RISK ASSESSMENT AND DISASTER MANAGEMENT PLAN

Emergency Preparedness And Response Plan

Purpose

To ensure that proper relief actions are taken in the event of facing defined emergencies with defined response at Naokari limestone Mines

Scope

Covers all defined Emergencies at Naokari Limestone Mines.

Responsibility

Mines Manager shall establish and maintain this procedure. He also reviews & revises this procedure as and when required based on its performance. All the employees shall implement this procedure.

Method

Definition Of Emergency:

“An incident may be considered as EMERGENCY if it causes serious injuries / fatality or serious damage to buildings, structures and Natural environment in and around the Organization”.

Following occurrences in or about the mine shall be termed as emergencies

a) An Accident causing loss of life or serious bodily injury in connection with mining operations,
b) An Explosion or ignition,
c) Out break of fire,
d) An eruption of water,
e) Premature collapse of any part of working,
f) An accident due to explosives,
g) Bursting of equipment containing steam compressed air or other substance at high pressure, or
h) Breakage fracture or failure of any essential part of any Machine or Apparatus where by safety of persons is endangered.

The following areas are declared as sensitive in Naokari Limestone mines

a) Explosive Magazine - Fire / Explosion
b) HSD Storage - Fire / Explosion
c) Lub. Oil & compressed gas storage - Fire Explosion & Spillage
d) Elec. Sub Stations - Short circuit / Fire
e) Nallah running through the Lease - Inundation

The above emergencies are derived from the emergency conditions evaluated from the register of aspects and impacts.
a. The Owner, Agent or Manager shall forthwith inform the DMS/DDMS about the occurrence by telephone or express telegram or by special messenger.

b. Within 24 hours of every such occurrence; Owner, Agent or Manager shall give notice there off in form-4A of first schedule to the District Magistrate DGMS DMS/DDMS.

c. The notice in form 4A shall simultaneously be exhibited on special notice board out side the office of mine, and it shall be ensured that the notice is kept on the board in legible condition for not less than 14 days from the date of such exhibition.

d. When an accident causing loss of life or serious bodily injury occurs in or about a mine in connection with the generation, storage, transformation, transmission, supply or use of electrical energy, the owner, agent or manager shall also forthwith inform the electrical inspector of mines by telephone, express telegram or special messenger.

e. The detailed actions in meeting the above emergencies are as follows for each of the above.

**MAGAZINE AT MINES (FIRE / EXPLOSION)**

**Control measures provided:**

- The storage is placed at a remote place far from population.
- Entry is restricted to authorized personnel only.
- The storage building is fenced and guarded round the clock.
- The storage area is not provided with any type of electrical fittings.
- Lightening arresters have been provided.
- Hand held portable fire extinguishers for B & C types of fires have been provided with the guards.
- Sand buckets are kept in the premises.
- The storage area is declared as “Non-Smoking” zone.
- Watch towers and powerful siren is provided at the site.
- Rotate surveillance cameras arranged for continuous monitoring.

**In case of emergency**

- All personnels nearby magazine area shall rush to the safe place at a safety distance away of 300 m from magazine area.
- The security guard on duty shall inform to the Mines Manager on mobile phone.
- The security guard on duty shall inform to the B Block and Gate # 8 security guard on mobile phone to blow the siren, which is audible in the Mines complex.
- On hearing the siren, the Mines Manager or his designee immediately rushes to the site for rescue operations.
Since the magazine is in remote location having no threat to the human life, rescue shall be carried out.

Safety Officer of Mines & Security officers shall co-ordinate the operations.

**HSD STORAGES (FIRE AND SPILL)**

**Location**

Mine - Diesel Storage near Office complex

**Control Measures provided**

- The storage area is fenced at specified safe distance and the floor has been cemented to prevent growth of weeds.
- The tanks have been covered with sand.
- The drainage arrangements are provided adequately to ensure that no stagnation of water is feasible.
- Adequate number of suitable fire extinguishers are provided near the storage areas
- Sand buckets are provided near the storage area.

**In case of Emergency**

- The personnel noticing any sort of fire at these storages, shall immediately inform the Main gate security at phone no. 339 and reveal the location and nature of the fire.
- The personnel shall also inform to the Mines Manager.
- The security staff shall immediately rush to the site for rescue operations with necessary equipment and put all efforts in extinguishing the fire.
- The safety Officer of Mines and Security officers shall co-ordinate the operations along with Mines Manager or his designee.
- Care shall be taken to ensure that water-containing oil does not escape outside the premises of the Mines and so also land to mitigate the environmental impacts.
- In case of major fire, the major emergency procedure shall be followed.

**LUB. Oil and Compressed Gas Storages**

**Locations**

a) Mines Garage
b) Lub. Storage in Mines
c) Compressor Room –Cr-2

**Control Measures Provided**

- Suitable fire extinguishers are provided near the area of storages
- Good house keeping is maintained at the storage areas.
- The gas cylinders are stored in upright positions.
In case of emergency

- Any one noticing fire near these areas shall inform main gate security at phone no. 339. In case of small fires, the departmental staff will extinguish the fire with fire extinguishers.
- The personnel shall also inform to the Mines Manager.
- The main gate security staff on receipt of the information shall immediately reach to the site and extinguish the fire.
- In case of major oil spillage, the person noticing the same shall inform his immediate superior who will in turn report to the sectional / departmental heads for taking corrective actions.

Electrical Sub-Stations (Short circuit and fire)

No. of sub-stations in the Mines: 3 sub – stations.

Location:
1) Main Sub Station near office complex
2) Main Sub station near CR-2
3) Sub station pump house

Control Measures provided:

- Rubber mats are provided in front and rear portions of the MCC Panel
- Suitable fire extinguishers are provided in all the sub-stations
- Protection relays have been provided to trip the circuits

In case of emergency:

- The person noticing any short circuit and fire shall immediately contact elec. Shift room at phone no. 424 to isolate the power and inform the main gate security at phone no. 339 in case of fire.
- The person shall also inform to the Mines Manager about the fire.
- The elec. Shift staff shall immediately arrange for isolation of power and keep their immediate superior and electrical engineer of mines informed.
- The security staff shall immediately rush to the spot and extinguish the fire.

INUNDATION:

Inundation is likely to occur

From the nallah flowing on the east side of the Mines
- During rainy season, from the arrested water from the top benches.

Control measures provided:

- A strong bund has been provided along the nallah, to a height of 3 meters above the HFL.
- Security guard is provided round the clock during continuous rains to check the water level.
- Regular inspection by shift in-charges and the surveyor during the rainy season to check water level and condition of the bund.
In case of emergency:

- Whoever notices the increasing level of water shall inform immediately to the Shift in-charge & Mines Manager.
- Shift in-charge shall immediately rush to the site and ascertained the situation & inform the superiors.
- Mines manager shall rush to the site & after assessing situation, declare emergency, if warranted and give instructions to deal with the emergency.
- Shift in-charge shall mobilize the equipments if the bund needs strengthening and shall supervise the operations till the work is completed.
- In case of inrush of water, Shift in-charge & Safety officer shall immediately arrange to evacuate the bottom benches and shall shift the machinery to the safer place.
- Shift in-charge & Safety Officer shall ensure that the pumps are operated without interruption.
- Electrical & Mechanical engineer shall ensure that any technical problems of the equipments & pumps are attended to without delay and sufficient lighting arrangement are provided if the work continues beyond the day light hours.

Procedure for Onsite Emergency Plan and Response

Purpose
To prepare and implement contingency plan and systematic approach for dealing with Major emergencies which may occur and are likely to effect life and property within the Naokari Limestone Mines.

Scope
Covers all Major Emergencies at Naokari Limestone Mines.

Responsibility
Mines Manager shall establish and maintain this procedure. They also review & revise this procedure as and when required based on its performance. All the concerned employees shall implement this procedure.

Method
This Onsite Emergency Plan is followed in case of the following Major emergencies

a) An Accident causing loss of life or serious bodily injury in connection with mining operations,

b) An Explosion or ignition,

c) Out break of fire,

d) An eruption of water,

e) Premature collapse of any part of working,
f) An accident due to explosives,

g) Bursting of equipment containing steam compressed air or other substance at high pressure,

or

h) Breakage fracture or failure of any essential part of any Machine or Apparatus where by safety of persons is endangered.

**Objectives:**

- Controlling the emergency and eliminating the hazards.
- Head count and rescue operations.
- Treatment of the injured.
- Safe guarding the personnel by timely Evacuation.
- Minimizing the damage to property and the Environment.
- Informing and assisting the relatives of the injured.
- Informing and co-ordination with the Statutory authorities.
- Preserving records and operating investigator.
- Ensuring Safety of the personnel and site conditions before the personnel re-enter and resume the work.
- Investigating and taking steps to prevent re-occurrence.
- Restore normalcy and confidence.

**Emergency Organisation Structure**

**Declaration of Emergency**

The Unit Head is the Site Main controller for declaring the Major Emergency. FH-Mines is the Site Controller, Mines Manager shall act as the co-ordinator for the rescue operations in Mines. Safety officer shall be the Incident Controllers and shall be taking the instructions from the Site Controller or Co-ordinator.

**Emergency Control Rooms:**

FH-Mines office is identified as Emergency Room and all the necessary items in case of emergency are kept at his control room. The emergency teams shall assemble at this place soon after receipt of the information.

Crusher control room has been identified, as the emergency site control room under the control of the Co-ordinator and monitoring shall be controlled from this centre till achievement of normalcy. This room shall have necessary communication facilities like telephone & walki-talkies.

**Role of Emergency Organisation Team Members**

Following structure is to be followed to deal with the Emergency:

- Anyone noticing the Emergency
Site Main controller
Site controller
Co-ordinator (Mines Manager)
Incident Controllers
Technical Team
First-aid Team
Medical Team
Communication team
IR team

a. Anyone noticing the Major emergency

- Any person noticing the emergency shall immediately inform the main gate security at phone no. 339 and the Mines Manager
- Inform the immediate superior about the incident and arrange for the first aid
- Give details of the incident about the exact location, type of emergency and if possible its magnitude
- Inform Medical Centre at phone no. 344, if injuries have taken place

b. Site Main Controller:

- He will assume the overall responsibility of the Mines and personnel
- After taking feedback from the site controllers and other senior officials, he shall review the situation immediately and depending on the impact declares the Emergency
- He will continuously review the actions and give instructions to the senior persons down the line.
- He shall visit to the site and assess the situation
- He shall be responsible to take decisions like informing to the authorities such as DGMS, Police, District Magistrate and other authorities as per the case.
- He shall be issuing instructions to the Site Controller & Co-ordinator

c. Site Controller:

- He will rush to the incident site, take over all charge, assess the condition and report to the Site Main Controller
- Identify an emergency control centre near to the incident site
- Provide information and instructions to co-ordinator, incident controllers and emergency teams.
- Ensure for the evacuation of the persons at safe places
Arrange for head count, search for casualties / missing personnel and necessary first aid

Direct medical and fire fighting teams

Arrange for informing the relatives of the injured

Direct concerned personnel for relief operations

d. **Co-Ordinator (Mines Manager):**

- Immediately proceed to the emergency control room and take the instructions from the Site Controller.
- Make the personnel aware about the unsafe and dangerous situation.
- Issue the required personal protective equipment wherever needed.
- Advise the fire fighting and rescue teams for necessary safety precautions and operations.
- Assist the site controller and communication team for communicating with the concerned people and for the arrangement of rescue operations.

e. **Incident Controller (Safety Officer):**

- Report at the emergency control center. Take instructions from the Site Controller and the Co-ordinator.
- Rush to the incident site and co-ordinate with Site Controller and Co-ordinator for rescue operations.
- Immediately act for the necessary resources for the rescue operations.
- Mobilize the staff towards various actions.
- Continuously monitor the rescue and relief operations.
- He shall not leave the place before handing over the charge to the relieving Incident Controller after the end of the shift.

f. **Security In-charge:**

- Immediately rush to the emergency control room and take instructions from the site controller.
- Control the traffic at various entry / exit points and at the scene of the incident.
- Nominate one person continuously at the security control room till the attaining normalcy for communications.
- Supervise fire fighting operations incase of major fire incident and salvaging operations.
- Associate with local police officials, if instructed by the Site Main Controller.
- Arrange for the requisitions of nearby fire services in case of major fire incident, if the resources are not sufficient within ACW.
- Continuously monitor the situation and report to the Site Controller.

g. First Aid Team:
- On getting the information of the incident, inform the Co-ordinator.
- Arrange to give the First-aid to the injured and rush them to the hospital if necessary.
- Team shall be responsible attending to the injured until the injured have been handed over to the Medical team.
- Take charge of all operations of ambulance requirements, transport facilities and medical facilities as and when required.

h. Medical Team:
- On receipt of the information, immediately ascertain the position of the emergency and accordingly act for arranging Ambulance for shifting the injured and keep Medical Officer in-charge informed of the same.
- In case of position warrants that medical staff have to reach the emergency spot for rendering medical aid, takes the appropriate instructions from the Medical Officer In-charge or Site Main Controller.
- He shall arrange medical relief teams to the site of the emergency with appropriate medicines within short time. In case, if the injured are brought to the Medical centre, he will arrange for necessary medical aid immediately.
- The Emergency instruments and medicines are always kept ready in Medical Centre all the times during the emergency.

i. Communication Team:
- Proceed to the emergency control centre and take instructions from the site controller.
- Arrange for informing the relations of the injured.
- Arrange for transport for the injured and for other transportation requirement as & when necessary.
- Arrange for the head count and evacuation measures.
- If the instructions received are for the Major emergency, inform all the members as per the list provided through the paging system immediately.
- Arrange for communication with statutory duties like informing District magistrate, Collector, Departments of Explosives, DGMS, and Insurance as the case may be, upon the approval from the Main Site Controller.
j. Technical Team:

- Proceed to the emergency control center and take instructions from the site controller.
- Provide the technical information and assist the rescue operations.
- Arrange for the equipments or repair of the equipment required to bring the situation to the normalcy.
- Arrange for the safety appliances like Safety Belts, Goggles, etc with the help of Safety Officer.

k. IR Team:

- Proceed to the emergency control center and take instructions from the site controller.
- Shall assist Communication team to inform to the relatives of the casualty.
- Shall be responsible for maintaining the industrial relations during the emergency.
- Shall assist Main Site Controller & Site Controller to resolve any industrial relation issue amicably, if raised.

**Emergency Preparedness & Response Plan - Organization Structure**

<table>
<thead>
<tr>
<th>Main Site Controller</th>
<th>Mr. G. Balasubramaniam, Unit Head</th>
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</thead>
<tbody>
<tr>
<td>Site Controller</td>
<td>Mr. G. Jayavelu, FH (Mines), Mines Agent.</td>
</tr>
<tr>
<td>Co-ordinator</td>
<td>Mr. Soudip Ghosh, Mines Manager</td>
</tr>
<tr>
<td>Safety Officer</td>
<td>Mr. Anil D Kawale</td>
</tr>
<tr>
<td>Security In-Charge</td>
<td>Mr. O. S. Kothari</td>
</tr>
<tr>
<td>Incident Controllers</td>
<td>Shift in-charge</td>
</tr>
</tbody>
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**Team members**

<table>
<thead>
<tr>
<th>Technical Team</th>
<th>First Aid Team</th>
<th>Communication Team</th>
<th>Medical Team</th>
<th>IR Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Soudip Ghosh</td>
<td>1. Anil D Kawale</td>
<td>1. Soudip Ghosh</td>
<td>1. Dr. B. Elelina Mujumdar</td>
<td></td>
</tr>
<tr>
<td>2. BGL Goud</td>
<td>2. M. S. Jawed</td>
<td>2. Sandip Satsangi</td>
<td>2. Dr. G. T. Pal</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. H. P. Bhoyar</td>
<td>5. S. J. Kale</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. A.K. Jain</td>
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M/s. UltraTech Cement Ltd.  
(Unit: Awarpur Cement Works)
In Emergency, inform at and seek help from following telephone nos.

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
<th>Residence</th>
<th>Mobile Nos.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shri G. Jayavelu</td>
<td>318</td>
<td>829</td>
<td>9130080173</td>
</tr>
<tr>
<td>Shri Soudip Ghosh</td>
<td>306</td>
<td>801</td>
<td>9904201112</td>
</tr>
<tr>
<td>Shri Anil D Kawale</td>
<td>518</td>
<td>835</td>
<td>9922007207</td>
</tr>
<tr>
<td>Security Officer</td>
<td>339</td>
<td></td>
<td>9922413086</td>
</tr>
<tr>
<td>Medical Center</td>
<td>344</td>
<td></td>
<td>9922413159</td>
</tr>
</tbody>
</table>