

88954

REGD. A/D

ACL/EMD/F-16/2021/2342

17.05.2021

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.

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

Sir,

We are pleased to submit herewith half yearly compliance status report (i.e. for the period of (October'2020 to March'2021) 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).

Thanking you,

Yours Faithfully.

For Ambuja Cements Ltd.

Birgh Anand Prakash **Head Environment** 

Encl.: As above.

Copy to:

- The Central Pollution Control Board (CPCB) Parivesh Bhawan, Atmajyoti Ashram 1) Rd, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara – 390023 (Gujarat).
- The Member Secretary, Gujarat Pollution Control Board (GPCB), Paryavaran 2) Bhavan, Sector-10-A, Gandhinagar-382010
- The Regional Officer, Gujarat Pollution Control Board (GPCB), Opp. Saint Anne's 3) Church Station Road, Junagadh.

Regd. Office:

PO: Ambujanagar - 362 715, Tal: Kodinar, Dist.: Gir Somnath (Gujarat) Phone: (02795) 221137, 232009,

Fax: (02795) 220328

**Ambuja Cements Limited** (Unit : Ambujanagar)

CIN No.: L26942GJ1981PLC004717 www.ambujacement.com

Corporate Office: Elegant Business Park, MIDC Cross Road 'B' Off Andheri - Kurla Road, Andheri (E) Mumbai - 400 059. Phone : (022) 4066700

## MONITORING THE IMPLEMENTATION OF ENVIRONMENTAL SAFEGUARDS

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

### **DATA SHEET**

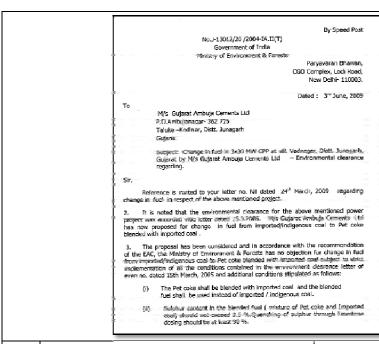
			DATA SHEET
01	Project type	:	Thermal Power Plant
02	Name of the project	:	Captive Thermal Power Plant (90 MW) for Cement Plant (5.7 MTPA capacity), Taulka Kodinar, Dist Gir Somnath & Bulk Cement Terminal, Village Muldwarka, Dist Gir Somnath
03	Clearance letter(s) / OM no. and date	:	Letter No. J – 13012/20/2004. IA –II (T) dated 15 <sup>th</sup> March and 18 <sup>th</sup> March, 2005, amended on 03 <sup>rd</sup> June 2009 & 3 <sup>rd</sup> December 2009.
04	Location	:	
	a) District(s)	:	Gir Somnath
	b) State(s)	:	Gujarat
	c) Latitude	:	21° 00' N
	d) Longitude	:	70° 30' E
05	Address for correspondence	:	
	<ul> <li>a) Address of concerned Project         Chief Engineer (with pincode &amp; telephone / telex / fax numbers).     </li> </ul>	:	Sh. Anupam Agrawal Manufacturing Cluster Head (W&S) 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		PO Ambujanagar, Taluka : Kodinar, Pin- 362715
	pincode / fax numbers.		District: Gir Somnath (Gujarat).
06	Salient features		Tel: 02795-237220/237221 Fax: 02795-220328/232032
00	a) of the project		- This is a CPP
	o) of the project		<ul> <li>Fuels are Indigenous Coal, Imported Coal, Petcoke, Lignite in Blend</li> <li>3 nos. of CFBC Boilers each having capacity of 135 TPH, 87 kg/cm² temperature 515°c</li> <li>Air cooled Condenser (ACC)</li> </ul>
	b) of the environmental management	:	a) Construction Phase
	plans		<ul> <li>Proper disposal of construction waste done during constriction phase.</li> <li>Minimize noise by using acoustic enclosure for boiler, Low noise generation equipments viz boier and compressor area. Ear muffs &amp; ear plugs are provided to workers engaged at high noise area. visuals for safe working in high noise are displayed at various location.</li> <li>Spraying suppression at regular intervals.</li> <li>Operation Phase</li> <li>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.</li> </ul>

1				
			>	Continuous online monitoring systems for measurements of
				particulate matter, SO <sub>2</sub> & NO <sub>x</sub> 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,
			ĺ .	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
			ĺ	
				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.			'
٠,	a) Submergence area (forest & non-forest)	:		Not applicable
	b) Others	:		4.8 ha (excluding cement plant).
08	Breakup of the project affected population	:		
00				Not applicable
	with enumeration of those losing houses /			As CPP is built on the already land occupied for cement
	dwelling unit's only agricultural land only,			plant .
	both dwelling units & agricultural land &			
	landless labourers / artisan.			
	a) SC, ST / Adivasis	:		
	b) Others	:		
09	Financial details	:		
$\vdash$	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	:		Rs. 15.08 Crore were allocated for Environment Management
	management plans with item wise and			Plan and it included in Project cost
L	year wise breakup		L	
	c) Benefit cost ratio / Internal rate of return	:		Approx. 8% in 2015-16
	and the year of assessment.	:		
	d) Whether (c) includes the cost of	:		Yes
	environmental management as shown in			- <del></del>
	the above.			
				De 226 44 64
	e) Actual expenditure incurred on the project	:		Rs. 336.11 Cr.
	so far.			
	f) Actual expenditure incurred on the	:		Rs. 15.08 Cr.
	environmental management plans so far.			

10	Forest land requirement	١.	
10	Forest land requirement.	:	
	a) The status of approval for diversion of	:	Not applicable.
	forest land for non-forestry use		
	b) The status of clearing felling	:	No clearing felling
	c) The status of compensatory afforestation,	:	Not Applicable
	if any		
	d) Comments on the viability & sustainability	:	Not Applicable
	of compensatory afforestation		
	programme in the light of actual field		
	experience so far.		
11	The status of clear felling in non-forest areas	:	No Clearing felling
	(such as submergence area of reservoir,		
	approach roads), if any with quantitative		
	information.		
12	Status of construction.	:	
	a. Date of commencement (Actual and / or	:	Not applicable.
	planned)		
	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	:	Not applicable.
	start.		
14	Dates of site visits	:	
	a) The dates on which the project was	:	17.8.2016 (by Dr. B.B. Burman Regional Office, Bhopal),
	monitored by the Regional Office on		
	previous occasions, if any.		
	b) Date of site visit for this monitoring report	:	17.08.2016
15	Details of correspondence with project	:	Half yearly compliance status report is being regularly
	authorities for obtaining action plans /		submitted and last submission was on <b>03.11.2020</b> vide
	information on status of compliance to		letter no. ACL/EMD/F-16/2020/2226/88126
	safeguards other than the routine letters for		, , ,,
	logistic support for site visits).		

\*\*\*\*

S No.	Condition		Co	mplianc	e Status	<u> </u>			
3 (i) 3 (ii)	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.	<ul> <li>Gujarat Pollution Control Board vide their letter no. PC/NOC 49/11712 dated 15.04.2004 stipulated seventeen condition PC/CCA –JNG-49/32287 dated 11.10.2004 stipulated two cond All this conditions are complied with and strictly implemented.</li> </ul>					ions & ditions.		
)(")	commissioning of captive power plant	<ul> <li>Complied.</li> <li>28 MW DG sets (3 DG sets of 6 MW &amp; 1 DG set of 10 MW) have beed discontinued. 30 MW DG sets has been retained and shall but utilized for emergency purposes during preventive maintenance 2x30 MW &amp; 1x30 MW captive thermal power plant.</li> <li>MoEF&amp;CC has granted permission for retention of 30 MW DG set x 10 MW). A Copy of the approval letter has already been submitted to MoEF&amp;CC vide our letter no. ACL/EMD, 16/2010/55928 dated 25.12.2010</li> <li>Copy of the same is enclosed as under:</li> </ul>					hall be ance of G set (3 y been		
	e-m Paryavaran Blaw Loch Road. Date  OFFICE ORDER  Sub: Retention of 30 MW DG Set installed at Center	conc: 011 2426-7267 and with a rankindin an, C.G.O. Complex, New Dollar 110803 and August 04, 2010.  and Plant at village reg.  cr dated 22.03.2010 bestalled within the dilage Vadragor, in has been considered by DC Set out of the	it w. bharautanic.in  O. G.G.O. Competer  Frank of officers  This issues with the approval of the Competent Authority  Yours Lerigally,  W. Bharau Shigh  Deputy Director  Addisor, Distr. Junagarh  Gajarat  Copy to:  S Section of the  S Section of the  Delhi 110 001.						
	<ul> <li>i) The 30 MW DG Set retained shall be used only for during preventive maintenance of any one laguille/Local/Petroke Essael Caption TPP.</li> <li>ii) Shiphur content in fact for 30 MW DG Set at permissible limits as prescribed under this Missued vide CSM 489 [15], dated 09.07.2002.</li> <li>3. It is accordingly informed that in the Ministry's left 15.03.2005, the condition no. (ii) under para no. 3 shall as under.</li> <li>*30 MW DG Set only shall be retained strictly as at for power requirement during previous maintenance of MW Caption TPP.</li> </ul>	of the 3x30 MW thall not exceed the inistry's notification  iter of even no. dated t be now substituted  iand-by arrangement	3. The Chairman, Ce New Dellis 110 of the Chairman, Ge Sector-10A, Gandl S. The Chairman, Ge aum-Office Comple G. The Chairman, Ge aum-Office Comple Graph Comple Graph General Complete Graph Complete Graph Complete Graph	66. ujarat Pollution C ujarat Pollution Cor ex, East Arjun Nag vestor of Forests, I VZJ, Kendriyo Pary r, Bhopal - 462016	control Board, Parive arr, Delhi - 110032 Ministry of Enviro avaran Bhawan, 1	ryavaran Bhawa esh Bhawan, CB nment & Fores	nn, D- is. ny,		
3 (iii)	Coal requirement is estimated at 1180 T	.					·		
	(Indian/Imported Coal) of 25 – 35% / 15% a content and 0.9% / 0.5% Sulphur content.	- /\\\	nge Coal cor quality is bei						
			onsumption	<u> </u>					
		Month	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	
		Total Coal (N	-	27858	27775	23405	16352	19500	
- (: )	Annual and a final about the material and	Total Coal (T		928.61	895.98	754.99	584.00	629.03	
3 (iv)	Any change in fuel shall be referred to a committee.	MoEF     03.12.     alread     ACL/E     propo	F&CC has am 2009 in resolute the subsection of t	pect of object of object of the object of th	fuel chan to MoE dated 2 e propose	nge. Cop F vide 2 <b>5.12.201</b> 0	oy of lett our lett <b>o</b> . No	ter has er no. change	

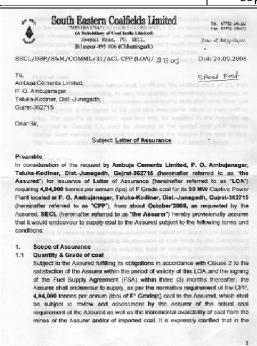




Copy of coal linkage duly approved by SLC Ministry of coal should be submitted before starting commissioning at the site.

#### Complied

- First phase (CFBC boilers 1 &2) of TPP commissioned in 2007
- 2<sup>nd</sup> 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.
- Copy of the same is enclosed as below:



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 coal requirement shall be met through imported coal available with the Seller, which too shall be distributed on pro-rata basis. \* Parameters in case of imported coal shall be as specified by CIL/Assurer. 1.2 Price of coal 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 Clause 1.1 above, necessitates opening of a dedicated mine, then coal 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 mentioned in Clause 1.1, shall be charged at the landed cost plus service charge. Such service charge shall be notified by the Assurer from time to time. The Assured shall be liable to pay all applicable taxes and statutory levies. In the event of an enactment, promulgation, amendment or repeal 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. Force-Majeure affecting the Assurer In the event that development of the coal block identified by the Assurer for the purpose of meeting the normative requirement stated in Clause 1.1 is delayed or ninated for reasons including de-allocation of such block by the Gove and inordinate delays faced in acquiring land or receiving environmental/forest clearances; Or that imports of coal required for the purpose of m portion of normative requirement stated in Clause 1.1 is reasonably withheld owing to such factors as global shortage or a Force Majouro event affecting the source(s) of imported coal or logistical bottlenecks faced in transportation and unloading; 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 without incurring any liability whatsoever, including the liability for payment of damages to the Assured.

Ground water will not be extracted/purchased for any purpose / use in captive power plant. On the extracted water and / or stored water in Mine pit reservoirs shall be used.  4. A regular auditing of ground water availability and use by an independent agency should be put in place.  5. A regular auditing of ground water availability and use by an independent agency should be put in place.  6. The ground water is not being used for captive power plant water is being used in operation of TPP. On harvested rain water is being used in operation of TPP.  6. 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.  8. However preliminary scientific Study on ground water level is augmented.  9. However preliminary scientific Study on ground water level is augmented.  9. However preliminary scientific Study on ground water level is augmented.  9. However preliminary scientific Study on ground water level is augmented.  9. Renewed audit agency M/S DNV is engaged for auditing of groundwater availability & use year 2019 report reveal that we are 21.1 times water positive.  10. No.51  10. No.52  10. No.53  10. No.54  10. No.54  10. No.55  10.	3 (vi)	Water requirement shall No discharge of waste outside the plant bounda the waste water should the the plant.	water should be done ry / natural drain and all	Av     ar     To     is     O     w     po	<ul> <li>Complied</li> <li>Average Industrial Water consumption is 246.32 m3/day and average domestic water consumption is 13.69 m3/day Total Average water consumption is 260.02 m3/day which is within the permissible quantity 1460 m3/day.</li> <li>Our Thermal power plant is Zero Liquid Discharge unit waste water (RO reject water) generated from thermal power plant is being re-used for cooling purpose and dust suppression in cement plant.</li> </ul>					
with place.  The ground water is not being used for TPP. Only harvested rain water is being used for TPP. Only harvested rain water is being used in operation of TPP.  CSR arm i.e. Ambuja Cement Foundation of Ambuj 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 was carried out in Aug-2004 jointly by Ground Water & Mineral Investigation Consultancy Centre (P) Ltd. Jaipur, Rajasthar en Renewed audit agency M/S DNV is engaged for auditing or groundwater availability & use year 2019 report reveal that we are 21.1 times water positive.  **Northead Investment of the water for the water of the	-	any purpose / use in carecycled water and / or reservoirs shall be used.	ptive power plant. Only stored water in Mine pit	• No po	lied. o ground water is being e ower plant. arvested rain water sto ts/reservoirs are being use	red in our mined out				
INCEPADENT VERIFICATION STATEMENT  PROMISE  ***TORROWS TO A STATEMENT**  **TORROWS TO		use by an independent		The hall the control of the control	ne ground water is not learvested rain water is being us on the servesting structures around inistry of Water Resources (of this, Salinity of the area is evel is augmented.  Towever preliminary scientification out in Aug-2004 jointly vestigation Consultancy Centernewed audit agency M/S DN coundwater availability & use	sed in operation of TPP. Int Foundation of Ambuja ructed various rain water the area in association with Govt. of Gujarat). As a result reduced and ground water ic Study on ground water of captive power plant was by Ground Water & Mineral tre (P) Ltd. Jaipur, Rajasthan. IV is engaged for auditing of se year 2019 report reveals				
INDEPENDIN VERIFICATION STATEMENT  THE TOTAL PROJECT CONTROL C										
Page 1 of 4 Associonamente Page 2 of 4 Associonamente Page 2 of 4 Associonamente Page 2 of 4 Associonamente Page 3 of 4 Associona	Thereful to Co. 10 in the Co.	The property of the property o	The rate data has a sumeral section returned and extended of the superior political settles and the section of			system of pressure of invent subs for inventionary of systemator or related unremovable of source flow models in subsidiary can protect and delivered from invention per description of the second forwards adds and credit date and subsidiary and source per subsidiary of worse 1989 calculated 6.8 to specificate date invention of the second flow of the second of the s				

3 (ix)					<ul> <li>The company 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 these area is reduced and ground water level is augmented</li> <li>The company has also well qualified and experienced inhouse hydrogeologist. These in house experts are competent to design &amp; develop rainwater harvesting structure. However, as directed, we had consulted CGWB for finalization of appropriate water harvesting technology. Officials from – Central Ground Water Board, Ahmedabad has visited our site.</li> <li>Water conservation measures to augment ground water resources in the area are being done by our CSR arm "Ambuja Cement Foundation" (ACF). A brief about ACF &amp; community development work done by ACF in surrounding areas is enclosed as under and rain water harvesting measures are enclosed as under.</li> </ul>						
			Ambuja C Details for programme wis		ndation - Amb Ire for the yea		o March 2021		(Rs. In lakhs)		
		Sr.No	Programme	ACF - ACL	*Funds received through Government	++ Funds from other Donors / Donor Agencies	***People's Contribution	****Direct Funding to Communities	Total Exp.		
		011110	GUJARAT - Kodinar		dovernment	rigenties	Contribution	communicies	rotui Expi		
		1	Water Resource Mangement								
			a.Water Resource Devlopment  B .Drinking Water Programme	7.15 8.26	7.49 6.12	_	6.00	-	14.64 20.38		
			B.Dilliking Water Programme	8.20	0.12		0.00		20.38		
		2	Agriculture Development	14.71	10.30	-	101.69	132.07	258.77		
		3	BCI  Krishi Viguan Kandra (KVK) - Agricultura	4.57	140.01	109.31	59.64	167.50	341.02		
		5	Krishi Vigyan Kendra (KVK) - Agriculture Health & Sanitation	2.35 10.18	148.91		70.59	_	151.26 80.77		
		6	Education Programme	12.12		-		-	12.12		
		7	Women / Youth Development	5.55		5.00		-	10.55		
		8	Skill and Enterprunership Development Programme	16.08	24.63	_	12.78	_	53.49		
		9	Integrated Community Development Programme	68.21				-	68.21		
		10	Co-ordination & Administration Expenses	45.45		-		-	45.45		
		11	Capital Expenditure TOTAL	1.25 195.88	197.45	114.31	250.70	299.57	1.25 1057.91		
3 (x)			of 94 m height each shall be provided	Comp	ied.					<u> </u>	
	with continuous online monitoring system with exit velocity of 20-25m/sec should be maintained.  High efficiency Electrostatic Precipitator (ESP) having efficiency of 99.8% should be installed to limit outlet SPM emission at 100 mg/Nm3				<ul> <li>Two stacks are provided with height 95 m each.</li> <li>Continuous online emission monitoring systems for particulate matter, SO<sub>2</sub> and NO<sub>x</sub> have been installed at both stack and data are continuously transmitted &amp; reported to CPCB and GPCB</li> </ul>						
3 (xi)					A emission erage con ainst <b>spec</b>	below 50 centration ified limitioning res	omg/Nm <sup>3</sup> . on of PM i t of 50 mg sults for t	s found to / <b>Nm³</b> . he period	ed to restro be 21.9 m	ıg/Nm3	

	Stack Monitoring Results									
		(Octob	er 2020	) - Mar	ch 202	1)				
			S	tack atta	ched to					
NA41-		Boiler	&		Boil	er III				
Month	PM	SOx	NOx	Hg	PM	SOx	NOx	Hg		
	mg/Nm³	mg/Nm <sup>3</sup>	mg/Nm³							
Oct-20	19.8	198.6	129.4	0.0046	23.4	410.7	201.7	0.0051		
Nov-20	21.8	198.2	124.8	0.0041	24.6	405.6	217.5	0.0052		
Dec-20	19.5	216.9	133.8	0.0034	23.5	398.6	190.7	0.0041		
Jan-21	18.5	177.9	116.2	0.0048	21.6	398.6	180.5	0.0044		
Feb-21	19.4	224.9	133.8	0.0056	23.6	359.8	218.9	0.0049		
Mar-21	20.6	245.7	307.9	0.0046	26.4	307.9	189.6	0.0039		
Permissible Limit	50.0	600.0	300.0	0.03	50.0	600.0	300.0	0.03		

The downwind AAQM station is 5 Km to the East. A station in the SE sector at a distance of 1 Km able to capture the impact of the existing & proposed stacks should be set up.

## Complied.

Ambient Air Quality Monitoring Results (October 2020 - March 2021)

- We have already setup AAQM stations in 5 Km to the E and 1 Km in SE direction as suggested.
- Ambient air quality monitoring reports for the period **October'2020 to March'2021** are enclosed as under:

	Allibic	III AII	Quanty	IVIOIII	toring	Nesult	3 ( Oct	ODCI Z	.020 - 1	nai Cii 2	2021)	
			Ave	rage An	nbient A	ir Quality	<b>Monito</b>	ring Res	ults (µg/	m3)		
Month		Inside	e TPP			Nava	para		Devalpara			
	PM2.5	PM10	SO2	NOx	PM2.5	PM10	SO2	NOx	PM2.5	PM10	SO2	NOx
Oct-20	24.07	41.97	11.47	15.28	22.73	39.73	11.83	15.40	22.38	41.60	11.67	15.28
Nov-20	25.38	49.38	11.71	20.09	21.89	40.23	11.68	19.30	22.38	40.36	11.95	18.94
Dec-20	29.05	50.89	11.23	15.57	23.75	44.42	11.48	15.54	23.59	43.87	11.46	15.69
Jan-21	30.36	49.78	11.09	15.38	23.71	43.61	11.34	15.50	23.49	45.10	11.45	15.58
Feb-21	30.16	49.93	11.40	15.59	24.85	43.63	11.06	15.86	23.71	44.74	11.08	15.63
Mar-21	28.97	49.91	10.91	15.83	22.60	82.99	11.12	15.71	23.38	42.41	10.80	15.62
3 (xiv)	Ash general ash and be in cement in silos onl pond.	ation will l ottom ash manufacti	generated uring. Fly a	d shall be ash will be	utilized stored	Premote Premot	ises itself  average 6 TPD wh sh is stored in cem cement p e is no op d in silo o quantity	Ash ge lich is we red in Sil lent man lant. en storaş ınly. of fly A	eneration Il 630 TPD o and boufacturing ge pond a sh genera	including ttom ash g along w s CPP ger	bottom directly ith fly as nerated F	(100%) h at our
						•			October'		1	-
					-	Month Fly Ash (M	Oct-2			_	Feb-21 3548	Mar-21 3154

3 (xvi)	Regular monitoring of water quality including heavy metals should be undertaken around ash dyke and the project area to ascertain the change in water quality, if any, due to leaching of contaminants from ash disposal area.  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.	<ul> <li>Not applicable as there is no ash ponds. Fly ash generated is being stored at fly ash silo.</li> <li>Complied.</li> <li>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).</li> <li>People working in the area of generator and other high noise areas are provided with necessary PPE's like earplugs</li> </ul>
3 (xvii)	Greenbelt of 20-25 m along the plant boundary should be developed covering an area of 0.5 ha.	<ul> <li>and ear muffs.</li> <li>Complied.</li> <li>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.</li> <li>Photographs of the same are enclosed as under:</li> </ul>
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.	<ul> <li>Complied.</li> <li>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.</li> <li>Ambient air quality monitoring report for the period October'2020 to March'2021 enclosed as under:</li> </ul>

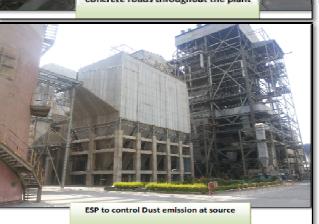
	Ambient Air Quality Monitoring Results ( October 2020 - March 2021)											
			Ave	rage An	nbient Ai	r Quality	/ Monito	ring Res	ults (µg/	m3)		
Month	Inside TPP					Nava	para			Deva	Ipara	
	PM2.5	PM10	SO2	NOx	PM2.5	PM10	SO2	NOx	PM2.5	PM10	SO2	NOx
Oct-20	24.07	41.97	11.47	15.28	22.73	39.73	11.83	15.40	22.38	41.60	11.67	15.28
Nov-20	25.38	49.38	11.71	20.09	21.89	40.23	11.68	19.30	22.38	40.36	11.95	18.94
Dec-20	29.05	50.89	11.23	15.57	23.75	44.42	11.48	15.54	23.59	43.87	11.46	15.69
Jan-21	30.36	49.78	11.09	15.38	23.71	43.61	11.34	15.50	23.49	45.10	11.45	15.58
Feb-21	30.16	49.93	11.40	15.59	24.85	43.63	11.06	15.86	23.71	44.74	11.08	15.63
Mar-21	28.97	49.91	10.91	15.83	22.60	82.99	11.12	15.71	23.38	42.41	10.80	15.62

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.
- 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 socio economic 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.

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 clearance 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:





3 (xxii)	A separate environme suitable qualified sta implementation of the safeguards.	ff should be s	et up for	Con •		rry out environment canagement cell direct cation in order to overnment protection maironmental performation chart is enclosed as anization Chart  Unit Head  Head Environment	ompliance.  ly report to the ersee effective easures and to nce within the sunder:		
3 (xxiii)	Half yearly report implementation of the environmental safegu to this Ministry / Regio	conditions stip ards should be	submitted	Con •	nplied.  Half yearly compliance sta data are regularly submitt and soft copies, our late:  ACL/EMD/F-16/2020/2108/8	ed to MoEF&CC /CPC st submission was vi	B/SPCB in hard de Letter No .		
3 (xxiv)	Regional office of the and Forests located a implementation of the Complete set of Assessment Report should be forwarded their use during monit	t Bhopal will m ne stipulated o Environmenta and Managen to the Regional	onitor the conditions. I Impact nent Plan	EIA report and management plan have been submitted vide our letter no. GACL/EMD/44/2005/30623 dated 09/04/2005.					
3 (xxv)	Separate funds she implementation of e measures along with i cost should be includ cost. The funds remain protection measures so ther purposes and should be reported to	ould be alloo environmental tem wise break ed as part of t rked for the en hould not be di year –wise ex	protection -up. These he project vironment iverted for	• •	nplied. Capital investment for e Lakhs. Recurring expenditure March'2021 is 59.19 Lakh Details of capital a environmental protection	for period of <b>Oc</b> o <b>s.</b> nd recurring exp	tober'2020 to		
		Expendit	ure incurre	ed in	Environment Managem	ent Plan -TTP			
	В	5.No P 1 Monit 2 Enviro 3 Other - Recurring E 5.No	articulars toring Equip onment Labors (Monitorin expenditure	oment orato ng Va for ti Part	ory n, DG Sets etc.) Total (In Lacs INR) he period of October'2020 t ticulars	Cost (In Lacs) 37.08 10.00 10.00 57.08 0 March'2021 Cost (In Lacs)			
	2 Manpower Cost 3 House Keeping 4 Maintenance of			olluti ction	ion Control Equipments (Environmental Monitoring) 255 * Total (In Lacs INR)	0.89 28.14 8.75 17.11 4.00 0.30 59.19			
		* Expenditu	ires are Com	nmon	for All the Plants & Mines.				

3 xxvi	Full cooperation should be extended to the Scientist/officer from the Ministry / Regional Office of the Ministry at Bhopal / the CPCB/The SPCB who would be monitoring the compliance of environmental stipulations and measures.	<ul> <li>Full support and co-operation is being extended during the visit of officer from Ministry of Environment &amp; Forest, CPCB as well as GPCB. Project was monitored by Director (Regional Office, Bhopal) during 12.10.10 to 13.10.10.&amp; 17.08.2016</li> </ul>
4	The ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the ministry.	Agreed.
5	The environmental clearance accorded shall be valid for a period of 5 years for construction/operation of the power plant. In case ,if the project authorities fails to do so within this stipulated period , this environmental clearance shall stand lapsed automatically.	<ul> <li>Noted.</li> <li>The environment clearance was issued on Nov-2005 and first phase of project was commissioned in 2007 and second phase of project was commissioned in 2010.</li> <li>Hence condition is complied.</li> </ul>
6	In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition (s) imposed and to add additional environmental protection measures required, if any.	<ul> <li>Complied.</li> <li>The company has applied for type of fuel change to MOEF&amp;CC for amendment of EC condition and same has been amended as per MOEF&amp;CC letter dated 03.06.2009 &amp; 03.12.2009.</li> </ul>
7	The above stipulations would be enforced among others under the Water (Prevention and Control of pollution)Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment Protection Act, 1986 and rules there under, Hazardous Waste (Management & Handling)Rules, 1989 and its amendments, the Environment Impact assessment Notification of January, 1994 and its amendments.	<ul> <li>All stipulations under Water (Prevention and Control of pollution) Act, 1974, the Air (Prevention and control of Pollution) Act 1981, the Environment Protection Act, 1986, Hazardous waste Rules, 1989 amendment 2003, 2008 2016 and EIA Notification 1994 are being complied.</li> </ul>
Compl		4- 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.	
(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 %.	
(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.	<ul> <li>Complied.</li> <li>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.</li> <li>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.</li> </ul>

(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 on six monthly basis. Ambient air quality monitoring report for the period October'2020 to March'2021 enclosed as under:

Ambient Air Quality Monitoring Results (October 2020 - March 2021)													
	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	
Oct-20	24.07	41.97	11.47	15.28	22.73	39.73	11.83	15.40	22.38	41.60	11.67	15.28	
Nov-20	25.38	49.38	11.71	20.09	21.89	40.23	11.68	19.30	22.38	40.36	11.95	18.94	
Dec-20	29.05	50.89	11.23	15.57	23.75	44.42	11.48	15.54	23.59	43.87	11.46	15.69	
Jan-21	30.36	49.78	11.09	15.38	23.71	43.61	11.34	15.50	23.49	45.10	11.45	15.58	
Feb-21	30.16	49.93	11.40	15.59	24.85	43.63	11.06	15.86	23.71	44.74	11.08	15.63	
Mar-21	28.97	49.91	10.91	15.83	22.60	82.99	11.12	15.71	23.38	42.41	10.80	15.62	

- (vi) 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.
- 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 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.

### Complied.

- Compliance status reports of the stipulated conditions, including results of monitoring data are being regularly uploaded on company website.
- (viii) The project proponent shall also submit six monthly reports 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.
- Half yearly compliance status report including results of monitored data are being regularly submitted to MoEF&CC /CPCB/SPCB, our last submission was on 03.11.2020 vide letter no. ACL/EMD/F-16/2020/2226/88126. Pollutants level is 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 their website and up-date the same from time to time at least on six monthly basis. Criteria pollutants level (Stack & ambient level of NOx) will be displayed at the main gate of the power plant.

### Complied

 Six monthly compliance status report and pollutants level (Stack & ambient) is being uploaded on website: <a href="www.ambujacement.com">www.ambujacement.com</a> and also being displayed at main gate of the power plant.

Co	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 coal in addition to petcoke and imported coal blended as fuel subject to strict compliance of the following.	Agreed						
(i)	CFBC Boiler shall be installed along with air cooled condenser and ESP having at least 99.8% efficiency.	Complied     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 90% SO2 removal shall be achieved by lime dosing or any other suitable mechanism.	<ul> <li>Complied</li> <li>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.</li> </ul>						
(iii)	100% Fly Ash utilization shall be achieved from the date of commissioning of the plants of total capacity.	All the generated fly ash (including bottom ash) is being stored in Silo and being fully (100%) utilized in cement manufacturing at our own cement plant.						
3	All other conditions earlier prescribed vide this Ministry letters of even no. dated 15.03.2005 and 03.05.2009 respectively shall remain the same.	Complied as all above condition.						