



GUJARAT INDUSTRIES POWER COMPANY LIMITED

(SURAT LIGNITE POWER PLANT)

At. Nani Naroli, Ta. Mangrol, Dist. Surat - 394 112

Phone : EPABX (02629) 261063 to 261072 Fax : (02629) 261080 E-mail : genslpp@gipcl.com

BY RPAD

SLPP/Mangrol- Valia Mine/ENV. Return/ 525

14th Feb- 2022

To,
Regional Officer, Surat RO
Gujarat Pollution Control Board,
338, Belgium square,
Opp. Linear Bus Stand, Surat.

Sub :-	Report of monitoring the implementation of environmental safeguards in data sheet, Part - I in respect of Mangrol-Valia Lignite Mines, of M/s Gujarat Industries Power Company Ltd, for the period from <u>Jul. To Dec - 2021.</u>
Ref :-	1. Environmental Clearance accorded vide letter no J-11015/38/99-IA. II (M) dated 21st July 2003.

Dear Sir,

Please find enclosed the report, in data sheet Part - I, and monitoring of the implementation of environmental safeguards in respect of Mangrol-Valia Lignite Mines, M/s Gujarat Industries Power Company Ltd, for the period from Jul. To Dec - 2021.

This is for your kind information.

Thanking you,

For Gujarat Industries Power Co. Ltd.

M A Nipane
14.02.2022

M A Nipane

Addl. General Manager (Mines)

Surat Lignite Power Plant

P.O. - Nani Naroli, Taluka- Mangrol.

Dist. - Surat, 394110

- Encl :-
1. Data Sheet Part - I. along with Piezometer Reading.
 2. Six Monthly Environmental Monitoring & Analysis Report for the period of Jul. To Dec - 2021

Registered Office & Vadodara Plant :

P.O. Petrochemical, Dist. Vadodara 391 346 Gujarat - INDIA

AN IMS
COMPANY

Phone : EPABX (0265) 2230182 / 2230028 / 2232768

Fax : 2230029 E-mail : genbaroda@gipcl.com

Website : www.gipcl.com

CIN No.: L99999GJ1985PLC007868

MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS
MINISTRY OF ENVIRONMENT AND FOREST (MOEF)
REGIONAL OFFICE (W), BHOPAL
MONITORING REPORT
PART - I
DATA SHEET

No.		
1	Project type: River/valley/Mining/Industry/thermal/ nuclear/other /specify	: Mining
2	Name of the project	: Mangrol - Valia Lignite Mine
3	Clearance letter (s) OM no. and date	: Environmental Clearance accorded vide Letter no. J-11015/38/99-IA. II (M) dated 21st July 2003
4	a) District	: Surat
	b) State	: Gujarat
	c) Latitude/Longitude	: Latitude- 21° 25' to 21° 31' Longitude: 73° 06' to 73° 09'
5	Address for correspondence	
	a) Address of concerned Project Chief with pin code and Telephone/Telex/Fax No.	: Sri M A Nipane Deputy General manager (Mines) Mangrol -Valia Lignite Opencast Mine Surat Lignite Power Plant Village: Nani Naroli, Tal: Mangrol, Dist.: Surat - 394 110 Phone:02629-261087(M) 9727757613 Fax: 02629-261112
	b) Address of concerned Engineer with pin code and telephone/Telex/Fax No.	: Sri M A Nipane Deputy General manager (Mines) Mangrol -Valia Lignite Opencast Mine Surat Lignite Power Plant Village: Nani Naroli, Tal: Mangrol, Dist.: Surat - 394 110 Phone:02629-261087(M) 9727757613 Fax: 02629-261112
6	Salient Features	
	a) of the project	: This mining project linked to Surat Lignite Power Plant under the same management to supply lignite as fuel for captive 4 X 125 MW Power Plant.
	b) of Environmental Management Plan	: I. Greenbelt development on 25.5+2.4 Ha of peripheral mining lease area comprising of 44191+3400 no trees has been developed till date. II. Greenbelt development on 96.50 Ha of peripheral mining lease boundary around Valia Pit comprising of 153509 no trees has been developed till date. III. 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. IV. A brief endeavor of the work done is given in Annexure - I.

	c) of Environmental Management Plan	a) Environmental monitoring for SPM, NOx, SOx, CO emission are being carried out as per the condition of Environmental Clearance vide letter no. J-11015/38/99-IA. II (M) dated 21st July 2003. The detail environmental monitoring report is enclosed herewith (Hard Copy)
7	Breakup of the project area a) Submergence area: Forest & Non forest b) Others	There is no forestland in and around of this project.
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 had previously used for agricultural purpose. There were no dwelling units/ houses previously existing in such area.
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 2021.	Project cost is 325 Crores based on price reference of the year 2009. The details provided in Annexure- I with this data sheet. Rate of return for the Mangrol- Valia Mining Project is @2.15% for the year 2021. Environmental Management cost included. 325.00Crores 12.5841 Lakh for Green belt development & maintenance. Dump plantation & maintenance. preparation & cleaning of silting ponds, catch drains, garland drains, Environmental Monitoring instruments, dust suppression measures, remote sensing imaginaries, Groundwater quality monitoring
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 a forestation if any d) Comments on viability and sustainability of compensatory a forestation 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)	:	22.05.2010 (Actual) for Mangrol Pit and 25.10.2012 for Valia Pit of Mangrol - Valia Lignite Mine. Project is planned for 30 years.
13	Reason for delay if the project is yet to start	:	
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	:	----- -----
15	The monitoring report may contain the details of all the letters issued so far (vide the letters as mentioned)	:	• Environmental Clearance accorded vide Letter no. J-11015/38/99-IA. II (M) dated 21st July 2003.

M A Nipane
14.02.2022

M A Nipane
Addl. General Manager (Mines)
Mangrol-Valia Lignite mine

ANNEXURE - I

Sub: Expenditure made for the Environmental Management Plan with item wise & year wise break-up.
(All figures are in Lac Rs.)

Year →	→	2016	2017	2018	2019	2020	Jan -Jun 2021	Jul -Dec 2021
Item ↓	Particulars of the activities							
Development of Peripheral Green Belt.	Green Belt development along lease boundary of Mangrol - Valia Mine using Forest Species & Seeding & Gap Filling	6.05	-----	-----	-	66.55	9.38	3.2
Maintenance & protection of Greenbelt	Maintenance & protection of Greenbelt (Along lease boundary of Valia Mine & Lignite Transport Road)	20.34	-----	-----	-	----	--	-
Dump plantation & maintenance	Plantation on black cotton at External Dump	0.96	-----	-----	-	----	--	-
Preparation, cleaning of settling pond, catch drains, Garland drains etc	Plantation through seeding at External Dump	---	---	---	---	---	---	---
Monitoring of Environmental parameter	Silting pond for settlement of suspended solids from the discharge mine water, being pumped out during the monsoon season.	6.90	26.4	12.39	20.56	25.04	17.79	5.89
Dust suppression measures in mines	Monitoring of Environmental parameters viz. Air quality (SPM, SOx, NOx, 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.	4.22	2.81	2.47	1.14	1.14	0.57	0.57
Remote sensing Imageries of the region.	Round the clock water spraying and road grading prevents formation & emission of Dust	81.0	67.5	56.6	60.4	63.41	44.19	22.45
Ground Water quality monitoring	Three year stage remote sensing to monitor the changes in the land use pattern and related impacts due to mining.	-	-----	3.26	-	-	---	-
Total....	Ground water level & quality monitoring in the core as well as buffer zone	0.67	-----	0.65	0.50	1.0	-----	.0106
Total (Cummulative)		120.14	96.71	120.74	82.60	157.14	71.93	32.121
		1004.35	1101.06	1221.8	1304.40	1461.54	1533.47	1565.59

M A Nipane
Addl. General Manager (Mines)
Mangrol-Valia Lignite mine

PLANTATION ACTIVITY FROM 2011 TO Dec. - 2021

S.No.	Year	Code	Location	Area (Ha)	No. of trees
(A) Peripheral green belt development					
1	From year 2012 to June 2018	GBD-MA	Both side of alternative Shah Road & Lignite Transport Road & Out plant stockyard	11.0	16410
2		GBD-MB	Both side of Lignite Transport Road	9.5	15344
3		GBD-MC	Lease Boundary of Mangrol Pit	5.0	12437
4		GBD-MD	Lease Boundary of Mangrol Pit	2.4	3400
		GBD-VA	Lease Boundary around Valia Pit	95.5	153509
TOTAL(A)				121.0+2.4	197700+3400
(B) Dump Plantation					
1	2012	---	External dump Valia Mine	-	-
(C) Seed Spraying					
1	2012	----	External dump(Valia Mine)	02.0	100 Kg
2	2013	----	Mangrol pit dump	05.0	200 Kg
3	2014	----	Along periphery of Mangrol Mine	08.0	100 Kg
4	2015	----	Along OB dump benches of Valia Mine	05.0	05 Kg
5	2018	-	Along periphery of Mangrol Mine	-	-
6	2019	-	Along OB dump benches of Valia Mine	-	-
7	2020	-	-----	-	-

M.A.N.P.
14.02.2022

M A Nipane
Addl. General Manager (Mines)
Mangrol-Valia Lignite mine

WATER LEVEL DATA RECORDED AT VALIA LIGNITE MINE SITE

Location: N 21° 29' 42.8" E 73° 11' 20.3"

Date	Time	Height(m)	Temp(*C)
11-08-2021	11:08	8.83	32.82
11-08-2021	11:10	8.83	32.84
11-08-2021	11:12	8.83	32.85
11-08-2021	11:14	8.83	33.00
11-08-2021	11:16	8.83	32.26
11-08-2021	12:03	9.05	33.00
12-08-2021	00:00	8.77	33.05
12-08-2021	06:00	8.63	32.88
13-08-2021	00:00	9.04	33.52
13-08-2021	06:00	8.64	32.32
13-08-2021	12:00	9.35	32.94
14-08-2021	00:00	8.87	33.02
14-08-2021	06:00	8.69	33.02
14-08-2021	12:00	8.76	33.08
14-08-2021	18:00	9.12	33.47
15-08-2021	00:00	8.78	33.50
15-08-2021	06:00	8.58	32.27
15-08-2021	12:00	8.54	32.18
15-08-2021	18:00	8.60	33.55
16-08-2021	00:00	8.59	32.77
16-08-2021	06:00	8.45	32.20
16-08-2021	12:00	8.26	32.60
16-08-2021	18:00	9.56	32.43
17-08-2021	00:00	9.11	33.49
17-08-2021	06:00	8.69	32.93
17-08-2021	12:00	9.04	32.27
17-08-2021	18:00	9.67	32.54
18-08-2021	00:00	9.83	32.16
18-08-2021	06:00	9.06	32.22
18-08-2021	12:00	8.70	33.47
18-08-2021	18:00	8.81	32.42
19-08-2021	00:00	8.54	32.15
19-08-2021	06:00	8.44	32.95
19-08-2021	12:00	8.93	32.27
19-08-2021	18:00	8.38	32.10
20-08-2021	00:00	8.20	32.05
20-08-2021	06:00	8.25	32.69
20-08-2021	12:00	9.70	32.23
20-08-2021	18:00	8.95	33.54
21-08-2021	00:00	9.66	32.96
21-08-2021	06:00	8.85	32.13
21-08-2021	12:00	9.02	32.74
21-08-2021	18:00	8.94	32.23

22-08-2021	00:00	9.03	33.43
22-08-2021	06:01	8.82	33.61
22-08-2021	12:00	8.80	33.49
22-08-2021	18:00	8.44	32.19
23-08-2021	00:00	8.77	33.63
23-08-2021	06:00	8.43	33.57
23-08-2021	12:00	8.61	32.58
23-08-2021	18:00	8.69	32.31
24-08-2021	00:00	9.01	32.29
24-08-2021	06:00	8.63	32.68
24-08-2021	12:00	8.93	32.25
24-08-2021	18:00	9.09	33.21
25-08-2021	00:00	8.77	33.24
25-08-2021	06:00	8.45	32.07
25-08-2021	12:00	8.60	32.22
25-08-2021	18:00	8.51	33.50
26-08-2021	00:00	8.95	33.52
26-08-2021	06:00	8.53	32.23
26-08-2021	12:00	8.60	33.45
26-08-2021	18:00	8.56	33.43
27-08-2021	00:00	9.10	32.20
27-08-2021	06:00	8.51	33.31
27-08-2021	12:00	8.31	32.23
27-08-2021	18:00	8.38	32.24
28-08-2021	00:00	8.70	32.28
28-08-2021	06:00	8.33	33.15
28-08-2021	12:00	8.89	33.39
28-08-2021	18:00	8.69	32.66
29-08-2021	00:00	8.50	32.19
29-08-2021	06:00	8.30	32.98
29-08-2021	12:00	9.01	32.28
29-08-2021	18:00	8.80	32.88
30-08-2021	00:00	8.94	33.54
30-08-2021	06:00	8.42	32.00
30-08-2021	12:00	8.14	33.24
30-08-2021	18:00	8.11	32.20
31-08-2021	00:00	8.02	33.56
31-08-2021	06:00	7.92	33.08
31-08-2021	12:00	9.45	32.71
31-08-2021	18:00	9.51	32.25
01-09-2021	00:00	8.93	32.07
01-09-2021	06:00	8.42	32.84
01-09-2021	12:00	8.44	33.33
01-09-2021	18:00	9.81	33.48
02-09-2021	00:01	9.58	33.24
02-09-2021	06:00	8.89	32.13
02-09-2021	12:00	9.30	33.38
02-09-2021	18:00	9.35	33.42
03-09-2021	00:00	9.19	32.24
03-09-2021	06:00	9.01	33.48

03-09-2021	12:00	9.39	32.30
03-09-2021	18:00	9.45	33.30
04-09-2021	00:00	9.01	32.28
04-09-2021	06:00	8.85	32.27
04-09-2021	12:00	8.96	33.06
04-09-2021	18:00	9.19	32.28
05-09-2021	00:00	8.80	32.76
05-09-2021	06:00	8.60	32.76
05-09-2021	12:00	9.92	32.49
05-09-2021	18:00	9.24	32.36
06-09-2021	00:00	9.44	33.50
06-09-2021	06:00	8.70	32.49
06-09-2021	12:00	9.03	32.91
06-09-2021	18:00	8.84	33.52
07-09-2021	00:00	8.53	33.59
07-09-2021	06:00	8.26	32.49
07-09-2021	12:00	8.53	33.02
07-09-2021	18:00	8.30	32.15
08-09-2021	00:00	8.56	33.39
08-09-2021	06:00	8.07	32.88
08-09-2021	12:00	8.60	32.14
08-09-2021	18:00	8.71	32.24
09-09-2021	00:00	8.40	32.60
09-09-2021	06:00	7.97	32.98
09-09-2021	12:00	8.57	32.28
09-09-2021	18:00	8.04	32.70
10-09-2021	00:00	8.46	32.61
10-09-2021	06:00	8.10	32.18
10-09-2021	12:00	8.34	32.62
10-09-2021	18:00	7.88	32.16
11-09-2021	00:00	8.09	33.52
11-09-2021	06:00	8.03	32.74
11-09-2021	12:00	8.17	32.22
11-09-2021	18:00	8.04	33.45
12-09-2021	00:00	8.50	33.25
12-09-2021	06:00	7.85	32.11
12-09-2021	12:00	9.04	32.41
12-09-2021	18:01	8.16	32.47
13-09-2021	00:00	7.65	32.03
13-09-2021	06:00	7.50	31.98
13-09-2021	12:00	7.38	33.20
13-09-2021	18:00	7.29	32.03
14-09-2021	00:00	7.93	32.80
14-09-2021	06:00	7.38	32.83
14-09-2021	12:00	7.36	32.81
14-09-2021	18:00	7.36	33.16
15-09-2021	00:00	7.43	33.34
15-09-2021	06:00	7.21	33.62
15-09-2021	12:00	7.55	32.11
15-09-2021	18:00	7.48	32.90

16-09-2021	00:00	6.44	32.22
16-09-2021	06:00	6.62	33.51
16-09-2021	12:00	7.53	33.46
16-09-2021	18:00	7.77	33.46
17-09-2021	00:00	7.90	33.52
17-09-2021	06:00	7.29	33.61
17-09-2021	12:00	6.96	32.36
17-09-2021	18:00	7.44	32.15
18-09-2021	00:00	7.11	31.97
18-09-2021	06:00	6.92	33.51
18-09-2021	12:00	7.05	33.33
18-09-2021	18:00	7.02	32.70
19-09-2021	00:00	6.87	33.37
19-09-2021	06:00	6.80	32.51
19-09-2021	12:00	7.45	32.62
19-09-2021	18:00	7.31	33.44
20-09-2021	00:00	7.43	32.11
20-09-2021	06:00	6.91	33.57
20-09-2021	12:00	7.08	33.43
20-09-2021	18:00	7.29	33.16
21-09-2021	00:00	7.27	33.51
07-10-2021	16:00	5.87	33.15
10-08-2021	00:00	5.39	33.40
10-09-2021	00:00	5.76	32.10
10-10-2021	00:00	5.26	33.23
10-11-2021	00:00	6.06	32.40
10-12-2021	00:00	6.02	33.50
10-12-2021	06:00	5.69	32.27
13/10/21	00:00	5.81	32.52
14/10/21	00:00	5.75	33.38
14/10/21	06:00	5.61	33.39
14/10/21	12:00	5.75	32.11
15/10/21	00:00	5.89	33.36
15/10/21	06:00	5.71	33.45
15/10/21	12:00	5.71	33.39
16/10/21	00:00	5.54	32.75
17/10/21	00:00	5.48	33.26
18/10/21	00:00	6.04	32.62
19/10/21	00:00	5.73	33.31
20/10/21	00:00	6.39	33.33
21/10/21	00:00	5.84	32.10
22/10/21	00:00	5.75	32.06
22/10/21	06:00	5.68	31.95
23/10/21	00:00	5.61	33.50
23/10/21	06:00	5.54	33.52
24/10/21	00:00	5.47	33.01
24/10/21	06:00	5.47	32.98
25/10/21	00:00	6.89	32.07
26/10/21	00:00	6.63	32.31
27/10/21	00:00	6.03	32.21

28/10/21	00:00	5.37	32.07
28/10/21	06:00	5.36	32.05
29/10/21	00:00	5.63	32.97
29/10/21	06:00	5.62	32.67
30/10/21	00:00	5.79	31.98
31/10/21	00:00	6.62	32.25
11-01-2021	00:00	6.11	31.97
11-02-2021	00:00	6.06	32.07
11-02-2021	06:00	5.76	33.26
11-03-2021	00:00	5.76	32.80
11-04-2021	00:00	5.85	33.46
11-05-2021	00:00	5.52	33.42
11-06-2021	00:00	5.71	33.49
11-06-2021	06:00	5.67	32.22
11-06-2021	12:00	5.77	32.21
11-06-2021	18:00	5.79	33.41
11-07-2021	00:00	5.99	31.97
11-07-2021	06:00	5.54	31.93
11-07-2021	12:00	5.54	32.49
11-07-2021	18:00	5.48	32.44
11-08-2021	00:00	6.26	32.33
11-08-2021	06:00	5.88	32.67
11-08-2021	12:00	5.60	32.47
11-08-2021	18:00	5.66	32.03
11-09-2021	00:00	5.53	31.96
11-09-2021	06:00	5.80	31.94
11-09-2021	12:00	5.68	33.40
11-09-2021	18:00	5.67	32.64
11-10-2021	00:00	5.49	33.54
11-10-2021	06:00	5.39	32.73
11-10-2021	12:00	5.77	32.03
11-10-2021	18:00	5.49	32.22
11-11-2021	00:00	5.32	31.54
11-11-2021	06:00	5.63	31.09
11-11-2021	12:00	5.46	33.44
11-12-2021	00:00	5.35	31.92
13/11/21	00:00	5.25	33.55
14/11/21	00:00	5.54	33.50
14/11/21	06:00	5.52	32.23
14/11/21	12:00	5.95	33.44
15/11/21	00:00	5.69	33.21
16/11/21	00:00	5.64	31.93
17/11/21	00:00	5.45	32.44
18/11/21	00:00	5.80	33.21
19/11/21	00:00	5.68	32.13
20/11/21	00:00	5.46	33.54
21/11/21	00:00	5.40	32.09
22/11/21	00:00	5.23	33.38
23/11/21	00:00	5.37	33.38
24/11/21	00:00	5.41	32.79

25/11/21	00:00	5.57	32.50
26/11/21	00:00	5.41	32.74
27/11/21	00:00	5.32	32.13
28/11/21	00:00	5.39	32.25
29/11/21	00:00	6.00	32.63
30/11/21	00:00	5.78	32.17
12-01-2021	00:00	5.43	32.65
12-02-2021	00:00	5.31	33.68
12-03-2021	00:00	5.45	33.46
12-04-2021	00:00	5.43	33.33
12-04-2021	06:00	5.44	31.87
12-05-2021	00:00	5.32	33.51
12-06-2021	00:00	5.28	33.13
12-06-2021	06:00	5.40	32.11
12-07-2021	00:00	5.27	33.35
12-08-2021	00:00	5.30	31.88
12-09-2021	00:00	5.15	31.86
12-10-2021	00:00	5.11	32.29
12-11-2021	00:00	5.16	31.85
12-11-2021	06:00	5.31	31.88
12-11-2021	12:00	5.16	32.18
12-11-2021	18:00	5.30	33.41
12-12-2021	00:00	5.10	32.00
12-12-2021	06:00	5.29	33.55
12-12-2021	12:00	5.25	31.92
12-12-2021	18:00	5.26	32.27
13/12/21	00:00	5.24	32.23
13/12/21	06:00	5.23	33.53
13/12/21	12:00	5.38	32.62
13/12/21	18:00	5.34	32.09
14/12/21	00:00	5.24	33.36
14/12/21	06:00	5.17	32.67
14/12/21	12:00	5.02	31.96