

RISK ASSESMENT
OF
KOYALBUDDHI STONE (CRUSHER) QUARRY (TP)

Surface mining involves winning of minerals, transportation, and processing. Risk assessment is identification of points of accidents and takes preventive measures.

Quarry Lease Details:-

1	Name of applicant	M/s Longjian-Jitendra Singh (JV)
2	Address	Camp Itarsi Road, Sadar Betul, Distt Betul.
3	Applicant's Mobile Number	06265697998
4	Lease Area	1.000 hectare
5	Khasra No.	59
6	Village	koyalbuddhi
7	Tehsil	Shahpur
8	District	Betul
9	State	Madhya Pradesh
10	Lease Period	24 months (i.e 27.12.2019/working period)
11	Proposed Annual Production	43430 Cub. M. per year

High risk accidents may be common in big and underground mines but it cannot be ignore totally in open cast small mines also. Koyalbuddhi stone quarry is having total sanction lease area of 1.000 hectare. It is an open cast mine in which manual and semi mechanized method of mining will be adopted. It is a small scale mine, probability of accident or disasters are almost negligible. It is located in ground covered with hard sandstone. There is no any risk of landslide.

In winning of minerals, transportation, and processing risk assessment and proposed preventive measures are as under:

S No .	Work	Equipments/ Material used	Risk point	Preventive Measures To avoid risk
1	Winning of minerals	In winning of mineral drilling, blasting, excavation and loading process area involved.		
	Drilling	Jack Hammer Drills	Dust emission, and noise hazardous to health	Very small work even- so nose mask and ear buds will be provided to prevent health hazard.
	Blasting	Explosive material	Catastrophic accident Sound generation	Blasting parameter very simple and requirement of explosive will also be less. Storage of explosive and blasting will be performed by trained and license holder person. Alert will be given before blasting; timing will be set in such a way so that there is not movement of human and other fauna. Blasting will not be done during night and in Silent period.
	Excavation & loading	JCB machine	Dust and noise emission Collapse of loading point Failure of hydraulic system, Fire and fall	Closed chamber for operator, nose mask and ear buds will prevent hazard risk. Examination of loading face before loading. Regular checking of machine.
2	Transporta tion	Dumper/ Truck	Accidents due to Brake failure, lake of visibility, Roll over	Deployment of trained and sensitive driver and regular checking of vehicle will prevent hazard due to Brake

			during reversing.	failure, lake of visibility. Protection wall at regular reversing point will protect role over of vehicle.
3	Processing	Crusher (Outside of QL area.)	Dust and noise emission Slip at feeding point and conveyor belts	Nose mask and ear buds will be provided to worker to prevent health hazard. Barricades at appropriate distance will prevent accident near feeding point and conveyor belts.

Besides above dust spreading in process of mining and crushing rolling of stones/ loose material will be controlled by water sprinkling on mine face. This will also protect health hazard risk. .

Other risk point is rolling of stones/ loose material at mine face and dump face. Bench will be developed from 3m depth onward having 3m height and 3m width. Slope of mine face will be maintained around 45° to avoid abrupt rolling of stones/ loose material. The step height of waste dump will not cross the limit of 3 meter with Slope less than 45° to avoid abrupt rolling of material.

First aid box and a stretcher will be available at mine site office. Mines manager will make necessary arrangement at the time of mishap for first aid treatment and shifting to hospital, in case of serious injury. He will also inform concern authority.