EXICUTIVE SUMMARY

OF

CHILAI DOLOMITE MINE,

TALUKA WANI, DISTRICT YAVATMAL

(M.S)

Area 61.91 Ha.

Proposed Production 12,000TPA

APPLICANT

M /s. Mohammadi Minerals

Wani, Yavatmal

EXECUTIVE SUMMARY

INTRODUCTION

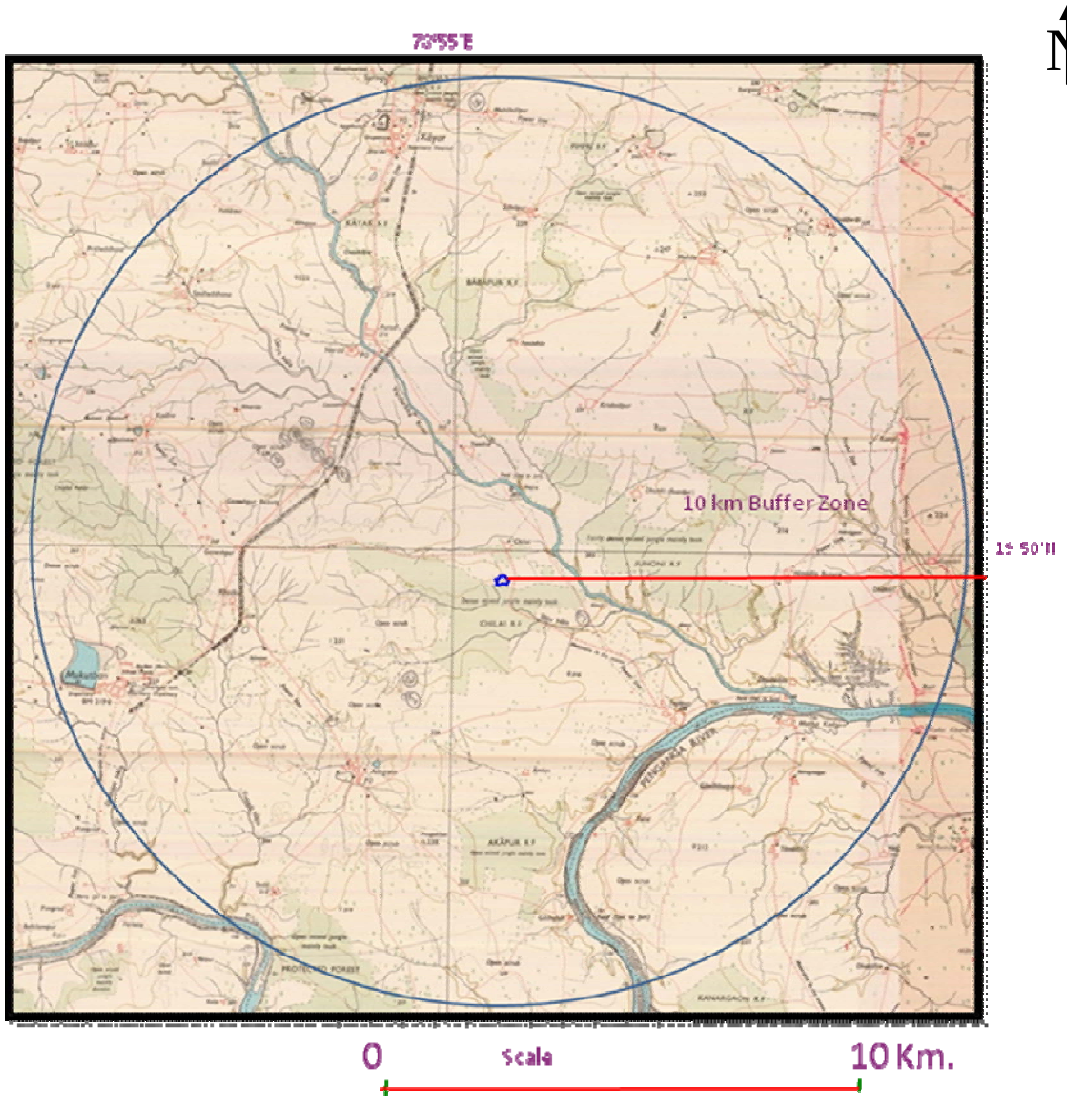
Chilai Dolomite Mine situated in Yavatmal District, Maharashtra is allotted to M/s Mohammadi Minerals , by INDIAN BUREAU OF MINES.

The project is of an opencast Dolomite mine. Commercially exploitable Dolomite deposits occur in this proposed mining lease. Geographically the applied M.L. area **61.91 hectares** is covered within the Survey of India toposheet No. 56I/13 on a scale of 1:50,000 and is bounded by the latitude **19° 49' 40" N** Latitude and **78° 55' 45" E** Longitudes.

As per the provisions of Notification of MoEF S.O. 1533 dated 14.11.2006, prior Environmental Clearance is necessary before commencing mining activities. According to the procedure laid down by Ministry of Environment & Forests, an application for seeking environmental clearance was made to MoEF & the proposal was considered by the Expert Appraisal Committee (EAC-II Mine) in its meeting held on 25-26th March 2010. The Ministry has prescribed detailed Terms of Reference (TOR). The EIA report has been prepared following the existing guidelines of MoEF as well as CPCB and addresses all the conditions TOR. The scope of the study includes detailed characterization of existing status of environment in the study area with respect to various environmental components, viz. air, noise, water, land, biological and socio-economic components and other parameters of human interest. The study area consists of Core Zone of **61.91 Ha** and 10 Km area surrounding core zone as Buffer Zone.

Location:

The Chilai Dolomite Mine part of Vaidarbha Nadi is covered in parts of Survey of India Toposheet no. 56 I /13 within latitude 19°49'40'' N to longitude 78° 55'45'' E respectively. Major portion of the land is agricultural land followed by forest land. The area is a plain terrain. Agricultural activity is prominent in this area.



Location map

Communications:

Chilai Dolomite area can be approached by all weather roads. The nearest railway station is on the west of the lease area and the distance is about 8 km. The block is located about 18 km from Wani.

PROJECT DETAILS

Geology:

The general strike of geological formations is NW-SE with varying dip from 5^0 to 15^0 due SW.There are many limestones and Dolomite mines, the limestone is utilized in the cement & lime-industry. The Dolomite is utilized in Paper &steel industry.

Method of Mining:

Out of the mining lease area of 61.91Ha, mining activity will be done only for 8.347 Ha. The mine to be opened upon along the strike direction of Dolomite, the pit will be 100 m long along the strike direction of Dolomite and the width will vary every year due to increase in production target the thin top soil cover (av. Thickness 0.5m) will be stripped in advance over the area, and there will be one bench of 3 m height (depth) in Dolomite.

Existing Land use Pattern:

The current land-use of the proposed mine is as under;

EXISTING LAND USE PATTERN

Name of the Taluka	Geographical Area (ha)	Forest	Land under Cultivation			Culturable Waste Land	Area not available for Cultivation
			Irrigated	Unirrigated	Total		
Wani	14968	1164.21	440.61	11040.68	769.39	769.39	1148.35
Forest Area	16432	16432	--	--	--	--	--
Grand Total	31400	17596.21	440.61	11040.68	769.39	769.39	1148.35

% of revenue landuse wrt total revenue land	100	7.78	2.94	73.76	76.70	5.14	7.67

(Source : Yavatmal District Census Report, 2001)

Proposed land use pattern:

The proposed land use is given in the table below.

PROPOSED LAND USE PATTERN

Land Use Pattern	Present (ha)	End of 5 years(ha)	At the end of conceptual period(ha)
Area for mining activities	NIL	0.685	7.9
Area under Dumps & infrastructure	NIL	0.3825	1.53
Area under Roads	NIL	0.10	0.18
Total		**1.1725**	**7.9**

BASELINE ENVIRONMENTAL SCENARIO

Micro- Meteorology: The climate of this district is characterized by hot summer, well distributed rainfall during the southwest monsoon and general dryness except in the rainy season. The winter season is from December to February. This is followed by the summer season from March to May. The monsoon season is from June to September. October and November constitute the post-monsoon season.

Air Quality: The monitoring was carried out for 13 continuous weeks beginning from 22 March 2010 to 19th June 2010, as per norms stipulated by the Central Pollution Control Board Notification No. B-33014 dated 11 April 1994. Nine air

quality monitoring stations were selected in the core and buffer zone. The concentration of PM_{10} and $PM_{2.5,}$ $SO_{2,}$ NOx in the buffer zone the details are given in EIA/EMP report (Chapter-3).

Water Quality: The purpose of investigation was to find out the present quality of ambient air and water so that impacts on their parameters could be evaluated after mining operations begin. Six surface water samples and four ground water samples were collected during summer 2010 for analysis. The analysis results of the water are given in EIA/EMP report (Chapter-3) and are compared with standards for drinking water as per IS: 10500.

Noise Environment: Detailed analysis of noise has revealed that there is no noticeable impact of noise in the surrounding environment. All the study sites in the residential areas exhibited a noise level well within the corresponding threshold limit value as prescribed by CPCB, both during the day and night time.

Soil Quality: Soil samples were collected from four sampling stations in study area in summer, 2010. The analysis results are given in EIA/EMP report (Chapter-3).

Land Use Pattern: Total area of 20 villages in buffer zone, as per census records, the revenue area of all the settlements works out to be 14968ha**.** As per data available from census 2001 the buffer zone area consists of 74% private land and only 16% Govt. land including forest. Irrigated land is only 3.75 % of total land, while 11.55 % is waste and not cultivate land. The Satellite image of the area has also been procured and the details of interpretations are provided in Chapter 3.

Soil Quality: Soil Quality: Soil samples were collected from four sampling stations in study area in the month of March, 2010 i.e. summer season to be considered as dry season samples.

ENVIRONMENTAL MANAGEMENT PLAN

Air Pollution Control: During the air quality monitoring and analysis, it was observed that PM_{10}, $PM_{2.5}$, SO_2, NO_x and CO, are well within the permissible limits. There may be marginal increment of present ambient levels due to operation of the proposed project. The Air pollution control measures proposed to be adopted are;

- Wet drilling of blast holes.
- Cabins for shovel & dumpers and dust respirators to workmen will be provided.
- Green belt development would be taken up all along the haul roads and overburden dumps.
- The dust respirators should be provided to all the workers in dusty atmosphere; and
- A good house keeping and proper maintenance would be practiced which help in controlling the pollution.

Noise Pollution Control: Noise should be best abated at source by choosing machinery and equipment suitably, by proper mounting of equipment & ventilation systems and by providing noise insulating enclosures or padding where practicable.

The equipments to be procured should be new and as such as the noise emission will be optimal for their design/operation. Proper maintenance/working shall be done which will keep the noise level within permissible limits.

Blasting Vibration Control: Ground vibrations are caused by blasting operations, subsidence due to mining operations, and deployment of mobile equipments, rock bursts and rock bumps. Blasting also generates air vibration waves (air blasts).

Green Belt Development: Conducting the new plantations is of paramount necessity of the area. In addition to augmenting present vegetation, it will also check soil erosion, make the ecosystem more diverse and functionally more stable, make the climate more conducive and improve water balance. It can also be employed to bring areas with special problems under vegetation cover and prevent further deterioration of land.

The mitigation measures suggested above should be implemented so as to reduce the impact on environment due to operations of proposed mining activities. In order to facilitate easy implementation, mitigation measures are phased as per the priority implementation.

SOCIO-ECONOMIC MEASURES

Dolomite Mining in the area will be involved in various socio-economic activities, which will generate employment, health services, schooling and drinking water facilities to local people. The following measures will be taken to improve quality of life of the people:

i) Preference in skilled and non-skilled job
ii) Planting of economically important trees
iii) Company will take all necessary steps to help and create self-employment opportunities for nearby villagers.
iv) Peripheral Developmental Activities will be undertaken in consultation with the local villagers from nearby villages starting from nearest village. This includes assistance in the field of education, health & hygiene, plantation, training, entrepreneur development, SHG, water conservation etc. An amount of Rs. 8 Lakhs / annum is earmarked for peripheral developmental activities. The amount will be spent after identifying the Felt needs of the village & execution will be done as per the priority fixed by them.
v) Provision of ambulance for the nearby villagers to provide medical assistance for emergency cases.
vi) Arrangement to supplement drinking water facility for Chilai village.
vii) Provision of supply of pumped out mine treated water (after settlement)

for irrigation

Occupational safety and health is very closely related to productivity and good employee relationship. The main factors of occupational health on Dolomite mine are fugitive dust and noise. To avoid any adverse effects on the health of workers due to dust, noise and other causes following measures have been taken by the company:

i) Provision of personal protection devices to the workers.
ii) Rotation of workers exposed to noise premises.
iii) Effective dust suppression of haul roads.
iv) First -aid facilities in mining area.
v) Provision of amenities like drinking water, toilets etc.