



# GUJARAT INDUSTRIES POWER COMPANY LIMITED

(SURAT LIGNITE POWER PLANT)

At. Nani Naroli, Ta. Mangrol, Dist. Surat - 394 110

Phone : (02629) 261087 Fax : (02629) 261112 E-mail : cgmmminesoffice@gipcl.com

SLPP/Vastan/Limestone Mines/Environment Return/2022/ 807

22.03.2022

## Courier

To,  
The Regional Officer,  
IRO – Gandhinagar,  
Ministry of Environment, Forest & Climate Change (MOEF&CC),  
A-407 & A -409, Aranya Bhavan,  
CH-3 Circle, Sector No 10A,  
Gandhinagar-382010

Sub :- MOEF's EC compliance & other compliance reports with respect to Vastan Limestone Mine, GIPCL, Vastan Village, Taluka- Mangrol, District- Surat, Gujarat for the period from July'2021 to Dec'2021

Ref :- Environmental Clearance accorded vide letter no F No. J – 11015/112/2011-IA.II (M) date 22<sup>nd</sup> July'2015

Dear Sir,

Please find enclosed herewith following details with respect to GIPCL's Vastan Limestone Mine, Taluka -Mangrol, District - Surat, State - Gujarat for the period July-2021 to Dec-2021

1. EC compliance report as **ANNEXURE – A** with enclosure **ANNEXURE – A(I) & ANNEXURE - A(II)**.
2. Monitoring of the implementation of Env. Safeguard (Data Sheet Part – I) as **ANNEXURE – B** with enclosure **ANNEXURE - I & ANNEXURE - II** and
3. Environmental Monitoring and analysis Report for period **ANNEXURE – C & C(I)**

This is for your kind information.

Thanking you,

For Gujarat Industries Power Co. Ltd.



N. K. Chauhan  
AGM (Mines)

Encl as above: -

cc: -The Regional Officer, Surat R.O.  
Gujarat Pollution Control Board,  
338, Belgium square,  
Opp. Linear Bus Stand, Surat.

**Registered Office & Vadodara Plant :**  
P.O. Petrochemical, Dist. Vadodara 391 346 Gujarat - INDIA  
Website : www.gipcl.com



**Phone :** EPABX (0265) 2232768/2213/0159  
**Fax :** 2231207 **E-mail :** genbaroda@gipcl.com  
CIN No. : I99999G11985PI1007868

**ANNEXURE – B**

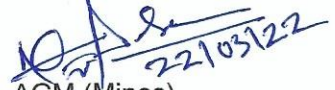
**MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS  
 MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE  
 REGIONAL OFFICE (W), BHOPAL  
 MONITORING REPORT  
 PART – I  
 DATA SHEET**

S.N.		
1	Project type: River/valley/Mining/Industry/thermal/ nuclear/other /specify	: Mining
2	Name of the project	: Vastan Limestone Mine
3	Clearance letter (s) OM no. and date	: F.No. J-11015/112/2011-IA. II (M) dated 22 <sup>nd</sup> July 2015.
4	a) District	: Surat
	b) State	: Gujarat
	c) Latitude/Longitude	: Latitude- 21° 22' 43.61" to 21° 24' 19.03" Longitude: 73° 04' 23.93" to 73° 05' 06.37"
5	Address for correspondence	
	a) Address of concerned Project Chief with pin code and Telephone/Telex/Fax No.	: Sri N.K.Chauhan AGM (Mines) Vastan Lignite Opencast Mine Surat Lignite Power Plant Village: Nani Naroli, Tal: Mangrol, Dist.: Surat – 394 110 Phone: (M) 9909925341 Fax: 02629-261080
	b) Address of concerned Engineer with pin code and telephone/Telex/Fax No.	: Shri Madhu Ranjan Choudhary, Manager (Mines) Vastan Limestone Mine Surat Lignite Power Plant Village: Nani Naroli, Taluka: Mangrol, Dist.: Surat – 394 110. Phone –(M) 9099045784 Fax: 02629-261080
6	Salient Features of	
	a) the project	: This mining project is linked to Surat Lignite Power Plant under the same management to supply lignite as fuel for captive 4 X 125 MW Power Plant.
	b) Environmental Management Plan	: Greenbelt developments on <b>584.86 Hectares</b> of mining lease area comprising of <b>9, 39,902</b> no trees have been developed till <b>Dec- 2021</b> .  Plantation of Waste dump: Plantation activity on plane & sloping surface of the waste dump was carried out since the beginning of the mining activities. This was planned for dump stability & also to curb the run-off of loose soil from the external Overburden Dumps. Plantation of on reclaimed area is being done. A brief endeavor of the work done is given in <b>Annexure – I</b> .



	b) Environmental Management Plan	:	Environmental monitoring for SPM, NOx, SOx, CO emission are being carried out as per the condition of Environmental Clearance vide letter no. O. /M letter F.No. J-11015/112/2011-IA. II (M) dated 22 <sup>nd</sup> July 2015. The detail environmental monitoring report (i.e. from July-21 to December-2021) is enclosed herewith as <b>Annexure – C</b> .
7	Breakup of the project area a) Submergence area: Forest & Non forest  b) Others	:	There is no forest land in and around of this project. Total areas of 80 Hectare will be used for mining activity.  Vastan Limestone Mine is a part of Vastan Lignite Mine having 1536 Ha area. Vastan Limestone lease is superimposed over Vastan Lignite Mining leases area.
8	Break up of project affected population with enumeration of those losing houses/dwelling units only, agriculture land only, both dwelling unit and agricultural land. a) Scheduled Cast b) Scheduled Tribe c) Others Please indicate whether these figures are based on any systematic survey carried out or only provisional figures. If any survey is carried out give details and year of survey.	:	The most of the mining lease land was previously used for agricultural purpose. There were no dwelling units/ houses previously existing in such area. Following population lost only their agricultural land.  5 nos 102 nos 400 nos These figures are based on systematic survey carried out in the year December, 1997.
9	Financial Details a) Project cost as originally planned and subsequent revised estimates and the year of price reference. b) Allocation made of environmental Management Plan with item wise & year wise break up. c) Benefit cost ratio/internal rate of return and the year of assessment. d) Whether (c) includes the cost environment management as shown in the above. e) Actual Expenditure incurred so far on the project. f) Actual expenditure incurred on EMP so far (till June. 2020).	:	Project cost is 300 Crores based on price reference of the year 1997.  The details are provided in <b>Annexure – II</b> with this data sheet.  Rate of return on Investment is <b>32.75 %</b> for assessment year <b>2020-21</b>  Yes  244.87 Crores.  <b>2325.18 Lakhs</b> for Green belt development, Dump plantation, preparation of silting ponds, Environmental Monitoring instruments studies.

10	Forest Land requirement a) The status of approval for diversion of forestland for non-forestry use. b) The Status of clear felling c) The status of compensatory afforestation, if any d) Comments on viability and sustainability of compensatory afforestation program in the light of actual field experience so far.	:	NA NA NA NA
11	The experience of clear felling in non forest area (Such as submergence area of reservoir, approach road) if any with quantitative information.	:	Area where active mining work is in progress contains no such vegetation and there are no such cases of clear felling.
12	Status of construction a) Date of commencement (actual or planned) b) Date of completion (Actual/Planned)	:	31.05.1996 (Actual) Project is planned for 30 years.
13	Reason for delay if the project is yet to start	:	NA
14	Dates of site visits a) The dates on which the project was monitored by Regional Office on previous occasion if any, b) Dates of site visit for this monitoring	:	26.03.2007, 29.11.2014, <b>21.08.2019</b> <b>21.08.2019 by Dr. H. V. C. Chary Guntupalli, Joint Director/Scientist 'D', Regional Office, Western Zone, Bhopal, MP</b>
15	The monitoring report may contain the details of all the letters issued so far (vide the letters as mentioned)	:	• Environmental Clearance by F. No. J-11015/112/2011-IA. II (M) dated 22 <sup>nd</sup> July 2015.

  
 22/03/22  
 AGM (Mines)  
 Vastan Mine



**PLANTATION ACTIVITY FROM 1997 to Dec-2021**


S. No.	Year	Code	Location	Area (Ha)	No. of trees
<b>(A) Peripheral green belt development</b>					
1	1997	GBD-A	Lease boundary (Village-Vastan, Jhakharda & Shah)	33	50,967
2	1998	GBD-B	Lease boundary (Village-Vastan & Surali)	21	37,290
3	1999	GBD-C	Lease boundary (Vastan & Shah)	12	21,017
4	2000	GBD-D	Lease boundary (Village- Shah & Cheraetha)	3.5	56,000
5	2001	--	Near Vastan village	04	6,000
6	2002	GBD-J	Lease boundary (Village-Cheretha)	20	31,368
7	2003	GBD-K	Lease boundary (Village- Surali, Naugama & Tadkeshwar)	34	51,000
8	2004	GBD-L	Lease boundary (village-Vastan & Surali)	12	30,000
9	2005	GBD-M	Along Limestone road, & Vastan village)	16	26,550
10	2006	Jetropha	Lease boundary-Vastan & Surali)	05	13,500
11	2008	GBD-N	Lease boundary of South Pit	20	32,000
12	2009	GBD-O	Lease boundary of South Pit	20	32,000
13	2011	GBD-Q	Lease boundary of South Pit near Surali Village	8	12,800
14	2012	GBD-R	South and North pit periphery area	19.5	25,100
15	2013	GBD-S	Lease boundary of Vastan Mines	13.5	16700
16	2014	GBD-T	Lease boundary of Vastan Mines	3	4800
17	2015	GBD-U	-	-	-
18	2016	Forest species	Lease boundary near north side of Limestone Pit	2	3800
19	2017	Forest species	South pit in west side of BC Dump	2.38	3300
20	2018	Forest species	South pit in west side of BC Dump as a gap filling	0.84	1355
21	2019	Junglee Variety	Eastern side Lease boundary of Vastan Mine near Nani Naroli Village	1.5	1670
22	2020	Bengali babul, Gulmohar, Neem, etc	North west corner side of Pit No. 1, along the limestone lease boundary.	0.35	473
		Sevan, Piplod, Sitafal, Mahuda, Kaju, Jambudo, Kanjo, Arjun and Neem	Eastern side Lease boundary of Vastan mine near Nani Naroli Village after harvesting of Bamboo plantation have been carried out as a gap filling	30.00	33330
23	2021 (July to Dec.)	Gmelina arborea, Ficus religiosa, Annona Squamosa, Modhuca indica, Anacardium Occidentale, Syzygium cumunii, Holoptelia integrifolia, Hardwic kia binata and Azadirachta indica	South-Eastern side Lease boundary of Vastan Mine near Nani Naroli Village after harvesting of Bamboo plantation, new plantation has been carried out.	12	13332
			Western side Lease boundary of Vastan Mine near Charetha & Surali Village. Plantation have been carried out as a gap filling	18	19998
<b>Total (A)</b>				<b>311.57</b>	<b>5,24,350</b>

<b>(B) Dump Plantation</b>					
1	1999	---	External dump	2.5	7500
2	2001	--	External dump	04	12,000
3	2005	--	External dump	02	3887
4	2006	--	External dump	42	42,549
5	2007	--	External dump	30	38,027
6	2010	---	External dump	5	8,000
7	2011		External dump near ELHS	8	12800
8	2012	flower plant	External dump	0.5	1052
9	2013	--	--	--	--
10	2014	-	-	-	-
11	2015	-	-	-	-
12	2016	-	-	-	-
13	2017	-	-	-	-
14	2018	-	-	-	-
16	2019	-	-	-	-
17	2020	-	-	-	-
<b>Total (B)</b>				<b>94</b>	<b>125815</b>
<b>(C) Reclaimed Area Plantation</b>					
1	2007	Jetropha	--	04	11,136
2	2008	Jetropha	--	05	13,504
3	2009	Bamboo Plantation		25	32000
4	2009	Junglee Variety		5	5000
5	2011	Junglee Variety		12	19200
6	2012	Junglee Variety		20	32000
7	2013	Forest Species	--	22	33000
7	2014	Forest Species	-	15	26500
8	2015	Forest Species	-	12.4	18600
9	2016	Forest Species		12.27	18400
10	2017	-	-	-	-
11	2018	Bengali babul & Gulmohar	South-pit North-West side reclaimed area	1.74	2815
12	2019	Bengali babul & Gulmohar	South-pit North-West side BC dump reclaimed area	2.75	4950
13	2020	Bengali babul, Gulmohar, Neem, etc	Reclaimed area (NW side) of South Pit	3.15	4091
			Limestone (Pit 1) reclaimed area	1.27	1575
14	2021 (July to Dec.)	Bengali babul, Gulmohar, etc	North-West corner side of south Pit Reclaimed Area	2.25	3015
		Paltro, Saptarni, Bengali babul, Limda, Nilgiri, etc	Limestone (Pit 1) near the eastern side of Reclaimed Area	1.28	1630
<b>Total (C)</b>				<b>145.11</b>	<b>227416</b>



<b>(D) Other plantation activity</b>					
1	2000	--	Mines road	02	3100
2	2000	GBD-F	Ambawadi (Near DEEP nursery)	0.5	290
3	2000	GBD-H	Near Demo Shed	03	13,200
4	2001	--	Mines road	1.6	2500
5	2005	--	Mines road	03	400
6	2007	Bamboo plantation	Near DEEP farm house	05	8000
7	2011	General Plantation	Near & at ELHS	2	3200
8	2012		Near & at ELHS	4	9600
9	2013	General Plantation	Near Limestone pit .	1	1200
10	2014	-	--	-	-
11	2015	Forest Species	Near Limestone Crusher	2.67	8000
12	2016	Forest Species	Near East side of Limestone Pit	2.73	4100
		Mango trees	Near Vastan site Office	0.3	50
13	2017	-	-	-	-
14	2018	Mango & Jamun trees , Kasid, Bengali babul, Peltro, Neem, Gulmohar etc	Near Vastan site Office & GVTC, Near Lime Stone crusher area	2.66	3543
15	2019	Mango (Kesar), Lemon & Amrud kalam	Near Vastan site Office gap filling of 0.3 Ha area	--	50
		Bengali babul & Gulmohar	Along Limestone Transport Road around 600M from crusher area	2.37	3500
16	2020	Bengali babul, Gulmohar, Ne em, etc	Surface(NW Side) of south pit	0.52	678
		Bengali babul, Gulmohar, Ne em, etc	Near eastern side of Limestone lease boundary, between crusher to Pit No.3	0.80	910
17	2021	--	-	--	--
			Total (D)	<b>34.15</b>	<b>62321</b>
			<b>GRAND TOTAL (A+B+C+D)</b>	<b>584.83</b>	<b>9,39,902</b>

<b>(E) Seed Spraying</b>					
1	1998	Dump-A	External dump	05	3000 Kg
2	1999	Dump-B	External dump	05	300 Kg
3	2000	Dump-C	External dump	28	790 Kg
4	2001	Dump-D	External dump	124	5760 Kg
5	2003	Dump-E	External dump	54	1620 Kg
6	2011	Dump-F	External dump, Bund near ELHS road	8	450 Kg
7	2012	Dump-G	Vastan Mines Cheretha Site	6	120 Kg
8	2013		Western side edge of Vastan north Pit	2	100kg
9	2014	-	-	-	-
10	2015			-	-
17	2016		Reclaimed area	5	62 KG
18	2017	-	-	-	-
19	2018	-	-	-	-
20	2019	---	Reclaimed area (su-babool and Bangali Babool)	2	30 Kg
21	2020	--	--	--	--
22	2021	--	--	--	--
			<b>Total (E)</b>	<b>239</b>	<b>12202 Kg</b>
<b>(F) Seed spraying by Mining Contractors</b>					
1	1999				2150 Kg
2	2000				550 Kg
3	2001				5760 Kg
4	2002				2600 Kg
5	2003				280 Kg
6	2004				525 Kg
7	2005				1000 Kg
8	2007				1000 Kg
9	2008		External Dump		1000 Kg
10	2009		External Dump		1000 Kg
11	2010		Bund of Garland drains		400 Kg
12	2011		Bund of Garland drains		400 Kg
13	2012		--		NIL
14	2013		--		NIL
15	2014		-		NIL
16	2015		-		NIL
17	2016		-		NIL
18	2017		South pit west side near BC bund		50Kg
19	2018	-	-	-	-
20	2019	-	-	-	-
21	2020	-	-	-	-
22	2021	-	-	-	-
			<b>Total (F)</b>		<b>16715 Kg</b>

  
 AGM (Mines)  
 Vastan Mine



## Sub: Expenditure made for the Environmental Management Plan with item wise &amp; year wise break-up.

(All figures are in Lakhs Rs.)

Year →		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021 (Jan. to June)	2021 (July To Dec.)
Item ▼	Particulars of the activities											
Development & maintenance of Plantation (Greenbelt, Reclaimed area and other)	Greenbelt Development along lease boundary, along Haul road & plantation on reclaimed area in mining premises. 1) New plantation by MDO at peripheral green belt development & maintenance. 2) At peripheral green belt development & maintenance. 3) After preparatory work done at reclaimed area, plantation was done. 4) Preparation of land for plantation	40.52	113.70	71.50	94.19	33.65	12.68	1.03	1.19	103.53	85.59	0.79
Dump plantation	Dump plantation maintenance, development and plantation cost	8.29	6.094	0.13	0.10	0.03	-	-	-	-	--	--
Preparation of settling pond	Silting pond for settlement of suspended solids from the discharge mine water, being pumped out during the monsoon season.	1.08	0.30	0.63	0.57	0.30	0.30	0.30	3.33	6.19	0.87	5.22
Monitoring of Environmental parameter	Monitoring of Environmental parameters viz. Air quality (SPM, SO <sub>x</sub> , NO <sub>x</sub> , CO), Water quality (Physical, Chemical & Biological tests), Noise survey & Dust fall measurement in villages peripheral to the mining lease area & Micro meteorological monitoring of the season/quarter.	0.87	1.39	1.85	2.31	2.40	2.44	1.85	1.04	1.0	0.61	0.61
Dust suppression measures in mines	Round the clock water spraying and road grading prevents formation & emission of Dust.	112.99	105.47	137.28	135.02	89.71	121.89	132.2	89.42	70.51	59.90	15.56
Remote sensing	Three-year stage remote sensing.	1.90	2.00	-	1.99	-	-	3.25	--	--	--	--
<b>Total Amount</b>	( in Lac Rs)	165.65	228.95	211.39	234.18	126.09	137.31	138.63	94.98	181.23	146.97	22.52
Cum. Total	<b>(Period from 1997 to Dec - 2021)</b>	803.85 (1997 to 2011)	1032.8	1244.10	1478.28	1604.37	1741.68	1880.31	1975.29	2156.52	2303.49	2326.01

AGM (Mines)  
Vastan Mine



# GUJARAT INDUSTRIES POWER COMPANY LIMITED

(SURAT LIGNITE POWER PLANT)

At. Nani Naroli, Ta. Mangrol, Dist. Surat - 394 110

Phone : (02629) 261087 Fax : (02629) 261112 E-mail : cgmmminesoffice@gipcl.com

SLPP/Vastan/Limestone Mines/Environment Return/2022/ 807

22.03.2022

## Courier

To,  
The Regional Officer,  
IRO – Gandhinagar,  
Ministry of Environment, Forest & Climate Change (MOEF&CC),  
A-407 & A -409, Aranya Bhavan,  
CH-3 Circle, Sector No 10A,  
Gandhinagar-382010

Sub :- MOEF's EC compliance & other compliance reports with respect to Vastan Limestone Mine, GIPCL, Vastan Village, Taluka- Mangrol, District- Surat, Gujarat for the period from July'2021 to Dec'2021

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3. Environmental Monitoring and analysis Report for period **ANNEXURE – C & C(I)**

This is for your kind information.

Thanking you,

For Gujarat Industries Power Co. Ltd.



N. K. Chauhan  
AGM (Mines)

Encl as above: -

cc: -The Regional Officer, Surat R.O.  
Gujarat Pollution Control Board,  
338, Belgium square,  
Opp. Linear Bus Stand, Surat.

**Registered Office & Vadodara Plant :**  
P.O. Petrochemical, Dist. Vadodara 391 346 Gujarat - INDIA  
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**Fax :** 2231207 **E-mail :** genbaroda@gipcl.com  
CIN No. : I99999G11985PI1007868



## ANNEXURE – A

**PROJECT NAME** : VASTAN LIMESTONE MINE  
**PROPONENT NAME** : M/S GUJARAT INDUSTRIES POWER COMPANY LIMITED  
**EC NUMBER AND DATE OF ISSUE** : LETTER NO. J-11015/112/2011-IA. II(M) Dated 22 JULY'2015  
**PERIOD OF COMPLAINE** : 1<sup>ST</sup> July 2021 TO 31<sup>ST</sup> Dec 2021

SN	Condition	Compliance
1	No mining activities will be allowed in the forest area, if any, for which the forest clearance is not available	The entire lease area falls under non-forest land hence it is not applicable
2	The project proponent shall obtain consent to operate from the state pollution control board, Gujarat and effectively implement all the conditions stipulated therein.	Consent from the Gujarat Pollution Control Board vide their letter No GPCB/CCA-SRT-346(3)/ID_20748/331172 dated 26 <sup>th</sup> October'2016 and effectively implemented all the conditions stipulated therein. The New consent letter No GPCB/CCA-SRT-346(3)/ID_20478/OUTWAR No-509345 dated 07 <sup>th</sup> June'2019 and effectively implements all the conditions stipulated therein.
3	The proponent shall appoint an occupational health specialist for regular and periodical medical examination of the workers engaged in the project and maintain records accordingly, also occupational health check-ups for the workers undertaken once in six month and necessary remedial / preventive measures taken accordingly. The recommendation of the National institute for ensuring occupational environment for mine workers shall be implemented: the preventive measures for burns, malaria and provision of anti – snake venom including all other paramedical safe guards may be ensured before initiating the mining activities.	Our Medical officer conducting initial and periodical medical examination of workman and staff. Initial and periodical medical examination of workers are being conducted at Occupational Health Centre and record of the same is maintained  The preventive measures for burns, malaria and provision of anti – snake venom including all other paramedical safe guards are kept at the centre.
4	Implementation of Action plan on the issues raised during the public Hearing shall be ensured. The PP shall complete the entire task as per the Action Plan submitted with budgetary provisions during the public Hearing.	The Action plan on the issue raised during public meeting is under progressive implementation.
5	The Mining Operations shall be restricted to above ground water table and it should not intersect groundwater table. In case of working below ground water table, prior approval of the ministry of Environment, Forest and Climate change and Central Ground water Authority shall be obtained for which a detailed hydro-geological study shall be carried out, the report on six monthly basis on changes in Ground water level and quality shall be submitted to the Regional Office of the Ministry.	Mining Operations is restricted to above ground water table.



6	The pollution due to transportation load on the environment will be effectively controlled & water sprinkling will also be done regularly. Vehicle with PUC only will be allowed to ply. The mineral transportation shall be carried out through covered truck only and the vehicle carrying the mineral shall not be overloaded. Project should obtain PUC certificate for the entire vehicle from authorized pollution testing centres.	Overloading of the transportation trucks is controlled through electronic weighbridge system. Continuous water sprinkling is carried out all along the transportation road. Covering of truck is in practice. All vehicles engaged in transportation of Limestone is checked and issued PUC by authorized pollution testing agencies.
7	There should be planning, developing and implementation facility of rainwater harvesting measures on long term basis in consultation with regional Directorate, Central Ground water board and implementation of conservation measures to augment ground water resource in the area in consultation with central ground water board.	Approval letter for construction of Rain Water Harvesting has been received from Central Ground Water Board, Ahmadabad and is attached herewith as <b>ANNEXURE - A(I)</b> .  Accordingly, two Rain water harvesting wells have been constructed and details with photographs has been submitted to Ministry of Environment, Forest and Climate Change vide letter no SLPP/Vastan Mines/Environment Return/2016/4009, dated – 01.08.2016.
8	Use of effective sprinkler system to suppress fugitive dust on haul road and other transport road shall be ensured. Washing of all transport vehicle should be done inside the mining lease	Continuous pressurized water sprinkling by engagement of water tanker is in practise. Fugitive dust emission is under control. Washing of all transport vehicles are done inside the mining lease area.
9	Implementation of Environment Management Policy of the company w.r.t judicious use of Mineral resources for growth & development synchronizing mining & environment with prosperity.	Environmental Management Policy of the company is already implemented at mine area for judicious use of mineral resources
10	The project proponent shall also take all precautionary measures during mining operation for conservation and protection of endangering flora/ fauna, if any, spotted in the study area.	All effort is being taken for conservation and protection of flora/ fauna. However, there is no endangering species is recorded in the EMP.
11	The illumination and sound at night at project site disturb the village in respect of both human and animal population. Consequent sleeping disorder and stress may affect the health in the village located close to mining operations. Habitation has a right for darkness and minimal noise level at night. Project proponent must ensure that the biological clock of the villagers and keeping the noise level well within the prescribed limit for day light / night hours	The Mine site is away from the surrounding villages and there is no adjoining habitation area.  However, all precautionary measures are being taken for keeping noise level well within the prescribed limit.  The Six-monthly Environment monitoring and analysis report from July 2021 to December-2021 is attached herewith as <b>ANNEXURE – C</b>



12	Main haulage road in the mine should be provided with permanent water sprinkling and other road should be regularly wetted with water tankers fitted with sprinklers	Entire mine road is covered with water sprinkling through water tanker. Because mine working is carried out in moving front and haulage road is frequently changing hence the water sprinkling system through engagement of water tanker is adopted.
13	Transportation of Mineral by road passing through the village shall not be allowed. A bypass road should be constructed (say leaving a gap of at least 200 Mtr) for the purpose of transportation of minerals so that the impact of sound, dust and accident could be mitigated. The project proponent shall bear the cost towards the widening and strengthening of existing public road network in case the same is proposed to be used for the project. No road movement should be allowed on existing village road network without appropriately increasing carrying capacity of such road.	Transportation of Lime stone from mine area to plant is being carried out through road owned by the company and no village road/ public road is under use.
14	Likewise alteration or re-routing of the foot path, pagdandis, cart road and village infrastructure / public utilities or road (for purpose of land acquisition for mining) shall be avoided to the extent possible and in case such acquisitions is inevitable, alternative arrangement shall be made first and then only the area acquired. In these types of cases, inspection report by site visit by expert may be insisted upon which should be done through reputed institutions.	Because no public road is under use for lime stone transportation hence this is not applicable.
15	CSR activities by companies including the Mining establishment has become mandatory up to 2% of their financial Turn- over, socio Economic Development of the neighbourhood habits could be planned and executed by project proponent more systematically based on the need-based door to door survey by established social institutes/ workers. The report shall be submitted to the ministry of Environment & forest and its Regional office located at Bhopal on six monthly basis.	GIPCL has been consistently spending more than 2% of its net profit towards various development activities under its CSR intervention for the benefit of community residing in surrounding villages towards health, education, income generation, village infrastructure, environment management etc. A brief report along with photograph of the CSR activities for the period from July'21 to December'21 of the GIPCL is attached herewith as <b>ANNEXURE-A(II)</b>
16	Provision shall be made for the housing of construction labourer within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project.	The maximum work force is local and they are commuting from their natives daily. Hence no such requirement is needed.



17	A final mine closure plan along with detail of corpus fund shall be submitted to the ministry of Environment, Forest & climate change 5 year in advance of final mine closure for approval.	Final mine closure plan with corpus fund has been submitted to Ministry of Environment, Forest and Climate Change. The 80 Ha lease area of Limestone mine falls under the 1536 Ha lease area of Vastan Lignite mine and Vastan Lignite mine closure plan has been approved from Ministry of Coal and same is under implementation.
<b>GENERAL CONDITION</b>		
18	No change in mining technology and scope of working should be made without prior approval of the ministry of Environment & Forest & climate change	There is no change in mining technology and scope of working for Vastan Limestone Mine.
19	No change in the calendar plan including excavation quantum of Lime stone and waste should be made	There is no change in calendar plan including excavation quantum of Lime Stone and waste.
20	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and ground water for the project	No surface water or ground water is under use for mining activity. Only Stored water of monsoon season in the mine pit is being used for water sprinkling.
21	Regular monitoring of ground water table to be carried out at the upstream and depth of water available in the dug well is to be measured. Monitoring to be done by establishing a network of existing wells and construction new piezometer.	A dug well is constructed in the mine area and since, Nov 2015 a piezometer is installed for regular monitoring of ground water table. Old Piezometer is under breakdown and new piezometer has already been procured & installed in Aug 2021 details report is attached herewith as <b>ANNEXURE – C(I)</b> .
22	Monitoring of ambient Air Quality to be carried out based on 2009 notification, as amended from time to time by central pollution control board, water sprinkling should be increased at place loading and unloading points & transfer point to reduce fugitive emission	Complied Ambient Air Quality monitoring details is enclosed in Environment monitoring and analysis report from July 2021 to December-2021 is attached herewith as <b>ANNEXURE – C</b> .
23	The upliftment of scheduled caste / schedule tribe population, specific program have been taken in to consideration specially with respect to education, health care, livelihood generation, infrastructure development & promotion of sport & culture for ST /SC population and that these will be intensified in future	The brief report on CSR activities of GIPCL for the period from July 2021 to Dec 2021 attached herewith as <b>ANNEXURE - A(II)</b> also includes the details of the efforts being made for upliftment of scheduled caste / schedule tribe population. CSR activities of the company include Health Care, Education, Livelihood Generation, Village Infrastructure Development, Resource Centre for training etc. Company has incurred <b>Rs 145.00</b> Lakhs period from July' 21 to December' 21. The community-based education, health care, Livelihood generation, infrastructure development, promotion of sport and culture work undertaken in program area fall under tribal pocket.



24	<p>The top soil, if any shall temporarily be stored at earmarked site (s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation. The overburden (OB) generated during the mining operation shall be stacked at earmarked dump site (s) only and it should not be kept active for a long period of time. The maximum height of the dumps shall not exceed 8 mtr and width 20 mtr and overall slope of the dumps shall be maintained to 45Degree. The OB dump should be scientifically vegetated with suitable native species to prevent erosion and surface runoff. In critical areas, use of geo textile shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled and afforested, monitoring and management of rehabilitated area should continue until the vegetation become self-sustaining, compliance status shall be submitted to the ministry of Environment, Forest and climate change and its regional office located at BHOPAL on six monthly basis.</p>	<p>Top soil is being utilised for land reclamation and plantation.</p> <p>Entire overburden is being dump at inside the mined-out area as a backfilling.</p>
25	<p>Catch drain and siltation pond of appropriate size shall be constructed around the mine working mineral and OB dump to prevent run off of water and inflow of sediment directly in to the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly de-silted particularly after monsoon and maintained properly. The drains, setting tanks and check damp of appropriate size, gradient and length shall be constructed both around the mine pit and overburden dumps to prevent run off of water and flow of sediment directly in to the river and other water bodies and sump capacity should be designed keeping 50 % safety margin over and above peak sudden rain fall ( based on 50 years data) and maximum discharge in the area adjoining the mine site, sump capacity should also provide adequate retention period to allow proper settling of silt material.</p>	<p>Before monsoon catch drain and siltation pond of appropriate size is constructed around the mine working mineral to prevent run off of water and inflow of sediment directly in to the natural nallah and other water bodies. The rain water so collected is being utilized for watering the mine area, roads, green belt development etc.</p> <p>The drains area regularly de-silted particularly after monsoon and maintained properly</p> <p>The drains, are constructed both around the working pit and it's overburden backfilled dump area, to prevent run off of water and flow of sediment directly in to the natural nallah and other water bodies;</p> <p>Mine Sump capacity is so designed that to keep around 50 % safety margin over and above peak sudden rain fall and maximum discharge in the area adjoining the mine site.</p> <p>Mine Sump capacity is so designed that to provide adequate retention period to allow proper settling of silt material.</p>



26	Plantation shall be raised in a 7.5 m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the road etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2500 plants per Ha. Green belt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.	The 80 Ha lease area of Limestone mine falls under the 1536 Ha lease area of Vastan Lignite mine and plantation has been carried out in the periphery of Vastan Lignite Mine leasehold area.  Further, Green belt will be developed in a phased manner.
27	Dimension of the retaining wall at the toe of over burden dumps and OB benches within the mine to check run off and siltation shall be based on the rain fall data.	The entire waste is being accommodated inside the voids of mined out area of mine pit. Hence no such requirement of retaining wall is there.
28	Effective safe guard measured such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high level of PM10 and PM2.5 such as haul road , loading and unloading point and transfer points , it shall be ensured that the Ambient Air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regards	Water sprinkling is carried out by Pressurized Water Tankers at regular interval covering all area of mine prone to air pollution.  This Ambient Air quality is being sampled at specified areas and analysed. Result is reported well within the prescribed limits.  Environment monitoring and analysis report from July 2021 to December 2021 is attached herewith as <b>ANNEXURE – C</b>
29	Regular monitoring of the flow rate of the springs and perennial nallah flowing in and around the mine lease area shall be carried out and records maintained. Regular monitoring of water quality upstream and downstream of water bodies shall be carried out four times in a year – pre-monsoon, (April- May), monsoon (August), post monsoon (November) and winter (January) and the data thus collected may be sent regularly to ministry of Environment, Forest and climate change and its Regional office Bhopal, central ground water authority and regional director, central ground water board.	Monitoring of environmental parameter of the core and buffer zone of the mine area is being carried out bi-monthly and report is being prepared. This monitoring includes the water quality of ponds, nallah and bore well of surrounding villages.  The half yearly monitoring of water quality data is incorporated in the Environment monitoring and analysis report from July 2021 to December 2021 is attached herewith as <b>ANNEXURE – C</b>  There is no perennial Nallah is flowing in and around mine lease area, only seasonal Nallah nearby mine lease area flowing during monsoon only.
30	The critical parameter such as PM 10 (size less than 10 micro meter) PM 2.5 (size less than 2.5 micro meter) No x in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation	Monitoring of air quality of the ambient air of the core and buffer zone of the mine area is being carried out bi-monthly and report is being prepared.



	<p>whichever is closer shall be monitored periodically. Further quality of the discharge water shall also be monitored (TDS, DO, PH and Total suspension solids (TSS)). The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain. The circular no J – 20012/1/2006 – IA. II (M) dated 27.05.2009 issued by ministry of environment, Forest &amp; Climate change, which is available on the website of the ministry shall also be referred in this regard for its compliance.</p>	<p>All the critical parameter viz PM10, PM2.5, NOx and Sox in the ambient air within core and buffer zone is being monitored.</p> <p>The half yearly Environment monitoring and analysis report from July 2021 to December 2021 is attached herewith as <b>ANNEXURE – C</b></p> <p>There is no habitation within 300 Mtr distance of the mine. There is no discharge of water from the mine. Only rain water, which collected in monsoon, season, is pumped out in monsoon period only place where resuming the mining activity. The above said water also is being used for water sprinkling and plantation purpose.</p>
31	<p>Four ambient air monitoring air quality monitoring stations should be established in the core zone as well as in the buffer zone for PM10, PM2.5, SO2, NOx, monitoring location of the stations should be decided based on the meteorological data topographical features and environmentally and economically sensitive targets. And frequency of monitoring should be undertaken in consultation with the state pollution control boards. Data on ambient air quality should be regularly submitted to the ministry including its regional office located at the Bhopal and the state pollution control boards / central pollution control boards once in six months.</p>	<p>Minimum five stations are established in core and buffer zone for ambient air quality monitoring and PM10, PM2.5, SO2, Nox, CO emission is being monitored.</p> <p>Monitoring stations are located as per meteorological data and topographical features and environmentally and economically sensitive areas of core and buffer zone.</p> <p>The level of PM10, PM2.5, SO2, NO2 emission is being monitored Bi-monthly. Data related with each of the above parameters are within limits prescribed.</p> <p>The half yearly monitoring of Environment monitoring and analysis report from July 2021 to December 2021 is attached herewith as <b>ANNEXURE – C</b></p>
32	<p>Fugitive dust emission from all the sources should be controlled regularly; water spraying arrangement on the haul road, loading and unloading and at transfer points should be provided and properly maintained.</p>	<p>Dust emission from all the sources are being controlled by water sprinkling at regular interval.</p>
33	<p>Measures should be taken for control of noise level below 85dBA in the work environment. Workers engaged in operations of HEMM etc, should be provided with ear plug / muff</p>	<p>Measure is taken for control of noise level below 85dBA. This noise level are being sampled every two months at specified area and analysed. Results are reported well within the prescribed limits. However, workers engaged in operations of HEMM (i.e Dozer) are issued ear plug.</p>



		The half yearly monitoring of Noise monitoring data is incorporated in the Environment monitoring and analysis report from July 2021 to December 2021 is attached herewith as <b>ANNEXURE – C</b>
34	Industrial waste water (work shop and waste water from the mine) should be properly collected, treated so as to conform to the standard prescribed under GSR 422 (E) dated 19 <sup>th</sup> May 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents.	Waste water from work shop is collected and treated.
35	Personal working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspect.	Before employment of workmen in mine, basic training on safety and health aspect is being carried out. Person working in the mine area is provided with dust mask.
36	Occupational health surveillance program of the workers should be undertaken periodically to observe any contraction due to exposure to dust and take corrective measures, if needed.	Occupation health surveillance program is already under implementation in the mine. Basic and periodical medical examination of the workers is being carried out at company's Occupation Health Centre by Industrial and Occupational Health Specialist employed by the company.
37	A separate environment management cell with suitable qualified personal should be set up under the control of a senior Executive, who will report directly to the head of the organization	Separate environment management cell is set up under the control of GM (Mines), who is directly reporting to Managing Director of the Company.
38	The fund earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the ministry and its Regional office located at Bhopal	<p>Fund earmarked for environmental protection is kept in separate ledger in annual budget of the company. Budget orders are generated for all planned expenditure and expenses are booked against the order in the ledger.</p> <p>The year wise expenditure of environment protection is enclosed in data Monitoring Report, Part – I of Data Sheet <b>ANNEXURE – B of Annexure – II</b></p>
39	The project authorities should inform to the Regional Office located at Bhopal regarding date of financial closure and final approval of the project by the concerned authorized and the date of start of the land development work.	<p>Vastan Lime Stone Mine is a part of the Vastan Lignite Mine project.</p> <p>Though the Vastan Lignite mining project is 23years old and financial closure is already completed years back.</p>



40	The regional office of this ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full co – operation to the officer(s) of the Regional office by furnishing the requisite data / information / monitoring report	Requisite data, report, information, monitoring report will be submitted to the regional office.
41	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environment safe guards to the ministry of Environment, Forest and climate change, its regional office, Bhopal, central pollution control board and state pollution control board.	<p>This report is about the six-monthly report of the status of implementation of the stipulated environmental safe guards of the ministry. This report is being submitted to regional office, Bhopal, central pollution control board and state pollution control board.</p> <p>For implementation of all environmental safeguards and for environmental measures detail enclosed in data Monitoring Report, Part – I of Data Sheet <b>ANNEXURE – B</b></p>

  
 AGM (Mines)  
 Vastan Mine