and taking into consideration the economic importance of the C28 route it is our opinion that upgrading of the route to bitumen standards will be feasible in the long term due to decreased road user and maintenance costs.

3.2.3 Storage and handling of reagents and chemicals: Third party health and safety - health and safety impacts and fire and explosion risks

With reference to Scoping (with assessment) Report, the hazardous chemicals/reagents that were assessed are:

- Urea Gran (biggest one) and Urea Prills (Comes from Middle east)
- MAP–Mono-Ammonium Phosphate (Europe/Russia)
- NPK – Nitrogen, Phosphorus and Potassium

- KCL (also MOP) – Potassium Chloride
- SOP - Potassium Sulphate
- Copper Concentrate
- Sulphur
- Pyrolusite
- Ferrous Sulphate
- Grinding Media (SAG Mill)
- Grinding Media (Ball Mill)
- Flocculant
- Coagulant
- Sodium Carbonate
- U IX Resin
- Extractant
- Modifier
- Sodium Hydroxide
- Diatomaceous Earth
- Lime
- Activated Carbon
- Lithium Products

The following scenarios could lead to hazardous reagents/chemicals being released (spilled), potentially impacting third parties health and safety:

1. A bag or container being dropped or damaged on the quay side during ship-offloading and breaking open (or in the case of bulk sulphur being off-loaded by the modified grab and hopper – the volume of the grab bucket released).
2. A damaged bag(s) or Intermediate Bulk Container (IBC) spilling its content along the route while being transported between the port and the UMP facility
3. A bag or container being dropped or damaged during off-loading at the UMP facility.
4. A bag, IBC or pallet box being damaged by the forklift or the sun if stored under direct sunlight for long periods at the facility.

In the very unlikely event of a (large) fire, it shall be assumed that more than one reagent is burning and that the packing material will most likely be involved in the fire. A fire is not a controlled chemical reaction (especially with a variety of reagents and chemicals and packing material); therefore, the release of toxic, corrosive combustion gases, vapours and dusts is likely.

The risk of fires or explosions during handling and transport of the reagents and chemicals is very low (especially considering that the two flammable liquids would have a flash point of app. 100°C) as long as the containers are in an undamaged state, have not been exposed due to damage to the containers by excessive UV-radiation (sun) and the shelf life of the chemical is not expired. The flammable reagents

and chemicals will only ignite if the containers have been damaged and there are sparks or heat created (mechanical or electrical) in the vicinity of the reagents and chemicals.

The following reagents/chemicals pose a fire risk:

- Extractant
- Modifier
- Sulphur
- Phosphorous
- Potassium
- Calcium Ammonium Nitrate
- Zinc
- Cobalt
- Nickel

The following chemical/reagents are not flammable. The risks were highlighted and relevant management and mitigation measures are stipulated below:

- Ferrous sulphate - in case of a surrounding fire there is a risk of thermal decomposition, for temperatures above 600°C, this may release toxic and corrosives oxides of sulphur (sulphur trioxide).
- Pyrolusite enhances combustion of other substances. It decomposes at temperatures of above 553°C resulting in manganese(III)oxide and oxygen, which further increases the fire hazard.
- Urea - Store away from Oxidizing agents Hypochlorites, Sodium nitrate. Keep in cool, dry ventilated area. Tightly closed containers.
- Limestone Ammonium Nitrate - Store away from Sulphur, urea, combustible materials, acids, hydrocarbons. Keep away from heat/ignition sources. Tightly closed containers. Cool, dry well-ventilated storage.
- Mono-Ammonium Phosphate - Store away from alkalis and caustic materials, copper and its alloy, acids. Keep in tightly closed containers. Cool, dry well-ventilated storage. Protect from moisture.
- Nitrogen - Keep away from heat/sunlight
- Lubricants - Store away from heat/ignition sources. Keep away from combustible materials.
- Chrome - Not listed as a hazardous material and does not exhibit any characteristics of hazardous materials, including toxicity, according to OSHA 29 CFT 1910.1200. Chromite is fairly inert and is a common agricultural product and does not present any hazard to environmental pollution in its natural form.

This section details management measures pertaining not only to the hazardous reagents and chemicals, but all of the reagents and chemicals proposed to be handled and stored by UMP at their facility.

3.2.3.1 Management measures relating to all reagents and chemicals (but more specifically the hazardous reagents/chemicals) to be handled and stored

- Regular housekeeping and safety inspections/audits to be conducted by management personnel to ensure continuous compliance with safe operating procedures and safety standards.
- “Firewatch” staff will be identified and trained.
- Full building Inspections will be carried out by Safety Reps as part of a monthly program. Daily walk-rounds must be carried out to identify any potential issues
- The reagents and chemicals shall only be stored in original containers being undamaged and sealed.
- Containers, bags, etc. must be handled carefully and stored accordingly to the manufacturer’s specifications.
- Damaged containers, bags, etc. shall be sealed/repaired immediately with appropriate material.
- Broken/damaged bags must be correctly handled & repaired to avoid contamination of the road and other third parties’ facility.
- A Standard Operating Procedure (SOP) must be developed for bag and container handling.
- After truck discharge, bags must be inspected to ensure they are not damaged in transit to site and no reagents/chemicals have or will be released.
- The storage of hazardous substances indoors will be carried out in well ventilated, cool and dry.
- Should deterioration of bags occur due to UV light or any other cause, the bags shall be sealed/repaired immediately with appropriate material.
- Storage shall be carried out in facility with appropriate bunding, specifically relating to the liquids.
- Ensure systems are in place to maintain stringent housekeeping standards.
- Employees must receive initial training prior to commencing work with hazardous substances and be adequately supervised until they are trained and found competent.
- Provide annually rigorous re-fresher safety training to employees to ensure that they remain familiar with the dangers associated with the various hazardous chemicals and reagents. In-house training program being developed for employees.
- UMP, various companies/clients will arrange insurance policies with adequate cover to protect third parties against incidents for which UMP, various companies/clients is legally liable and

such policies will be in line with best practice for Namibian mining/ processing/ and exporting companies.

- Keep the various companies/clients chemicals away from the other products being stored in the warehouse to avoid any contamination. (refer to specific hazardous substance storage prohibitions below).
- Temporary wind screens should be stored on site to be placed around a spill to further reduce the wind speeds and reduce the potential for wind-blown material in the event of a spill.
- Ensure controls are in place, such as, but not limited to:
 - regular inspection is undertaken of NamPort lifting gear on quayside;
 - correct inspection of bags prior to filling by dockside personnel is undertaken;
 - there are suitable off-loading procedures;
 - there is control of ignition sources on quayside during unloading.
- UMP to undertake an audit of transportation operations to ensure that proper controls are in place.
- A sprinkler system / deluge system must be installed. It is at the discretion of the client whether or not to install a live connection to the police / fire services, but the important aspect is that a fire / smoke can be detected by the system and any fires put out.
- UMP to ensure that there is segregation of incompatible materials
- UMP to ensure an offsite emergency plan is generated with relevant emergency responders.
- UMP to ensure an onsite emergency plan is generated.
- Clear channels of communication must be opened between UMP and the various Municipal Departments responsible for the health and safety of the residents of Walvis Bay. The Emergency Response Plans and Risks Assessments must complement and correlate with the existing Municipal plans and structures.
- No foodstuffs will be stored within this facility.

3.2.3.2 Additional Management Measures for the Handling, Storage and Disposal of Chemicals and Reagents

Storage

- Risk assessments to determine appropriate storage arrangements and packaging requirements
- Use of chemical segregation:
 - chemical bunds
 - lockable cages

- drip trays
- Ensure incompatible chemicals stored at facility
- Cool, dry, well ventilated storage facility
- Wherever possible, chemicals stored in their original containers/packaging. Where this is not appropriate a risk assessment is undertaken to ensure correct packaging and labelling
- Hazchem signage where required
- Time sensitive chemicals dated and monitored through scheduled workplace inspections
- Use personal protective equipment described in the MSDS
- Training for workers responsible for storing and accessing chemicals
- Access to chemical storage restricted to authorized workers only
- Local induction and emergency training
- Emergency procedures in place
- Spill kits available
- First aid kits and trained first aiders/safety representatives
- Appropriate fire extinguishers available

Handling

- Risk assessments to determine chemical properties and appropriate handling arrangements
- Compatible equipment used with chemicals
- Adequate ventilation
- Chemicals in small sized containers to reduce weight
- Chemicals labeled
- Use lifting aids and trolleys for larger items
- Use personal protective equipment described in the MSDS
- Training for workers using chemicals
- Access to chemical storage restricted to authorized workers only
- Adequate supervision with regards to level of training and experience
- Local induction and emergency training
- Emergency procedures in place
- Spill kits available
- Buddy system
- First aid kits and trained first aiders/safety representatives

Disposal

- Chemicals labeled and disposed of in appropriate containers

- Removed by EPA licensed contractor
- Risk assessment of area where chemicals are disposed
- Restricted access where appropriate
- Local induction and emergency training.
- Emergency procedures in place
- Spill kits available
- First aid kits and trained first aiders/safety representatives
- Appropriate drainage system

As mentioned above, a sprinkler or deluge system is required. A detailed assessment of the existing fire suppression system (sprinkler system) within the warehouse is required to determine whether it is capable of being made functional. If the existing sprinkler system is not functional the assessment is to determine what needs to be done to fix the existing system or if it cannot be fixed the assessment should define what will replace it. In either case, whether the existing system can be utilised or a new system installed, the fire detection and suppression system used must conform with international standards. Whether the existing sprinkler system can be utilized or a new system installed, the final fire detection and suppression system implemented must include an alarm system to warn workers in the warehouse of the danger of the fire. Depending on the system to be implemented, the designer of the system must give consideration to the following (and other relevant) standards, as appropriate:

- ISO 6182 - parts 1 to 8 ('Automatic sprinkler systems')
- ISO 7240 - part 1 to 29 (Fire detection and alarm systems)
- ISO 12239 (smoke alarms)

In addition, it is necessary to ensure the segregation of incompatible chemicals within the warehouse (see further details below).

Table 1: Chemical Compatibility Table

CHEMICAL	Urea	LAN/CAN	MAP	Nitrogen	Phosphorus	Potassium	KCL/MOP	SOP	Lubricants	Copper Concentrate	Sulphur	Magnesium Nitrate	Caustic Soda	Copper	Flocculant
Future Chemicals															
Urea															
Limestone/Calcium Ammonium Nitrate (LAN/CAN)															

Mono-Ammonium Phosphate (MAP)	Green	Red	Green															
Nitrogen	Green	Green	Green	Green														
Phosphorus	Green	Red	Green	Green	Green													
Potassium	Green	Green	Green	Green	Green													
Potassium Chloride (KCL/MOP)	Green	Red	Green	Green	Green	Green	Green											
Potassium Sulphate (SOP)	Green	Red	Green	Green	Green	Green	Green	Green										
Lubricants	Green	Red	Red	Green	Red	Red	Red	Red	Green									
Copper Concentrate	Green	Green	Red	Green	Green	Green	Green	Green	Green									
Current Chemicals (as observed)																		
Sulphur	Red	Red	Red	Green	Red	Green	Red	Red	Green	Green	Green							
Magnesium Nitrate	Red	Green	Green	Green	Red	Red	Red	Green	Red	Green	Red	Green						
Caustic Soda	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green					
Copper	Green	Green	Red	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green			
Flocculant	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green		

3.2.4 Soils

Should hydrocarbon leaks and spills occur (from vehicles and/or machinery) this could result in contamination of the site(s). The following measures will be implemented in order to manage this potential impact:

- All machinery and vehicles will be adequately maintained so as to prevent leaks and spills.
- Should any leaks and hydrocarbon spills occur, these will be contained and cleaned up immediately and disposed of at the Walvis Bay Hazardous waste facility.
- Carefully manage the storage and handling of hydrocarbons and other hazardous materials.
- Ensure that surface runoff is controlled and impacts on water resources are prevented.
- Spill kits will be readily available (i.e. in vehicles or close to transfer positions).

3.2.5 Water (surface and groundwater)

The following measures will be implemented in order to manage the potential impacts associated with the storage in the UFE Warehouse:

- Ensure the roof and floor of warehouse are in sound condition. In terms of this, the section of the Warehouse Roof that is damaged, needs to be fixed. Furthermore, repairs to warehouse infrastructure, if leaks are found.

3.2.6 Biophysical environment

Under normal (operating) conditions there will be no release of any of the chemicals/reagents into the environment, as it will all be contained. During the off-loading from the ship; transportation to the UMP storage facility; unpacking; storing; or loading onto interlink flatbed trucks, incidences or accidents may occur where some of the chemicals/regents are spilled. In all these incidences, the spilled reagents/chemicals could end up in the sea.

Management and mitigation measures:

- Clean-up procedures to be put in place.
- Ensure that the transport route is regularly checked for spillages.
- The area in which the sulphur and pyrolusite will be stored will be bounded by bunding and will have an impermeable surface/liner.
- Ensure that all staff operating on site receive training regarding the requirements of this EMP and the UMP Emergency Response Plan.

3.2.7 Socio economic impacts

Emissions from the operations could result in the contamination of the neighboring sites and their products, thereby impacting them economically. The management and mitigation measures in the preceding sections will be implemented in order to manage this risk.

3.2.8 Noise

In order to protect the amenity of the local residents some good site practice methods should be employed and are described below:

- Machinery would be subject to regular maintenance.

3.2.9 Air quality

Exhaust emissions, chemical and reagent emissions as well as dust generation could occur during the off-loading from the ships or during stacking in the warehouse or transport to and from the warehouse. Dust and emissions from the chemicals and reagents will be managed through the implementation of the management measures. Exhaust emissions and dust generated by vehicles on site will be managed as follows:

- Vehicles will be well maintained so as to minimise exhaust emissions.

3.2.10 Emergency Response

3.2.10.1 Emergency response tools and equipment

The placement of organograms at offices indicating the key responsible persons and actions to be followed in the event of emergency was generally found to be well implemented. However, recommendations are provided below to ensure emergency response procedures involving the offloading, transporting and storage of chemicals are carried out effectively.

Recommendations

- Ensure portable fire extinguishers and fire hose reels are distributed and placed throughout UMP's site.
- Ensure all fire equipment are in good condition and regularly serviced by external fire equipment maintenance company.
- Ensure emergency showers are available at most of the storage areas but provision of additional emergency showers pending the implementation of storage recommendations for the new list of chemicals, may be necessitated.
- Ensure symbolic safety signage and demarcation have an in-depth overview and should be effectively displayed at all locations.
- Ensure that, due to the lack of sufficient water supply for firefighting purposes, a small team of First Responder members should be provided with emergency response equipment. The First Responder Team and equipment should comprise the following most essential equipment and manpower:
 - Responder personnel: x 4 (Fire Fighting training and certification will be provided by Walvis Bay Fire Department)
 - Response trailer: 1
 - Portable fire pump: 1
 - Fire hoses: 23m x 45mm: 4
 - Fire nozzles c/w shut-off valve: 2
 - Foam Branch (Nozzle): 2
 - Foam, 25 L drums: 4
 - First Responders to be fitted with Acid/Fireproof overalls.
- That the available systems be utilised and made fully operational.

3.2.10.2 Emergency Response Communication

The effectiveness of emergency response was tested by ascertaining the duration of time taken to establish actual contact with the Walvis Bay Fire Department.

The result of this exercise was unsatisfactory as direct communication with the Fire Department was only established after 26 minutes.

Recommendations

- Ensure a flyer-type of list is provided by the Municipality of Walvis Bay to UMP which contains general contact numbers.
- Confirm and communicate role of Security Company in initiating Emergency Response and communicate formal policy to all employees. Provide company-own (with company Logo) emergency contact numbers at all offices for Emergency Services, Ambulance, Hospital etc.
- All key offices areas to conduct table-top exercises to ensure understanding of Emergency call-out procedures.
- That the respective EH&S Managers formally meet set-up a collective response strategy.

