

1.1 Risk Assessment

Risk assessment has been done covering following aspects: - Possible danger due to failure of mine benches, terraces of external dumps, accident due to earth moving machinery, trucks etc.

All types of industries face certain types of hazards which can disrupt normal activities abruptly and lead to disaster like fires, inundation, failure of machinery to name a few. Similarly limestone mines also have impending dangers or risk which needs to be investigated and addressed. Disaster management plan is formulated with an aim of taking precautionary steps to avert disaster and also to take such action after the disaster which limits the damage to the minimum.

Nevertheless, the following natural/industrial problems may be encountered during the mining operation:

- Inundation-Filling of the mine pit due to excessive rains/flooding.
- Slope failures at the mine faces.
- Accident due to fire.

As per proposal made under the Mining Plan, during proposed working, the area will be developed by means of opencast mining method. Exploitation and transportation of minerals will be carried out by opencast semi-mechanized means respectively. Bench height is kept 3.0 m. As per the well located nearby agricultural land & in village the ground water table is at around 10-12mts below from the surface level depending upon the relief of areas. However, in dry season it goes to 15-20 m below the surface mining will be confined to 3 mRL.

1.2 Hazard Identification and Risk Assessment

1.2.1 Objective

- To identify risks which need maximum attention and the options for achieving risk reduction.
- To identify which risks need careful ongoing management, the nature of ongoing management as well as the indicators that show that the risk is being managed.
- To identify triggers which might be used to monitor that hazard and initiate remedial action if elimination is not feasible.

1.2.2 Definition

Hazard: source of potential harm, injury or loss

Risk: combination of the likelihood of a specific unwanted event and the potential consequence if it should occur

Risk assessment: the process that involves measurement of risk to determine priorities.

Risk Control: Implementation of strategies to prevent or control hazards

Risk rating: the category or level of risk assigned i.e. high, medium and low.

Risk Management: the description of the steps taken to manage the risk by identifying hazards and implementing control in the work place.

Risk assessment process: - The goal for risk assessment is to identify hazard, determine risk rating and controls.

Assemble the team: -The risk assessment should be done by involving different categories of persons to provide their opinion on likelihood, consequence and controls. The category of employees to be involved or Manager, Supervisor and worker.

1.2.3 Identifying the Hazard

This should be done by using:

- Past experience of accident and occurrences at the mines
- Work process evaluation
- Consultation with employees
- Safety statistics for this or other mines.

The other method used IS:

- By way of activities like excavation, transportation etc.
- By way of equipment and machinery like Hydraulic excavator, trucks, dumpers etc.
- By way of geographical areas like mining pit, dumps, mine road, mule tracks etc.

1.3 Emergency Management Plan

General Manager will be designated as the adviser (Disaster Management) and will be responsible for establishing the organization procedures and providing guidelines to the Disaster Management Committee of the area.

- Mines Manager (Disaster Management)
- Advisor (DM)
- Director/Dy. Director of mines safety
- Safety officer
- Personal Manager
- Medical Officer
- Senior Official of the largest trade union
- Officer in charge of the local police station office of the general manager will function as the emergency headquarter
- Telephonic facilities will be provided at the mine;
- Three control committees each direct by a controller shall be established
- Incident control committee;
- Surface control committee;

Composition of the committee will be as follows:

- Incident control committee:-
- Mine Agent
- Mine Manager

Surface control committee:

- Mining Engineer controller
- Medical Officer
- Officer In charge of local police station
- Local representative
- Store Manager
- Officer/Welfare Officer