



# GUJARAT STATE ELECTRICITY CORPORATION LIMITED

Sikka Thermal Power Station, At PO Sikka, Dist Jamnagar – 361141. Ph. 91-288-2344106  
Fax: 91-288-2344033, 2344071 e-mail: [cegstps.gsecl@gebmail.com](mailto:cegstps.gsecl@gebmail.com) Website: [www.gsecl.in](http://www.gsecl.in)  
CIN: U40100GJ1993SGC019988

No. CE / STPS / SE [Operation] / EFF-R-32 / XGN ID 16969 /6791

Date: 26/11/2021

BY: RPAD

To,  
The Additional Principal Chief Conservator of Forests (C),  
Minister of Environment, Forest & Climate Change,  
Regional Office (Western Region),  
Kendriya Paryavaran Bhavan,  
Link Road No.3, E-5, Ravishankarnagar,  
BHOPAL – 462 016 (MP)  
E-mail: [rowz.bpl-mef@nic.in](mailto:rowz.bpl-mef@nic.in)

Subject: 2 x 250 MW Imported Coal Based TPP Extension Unit 3&4 at Sikka,  
Jamnagar by GSECL – Environmental Clearance – Regarding.

Ref.No.: 1). MoEF EC no. J-13011/2/2003.IA-II (T) dated 24/05/2005.  
2). CE/STPS/2X250 MWH/EC/668, dated 07/05/2015.

Respected Sir,

With reference to above subject matter, the compliance report to the Environment Clearance conditions in the prescribed format from Gujarat State Electricity Corporation Limited, Sikka Thermal Power Station is as under.

Sr. No.	Point	Compliance As on 30 <sup>th</sup> Sep'2021
01.	The conditions stipulated by Gujarat Pollution Control Board vide their letter No: PC/NOC/JMN-16(4)/30535 dated 7 <sup>th</sup> October 2002 shall be strictly implemented.	The Project proposal considers all aspects covered by NOC of G.P.C.B. as follows: 1. Necessary agreement for Narmada water & Sasoi dam water had been carried out to overcome water requirement of Plant and Colony. 2. Stack, Ambient Norms and Effluent Norms had been met & shall be ensured. 3. All applicable EP Act and Water cess Act Norms had been met & shall be ensured.
02.	Regularization of land area of the existing plant shall be obtained under the Forest [Conservation] Act 1980 and Wildlife [Projection] Act, 1972 and its amendments before starting work on this project.	This land has been regularized vide MoEF order no. 8-116/2006-FC dtd.28/06/2010.

Sr. No.	Point	Compliance As on 30 <sup>th</sup> Sep'2021
03.	The Project Authority shall surrender 6 ha of land, presently under the possession of Gujarat Electricity Board to the State Government.	Land allotted vide 0.0. No. JMR/4/200/93/ dated 10/02/1993. But STPS has requested collector to cancel this land, as this land has been falling in CRZ area (vide letter No. 1584 dated 04/02/2005).  Possession of this land was not taken due to falling in CRZ area.
04.	Expansion of the project shall not be carried out in CRZ area except for setting up of raw water intake pump house.	No Unauthorized construction activities are falling under the CRZ area.
05.	The coal to be used shall not have more than 14-16% Ash content and 0.8% Sulphur content.	The coal being used having an Ash content lower than 14-16 % and sulphur content lower than 0.8% and shall be ensured.
06.	Copy of confirmed coal linkage with fuel analysis report shall be submitted to the Ministry within a period of six months from the date of clearance.	Procurement order for long term supply of imported coal is issued vide letter no. GSECL / Fuel / LT / Imp Coal / Sikka / CIF / Adani / 884, dated 28/10/2014 & same had been submitted.
07.	Two stacks of 220 m each shall be provided with continuous online monitoring system. Exit velocity of 20 m/sec shall be maintained from these stacks.	MOEF has issued amendment for single multi-flue stack of 220m height as per the application vide GPCB letter no. PC/JMN-16/24813 dated 04/08/2003.  The stacks have been constructed with continuous online monitoring system.
08.	Electrostatic Precipitators [ESPs] having efficiency of not less than 99.9% be installed so as to ensure that SPM emissions do not exceed 100 mg/Nm <sup>3</sup> .	The ESP's have been installed for both units having efficiency not less than 99.9%.
09.	Fly Ash shall not be dumped into the existing Ash pond and Ash generated shall be collected in silos for further utilization. Ash generated shall be used in a phased manner as per the provisions of the notification on Fly Ash Utilization issued by the Ministry in September 1999 and its amendments. By the end of 9 <sup>th</sup> year of commissioning of the plant, 100% fly Ash utilization shall be ensured.	There are 2 dry Ash & 2 wet (pest) Ash silo constructed.  Ash generated is used in such a manner that, Fly Ash notification is being complied.  Ash utilization for the last year 2020-21 is 380.21 % for the GSECL, Sikka TPS.

Sr. No.	Point	Compliance As on 30 <sup>th</sup> Sep'2021
10.	Surface water requirement shall not exceed 5260 m <sup>3</sup> /day. A dedicated RO system shall be installed. Wastewater shall not be discharged into the eco-sensitive area and Marine Park/Sanctuary area, which are in the vicinity of the project.	Surface water requirement has been not exceeding 5260 m <sup>3</sup> /day.  A R.O. system is already installed.  Waste water from the plant is not discharge into the eco-sensitive area & Marine Park / sanctuary area.
11.	Rainwater harvesting shall be adopted. Central Groundwater Authority Board shall be consulted for finalization of appropriate water harvesting technology within a period of three months from the date of clearance.	Rain water Harvesting System had been adopted in colony.
12.	Regular monitoring of water quality including heavy metals shall be undertaken around Ash dyke and the project area to ascertain that there is no leaching of contaminants from the Ash disposal area.	Regular water quality including heavy metals is being monitored once in a month or two month and shall be ensured.
13.	Noise level in the work zone shall not exceed 75 dB (A). Requisite Personal Protection Equipment including earplugs shall be provided to the persons working in the high noise area.	Noise level in the work zone has been not exceeding 75 dB (A) and PPEs are being provided to employees working in the high noise area.
14.	Greenbelt of 10-15 m along the plant boundary shall be developed covering an area of 14 ha.	Greenbelt of 14 ha area developed.
15.	Regular monitoring of the air quality shall be carried out in and around the power plant and records shall be maintained. Six monthly monitoring reports shall be submitted to this Ministry.	Air quality monitoring around the plant has carried out and same was reported to GPCB & CPCB every month.  Monthly report data from April'2021 to Sep'2021 is attached herewith.
16.	For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant shall be ensured.	Being Implemented.
17.	The project proponent shall advertise at least in two local newspapers widely circulated in the region around the project one of which should be in the vernacular language of the locality concerned informing that the project has been accorded environmental clearance and copies of clearance letter is	It is already published.

Sr. No.	Point	Compliance As on 30 <sup>th</sup> Sep'2021
	available with the State Pollution Control Board/Committee and at Website of the Ministry of Environment and Forests at <a href="http://envior.nic.in">http://envior.nic.in</a> .	
18.	A separate environment-monitoring cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Separate Environment Cell is already formed at STPS with SE (Operation), EE(Effi.), Chief Chemist, EE(Civil) and DE(Environment) as its members to look after implementation of the stipulated environmental safeguard.  This team is directly working under the control of power station Chief. Moreover, Corporate Office Environment Cell also provides necessary guidance.
19.	Half yearly reports on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to this Ministry/Regional office/CPCB/SPCB.	Six monthly reports from April'2021 to Sep'2021 are submitted herewith.
20.	Regional Office of the Ministry of Environment & Forests located at Bhopal will monitor the implementation of the stipulated conditions. Complete set of documents including Environmental Impact Assessment Report and Environment Management Plan etc. shall be forwarded to the Regional Office for their use during monitoring.	Already submitted.
21.	Funds shall be allocated separately for each action point for implementation of environmental protection measures by the project authorities. This cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for any other purposes and year-wise expenditure shall be reported to the Ministry.	Agreed, Recurring Expenditure on Environmental Management for the year 2020-21 is submitted herewith.
22.	Full cooperation shall be extended to the Scientists / Officers from the Ministry / Regional Office of the Ministry at Bhopal / CPCB / SPCB during monitoring of the project.	Will be provided.

**Recurring Expenditure on Environmental Management**  
For the year 2020-21 (April 2020-March 2021)

Sr. No.	Expenses on	Amount Rs.	Remarks
	Salaries & Wages of staff of Env. Cell	1032183	<b>Amount Rs.</b>
2	Payment to Contractors for monthly monitoring	308598	
3	Fees / Payments to Environment Auditors	359509	
4	Consent / Audit / Other Fees to GPCB	10000	
5	Payment to GPCB for sampling and analysis	0	
6	In-house sampling and analysis cost	0	
7	Payment of Water Cess to GPCB	0	
8	Maintenance costs for Ash Handling	67200000	Including Silo & Slurry System
9	Purchase / Maintenance of Equipments for Environment laboratory	254000	
10	Gardening and Plantation	3609050	
11	Ash Dyke construction, area grading, maintenance of bunds	85000	
12	Maintenance of ESPs and spares apart from electric power consumption	1716557	
13	Misc. Civil Works for Environment	3009000	
14	Maintenance of On-line Monitors	777000	
15	Attending of Coal Mill / Pipe leakages and Duct leakages	600988	
16	Maintenance of Neutralizing Pits / Cost of chemicals used	173586	
17	Maintenance cost of water spraying, DSS / DES / control of fugitive dust	570680	
18	Maintenance of SILOs	0	
19	Expenses / Maintenance of ETP	400000	
20	Expenses / Maintenance of STP	1080609	
21	Participation in Environment related Seminars / Conferences / Training programme / World Environment Day	9687	
22	Waste Oil, Resin and Battery management	0	
23	Bio-medical wastes management	141632	
	<b>Total Expenditure (Recurring ) Rs.</b>	<b>81338079</b>	
In addition to above, the Capital expenditure done for Environment Upgradation is as under.			
1	R&M of Ash handling Plant	0	
2	Capital expenditure on Dry Fog D.S.S.	0	
3	Shed for Waste oil	0	
4	R&M of ESP for Microprocessor controls	0	
5	Online System (Flue Gas / Effluent)	0	
	<b>Total Capital Expenditure Rs.</b>	<b>0</b>	

## Ambient Air Quality monitoring data for April'2021 to Sep'2021

Month	PM10 $\mu\text{g}/\text{m}^3$ GPCB limit 100			PM2.5 $\mu\text{g}/\text{m}^3$ GPCB limit 60			SO2 $\mu\text{g}/\text{m}^3$ GPCB limit 80			NO2 $\mu\text{g}/\text{m}^3$ GPCB limit 80		
	Main Gate	Service Building	Market Colony	Main Gate	Service Building	Market Colony	Main Gate	Service Building	Market Colony	Main Gate	Service Building	Market Colony
Apr-21	73	69	65	45	40	36	23.8	23.8	19.2	14.56	15.34	13.65
May-21	76	73	69	48	43	39	29.2	19.5	17	20.3	12.2	11.1
Jun-21	60.8	76	52	27.5	29.2	25.8	17.2	11.3	18.2	11.8	16.4	11
Jul-21	56.16	72.82	54.58	23.33	27.08	26.66	15.31	12.25	20.99	9.88	14.81	14.09
Aug-21	51.3	66.43	61.52	24.58	28.74	28.74	11.38	9.11	25.35	7.6	11.4	19.48
Sep-21	53.39	56.94	55.83	22.5	26.24	26.66	13.31	7.65	13.85	8.65	13.84	16.14
Average	<b>61.78</b>	<b>69.03</b>	<b>59.66</b>	<b>31.82</b>	<b>32.38</b>	<b>30.48</b>	<b>18.37</b>	<b>13.94</b>	<b>19.10</b>	<b>12.13</b>	<b>14.00</b>	<b>14.24</b>
Month	PM10 $\mu\text{g}/\text{m}^3$ GPCB limit 100			PM2.5 $\mu\text{g}/\text{m}^3$ GPCB limit 60			SO2 $\mu\text{g}/\text{m}^3$ GPCB limit 80			NO2 $\mu\text{g}/\text{m}^3$ GPCB limit 80		
	Panchvati Market	Jogwad Village	Mungani Village	Panchvati Market	Jogwad Village	Mungani Village	Panchvati Market	Jogwad Village	Mungani Village	Panchvati Market	Jogwad Village	Mungani Village
Apr-21	58	60	56	29	35	32	14.2	12.1	12.1	19.06	19.45	22.28
May-21	63	66	59	34	38	31	19.5	12.3	9.7	23.3	18.7	19.5
Jun-21	70.8	66.5	59.8	27.5	29.6	29.6	22.2	<5	<5	13	10	6.5
Jul-21	68.84	69.25	61.24	29.99	32.08	31.24	25.27	<5	<5	15.25	12.05	7.03
Aug-21	59.8	63.58	55.1	26.24	27.49	24.16	20.57	5.4	8.09	10.96	8.65	9.99
Sep-21	56.33	52.02	52.05	27.49	22.91	25	13.04	8.61	7.11	16.28	10.28	8.2
Average	<b>62.80</b>	<b>62.89</b>	<b>57.20</b>	<b>29.04</b>	<b>30.85</b>	<b>28.83</b>	<b>19.13</b>	<b>9.60</b>	<b>9.25</b>	<b>16.31</b>	<b>13.19</b>	<b>12.25</b>

This is for information and further needful please.

Thanking you,

Yours faithfully,  
For, Gujarat State Electricity Corporation Ltd.,

S/d.26/11/2021  
I/c. Chief Engineer (GEN)  
GSECL, Sikka TPS

Encl: As above.

Copy to:

- (1) The Member Secretary,  
Gujarat Pollution Control Board,  
Paryawaran Bhavan, Sector 10A,  
Gandhinagar- 382010
- (2) The Regional Director  
Central Pollution Control Board,  
Parivesh Bhawan, Aatmajyoti Ashram Rd,  
Opp. VMC Ward Office No. 10, Subhanpura,  
Vadodara, Gujarat 390023
- (3) Regional Officer,  
Gujarat Pollution Control Board,  
Sardar Patel Bhavan, Rameshwarnagar,  
Jamnagar – 361008
- (4) The CE (P & P), GSECL, CO, Vadodara.
- (5) The CE (GEN), GSECL, CO, Vadodara.
- (6) The CE (Civil), GSECL, CO, Vadodara.
- (7) The SE (Project), GSECL, Sikka TPS.
- (8) The SE (Civil), GSECL, Sikka TPS.

By e-mail:

cepnp.gsecl@gebmail.com;  
cegen.gsecl@gebmail.com;  
cecivil@gebmail.com;  
seprojsikka.gsecl@gebmail.com;  
secivilstps.gsecl@gebmail.com