

REGD. A/D

ACL/EMD/F-16/2022/2682

18.11.2022

The Director,

Ministry of Environment, Forest and Climate Change (MoEF&CC), Regional Office, Western Region, "Kendriya Paryavaran Bhavan" Link Road No.3, Ravi Shankar Nagar, Bhopal – 462016 (M.P.)

Sub.: Half Yearly Compliance Status Report of Environmental Clearance of *Thermal Power Plant* Unit of Ambuja Cements Ltd.

Ref.: Environmental Clearance Order No. J -13012/20/2004.l (A)-II (T) dated 15th March 2005 & amendment on 03rd June 2009 and 03rd December 2009.

Sir,

We are pleased to submit herewith half yearly compliance status report (i.e. for the period of (April'2022 to September'2022) of Environmental Clearance Order No. 13012/20/2004.I(A)-II (T) granted by MoEF&CC to 90 MW *Thermal Power Plant* Unit of Ambuja Cements Ltd., located at Ambujanagar, Taluka - Kodinar, District - Gir Somnath (Gujarat).

This is for your information and record please.

Thanking you,

Yours Faithfully,

For Ambuja Cements Ltd.

Devendra Singh Chauhan Head-Environment

Encl.: As above.

Copy to:

- The Central Pollution Control Board (CPCB) Parivesh Bhawan, Atmajyoti Ashram
 Rd, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara 390023 (Gujarat).
- 2) The Member Secretary, Gujarat Pollution Control Board (GPCB), Paryavaran Bhavan, Sector-10-A, Gandhinagar-382010
- The Regional Officer, Gujarat Pollution Control Board (GPCB), Opp. Saint Anne's Church Station Road, Junagadh.

MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS

Ministry of Environment & Forests Regional Office (W), Bhopal Monitoring Report Part-I

DATA SHEET

		_	
01	Project type	:	Thermal Power Plant
02	Name of the project	:	Captive Thermal Power Plant (90 MW) for Cement Plant (5.7 MTPA capacity), Taulka Kodinar, Dist Gir Somnath & Bulk Cement Terminal, Village Muldwarka, Dist Gir Somnath
03	Clearance letter(s) / OM no. and date	:	Letter No. J – 13012/20/2004. IA –II (T) dated 15 th March and 18 th March, 2005, amended on 03 rd June 2009 & 3 rd December 2009.
04	Location	:	
	a) District(s)	:	Gir Somnath
	b) State(s)	1:	Gujarat
	c) Latitude	1:	21° 00′ N
	d) Longitude	:	70° 30' E
05	Address for correspondence	:	
	 a) Address of concerned Project Chief Engineer (with pincode & telephone / telex / fax numbers). 	;	Sh. Devendra Singh Chauhan Head (Environment) Ambuja Cements Ltd. PO Ambujanagar, Taluka: Kodinar, Pin- 362715 District: Gir Somnath (Gujarat). Tel: 02795-221137/232009/237403 Fax: 02795-220328/232032
	b) Address of Executive Project	:	Shri Rajesh Vadher (Head -TPP)
	Engineer / Manager (with pincode / fax numbers.		PO Ambujanagar, Taluka: Kodinar, Pin- 362715 District: Gir Somnath (Gujarat).
06	Salient features	+	Tel: 02795-237220/237221 Fax: 02795-220328/232032
	a) of the project		 This is a CPP Fuels are Indigenous Coal, Imported Coal, Petcoke, Lignite in Blend 3 nos. of CFBC Boilers each having capacity of 135 TPH, 87 kg/cm² temperature 515°c Air cooled Condenser (ACC)
	b) of the environmental management plans		 a) Construction Phase Proper disposal of construction waste done during construction phase. Minimize noise by using acoustic enclosure for boiler, Low noise generation equipments viz boier and compressor area. Ear muffs & ear plugs are provided to workers engaged at high noise area. visuals for safe working in high noise are displayed at various location. Spraying suppression at regular intervals. Operation Phase An Environment Management Division (EMD) with suitable qualified staff has been set up as per company's policy with adequate monitoring instrument and other infrastructure for implementation of the stipulated environmental safeguards.



			A A A A A A	Continuous online monitoring systems for measurements of particulate matter, SO ₂ & NO _x have been installed at boiler stack and data are continuously uploading to CPCB website & GPCB website. Ambient Air Quality Monitoring is being regularly carried out at three locations for PM 10, PM 2.5, SO ₂ , NO _x and the monitoring report is being regularly submitted to SPCB & MoEF&CC Bhopal. Occupational Exposure Monitoring – Worker's exposure to coal dust, fly ash & noise is being regularly carried out in plant area. Meteorology - Wind speed, wind direction, temperature, relative humidity & rainfall is being regularly monitored and record maintained on daily basis. Water Quality Monitoring – Waste water quality monitoring of RO plant is ensured. Waste water from RO plant is being stored in closed Water tank and used for cooling process in cement plant after neutralization. Fly Ash Utilization Plan – Imported coal is being used as fuel in Power plant with low sulphur content. Fly ash generated from TPP is being stored in closed silos and 100% utilization in cement manufacturing in Cement plant in environment friendly manner. Adequate air pollution control equipments like ESP's and Bag filters have been installed for effective air pollution control.
07	Breakup of the project area.	-		Not applicable
	a) Submergence area (forest & non-forest) b) Others	:	ļ	Not applicable
08	Breakup of the project affected population	:		4.8 ha (excluding cement plant). Not applicable
00	with enumeration of those losing houses /	•		As CPP is built on the already land occupied for cement
	dwelling unit's only agricultural land only,			
11	both dwelling units & agricultural land &	aŝjī	-Era	plant.
	landless labourers / artisan.			
	a) SC, ST / Adivasis	:		No.
	b) Others	:		
09	Financial details	:		
-	a) roject cost as originally planned and	:		Rs. 300 Crore, Year 2005
	subsequent revised estimates and the			Rs. 226.90 Crore for Steam Turbine Generator 1 & 2 in 2007
	year of price reference.			and 106.21 Crore for Steam Turbine Generator 3 in 2010
	b) Allocation made for environmental	1;		Rs. 16.61 Crore were allocated for Environment Management
	management plans with item wise and			Plan and it included in Project cost
	year wise breakup	×		
	c) Benefit cost ratio / Internal rate of return	:		Approx. 8% in 2015-16
5	and the year of assessment.	;		
	d) Whether (c) includes the cost of	:	ļ	Yes
	environmental management as shown in		4	
	the above.			notana no de la comita de la comi
	e) Actual expenditure incurred on the project	:		Rs. 336.11 Cr.
	so far.			
				CEME

	f) Actual expenditure incurred on the environmental management plans so far.	:	Rs. 16.61 Cr.
10	Forest land requirement.		
	a) The status of approval for diversion of forest land for non-forestry use	:	Not applicable.
	b) The status of clearing felling	:	No clearing felling
	c) The status of compensatory afforestation, if any	:	Not Applicable
	d) Comments on the viability & sustainability of compensatory afforestation programme in the light of actual field experience so far.	:	Not Applicable
11	The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.	:	No Clearing felling
12	Status of construction.	:	
	a. Date of commencement (Actual and / or planned)	:	Not applicable.
	b. Date of completion (Actual and / or	:	60 MW commissioned in November 2007
	planned).		30 MW commissioned in January 2010
13	Reasons for the delay if the project is yet to start.	;	Not applicable.
14	Dates of site visits	:	
	 The dates on which the project was monitored by the Regional Office on previous occasions, if any. 	:	17.8.2016 (by Dr. B.B. Burman Regional Office, Bhopal),
	b) Date of site visit for this monitoring report	:	17.08.2016
15	Details of correspondence with project authorities for obtaining action plans / information on status of compliance to safeguards other than the routine letters for logistic support for site visits).	:	Half yearly compliance status report is being regularly submitted and last submission was on 26.05.2022 vide letter no. ACL/EMD/F-16/2022/2514/90447.

S No.	Condition	Compliance Status						
3 (i)	All the conditions stipulated by Gujarat	Compliance Status Complied.						
3(1)	Pollution Control Board letter No. PC/NOC/CCA-49/11712 dated 15.04.2004 & PC/CCA –JNG-49/32287 dated 11.10.2004 should be strictly implemented.	 Gujarat Pollution Control Board vide their letter no. PC/NOC/CC. 49/11712 dated 15.04.2004 stipulated seventeen conditions PC/CCA –JNG-49/32287 dated 11.10.2004stipulated tw conditions.All these conditions are complied with and strict implemented. 						
3 (ii)	DG set shall be discontinued after commissioning of captive power plant	 28 MW DG sets (3 DG sets of 6 MW & 1 DG set of 10 MW) have been discontinued.30 MW DG sets has been retained and shall be utilized for emergency purposes during preventive maintenance of 2x30 MW & 1x30 MW captive thermal power plant. MoEF&CC has granted permission for retention of 30 MW DG set (3 x 10 MW). A Copy of the approval letter has already been submitted to MoEF&CC vide our letter no. ACL/EMD/F-16/2010/55928 dated 25.12.2010 						
	<u> </u>	Copy of the same is enclosed asunder:						
	Puryavaran Bha. Loci Road Puryavaran Bha. Loci Road Road Road OFFICE ORDER Sub: Retention of 30 MW DG Set Installed at Cem Vadnagar, in Junagarh Dists, in Oujarat Sit. The undersigned is directed to refer to your let requesting for allowing retention of 30 MW DG Set premises of Cement and Captive Power Plants at Junagarh Dists. in Gujarat 2. In this retend it is to inform you that the request	hone: 011-2436 7287 mail to Utterstationic me. Income Deline: 011-2436 7287 mail to Utterstationic me. Income Deline: 011-2436 7287 mod to Utterstationic me. Income Deline: 01-2436 7287 mod to Utterstationic me. Income Deline: 01-2436 7287 mod to Utterstationic me. Income Deline: 01-2436 7287 This issues with the approval of the Compotent Authority. Yours (surroutly, W. Sharty Bright Deputy Director P.O. Ambuja Nagar - 362715 Table: Kodiner, Distr. Junagarb Osignat. Copy 10: Income Description: 1 The Secretary, Ministry of Power, Shram Shaku Bhawan, Ref. Marg. New						
	and permission is hereby granted for retaining 30 M total installed capacity of 58 MW subject to sure following: 1) The 30 MW DG Set retained shall be used only for during preventive maintenance of any one Lighter Could feet and for all MW DG Set permissible limits as prescribed budget that it is subject to the limits as prescribed budget that is issued vide CSR 489 [E], dated 09 07.2002. 3. It is accordingly informed that in the Ministry's letter of the subject of the condition on. [ii] under para no. 3 shall as under 130 MW DG Set only shall be retained strictly as a for power requirement during preventive maintenance of MW (suprise TDF)	Sachivalaya, 5th Floor, Gandi Nagar - 382010. 3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Belhi - 110 056. 4. The Chairman, Culture Country Board, Paryavaran Bhawan, Sector-10A, Gandhi Nagar - 382010. 5. The Chairman, Central Pollution Control Board, Paryavaran Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 110032. 6. The Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (WZ), Ecuditya Paryavaran Bhawan, E-5 Arera Colony, Ravishankar Nagar, Ehopal + 462016. 7. Director [ES], MoSP						
3 (iii)	Coal requirement is estimated at 1180 To (Indian/Imported Coal) of 25 – 35% / 15% content and 0.9% / 0.5% Sulphur content.							
3 (iv)	Any change in fuel shall be referred to committee.							



By Speed Post No.1-13012/20 /2004-IA.II(T) Ministry of Environment & Forests Paryavaran Bhawan, CGO Complex, Lodi Road. OFFICE ORDER New Delhi- 110003. Sub: 90 MW Captive Power Plant at Ambuja Nagar, in Gujerzit M/s Gujarat Ambuja Cements Ltd P.O.Ambujanagar- 362 715 Tajuka -Kodinar, Distt. Junagarh In this regard it is to inform you that the matter has been examined be Expert Appraisal Committee (Thermal), it is to inform that this Mon in permitting lightfu and domestic coef in addition to petcoke and id as fuel subject to strict compliance of the following: Subject: Change in fuei in 3x30 MW CPP at vill. Vadnagar, Distt. Junegarh, Gujarat by M/s Gujarat Ambuja Cernents Ltd — Environmental clearance regarding. CFBC Boiler shall be installed along with nr cooled condensar and ESP having attens 19 8% efficiency; and the state of the Reference is invited to your letter no. Nil dated $24^{\rm th}$ March, 2009 regarding change in fuel in respect of the above mentioned project. All other conditions earlier prescribed vide this Ministry let 15.03.2005 and 03.05.2009 respectively shall remain the same. It is noted that the environmental clearance for the above mentioned power project was accorded vide letter dated 15.3.2005. M/s Gujarat Ambuja Cements Ltd has now proposed for change in fuel from imported/indigenous coal to Pet coke blended with imported coal. This issues with the approval of the Competent Authority 3. The proposal has been considered and in accordance with the recommendate of the EAC, the Ministry of Environment & Presist has no objection for change in if from imported/indigenous coal to Pet coke blended with imported coal subject to st implementation of all the conditions contained in the environment clearance letter even no, dated 15th Merch, 2005 and additional conditions stipulated as follows: (W. Bharat Singh) The Pet coke shall be blended with imported coal and the blended fuel shall be used instead of imported / indigenous coal. Sulphur content in the blended fuel (mixture of Pet coke and Imported coal) should not exceed 3.5 % Quenching of sulphur through linestone dosing should be at least 90 %.

Copy of coal linkage duly approved by SLC Ministry of coal should be submitted before (v) starting commissioning at the site.

Scope of Assurance

Quantity & Grade of cost

Complied

First phase (CFBC boilers 1 &2) of TPP commissioned in 2007

ry, Deptt. Of Forests & Environment, Government of Gujarat, Sachivalay ndi Nagar - 382010. on, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi

- 2nd Phase (CFBC boiler 03) of TPP commissioned in 2010.
- Coal linkage has been approved by SLC, Ministry of Coal and CIL have issued letter of assurance dated 24.09.2008 for 90 MW captive thermal power plant. Copy of LoA has already been submitted to MoEF vide our letter no.ACL/EMD/F-16/2010/55928 dated 25.12.2010.

vent that the incremental coal supplies available with the Assurer (after meeting out the commitments already made) is less than the incremental coal demand,

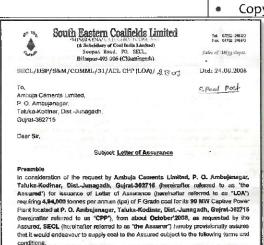
such incremental availability shall be distributed on pro-rata basis and the balance quantity of coel requirement shall be met through imported coal available with the Selfar, which too shall be distributed on pro-rata basis.

The price of coal assured herein shall be as per the notified price of CIL from time to time. Notwithstanding, in case the quantity of normative requirement, as stated in Clouse 1.1 above, necessitates opening of a dedicated mine, then cost shall be priced at the higher of the cost plus reasonable return or such notified

price. The quantity of imported coal that may be supplied to the Assured, as mensoned in Clause 1.1, shall be charged at the landed cost plus sarylce charge. Such service charge shall be notified by the Assurer from time to time.

Parameters in case of imported coal shall be as specified by CIL/Assurer

Copy of the same is enclosed as below:



Subject to the Assured fulfilling its obligations in accordance with Clause 2 to the satisfaction of the Assurer within the period of validity of this LOA and the signing of the Feel Supply Agreement (FSA) within three (3) months thereaffer, the Assurer shall endeavour to supply, as per the nominative requirement of the CPP.

4,94,998 termes per annum (that of F° Grade(s) coal to the Assured, which shall be authored to create and assurement by the Assured of the central coal

call of the Assured on well as the incremental sychiability of coal from the

In the event that development of the coat block identified by the Assurer for the purpose of meeting the normalive requirement stated in Clause 1.1 is delayed or terminated for reasons including de-allocation of such block by the Government and inordinate delays faced in acquiring land or receiving environmental/forest clearences; Or that imports of coal required for the purpose of meeting the portion of normative requirement stated in Clause 1.1 is reasonably withheld owing to such factors as global shortage or a Force Majoure event affecting the source(s) of imported coal or logistical bottlenecks faced in transportation and untoacting, which are not within the control of and not caused by the negligence or fault of the Assurer; the Assurer shall be free to amend or repeal this LOA ithout incurring any liability whatsoever, including the liability for payment of

In the event of an exactment, promispation, amendment or repeat of any statute, policy, decree, notice, rule or direction by any government instrumentality that would have an impact on the coal supply terms assured hereof, the Assurer shall be free to amend or repeal this LOA without any liabilities or damages, whatsoever, payable to the Assured.

The Assured shall be liable to pay at applicable taxes and statutory levies.

Force-Majeure affecting the Assurer

EM clamages to the Assured

pits/reservoirs are being used for captive power plan operation. Complied. The ground water is not being used for TPP. Onl harvested rain water is being used in operation of TPP. CSR arm i.e. Ambuja Cement Foundation of Ambuj Cements Limited has constructed various rain water harvesting structures around the area in association with Ministry of Water Resources (Govt. of Gujarat). As a result of this, Salinity of the area is reduced and ground water level is augmented. However preliminary scientific Study on ground water potential in 1 km radius zone of captive power plant water are all the second of this, Salinity of the area is reduced and ground water potential in 1 km radius zone of captive power plant water are all the second of this, Salinity of the area is reduced and ground water potential in 1 km radius zone of captive power plant water are all the second of this, Salinity of the area is ground water availability & use year 2019 report reveal that we are 21.1 times water positive. DIVIGI. INDICENSINI WHEELATION STATCHEN In the second of the second o	(vi) No	o discharge of waste utside the plant bound	not exceed 1460 m3/day. water should be done ary / natural drain and all be recycled and reused in	a T is	werage Industrial Water consulted average domestic water consoluted average water consumption within the permissible quantity our Thermal power plant is Zerastewater (RO reject water) ower plant is being re-used for a	isumption is 25.41 m3/day. on is 345.75 m3/day which 1460 m3/day. ro Liquid Discharge unit, generated from thermal
A regular auditing of ground water availability and use by an independent agency should be put in place. The ground water is not being used for TPP. Online harvested rain water is being used for TPP. Online harvested rain water is being used in operation of TPP. CSR arm i.e. Ambuja Cement Foundation of Ambuj Cements Limited has constructed various rain water harvesting structures around the area in association with Ministry of Water Resources (Govt. of Gujarat). As a result of this, Salinity of the area is reduced and ground water level is augmented. However preliminary scientific Study on ground water work in the property of the same as the same of the property of the same	(vii) an	y purpose / use in c cycled water and / or	aptive power plant. Only	• N p	olied. lo ground water is being extrower plant. arvested rainwater stored its/reservoirs are being used f	in our mined out
INDEPENDENT VERIFICATION STATEMENT Introduction Interpolation I	(viii) use	e by an independent		• T hh	blied. he ground water is not being arvested rain water is being used. SR arm i.e. Ambuja Cement ements Limited has construct arvesting structures around the linistry of Water Resources (Governian of the area is received is augmented. Owever preliminary scientific someone of the area in 1 km radius zone of the area out in Aug-2004 jointly by avestigation Consultancy Centre (enewed audit agency M/S DNV is roundwater availability & use years.	d in operation of TPP. Foundation of Ambuja ated various rain water area in association with vt. of Gujarat). As a result duced and ground water Study on ground water captive power plant was a Ground Water & Mineral (P) Ltd. Jaipur, Rajasthan. Its engaged for auditing of year 2019 report reveals
No. 3 of 4	Introduction DIV G. Buttines Nationals DIV G. Buttines Nationals DIV G. Buttines Nationals Life (Acad Str.) 19 on DIV G. Wurfstates The Company is responsible Catte of other Periods The Company is responsible Catte of detailed in the terms that Company is responsible Catte of detailed in the terms that Company is responsible Catte of detailed in the terms that Company is responsible Catter of the Company is responsible Catter of the Company is responsible or stripped on soope of a continuation of the Company or the methods In the company of the methods In the company of the company Catter of the Company or the continuation Catter of the Company of the Company and ensuring DIV G. adopted a rela-inside position of the Company of the	DENT VERIFICATION STATEMENT on India Private Limited (VW G2) has been convenienced by the review Limited (Verbyl G3). The beam convenienced by the review Limited (Verbyl G4) has been convenienced by the review Limited (Verbyl G4). The convenience Limited (Verbyl G4) and the limited of	The value shelf data is accounted teach on material source with the said of the bills for frontabent reliable, The water cells data is based on many cells data in the cell shelf is based on many/climans, or groundwater studies; and water savings estimated across waters have statistics. As part of the verification process, see: A part of the verification process, see: Conducted offset data verifies of the climate such as controling tools, so but General (Scotic), other offset and violation data for several process, see: A part of the verification process, see: Conducted of services, see: Control and a wait fortunate process, see: Control and a wait fortunate process, see: Control and a wait fortunate of the consequence or water consumption including audienteer proceduration and seeds and process. Control and a wait fortunate and so seeds and process of the consequence or water consumption including audienteer proceduration and seeds and process. Control and a wait fortunate process, see distinct. See part of the verification process, we distinct. An understanding of the restrict and process for generation of the section of	DIV-GL and through water remote favorable, and through water remote favorable, and through a second for the sec	Control Statement State State	DNV-GL Or, during the springle site viaits all operational glands and nainvester harvesting structures were easied and incorporated in the Water Date. Or, during the springle site is the Water Date. Or and compressible or the Water Date. Or and compressible or harvestine presented, as well as the quality of underlying date general springle. Or and compressible or harvestine to proget that Water Date dies not not the formation of the text of the section of section of the sectio



ve Thermal Power Plant ch and 18th March, 2005)

	resources in the are "Ambuja Cement For community developed areas is enclosed measures are enclosed measurements.
Ambuja Cem Details for programme wis-	ent Foundation - Ambujar
	*Funds received ** Funds from
Sr. No Programme ACF - ACL	through other Donors Government Donor Agenci

- constructed various rain water around the area in association with ources (Govt. of Gujarat). As a result e area is reduced and ground water
- o well qualified and experienced inst. These in house experts are n & develop rainwater harvesting is directed, we had consulted CGWB appropriate water harvesting from - Central Ground Water Board, d our site.
- neasures to augment ground water a are being done by our CSR arm ndation" (ACF). A brief about ACF & ent work done by ACF in surrounding under and rain water harvesting d as under.

Sr. No	Programme	ACF - ACL	*Funds received through Government	** Funds from other Donors / Donor Agencies	***People's Contribution	****Direct Funding to Communities	Total Exp. (Rs. In lakhs)
	GUJARAT - Kodinar	-				·	
1	Water Resource Mangement & Drinking Water Projects						
	A.Water Resource Deviopment	16.34	3.69				20.03
	B . Drinking Water Programme	6.09			3.00		9.09
2	Agriculture Development (Drip irrigation, Farm Forestry & Afforesation)	8.78	- 225		75.16	111.97	195.91
3	BCI	18.65	0.10	202.35	109.49	250.83	581.42
4	Krishi Vigyan Kendra (KVK) - Agriculture	4.66	85.23				89.89
5	Health & Sanitation	8.11			9.14		17.25
6	Education Programme	3.71					3.71
7	Women / Youth Development	7.71					7.71
8	Skill and Enterprunership Development Programme	25.57	28.45		25.18		79.20
9	Integrated Community Development Programme	94.94	Y				94.94
10	Co-ordination & Administration Expenses	42.41					42.41
11	Capital Expenditure						0,00
-	TOTAL	236.97	117.47	202.35	221.97	362.80	1141.56

Two stacks of 94 m height each shall be provided 3 (x) with continuous online monitoring system with exit velocity of 20-25m/sec should be maintained.

Complied.

- Two stacks are provided with height 95 m each.
- Continuous online emission monitoring systems for particulate matter (PM), SO2 and NOx have been installed at both stack and data are continuously transmitted & reported to CPCB and GPCB.

High efficiency Electrostatic Precipitator (ESP) (xi) having efficiency of 99.8% should be installed to limit outlet SPM emission at 100 mg/Nm3

Complied.

- 03 ESP's have been Installed and designed to restrict the PM emission below 50 mg/Nm3.
 - Average concentration of PM is found to be 25.0mg/Nm3 against specified limit of 50 mg/Nm³.

Stack monitoring results for the periodfromApril 2022 to September 2022 is enclosed as under:

*Compliance Status of Environmental Clearance issued to 90 MW Captive Thermal Power Plant

	(EC vide MoEF&CC letter No. J – 13012/20/2004. IA –II (T) dated 15th March and 18th March, 2005)														
					S	tack M	onitori	ng Re	sults	;					
	(April 2022														
							Stack attached								
	l M	ionth			Boiler					Boi	ler III				
	"	Ontri	PM		Ox	NOx	Hg		M	SOX	NOx		-lg		
	<u> </u>		mg/Nr	m ³ mg	/Nm ³	mg/Nm ³			Nm ³	mg/Nm ³	mg/Nm	mg	/Nm ³		
		pr-22	23.6		40.7	156.9	0.005		5.4	350.4	160.5		067		
		ay-22	24.6		42.6	157.9	0.005		3.7	342.8	161.8		0071		
		ın-22 ul-22	23.9 25.1		44.8 26.5	150.7 142.3	0.004		5.7 3.7	360.8	160.8		0065		
		ig-22	26.9		35.1	140.9	0.003		4.9	348.9 326.4	164.8 132.8		0057		
	Se	ep-22	27.9		38.9	146.9	0.004		1.0		hutdown	0.0	7002		
		nissible Limit	50	(000	300	0.03		0	600	300	0	.03		
3(хіі	THE RESERVE OF THE PERSON NAMED IN	THE RESERVE THE PERSON NAMED IN	AAQM st	ation is 5	Km to t	he East. A	Complie	d.							
)	statio	on in the S	E sector a	it a distan	ce of 1 K	m able to			idy setu	p AAQM st	ations in	5 Km to	the Fan		
	captı	ure the in	npact of	the exis	ting &	proposed				s suggeste) Kill to	unc L an		
	stack	s should b	e set up.									- 400 41			
										monitorin					
Reserve										otember 20			-		
	1	Ambie	nt Air (Quality	Mon	itoring	Result	s (Apı	il 202	2 - Sep	tembe	r 2022)		
				Avera	ige Ar	nbient A	Air Quality Monitoring Results (µg/m3)								
Mo	nth		Inside	e TPP			Nava	apara			Deva	Ipara			
	PM2.5		PM10	SO2	NOX	PM2.5	PM10	SO2	NOx	PM2.5	PM10	SO2	NOx		
Apı	r-22	32.31	37.61	61 12.36 12.40 31.4		31.49	40.89	13.61	14.36	32.21	41.25	13.36	14.70		
Ma	y-22	32.18	41.07	13.27	14.34	31.68	42.50	12.84	13.68	32.00	42.90	13.10	14.50		
Jur	1-22	30.26	32.93	13.18	14.01	29.83	32.23	14.31	13.10	30.30	31.90	14.70	14.30		
Jul	-22	24.77	32.17	14.86	13.07	23.64	35.06	13.81	13.19	24.50	35.10	14.00	14.10		
Aug	J-22	27.21	35.14	14.89	14.30	25.73	35.23	12.99	15.19	26.80	36.20	14.80	15.60		
The Real Property lies, the Parket Inches)-22	25.99	34.70	14.88	15.49		37.63	17.70	14.75	27.19	36.00	17.39	14.51		
3 (xiii)		pace for F		lation sha	ll be ke	pt in the	Complied	1.		P (1)					
	pl	ant premi	ses.				 Space 	e for FG	D insta	llation has	been k	ept in t	he plan		
		- 3	premises itself.												
3 (xiv)		-	ration will be 630 TPD. 100% of the fly Complied.												
							utilized • Total average Ash generation including bottom ash								
		cement n								ell 630 TPD					
		silos only	and there	e shall be	no opei	n storage				Silo and b		sh direct	lv (100%		
	po	ond.				- 1				nufacturin					
								cement p			0	iiy d.	,, at ou		
										age pond a	s CPP ge	nerated	Fly ash is		
						store	d in silo d	nly.		7					
										Ash gener					
	1						periodfromApril 2022 to September 2022 as under:								
				Fly Ash Generation (April'2022 to September'2022)											
											T				

3 (xv) Regular monitoring of water quality including heavy metals should be undertaken around ash dyke and the project area to ascertain the

of contaminants from ash disposal area.

change in water quality, if any, due to leaching

Not applicable as there is no ash ponds. Fly ash generated is being stored at fly ash silo.

Jun-22

6289

Jul-22

2098

May-22

6137



Month

Fly Ash (MT)

Арг-22

4886

Aug-22

1178

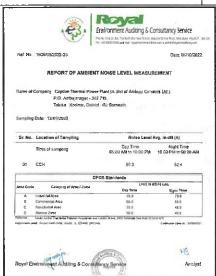
Sep-22

2243

Noise level should be limited to 75 dB (A) and regular maintenance of equipment will be undertaken. For people working in the area of generator and other high noise area, earplug should be provided.

Complied.

- Monitoring of Ambient noise level is done on regular basis and the noise level around thermal power plant is maintained well below 75 dB (A). report are enclosed as under:
- People working in the area of generator and other high noise areas are provided with necessary PPE's like earplugs and ear muffs.

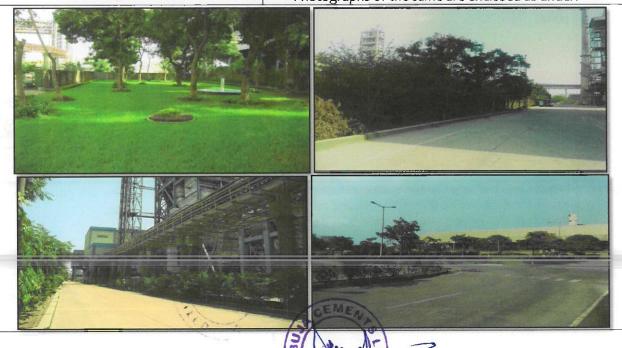




3 (xvii) Greenbelt of 20-25 m along the plant boundary should be developed covering an area of 0.5 ha.

Complied.

- Greenbelt of 20-25 m has been established around the plant boundary wherever open space is available. However the company has done plantation where space is available inside the plant area. The company has already developed 2.10 hectares of greenbelt, more than the requirement.
- Photographs of the same are enclosed as under:



3 (xviii)

Regular monitoring of the air quality should be carried out in and around the power plant and records should be maintained. Periodic six monthly reports should be submitted to this Ministry.

Complied.

- Ambient air quality is being regularly monitored at identified AAQM stations and report is being regularly submitted to GPCB on monthly basis and to MoEF on six monthly basis.
- Ambient air quality monitoring report for the period fromApril 2022 to September 2022 enclosed as under:

	Ambient Air Quality Monitoring Results (April 2022 - September 2022)											
Month	Average Ambient Air Quality Monitoring Results (µg/m3) Inside TPP Navapara Deval										Ipara	
	PM2.5	PM10	SO2	NOx	PM2.5	PM10	SO2	NOx	PM2.5	PM10	SO2	NOx
Apr-22	32.31	37.61	12.36	12.40	31.49	40.89	13.61	14.36	32.21	41.25	13.36	14.70
May-22	32.18	41.07	13.27	14.34	31.68	42.50	12.84	13.68	32.00	42.90	13.10	14.50
Jun-22	30.26	32.93	13.18	14.01	29.83	32.23	14.31	13.10	30.30	31.90	14.70	14.30
Jul-22	24.77	32.17	14.86	13.07	23.64	35.06	13.81	13.19	24.50	35.10	14.00	14.10
Aug-22	27.21	35.14	14.89	14.30	25.73	35.23	12.99	15.19	26.80	36.20	14.80	15.60
Sep-22	25.99	34.70	14.88	15.49	25.15	37.63	17.70	14.75	27.19	36.00	17.39	14.51

3 (xix)

For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant should be ensured.

Complied.

- Various measures are being taken to control fugitive emission like construction of RCC roads inside plant premises, closed conveying system for fly-ash handling. Transport roads and internal plant roads are being regularly cleaned using mechanized vacuum sweeping machines.
- Actions are being implemented in a time bound manner for controlling the fugitive dust emissions from all the sources.
 Regular monitoring of fugitive dust emission is carried out at the prescribed intervals.
- Fugitive Emission monitoring report (Average data) for the periodApril 2022 to September 2022enclosed as under:

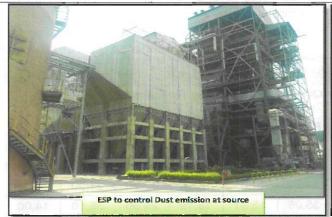
Fugitive Emission N	Monitoring Results	
(April 2022 - Se	ptember 2022)	
Average Fugitive Emission N	Ionitoring Results (µg/m3)	
Bottom Ash Collection Area	Fly Ash Loading Area	CPP Main Gate Road
1340	1131	1285
	(April 2022 - Se Average Fugitive Emission N Bottom Ash Collection Area 1340	

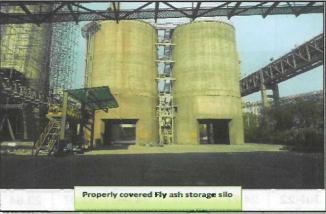
 Photographs of fugitive dust control measures are enclosed as under.

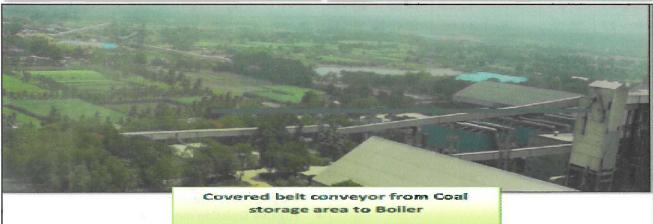












3 (xx) All other mitigative measures shall be taken as enumerated in Chapter 5 of the REIA report.

Complied.

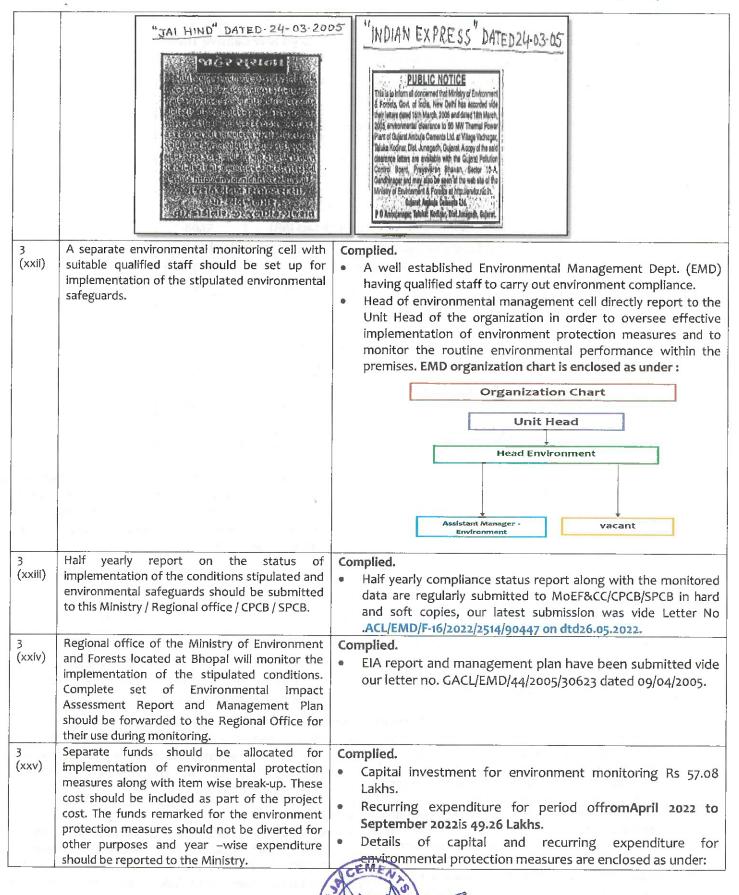
- The main mitigation measures suggested in REIA chapter -5 are as follows.
 - Recycle and reuse of treated effluent for green belt development,
 - No adverse impact on flora -fauna
 - > Land use pattern of area to be remain unchanged.
 - Upliftment of socioeconomic condition of surrounding area
 - Solid waste management by proper storage facilities.
- All of the above recommendations are being followed and detail Compliance status has already been submitted to MoEF&CC vide our letter no.ACL/EMD/F-16/2010/55928 dated 25.12.2010.

3 (xxi)

The project proponent should 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 ciearance letters are available with the State Pollution Control Board / Committee and may also be seen at Website of Ministry of Environment and Forests in the http://envfor.nic.in.

Complied

- Advertisement has been published in local newspapers "Jai Hind" and "Indian Express" dated 24.03.2005. Copy of advertisement has already been submitted to MoEF&CC vide our letter no.ACL/EMD/F-16/2010/55928 dated 25.12.2010.
- Copy of the same is enclosed as under:



			Expenditure incurred in Enviro	nment Management I	Plan -TTP	
			apital Invesstment for Environ			
		S.No	Particulars			
		1	Monitoring Equipments		Cost (In Lacs)	
		2	Environment Laboratory	120	10.00	
		3	Others (Monitoring Van, DG S	Sets etc.)	10.00	
				otal (In Lacs INR)	57.08	
		B. Rec	curring Expenditure for the per			
		S.No	Particular		Cost (In Lacs)	!
		1	Green belt development & D		0.96	
		2	Manpower Cost *	4.1	12.15	
		3	House Keeping		8.91	
		4	Maintenance of Pollution Cor	ntrol Equipments	21.21	
		5	Other Env. Protection (Enviro		4.61	
	3/7	6	Environment Awareness *		1.43	
				otal (In Lacs INR)	49.26	
		174				
		^	Expenditures are Common for	All the Plants & Mine	S.	
	environmental sti			13.10.10& 17.08		Shopal) during 12.10.10 to
4	clearance if	conditio	the right to revoke the ns stipulated are not action of the ministry.	Agreed.		
5	The environment for a period of 5 the power plant. fails to do so v	al cleara years fo In case	nce accorded shall be valid or construction/operation of , if the project authorities his stipulated period , this	and first phas and second ph	e of project w	was issued on Nov-2005 vas commissioned in 2007 was commissioned in 2010.
6	In case of any deproposed from to clearance, a fresh Ministry to asses	hose sul h refere s the ad to add	or alteration in the project omitted to this Ministry for nee should be made to the lequacy of the condition (s) additional environmental lired, if any.	MOEF&CC for	amendment on nended as pe	or type of fuel change to of EC condition and same r MOEF&CC letter dated
7	The above stipu others under the pollution)Act, 197 Pollution) Act 198 1986 and rules (Management & amendments, th	lations of Water 4, the A B1, the E there & Hande e Enviro	would be enforced among (Prevention and Control of ir (Prevention and control of nvironment Protection Act, under, Hazardous Waste ling)Rules, 1989 and its onment Impact assessment 1994 and its amendments.	pollution)Act, Pollution) Act 1986,Hazardou	1974, the Air (1981, the Fnv us waste Rule	(Prevention and Control of (Prevention and control of Fronment Protection Act ; s, 1989 amendment 2003, Ification 1994 are being

Com	pliance Status of Environmental Clearance No. J-13012/20/2004	- IA. II (T) dated 03.06.2009 issued to Thermal Power Plant [EC 1st
(i)	The Pet coke shall be blended with imported coal and the blended fuel shall be used instead of imported/indigenous coal.	 Complied. As per further amendment in CPP EC dated 03.12.2009 we are blending lignite and domestic coal in addition to petcoke and imported coal.
(ii)	Sulphur content in the blended fuel (mixture of Pet coke and Imported coal) should not exceed 3.5%. Quenching of sulphur through limestone dosing should be at least 90 %.	 Complied. Blending of fuels is done in a manner to restrict Sulphur percentage below 3.5%. Limestone dosing is done along with coal, in order to limit Sulphur dioxide emission.
(iii)	All the waste generated from sulphur quenching shall be used in a cement plant.	The fly ash and bottom ash generated from sulphur quenching is being used in cement plant.
(iv)	First aid and sanitation arrangement shall be made for the drivers and the contract workers during construction phase.	 Complied. All required facilities such as first aid, drinking water and sanitation arrangements were made for the drivers and the contract workmen during the construction phase. All these facilities are also available for workmen presently working in thermal power plant. A multispecialty hospital of 60 beds is established in 2015 at Ambujanagar.
(v)	Regular monitoring of ground level concentration of SO2, NOx, Hg, SPM and RSPM shall be carried out in the impact zone and records should be maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be submitted to the regional office of the ministry. The data shall also be put on the website of the company.	 Complied. Ambient air quality is being regularly monitored at identified AAQM stations and report is being regularly submitted to SPCB on monthly basis and to MoEF&CC on six monthly basis. Ambient air quality monitoring report for the period fromApril 2022 - September 2022enclosed as under:

Ambient Air Quality Monitoring Results (April 2022 - September 2022)														
	Average Ambient Air Quality Monitoring Results (µg/m3)													
Month	Inside TPP				Navapara				Devalpara					
	PM2.5	PM10	SO2	NOx	PM2.5	PM10	SO2	NOx	PM2.5	PM10	SO2	NOx		
Арг-22	32.31	37.61	12.36	12.40	31.49	40.89	13.61	14.36	32.21	41.25	13.36	14.70		
May-22	32.18	41.07	13.27	14.34	31.68	42.50	12.84	13.68	32.00	42.90	13.10	14.50		
Jun-22	30.26	32.93	13.18	14.01	29.83	32.23	14.31	13.10	30.30	31.90	14.70	14.30		
Jul-22	24.77	32.17	14.86	13.07	23.64	35.06	13.81	13.19	24.50	35.10	14.00	14.10		
Aug-22	27.21	35.14	14.89	14.30	25.73	35.23	12.99	15.19	26.80	36.20	14.80	15.60		
Sep-22	25.99	34.70	14.88	15.49	25.15	37.63	17.70	14.75	27.19	36.00	17.39	14.51		

Provision shall be made for the housing of construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structure to be removed after the completion of the project.

(vi)

Complied.

- Project has already completed and plant is under operational stage.
- Presently, all our management staff and wage board employees are residing in company provided
 residential colony.

(vii)	The proponent shall upload the status of compliance of the	Complied.					
(viii)	stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutants levels namely: SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain. The project proponent shall also submit six monthly reports	 Compliance status reports of the stipulat conditions, including results of monitoring data a being regularly uploaded on company website. Half yearly compliance status report includi results of monitored data are being regula submitted to MoEF&CC/CPCB/SPCB, our last submission was on dated26.05.2022 vide letter of ACL/EMD/F-16/2022/2514/90447. Pollutants level 					
	on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	being uploaded on website and also being displayed on board at main gate of the power plant.					
(ix)	Project proponent will up-load the compliance status on	Complied					
	their website and up-date the same from time to time at least on six monthly basis. Criteria pollutants level (Stack &	Six monthly compliance status report and					
	ambient level of NOx) will be displayed at the main gate of	pollutants level (Stack & ambient) is being					
	the power plant.	uploaded on website:					
		www.ambujacement.comand also being displayed					
C-		at main gate of the power plant.					
Compliance Status of Environmental Clearance No. J-13012/20/2004- IA. II (T) dated 03.12.2009 issued to Thermal Power Plant [EC 2nd amendment]							
2	Ministry has no objection in permitting lignite and domestic	Agreed					
	coal in addition to petcoke and imported coal blended as fuel						
	subject to strict compliance of the following.						
(i)	CFBC Boiler shall be installed along with air cooled	Complied					
	condenser and ESP having at least 99.8% efficiency.	 CFBC Boilers are installed along with air cooled condensers and highly efficient ESP's to control emission. 					
(ii)	Sulphur content in blending fuel shall not exceed 3.5% and	Complied					
_	90% SO2 removal shall be achieved by lime dosing or any other suitable mechanism.	Blending of fuels is done in a manner to restrict % Sulphur below 3.5% in blended fuel. Limestone dosing is done along with coal, in order to limit					
		sulphur dioxide emission.					
(iii)	100% Fly Ash utilization shall be achieved from the date of commissioning of the plants of total capacity.	Complied					
	Commissioning of the plants of total capacity.	All the generated fly ash (including bottom ash) is being stand in Sile and being fully (199%) utilized.					
	e i i i i	being stored in Silo and being fully (100%) utilized					
	All other conditions earlier prescribed vide this Ministry	in cement manufacturing at our own cement plant. Complied as all above condition.					
3	letters of even no. dated 15.03.2005 and 03.05.2009	and the same of th					
	respectively shall remain the same.	CEMEN					
	1						

