

CHAPTER - VII

DISASTER MANAGEMENT PLAN

7.1 Introduction

The disaster management plan is essential to guard against and mitigate the consequences of major accidents. The term, "major accident" means an unexpected and sudden occurrence of event from abnormal developments in course of one's industrial activity leading to a serious danger, public or environment, whether immediate or delayed, inside or outside the installation involving one or more hazardous substances.

Keeping in view the three basic principles i.e. prevention, preparedness (both pro-active and reactive) and mitigation of effect through rescue, recovery, relief and rehabilitation; a comprehensive blue print of disaster management plan (DMP) has been made for Vijay West UGP incorporating the following:

- Identification and assessment of risks
- Recommendation of measures to prevent damage to life and property against such risks.

7.2. Risk Assessment & Management

7.2.1 Blasting

For proper blasting and minimising the adverse side effects due to blasting viz noise, ground vibration, air blast, fly rocks etc. the following precautions would be followed to avoid dangerous situation :

- The optimal blast design parameters will be used.
- All necessary precautions will be taken while blasting so that the underground workings of seam below present workings and in close proximity will remain safe.
- Instruments like vibration meter etc. will be used to monitor vibration and necessary precautions will be taken while blasting.
- Before blasting is done, warning sound will be given so that people can move to safe places.
- Arrangement will be made to alert the people working underground for sudden inrush of water by accidental development of fracture connecting the working place to the water bodies / aquifer.

7.2.2 Explosive Handling

Vijay West UG is proposed mine. All the safety measures to counter danger from explosives will be taken. Adherence to relevant statutory safety provisions as stipulated by DGMS, Chief Controller of Explosives and others will be made.

7.2.3 Mine inundation

Numerous small streams / nallas flowing radial from the plateau constitute the main drainage pattern. These streams join with the two main streams “Bamni Nadi & Teti Nadi” which in turn flow into the Hasdeo river in the north-east. The seasonal nallas are the main source of irrigation in the area and all these are rain fed only. Number of shallow dug wells has been constructed in the soil and in the weathered mentle in which the occurrence of ground water is limited to weathered fractured zones.

Except these nallas, no major river falls within the proposed mining area. As precautionary measures, a barrier of about 60m from the edge of the nalla is left. It is also proposed that below nalla (part of which is within working property) and around 60m from the edges, only development work has been proposed to protect the surface cracks from inundation point of view.

In addition, all exploratory boreholes drilled in mining area should be plugged so that water from surface should not find its way to the underground workings through these boreholes. In lower cover area, developed cracks (if any) should be filled up and compacted as soon as possible.

7.2.4 Fire

Accidental fires are causes of large scale loss of property and life. Keeping this in view, adequate fire fighting arrangement has been made. Adequate number of fire extinguisher has been provided for store and other service buildings. While calculating total water demand for the project, provision for fire fighting has also been made.

7.2.5 Road Accidents

Sufficient arrangements for illumination of roads have also been made. Road crossings have been properly planned and designed to prevent vehicular accidents.

7.2.6 Safety Rules

Mining operation is required to follow statutory mine safety rules administered by the Directorate General of Mine Safety (DGMS), Chief Controller of Explosives and others. During planning an underground project, sufficient care has been taken to comply with these rules.

Planning and design of electrical installation have taken into account the existing provisions of Indian Electricity Rules 1956 to obviate the hazards due to use of electricity. All enumerated Safety rules in above said legislations will be diligently followed.

To create safety awareness and impart education on safe practices, the following steps are being taken.

- Holding annual safety weeks
- Imparting basic and refresher training to new and old employees respectively.

7.2.7 Training

The personnel directly responsible for handling emergencies will be given training for making them better equipped for discharging their responsibilities.

7.2.8 Medical Preparedness

For guarding against accidental hazards the following measures will be taken:

1. Emergency Ambulance Service will be kept ready on a 24 hour basis.
2. Doctor and paramedical staff will be made ready during emergency.
3. First Aid Medical facilities will be provided at work place.

The existing mine has already been provided with a dispensary with qualified doctors in addition to a first aid centre. These will meet the medical emergencies arising out of accident.

7.2.9 Other Miscellaneous Measures

- Proper illumination in the mine area, workshop and other workplaces besides along roads as mentioned above has been undertaken.
- An efficient communication system to allow communication link amongst various work centres to help in avoiding accidents and handle emergencies has been provided.
- Fire alarm and fire fighting system has been provided at project site.

7.3 Conclusion

With adoption of preventive measures as enumerated above, the operation of this project will be safe as well as environment friendly.
