DOCUMENT FOR PUBLIC HEARING

DOLOMITE MINING PROJECT
AT
VILLAGE CHILAI
TEHSIL WANI
DISTRICT – YAVATMAL
61.91 ha

PROPONENT

M. ABDUL KADIR M. HANIF
PROP. MOHAMMADI MINERALS
STATION ROAD, WARD 3
WANI 445 304

PREPARED BY

ENVIRO TECHNO CONSULT
68, MAHAKALI NAGAR-2
NEAR MANEWADA SQUARE
NAGPUR 440 024

DECEMBER 2014

EXECUTIVE SUMMARY

1.0 Site:

A 61.91 ha dolomite mining lease near village Chilai in Wani tehsil of Yavatmal district has been granted by Maharashtra Government to Mr. M. Abdul Kadir M. Hanif of M/s Mohammadi Minerals (MM) for mining dolomite. Lease period is 30 years.

This is a new project and there is neither litigation nor any directions by any court or statutory authority against proposed project.

Chilai dolomite mine is about 25km from Wani town. Nearest railway station is Kayar at distance of 17 km.

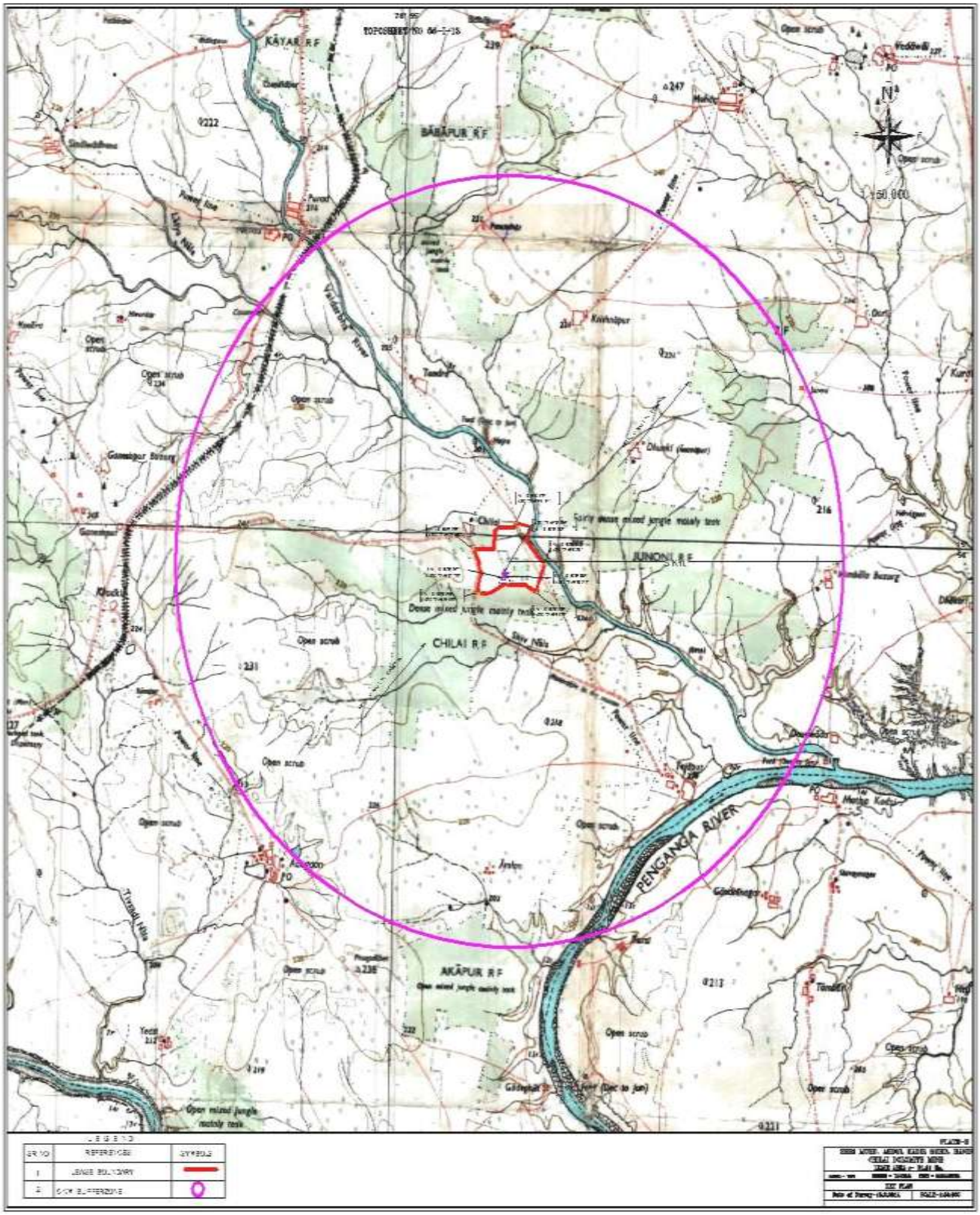
Lease latitude and longitude are respectively N 19^0 49' 39.6" - N 19^0 50' 09.5" & E 78^0 55' 32.6" - E 78^0 56' 09.4". Survey of India Topo sheet no is 56 I/13.

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.

Lease is a flat with gentle slope towards NE. Maximum contour is 225 m and minimum is 215 m mining plan m above MSL.

Location of lease on Survey of India topo sheet is shown in **Figure 1.**

FIGURE 1



TOPO SHEET 56 I/13

Terms of reference (TOR) required for environmental impact assessment of this project and for seeking environmental clearance have been prescribed after elaborate presentation to Environment Appraisal Committee of MOEF, New Delhi during its 21st meeting on 8th July 2014.

Mining scheme for open cast mechanized extraction of dolomite @ 15,00,000 tonnes per year has been approved by DGM, Maharashtra vide letter no. STC-852/part-4/2012/3023 dated 5th November 2014.

2.0 Deposits & proposed mining :

Dolomite deposits at Chilai are of high quality (low silica & iron CaO-29.74 to 30.58% , MgO 20 .6 to 21.05 % and SiO_2 0.74 to 1.72 %). There are 10 potential user- industries and ready buyers within 200 km from the lease.

Total reserves - 52.27 MT; mineable reserves -51.540748 MT and stripping ratio is 1: 0.014 m^3. Mine life will be 34 years at production rate 1.5 MTPA.

Mechanized open cast mining is proposed @ 1.5 MTPA. Bench height- 6m; width- not less 6 m, 45 °. Dumpers & shovels will be used. Drill-holes:ϕ100mm & depth 6 m; spacing between holes 2.5-3 m, 10-20 holes , 3 blasts/ day.

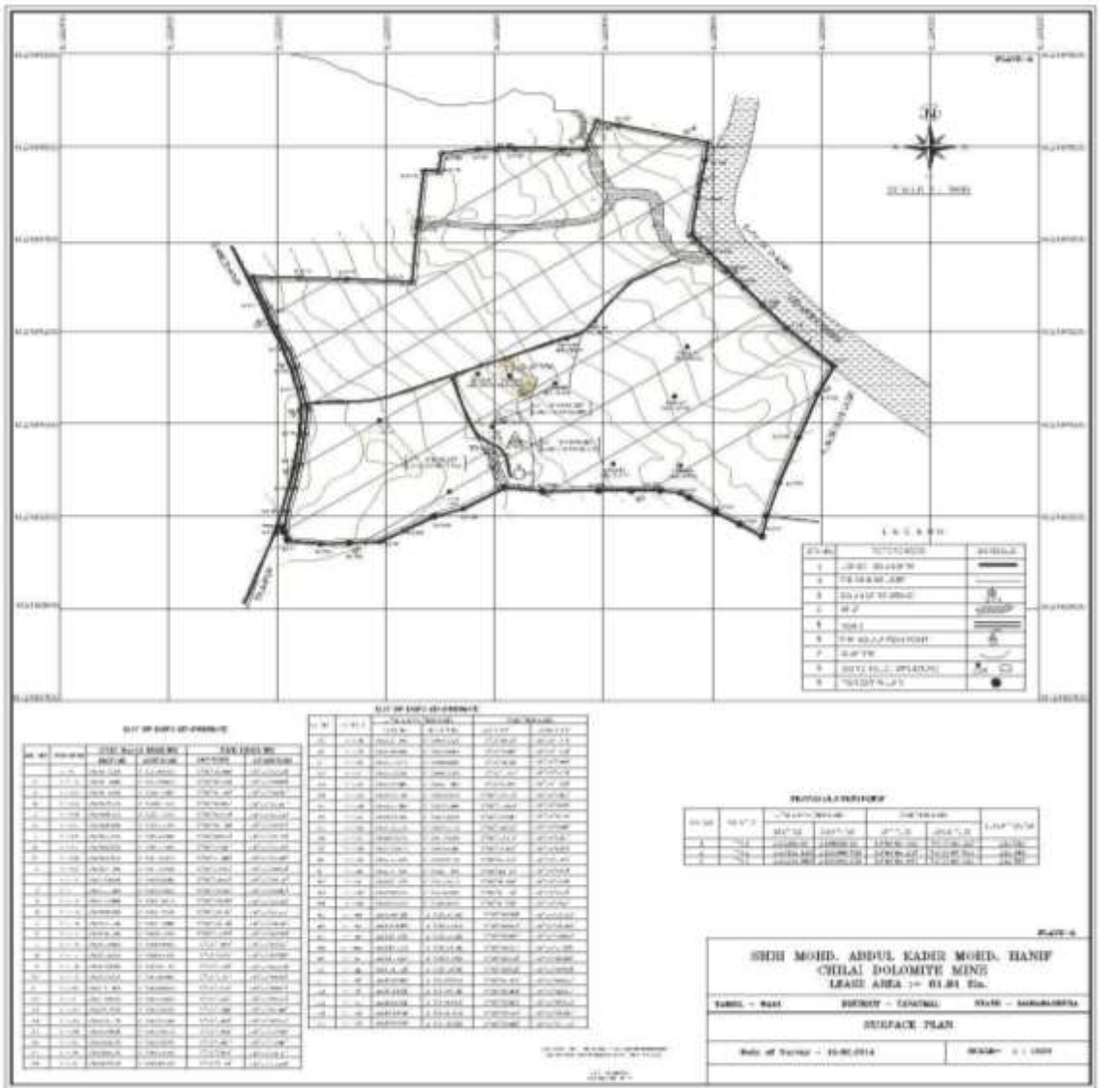
Ultimate pit depth – 36 m.

Generation of rejects/low grade material : @ 60166 T/year & soil @ 45662 m^3 /year.

Plant & machinery - Dumpers 25 T- 9, loaders 2.1 m^3 -3, Grader, water tanker,tractor,10 H.P. water pump, compressor-1 each, wagon drills-4 & Crusher 250 T/hour- 1.

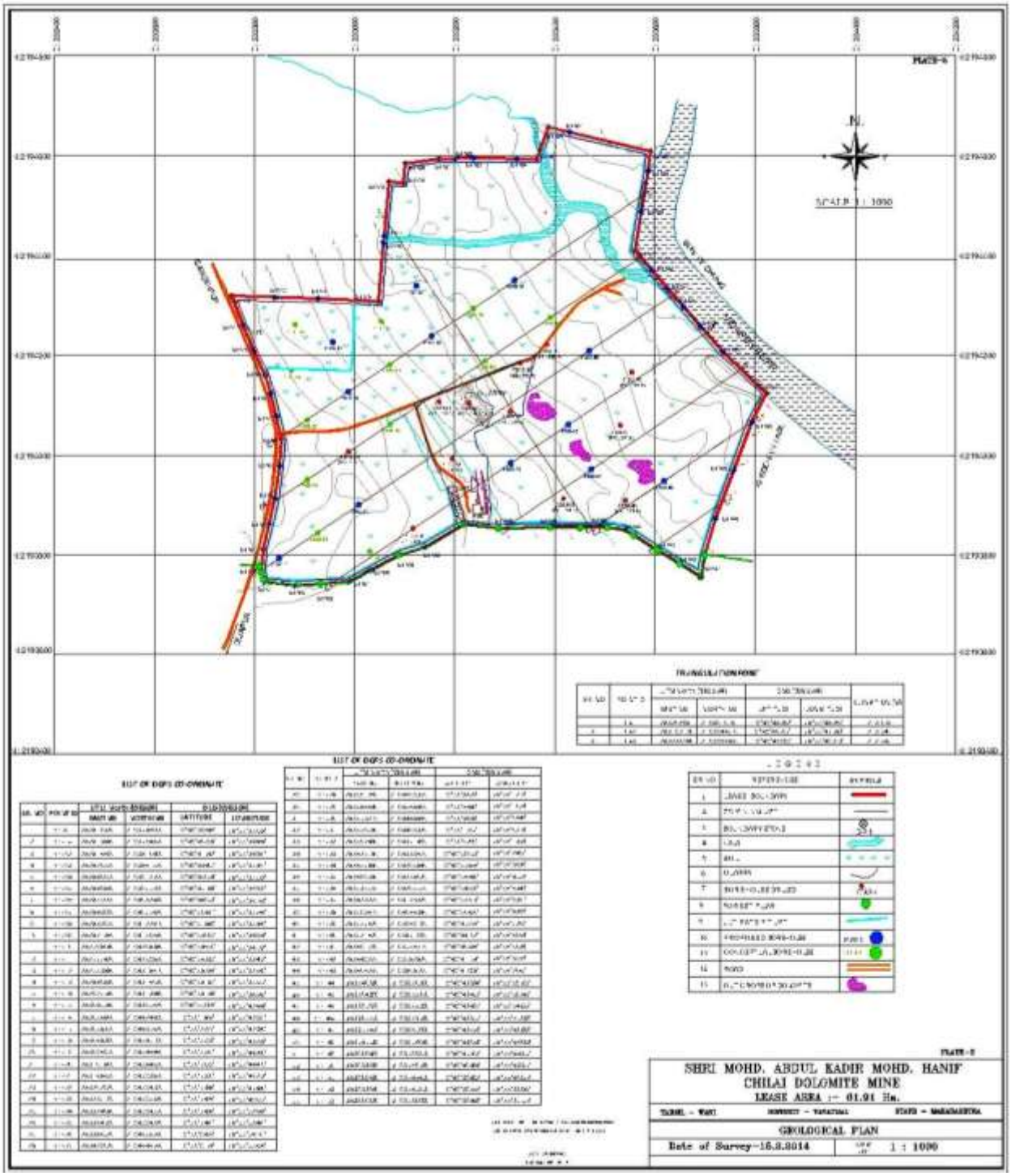
Surface plan, Geological plan & conceptual plan of the lease is given in **Figures 2-4.**

FIGURE 2



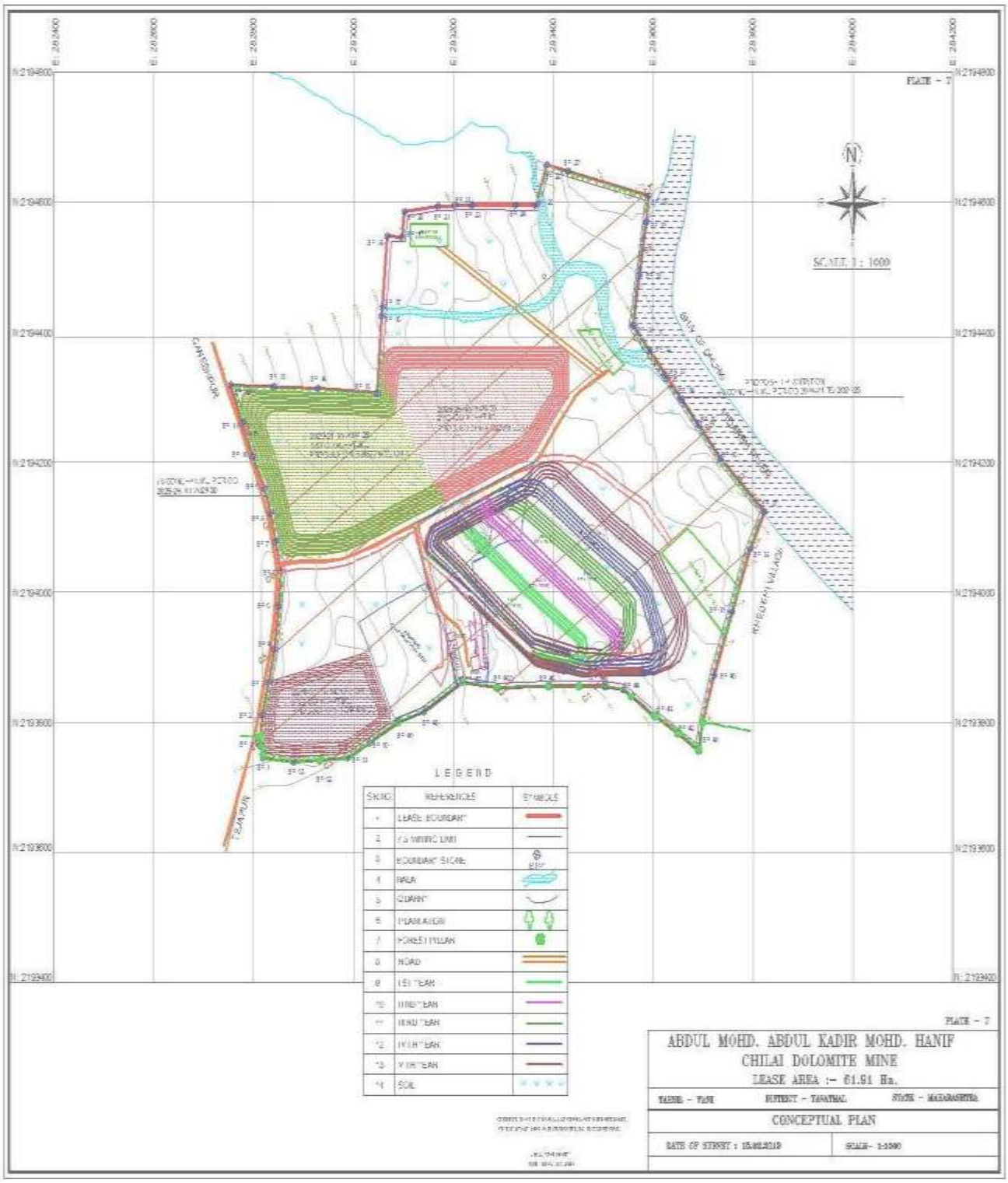
SURFACE PLAN

FIGURE 3



GEOLOGICAL PLAN

FIGURE 4



CONCEPTUAL PLAN

3.0 Environment monitoring:

There are no industrial activities excepting some manually operated metal quarries.

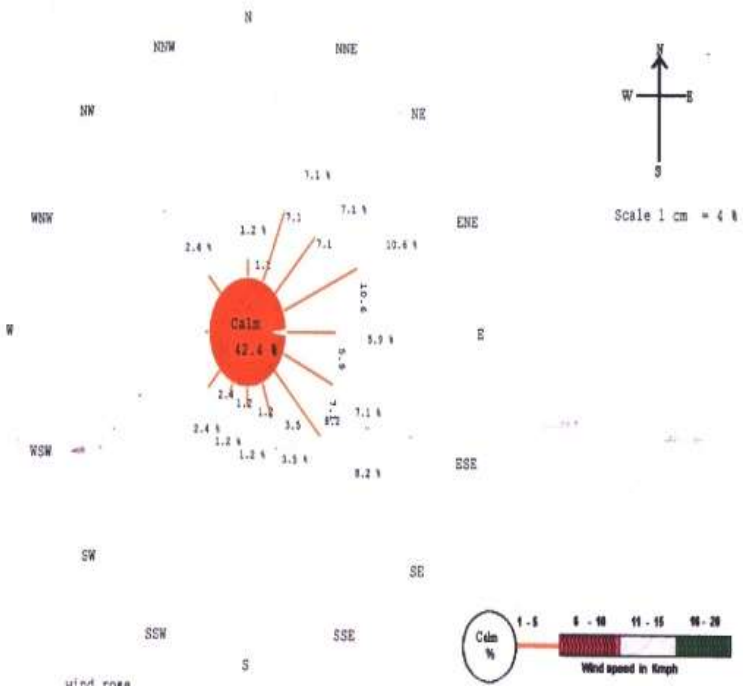
Base-line environment quality data collection for post monsoon season has been stared from October 08, 2014 and will continue till December 2014. Study area 10 km from the lease. TOR for EIA/EMP were adhered to for data collection. Information from secondary sources and government departments was collected and collated wherever justified.

3.1 Air quality & mitigation methods :

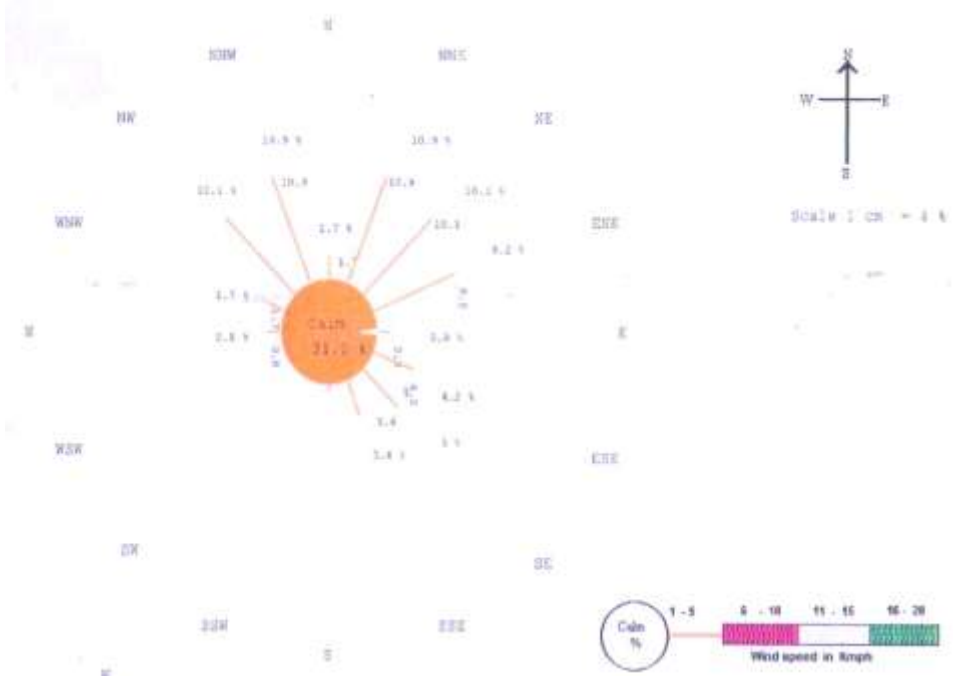
Micrometeorology data from IMD and that during monitoring was collected. Selected nine AAQ sampling stations ; average wind speed - 6 km/h- 67 %, predominant wind direction- NE- 53 %, 8 %E & SE each; Gaseous pollutants SO_2, NOx, HC etc were less than 10 µg/m^3 at all stations in absence of industrial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

Wind rose during monitoring period is given in **Figure 5.**

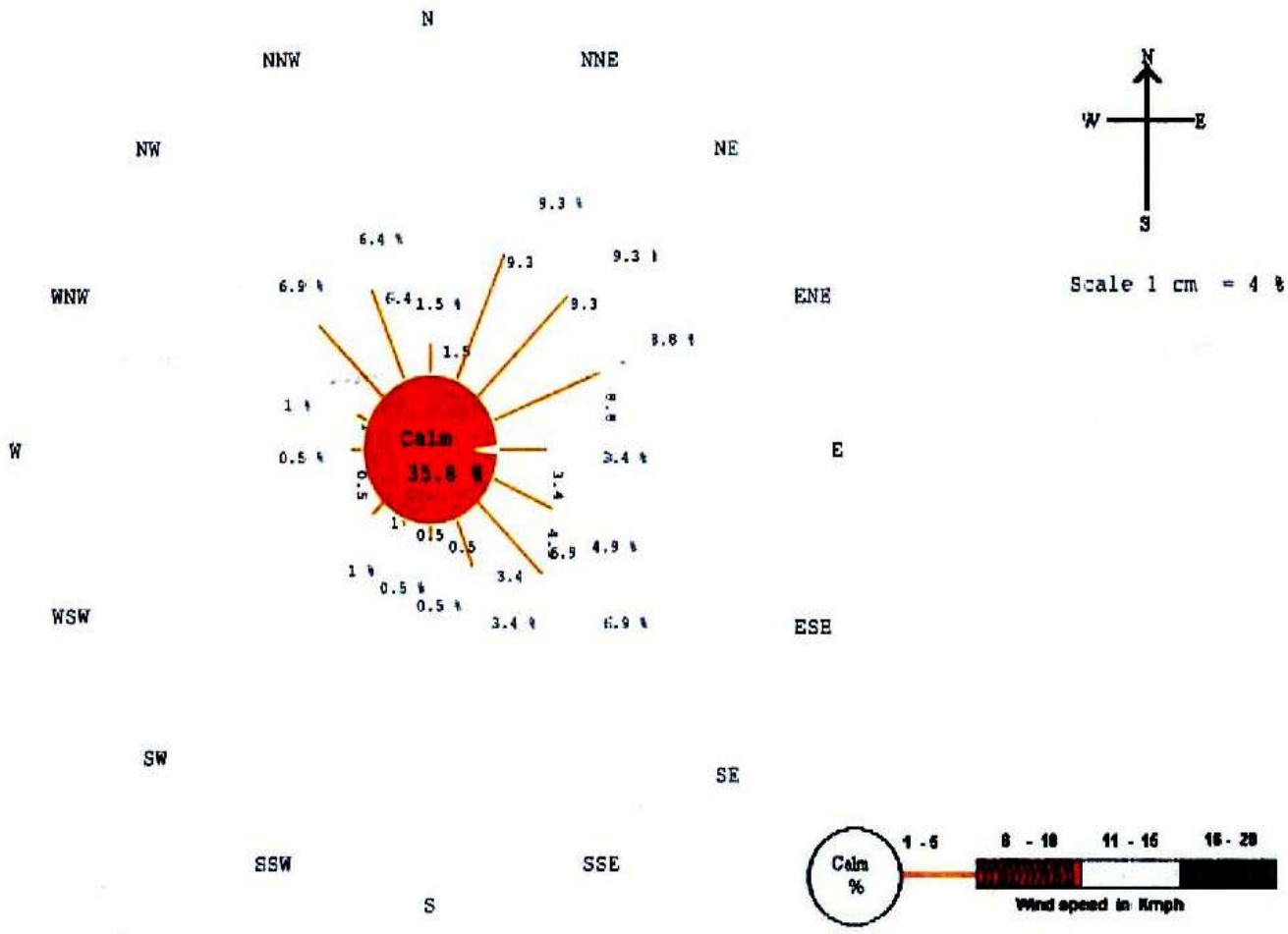
FIGURE 5



Wind rose during October 2014



Wind rose during November 2014



Wind rose during December 2014

Particulate matter concentration in AAQ - µg/m³

Sampling station		PM_{10}	$PM_{2.5}$
Lease	Minimum	34.0	10.8
	Maximum	48.6	15.8
	Average	39.2	12.8
	98 percentile	48.0	15.6
Chilai	Minimum	30.7	10.5
	Maximum	57.6	46.5
	Average	45.9	16.5
	98 percentile	57.0	36.0
Krishnapur	Minimum	33.6	11.3
	Maximum	54.3	17.3
	Average	42.8	13.8
	98 percentile	52.2	16.9
Tundra	Minimum	20.6	7.1
	Maximum	38.6	12.5
	Average	30.5	10.1
	98 percentile	38.0	12.3
Kurai	Minimum	41.5	14.2
	Maximum	59.3	17.7
	Average	51.8	15.9
	98 percentile	59.1	17.6
Vedawai	Minimum	22.1	7.7
	Maximum	37.6	13.5
	Average	31.4	10.6
	98 percentile	37.4	13.3
Adegaon	Minimum	33.8	9.4
	Maximum	47.8	15.5
	Average	39.6	12.1
	98 percentile	46.9	15.1
Babapur	Minimum	32.4	8.3
	Maximum	47.6	13.7
	Average	39.2	10.8
	98 percentile	46.8	13.7
Ganeshpur	Minimum	30.4	8.9
	Maximum	48.7	12.8
	Average	39.1	10.9
	98 percentile	47.6	12.7

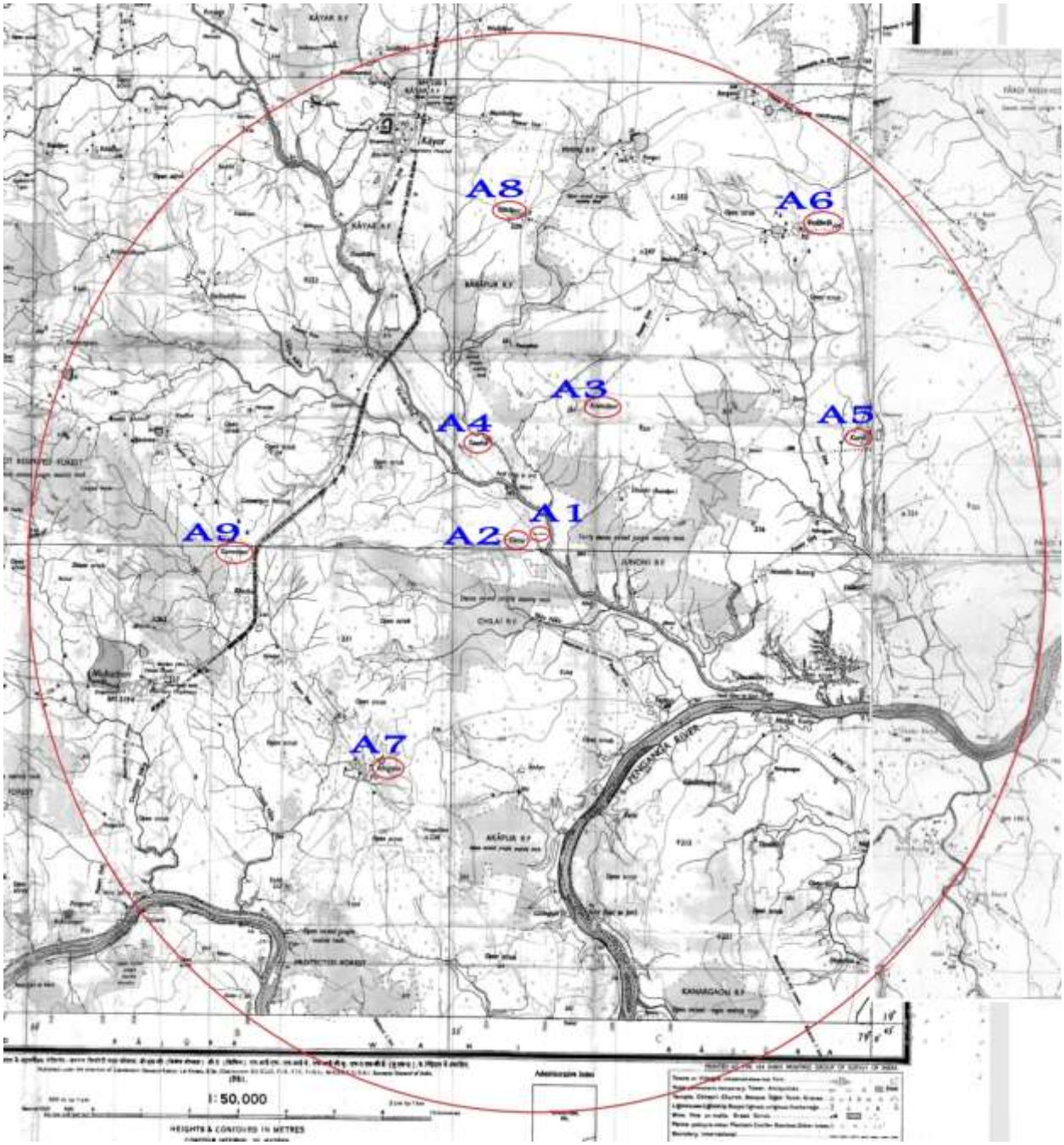
Nine monitoring stations around mine lease were selected. They described in **Table 1**.

Table 1 : Sampling stations

Code	Sampling station	Direction with respect to lease	Distance, km	Activities
A-1	Lease	--	--	Nil
A-2	Chilai village	SW	1	Lime kilns
A-3	Krishnapur	NW	3	Stone crusher
A-4	Tundra	N-NW	1.8	Stone crusher
A-5	Kurai	E-NE	7.5	Normal village
A-6	Vedawai	NE	8	Mining
A-7	Adegaon	SW	4.5	L.S. mines & lime kilns
A-8	Babapur	N	5.3	Normal village
A-9	Ganeshpur	W-SW	7	Lime kiln,

Sampling stations are shown in **Figure 6**. Air quality analysis is given in **Table 2.**

FIGURE 6



AAQ MONITORING STATIONS

Table 2: Ambient air quality

A1- Mine lease area

Week	PM $_{10}$ µg/m^3	PM $_{2.5}$ µg/m^3	NOx µg/m^3	SO_2 µg/m^3
Minimum	34.0	10.8	7.6	6.0
Maximum	48.6	15.8	11.6	9.8
Average	39.2	12.8	9.2	7.5
98 percentile	48.0	15.6	11.4	9.5

A2- Village Chilai

Week	PM $_{10}$ µg/m^3	PM $_{2.5}$ µg/m^3	NOx µg/m^3	SO_2 µg/m^3
Minimum	30.7	10.5	7.4	7.2
Maximum	57.6	46.5	13.2	12.3
Average	45.9	16.5	10.4	8.7
98 percentile	57.0	36.0	13.0	11.9

A3- Krishnapur

Week	PM $_{10}$ µg/m^3	PM $_{2.5}$ µg/m^3	NOx µg/m^3	SO_2 µg/m^3
Minimum	33.6	11.3	6.5	6.0
Maximum	54.3	17.3	11.2	8.4
Average	42.8	13.8	8.3	7.1
98 percentile	52.2	16.9	10.9	8.4

A4- Tundra

Week	PM_{10} (µg/m^3)	$PM_{2.5}$ (µg/m^3)	NOx (µg/m^3)	SO_2 (µg/m^3)
Minimum	20.6	7.1	6.2	6.0
Maximum	38.6	12.5	9.2	9.2
Average	30.5	10.1	7.2	7.6
98 percentile	38.0	12.3	8.9	9.0

A5- Kurai

Week	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	NOx ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)
Minimum	41.5	14.2	6.5	6.1
Maximum	59.3	17.7	8.2	9.5
Average	51.8	15.9	7.2	7.8
98 percentile	59.1	17.6	8.2	9.5

A6- Vedawai

Week	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	NOx ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)
Minimum	22.1	7.7	6.6	6.8
Maximum	37.6	13.5	9.6	10.2
Average	31.4	10.6	7.8	8.6
98 percentile	37.4	13.3	9.5	10.0

A7- Adegaon

Week	PM_{10} $\mu g/m^3$	$PM_{2.5}$ $\mu g/m^3$	NOx $\mu g/m^3$	SO_2 $\mu g/m^3$
Minimum	33.8	9.4	6.2	6.5
Maximum	47.8	15.5	9.4	9.4
Average	39.6	12.4	8.0	7.6
98 percentile	47.2	15.2	9.4	9.3

A8- Babapur

Week	PM_{10} $\mu g/m^3$	$PM_{2.5}$ $\mu g/m^3$	NOx $\mu g/m^3$	SO_2 $\mu g/m^3$
Minimum	32.4	8.3	6.4	6.5
Maximum	47.6	13.7	11.4	9.3
Average	39.2	10.8	8.6	7.7
98 percentile	46.8	13.7	11.0	9.3

A9- Ganeshpur

Week	PM_{10} µg/m^3	$PM_{2.5}$ (µg/m^3)	NOx µg/m^3	SO_2 µg/m^3
Minimum	30.4	8.9	6.6	6.4
Maximum	48.7	12.8	10.2	9.6
Average	39.1	10.9	7.7	8.0
98 percentile	47.6	12.7	9.7	9.5

Predictive dispersion models show that maximum concentration of PM in downwind direction under critical wind conditions would be 21.2 µg/m^3 at 1km from the lease without control measures. It has been presumed that all activities would be simultaneous. Incremental concentration at the nearest village Chilai under these conditions would be 78.8 µg/m^3 lease.

Mitigation :

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.

Project proponent will take all prcautions to control emissions from fugitive sources. It will include enclosures, scaffolding at all the transfer points within the lease area. They would appear as in following photograph.

3.2 Noise:

Back ground noise levels Ld, Ln and Ldn were between 51.1& 53.4; 52.3 & 53.8 and 58.2 & 59.1 dB(A) respectively.

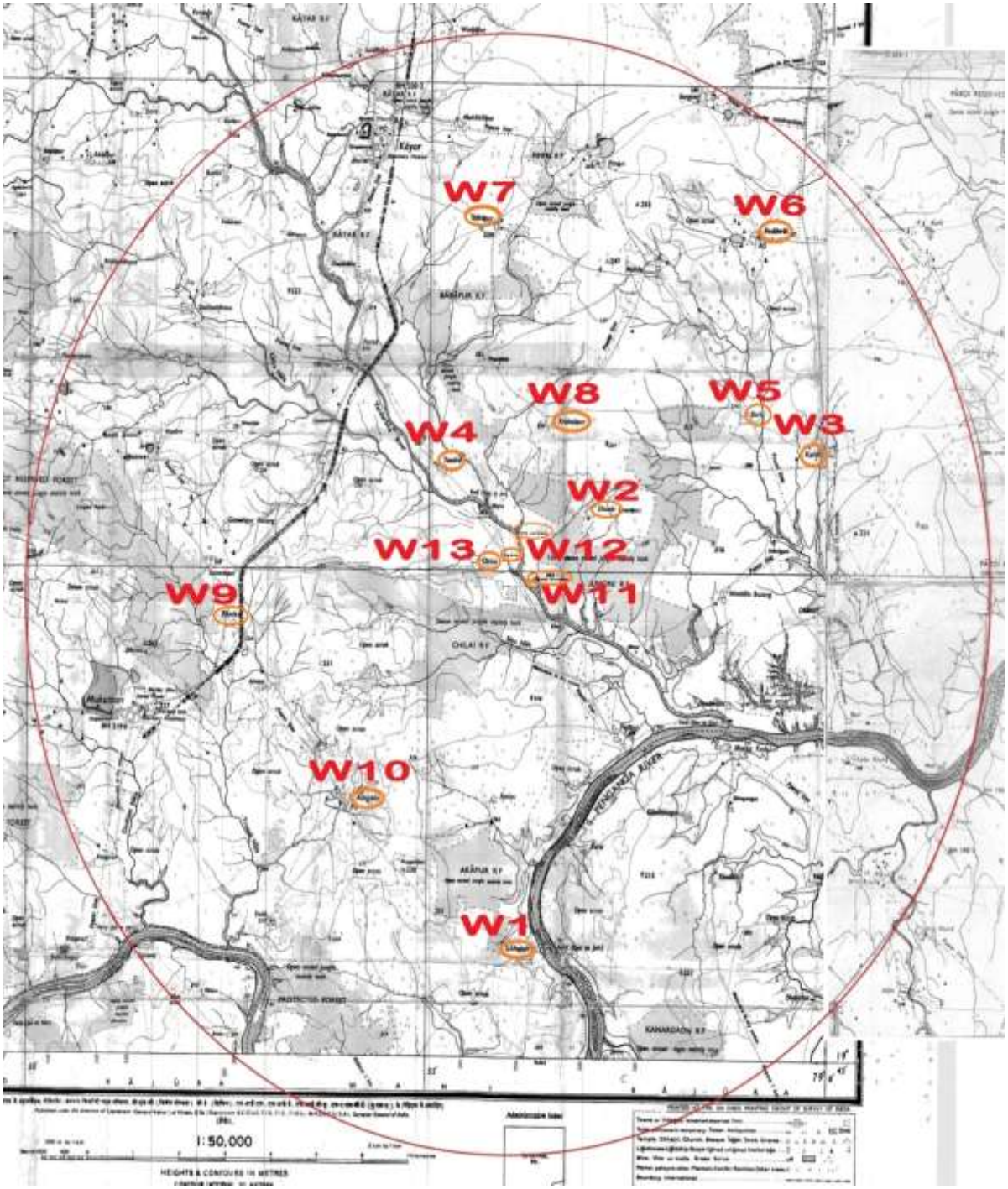
Personal protection equipment (PPE) will be supplied to miners. Blasting will be during fixed hours.

3.3 Water :

Thirteen water samples from ground and surface sources were examined for their physical/chemical properties. Ground water quality is satisfactory as per BIS10500 except for fluoride in three wells near limestone deposits. Fluoride was present in the Vaidarbha river water samples but is within limits. Hydrology of the area was studied. Ground water table is beyond 35-38 m in buffer zone and that in core zone. Water- table interception is not likely during mining scheme period.

Water quality monitoring stations are given in **Figure 7** & water quality analysis is given in **Table 3.**

FIGURE 7



WATER QUALITY MONITORING STATIONS

Table 3 : Water quality Analysis

Parameters	Sampling Stations												
	W1 HP	W2 HP	W3 HP	W4 HP	W5 Dug well	W6 HP	W7 HP	W8 HP	W9 HP	W10 Tube	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 absent.

3.4 Land use:

Lease is a private land. Dolomite mining over lease has been approved by State Government. Land use within mining lease as per the conceptual plan would be as under:

Use	Area, ha
Mine pits	22.59
Waste dumps	2.59
Plantation	2.7993
Rejects	0.6150
Sub grade	1.046497
Road	0.98

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 & plantation. Plantation along lease boundary has been proposed to arrest its erosion. Guidance from forest department will be available for plantation of suitable species.

A view of land beyond mine lease & Chilai village

3.5 Socio-economics :

Mine lease is lying unused. Soil cover in the lease land being inadequate, agriculture is scanty to nil. Mining will provide direct employment to about 78 local. Indirect employment is likely e.g. tree plantation will be entrusted to a local plant nursery, transportation by local transporters etc. Some land has been purchased by project proponent by direct negotiations and same practice will continue after environmental clearance.

3.6 Environment management :

Environmental cell is proposed. 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.

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

vke tursP;k lquokbZlkBh

i;kZoj.k fo"k;d fuosnu

izkstsDV % डोलोमाईट उत्खनन प्रकल्प @ १,५०,००० दश लक्ष टन

izLrkfor {ks= % गाव : चिलई
तहसील वणी, यवतमाळ

izLrkod

श्री अब्दुल कादिर मो. हनीफ
मोहम्मदी मिनरल्स
स्टेशन रोड
वणी

एन्विरो टेक्नो कन्सल्ट
६८, महाकाली नगर-२,
मानेवाडा चौक,
नागपूर ४४००२४

डिसेम्बेर् २०१४

चिलई डोलोमाईट उत्खनन प्रकल्प
पर्यावरणीय अहवाल

१.० प्रास्ताविक

वणी येथील मोहम्मदी मिनरल्सचे श्री अब्दुल कादिर मो. हनीफ यांना ६१.९१ हे. चे क्षेत्र डोलोमाईट उत्खननासाठी महाराष्ट्र सरकारने आवन्तीत केले आहे. ही लीज वणी तहसील मध्ये चिलई गावाजवळ आहे. हा प्रकल्प नवा असून याबदल कोणतेही आक्षेप कोर्टात नाहीत.

या क्षेत्राच्या अवती - भोवती राष्ट्रीय उद्याने किंवा सुरक्षित क्षेत्र १० कि.मी. परिसरात नाहीत.

लीज वणी पासून अंदाजे २५ कि.मी. दूर आहे. जवळचे रेल्वे स्टेशन कार्य पासून १७ किमी आहे.

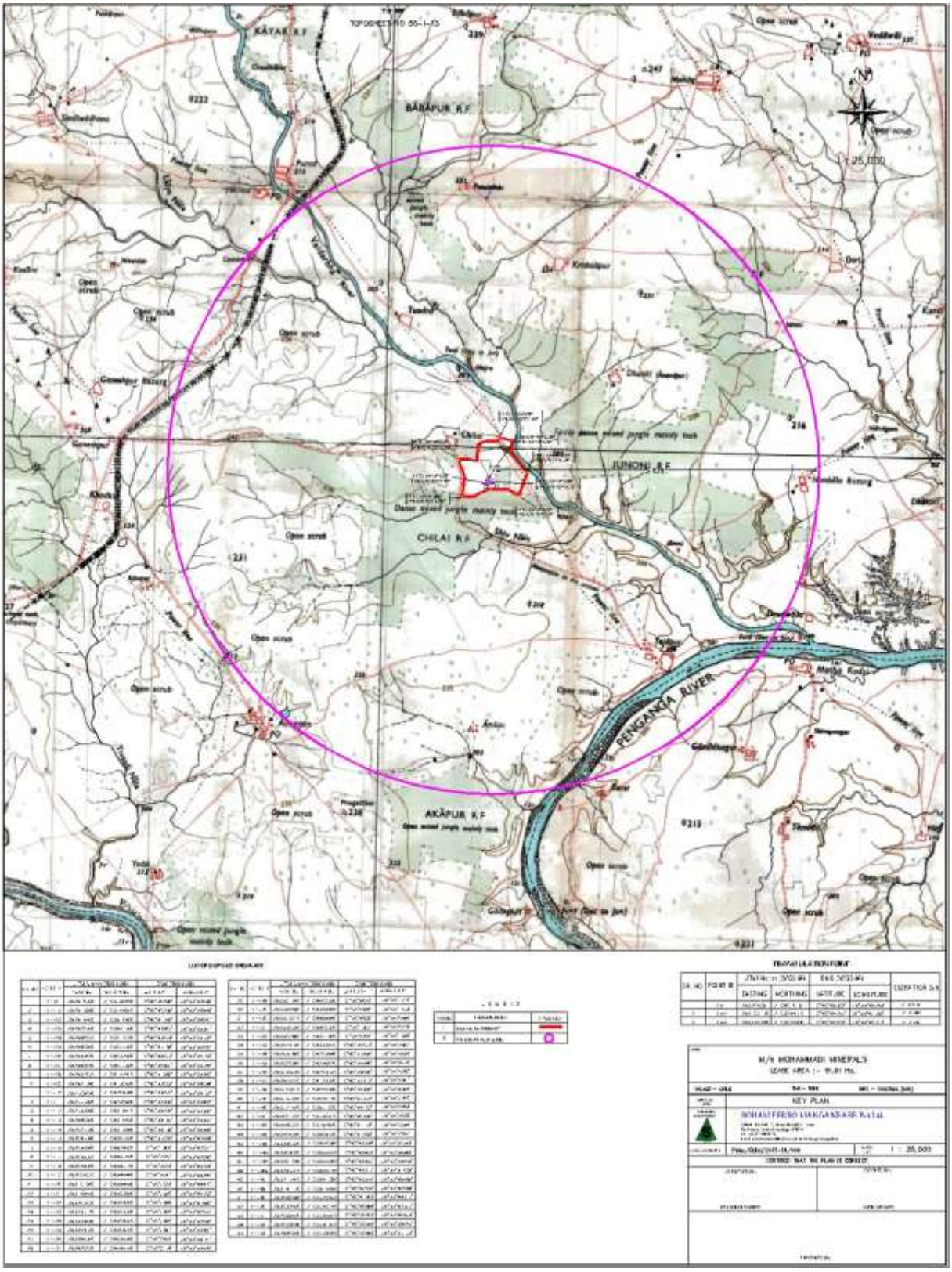
याचा अक्षांश आणि रेखांश अनुक्रमे १९° ४९' ३९.६" - १९° ५०' ९.५" उ व ७८° ५५' ३२.६" - ७८° ५६' ९.४" पु आहेत. हे क्षेत्र टोपोशीट क्रमांक ५६ १/१३ मध्ये येते.

लीज हे सपाट क्षेत्र असून त्याचा उतार ईशान्ये कडे आहे. कंटूर २११ ते १९७ पर्यंत आहे. विदर्भ नदी क्षेत्राला लागून आहे.

सरकारी नियमानुसार कंपनीने पर्यावरण व वनमंत्रालय, नवी दिल्ली, भारत सरकारला अर्ज केला आहे. ८ जुलै २०१४ रोजी झालेल्या विशेषज्ञ समिती ने एक संदर्भ सूची पर्यावरणीय अभ्यासासाठी पाठवली.

अभ्यासाचे क्षेत्र चिलई पासून १० किमी होते. उत्खननासाठी आवश्यक असलेली मायनिंग स्कीमला निदेशक जिऔलौजी व मायनिंग मान्यता पर्यावरणीय अहवाल कडून प्राप्त झाली. महाराष्ट्र प्रदूषण नियंत्रण मंडळ, चंद्रपूर येथील त्यांच्या क्षेत्रीय कचेरीत सादर केला. त्याचा संक्षिप्त गोषवारा या निवेदनात दिला आहे.

आकृती १


KATAK R.F
BARAPUR R.F
JUNONI R.F
CHILAI R.F
AKAPUR R.F
PENGANGA RIVER
KEY PLAN

२.० डोलोमाईटचे क्षेत्रातील साठे आणि प्रस्तावित उत्खनन :

चिलईतील डोलोमाईटचे साठे उत्तम प्रतीचे आहेत. त्यात सिलिका (SiO_2) आणि लोह (Fe) यांचे प्रमाण फार कमी आहे. त्यामुळे त्या डोलोमाईटचा वापर करणाऱ्या उद्योगाकडून मागणी बरीच आहे. अंदाजे दहा उद्योग २०० किमी च्या परिसरात आहेत.

या क्षेत्रात अर्थात लीज मध्ये डोलोमाईटचे एकंदर साठे ५२.२७ दश लक्ष टन आहेत असा अंदाज मायनिंग स्कीम मध्ये आहे. त्या पैकी ५१.५४०७४८ दश लक्ष टन डोलोमाईट उत्खननाने काढता येतील. खनिजाचा आणि त्यासोबतच्या मातीचे प्रमाण १:०.०१४ घनमी. इतके आहे.

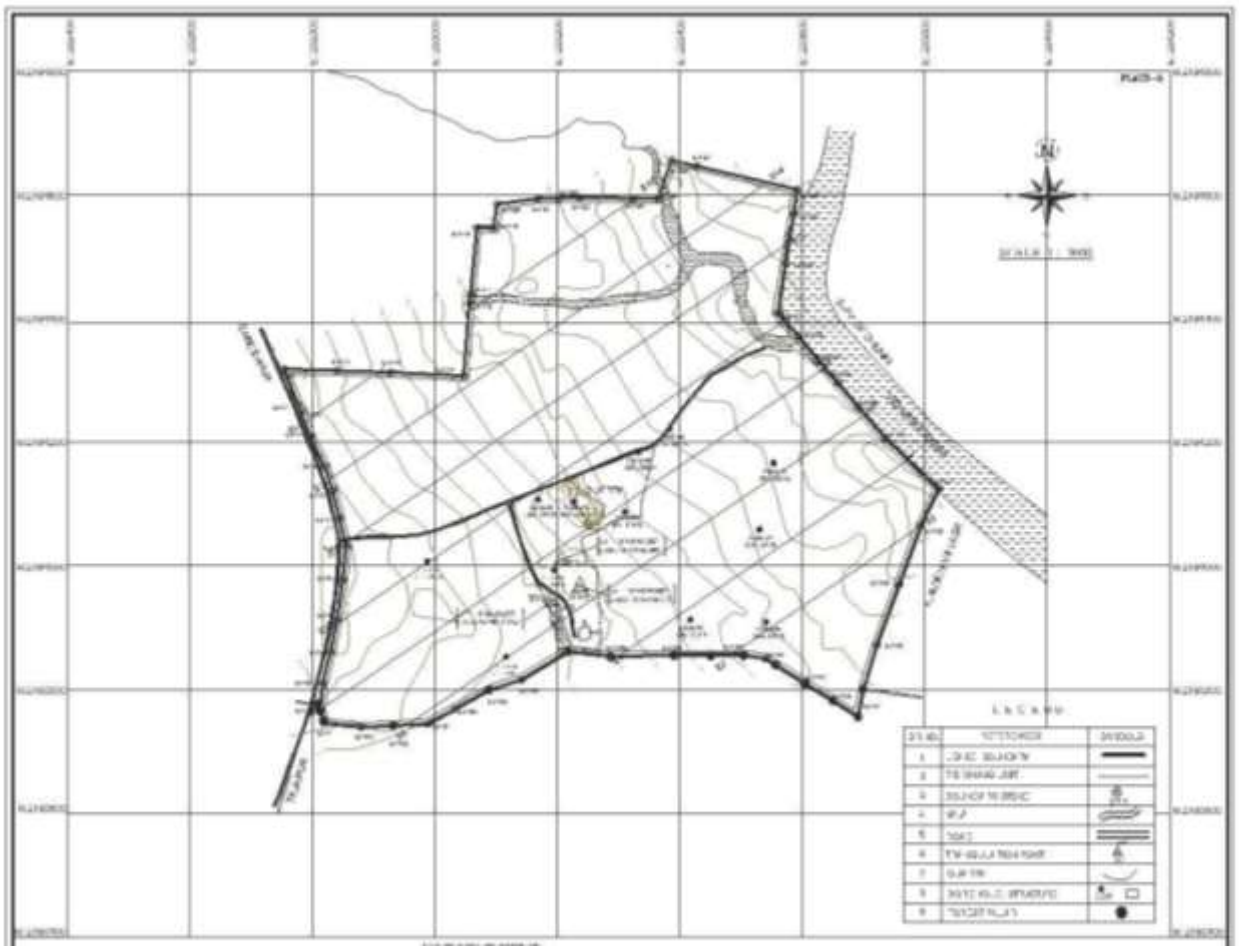
उत्खनन जर प्रती वर्षी १.५ दशलक्ष केले, तर डोलोमाईटचे साठे ३४ वर्षे पुरतील. उत्खनन यांत्रिक असेल.

शोवेल आणि डम्पर यांचा वापर प्रस्तावित आहे. बेंच ची उंची ६ मी, रुंदी ६ मी पेक्षा जास्त आणि बेंच चा कल ४५ डिग्री असेल. रोज १०-२० होल्स करण्यात येतील आणि तीन ब्लास्ट्स दिवसातून करण्यात येतील. ब्लास्ट्स शास्त्रीय पद्धतीनेच करतील. त्याची मान्यता DGMS कडून प्राप्त करण्यात येईल .

मायनिंग स्कीम मधील सरफेस व जिऔलौजीकल नकाशे आकृती २ आणि ३ मध्ये दाखविले आहेत. उत्खननामुळे पाच वर्षानंतर लीज मध्ये ३६ मी. खोल खड्डा होईल.

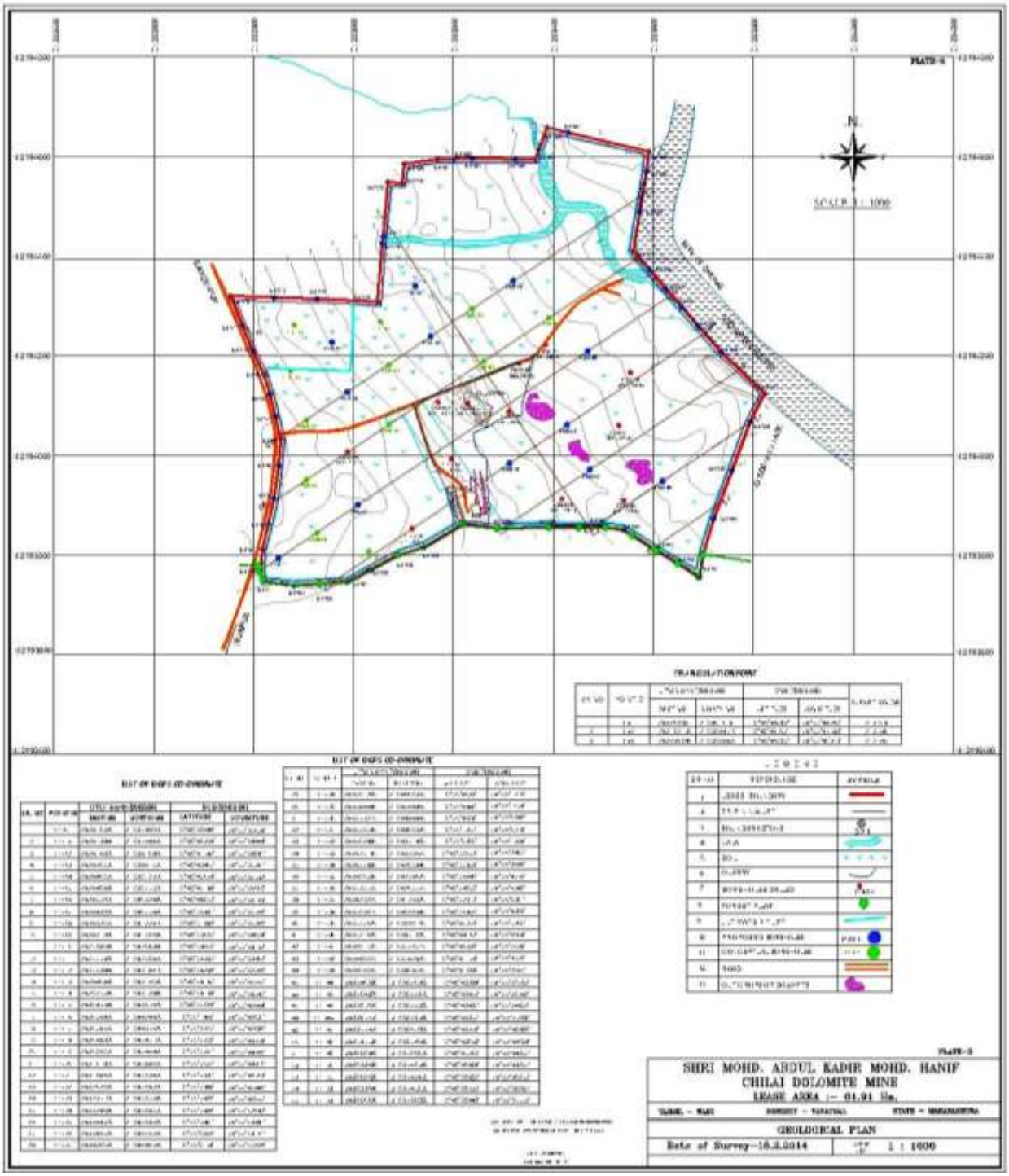
मायनिंग स्कीम मध्ये एक नकाशा दिलेला असतो. या नकाशात लीज चे स्क्षेत्र मायनिंग पूर्ण झाल्या नंतर कसे असेल याचे विवरण दाखविले असते. हा नकाशा आकृती क्रमांक ५ मध्ये आहे.

आकृती २



SURFACE PLAN

आकृती ३

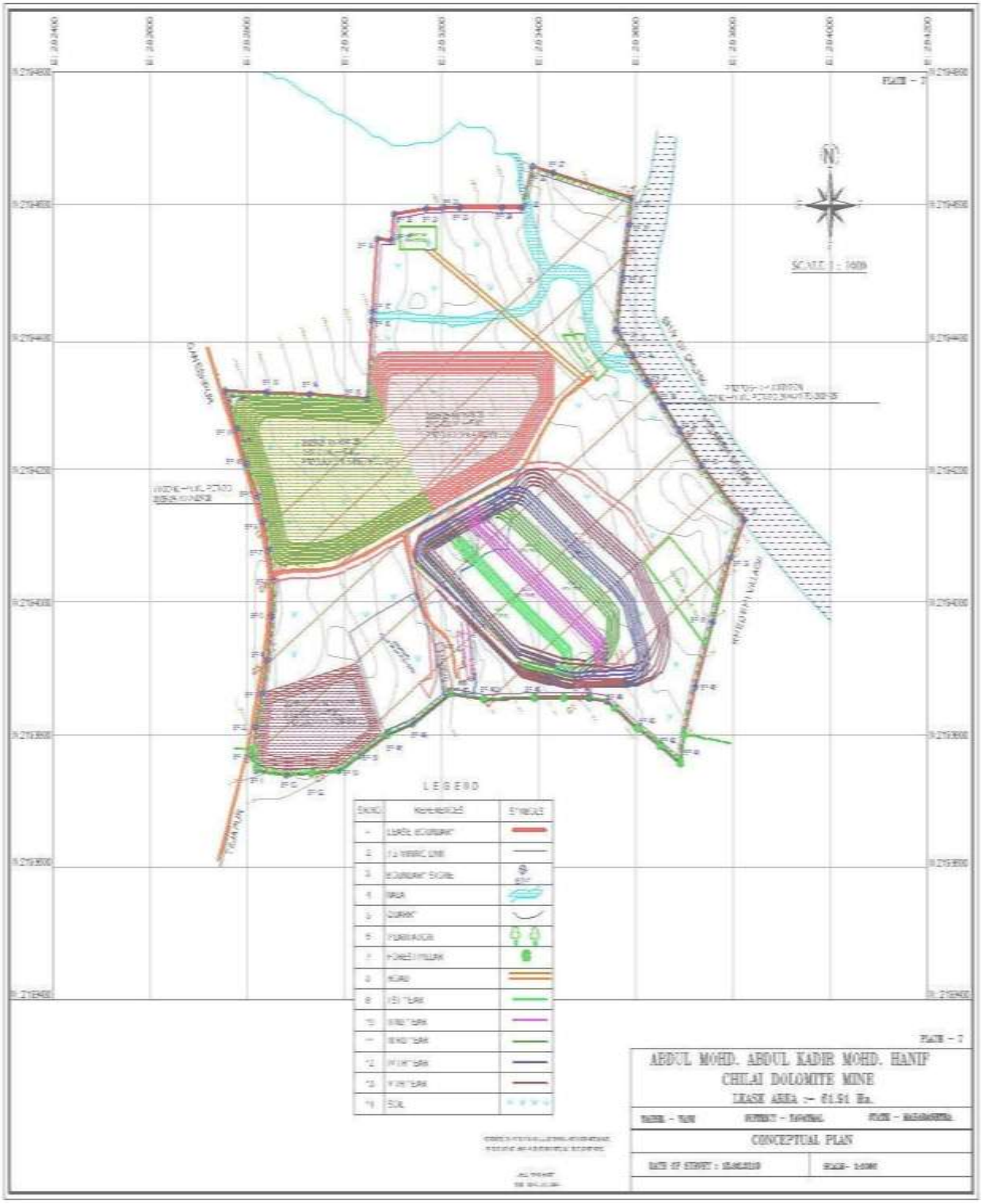


GEOLOGICAL PLAN

लीज जमिनीचे विभाजन खालील प्रमाणे उत्खननाच्या नंतर असे असेल

खोदलेले क्षेत्र	२५.९७९४ हे.
वेस्टचा डम्प	२.५९ हे
हरित क्षेत्र	२.७९९३ हे
कमी प्रतीच्या डोलोमाईट डम्प साठी	१.०४६४९७ हे
नको असलेल्या पदार्थ डम्प साठी	०.६१५० हे
रस्ता	०.९८ हे

आकृती ४



CONCEPTUAL PLAN

या प्रकल्पात निम्न लिखित मशिनरी वापरली जाईल.

डम्पर २५ टन	:	९
लोडर २. घन मी.	:	३
ग्रेडर, पाण्याचा शिडकावा साठी, १० अ शक्ती, कोम्प्रेस्सर-प्रत्येकी	:	१
व्यागन ड्रील्ल्स	:	४
क्रशर २५० टन/तास क्षमता	:	१

३.० पर्यावरणाचे परीक्षण

लिझच्या परिसरात काही दगडाच्या खाणी आहेत. इतर उद्द्योग् नाहीत अथवा नगण्य आहेत.

सद्यपरिस्थितील पर्यावरणाचे मुल्यांकन ऑक्टोबर महिन्यात सुरु केले आणि डिसेम्बेर् २०१४ पर्यंत चालू ठेवणार आहे.

अभ्यासाच्या क्षेत्र लिझच्या अवतीभोवती १० कि मी होते.

पाणी, हवा, जमीन, ध्वनी, सामाजिक परिस्थिती इत्यादी पर्यावरणाच्या घटकांचा परामर्ष घेतला. इतर उपलब्ध असलेली माहिती एकत्रित केली, तसेच मोजमापनहि केले.

प्रकल्पात होणारी कारवाई यांचा परामर्श घेतला आणि पर्यावरणावर होणारा संभाव्य परीणाम याचा अंदाज केला. या सर्व माहिती एका अहवालात एकत्र केली. तो अहवाल महाराष्ट्र प्रदूषण नियंत्रण मंडळ, चन्द्रपूर येथील त्यांच्या क्षेत्रीयकचेरीत सादर केला. त्यातील संक्षिप्त माहिती या निवेदनात दिली आहे.

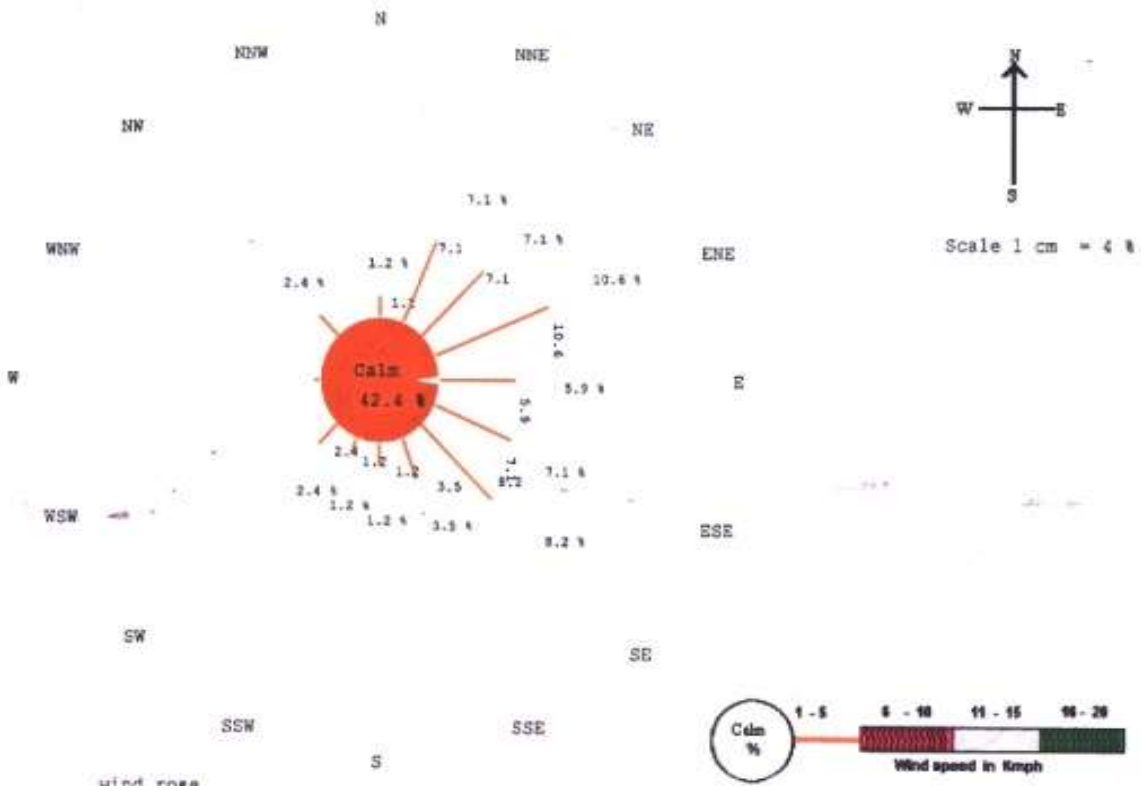
३.१ वायू, हवा

हवेवर होणाऱ्या संभाव्य परीणामाचे मुल्यांकन शास्त्रीय आणि प्रचलित रीतीने केले. प्रकल्प सुरु झाल्यावर उत्खनन, निघालेल्या मालाला डम्परमध्ये भरणे, डम्परचे रस्त्यावरून क्रशरपर्यंत वहन, त्याचेवर प्रक्रिया आणि बाहेर पाठवणे/रवानगी इत्यादी कार्यक्रम लीझ मध्ये होतील. हा प्रकल्प सुरू झाल्यावर दाखविलेल्या कार्यवाही (ड्रिल करणे, ब्लास्ट करणे, मालाचे वहन करणे इत्यादी) करतना धुळीचे अर्थात P.M. चे उत्सर्जन होईल

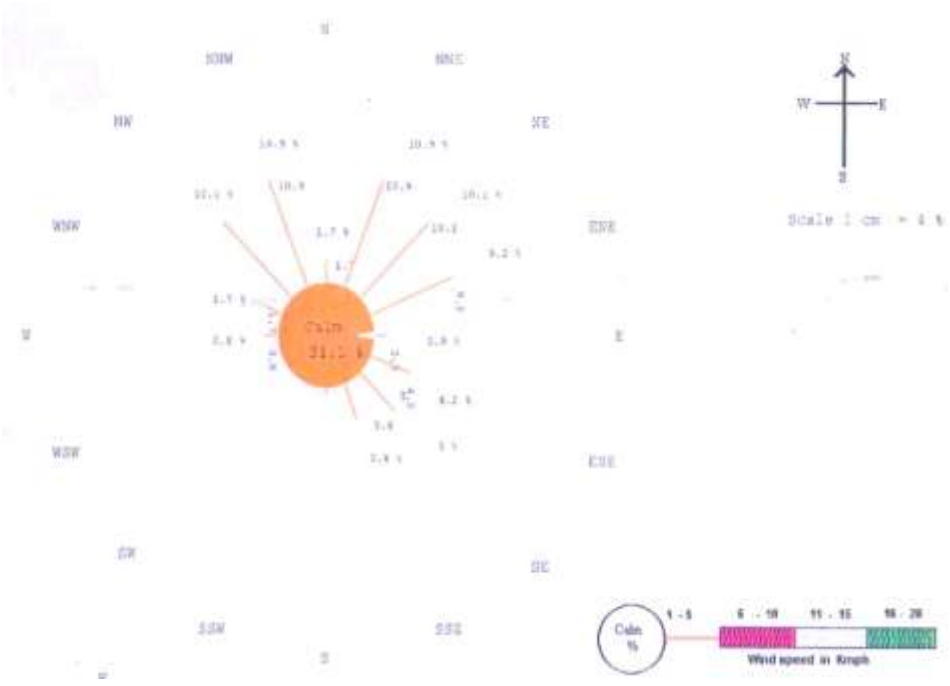
हे सर्व होत असतांना धूळ उडणे सहाजिक आहे. उडलेली धूळ हवेच्या दिशेने उडू आणि पसरू शकते. हवेची गुणवत्ता बदलू शकते. ती किती बदलू शकेल याचा अंदाज घेतला.

हवेची दिशा लीज मध्ये कशी राहील हे खाली दिलेल्या आकृती ५ मध्ये दर्शविले आहे. हवेची गती - सरासरी ६७% वेळेला ६ किमी/तास , इशान्येकडून - ५३% ; पूर्वे आणि आग्नेयेकडून - प्रत्येकी ८ % होती . एकंदर ९ जागी हवेचे मुल्यांकन केले. गंधक द्वि प्राणीद आणि नत्र प्राणीद १० माय्क्रोग्राम पेक्षा कमी होते.

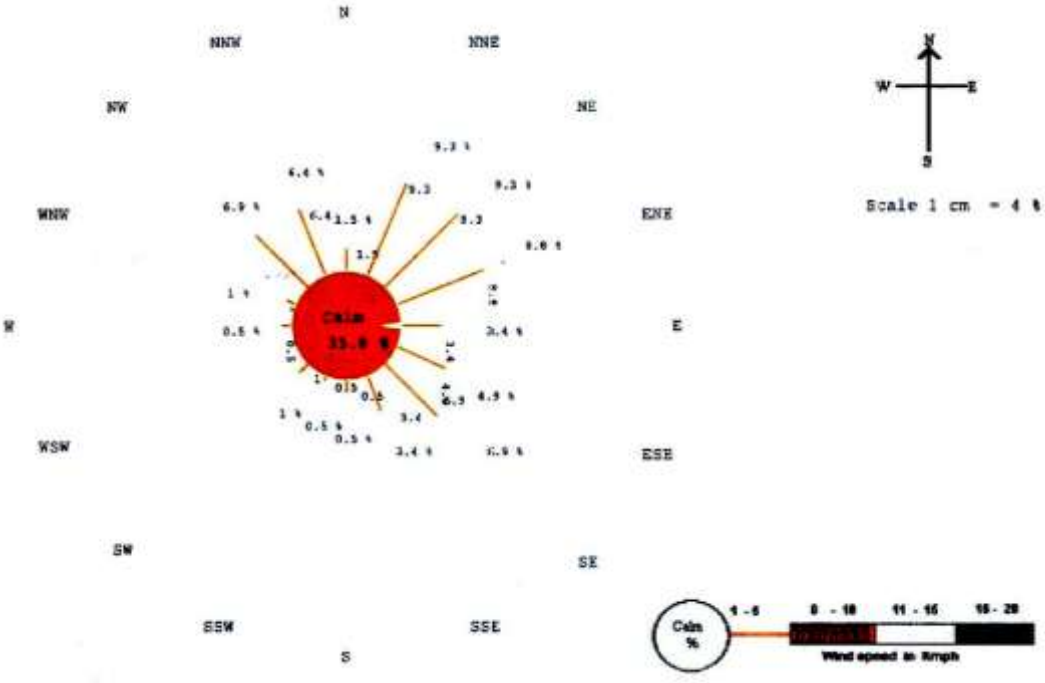
आकृती ५



Wind rose during October 2014



Wind rose during November 2014

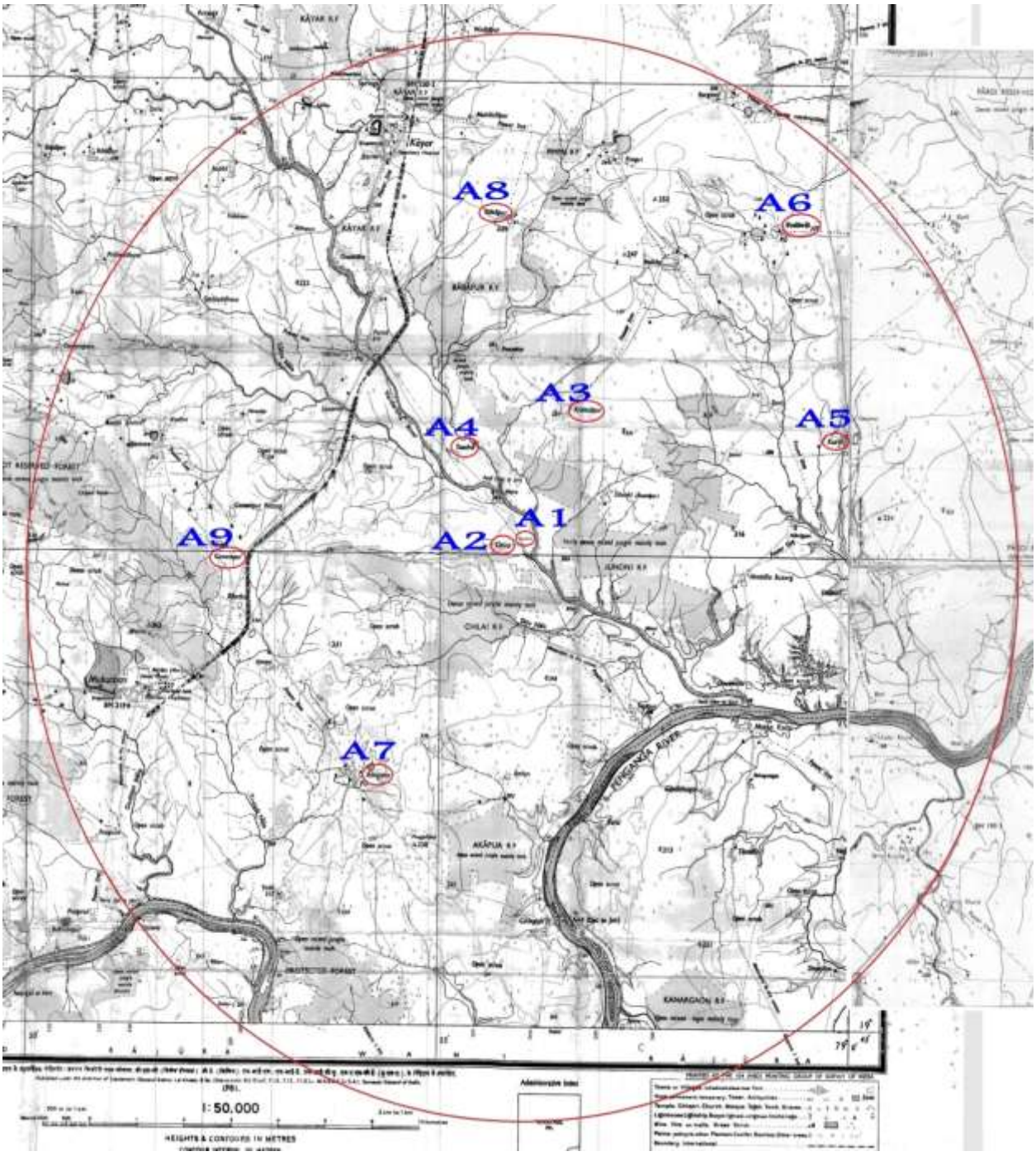


Wind rose during December 2014

नमुने घेतलेली ठिकाणे खालील तक्त्यात समाविष्ट आहेत आणि आकृती क्रमांक ६ मध्ये दाखवली आहेत.

कोडे	घेतलेले स्थान	दिशा	दूर, किमी
A 1	लीज	--	--
A 2	चीलई गाव	SW	१
A 3	कुष्णापूर	NW	३
A 4	टुंड्रा	N-NW	१.८
A 5	कुरी	E-NE	७.५
A 6	वेदावाई	NE	८
A 7	आडेगांव	SW	४.५
A 8	बाबापूर	N	५.३
A 9	गणेशपूर	W-SW	७

आकृती ६



हवेची गुणवत्ता घेतलेली स्थाने

हवेची गुणवत्ता

A1 - माईन लीज क्षेत्र

Week	PM $_{10}$ µg/m^3	PM $_{2.5}$ µg/m^3	NOx µg/m^3	SO_2 µg/m^3
Minimum	34.0	10.8	7.6	6.0
Maximum	48.6	15.8	11.6	9.8
Average	39.2	12.8	9.2	7.5
98 percentile	48.0	15.6	11.4	9.5

A2- चीलई गाव

Week	PM $_{10}$ µg/m^3	PM $_{2.5}$ µg/m^3	NOx µg/m^3	SO_2 µg/m^3
Minimum	30.7	10.5	7.4	7.2
Maximum	57.6	46.5	13.2	12.3
Average	45.9	16.5	10.4	8.7
98 percentile	57.0	36.0	13.0	11.9

A3- कुष्णापूर

Week	PM $_{10}$ µg/m^3	PM $_{2.5}$ µg/m^3	NOx µg/m^3	SO_2 µg/m^3
Minimum	33.6	11.3	6.5	6.0
Maximum	54.3	17.3	11.2	8.4
Average	42.8	13.8	8.3	7.1
98 percentile	52.2	16.9	10.9	8.4

A4- टुंड्रा

Week	PM_{10} (µg/m^3)	$PM_{2.5}$ (µg/m^3)	NOx (µg/m^3)	SO_2 (µg/m^3)
Minimum	20.6	7.1	6.2	6.0
Maximum	38.6	12.5	9.2	9.2
Average	30.5	10.1	7.2	7.6
98 percentile	38.0	12.3	8.9	9.0

A5- कुरी

Week	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	NOx ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)
Minimum	41.5	14.2	6.5	6.1
Maximum	59.3	17.7	8.2	9.5
Average	51.8	15.9	7.2	7.8
98 percentile	59.1	17.6	8.2	9.5

A6- वेदावाई

Week	PM_{10} ($\mu g/m^3$)	$PM_{2.5}$ ($\mu g/m^3$)	NOx ($\mu g/m^3$)	SO_2 ($\mu g/m^3$)
Minimum	22.1	7.7	6.6	6.8
Maximum	37.6	13.5	9.6	10.2
Average	31.4	10.6	7.8	8.6
98 percentile	37.4	13.3	9.5	10.0

A7- आडेगांव

Week	PM $_{10}$ $\mu g/m^3$	PM $_{2.5}$ $\mu g/m^3$	NOx $\mu g/m^3$	SO_2 $\mu g/m^3$
Minimum	33.8	9.4	6.2	6.5
Maximum	47.8	15.5	9.4	9.4
Average	39.6	12.4	8.0	7.6
98 percentile	47.2	15.2	9.4	9.3

A8- बाबापूर

Week	PM $_{10}$ $\mu g/m^3$	PM $_{2.5}$ $\mu g/m^3$	NOx $\mu g/m^3$	SO_2 $\mu g/m^3$
Minimum	32.4	8.3	6.4	6.5
Maximum	47.6	13.7	11.4	9.3
Average	39.2	10.8	8.6	7.7
98 percentile	46.8	13.7	11.0	9.3

A9- गणेशपूर

Week	PM_{10} µg/m^3	$PM_{2.5}$ (µg/m^3)	NOx µg/m^3	SO_2 µg/m^3
Minimum	30.4	8.9	6.6	6.4
Maximum	48.7	12.8	10.2	9.6
Average	39.1	10.9	7.7	8.0
98 percentile	47.6	12.7	9.7	9.5

या गावातील हवा प्रदूषण मुक्त आहे असा निष्कर्ष वरील तक्त्यांवरून दिसून येतो.

३.१.१ प्रकल्पाचे संभाव्य परिणाम

हा प्रकल्प सुरू झाल्यावर उत्खनन, मालाचे भरण आणि वहन करताना तसेच त्याचे क्रशिंग करताना मुख्यत्वे धुळीच्या कणांचे उत्सर्जन संभवते. त्याची मात्रा/प्रमाण खाली दिलेली आहे.

Activity	Emission factor	Level of activity	Emission rate, g/second
Drilling	0.6 kg/hole	43	0.2986
Blasting	22.6 kg/blast	1/d	0.2616
Dumping	0.02 kg/tonne	5000 TPD	1.1574
Haul road with watering	4.0 kg/km	68 km/day @ 5000 TPD, 20 T dumper capacity,170 m/trip & return	3.1
Total			4.8176

३.१.२ रस्त्यावरची वाहतूक देखिल प्रदूषण करू शकते. सध्याची वाहतूक परीस्थिती खाली दिली आहे.

Road	Type of vehicle, wheels	Number	Vehicle/hour
Kayar –Mukutban & back	2	769	77
	3	119	12
	4	182	18
	Truck	94	9
	Bus	56	6
	Tippers	74	7
	Tractor	52	5
Kayar to Chilai & back	2	98	10
	3	55	6
	4	32	3
	Truck	17	2
	Bus	4	1
	Tippers	27	3
	Tractor	31	3
Mukutban to Chilai & back	2	98	10
	3	49	5
	4	28	3
	Truck	16	2
	Bus	4	1
	Tippers	25	3
	Tractor	33	--

संगणकाने केलेल्या अंदाजाप्रमाणे खाणीत होत असलेल्या सर्व हालचालींचा हवेवर होणारा परिणाम ज्यास्तीत ज्यास्त एक १०० मी पर्यंत संभवतो. शिवाय उत्खनन जमिनीच्या खाली १० मी. असेल. त्यामुळे हवा प्रदूषित होणार नाही.

३.२ हवेचे प्रदूषण कमी करण्यासाठी उपाययोजना

- क्रशरच्या अवतीभोवती पत्रे लावण्याचे नक्की केले आहे.

- लिझच्या सभोवताल झाडे/वृक्षारोपण होईल

- रस्त्यावर पाणी - शिडकाव व्यवस्थित होईल

३.३ ध्वनी

क्षेत्राच्या आसपासच्या खेड्यात ध्वनीचे मोजमाप केले. ते ५१.१-५९.१ डी.(बी) A पर्यंत होतं. ब्लास्टिंग, ड्रिल करताना किंवा क्रशर चालू असतांना आवाज/ध्वनी प्रदूषण संभवते.

त्यावर उपाय म्हणून प्रत्येक काम करणाऱ्या खाण मजुराला कानाचे व्यक्तीगत यंत्र देण्यात येईल. ब्लास्टिंग फक्त ठराविक वेळातच होईल. त्याची पूर्व सूचना -सायरन वाजून देण्यात येईल.

३.४ पाणी:

लीज मध्ये पाण्याचा स्त्रोत नाही. तिच्या बाजूने विदर्भ नदी वाहते. या नदीचा प्रवाहाचा अभ्यास केला. पाणी मुख्यतः पावसाळ्यात वाहते. ओढ फार असते. परंतु हे पाणी लीझ मध्ये शिरणार नाही. भूजल ३५-३८ मी. खोल आहे. उत्खनाचा खड्डा भुजलाला छेदणार नाही. परिसराच्या भूजलाचे आणि विदर्भ नदीच्या पाण्याचे परीक्षण केल्यावर ते पिण्यायोग्य असल्याचे आढलुन आले. फ्लोराईड प्रमाण काही हात पंपात अधिक दिसले.

पाण्याचे विश्लेषण खाली दिले आहे.

Code	Sampling station	Details
W1	Gadeghat	Hand pump
W2	Dhunki	Hand pump
W3	Kurai	Hand pump
W4	Tundra	Hand pump
W5	Dorli	Dug well
W 6	Vedawai	Hand pump
W7	Babapur	Hand pump
W8	Krushnapur	Hand pump
W9	Khadki	Hand pump
W10	Adegao	Tube well
W11	Vaidarbha river	Downstream
W12	Vaidarbha river	Upstream
W13	Chilai	Tube well

पाण्याचे विश्लेषण

Parameters	Sampling Stations												
	W1 HP	W2 HP	W3 HP	W4 HP	W5 Dug well	W6 HP	W7 HP	W8 HP	W9 HP	W10 Tube	W11 Surface	W12 Surface	W13 Tube
Temperature, ^0C	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 absent.

३.५ जमीनीचे - पर्यावरण

सध्या लीज मधील जमीनीचा वापर किरकोळ किंवा नगण्य शेती साठी होतो. परंतु शेतीचे उत्पन्न हमखास मिळेलच याची खात्री नाही. लीज ची जमीनीचे फोटो खाली दाखविले आहेत. या क्षेत्रात दगडाळ जमीन आहे, मातीचा थर क्वचित दिसतो.

उत्खनन केल्यामुळे जमिनीच्या पर्यावरणावर विपरीत परिणाम संभवत नाही. झाडे तोडावी लागणार नाहीत. विस्थापितांचे प्रश्न उद्भवणार नाहीत . ज्यांची जमीन विकत घेण्यात येईल त्यांना योग्य तो मोबदला देण्याचे ठरले आहे.

३.६ सामाजिक बांधिलकी

चिलई मध्ये असलेल्या लीज मधील डोलोमाईट उच्च प्रतीचा आहे, त्याचे उत्खनन देशच्या हिताच्च ठरेल, कारण चिलीच्या २०० किलो मी परिसरातील पुष्कळ उद्योगांना डोलोमाईट ची आवश्यकता आहे . डोलोमाईटची जरूरत स्टील, काच, पेंट उद्योगांना आहे .

स्वदेशातच उपलब्ध असल्यामुळे डोलोमाईटची आयात बंद होईल .

चिलई आणि आजूबाजूच्या गावातील ७८ लोकांना प्रत्यक्ष आणि ईतर्हे रोजगार जसे वाहतूकदार, वर्क शोप, हॉटेल इत्यादी अप्रत्यक्ष रोजगार निर्माण होवू शकतात.

पावसाच्या अनिश्चितेमुळे वाणी तहसीलीत शेती फायदेशीर नाही. त्यामुळे उत्खनन चालू करणे आवश्यक आहे . ते सर्वांच्या हिताचे ठरेल पूर्ण ६१.९१ हे जमीन खाजगी आहे. ती विकत घ्यायचे प्रस्तावित आहे. जमिनीच्या मालकाशीच संपर्क करून त्यांच्याशी व्यवहार केला जाईल.

पर्यावरणाचे व्यवस्थापन, उत्खनन इत्यादीचे खर्च पकडून डोलोमाईटची किंमत रु ०.२८०/ किलो असेल.

पर्यावरणाच्या कोणत्याही घटकाला जसे पाणी, हवा, जमीन तसेच समाजाला हानी न करता उत्खनन शक्य आहे.

३.७ पर्यावरणाचे व्यवस्थापन

प्रकल्प सुरु झाल्यावर एक "पर्यावरण कक्ष" स्थापन करण्यात येईल. खाणीचे व्यवस्थापक त्याचे अध्यक्ष असतील. प्रदूषण मंडलाने दिलेले आदेश हा कक्ष पाळेल. आदेशाचे पालन करणे हि त्याची जबाबदारी राहील. तसेच पर्यावरण व वन खात्याने दिलेल्या अटींचे पालन करतील.

या कार्यक्रमात मुख्यत्वेकरून धुळीचे उत्सर्जन की करणे, ब्लास्टिंग शास्त्रीय पद्धन्तेनेच करणे, ध्वनी प्रदूषणाचे नियंत्रण, निघालेल्या मालाची साठवण आणि मुख्यत्वेकरून खाणीतील कामगारांचे आरोग्याची काळजी इत्यादींचा समावेश आहे.

-पक्के किंवा अर्ध पक्के रस्ते बनविणे

-खाणीतून उत्पन्न झालेल्या मालाचे वाहन फक्त झाकलेल्या वाहनातूनच करणे

-रस्त्यावर गतिरोधक, तसेच लिझच्या सुरक्षित क्षेत्रात आणि रस्त्याचा दुतर्फा तसेच डम्पवर वृ क्षारोपण

-पाण्याचा फवारा क्रशर मध्ये आणि रस्त्यावार करणे,

-ब्लास्टिंग मुख्य निदेशक, खाण सुरक्षा यांच्या निर्देशानुसार करणे

-खदान सुरु झाल्यावर हवा, पाणी, ध्वनी यांचे मोजमापन करणे आणि त्याची माहिती पर्यावरण आणि प्रदूषण मंडळाला कळविणे इत्यादी. मान्यता प्राप्त संस्थे कडून हे काम करून घेण्यात येईल.

३.८ पर्यावरणाच्या क्षेत्रपर्यावरणाच्या परीक्षणाचे वेळापत्रक :

- पाणी - आठवड्यातून एकदा
- ध्वनी - रोज आणि ब्लास्टिंग करताना
- हवा - पर्यावरण आणि प्रदूषण मंडळाच्या आदेशानुसार
- दर महिन्यात प्रदूषण मंडळाला रिपोर्ट पाटवण्यात येईल .
- पर्यावरणाच्या संबंधी माहिती ज्यांना हवी त्यांना उपलब्ध करून देणे

रु. १५०,०००/- पर्यावरणाच्या मोज मापनासाठी उपकरणे आणि वर्षाला रु. ५०,०००/- खर्च अपेक्षित आहे .

CONSENT APPLICATION UNDER WATER ACT, 1974; AIR ACT 1981 & HAZARDOUS WASTE (M&H) RULES 1989, AS AMENDED IN 2003

APPLICATION FOR CONSENT/AUTHORISATION

Date :

From

MAHAMMADI MINERALS
CHILAI DOLOMITE MINE
VILLAGE : CHILAI
TAL : WANI, DIST YAVATMAL

To
THE REGIONAL OFFICER
MAHARASHTRA POLLUTION CONTROL BOARD
MAHAVIR TOWER, 2 ND FLOOR
MUL ROAD, CHANDRAPUR (MS)

Sir,

We hereby apply for "

Consent to Establish/Operate/Renewal of consent under section 25 and 26 of the Water (Prevention & Control of Pollution) Act, 1974 as amended.

Consent to Establish/Operate/Renewal of consent under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981, as amended.

Authorisation/renewal of authorisation under rule 5 of the Hazardous Wastes (Management and Handling) Rules, 1989, as amended in January 2000 in connection with my/our existing/proposed/ altered additional manufacturing/processing activity from the premises as per the details given below :

		Part A : General	
1.		Name designation, office address with Telephone/Fax numbers e-mail of the Applicant Occupier/Industry/Institution/Local body	MOHD. ABDUL KADIR M. HANIF, PROP. MOHAMMADI MINERALS , STATION ROAD WARD NO 3, WANI 445304, DIST YAVATMAL (M) 09422166088
2.	a.	Name and location of the industrial unit/premises for which the application is made (Give revenue Survey Number/Plot number name to Taluka and District, also telephone and fax number)	MAHAMMADI MINERALS CHILAI DOLOMITE MINE VILLAGE : CHILAI TAL : WANI, DIST : YAVATMAL KH. NO. 22-24, 29,31-37, 40-41 PL SEE **ANNEXURE 1**
	b.	Details of planning permission obtained from the local body/town and country planning authorityMetropolitan development authority/ designated Authority.	PH 26317, 25262 GRAM PANCHAYAT CHILAI PLEASE SEE **ANNEXURE 2** **DMO YAVATMAL**
	c.	Name of the local body under whose jurisdiction the unit is located and name of the licence issuing authority.	AS ABOVE

3.		Name, addresses with Telephone and Fax Number of Managing Director/Managing Partner and officer responsible for matters connected with pollution control and/or Hazardous waste disposal.	MOHD. ABDUL KADIR M. HANIF, PROP. MOHAMMADI MINERALS, STATION ROAD WARD NO 3, WANI 445304, DIST YAVATMAL (MS)
4.	a. b.	Are you registered Industrial unit ? If yes, give the number and date of registration	LEASE HAS BEEN GRANTED BY GOM VIDE LETTER NO MMN2099/7707/DESK-4 DT 08.01.2001. PL SEE **ANNEXURE 3**
5.		Gross capital investment of the unit without depreciation till the date of application (Cost of building land plant and machinery). (To be supported by an affidavit/undertaking on Rs. 20/- stamp paper annual report or certificate from a Chartered Accountant for proposed unit(s), give estimated figure).	APPROX RS 2425 LAKHS PLEASE SEE **ANNEXURE 4**
6.		If the site is located near sea-shore/river bank/ other water bodies/highway, indicate the crow fly distance and the name of the water body, if any.	YES RIVER VAIDARBHA ABOUT 250 M
7.		Does the location satisfy the requirements under relevant Central/State Govt. Notification such as Coastal regulation Zone. Notification on Ecologically fraglle area. Industrial Location policy etc. if so, give details.	YES
8.	 a. b. c.	If the site is situated in notified industrial estate. Whether effluent collection, treatment and disposal system has been provided by the authority. Will the applicant utilise the system, if provided. If not provided, details of proposed arrangement.	NO N.A. N.A. N.A.
9.	a. b. c..	Total plot area Built up area and Area available for the use of treated sewage/trade effluent for gardening/irrigation	61.91 HA 0.7994 HA 2.7993 HA FOR PLANTATION
10.		Month and year of commissioning of the Unit	THIS APPLICATION IS FOR CONSENT TO ESTABLISH
11.		Number of workers and office staff Hrs. of shifts Weekly off 8 hrly x 2 shifts per day Yes	ABOUT 78
12.	a. b. c.	Do you have a residential colony within the premises in respect of which the present application is made? If yes, please state population staying. Indicate its location and distance with reference to plant site.	NO N.A. N.A.

13.		List of products and by-products manufactured in tonnes/month, kl/month or numbers/month (Give figure corresponding to maximum installed production capacity)	DOLOMITE MINERALS/ORE @1,25,000 TPM OR 5000 TPD
14.		List of raw materials and process chemicals with annual consumption corresponding to above stated production figures, in tonnes/ month or kl/month or numbers/month	NONE
15.		Description of process of manufacture for each of the products showing input, output, quality and quantity of solid, liquid and gaseous wastes, if any from each unit process. (To be supported by flow sheet and/or material balance).	OPENCAST MECHANISED MINING PL SEE **ANNEXURE 5**
		Part B : Wastewater aspects	
16.		Water consumption for different uses (m^3/day)	100
	i.	Industrial cooling, spraying in mine pits or boiler feeds propultion of hydro generation sets	40
	ii.	Domestic purpose	10
	iii.	Processing whereby water gets polluted and the pollutants are easily biodegradable and are toxic	--
	iv.	Processing whereby water gets polluted and the pollutants are not easily bio-degradable and are toxic	--
	v.	Others such as agriculture, gardening etc. (specify) WORKSHOP PLANTATION	20 30
17.		Source of water supply. Name of authority granting permission if applicable and quantity permitted	GROUND WATER & MINE PIT PERMISSION OBTAINED FROM GSDA. PLEASE SEE **ANNEXURE 6**
18.		Quantity of waste water (effluent) generated (ml/day)	
	i.	Domestic 8 M^3	vi. Cooling water blow down
	ii.	Industrial	vii. DM plant/softening
	iii.	Process	plant washings
	iv.	Washings	viii. Tail raise discharge from
	v.	Boiler blow down	hydro power station
			ix Others -- Work shop 15 m^3
19.		Water budget calculations accounting for difference between water consumption and effluent generated.	PLEASE SEE **ANNEXURE 7**

20		Present treatment of sewage/canteen effluent (Give sizes/ capacities of treatment units).	DOMESTIC - SEPTIC TANK FOLLOWED BY SOAK PIT WASTE FROM WORKSHOP – PLEASE SEE **ANNEXURE 8**
21		Present treatment of trade effluent (Give sizes/ capacities of treatment units). (A schematic diagram of the treatment scheme with inlet/outlet characteristics of each unit operation/process is to be provided. Include details of residue management system (sludges))	N.A.
22.	a. b.	Are sewage and trade effluents mixed together? If yes, state at which stage - Whether before, intermittently or after treatment.	NO N.A.
23.		Capacity of treated effluent sump, Guard Pond if any.	NOT REQUIRED
24.	 i. ii. iii. iv. v. vi.	Mode of disposal of treated effluents, with respective quantity, m^3/day into stream/river (name of river) into creek/ estuary (name of creek/estuary) into sea into drain/sewer (owner of sewer) On land for irrigation on owned land/ lease land. Specify cropped area (To be supported by relevant documents) Quantity of treated effluent reused/ recycled Provide a location map of disposal arrangement indicating the outlet(s) for Sampling	 18 – WILL BE USED FOR DUST SUPPRESSION AND PLANTATION --
25.	a. b.	Quality of untreated/treated effluents (Specify pH and concentration of SS, BOD COD and specific pollutants relevant to the industry, TDS to be reported for disposal on land of into stream/river) Enclose a copy of the latest report of analysis from the laboratory approved by State floard/Committee/Central Board/Central Government in the Ministry of Environment & Forests. For proposed unit furnish expected characteristics of the untreated / treated effluent.	PARA METERS UN-TREATED TREATED Ph 6.0 – 8.0 7.5 – 8.0 SS 50 – 100 30 – 35 BOD 80 – 90 20 – 30 COD 200 – 300 200 – 250 O&G 60 – 70 <10 N.A.
26.	 a. b. c. d. e.	***Part C Air Emission Aspects*** Fuel consumption: Fuel consumption (TPD) Calorific value K.cal Ash content % Sulphur content % Other (specify)	NOT APPLICABLE SINCE MAHADISTCO POWER WILL BE USED

27.	A a. b. c. d. e. f. g. h. i. j. k. l. m. n. o. p.	Details of stack : (Process & fuel stacks, DG set) Stack number(s) Attached to Capacity Fuel type Fuel quantity (kg/hr) Material of construction Shape (round/rectangular) Height (above ground level) Diameter/size, in meters Gas quantity, Nm^3/hr. Gas temperature, °C(k) Exit gas velocity, m/sec. Control equipment preceding the stack Nature of pollutants likely to present in the stack gases such as CO_2, NOx, SO_2, TPM etc. Emissions control system provided In case of DG set power generation capacity in KVA. (Attach specifications including residue management systems of each of the control equipment indicating inlet/ outlet concentrations of relevant pollutants)	NOT APPLICABLE
27.	B.	Wheather any release of odoriferous compounds such as Marcaptans, Phorate etc. Are coming out from ant storages or process house.	NO
28.		Do you have adequate facility for collection of samples of emissions in the form of port holes, platform, ladder etc. as per Central Board Publication "Emission Regulations Part-III" (December 1985)	N.A.
29		Quality of treated flue gas emissions and process emissions. (Specify concentration of criteria pollutants and industry/process-specific pollutants stack-wise. Enclose a copy of the latest report of analysis from the approved laboratory by State Board/Central Board/ Central Government in the Ministry of Environment and Forests. For proposed units furnish the expected characteristics of the emission	CRITERIA POLLUTANTS - PM

		Part D : Hazardous Waste Aspects	Method of					
30		Information about Hazardous Waste Management as defined in the Hazardous Waste (Management and handling) Rules, 1989, as amended in January 2000. Type/ category of waste as per Schedule –I Schedule –II Qty. Cat. No. Type Class Type Kg/day NOT APPLICABLE Please refer copy of schedule-I & II attached	Colle-ction	Rece-ption	Stor-age	Trans-port	Treat-ment	Dis-posal
31.		Details about use of hazardous waste	NOT APPLICABLE					
	i. ii. iii. iv.	Name of hazardous waste/spent chemical Quantity used/month Party from whom purchased Party to whom sold						
32	a. b.	Details about technical capability and equipments available with the applicant to handle hazardous Waste. Characteristics of the hazardous waste(s). Specify concentration of relevant pollutants. Enclose a copy of the latest report of analysis from the laboratory approved by State Board/Central Board/Central Government in the Ministry of Environment and Forests). For proposed units furnish expected characteristics	NOT APPLICABLE					
33		Copy of format of manifest/record keeping practised by the applicant.	NOT APPLICABLE					
34.		Details of self monitoring (source and environment system)	NOT APPLICABLE					
35		Are you using any imported hazardous waste. If yes give details.	NOT APPLICABLE					
36		Copy of actual user Registration/certificate obtained from Ministry of Environment & Forest, Govt. of India for use of hazardous waste.	NOT APPLICABLE					
37		Present treatment of hazardous waste, if any (give type and capacity of treatment units)	NOT APPLICABLE					

38		Quantity of hazardous waste disposed Within the factory Outside the factory (Specify location and enclose copies of agreement) Through sale (Enclose documentary proof and copies of agreement) Outside State/Union Territory, if yes particulars of (i) & (iii) above Other (specify)	NOT APPLICABLE
		Part –E : Additional Information	
39	a. b.	Do you have any proposals to upgrade the present system for treatment and disposal of effluent/ emissions and/or hazardous waste If yes, give the details with time-schedule for the implementation and approximate expenditure to be incurred on it.	NOT APPLICABLE NOT APPLICABLE
40		Capital and recurring (O&M) expenditure on various a§pects of environment protection such as effluent, emission, hazardous waste, solid waste, tree plantation, monitoring, data acquisition etc. (give figures separately for items implemented/to be implemented).	
41		To which of the pollution control equipment, separate meters for recording consumption of electric energy are installed?	NOT APPLICABLE SINCE THIS IS A MINING PROJECT
42		Which of the pollution control items are connected to D.G. set (captive power source) to ensue their running in the event of normal power failure?	NOT APPLICABLE
43		Nature, quantity and method of disposal of non-hazardous solid waste generated separately from the process of manufacture and waste treatment. (Give details of area/capacity available in applicant's land)	MINERAL REJECTS @ 200 TPD SOIL @ 72 M^3/D DISPOSAL- LAND FOR DUMP 2.6837 ha
44	 i. ii. iii. iv. v. vi. vii.	Hazardous chemicals – Give details of Chemicals and quantities handled and stored. Is the unit a Major Accident Hazard Unit as per Mfg. Storage Import Hazards Chemicals Rules? Is the unit an isolated storage as defined under the MSIHC Rules ? Indicates status of compliance of Rules 5, 7, 10, 11, 12, 13 & 18 of the MSIHC Rules. Has approval of sites has been obtained from the concerned authority ? Has the unit prepared an off-site Emergency Plan? Is it updated. Has information on imports of chemicals been provided to the concerned authority ? Does the unit possess a policy under the PLI Act?	NOT APPLICABLE

45		Brief details of tree plantation/ green belt development within applicant's premises.	WILL BE CARRIED OUT AS PER MINING PLAN
46		Information of schemes for waste minimisation, resource recovery and recycling - implemented and to be implemented, separately.	--
47	a.	The applicant shall indicate whether industry comes under Public Hearing. If so the relevant documents such as EIA, EMP, Risk Analysis etc. shall be submitted, if so the relevant documents enclosed shall be indicated accordingly.	YES DOCUMENTS ENCLOSED
	b.	Any other additional information that the applicant desires to give.	NIL
	c.	Whether Environmental Statement submitted ? If submitted give date of submission.	NOT APPPLICABLE

48. I/We further declare that the information furnished above is correct to the best of my/our knowledge.

49. I/We hereby submit that in case of any change from what is stated in this application in respect of raw materials, products, process of manufacture and treatment and/or disposal of effluent, emissions, hazardous wastes etc. in quality and quantity; a fresh application for Consent/Authorisation shall be made and until the grant of fresh Consent/Authorisation no change shall be made.

50. I/We undertake to furnish any other information within one month of its being called by the Board/ Committee.

51. I/We enclose herewith a Demand Draft for Rs. ..... (Rupees .....) drawn in favour of ..... Maharashtra Pollution Control Board/ Committee as the fee for consent/authorisation for a period upto.

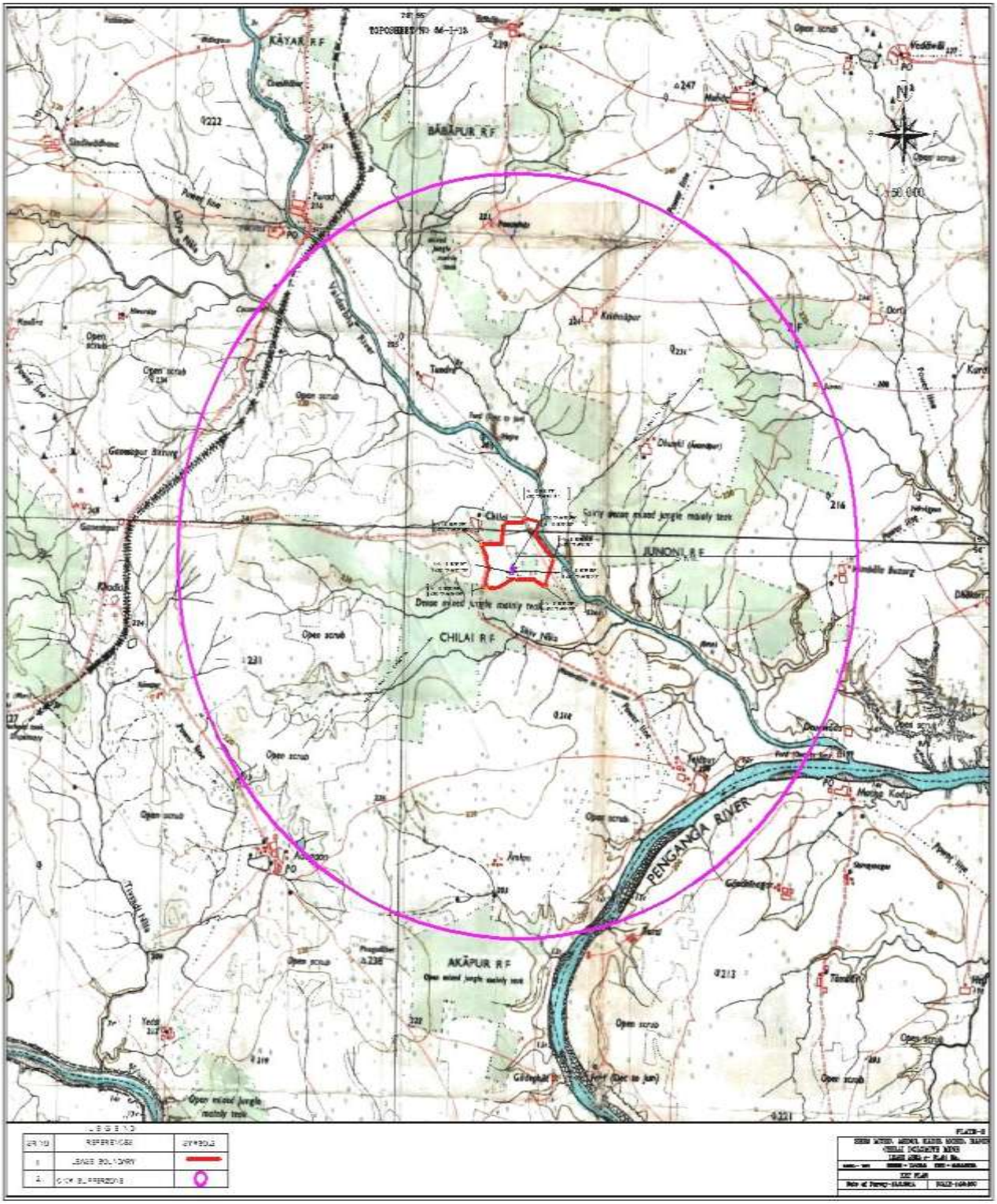
Yours faithfully,

Signature …….

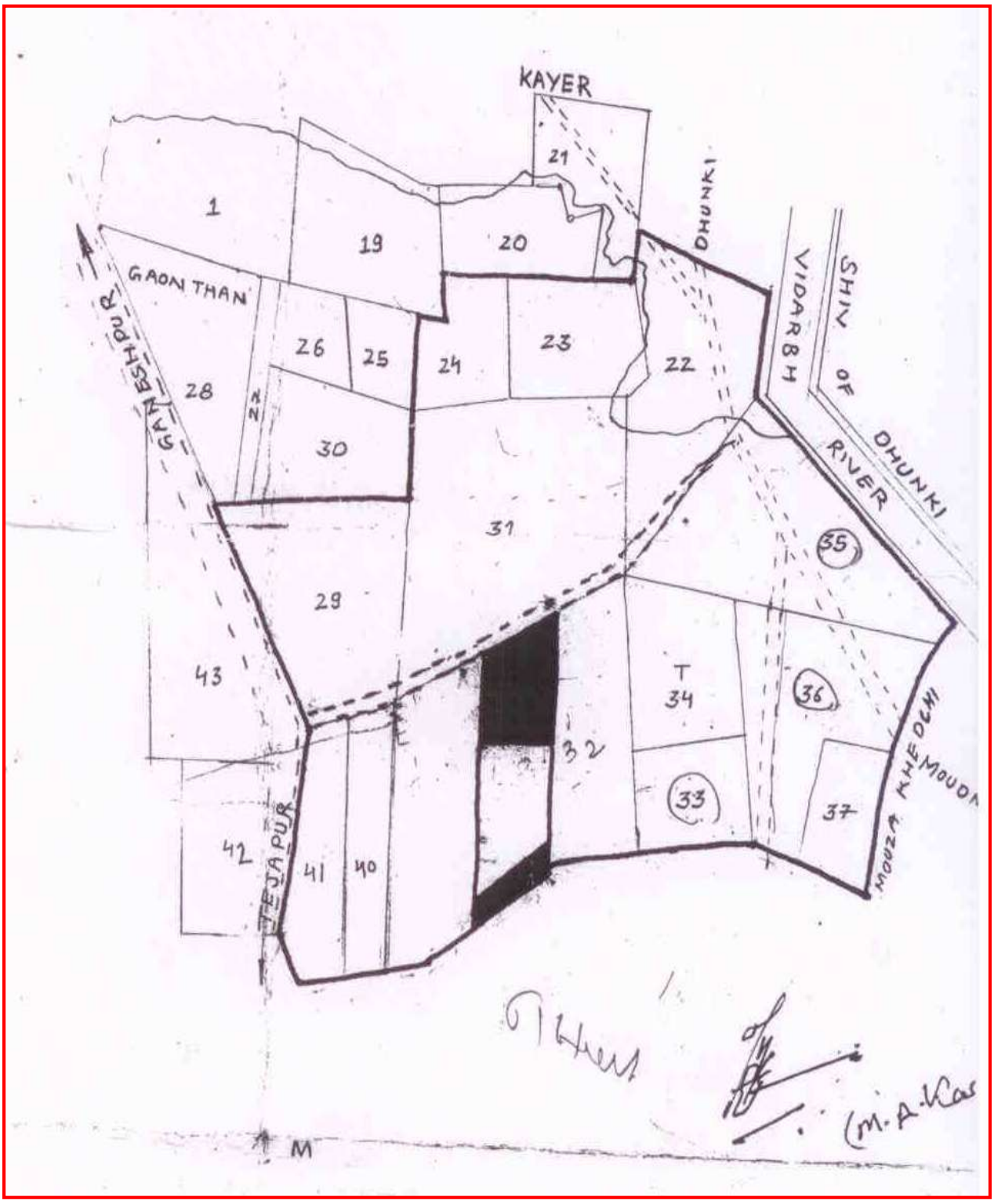
Name …….

Designation . ……

ANNEXURE 1



LOCATION OF MINE LEASE AREA



CADASTRAL MAP

ANNEXURE 2

गट ग्राम पंचायत कार्यालय, चिलई (आ.)

पंचायत समिती, वणी- ४४५ ३०४ जि.यवतमाळ

दामोदर सदाशिव झाडे सरपंच	हरिचंद्र जनार्दन कोवे उपसरपंच	के. जी. आत्राम सचिव

जा.क्र.

दिनांक 21.MAY

नाहरकत प्रमाणपत्र

मौजा ग्राम पंचायत कार्यालय चिलई (आ.) यांचे कडुन नाहरकत प्रमाणपत्र देण्यात येते की, मोहम्मद मीनरल चिलई यांचे ग्रा. प. कार्यालयाला प्राप्त अर्ज व कागदपत्रा नुसार मासीक सभा दि. २७/३/२००७ ला विषयक्रमांक -७ अन्वये

तसेच ग्राम सभा दिनांक २८/३/२००७ विषय क्र. १ अन्वये ग्राम पंचायत सदस्य ठराव मंजुरीने तसेच ग्राम सभा उपस्थित समस्थ ग्रामस्थांच्या ठरावानुसार बहुमताने मंजुरात दिली.

करिता ठराव पारीत करण्यात आला. यावरुन मोहम्मद मिनरल चिलई यास गट क्र. ३२/४ मध्ये चुना भट्टा, क्रेशर आणि पलवराईझर सुरु करण्याकरीता नाहरकत प्रमाणपत्र देण्यात येत आहे.

करिता खालील दिलेल्या मासीक सभा व ग्राम सभा यांनी दिलेल्या अटीस अधिन राहुन नाहरकत प्रमाणपत्र देण्यात येत आहे.

ग्रा. प. कार्यालय व ग्रामस्थांच्या अटी खालील प्रमाणे-

१. ७/१ ची मुळ प्रत, सदर्हु गट क्र. ३२/४ चे अकृशक आदेश, प्रदुषण बोर्ड विभाग अमरावती पर्यावरण समतोल बाबतचे प्रमाण पत्र सदर अर्जदाराने कागदपत्राची पुर्तता न केल्यास दिलेले नाहरकत प्रमाणपत्र ग्राह्य धरता येणार नाही.
२. शासकिय कामात कोणत्याही पध्दतीची तांत्रीक अडचण आल्यास आपणास दिलेले नाहरकत प्रमाणपत्र रद्द ठरेल.
३. नगर रचना मंजुर नकाशा भुमी अभिलेख यांचा सादर करावा.
४. स्थानीक बेरोजगार यांना प्रथम प्राधान्य दयावे.
५. प्रत्येक वित्तीय वर्षाला कारखान्याचा वेलफेअर फेड ग्राम पंचायत कंक्षेत खर्च करावा, विकास कामे करावी.
६. प्रत्येक वित्तीय वर्षाला शासणाच्या निकशाप्रमाणे ग्रा. प. कार्यालयाने लावलेल्या कर देणे बंदन कारक राहील.
७. कारखान्यांच्या परिसरात संबंधीत शेतकऱ्यांच्या शेतीच्या विकास नुकसान झाल्यास संबंधीत कारखानदार जबाबदार राहील.
८. कारखान्याच्या क्षेत्रात कत्तलखाना करतील कमीत कमी क्षमतेचे ब्लॉस्टींग करावे व संध्याकाळ ला ७ ते ९ च्या दरम्यान करावे.

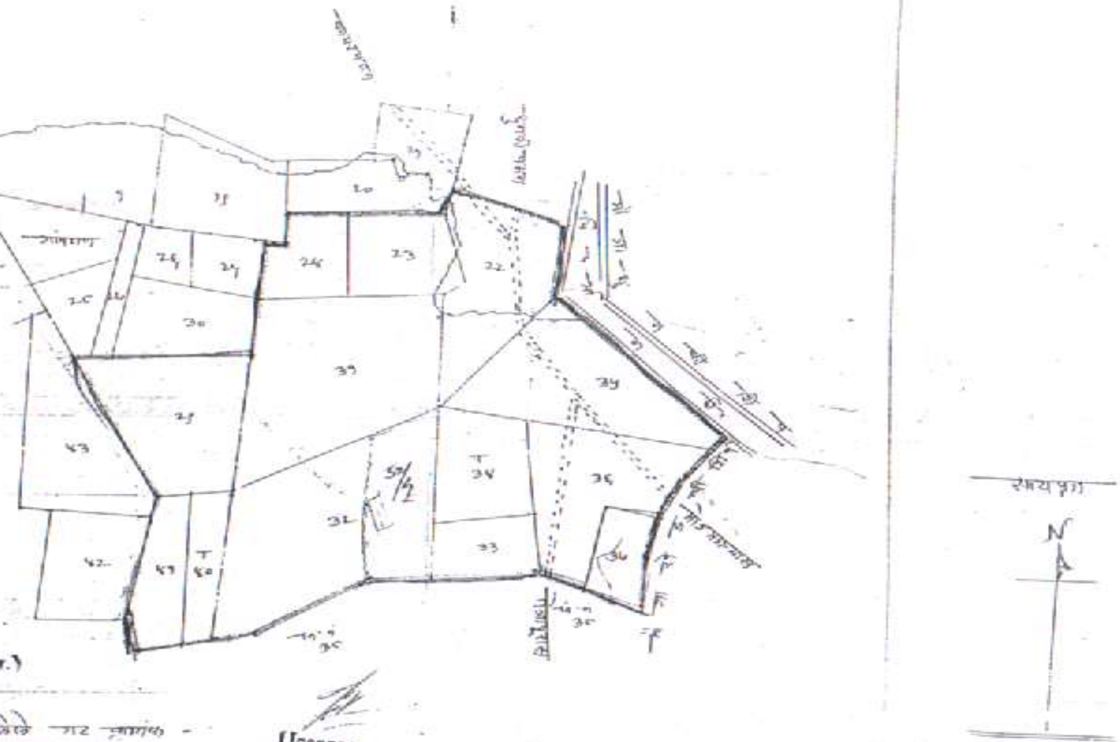
वरील कोणत्याही पध्दतीची अटीची पुर्तता न केल्यास चुना भट्टा, क्रेशर, पलवराईजर चे मंहमद मिनरल चिलई यांना दिलेले नाहरकत प्रमाणपत्र रद्द करण्यात येईल. यांचे अधिकार ग्रा. प. ला राहील.

डि एस झाडे
सरपंच
ग्रामपंचायत चिलई

सचिव
ग्रामपंचायत चिलई(आ.)

मौजा चिलई गां नं [illegible], ता. वणी येथील पूर्वेक्षण अनुज्ञप्ती मंजूर [illegible]

गटक्रमांक - २२, २३, २४, २९, ३१, ३२, ३३, ३४, ३५, ३६, ३७, ४०, ४१.



सरपंच
ग्राम पंचायत चिलई

सचिव
ग्रामपंचायत चि[illegible]

सदर रंगाने दाखविलेले गट क्रमांक -
२२, २३, २४, २९, ३१, ३२, ३३, ३४, ३५, ३६, ३७, ४०, ४१.
पूर्वेक्षण अनुज्ञप्ती मंजूर [illegible]

Licensee

Collector Yavatmal

प्रमाण : १ : ८०००

ग्राम सभेच्या कामकाजाच्या वृत्तांताची पुस्तीका सन

ग्रामपंचायत चिमडी (खो.) पंचायत समिती वणी जिल्हा परिषद :- यवतमाळ

(पहा मुंबई ग्रामपंचायत) (सभाबाबत) नियम १९५९

१) सभेचा प्रकार - दरमहा होणारी सभा / खास सभा / तहकुब सभा २) सभेची नोटीस काढण्याचा दिनांक २०/३/०८ ३) सभेचा क्रमांक ४) सभेचा दिनांक २८/३/२००८

५) सभेची वेळ - ९.०० वा सकाळ ६) सभेचे स्थळ ग्रा. प. कार्या. ७) सभेला हजर असलेले इतर व्यक्ती लोकप्रतिनिधी / निमंत्रीत / अधिकारी / इतर

अ. क्र.	हजर असणाऱ्या सदस्यांची नावे	कार्यक्रम पत्रिकेतील विषय क्रमांक व विषय	सूचक व अनुमोदक	प्रस्तावावरील चर्चा	प्रस्तावातील चर्चेत आवश्यकतेनुसार योग्य वेळेस सचिवांचा कायदेशीर सल्ला	प्रस्तावावरील मतदान: निकालांच्या बाजूने असणारे सदस्यांची नावे	प्रस्तावावरील मतदान: निकालांच्या विरुद्ध असणारे सदस्यांची नावे	प्रस्तावावरील मतदान: तटस्थ राहणारे सदस्यांची नावे	प्रस्तावावरील निकाल: मंजूर	प्रस्तावावरील निकाल: नामंजूर	ठराव क्रमांक व ठरावा विषयक थोडक्यात विवरण	हजर सदस्यांची स्वाक्षरी
–	सभेला उपस्थित असणाऱ्या सदस्यांची नावे व सह्या रजिस्टर वर नमुद आहेत	विषय क्र. ७ विषय :- मोहन रमेश निंदेकर यांच्या मृत्यूचे प्रमाणपत्र देण्याचे चर्चा करणे बाबत. सूचक - मुरली आत्राम अनुमोदक - पिसाराम आत्राम		आज दि. २८/३/२००८ ला सकाळी ९.०० वा. मा. सरपंच यांचे अध्यक्षतेखाली [illegible] ग्रामसभा घेण्यात आली. व सभेत ग्रा. प. सचिव यांनी सदर विषया बाबत अवगत केले [illegible] सभेला उपस्थित ग्रामस्थांनी [illegible] चर्चा केली व [illegible] उपस्थित [illegible] ठरावास [illegible] विषय कायम करण्यात आला [illegible] ① [illegible] ② [illegible] प्रमाणपत्र देण्यात [illegible] ③ [illegible] ④ [illegible] पंचायत [illegible] खर्च करावा [illegible] ⑤ [illegible] ⑥ [illegible] [illegible]		विषयास सर्वानुमते मंजुरी मिळाली करिता ठराव पारित करण्यात आला						उपस्थितांच्या सह्या रजिस्टर मध्ये नमुद आहे

ANNEXURE 3

GOVERNMENT OF MAHARASHTRA

By Registered Post

No.MMN-2099/7707/Desk-4,
Trade, Commerce and Mining Department,
Mantralaya, Mumbai - 32.

Dated the : 8.1.2001

From :

The Secretary,
Trade, Commerce & Mining Department,
Mantralaya, Mumbai - 400 032.

To,

Shri Mohd. Abdul Kadir Mohd. Hanif,
Station Road, Word No. 3,
Tah. Wani, Dist. Yavatmal.

Subject: Grant of Mining lease for Dolomite over an area of 61.91 Hectares in Village Chilie, Tahsil Wani, Dist. Yavatmal.

Sir,

With reference to your application, dated the 6.5.97, on the subject mentioned above, I am to enclose herewith Government order of even number, dated the 8.1.2001 for your information. You are now requested to submit the mining plan within six months and then approach to the District mining Officer, Collectorate, Yavatmal for execution of the lease. I am to add that you should also execute mining lease within a period of six months from the date of the enclosed Government order after making due payment of G.R. (Geological Report) charges to the Director, Geology & Mining, Napgur, as per Government Resolution No. PLS-1020/7813/Desk-IV, Dated 29.1.2000.

The mining lease should be executed in the model form of mining lease appended to the Mineral Concession Rules, 1960 with appropriate modifications, but without clause 3 in part VIII therein relating to renewal.

Yours faithfully,

(J. P. DANGE)
Secretary to Government.

Copy with the copy of the Government Order of even number, dated the 8.1.2001forwarded to the :

ANNEXURE 4

भारतीय गैर न्यायिक

एक सौ रुपये

Rs. 100

रु. 100

ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

महाराष्ट्र MAHARASHTRA

NAGPUR TREASURY
KX 804275
02 DEC 2014
Stamp Head Clerk / Sr. Clerk

NOTARIAL REG
ENTRY NO. 7495
DATE 5/12/14

TO WHOMSOVER IT MAY CONCERN

This affidavit is made on this date of 5th Dec., 2014 with regard to proposed, likely and estimated capital investment in a project entitled Chilai dolomite mining project at Village Chilai, Tehsil Wani, Dist. Yavatmal by M/s Mohd. Abdul Kadir M. Hanif, Prop. M/s Mohammadi Minerals.

Estimated investment on land, building, plant & machinery will be as follows ;

1. Land	--	Rs. 714.36 lakhs
2. Plant & Machinery	--	Rs. 1023.60 Lakhs
3. Building – Construction Infrastructure, railway siding etc.	--	Rs. 687.28 Lakhs
TOTAL	--	Rs. 2425.24 Lakhs

Above referred estimated figures are based on the approved mining scheme.

M/S MOHD. ABDUL KADIR MOMD. HANIF

AUTHORISED SIGNATORY
YOGESH KUMAR SHARMA

Date : 05.12.2014

फक्त प्रतिज्ञापत्रासाठी (अनुच्छेद - ४)

प्रतिज्ञापत्र कोणाकडे सादर करावयाचे

प्रतिज्ञापत्रासाठीचे कारण

मुद्रांक विकत घेणाऱ्याचे नाव

रहिवाशी पत्ता

मुद्रांक विक्री

46698 - 5 DEC 2014

मुद्रांक विक्रेत

नारायण गं. म्हाडीकर

जिल्हाधिकारी परिसर, त. कार्यालय, नागपूर (शह.

NOTARY NARESH K. SIDAM Nagpur Dist. (M.S.) INDIA Regd. No. 9082 GOVT. OF INDIA

NOTARY NARESH K. SIDAM Nagpur Dist. (M.S.) INDIA REGD. No. 9082 GOVT. OF INDIA

NOTARIAL NOTARIAL NOTARIAL NOTARIAL NOTARIAL

CANCELLED

Attested

NARESH K. SIDAM
Notary
Nagpur Dist. (M.S.) INDIA

ANNEXURE 5

PROPOSED METHOD OF MINING

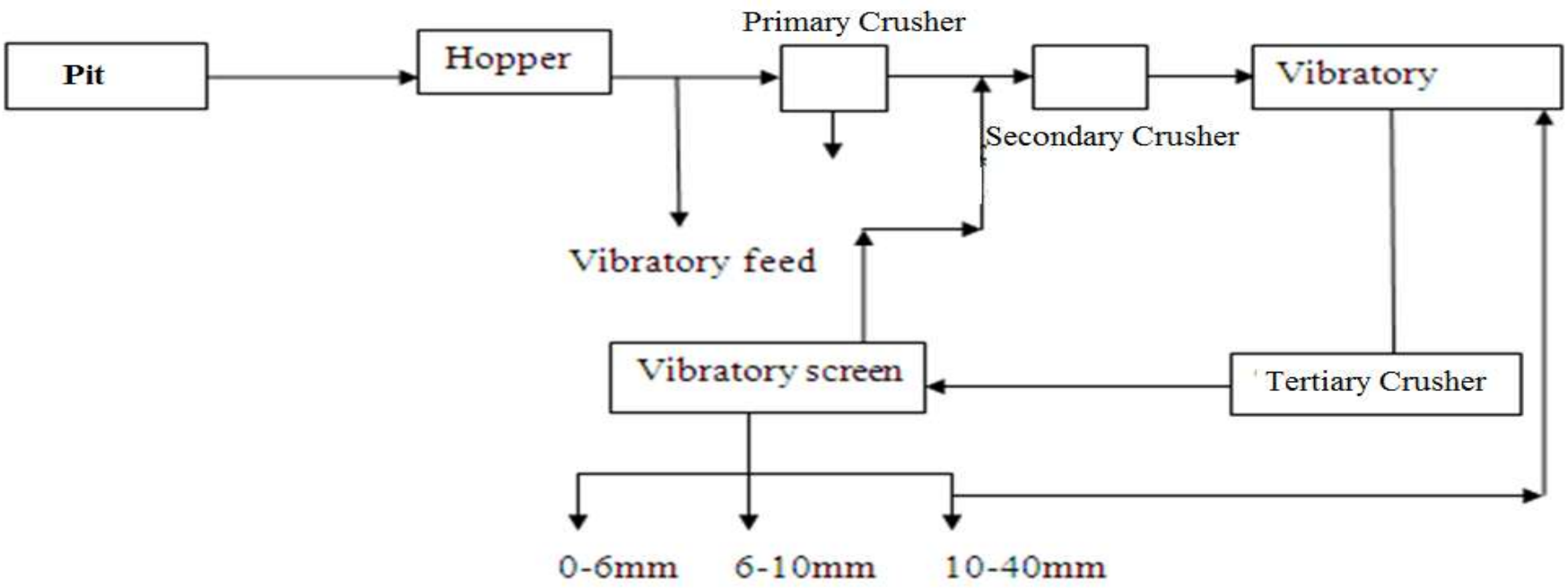
The mining operations will be carried out with A- category fully mechanized in two shift operations. First soil will be removed manually or sometimes with the aid of machinery wherever feasible. HEMM will be deployed. Dolomite being hard, it will blasted, drilling drill holes by Wagon drill i.e. 100 mm to a depth of 6 m with spacing 3.0 m and burden 2.5 m in dolomite bed. The orientation of benches will be along strike direction advancing towards hanging wall side. The holes will be charges with explosive slurry based cartridges 83 mm dia. Weighing each and cartridge 2.78 kg with electric detonators and detonating fuse or Nonel and electric detonators. Each hole will be charged with six cartridges. Yield per hole will be about 45 m3 or 112.5t ROM. Powder factor will be about 6.74t per kg of explosive. At a time about 1 to 20 holes in a single row will be blasted. In the process of category A-fully mechanized mining, bench height in dolomite will be kept to 6 m with width of each bench to be maintained not less than the height of the bench that is 6 m with slope of each bench to 45° to the horizontal. Overall slope of hanging wall and foot wall will be maintained 45°. A garland drill of 1 m x 1 m will be provided at top bench in hanging wall side. Roads will be maintained in good condition and gradient as per rules. No boulders or trees will be kept within 3 m from the edge of the top bench. All safety precautions will be followed to ensure safe working. The blasted muck will be loaded into 25t dumpers and transported to temporary storage yard, wherein sorting of graded material will be done. The reject generated will be stacked separately

and graded dolomite to a stack yard. The maximum depth of pit will be 34 m from surface. There is no sub-grade or reject dolomite stacks. The pits dimensions at the end of ensuring scheme period will as follows:

AREA AT THE END OF ENSUING SCHEME

Mineral	Area in m^2	Max. depth in m.
Dolomite	1,2,791.07	36

The open cast mining with category A_FM of dolomite will be continued as shown in production and development plates No. 6 & 6A. The height of benches in dolomite bed will be kept to 6 m with width of each bench to be maintained not less than the height of the bench that is 6 m with slope of each bench to 45° to the horizontal. The width of working benches would be kept to about five times the dumper's width i.e. about 15 m. Overall slope of hanging wall and foot wall would be maintained at 45°. During the year 2015-16 to 2019-20, the benches would be of pit bottom will be 178 m. Contiguous area will be mined in each year. During the SOM period, length of face will range from 329.78 m to 405.86 m. Haul roads with proper gradient will be formed. Mining machineries such a dumpers of 25t capacity for hauling dolomite and waste, wagon drill to drill 100 mm dia. blast holes will be engaged. Loading will be done by loader. Compressor with Jack Hammer will also be used for secondary blasting. The dolomite brought to stack yard will be sorted out according to size and grade. Reject/OB will be dumped to its designated site. Part of dolomite will be directly fed to crusher for making different sizes as per customer need.


Primary Crusher
Pit
Hopper
Vibratory
Secondary Crusher
Vibratory feed
Vibratory screen
Tertiary Crusher
0-6mm
6-10mm
10-40mm

ANNEXURE 6

Sr. No. /gsda/Ytl/Tech/523/2014

Office of the Senior Geologist

G.S.D.A. Yavatmal

Date: 25/07/2014

To,

Mohd. Abdul Kadir Mohd. Hanif

(M/s Mohammadi Minerals)

Near Aman Manzil

Ward No. 03, Station Road, Wani

Tq. Wani Dist. Yavatmal. (M.S.)

Sub: Permission for granting utilization of water for Drinking 50m3 Per Day in Chilai Dolomite Mine site.

Ref : Your letter No. MM/LET / 2014-15 Dated 17 July 2014.

With reference with the above letter, the hydrogeological survey work carried out in village Chilai. Taluk Wani yavatmal district on the given site of your map. The area falls under Toposheet No. 56I/13 and Watershed No. PGV-2 having limestone /dolomite rock formation

On the basis of hydrogeological Survey the area is feasible for Borewell. Hence the 150mm diameter and 60mt depth Borewell is recommended on your mining lease area you are therefore permitted to utilize 50cbm/day through bore well the drinking water for miners

The site is shown to your office representative Mr. N. Venkateshwarlu (Sr. Manager Geology) and Mr. Yogesh Kr. Sharma at the time of Survey.

Office of the Senior Geologist G.S.D.A. Yavatmal

Senior Geologist

Grawound water Survey's &Dev., Agency

Yavatmal (M.S.)

ANNEXURE 7

WATER BUDGET

Use	Source	Quantity, m^3	Consumption, m^3	Wastewater, m^3	Use, m^3
Dust control	Mine pit	40	40	Nil	--
Workshop	Mine pit	20	5	15	Plantation
Plantation	Mine pit	30	30	Nil	--
Domestic	Bore well	10	2	8	Septic tank followed by sock pit
Total	--	100	77	23	

ANNEXURE 8

WASTEWATER TREATMENT – WORK SHOP

It is proposed to provide toilet blocks at work shop, blaster's shed and canteen. They will comprise of 2-pit latrines with soil at bottom to facilitate decomposition of organic matter. Pits will be used alternately and digested sludge + soil will be used as manure.

Work shop effluent will have following characteristics

pH	:	6-8
O&G	:	60-70mg/L
COD	:	200-300 mg/L
$BOD_{3,27}$	:	80-90 mg/L
S.S.	:	50-100 mg/L- mostly o & g emulsion

It will be treated and treatment flow sheet is given below :