

# EMERGENCY RESPONSE / CONTINGENCY PLAN

---

Proposed Alliance LC's Dry Bulk (Mineral Ore) Loading and Export Operations utilizing a Transshipment Facility at the Port of Lüderitz, Namibia

April 21

Compiled for: Mr. Vyacheslav Lobikov  
Alliance LLC  
11B Komendantsky propsekt  
Saint-Petersburg, Russia

Authored by: Mr. Titus Shuuya



## DOCUMENT INFORMATION AND APPROVAL

<b>Title</b>	Environmental Clearance Certificate for the Proposed Alliance LC's Dry Bulk (Mineral Ore) Loading and Export Operations utilizing a Transshipment Facility at the Port of Lüderitz, Namibia	
<b>ECC Application Reference number</b>	APP- 002862	
<b>Location</b>	Lüderitz Port, Namibia	
<b>Proponent</b>	LLC Alliance 11B Komendantsky propsekt Saint-Petersburg, Russia P. O. Box 25874, Windhoek	
<b>Author:</b>	<b>Signature</b>	<b>Date</b>
Mr. Titus Shuuya (EAP) 1		13 April 2022
Mr. Shadrag Tjiramba (EAP – Internal reviewer) 2		18 April 2022
<b>Approval – Client 1</b>		
Mr. Vyacheslav Lobikov		20 April 2022
<p><i>Copy Right:</i></p> <p><i>“This document is the intellectual property of ELC and may only be used for the intended purpose. Unauthorized use, duplication, plagiarism or copying without referencing is prohibited”</i></p>		

## 1.0 RESPONSE CONCEPT

Possible accidents involving spill of hazardous chemical substances may include:

- Release of hazardous chemicals as a result of tankers accidents
- Release as a result of capsized or damaged wagons, containers and or tankers carrying the respective commodity (Mineral Ore (Manganese, Lead and Zinc)) of hazardous substance or dust particles
- Accompanied by fire, explosives, property damage and involving environmental pollution with corrosive or toxic products resulting from vehicle collision
- As a result of handling of hazardous substances while in transit

Barges / Vessels accidents may occur within the harbour during the handling (loading) of the commodities and such accident may impose threats on the health and lives of marine and terrestrial communities operating within the port (should such occurs near/within inhabited areas) as well as on the natural environment.

Faulty automated or mechanical accessories safety measures on the wagons, barges and cranes used for handling the commodity may also cause spills of dangerous amounts of hazardous substances.

When hazardous substances spills into the marine environment, the particulate matter in granule form may tarts to dissolve and dilute the sea water. The diffusion rate is proportional to ambient temperature and the size of the particulate, which releases the granules.

Additionally, potential spillage of fuels i.e. diesel and engine oil from the vessels / barge into the marine environment may cause harm or disturbance to the vegetation or living microorganisms that it comes into contact with.

### Objectives

The purpose of the emergency response plan for cases involving spill of hazardous substances is as follows:

- 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.

## 2.0 SETTING UP EMERGENCY RESCUE CREWS

Alliance LLC shall set up the following emergency response steps:

- Incident Alert and Mobilisation – accident reported to key authorities for recourses mobilisation
- Emergency Response – emergency response and first aid to injured employees and in case another vehicle(s), other casualties
- Reconnaissance and rescue team – reconnaissance and rescue of injured persons
- First-aid team – first aid to injured employees and other persons
- Emergency Rescue Service – fire fighting

Manpower of the authorities providing a joint response to emergency situation according to its complexity:

- Manpower and equipment of the **Department of Environmental Affairs**
- Manpower and equipment of the **Emergency Rescue Services**
- Manpower and equipment of the **Fire Safety Local Authority Department**
- Manpower and equipment of the **Regional Police Unit**
- Manpower and equipment of the **Emergency Medical Care**

### **3.0 TASKS**

#### **3.1 Tasks of Officials Involved in the Emergency Response Operations. Method of Action**

Operations Manager of Alliance LLC (accountable manager):

- Becomes familiar with the situation
- Arranges for accident notification to relevant national and regional level authorities
- Designates a location for meeting and directing the manpower and equipment
- Provides directions for the actions of the emergency response units
- Requests additional manpower and equipment, if necessary
- Specifies measures ensuring the safe performance of the emergency response operations
- Supervises the task performance

Independent Environmental Officer – Alliance LLC:

- Receives information about the situation and suggests measures for emergency response and recovery of damaged equipment
- Ensures the availability of the equipment, materials and manpower required for conducting the emergency recovery works
- Assumes the duties of a person in charge of the emergency response
- Implements any instructions the accountable manager may give

Employees of Alliance LLC:

- Notify the appropriate persons and agencies as envisaged in the plan
- Take actions to rescue injured persons
- Apply preliminary emergency response measures to address the incident or limit the scope of the incident envisaged in the plan
- Inform the accountable manager about the measures implemented
- Follow the instructions of the accountable manager of the rescue operations.

#### **3.2 Tasks of the Managing Authorities; Response to Fuels or Hazardous Substance Spills.**

The overall management of the rescue operations on the site is a responsibility of the appointed emergency response service provider with supervision of Alliance LLC Operations Manager and in collaboration with relevant authorities.

The direct operational management of the rescue personnel is a responsibility of Alliance LLC accountable manager on the site who interacts with the emergency response forces at a regional and or local level (affected Regional / Town Council or Municipality), organizes the operations of the emergency teams for response to disasters, and accidents, rescue and emergency recovery operations and provides assistance to the Technical Supervision Authorities to establish the reason for the incident.

### **3.3 Tasks of the Company Teams. Response to Fuels or Chemical Spills**

#### **3.3.1 Tasks of the Service Personnel:**

- Take measures as per the operating instructions
- Notification of authorities.

#### **3.3.2 Tasks of the Emergency Response Units:**

- Task of the reconnaissance-rescue team: Immediately start observation of the situation, notify all personnel about the evacuation order issued by the Manager along with any other instructions issued.
- Task of the first-aid team: Receive materials and medicines and immediately start to provide first aid to injured persons;
- Task of the **Emergency Rescue Service (ERS)** team: Immediately start fire suppression, evacuate any personnel from the premises close to fire, and rescue people from vehicle wreckages.
- The tools and equipment to be used for emergency response include: tools from the fire-extinguisher cabinets; other suitable tools and materials in place, including the first-aid kits with the Emergency Rescue Service.

### **4.0 EMERGENCY NOTIFICATION AND ALERT CALL**

Any member of the Company personnel must immediately notify the site manager if an incident or fire occurs. Once an emergency notification is received, the Emergency Rescue team must be immediately notified by calling, the relevant nearest local authority and police departments.

### **5.0 ORGANIZATION**

#### **5.1 Clarify the Situation.**

The emergency team will conduct visual inspection of the affected area in order to collect full and objective information about the type, scope and original location of the incident, and the impact (vehicle wreckage, victims, chemical spills etc.).

#### **5.2 Protection of Employees and Population**

Accidents involving spills of flammable liquids will require evacuation of victims from impact areas according to evacuation plans. Employees must be evacuated opposite the wind direction. Evacuation of accident victims must be done with care and by persons trained to provide first aid, hence all drivers must undergo a first aid train and at all time carry with them a valid first aid certificate.

PPEs must be used by rescue teams where high concentrations of hazardous substances are in place. PPEs will include breathing apparatus, skin protection, protective glasses, gloves, etc.

#### **5.3 Isolation of the Accident Scene**

Isolation will be applied to limit the impact of chemical spills as follows:

- Cease any handling of hazardous chemical substances
- Activate all shut off valves at the facility
- Isolate the spill with sand or lime, manually collect the spilled material, place in buckets or bins and if still usable, use accordingly. Any residual traces of the material will be treated with sand

and sawdust to the point where the area is completely dry and clean. Any waste from the cleaning will be kept in bins at the temporary storage facility for later treatment.

These operations are a responsibility of the emergency team, emergency rescuers and manpower and equipment of the ERS, Fire Safety Department of any relevant local authority along the route and other forces and equipment involved in the rescue operations.

#### **5.4 Rescue Operations**

Rescue operations include:

- Search and evacuation of victims to a safe place. This is a task of the reconnaissance-rescue team of the Company, together with manpower and equipment of the ERS, Fire Safety Department of any relevant local authority along the route , and other forces and equipment involved in the rescue operations;
- Administration of first aid - task of the first-aid team together with manpower and equipment of the ERS Fire Safety Department of any relevant local authority along the route
- In case of hazardous substance spill, take the victims out, place comfortable and expose to fresh air; loosen any tight clothing. Apply CPR or oxygen breathing apparatus where necessary. Immediately remove any contaminated clothes. Rinse any affected body parts with plenty of water and soap. In case of eye contact, flush victim's eyes with water for 10-15 minutes while making sure the eye lids are kept open with the thumb and the index finger and eyeballs are rolling around. To transport a victim who is at risk of seizure, place them in a stable position sideways;
- Gas removal from rooms or sites - task of the emergency team together with manpower and equipment of the ERS, Fire Safety Department of any relevant local authority along the route
- Fire suppression – see FIRE PLAN.
- In case of hazardous chemical spill, if a source of ignition is in place, it may cause fire and/or explosion, which may take victims and damage property. This is mostly a responsibility of the Company's fire-fighting unit and the Fire Safety Department of any relevant local authority along the route

#### **5.5 Recovery and Construction Works**

Include a full review of the status of any damaged facilities at their recovery following completion of the rescue operations. These works are a responsibility of Alliance LLC repair teams or external contractors.

### **6.0 MANAGEMENT**

The overall management of the rescue operations on the site is a responsibility of the company with other relevant authorities. The immediate supervision over the rescue crew and other personnel involved in the emergency and rescue operations in case of chemical spills will be a responsibility of the accountable site manager, who will also interact with the Department of Environmental Affairs, and nearest local authority.

The accountable manager of the rescue operations at the base will report to the relevant affected authorities coordinating the rescue operations about:

- Changes to the situation – immediately
- Commencement of emergency response actions
- Performed rescue operations – every 2 hours
- Termination of the emergency situation.

## **7.0 SUPPORT**

### **7.1 Re-reconnaissance**

#### **7.1.1 Reconnaissance Objectives**

The purpose of the reconnaissance is to provide timely and valid information about the situation as required for making an informed decision about the performing adequate rescue and emergency response operations at the accident area.

#### **7.1.2 Reconnaissance Tasks**

Obtain valid information in real time in order to support the rescue operations. Determine and post signs at safe areas for evacuation of personnel and population from the source of impact.

#### **7.1.3 Reconnaissance Concept**

These efforts must be focused on clarifying the situation at the site, together with the site authorities, and on the direction of chemical spill dispersion. Later, safe areas must be established to evacuate the population and site personnel.

#### **7.1.4 Reconnaissance Organization**

This is a responsibility of the reconnaissance-rescue team with the relevant affected authorities. Reconnaissance data will be reported in a timely manner to the accountable manager of the rescue operations at the Company and the Permanent Site Committee for management of rescue operations with the relevant affected authorities.

Water control is a responsibility of the Environmental Affairs Department and the relevant affected authorities. Without their authorization, the site may not resume operations when the emergency response operation is completed. Following reconnaissance, the team will perform partial clean-up and treatment away from the impact area.

#### **7.1.5 Reconnaissance Tasks**

- Inspect, observe and constantly monitor the situation
- Identify shortest and safest access routes for the emergency teams and equipment to the impact area in order to perform emergency response and rescue operations
- Identify the direction of cloud dispersion, if generated, and impact area growth
- Identify impact boundaries.

### **7.2 Chemical Reconnaissance**

#### **7.2.1 Purpose of Chemical Support**

The purpose of chemical support is to ensure timely clarification of the chemical situation, prevent any damage, ensure that employees are in good condition and enable the emergency and rescue operations.

#### **7.2.2 Main Tasks of the Chemical Support**

Protection of the population and employees who are at risk from uncontrolled release of hazardous substances. Chemical support to emergency and rescue teams.

### **7.2.3 Concept of Chemical Support - Organization and Performance**

Terms of chemical support, the emergency and rescue teams must focus their efforts on notification about the chemical hazards, clarification of the situation and efforts to limit the dispersion of the chemical cloud.

### **7.2.4 Organization of Chemical Support**

#### **7.2.4.1 Notification of population and employees at risk**

The emergency notification is a responsibility of the site personnel on duty. The person on duty will notify the accountable manager of Alliance LLC and other relevant local, regional and or national authorities.

The Local Authority will evaluate the situation on the basis of the data provided by Alliance LLC and depending on the spill/cloud's dispersion speed and direction the headquarters will make a decision to notify and or evacuate the population at risk.

#### **7.2.4.2 Chemical reconnaissance**

This reconnaissance will focus on identifying the scope of the spill/cloud dispersion and the boundaries of any concentrations in excess to the regulated limits.

#### **7.2.4.3 Information gathering, prognoses and analyses**

The independent environmental officer with the relevant affected authorities will set up groups (within the emergency team) of two persons whose task will be to gather information, analyze the situation and suggest options for the implementation of the emergency and rescue operations.

Provision of chemical protection equipment, chemical reconnaissance devices and gas neutralization substances. The Company keeps PPEs on stock - such as helmets, oxygen breathers, skin protection (boots and gloves), protective glasses etc. PPEs will be delivered by the store supervisor.

### **7.4 Engineering Support**

#### **7.4.1 Purpose of engineering support:**

Enables the isolation of the accident scene and assists the emergency operations. Main tasks of the engineering support:

- Conducts engineering reconnaissance and assists the access of any emergency equipment and personnel to the accident scene to enable site isolation and emergency response.

#### **7.4.2 Concept of engineering support:**

The main focus will be on assisting the special teams in their efforts to rescue any victims of the accident, isolate and address the emergency.

#### **7.4.3 Notification about the accident**

This is a responsibility of the engineering teams for the purpose of providing timely information on the nature and scope of any property damage at the work areas. The engineering support will use the access route to the accident scene and immediately the source of damage. The engineering reconnaissance process will determine:

- Victims' location, number and pending risks, if any
- Shortest and safest access routes to victims trapped in collapsed structures, if any
- Nature and scope of property damage including buildings and facilities



- Amount and methods of the required engineering works, including any clean-up required to enable victims' evacuation
- Estimate number of personnel and equipment required for the emergency operations at a core damage area
- Status of water sources, contamination level, possibility to use such water for fire suppression and any other technical purposes

### **7.5 Information Support**

Main tasks of the information support:

- Familiarize with the alert signals of various hazards/risks and performance of regular emergency drills in order to build behavior, habits and skills required in various critical situations
- Train employees to properly use PPE
- Exercise control to ensure proper emergency behavior
- Whenever an emergency situation occurs, will provide timely information to the managing authorities about the type and scale of the accident and the initiated actions.
- Whenever rescue operations are to take place in environment with flammable vapors, which involve risk of explosions, rescue teams need to use spark-free tools and explosive-safe lighting, apparatus and facilities.
- This task is a responsibility of the core rescue teams: Alliance LLC emergency response teams, regional fire safety department, and any additional forces such as regional health inspection, teams of the power Distribution Company, water and sewage company etc.

### **7.6 Ensuring Order and Security**

Order and security must be ensured throughout the site, along with securing the accident scene, an traffic control to support the effective emergency and rescue operations.

Order and security tasks:

- enhance the security
- secure/barricade the accident scene
- guide access of emergency personnel to the accident area
- establish the identity of any bodies
- Take part in the emergency and rescue operations.

These are tasks of the security personnel. More complicated situations may require involvement of the local police.

### **7.7 Medical Assistance**

The purpose of the medical assistance is to provide first aid to any injured employees. The main task is to arrange for timely administration of first aid and any required medications.

These services will be provided by the first-aid teams of the ERS, the Emergency Medical Service and the hospitals will provide Civil Protection Dept. and Fire Safety Dept. Medical care. Medical specialists will take to the nearest medical centers the victims for treatment of injured persons.

### **7.8 Provision of Transport, Materials and Equipment**

The purpose of this support is to enable the adequate and timely provision of any special equipment, PPE, food, drinking water, special automation and tools, communication devices, oil and fuel, medical supplies, engineering materials, supporting and construction materials in order to enable the timely

and effective emergency response operations and resumption of the production process, transportation of the rescue teams' personnel, delivery of construction materials, food, water and other basic items for the employees, and rescue team members and also support the evacuation process.

Tasks:

- Supply of materials for the company employees and rescue teams
- Oil and fuel supply for the vehicles and special equipment
- Supply of medical equipment, neutralizing substances and provision of their transportation
- Transportation of employees away from the accident scene
- Transportation of food supplies for the emergency response teams
- Provision of vehicles for the emergency response teams
- Arrangements to accommodate regular vehicles for transportation of injured persons.

### **7.9 Financial Support**

The purpose of the financial support is to provide funding for the purchase of any required inventory to support the emergency operations including employee life protection, rescue and emergency response operations.

Tasks:

- Provision of funds to ensure food supplies for the emergency and rescue teams
- Provision of funds for preventive measures and emergency preparedness for cases of natural disasters and industrial accidents.

## **8.0 COORDINATION**

If, in the course of the rescue and emergency response operations, the emergency response team and other personnel establish that they cannot handle the situation without help, they must seek help from the nearest emergency support service provider and relevant affected authorities.

### **9.0 PROCEDURES FOR RESUMING NORMAL OPERATION OF THE SITE**

Once the emergency response operations to address industrial accident are completed (including fire), a committee will be set to determine the required recovery and construction works. The committee inspects and assesses the condition of facilities, equipment, piping, ventilation, power lines, lighting and systems to check for the full compliance with the process and fire safety requirements.

The site commissioning will follow the process requirements following coordination with the fire safety and other special authorities.

### **10.0 FINAL PROVISIONS**

The emergency response plan for cases of industrial accidents involving spill of hazardous substances will be coordinated with the Fire Safety Department (through their management or councils) of any relevant local authority along the route.

The site employees will review this Plan and will sign to confirm they are familiar with it.