(Draft Report)

REPORT ON ENVIRONMENTAL IMPACT ASSESSMENT
&
ENVIRONMENTAL MANAGEMENT PLAN
OF

Mundra Dolomite Mine

Dolomite @530000TPA (Average)Peak Production 900000 TPA)

Project

M/s K.K. Mines & Minerals

Mundra Dolomite Mine
(Mine Lease Area 18.87 Hectares)

Date of ToR : 13.11.2025

PROPONENT

M/s K.K. Mines & Mineral
Near Gajanan Mandir,13-14 Adarsh Gruhnirman Society
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Consultant

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Accreditation Details: NABET/EIA/25-28/IA 0169 valid till June 2028

May 2025

EXECUTIVE SUMMARY

1.0 Site:

Maharashtra Government has granted a -lease for Dolomite mining for thirty years over an area of 18.87 Ha at village Mundra in Wani tehsil of Yavatmal district of Maharashtra to M/s K.K. Mines & Minerals.. The Dolomite deposit is about 22 km from Wani town. Nearest railway station is Kayar at distance of 08 km. There is neither any litigation nor any directions by any court or statutory authority against this proposed project.

Lease area is bounded by latitudes 19^0 50' 18.56" N to 19^0 50' 32.34" N and longitudes 78^0 54' 56.23" E to 78^0 55' 16.68" N respectively and It is included in Survey of India Topo sheet no is 56 I/13.

Lease area is flat with gentle slope towards South. Maximum contour is 216m SW and minimum is 210m in NE above MSL. There are no national parks, sanctuaries, biosphere reserves, wild life corridors or reserves within 10 km. There are no critically polluted areas or archeological sites within 10 km.

Terms of reference (TOR) for environmental impact assessment was prescribed by SEIAA Maharashtra on 13.11.2025 vide letter no. SIA/MH/MIN/557548/2025.

Mining Plan for open cast mechanized extraction of dolomite @530000TPA (Average)Peak Production 900000 TPA)Area- 18.87 ha is submitted for approval to Director,Directorate of Geology & Mining ,Government of Maharashtra.

2.0 Deposits and proposed mining:

Dolomite deposits at Mundra are of high quality, silica and iron contents are low. Other ingredients are CaO-29.74 to 30.58%, MgO-20.6 to 21.05%. Silica content is 0.74 to 1.72%. There are about 10 consumer-industries/ purchasers of dolomite within 200 km from the lease. Total reserves are 18315475 MT, mineable reserves being 12.67 MT. Stripping ratio is 1: 0. Mine life will be 38 years at a production rate of Dolomite @530000TPA (Average)Peak Production 900000.

Mechanized open cast mining of Dolomite 530000TPA (Average)Peak Production 900000 with dumper and shovel combination is proposed. Bench height will be 6 m and width will not be less 6 m. Slope will be 45° to horizontal. Drill- holes- diameter will be 100 mm and depth will be 6 m; burden 2.5 m and spacing 3 m. Number of blasts will depend on the number of holes blasted maximum being three blasts per day. Ultimate pit depth will be 35 m. Ground water table will not be intercepted. There will be no generation of rejects/low grade material for the plan period. Soil volume will be nil. O.B. generated wil ne 200773 tonnes. Nine 25 T dumpers, three loaders of 2.1 m^3 capacity, a grader, a water tanker, a 10 H.P. tractor, a water pump, a compressor-1 four wagon drills and a crusher 250 T/hour will be used during operational phase.

3.0 Environment setting and monitoring:

There are no industrial activities except for a few manually- operated stone -metal quarries. Base-line environment quality data was collected for post monsoon season from October to December 2025. Study area was 10 km from the lease. Relevant information was collated from secondary sources and government departments.

Air quality and mitigation methods :

Micrometeorology data from IMD and that during monitoring was collected and nine AAQ sampling stations were selected. Average wind speed was 6 km/h with frequency of 67%, predominant wind direction- NE- 53%, 8% E and SE each; Gaseous pollutants SO_2, NOx, HC etc. were less than 10 µg/m^3 at all stations due to absence of industrial sources.

Particulate matter concentration -µg/m^3

Sampling station		PM_{10}	$PM_{2..5}$	SO_2	NOx
Lease	Minimum	31.2	9.8	6.0	7.6
	Maximum	48.6	15.8	9.8	11.6
	Average	38.8	12.6	7.7	9.0
	98 percentile	47.8	15.6	9.5	11.3
Chilai	Minimum	30.7	10.5	7.2	7.4
	Maximum	57.6	18.8	12.3	13.2
	Average	46.2	14.9	8.8	10.4
	98 percentile	56.8	18.6	11.8	13.0
Krishnapur	Minimum	33.6	9.6	6.0	6.5
	Maximum	54.3	17.3	8.4	11.2
	Average	41.9	13.3	7.1	8.5
	98 percentile	51.5	16.8	8.4	11.2
Tundra	Minimum	20.6	7.0	6.0	6.2
	Maximum	38.6	12.5	9.2	9.2
	Average	31.0	9.6	7.6	7.1
	98 percentile	37.9	12.2	8.9	8.8
Adegaon	Minimum	33.8	9.4	6.5	6.2
	Maximum	47.8	15.5	9.4	9.4
	Average	39.9	12.0	7.6	8.2
	98 percentile	46.6	15.0	9.3	9.4
Vedawai	Minimum	22.1	7.7	6.6	6.6
	Maximum	37.6	13.5	10.2	9.6
	Average	31.2	10.4	8.5	7.7
	98 percentile	37.4	13.2	10.2	9.5
Kurai	Minimum	41.5	13.8	6.1	6.5
	Maximum	59.3	17.7	9.5	8.2
	Average	51.3	15.8	8.0	7.1
	98 percentile	59.1	17.6	9.5	8.2
Babapur	Minimum	32.4	8.3	6.5	6.4
	Maximum	47.6	13.7	9.3	11.4

	Average	38.9	10.7	7.7	8.5
	98 percentile	46.6	13.7	9.3	10.9
Ganeshpur	Minimum	30.4	8.9	6.4	6.6
	Maximum	48.7	12.8	9.6	10.2
	Average	39.3	10.9	8.0	7.8
	98 percentile	47.4	12.7	9.5	9.6

Proposed fugitive emission-control measures include macadamized / paved roads, plantation, regulated vehicle speed and water sprinkling etc.. Crusher area would have scaffolding, conveyer belts would be covered and water sprinklers would be located at transfer points.

3.1 Noise:

Back ground noise levels L_d, L_n and L_{dn} were between 51.1and 53.4; 52.3 and 53.8 and 58.2 and 59.1 dB (A) respectively. Personal protection equipment (PPE) will be supplied to miners. Blasting will be during fixed hours.

3.2 Water :

Thirteen water samples from ground and surface sources within study area were collected and analysed. Ground water quality is satisfactory as per BIS10500 except for fluoride in three wells near limestone deposits. Hydrology of the area was studied. Ground water table is beyond 40 m below ground level core zone. Water-table interception is not likely during mining scheme period.

Water quality analysis

Parameters	Sampling Stations												
	W1 Hand Pump	W2 Hand Pump	W3 Hand Pump	W4 Hand Pump	W5 Dug well	W6 Hand Pump	W7 Hand Pump	W8 Hand Pump	W9 Hand Pump	W10 Tube well	W11 Surface	W12 Surface	W13 Tube
Temperature, ^{0}C	27.5	27.0	27.0	27.5	28.0	27.5	27.0	27.5	28.0	27.5	26.5	26.5	27.5
pH	7.0	7.2	7.1	7.1	7.0	7.0	7.1	7.9	7.3	7.0	7.4	7.3	6.7
Conductivity, µS	343	358	664	1395	837	982	646	516	1405	1100	361	498	117
D.O.	6.5	5.9	6.2	6.8	6.9	6.5	5.9	5.8	6.0	5.8	6.9	6.9	5.8
TDS	171	179	332	1255	753	881	323	258	1264	990	158	249	58
T. Alkalinity, $CaCaCO_3$	208	178	266	426	182	242	256	278	416	496	306	296	80
T. hardness $CaCO_3$	288	266	372	600	380	540	400	380	780	800	280	304	38
Ca^{++}	72	70	66	98	96	128	104	120	192	108	45	46	10
Mg^{++}	26	22	50	86	34	54	34	20	73	129	41	46	4
Na	71	85	92	9	48	75	9	11	5	71	36	7	36
Chlorides	156	181	231	71	26	28	61	47	214	251	19	17	24
Sulphates	16	20	69	100	66	105	42	26	74	115	17	Traces	Traces
Iron as Fe	<0.2	Traces	Traces	Traces	Traces	0.1	0.1	Traces	0.2	0.1	Traces	0.2	0.3
Ammonia	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Traces	Nil	Nil
Phosphate	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Traces	Nil	Nil
Fluoride	0.8	0.7	1.0	2.0	1.2	1.6	1.0	0.2	2.0	1.5	0.6	1.0	0.2

N.B: All values in mg/L except otherwise stated: Cu, Cd, Hg, Cr, Se, Pb were absent.

3.3 Land use:

Lease is a private land. Dolomite mining over lease has been approved by State Government. Twelve land owners have agreed to sale their land. There are a few outcrops/exposed ore-deposit. Only rain –fed agriculture, by private land -owners is practiced over a few scanty soil patches. Agriculture is unreliable being dependent on rain and thin soil cover over impervious dolomite. Land use within mining lease as per the conceptual plan would be as under:

Land Use	Area (Ha)
Area under mining Pit	6.4485
Undisturbed Area (Available for future use)	9.8660
Plantation (including Safety Zone Area, along the roads)	1.3555
O.B. Dump	1.00
Others, Specify (crusher & Office)	0.20
Total =	**18.87**

Back filling of mined land has not been planned since working pits will not mature. Erosion of soil dump will be controlled by proper design of dump, contour-bunds and plantation. Plantation along lease boundary has been proposed. Guidance from forest department will be available for plantation of suitable species.

3.4 Socio-economics :

Deposits are lying unused. Soil cover in the lease is inadequate to support agriculture. Presently most of the lease land is unproductive. Mining will provide direct employment to about 78 locals. Indirect employment is likely e.g. i) tree plantation by local plant nursery, ii) material transportation

to local transporters, iii) contractual labour etc.. Some land has been purchased by project proponent by direct negotiations and same practice will continue after environmental clearance.

3.5 Environment management :

An environmental cell is proposed for the project. Mine manager will be its chairman. He will be responsible for compliance of environment related rules/conditions and for environment-friendly mining of dolomite. Environment quality monitoring during operational phase is proposed.

3.6 Financial viability :

Cost of production at mine-site will be approximately Rs. 280 per tonne. This is an economically viable proposal. Present selling price varies between Rs. 350-400 per tonne. Project is located over relatively non productive land with compatible environmental setting.