EXECUTIVE SUMMARY OF DRAFT EIA REPORT

FOR

Environmental Clearance for Proposed Nardaha & Dhansuli Limestone Mining Project

(Minor mineral)

Total Mine area is 23.323 Hect.

At

Near Village:-Nardaha&Dhansuli, Tehsil-Arang, District-Raipur, State- Chhattisgarh

APPLICANTS

FOR Mining Lease Cluster Area :181.546 Ha. Project Cost : Rs. 997.72 Lakh Category –B1

ENVIRONMENTAL CONSULTANT



Environmental Consultancy & Laboratory (Lab. Gazetted by MoEF-Govt. of India)

M/s. ULTRA-TECH ENVIRONMENTAL LABORATORY AND CONSULTANCY

NABET Accredited EIA Consulting Organization NABET Accreditation Number: NABET/EIA/2023/RA019-Rev 01 Valid Upto - Oct 18,2024



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EXECUTIVE SUMMARY

1.1 Introduction

The propose Limestone mine mineral project of 23.323 ha situated near Village- Nardaha & Dhansuli , Tehsil-Arang, District – Raipur, State-Chhattisgarh. The Proposed Lease is issued in favour of Anil Janghel, M/s. Mahamaya Minerals, Kamlesh Athwani, Vasudev Pritwani, Abdul Malik, Prakash Bajaj, Abhay Athwani, Anuj badwani & Gulshan Nagdev respectively. TOR issued in favour of project proponent whose details as follow:

	Details of TOR				
S.no.	Name of	TOR letter no.			
	Applicant				
1.	Anil Janghel	vide letter no 1881/S.E.A.C.C.G./Mine/2085 Nawa Raipur			
		Atal Nagar, dated 05/01/2023.			
2.	M/s. Mahamaya	Vide letter no. 538/S.E.A.C.C.G/Mine/ 1860 Nawa Raipur			
	Minerals	Atal Nagar, Dated 06/06/2023			
3.	Kamlesh Athwani	Vide letter no. 940/S.E.A.C.C.G/Mine/ 2327 Nawa Raipur			
		Atal Nagar, Dated 12/07/2023			
4.	Vasudev Pritwani	Vide letter no. 863/S.E.A.C.C.G/Mine/ 2342 Nawa Raipur			
		Atal Nagar, Dated 06/07/2023			
5.	Abdul Malik	Vide letter no. 2716/S.E.A.C.C.G/Mine/ 2079 Nawa Raipur			
		Atal Nagar, Dated 23/03/2023			
6.	Prakash Bajaj	vide letter no 1532/S.E.A.C.C.G./Mine/1863 Nawa Raipur			
		Atal Nagar, dated 08/12/2022.			
7.	Abhay Athwani	vide letter no 48/S.E.A.C.C.G./Mine/2010 Nawa Raipur Atal			
		Nagar, dated 03/04/2023.			
8.	Anuj Badwani	vide letter no 1529/S.E.A.C.C.G./Mine/2014 Nawa Raipur			
		Atal Nagar, dated 08/12/2022.			
9.	Gulshan Nagdev	vide letter no 1803/S.E.A.C.C.G./Mine/2055 Nawa Raipur			
		Atal Nagar, dated 26/12/2022.			

This mining project comes under Category 'B1' (Cluster situation) Project or activity 1(a) as per EIA Notifications 2006, and its subsequent amendments and will be appraised at SEAC, Chhattisgarh. The lease is falling in the cluster as per 15th January 2016 EIA Notification of MoEF&CC and NGT order dated13th September 2018.

1.1.1 Project Location -

The proposed project of Dhansuli Limestone Mine having an area of 1.19 ha, 3.880 ha, 3.238ha, 3.180ha, 1.60ha & Nardaha Limestone Mine having area of 2.744 ha, 2.819 ha, 2.00 ha, 2.672 ha situated at Village–Dhansuli & Nardaha, Tehsil–Arang, District:-



Raipur , State:- Chattishgarh under Khasra No. 818,870,871, (new 913, 926, 927), 707/2, 708, 709/1, 711/1, 711/2, 711/2, 711/3, 712, 713, 756/1, 756/2, 576, 653Part,915, 916/1, 705, 706, 716 (Dhansuli Limestone Mine) & 1972, 1980,1982 ,1960, 1961/2, 1949, 1950, , 1948 (part) (Nardaha Limestone Mine). Mine featured in the Survey of Indian Toposheet No. 64G/11, 64G/12, 64G/15, 64G/16.



Figure 1.1: Location Map of Proposed Project Site

Draft EIA Report for Dhansuli Limestone Mine & Nardaha Limestone Mine at Village-Dhansuli&Nardaha, Tehsil-Arang, District-Raipur, State-Chhattishgarh.

Particulars		Details		
Name of the Project	Dhansuli Limestone Mine & Nardaha Limestone Lime			
Location of the Project	Village- Dhansuli	& Nardaha, Tehsil- A	rang,	
	District- Raipur, Sta	ate- Chhattisgarh		
Geographical	Anil Janghel			_
Coordinates:	Boundary	Latitude	Longitude	
	POINTS	21016147 65"N	81º45'50 00"E	
	BL1 BL2	21 1047.03 N 21°16'47 67''N	81°46'3 05"E	
	BL2	21°16'45 31"N	81°46'6 68"E	
	BL5 BL4	21°16'44 37"N	81°46'6 51"F	
	BL4 BL5	21°16'43 26"N	81°46'7 40"E	
	BL6	21°16'43 31"N	81°46'3 97"E	
	BL7	21°16'45.85"N	81°46'3.25"E	
	BL8	21°16'46.29"N	81°45'59.78"E	1
				J
	Prakash Bajaj			
	Boundary	Latitude	Longitude	
	Points		J	
	BL1	21°17'25.46"N	81°46'25.18"E	
	BL2	21°17'21.79"N	81°46'25.20"E	
	BL3	21°17'23.09"N	81°46'31.62"E	
	BL4	21°17'19.28"N	81°46'32.13"E	
	BL5	21°17'19.34"N	81°46'33.65"E	
	BL6	21°17'20.31"N	81°46'35.25"E	
	BL7	21°17'22.20"N	81°46'34.95"E	
	BL8	21°17'22.23"N	81°46'34.47"E	
	BL9	21°17'22.95"N	81°46'34.37"E	
	BL10	21°17'22.96"N	81°46'31.83"E	
	BL11	21°17'26.15"N	81°46'31.22"E	
	Anuj Badwani			1
	BoundaryPoint	Latitude	Longitude	
	BI 1	21º17'27 58"N	81º46'24 36"E	
	BL1 BL2	21°17'28 19"N	81°46'19 30"E	
	BL2 RI 3	21°17'23 70"N	81°46'18 89"F	
	BL3 BL4	21°17'23 35"N	81°46'24 13"E	
	Abhay Athwani			7
	Boundary Latitude Longitude			
	POINTS	21016150 2011NT	01016121 2011F	l
	BL1	$21^{\circ}1038.28^{\circ}N$	$01^{\circ}40^{\circ}31.32^{\circ}E$	
	BL2	21 1/8.44 N	01 40 28.84 E	

Table 1.1: Environmental Setting of Proposed limestone Mining Projects

Draft EIA Report for Dhansuli Limestone Mine & Nardaha Limestone Mine at Village-Dhansuli&Nardaha, Tehsil-Arang, District-Raipur, State-Chhattishgarh.

articulars		Details	
	BL3	21°17'8.45"N	81°46'26.24''E
	BL4	21°16'58.72"N	81°46'27.75"E
	BL5	21°16'57.44"N	81°46'28.58''E
	M/a Mahamay	Minonola	
	NI/S. Manamaya		Longitudo
	Points	Latitude	Longitude
	BL1	21°17'14.76"N	81°45'57.92"E
	BL2	21°17'14.47"N	81°45'56.60"E
	BL3	21°17'13.27"N	81°45'56.59"E
	BL4	21°17'11.41"N	81°45'57.17"E
	BL5	21°17'7.18"N	81°45'57.29"E
	BL6	21°17'7.15"N	81°45'56.84"E
	BL7	21°17'6.14"N	81°45'56.87"E
	BL8	21°17'5.89"N	81°45'55.96"E
	BL9	21°17'3.61"N	81°45'56.13"E
	BL10	21°17'3.63"N	81°45'57.83"E
	BL11	21°17'5.16"N	81°45'57.94"E
	BL12	21°17'5.19"N	81°45'58.84"E
	BL13	21°17'3.69"N	81°45'58.90"E
	BL14	21°17'3.69"N	81°45'59.53"E
	BL15	21°17'0.05"N	81°45'59.40"E
	BL16	21°17'0.05"N	81°45'59.96"E
	BL17	21°17'2.87"N	81°46'2.16"E
	BL18	21°17'5.21"N	81°46'2.10"E
	BL19	21°17'5.25"N	81°45'59.57"E
	BL20	21°17'11.56"N	81°46'0.57"E
	BL21	21°17'13.41"N	81°46'0.65"E
	BL22	21°17'14.35"N	81°46'0.62''E
	BL23	21°17'14.62"N	81°46'0.31"E
	BL24	21°17'14.20"N	81°45'59.72"E
	BL25	21°17'13.64"N	81°45'59.68"E
	BL26	21°17'13.46"N	81°45'57.91"E
	Kamlash Athwan	i	
	Boundary		Longitude
	Points	Landuc	Longitude
	BL1	21°16'46.64"N	81°45'40.28"E
	BL2	21°16'46.53"N	81°45'43.27"E
	BL3	21°16'46.40"N	81°45'43.51"E
	BL4	21°16'46.48"N	81°45'46.29"E
	BL5	21°16'42.80"N	81°45'46.12"E
	BL6	21°16'42.74"N	81°45'46.79"E
	BL7	21°16'39.83"N	81°45'46.71"E
	BL8	21°16'39.96"N	81°45'40.82"E

ÚLTRA-TECH

Draft EIA Report for Dhansuli Limestone Mine & Nardaha Limestone Mine at Village- Dhansuli&Nardaha, Tehsil-Arang, District- Raipur, State- Chhattishgarh.



Particulars		Details			
	Vasudev Pritwani				
	Boundary Points	Latitude	Long	itude	
	BL1	21°16'45.84"N	81°46	'6.55"E	
	BL2	21°16'46.49"N	81°46	'6.48"E	
	BL3	21°16'46.65"N	81°46	'7.14"E	
	BL4	21°16'47.04"N	81°46	'7.08''E	
	BL5	21°16'47.39"N	81°46	'8.33"E	
	BL6	21°16'48.56"N	81°46	'8.05"E	
	BL7	21°16'50.54"N	81°46	'8.48"E	
	BL8	21°16'52.72"N	81°46	'8.53"E	
	BL9	21°16'52.45"N	81°46	'4.26"E	
	BL10	21°16'52.16"N	81°46	'4.29"E	
	BL11	21°16'52.16"N	81°46	'3.91"E	
	BL12	21°16'51.54"N	81°46	'3.42"E	
	BL13	21°16'50.83"N	81°46	'3.49"E	
	BL14	21°16'50.84"N	81°46	'1.33"E	
	BL15	21°16'49.76"N	81°46	'1.33"E	
	BL16	21°16'49.11"N	81°46	'2.30"E	
	BL17	21°16'48.39"N	81°46	'1.91"E	
	BL18	21°16'47.71"N	81°46	'1.77"E	
	BL19	21°16'47.67"N	81°46	'3.05"E	
	BL20	21°16'45.91"N	81°46	'5.37"E	
	<u>Abdul Mali</u>	<u>k</u>			
	Boundary Points	Latitude		Longitude	
	BL1	21°17'11.35"N		81°45'56.69"E	
	BL2	21°17'11.25"N		81°45'55.75"E	
	BL3	21°17'10.08"N		81°45'55.81"E	
	BL4	21°17'9.99"N		81°45'55.19"E	
	BL5	21°17'10.38"N		81°45'55.22"E	
	BL6	21°17'10.71"N		81°45'53.98"E	
	BL7	21°17'9.57"N		81°45'53.94"E	
	BL8	21°17'8.20"N		81°45'54.14"E	
	BL9	21°17'7.46"N		81°45'54.34"E	—
	BL10	21°17'7.03"N		81°45'54.34"E	
	BL11	21°17'6.84"N		81°45'54.27"E	—
	BL12	21°17'5.96"N		81°45'54.02"E	
	BL13	21°17'4.27"N		81°45'54.12"E	
	BL14	21°17'4.03"N		81°45'56.02"E	—
	BL15	21°17'5.40"N		81°45'56.00"E	—
	BL16	21°17'5.40"N		81°45'56.55"E	—

Particulars	Details			
	BL17 21°17'6.57"N		81°45'56.49"E	
	BL18 21°17'6.56"N		8	1°45'57.25"E
	BL19 21°17'9.69"N		8	1°45'57.16"E
	BL20	21°17'9.66"N	8	1°45'56.78"E
	Culshan Nagd	• • •		
	Boundary	<u>ev</u> Latiti	ude	Longitude
	Points	Latte		Longitudo
	BL1	21°17	23.72"N	81°46'15.04"E
	BL2	21°17	23.67"N	81°46'18.61"E
	BL3	21°17'	31.67"N	81°46'18.76"E
	BL4	21°17	31.53"N	81°46'14.66"E
	BL5	21°17	27.82"N	81°46'14.78"E
Maximum Temperature	37.33° C			
Minimum Temperature	3.66° C			
Annual rainfall	1193.40 mm			
Size of the Project	1.19 ha, 3.880 l	na, 3.238ha, 3.1	8ha, 1.60l	na & 2.744 ha,
NT	2.819 ha, 2.00 l	na , 2.672 ha.	1	
Nearest Highway	Dhansuli Lin	estone Mine	Narda	ha Limestone Mine
	Anil Janghel		Prakash Bajaj	
	NH-53 at 5.20 km toward		South (Raipur Arang	
	Vishakhapatn	- Pond)	South (Kalpur – Arang
	SH_ 9 at 3 70	km towards	SH_9at	A 10 km towards
	north – west	Rainur-	north- y	vest (Raipur-
	balodabazar road)		balodał	pazar road)
	M/s. Mahamaya Minerals		Abhay	Athwani
	NH-53 at 5.70 km toward		NH-53	at 5.80 km toward
	South (Raipur	– Arang	South (Raipur – Arang	
	Road),		Road),	
	SH 9 at 3.40k	mtowardswest	SH9 at	4.20 km towards
	(Raipur-Balod	labazar road)	west(R	aipur- Balodabazar
		•	road)	
	Kamlesh Athwani		Anuj B	adwani
	NH-55 at 4.90 South (Deinur	Kin toward	NH-55	al 0.00 Kill loward
	Road)		Road)	Kaipui – Arang
	SH 9 at 3.20k	m towards	SH9 at	3.90 km towards
	North - west (Raipur-	west(R	aipur-Balodabazar
	Balodabazar road)		Road).	1
	Vasudev Pritv	vani	Gulsha	n Nagdev
	NH-53 at 5.30	km toward	NH-53	at 6.50 km toward
	South (Raipur		South (Raipur – Arang
	Vishakhapatna	am Road),	Road),	
	SH 9 at 3.70km towards		SH9at3	.80kmtowardsnorth-
	north - west (Raipur-	west(R	aipur-

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Draft EIA Report for Dhansuli Limestone Mine & Nardaha Limestone Mine at Village-Dhansuli&Nardaha, Tehsil-Arang, District-Raipur, State-Chhattishgarh.



Particulars	Details			
	Balodabazar road)	Balodabazarroad)		
	Abdul Malik			
	NH-53 at 5.80 km toward			
	South (Raipur – Arang			
	Road),			
	SH 9 at 3.35 km towards west			
	(Raipur-Balodabazar road)			
Nearest railway station	Dhansuli Limestone Mine	Nardaha Limestone Mine		
	Anil Janghel	Prakash Bajaj		
	Mandir Hasaud Railway	Mandir Hasaud Railway		
	Station at 5.85 km	Station at 6.90 km		
	towards south	towards south		
	M/s. Mahamaya Minerals	Abhay Athwani		
	Mandir Hasaud Railway	Mandir Hasaud Railway		
	Station at 6.30 km towards	Station at 6.30 km		
	south	towards south		
	Kamlesh Athwani	Anuj Badwani Mandin Haarad Dailaraa		
	Mandir Hasaud Railway	Mandir Hasaud Kallway		
	Station at 5.90 km towards	Station at 7.00 km		
	South Vasudou Prituani	Culaban Nacdau		
	Mondir Hosoud Boilwoy	Guisnan Nagaev		
	Station at 5 90 km towards	Station at 7 10 km		
	south	towards south		
	Abdul Malik			
	Mandir Hasaud Railway			
	Station at 5 90 km towards			
	south			
Nearest Airport	Swami Vivekananda Airport, Ra	aipur – 12.00 km in SSW		
Nearest town/City	Raipur – 15.00 Km in WSW			
Major water body within	Canal – 850 m towards west			
10 km radius	Kurud Reserviour - 3.00 km towar	ds south-east		
	Kharun river – 19.00 Km toward	ds south-west		
<u> </u>				
Densely populated or	Raipur – 4.00 Km towards SSW			
built-up area				
Archaeologically	None within 10 km radius			
Important places				
Wildlife Drotection A at	None within 10 km radius			
(Tigor resorge Elephont	None within 10 km radius			
reserve Biographeres				
National parks Wildlife				
sanctuaries community				
reserves and				
conservation reserves)				



Particulars	Details			
Reserved / Protected	Mohrenga P.F	18.55 km		
Forests	Khaulidabri P.F	17.7 km		
Defense Installations	None within 10 km radius			
Seismicity	Since project site comes under Se active zone for earthquakes as per	ismic zone II, w IS: 1893 (Part 1	hich is least : 2002).	
WildlifeSanctuary	None within 10 km radius			
National Park	None within 10 km radius			
Biosphere reserves	None within 10 km radius			
Important migration routes of birds	None within 10 km radius			
Ramsar sites (Wetlands	None within 10 km radius			
of International				
Importance				
Unique or threatened	None within 10 km radius			
ecosystems				
Important topographical	None within 10 km radius			
features, including				
ridges, river valleys,				
shorelines, and riparian				
areas				
Mangrooves	None within 10 km radius			
Physical Sensitive	None within 10 km radius			
Receptors				
Notified Ground Water	None within 10 km radius			
Zone by CGWA				
Critically Environmental	None within 10 km radius			
polluted Area				
Pollution Sources	None within 10 km radius			

1.2 Project Description

The proposed project of Dhansuli Limestone Mine having an area of 1.19 ha, 3.880 ha, 3.238ha, 3.180ha, 1.60ha & Nardaha Limestone Mine having areaof 2.744 ha, 2.819 ha, 2.00 ha, 2.672 ha situated at Village–Dhansuli & Nardaha, Tehsil–Arang, District:-Raipur, State:- Chhattishgarh under Khasra No. 818, 870, 871, (new 913, 926, 927), 707/2, 708, 709/1, 711/1, 711/2, 711/2, 711/3, 712, 713, 756/1, 756/2, 576, 653 Part,915, 916/1, 705, 706, 716 (Dhansuli Limestone Mine) & 1972, 1980, 1982, 1960, 1961/2, 1949, 1950, 1948 (part) (Nardaha Limestone Mine). The proposed method of mining is open cast semi mechanized mining.



INFORMATION	DETAILS
Name of the project	1.Dhansuli Limestone Mine
	2.Nardaha Limestone Mine
Village	Dhansuli &Nardaha
Tahsil	Arang
District	Raipur
State	Chhattisgarh
Toposheet No	64 G/11, 64G/12, 64G/15, 64G/16
Name of Leaseholders	1. Anil Janghel
	2. M/s. Mahamaya Minerals
	3. Kamlesh Athwani
	4. Vasudev Pritwani
	5. Abdul Malik
	6. Prakash Bajaj
	7. Abhay Athwani
	8. Anuj Badwani
	9. Gulshan Nagdev

Table 0.2: Salient Features of the Proposed Mining Project



Address and Contact			
details of Lease Holders	Anil Janghel M/s. Mahamaya Mineral		
	S/o Late Shri Bhagatram	Partner - Vivek Agrawal	
	Janghel, City- I/16, Gali no	S /o- Shri Ishwar	
	2, Shri Ram Nagar Face-	ChandaAgrawal, City- House No.	
	1,Shankar Nagar Raipur,	Z5, Ballayali 11ee Society, Khamhardih Sankar Nagar Tehsil	
	Tehsil & District- Raipur	&District- Raipur (C.G)	
	(C.G)	1 ()	
	Kamlesh Athwani	Vasudev Pritwani	
	S/o Late Shri Gurmukh Das	S/o Late Shri Atthumal Pritwani	
	Athwani City– Sarthi	City– Lakhe Nagar Raipur	
	Chowk, Kanhaiya Cloth	Tehsil- Raipur, District- Raipur	
	Store Lakhe Nagar, Raipur	(C.G.), 492001	
	Raipur (C.G.),		
	Abdul Malik	Prakash Bajaj	
	S/o Musa Bhai City– 6	S/o Shri Manghanmal Bajaj	
	Golden Homes, Khamardih	Gali No. 3, Fafadih ,Raipur	
	Raipur Tehsil- Raipur,	Tehsil & District- Raipur(C.G)	
	District- Raipur (C.G.),		
	Anuj Badwani	Abhay Athwani	
	S/o. Shri Anil Badwani	S/o Late Shri Inder Kumar	
	City-Phaphadih Naka, Gali Athwani Flat No. 204, T		
	No. 4 Tensilæ District – Paipur (C G)	Village/City – Kalpur, Tensii- Raipur, District, Raipur (C.G.)	
	Gulshan Nagdey	Kalpur, District- Kalpur (C.O)	
	S/o- Shri Indra Kumar Nagde	2V	
	Kachhari Chowk, Jail Road		
	Tehsil & District- Raipur (C.	G)	
Name of the Mineral to	Limestone		
be mined			
Type of land	Dhansuli Limestone Mine		
	Anil Janghel (Govt. Land)		
	M/s. Mahamaya Minerals (Pv	t. Land)	
	All Nardaha Limestone Mine (Non forest Private land)		
Status of Operation			
(New Project or	New Project & Existing Project	ct	
Existing Project			
operating since)			
Mine Area	Name	Mine Area	
	Anil Janghel	1.190 Hect.	
	M/s. Mahamaya Minerals	3.880 Hect.	
	Kamlesh Athwani	3.238 Hect.	



	Vasudev Pritwani		3	.180 Hect.	
	Abdul Malik	Abdul Malik			
	Prakash Bajaj	2	.744 Hect.		
	Abhay Athwani	2.819 Hect			
	Anuj Badwani		2	2.00 Hect.	
	Gulshan Nagdev		2	.672 Hect.	
	Total Area		2	3.323 Hect	
Ultimate depth of	Name			Depth	
mining	Anil Ianghel			21.0 m	
	M/s Mahamaya Mineral	c		25.0 m	
	Kamlesh Athwani	3		20.0 m	
	Vacuday Dritwani			20.0 m	
				20.0 m	
				26.0 m	
	Prakash Bajaj			25.0 m	
	Abhay Athwani			25.0 m	
	Anuj Badwani			25.0 m	
	Gulshan Nagdev			25.0 m	
Mineable Reserve &	Name	Min	eable	Production	
Production Capacity		Reserve	e(in MT)	Capacity(in TPY)	
	Anil Janghel	1,18	3,763	23,890	
	M/s. Mahamaya	8,45,2	200.00	1,00,494	
	Minerals	10.00	700 75	1.10.670	
	Kamlesh Athwani	18,02,	122.75	1,12,670	
	Vasudev Pritwani	/,00,3	063.75	/9,845	
	Abdul Malik Drolcoch Doioi	1,99,4	+52.50	52 046 88	
	Prakasn Bajaj	5,50,4	+22.50	55,040.88	
	Abilay Atilwalii Apui Badwani	5,07,2	+03,00 282 50	90,008	
	Gulshan Nagdey	2.84	380.00	35.458	
Life of Mine	Δ nil Ianghel - 35 VE Δ R	2,07,	,00	55,450	
	As per lease deed of all	Mines -30	vears exc	ent Anil Ianghel	
	which is 35 year	wines -50	years, exe	ept Ann Jangher	
Overtity of topsoil and	which is 55 year.				
Qualitity of topsoff and Overburden estimated	N	т <u>с</u>	$(1, (0, \dots))$	0 1 1 (0)	
to be removed	Name Top Soi		$\frac{11 (\text{Cum})}{0.00}$	Overburden(Cum)	
to be removed	Anni Jangnei M/a Mahamawa	6028.00		INII 18.082.00	
	Minerals	002	0.00	18,085.00	
	Kamlesh Athwani	Ň	Jil	Nil	
	Vasudev Pritwani	384	0.25	3840.25	
	Abdul Malik	N	<u></u> Jil	Nil	
	Prakash Baiai	649	1.00	Nil	
	Abhay Athwani	373	9.75	11219.25	
	Anuj Badwani	372	6.50	3726.50	
	Gulshan Nagdey	169	1.50	5074.50	



Depth of Ground	Approx. 40 meters of below from the normal surface level
T 11	
Water Table	
Mathad of Mining	Openeest Semi Mechanized
Method of Mining	Opencast Senn-Mechanized
Calana's Zama	
SeismicZone	Seismic Zone II

1.2.1 Water Requirement

The total water requirement shall be 39.00 KLD and 26.50 KLD for Dhansuli Limestone Mine &Nardaha Limestone Mine respectively for domestic, green belt and sprinkling purpose, which will be sourced from Water Tankers from nearby village. Detail of water requirement is given below:

Sr.	Usage	Water Requirement	
No.			
1.	Dust Suppression @ 1	Haul road Area = $(1000m \text{ Length x 4 m})$	4.00 KLD
	L/Sq.m (twice a day)	width = 4000 sqm.) x 1 li/sqm =2000 lit	
		$/day \ge 1$ time = 4000 lit/day	
2.	Greenbelt	654 Trees X 2.5Lit/day = 1635 Lit/day	2.00 KLD
	Development@ 2.5	or say 2 KLD	
	L/tree		
3.	Domestic Purpose	14 workers x 25 lit per day = 350Lit/Day	0.50KLD
	@25 lpd/worker		
		Total ::	6.50 KLD

Table 1.2 A: Water Requirment Details (Anil Janghel)

Table 1.2 B: Water Requirment Details (M/s Mahamaya Minerals)

Sr.	Usage	Water Requirement	
No.			
1.	Dust Suppression @	Haul road Area = $(1500 \text{ m Length x 5m})$	4.00 KLD
	0.25 L/Sq.m (twice a	width = 7500 sqm.) x 0.25 li/sqm =1875	
	day)	lit /day x 2 time = $3750 \text{ lit/day or say}$	
		4.00 KLD	
2.	Greenbelt	2094 Trees X 2.0Lit/day = 4188 Lit/day	4.20 KLD
	Development@ 2.0	or say 4.20 KLD	
	L/tree		
3.	Domestic Purpose	32 workers x 25 lit per day =	0.80 KLD
	@25 lpd/worker	800Lit/Day	
		Total ::	9.00 KLD



Sr.	Usage	Water Requirement	
No.			
1.	Dust Suppression @	Haul road Area = $(1000 \text{ m Length x 4 m})$	4.00 KLD
	0.5 L/Sq.m (twice a	width = 4000 sqm.) x 0.51i/sqm = 2000	
	day)	lit /day x 2 time = 4000 lit/day	
2.	Greenbelt	1077 Trees X 2.5 Lit/day = 2,692.5	3.00 KLD
	Development@	Lit/day or say 3.00 KLD	
	2.5L/tree		
3.	Domestic Purpose	24 workers x 25 lit per day $= 600$	1.00 KLD
	@25 lpd/worker	Lit/Day	
		Total ::	8.00 KLD

Table 1.2 C : Water Requirment Details (Kamlesh Athwani)

Table	12D·	Water	Requi	rment	Details ((Vasur	lev 1	Pritwani	h
Lanc	$\mathbf{I} \cdot \mathbf{L} \cdot \mathbf{D}$.	vv atti	Nequi	ment	Details	(v asut		l i itwaiii	J

Sr.	Usage	Water Requirement	
No.			
1.	Dust Suppression @	Haul road Area = $(1000 \text{ m Length x 4 m})$	4.00 KLD
	0.5 L/Sq.m (twice a	width = 4000 sqm.) x 0.51i/sqm = 2000	
	day)	lit /day x 2 time = 4000 lit/day	
2.	Greenbelt	1179 Trees X 2.5 Lit/day = 2,947.5	3.00 KLD
	Development@	Lit/day or say 3.00 KLD	
	2.5L/tree		
3.	Domestic Purpose	27 workers x 25 lit per day $= 675$	1.00 KLD
	@25 lpd/worker	Lit/Day	
		Total ::	8.00 KLD

Table 1.2 E : Water Requirment Details (Abdul Malik)

Sr.	Usage	Water Requirement	
No.			
1.	Dust Suppression @	Haul road Area = $(1000 \text{ m Length x 4 m})$	4.00 KLD
	0.5 L/Sq.m (twice a	width = 4000 sqm.) x $0.51i/\text{sqm} = 2000$	
	day)	lit /day x 2 time = 4000 lit/day	
2.	Greenbelt	1038 Trees X 2.5 Lit/day = 2,595Lit/day	3.00 KLD
	Development@	or say 3.00 KLD	
	2.5L/tree		
3.	Domestic Purpose	16 workers x 25 lit per day =	0.50 KLD
	@25 lpd/worker	400Lit/Day	
		Total ::	7.50 KLD



Sr.	Usage	Water Requirement	
No.			
1.	Dust Suppression @	Haul road Area = $(750 \text{ m Length x 5 m})$	2.00 KLD
	0.25 L/Sq.m (twice a	width = 3750 sqm.) x 0.25 li/sqm = 938	
	day)	lit /day x 2 time = 1876 lit/day or say 2	
		KLD	
2.	Greenbelt	1350 Trees X 2.5 Lit/day = 3375 Lit/day	3.50 KLD
	Development@	or say 3.50 KLD	
	2.5L/tree		
3.	Domestic Purpose	17 workers x 25 lit per day $= 425$	0.50 KLD
	@25 lpd/worker	Lit/Day	
	_	-	
		Total ::	6.00 KLD

Table 1.2 F : Water Requirment Details (Prakash Bajaj)

Table 1.2 G : Water Requirment Details (Abhay Athwani

Sr.	Usage	Water Requirement	
No.			
1.	Dust Suppression @	Haul road Area = $(1000 \text{ m Length x 4 m})$	4.00 KLD
	0.5 L/Sq.m (twice a	width = 4000 sqm.) x 0.51i/sqm = 2000	
	day)	lit /day x 2 time = 4000 lit/day	
2.	Greenbelt	858 Trees X 2.5 Lit/day = 2145 Lit/day	2.50 KLD
	Development@	or say 2.50 KLD	
	2.5L/tree		
3.	Domestic Purpose	29 workers x 25 lit per day $= 725$	1.00 KLD
	@25 lpd/worker	Lit/Day	
		Total ::	7.50 KLD

Table 1.2 H : Water Requirment Details (Anuj Badwani)

Sr.	Usage	Water Requirement	
No.			
1.	Dust Suppression @	Haul road Area = $(750m \text{ Length x } 4m)$	3.00 KLD
	0.5 L/Sq.m (twice a	width = 3000 sqm.) x 0.5 li/sqm =15000	
	day)	lit /day x 2 time = 30000 lit/day	
2.	Greenbelt	795 Trees X 2.5 Lit/day = 1987 Lit/day	2.00 KLD
	Development@	or say 2.00 KLD	
	2.5L/tree		
3.	Domestic Purpose	18 workers x 25 lit per day $= 450$	0.50 KLD
	@25 lpd/worker	Lit/Day	
		Total ::	5.50 KLD



Sr.	Usage	Water Requirement	
No.			
1.	Dust Suppression @	Haul road Area = $(1000 \text{ m Length x 4})$	4.00 KLD
	0.5 L/Sq.m (twice a	m width = 4000 sqm.) x 0.5 li/sqm	
	day)	=2000 lit /day x 2 time = 40000 lit/day	
2.	Greenbelt	1011 Trees X 2.5 Lit/day = 2527	3.00 KLD
	Development@	Lit/day or say 3.00 KLD	
	2.5L/tree		
3.	Domestic Purpose	20 workers x 25 lit per day $= 500$	0.50 KLD
	@25 lpd/worker	Lit/Day	
		Total ::	7.50KLD

Table 1.2 I : Water Requirment Details (Gulshan Nagdev)

1.2.2 Power Requirement

No power is required for mining purpose only for labour, admin building and for crusher plant. State electricity board will supply the electricity. Electric power is available in the lease area.

1.2.3 Manpower Requirement

The mining project will generate direct & indirect employment. Local people will get direct employment, and some persons will also be affected indirectly and employed with allied and related industries, such as transportation, maintenance, etc. Following staff & workers are proposed to be employed:



S.N		Details													
	Category		1]	No's									
		Anil Janghel	M/s. Mahamaya Minerals	Kamlesh Athwani	Vasudev Pritwani	Abdul Malik	Prakash Bajaj	Abhay Athawan i	Anuj Badwani	Gulshan Nagdev					
1	Mine Manager	-	-	1	-	-	-	-	-	-					
2	Mining mate	1	1	1	1	-	1	1	1	1					
3	Supervisor	1	1	2	1	-	1	1	1	1					
4	Skilled labour	7	17	5	14	1	8	19	9	10					
5	Un Skilled labour	0	1	15	-	15	0	0	0	0					
6	Machine Operator	5	12	-	8	-	5	8	5	5					
7	Crusher Supervisor	0	0	-	1	-	1	0	1	1					
8	Crusher Operator & Assistant	0	0	-	2	-	1	0	1	2					
	TOTAL	14	32	24	27	16	17	29	18	20					

Table 1.3 : Manpower Details of Nardaha & Dhansuli Limestone Mine

1.3 Description of Environment

The area around the proposed mining site has been surveyed for physical features and existing environmental scenario. The field survey and baseline monitoring has been done from the period of **December 2021 to March 2022** (Winter Season).

The observations for Winter season-(December 2021 – March 2022) are summarized below:

1.3.1 Meteorology

The secondary meteorological data of the study period collected from www. imdpune.gov.in/. The month wise meteorological data is given in Table 3.4B. The wind rose during the study period

	Wind	d speed (1	m/s)	T	Cemp (⁰ C	2)	Relativ	e Humid	ity (%)	Rainfa ll (mm)	Solar radiation (W/m^2)			
Period	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg		Max	Min	Avg	
Dec- 2021	5.43	0.17	1.97	25.83	3.66	16.50	100	25.56	69.48	8.75				
Jan- 2022	4.4	0.11	2.01	26.03	4.65	16.4	100	28.6	73.08	2.6	15.84	3.02	10.52	



Feb	6.18	0.07	2.07	33.28	6.41	19.6	100	16.81	55.7	1.03		
2022												
March -	4.13	0.11	2.03	37.33	13.8	24.86	86.94	12.62	44.8	0.09		
2022												

1.3.2 Air Environment

The ambient air quality is carried out at 16 locations in and around the project site and studies are carried out as per CPCB standards. It is observed that, all the values are within the prescribed limits as per National Ambient Air Quality Standards (NAAQS), 2009.

Particulate Matter (PM₁₀):

A maximum concentration of PM_{10} is $72\mu g/m^3$ was observed at the AAQM-1& 4 and minimum value of $42\mu g/m^3$ was observed at AAQM-15

Respirable Particulate Matter (PM_{2.5}):

A maximum concentration of $PM_{2.5}$ is recorded to be 32 µg/m³ at AAQM- 5and minimum value of 10μ g/m³ was observed at AAQM-9 - 16

Sulphur Dioxide (SO₂):

Maximum concentration of SO₂ is observed to be $19\mu g/m^3$ at AAQM -1&4 and minimum value of 5 $\mu g/m^3$ observed at AAQM- 11-16

Oxides of Nitrogen (NO_X):

Maximum concentration of NO_x is observed to be $19\mu g/m^3$ at AAQM – 13&minimum value of $6\mu g/m^3$ observed at AAQM–2,3,6,7,8

Carbon Monoxide (CO):

Maximum concentrations in the region are observed to be 0.9mg/m³ at AAQM-1,4,6,8,16 and minimum value of 0.3mg/m³ observed at AAQM-.12,14.

Silica

Silica in the ambient air of the 10 Km radius of the study area of the project site has been analysed from the PM_{10} filter paper of the Ambient Air quality monitoring stations mentioned in Table 3.5 (7601 ,Issue 3 as per NIOSH Methods). The result indicates that silica concentration in the surrounding of project site was found to be in the range of $0.1 \mu g/m^3$ to $0.5 \mu g/m^3$.

The results are compared with the standards prescribed by Central Pollution Control Board (CPCB). The overall ambient air quality around the proposed mine lease is within the limits of ambient air quality standards prescribed by CPCB.

1. 3.3 Noise Environment

Noise levels were monitored in sixteen locations including project within the study area. Then noise levels ranged between 51.0 to 60.5 dB (A) during day time and noise levels ranged between 42.5to 52.4 dB (A) during night time. Over all the monitored noise levels are found to be within the stipulated standards set by CPCB.

1.3.4 Water Environment

In order to establish the baseline water quality, 6 ground water and 4 surface water samples were collected and analyzed in the study area. The quality of surface water samples was compared with surface water specification IS 2296:1982 and the surface water quality comes under Class D (Propagation of wildlife and fisheries). The ground water samples were compared with drinking water specification IS 10500:2012 standards.

1. 3.5 Soil Quality

A total of 16 samples in and around the project site are collected and analysed. It has been observed that the pH of the soil quality ranged from 7.0 (S9) to 7.7 (S7) indicating that the soil is slightly alkaline in nature

1.3.6 Land Use/Land Cover of the Study Area

Nardaha and Dhansuli are villages in the Arang Tehsil of the Raipur District in Chattisgarh State, India. Figure 4 depicts the village area as covered by Survey of India toposheets 64G/11,64G/12, 64G/15, 64G/16 (SOI). Figure 11.4 shows a pie diagram of the 10-kilometer research region's land use and land cover maps. The LULC map, shown in Figure 4, shows that the analysis is separated into nine areal classes: Water body, Canal, Crop Land, Settlement, Vegetation, Fallow Land, and Mining area.





Figure1 2: LULC Classification (10 km radius Proposed Project Area)

1.3.7 Biological Environment

Study of biological environment is one of the most important aspects for Environmental Impact Assessment. In view of the need for conservation of environmental quality and biodiversity study, biological environment is one of the most important aspects for Environmental Impact Assessment. Ecological systems show complex inter-relationships between biotic and abiotic components including dependence, competition and mutualism. Biotic components comprise of both plant and animal communities, which interact not only within and between them but also with the abiotic components viz. physical and chemical components of the environment. Generally, biological communities are the indicators of climatic and edaphic factors. The biological environment includes mainly terrestrial ecosystem and aquatic ecosystem. The mining activities are one such external influence, which might affect the ecology of an area, if proper management measures are not taken.

1.3.8 Socio-economic Environment

According to recent census (2011) Population of study area is (10 Km radius from project site) 188814 in 38976 households. Male population is 95545 and female population is 93269 in the region surrounding the project location. Highest population in study area is in Mandir Hasaud (CT) (2073).



Figure 11.3 shows the village-wise population concentration in the study area selected from the project location. Based on the concentration of population within the 10 km radius of the study area, a map of the study area has been prepared. The largest number of inhabitants in Durgapur, where the project location is situated. comprising of the 5 classes of population, which shows there is high population in the blocks Mandhar, Mandir Hasaud (CT), Nardaha, and Seoni-1 (Seoni)



Fig. 1.3: Villages within 10 Km. Radius Area from Project Site.



1.4 Anticipated Environment Impacts and Environment Management Plan

Land/Soil Environment Impact Mitigation

The mitigation measure of the land environment includes:

- Before the mining activity the top soil will be scrapped and stored in the lease area and will be utilized for plantation purpose. Balance top soil if any preserved separately will be used to spread over partially reclaimed land.
- The limestone excavated from the lease area will be completely selleable resulting no dump within the lease area
- At the end of conceptual period the excavated quarry will converted into water reservoir to supply water for local use like irrigation and pisciculture.
- Due to manual mining operation emission from the Limestone mines are very less, there will be no impact on the surrounding soil quality and cropping pattern of the area.
- The propose project falls under the seismic zone –II (Low Hazard Risk Zone). Since this project will not have physical infrastructure to be constructed, no impact of seismicity isenvisaged in this project. Further, this project will not change/alter the seismic behaviour of the area.
- Air Impact Mitigation

The mitigation measures undertaken in the mine for control of air pollution are:

- Checking of vehicles and machinery to ensure compliance to Indian Emission Standards Transportation vehicles and machinery to be properly and timely maintained and serviced regularly to control the emission of air pollutants in order to maintain the emissions of NO_x and SO_x within the limits established by CPCB.
- Total 4 KLD water required for two mines towards dust suppression purpose for which 2 no. of water tanker with 2000 litre capacity will be hired and used for water sprinkling twice in a day in haul roads, dumping site, loading and unloading site of each lease within the cluster and this will be regularly monitored by the cluster management. Water sprinkling on transport road side, stock yard (if any) etc. will be done by tractor mounted water sprinkler.
- Regular compaction and grading of haul roads will be done to clear the accumulation of loose material
- All the mines workers will be provided with the dust masks.
- Trees can act as efficient biological filters. As this is a small lease, the area available for plantation is very less. However, a well-planned plantation programme has been proposed for the mining area to arrest the dust pollution within the lease boundary. There is the



proposal for continuous plantation along the cluster boundary and both side of the road connecting the cluster.

- Vehicles with valid PUC shall be used for transporting the minerals to avoid the exhaust emission.
- A greenbelt development plan is prepared with local species. The greenbelt on the periphery will reduce the dust levelsits.
- Sharp drill bits will be used for drilling and regrinding will be done periodically to reduce generation of dust.
- Fugitive emission by stone crusher plant will be supressed by adopting following measures as per norms:-
 - ✓ Construction of tin walls around the crusher plant and equipment.
 - \checkmark Regular cleaning and wetting of the ground within the premises.
 - ✓ Better maintenance of crusher plant and equipment will help to reduce such emissions.
 - \checkmark water spray at dust generating points on crusher plant.
- Regular monitoring of the air quality as per the monitoring plan detailed in Chapter 6 of this EIA report, shall be adopted during the operation phase, to ensure that, the air quality is within the desired limits prescribed by CPCB.

Noise Impact Mitigation

- No noise polluting work shall be carried out in the night hours.
- Provision of PPE's for the workers.
- Vehicles to be serviced regularly and maintained properly to avoid any unwanted generation of noise or vibration from them.
- Green belt plantation and garden trees will help in reducing the noise, traffic related pollution and heat island effects.
- Proper lubrication, muffling and modernization of equipment shall be used to reduce the noise during operation phase.
- Vibration and noise due to blasting will be reduced by adopting controlled blasting technique.
- Blasting will be avoided under unfavourable conditions.
- Rock breakers is being/ will be used instead of secondary blasting.
- Regular monitoring of the noise levels as per the monitoring plan detailed in Chapter 6 of this EIA report, shall be adopted during the operation phase, to ensure that, the noise levels are within the limits prescribed by CPCB.



Water Impact Mitigation

- Provision of temporary toilets for labours
- Domestic waste water will be treated into septic tank followed by soak pit outside of the proposed cluster project with a safe distance and no wastewater will be allowed to be get discharged into the water body
- All stacking and loading areas should be provided with proper garland drains
- Check dams should be provided to prevent solids from wash off.
- Construction of garland drains around freshly excavated and dumped areas so that flow of water with loose material is prevented.
- The mine water should be passed through specially constructed catch pits to arrest any loose material being carried away with water.
- Any areas with loose debris within the leasehold should be planted.
- Garland drains should be constructed surrounding the waste dumps and should be connected to the surface water reservoir to avoid the run-off mixing directly to natural water channels before settling.
- Ground water table will not be intersected during the mining activity

Biological Impact Mitigation

- Green belt will be developed along the core zone boundary which will act as a pollution barrier for the biological environment.
- The drilling and transportation will be carried out during the day time only minimizing the impact on the wild fauna movement.
- Fencing around the entire mine lease area is recommended in order to restrict the entry of stray animals into the mining area.

Socio-Economic Environment Impact Mitigation

In order to mitigate the adverse impacts likely to arise in the surrounding area due to proposed project activity, it is necessary to formulate an effective mitigation plan. The suggestions are as follows:

Before Commencing and During Initial Phase:

• Communication with the local community should be institutionalized and done on a regular basis. The forum could provide opportunities to discuss local critical issues and prepare programmers of mutual benefits.



• Information regarding the proposed development plan, community programmes etc. should be communicated to the local community.

1.5 Environmental Monitoring Program

Environmental monitoring shall be carried out at the locations to assess the environmental health in the post period. A post study monitoring programme is important as it provides useful information on the following aspects.

- It helps to verify the predictions on environmental impacts presented in this study.
- It helps to indicate warnings of the development of any alarming environmental situations, and thus, provides opportunities for adopting appropriate control measures in advance.

Detailed EMP plan during the operation phase is given chapter 6 of EIA report.

1.6 Risk Assessment

The hazards and its risk assessed during the operation phase of the proposed limestone mining project are low, medium & high. The project proponents are proposed to implement all the mitigation measures to prevent the impact or consequences of the risk expected to be happened in both the project sites. The level of impact after implementing the mitigation measures will be low/medium in all the hazards identified.

1.7 Emergency Response and Disaster Management Plan

Impact of disaster can be significantly reduced through attempts at preparedness, mitigation, and post-event rehabilitation work. Based on hazard identification in the proposed project, an emergency plan has been prepared and the same plan will be implemented by the project implementing agency with the coordination of District Authorities to minimize the damage. The risk assessment and disaster management plan is detailed in Chapter 7 of the EIA report.

1.8 Project Benefits

Mining is back bone of infra-structure development of country. Proposed project has following benefits as given below:

- Employment for local people
- Revenue for the State Government in form of excise duties, GST, taxes, levies etc.
- Generate business opportunity for the people
- Need based funds will be used for welfare of people in villages
- EMP funds will improve environmental quality.
- The operation of the limestone mining would help to improve socio-economic condition of people in villages through separate fund allocated for Need Based Activity.



1.9 Budget for Social Development

The total estimated cost of the project is 997.72 lacs . Rs 20.96 /- lac will be allocated for Need based activity for causes of village for drinking water, sanitation, education, health.

1.10 Environment Management Plan (EMP)

The detailed Environment Management Plan has been prepared based on the mining activities and the impacts imparting on land/soil, air, noise, water by the activities. The EMP and the cost for the environment protection measures are detailed in Chapter 10 of EIA report.

S	Particula	Anil Janghel		M/sMahamaya		maya Prakash Bajaj		Abhay Athwani		Anuj Badwani		Gulshan Nagdev		Kamlesh Athwani		Vasudev Pritwani		Abdul Malik	
N	rs	0.11	D '	Min	erals	G 1 1	D .			G 1 1	D .	G : 1		0 1 1	D ·			Conital Dominia	
IN O		Capital Cost in	Recurrin a Cost in	Capital	Recurrin g Cost	Capital Cost in	Recurrin a Cost in	Capital Cost in	Recurrin a Cost in	Capital Cost in	Recurrin a Cost in	Capital	Cost in Ps	Capital Cost in	Recurri	Capital Cost in	Recurrin a Cost in	Capital Cost in	Recurrin a Cost in
		Rs	Rs	COSt	in Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Cost in Rs	Rs	Cost in	Rs	Rs	Rs	g Cost III Rs
															Rs				
	Air																		
1	Pollution	-	72,000		72,000	-	90,000	-	72,000	-	90,000	-	72,000	-	72,000	-	72,000	-	72,000
	Green																		
2	Belt	55 215	1 72 250	1,95,44	2 00 050	1,20,40	2 08 850	80.080	1 92 750	60 075	1 90 5 40	04 260	1.01.560	1 00 490	1,94,92	1,09,91	2 00 120	06 000	1 02 020
2	Develop	55,515	1,75,550	0	2,08,830	0	2,08,830	80,080	1,65,750	08,823	1,80,340	94,300	1,91,500	1,00,480	0	5	2,00,120	90,000	1,92,930
	ment																		
3	Maintena nce of		40.000		40.000		40.000		40.000		40.000		40.000		40.000		40.000		40.000
5	Road	-	40,000	-	40,000	-	40,000	_	40,000	-	40,000	-	40,000	_	40,000	_	40,000	-	40,000
	Facilities														1,08,00		1 21 500		72.000
4	for Mine	50,000	63,000	50,000	1,44,000	50,000	76,500	50,000	1,30,500	50,000	81,000	50,000	90,000	50,000	0	50,000	1,21,300	50,000	72,000
	workers																		
	Total ::	1,05,315	3,48,350	2,45,440	4,64,850	1,70,400	4,15,350	1,30,080	4,26,250	1,18,825	3,91,540	1,44,360	3,93,560	1,50,480	4,14,920	1,59,915	4,33,620	1,46,880	3,76,930
To	al Capital	13.71.695																	
	st in Rs																		
Re	Recurring 36 65 370																		
Co	st in Rs																		
To EN	al Cost of IP in Rs	50,37,065																	

Expenditure Proposed for Environmental Protection Activities:



1.11 Conclusion

As discussed, it is safe to say that the collection of minor minerals from the proposed lease area is not likely to cause any significant impact on the ecology of the area as the mineral is and waste generated is non-toxic and does not harm the surrounding environment.

Adequate measures will be taken to control the fugitive emissions to be generating during mining operation. Socio-economic condition of the surrounding villages will improve in long run due to involvement of local population and improvement of infrastructure facilities. Green belt development in the statutory boundary, approach roads, schools are proposed with the participation of local people. This proposed plantation in the area will improve the aesthetic look along with betterment of ecology and environment of the locality.