

# REGD. A/D

ACL/EMD/F-16/2017/ 71%

30.05.2017

**The Director (s),** Ministry of Environment & Forest (MoEF), 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 TPP.

**Ref.:** Environmental Clearance Order No. J -13012/20/2004.I (A)-II (T) dated 15<sup>th</sup> 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'16 to March'17) of Environmental Clearance Order No. 13012/20/2004.I(A)-II (T) granted by MoEF to 90 MW *Thermal Power Plant* of Ambuja Cements Ltd., located at Ambujanagar, Taluka - Kodinar, District – Gir Somnath (Gujarat). We are also enclosing here with CD containing soft copy of the same.

In case of further clarification/information require, we shall be please to provide the same.

Thanking you,

Yours Faithfully, For **Ambuja Cements Ltd.** 

2-30/5/17

Dr. Anand K. Rai HOD (Environment)

Encl.: As above.

CC:

 Central Pollution Control Board Privesh Bhavan, Atmajyoti Ashram Rd, Opp. VMC Ward Office No. 10, Subhanpura, Vadodara – 390023 (Gujarat)

Regd. Office : PO : Ambujanagar - 362 715, Tal : Kodinar, Dist. : Gir Somnath (Gujarat) Phone : (02795) 221137, 232365, Fax : (02795) 220328, 232032 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

- Member Secretary, Gujarat Pollution Control Board, Sector 10A, Paryavaran Bhavan, Gandhinagar-382010
- Regional Officer
   Gujarat Pollution Control Board,
   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

Date: 30.05.2017

01	Project type	:	Thermal Power Plant
02	Name of the project	:	Captive Thermal Power Plant (90 MW)
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)	:	Gujarat
	c) Latitude	:	21 <sup>0</sup> 00' N
	d) Longitude	:	70 <sup>°</sup> 30' E
05	Address for correspondence a) Address of concerned Project Chief Engineer (with pincode & telephone / telex / fax numbers).	:	Shri S Ramarao (Unit Head) Ambuja Cements Ltd. PO Ambujanagar-362715 Taluka- Kodinar District- Gir Somnath (Gujarat) Tel: 02795-221136/237200 Fax: 02795-220328/222032
	<ul> <li>b) Address of Executive Project Engineer / Manager (with pincode / fax numbers.</li> </ul>	:	Shri Pravin Varotaria (Head -TPP) Ambuja Cements Ltd. PO Ambujanagar-362715 Taluka- Kodinar District- Gir Somnath (Gujarat) Tel: 02795-221136/237230 Fax: 02795-220328/222032

06 Salient features a) of the project

- b) of the environmental management plans
- : To full fill the power requirements for manufacturing of cements, ACL has decided & commissioned 90 MW coal based captive thermal power plant adjacent to cement plant at Ambujanagar. At present 3x30 MW has been commissioned & under operation.
- : 1. Separate 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.
  - Continuous online monitoring systems for measurements of particulate matter, SO<sub>2</sub> & NO<sub>x</sub> have been installed at boiler stack.
  - Ambient Air Quality Monitoring is being regularly carried out at three locations for PM 10, PM 2.5, SO<sub>2</sub>, NO<sub>x</sub> and the monitoring report is being regularly submitted to SPCB & MoEF.
  - Occupational Exposure Monitoring Worker's exposure to coal dust, fly ash & noise is being regularly carried out in plant area.
  - 5. Meteorology Wind speed, wind direction, temperature, relative humidity & rainfall is being regulary monitored and record maintained on daily basis.
  - Water Quality Monitoring It involves regular monitoring of waste water from RO plant. Waste water from RO plant is being stored in closed Water tank and used for cooling process in cement plant.
  - A green belt in available area has been created which gives aesthetic look to the plant and also helps in dust level abatement.
  - 8. 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 Break up of the project area.
  - a) Submergence area : Not applicable (forest & non-forest)
  - b) Others : 4.8 ha.
- 08 Break up of the project affected : Not applicable population with enumeration of those losing houses / dwelling unit's only agricultural land only, both dwelling units & agricultural land & landless labourers / artisan.

a) SC, ST / Adivasis : ---

- b) Others : ---
- 09 Financial details :
  - a) Project cost as originally planned : Rs. 350 Crore, Year 2005 and subsequent revised estimates and the year of price reference.
  - b) Allocation made for environmental : Rs. 10.73 Crore management plans with item wise and year wise breakup
  - c) Benefit cost ratio / Internal rate of : Not Applicable return and the year of assessment. :
  - d) Whether (c) includes the cost of environmental management as shown in the above.
     : Not Applicable
  - e) Actual expenditure incurred on the : Rs. 350.29 Crore project so far.

nditure incurred on the al management plans	: 10.30 Crore April-Sept. 2008 OctMarch 2009 April – Sept.2009 Oct.'09 – March'10 April'10 –Sept.'10 Oct.'10 – March'11 April'11 – Sept.'11 Oct.'11 - March'12 April '12 – Sept.'12 Oct'12 – March'13 April'13-Sept.'13 Oct'13March'14 April'14 – Sept.'14 Oct.'14 – March'15 April'15 –Sept.'15 Oct.'15 – March'16 April'16-Sept.'16	Rs. 5.39 Crore Rs. 0.05 Crore Rs. 0.16 Crore Rs. 0.22 Crore Rs. 0.32 Crore Rs. 0.32 Crore Rs. 0.36 Crore Rs. 0.36 Crore Rs. 0.36 Crore Rs. 0.20 Crore Rs. 0.34 Crore Rs. 0.35 Crore Rs. 0.29 Crore Rs. 0.29 Crore Rs. 0.29 Crore Rs. 0.39 Crore Rs. 0.40 Crore
	Oct.'16 – March'17	Rs. 0.44 Crore

Total = Rs. 10.73 Crore

10	Forest land requirement.	:	Not applicable.
	<ul> <li>a) The status of approval for diversion of forest land for non-forestry use</li> </ul>	:	
	b) The status of clearing felling	:	
	c) The status of compensatory afforestation, if any	:	
	d) Comments on the viability & sustainability of compensatory afforestation programme in the light of actual field experience so far.	:	
11	The status of clear felling in non-forest areas (such as submergence area of reservoir, approach roads), if any with quantitative information.	:	Not applicable
12	Status of construction.	:	

f) Actual expense environmenta so far.

	a) Date of commencement (Actual and / or planned) : 60 MW commissioned in November 2005 30 MW commissioned in January 2009
	b) Date of completion (Actual and / or 2007, 2010 : 2007, 2010) : : : : : : : : : : : : : : : : : : :
13	Reasons for the delay if the project is : Not applicable. yet to start.
14	Dates of site visits :
	<ul> <li>a) The dates on which the project was : 12.10.10 to 13.10.10 by Dr. A. Mehrotra monitored by the Regional Office on previous occasions, if any.</li> <li>12.10.10 to 13.10.10 by Dr. A. Mehrotra</li> </ul>
	b) Date of site visit for this monitoring : 17.08.2016 report
15	Details of correspondence with project : Half yearly compliance status report is authorities for obtaining action plans / information on status of compliance to safeguards other than the routine letters for logistic support for site visits).

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# Compliance Status of Environmental Clearance issued to 90 MW Captive Thermal Power Plant (EC vide MoEF letter No. J – 13012/20/2004. IA –II (T) dated 15th March and 18th March, 2005)

S No.	Condition	Compliance Status
3 (i)	All the conditions stipulated by Gujarat 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>All the conditions stipulated by Gujarat Pollution Control Board vide their letter no. PC/NOC/CCA- 49/11712 dated 15.04.2004 &amp; PC/CCA –JNG- 49/32287 dated 11.10.2004 are complied with and strictly implemented.</li> </ul>
3 (ii)	DG set shall be discontinued after commissioning of captive power plant	<ul> <li>28 MW DG sets (3 DG sets of 6 MW &amp; 1 DG set of 10 MW) have been discontinued. 30 MW DG sets has been retained and shall be continued for emergency purposes during preventive maintenance of 2x30 MW &amp; 1x30 MW captive thermal power plant.</li> <li>MoEF 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 vide our letter no. ACL/EMD/F-16/2010/55928 dated 25.12.2010</li> <li>Copy of the same is enclosed as Annexure 1</li> </ul>
3 (iii)	Coal requirement is estimated at 1180 TPD (Indian/Imported Coal) of 25 – 35% / 15% ash content and 0.9% / 0.5% Sulphur content.	<ul> <li>Total Coal requirement is 1180 TPD (Indian/Imported Coal) quality is being complied for Indian/Imported coal.</li> </ul>
3 (iv)	Any change in fuel shall be referred to the committee.	<ul> <li>MoEF has amended EC vide letter dated 03.06.2009 &amp; 03.12.2009 in respect of fuel change. Copy of letter has already been submitted to MoEF vide our letter no.ACL/EMD/F-16/2010/55928 dated 25.12.2010.</li> <li>Copy of the same are enclosed as Annexure 2a and Annexure 2b respectively.</li> </ul>
3 (v)	Copy of coal linkage duly approved by SLC Ministry of coal should be submitted before starting commissioning at the site.	<ul> <li>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.</li> <li>Copy of the same is enclosed as Annexure 3</li> </ul>
3 (vi)	Water requirement shall not exceed 1460 m3/day. No discharge of waste water should be done outside the plant boundary / natural drain and all the waste water should be recycled and reused in the plant.	<ul> <li>Point noted and complied. Water requirement is not exceeding 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 at cement plant.</li> </ul>
3 (vii)	Ground water will not be extracted/purchased for any purpose / use in captive power plant. Only recycled water and / or stored water in Mine pit reservoirs	<ul> <li>Harvested rain water stored in mined out pits/reservoirs are being used for captive power plant operation.</li> </ul>

(EC vide MoEF letter No. J – 13012/20/2004. IA –II (T) dated 15th March and 18th March, 2005)

	shall be used.	
3 (viii)	A regular auditing of ground water availability and use by an independent agency should be put in place.	<ul> <li>Study on ground water potential in 1 km radius zone of captive power plant was carried out jointly by Ground Water &amp; Mineral Investigation Consultancy Centre (P) Ltd. Jaipur, Rajasthan.</li> </ul>
3 (ix)	Rain water harvesting should be adopted. Central Ground Water Authority / Board shall be consulted for finalization of appropriate water harvesting technology within a period of three months from the date of clearance.	<ul> <li>Water-harvesting practices such as check dams, inter linking canals, rooftop rain water harvesting system, injection wells etc are already in place. However, as directed, we have consulted CGWA/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 Annexure 4a and rain water harvesting measures are enclosed as 4b.</li> </ul>
3 (x)	Two stacks of 94 m height each shall be provided with continuous online monitoring system with exit velocity of 20-25m/sec should be maintained.	<ul> <li>Two stacks are provided with height 95 m each.</li> <li>Continuous online emission monitoring systems for particulate matter, SO2 and NOx have been installed at both stacks and exit velocity of 20-25 m/sec is being maintained.</li> </ul>
3 (xi)	High efficiency Electrostatic Precipitator (ESP) having efficiency of 99.8% should be installed to limit outlet SPM emission at 100 mg/Nm3	<ul> <li>03 nos. of ESP's have been Installed and designed to restrict the PM emission below 100 mg/Nm3.</li> <li>Stack monitoring results for the period October'16 to March'17 is enclosed as Annexure 5.</li> </ul>
3 (xii)	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.	<ul> <li>We have already setup AAQM stations in 5 Km to the E and 1 Km in SE direction as suggested.</li> <li>Ambient air quality monitoring reports for the period October'16 to March'17 are enclosed as Annexure 6.</li> </ul>
3 (xiii)	Space for FGD installation shall be kept in the plant premises.	• Space for FGD installation has been kept in the plant premises itself.
3 (xiv)	Ash generation will be 630 TPD. 100% of the fly ash and bottom ash generated shall be utilized in cement manufacturing. Fly ash will be stored in silos only and there shall be no open storage pond.	<ul> <li>Total ash generation is less than 630 TPD and 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.</li> <li>Total quantity of ash generated during October'16 to March'17 is enclosed as Annexure 7</li> </ul>
3 (xv)	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	<ul> <li>Not applicable as there is no ash ponds. Fly ash generated is being stored at fly ash silo.</li> </ul>

(EC vide MoEF letter No. J – 13012/20/2004. IA –II (T) dated 15th March and 18th March, 2005)

	area.		, 2003)
3 (xvi) 3 (xvii)	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. Greenbelt of 20-25 m along the plant boundary should be developed covering an area of 0.5 ha.	•	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). People working in the area of generator and other high noise areas are provided with necessary PPE's like earplugs and ear muffs. Green belt of 20-25 m has been developed in and around plant boundary covering an area of around 2.10 hectares. Photographs of the same are enclosed as
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.	•	Annexure 8. 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'16 to March'17 is enclosed as <b>Annexure 6</b> .
3 (xix)	For controlling fugitive dust, regular sprinkling of water in vulnerable areas of the plant should be ensured.	•	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 <b>Annexure 9</b>
3 (xx)	All other mitigative measures shall be taken as enumerated in Chapter 5 of the REIA report.	•	All the mitigation measures are being taken and the Compliance status has already been submitted to MoEF 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 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.	•	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 vide our letter no.ACL/EMD/F-16/2010/55928 dated 25.12.2010. Copy of the same is enclosed as <b>Annexure 10</b>
3 (xxii)	A separate environmental monitoring cell with suitable qualified staff should be set up	•	A well established Environmental Management Division (EMD) with suitable qualified personnel is

(EC vide MoEF letter No. J – 13012/20/2004. IA –II (T) dated 15th March and 18th March, 2005)

		irch, 2005)
	for implementation of the stipulated environmental safeguards.	<ul> <li>already in place.</li> <li>Head of environmental management cell directly report to the Unit Head of the organization in order to oversee effective implementation of environment protection measures and to monitor the routine environmental performance within the premises. EMD organization chart is enclosed as Annexure 11.</li> </ul>
3 (xxiii)	Half yearly report on the status of implementation of the conditions stipulated and environmental safeguards should be submitted to this Ministry / Regional office / CPCB / SPCB.	<ul> <li>Half yearly compliance status report along with the monitored data are regularly submitted to MoEF/CPCB/SPCB in hard and soft copies, our last submission was on 28.11.2016 vide letter no.ACL/EMD/F-16/2016.</li> </ul>
3 (xxiv)	Regional office of the Ministry of Environment and Forests located at Bhopal will monitor the implementation of the stipulated conditions. Complete set of Environmental Impact Assessment Report and Management Plan should be forwarded to the Regional Office for their use during monitoring.	<ul> <li>EIA report and management plan have been submitted vide our letter no. GACL/EMD/44/2005/30623 dated 09/04/2005.</li> </ul>
3 (xxv)	Separate funds should be allocated for implementation of environmental protection measures along with item wise break-up. These cost should be included as part of the project cost. The funds remarked for the environment protection measures should not be diverted for other purposes and year – wise expenditure should be reported to the Ministry.	<ul> <li>Details of capital and recurring expenditure for environmental protection measures are enclosed as Annexure 12.</li> </ul>
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 Dr. A. Mehrotra (Regional Office, Bhopal) during 12.10.10 to 13.10.10.</li> </ul>
4	The ministry reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the ministry.	Point Noted.
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>Condition has complied, project has completed within the stipulated time.</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	<ul> <li>Point Noted and shall be done in case of any alteration of conditions.</li> </ul>

(EC vide MoEF letter No. J – 13012/20/2004. IA –II (T) dated 15th March and 18th March. 2005)

	Ma	irch, 2005)
	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.	
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>Point Noted and shall be ensured that all the stipulated conditions are being complied with.</li> </ul>
		o. J-13012/20/2004- IA. II (T) dated 03.06.2009 issued
(i)	ermal Power Plant [EC 1st amendment]The Pet coke shall be blended with imported coal and the blended fuel shall be used instead of imported/indigenous coal.	• Accepted, Petcoke is blended with imported coal and being used as fuel.
(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 %.	<ul> <li>Blending of fuels is done in a manner to restrict Sulphur percentage below 3.5% in blended fuel. Limestone dosing is done along with coal, in order to limit Sulphur dioxide emission.</li> </ul>
(iii)	All the waste generated from sulphur quenching shall be used in a cement plant.	<ul> <li>All the waste generated from sulphur quenching is being used in cement plant.</li> </ul>
(iv)	First aid and sanitation arrangement shall be made for the drivers and the contract workers during construction phase.	<ul> <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.</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.	• 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'16 to March'17 enclosed as <b>Annexure 6</b> .
(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	<ul> <li>Project has already completed and plant is under operational stage.</li> <li>Presently, all our management staff and wage board employees are residing in company provided residential colony.</li> </ul>

(EC vide MoEF letter No. J – 13012/20/2004. IA –II (T) dated 15th March and 18th March, 2005)

	after the completion of the project.		, 2003)
(vii) (viii)	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. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including	•	Compliance status reports of the stipulated conditions, including results of monitoring data are being regularly uploaded on company website. Half yearly compliance status report including results of monitored data are being regularly submitted to MoEF/CPCB/SPCB both in hard and soft copies, our last submission was on 28.11.2016 vide letter no. ACL/EMD/F-16/2016. Pollutants level is being uploaded on website and also being displayed on board at main gate of the power plant.
	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.		
(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.	•	Six monthly compliance status report and pollutants level (Stack & ambient) is being uploaded on website and also being displayed at main gate of the power plant.
	liance Status of Environmental Clearance N ermal Power Plant [EC 2nd amendment]	o. J	-13012/20/2004- IA. II (T) dated 03.12.2009 issued
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.	•	Point Noted.
(i)	CFBC Boiler shall be installed along with air cooled 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 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.	•	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.	•	Point Noted & agreed.



#### J-13012/20/2004- IA. II (T) Government of India Ministry of Environment & Forests

Telephone: 011-2436 7257 e-mail: w.bharat@nic.in Paryavaran Bhavan, C.G.O. Complex, Lodi Road, New Delhi -110003. Dated: August 04, 2010.

#### **OFFICE ORDER**

#### Sub: Retention of 30 MW DG Set installed at Cement Plant at village Vadnagar, in Junagarh Distt., in Gujarat - reg.

Sir,

The undersigned is directed to refer to your letter dated 22.03.2010 requesting for allowing retention of 30 MW DG Set installed within the premises of Cement and Captive Power Plants at village Vadnagar, in Junagarh Distt., in Gujarat

2. In this regard it is to inform you that the request has been considered and permission is hereby granted for retaining 30 MW DG Set out of the total installed capacity of 58 MW subject to strict compliance of the following:

- i) The 30 MW DG Set retained shall be used only for emergency purpose during preventive maintenance of any one of the 3x30 MW Lignite/Coal/Petcoke Based Captive TPP.
- ii) Sulphur content in fuel for 30 MW DG Set shall not exceed the permissible limits as prescribed under this Ministry's notification issued vide GSR 489 (E), dated 09.07.2002.

3. It is accordingly informed that in the Ministry's letter of even no. dated 15.03.2005, the condition no. (ii) under para no. 3 shall be now substituted as under:

"30 MW DG Set only shall be retained strictly as stand-by arrangement for power requirement during preventive maintenance of any one of the 3x30 MW Captive TPP".

Cont`d.....

4. All other conditions earlier prescribed vide this Ministry letters of even no. dated 15.03.2005 and 03.05.2009 and 13.012.2009 respectively shall remain the same.

This issues with the approval of the Competent Authority.

Yours fattifully, (W. Bharad Sinch) **Deputy Director** 

M/s Gujarat Ambuja Cements Ltd. P.O Ambuja Nagar - 362715 Taluk: Kodinar, Distt: Junagarh **Gujarat.** 

#### Copy to:

- 1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110 001.
- 2. The Secretary, Deptt. Of Forests & Environment, Government of Gujarat, Sachivalaya, 8th Floor, Gandi Nagar 382010.
- 3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi - 110 066.
- 4. The Chairman, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector-10A, Gandhi Nagar - 382010.
- 5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBDcum-Office Complex, East Arjun Nagar, Delhi - 110032.
- 6. The Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (WZ), Kendriya Paryavaran Bhawan, E-5 Arera Colony, Ravishankar Nagar, Bhopal - 462016.
- 7. Director (EI), MoEF
- 8. Guard file.
- 9. Monitoring file.

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(W.Bharat Singh) Deputy Director

By Speed Post

# No.J-13012/20 /2004-IA.II(T) Government of India Ministry of Environment & Forests

Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi- 110003.

Dated : 3<sup>rd</sup> June, 2009

То

M/s Gujarat Ambuja Cements Ltd P.O.Ambujanagar- 362 715 Taluka –Kodinar, Distt. Junagarh Gujarat

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Subject: Change in fuel in 3x30 MW CPP at vill. Vadnagar, Distt. Junagarh, Gujarat by M/s Gujarat Ambuja Cements Ltd – Environmental clearance regarding.

Sir,

Reference is invited to your letter no. Nil dated 24<sup>th</sup> March, 2009 regarding change in fuel in respect of the above mentioned project.

2. 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.

3. The proposal has been considered and in accordance with the recommendation of the EAC, the Ministry of Environment & Forests has no objection for change in fuel from imported/indigenous coal to Pet coke blended with imported coal subject to strict implementation of all the conditions contained in the environment clearance letter of even no. dated 15th March, 2005 and additional conditions stipulated as follows:

- (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 waste generated from sulphur quenching shall be used in a cement plant.

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- (iv) First aid and sanitation arrangements shall be made for the drivers and the contract workers during construction phase.
- (v) Regular monitoring of ground level concentration of SO<sub>2</sub>, NOx, Hg,SPM and RSPM shall be carried out in the impact zone and records 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 decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.
- (vi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (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 pollutant 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.

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- (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.
  - (ix) Project proponent will up-load the compliance status in their website and up-date the same from time to time at least six monthly bases. Criteria pollutants levels (Stack & ambient levels of NOx) will be displayed at the main gate of the power plant.

This issues with the approval of the Competent Authority.

'n

Yours faithfully,

(OM PRAKASH) DEPUTY DIRECTOR

Copy to:

- 1. The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001.
- 2. The Secretary, Environment & Forests Deptt., Government of Gujarat, Sachivalaya, 8<sup>th</sup>floor, Gandhi Nagar-382010 (Gujarat).
- 3. The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
- 4. The Chairman, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector 10-A, Gandhi Nagar-382010.
- 5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- 6. The Chief Conservator of Forests, Western Regional Office, Ministry of Environment & Forests, Kendriya Parayavaran Bhawan, E- 5, Arera Colony, Link Road -3, Ravishankar Nagar, Bhopal-462016.
- 7. Director (EI), MOEF.

8. Guard file.

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9. Monitoring file.

(OM PRAKASH) DEPUTY DIRECTOR

#### J-13012/20/2004- IA. II (T) Government of India Ministry of Environment & Forests



Paryavaran Bhavan, C.G.O. Complex, Lodi Road, New Delhi -110003. Dated: December 03, 2009.

#### OFFICE ORDER

#### Sub: 90 MW Captive Power Plant at Ambuja Nagar, in Gujarat -reg.

Sir,

The undersigned is directed to refer to your letters dated 18.09.2009 requesting for allowing domestic coal and lignite along with pet coke blended with imported coal.

2. In this regard it is to inform you that the matter has been examined in consultation with the Expert Appraisal Committee (Thermal), it is to inform that this 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:

- i) CFBC Boiler shall be installed along with air cooled condenser and ESP having atleast 99.8% efficiency.
- ii) Sulphur content in blended fuel shall not exceed 3.5 % and 90% SO<sub>2</sub> removal shall be achieved by lime dosing or any other suitable mechanism.
- iii) 100 % Fly Ash utilization shall be achieved from the date of commissioning of the plants of total capacity.

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.

This issues with the approval of the Competent Authority.

Yours faithfully. (W. Bhar **Deputy Director** 

M/sGujarat Ambuja Cements Ltd. P.O Ambuja Nagar – 362715 Taluk: Kodinar, Distt: Junagarh **Gujarat.** 

Copy to:

- The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110 001.
- The Secretary, Deptt. Of Forests & Environment, Government of Gujarat, Sachivalaya, 8<sup>th</sup> Floor, Gandi Nagar – 382010.
- The Chairman, Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi 110 066.

- 4. The Chairman, Gujarat Pollution Control Board, Paryavaran Bhawan, Sector-10A, 5. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office
- 6. The Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office
- (WZ), Kendriya Paryavaran Bhawan, E-5 Arera Colony, Ravishankar Nagar, Bhopal -
- 462016. 7. Director (EI), MoEF
- 8. Guard file.
- 9. Monitoring file.

(W.Bharat Singh) Deputy Director



# South Eastern Coalfields Limited

(A Subsidiary of Coal India Limited) Seepat Road, PO. SECL, Bilaspur-495 006 (Chhattisgarh) Tel. 07752-246322 Fax. 07752-246472

Sales & Mktg. Deptt.

SECL/BSP/S&M/COMML/31/ACL CPP (LOA)/ 2803

Dtd: 24.09.2008

Speed Post

To, Ambuja Cements Limited, P. O. Ambujanagar, Taluka-Kodinar, Dist.-Junagadh, Gujrat-362715

Dear Sir,

# Subject: Letter of Assurance

### Preamble

In consideration of the request by Ambuja Cements Limited, P. O. Ambujanagar, Taluka-Kodinar, Dist.-Junagadh, Gujrat-362715 (hereinafter referred to as "the Assured") for issuance of Letter of Assurance (hereinafter referred to as "LOA") requiring 4,94,000 tonnes per annum (tpa) of F Grade coal for its 90 MW Captive Power Plant located at P. O. Ambujanagar, Taluka-Kodinar, Dist.-Junagadh, Gujrat-362715 (hereinafter referred to as "CPP"), from about October'2008, as requested by the Assured, SECL (hereinafter referred to as "the Assurer") hereby provisionally assures that it would endeavour to supply coal to the Assured subject to the following terms and conditions:

### 1. Scope of Assurance

### 1.1 Quantity & Grade of coal

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 Fuel Supply Agreement (FSA) within three (3) months thereafter, the Assurer shall endeavour to supply, as per the normative requirement of the CPP, **4,94,000** tonnes per annum (tpa) of F\* Grade(s) coal to the Assured, which shall be subject to review and assessment by the Assurer of the actual coal requirement of the Assured as well as the incremental availability of coal from the mines of the Assurer and/or of imported coal. It is expressly clarified that in the

event 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 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.

#### 1.3 Change in law

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.

#### 1.4 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 terminated for reasons including de-allocation of such block by the Government and inordinate delays faced in acquiring land or receiving environmental/forest clearances; 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-Majeure 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.

#### 2. Fulfillment of Assured's obligations

# 2.1 Time-bound achievement of milestones

The Assured shall undertake to complete all the activities, as mentioned in Annexure 1 to this LOA, within twenty four (24) months from the date of issue of LOA and each activity within the time-period mentioned against it. For the avoidance of any doubt, the time-period of twenty-four (24) months, as aforesaid, shall include any Force Majeure Act that may occur during the validity of the LOA.

# 2.2 Reporting Requirement

The Assured shall submit the status of each activity/milestone including the documentary evidence in relation to such status within the time-period as mentioned in Annexure 1.

### 2.3 Verification by the Assurer

The Assurer reserves the right to independently verify the status of each milestone, as mentioned in Annexure 1, and satisfy itself of its authenticity; and in the event of any significant or reasonable discrepancy found by the Assured in respect of the status reported /documentary evidence submitted by the Assured, the Assurer shall notify the Assured forthwith upon which the Assured shall correct the discrepancy so noted by the Assurer within seven (7) days. Further, in the event that the Assured fails to correct the discrepancy as provided herein the Assured shall be liable to submit additional Commitment Guarantee, as per Clause 3.3.

# 3. Commitment Guarantee by the Assured

# 3.1 Amount of Commitment Guarantee

Prior to the date of issue of this LOA, the Assured have provided to the Assurer, a Commitment Guarantee (CG), in cash / bank guarantee, for a sum of Rs. **2,81,58,000 (Rs. Two Crore Eighty One Lakhs Fifty Eight Thousand)** equivalent to ten percent (10%) of base price of Grade F\* Run-of-Mine (ROM) coal of the Assurer prevalent on the date of application for issue of LOA, multiplied by the quantity of coal mentioned in the Preamble, {Note:in no case shall the CG be less than Rs.3,00,000/- (Indian Rupees Three lakhs only) or be more than Rs.6,00,00,000/- (Indian Rupees Sixty Million only) per mtpa of coal quantities requested by the Assured or part thereof.} Such CG shall be noninterest bearing, and in case of it being deposited in the form of bank guarantee it should comply with the format specified by the Assurer and issued by a scheduled bank acceptable to the Assurer.

\* In case of multiple grades mentioned in Clause 1.1, grade with the highest useful heat value (UHV) shall be considered for the purpose of calculation of commitment advance.

### 3.2 Validity & Conversion of Commitment Guarantee

The Commitment Guarantee (CG) shall remain valid until four (4) months after the expiry of the LOA period of twenty-four (24) months. Thereafter, the CG shall stand converted into the Contract Performance Guarantee (CPG) that would be the condition precedent to signing of the FSA, in which case validity of the CG shall be extended in accordance with the terms of the FSA. For the avoidance of any doubt, the Assured shall be liable to submit the guarantee for such further amount that may result from the difference between the CPG under FSA and the CG under this LOA.

## 3.3 Additional Commitment Guarantee

If any activity/milestone is not duly performed or completed by the Assured within the time stipulated against each such activity/milestone, as specified in Annexure 1, then the Assured shall be liable to furnish to the Assurer one tenth (1/10<sup>th</sup>) of the amount of CG for each such non-performed or incomplete milestone, as additional Commitment Guarantee, within fifteen (15) days from the date such activity/milestone is falling due for completion. For the avoidance of any doubt, such additional CG may need to be deposited multiple times subject to partial/non-fulfillment of each activity/milestone at the end of each half-yearly interval, as mentioned in Annexure 1. The aggregate of additional CG(s) in no case shall exceed the amount of CG, as specified in Clause 3.1 above. Further, such additional CG(s) shall at all times be deemed to be a part of the CG and all related provisions of this LOA shall be equally applicable for additional CG.

#### 3.4 Encashment of Commitment Guarantee

#### 3.4.1 Cancellation or withdrawal of LOA

In the event that any of the activities/milestones is delayed beyond the period specified against each such activity/milestone in Annexure 1 and the Assured fails to furnish the additional CG to the Assurer in accordance with Clause 3.3 hereof, or the Assured furnishes additional CG to the Assurer in accordance with Clause 3.3 hereof but fails to fulfill all the activities/milestones within the total period of twenty-four (24) months, as specified in Annexure 1, the Assurer shall

have the right to cancel or withdraw this LOA after duly notifying the Assured in writing at least seven (7) days in advance. For the avoidance of doubt, all the milestones, as specified in Annexure 1, shall need to be fully completed and any partial completion of any activity/milestone at the end of validity of LOA shall entitle the Assurer to cancel or withdraw this LOA. Upon such cancellation/ withdrawal of this LOA, the Assurer shall encash the CG including any additional CG submitted by the Assured. It is clarified for removal of doubt that this Clause shall survive the cancellation/ withdrawal of this LOA.

### 3.4.2 Failure to sign the FSA

The Assurer shall have the right to encash the CG in the event of failure by the Assured to sign the FSA within three (3) months from the expiry of validity of the LOA or the satisfactory achievement of all the milestones, as shown in Annexure 1, whichever is earlier. It is also clarified to the Assured that the percentage of annual contracted quantity fixed with respect to Take or Pay obligations in the FSA may be reviewed by the Seller in light of its coal availability and coal commitments, and amended on year-to-year basis during the term of the FSA.

#### 4. Validity of the LOA

The LOA shall remain valid for a period of twenty-four (24) months from the date of issue of this LOA, and shall stand annulled upon expiry of such period.

#### 5. Assignment of the LOA

The Assured shall not, without the express prior written consent of the Assurer, assign to any third person the LOA, or any right, benefit, obligation or interest therein or thereunder.

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### 6. End-use of coal

The total quantity of coal assured pursuant to this LOA is for use at the CPP, and the Assured shall not re-sell or trade the coal assured or supplied hereunder to any third party. If at any time in the reasonable opinion of the Assurer, the Assured has entered into an arrangement for such resale or trade of such coal supplies, the Assurer shall cancel/withdraw this LOA without incurring any liability whatsoever, including the liability for payment of damages to the Assured.

24/9/08 T

GENERAL MANAGER(S&M) SOUTH EASTERN COALFIELDS LIMITED ୍ରାଧ୍ୟ, BILASPUR (CG)

## Copy for kind information:

- 1) CMD, SECL
- 2) DT(O), SECL
- 3) DT(P&P), SECL
- 4) CGM(S&M), CIL, Kolkata

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# Annexure 4(a)

#### Ambuja Cement Foundation - Ambujanagar Details for programme wise expenditure from Oct. 2016 to march 2017

No	Programme	Funds from ACF Resources	*Funds received through Government	** Funds from other Donors / Donor Agencies	***People's Contribution	****Direct Funding to Communities	Total Exp.
	GUJARAT - Kodinar						
1	Water Resource Mangement & Drinking Water Projects						
	a.Water Resource Devlopment	32.77	-	7.89	-	-	40.66
	B .Drinking Water Programme	5.69	-	12.59	12.50	51.05	81.83
	c. Salinity Prevention (KVY III)	11.28	-	43.90	66.82	59.10	181.10
2	Agriculture Development( Farm Forestry & Afforesation)	5.28	-	5.89	33.60	49.09	93.86
3	Better Cotton Initiative (BCI)	3.17	-	29.83	92.76	7.31	133.07
4	Krishi Vigyan Kendra (KVK)	10.49	99.46	-	-	-	109.95
5	Health & Sanitation Programme	15.00	-	4.34	114.69	187.32	321.35
6	Skill and Enterprunership Development Programme	66.86	-	20.68	15.72	-	103.26
7	Village Knowledge Centre & Anganwadi exp	1.25	-	-	-	-	1.25
8	Women / Youth Development & Others	6.79	-	-	-	-	6.79
9	Integrated Community Development Programme	99.03	-	-	-	-	99.03
10	Co-ordination & Administration Expenses	42.15			-	-	42.15
11	Capital Expenditure	3.49	-	-	-	-	3.49
	TOTAL	303.25	99.46	125.12	336.09	353.87	1,217.79

(Rs. In lakhs)

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A 1A V a b c c d f f g B D a b B B	Activities          Activities         Mater Resources Management and Drinking Water Projects         a. Checkdam construction / Renovation         b. Dykes construction         c. Well Recharging / Percolation well         d. Ponds Construction / Renovation         e. Link Channels / Canals construction         f. Water Storage Tank / Farm Ponds         g. Khadine Bund         Drinking Water Projects         a. RRWHS Construction         b. Drinking water wells / Bore wells / Renovation of Saline Wells / Bouris	Unit No No No No No No No No	5 14 1 2 11
1AVabcdef.gBDabB	Water Resources Management and Drinking Water Projects         a. Checkdam construction / Renovation         b. Dykes construction         c. Well Recharging / Percolation well         d. Ponds Construction / Renovation         e. Link Channels / Canals construction         f. Water Storage Tank / Farm Ponds         g. Khadine Bund         Drinking Water Projects         a. RRWHS Construction         b. Drinking water wells / Bore wells / Renovation of Saline Wells /	No No No No No	14 1 2
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f. g B D a b B	. Water Storage Tank / Farm Ponds g. Khadine Bund Drinking Water Projects a. RRWHS Construction b. Drinking water wells / Bore wells / Renovation of Saline Wells /	No No	
B D a b B	g. Khadine Bund Drinking Water Projects a. RRWHS Construction b. Drinking water wells / Bore wells / Renovation of Saline Wells /	No No	11
B D a b B	Drinking Water Projects A. RRWHS Construction D. Drinking water wells / Bore wells / Renovation of Saline Wells /	No	11
a b B	a. RRWHS Construction b. Drinking water wells / Bore wells / Renovation of Saline Wells /		11
a b B	a. RRWHS Construction b. Drinking water wells / Bore wells / Renovation of Saline Wells /		11
В	-	No	
В	-	I No I	
		110	0/4/0
IC	c. Overhead / Cistern Tank construction/underground sump	No	
	J. Community Based Driniking Water Project	No	5
	Soil and Water Conservation		-
	a. Area Treated ( Gully Control / Gabion / loose boulder structure /		
	veir crates / Khadine	На	
	Agriculture Development		
	a. Micro Irrigation system, Drip and Sprinklers	Acre	453.15
	b. Bee Keeping		
	No of units	No	71
	Yield from bee keeping	Kg.	14
	No of families		3
с	c. Organic Farming	Acre	
	d. Training & Exposure visits	No	314
	Farmers trained	No	14397
e	e. Vermi / NADEP Composting	No	22
	. Mushroom Cultivation	Farmers	
	g. Aquaculture	No	
-	n. Area under SRI cultivation	Acre	
	No of farmers	No.	
i	. Seed Production programme	Acre	
	. Better Cotton Initiative - Area covered	Acre	4887
J.	- Farmers covered	No	10554
L	. Farmer producer organization	No	10354
	. No of members	NO	935
	Farm Forestry and Afforestation	NU	333
	a. Horticulture Plantation	Acro	1225.03
a		Acre	
i.	No of plants D. Agro-Farm Forestry	nos Acre	78373

Sr. No	Locations : Ambujanagar	Unit	
	Activities		
	c Afforestation	Acre	
	d. Avenue plantation / Roadside plantation	Km	
3	Animal Husbandry Programme		
	a. Cattle Health Camps	No	
	Cattles Treated	No	
	Cattle Immunised	No	2718
	b. Fodder Demonstrations	Acre	82
	c. Artificial Insemination	No	
	d. Integrated cattle feeding system	No	
	e. Dairy co-operatives formed	No	
	f. Pashu Swastha Sevika (PSS) / paravets	No	
	g. No of families benefited by AH programme		261
4	Non Conventional Energy		
	a. Biogas Plants	No	
	b. Smokeless Chullahs	No	
5	Education Development		
	a. Non Formal Education Centre	No	
	b. School / Anganwadi (Balwadi )Support Programme	No	1
	c. Balmitras trained	No	
	d. Government Teachers Training & Workshops	No	
	e. Construction and Repairing of School Building	No	
	f. Teaching Learning Resource support to schools	No	
	g. Scholarship for Higher Studies / Support to Needy Students	No	
	h. Village / School Library	No	
	i. Village Knowledge Centre / Computer education	No	3
	j. Adolescent Education Programme	No	8
	k. Adult Education Centres		
	I. Students training / exposure visits	No	
	m. Co-curricular activities (Balmela, summer camps, sports events)	No	
	n. Schools benefited	No	
	o.No of students benefited under Education Development		
6	Special Education- Ambuja Mano Vikas Kendra		
	a.No of Children	No	
	b. No of children covered under home based rehabilitation	No	
	c.No of special children / community benefited by physiotherapy cen	No	
7	Health and sanitation Programme		
	a. No of camps organised (include all general and speciality health camps)	No	6
	Patients benefited	No	1206
	b. Villages benefited under mobile & weekly dispensary	No	12

Sr. No	Locations : Ambujanagar	Unit	
	Activities		
	Patients treated	No	2024
	c. Sakhis (Village Health Functionaries)	No	19
	d. Villages covered by <i>Sakhis</i> / Patients treated by <i>Sakhis</i>	No	14
	No of Patients treaded		1368
	e. Khelwadi sessions conducted by <i>Sakhis</i>	No	81
	f. Health intervention trainings done (include trainings of Sakhis /	No	14
	Govt. health fucntioneries)		
	Participants in trainings	No	184
	g. Construction of Toilet Blocks / Sulabh Sauchalaya / Soak Pits	No	1022
	h. Villages where Total Sanitation Campaign initiated	No	6
	i. No of Village Health Sanitation Committees activated	No	
	j. No of drug addicts treated / referred	No	
	No of families benefited		
	k. No of IEC activities done to save girl child	No	
В	Tobacco Control Programe		
	a. Tobacco free villages	No	
	Population covered		
	b. Tobacco free schools	No	
	c. No. of People who quit Tobacco	No	
	d. Master Trainer trained	No	
	e. Teachers Trained	No	
8A	HIV/AIDS Awareness Programme ( Community )		
	a. Awareness session for CSWs / MSMs/ IDUs / Migrant workers	No	
	b. Condom Distribution	No	
	c. Peer Educators	No	
	d. Cases treated under STI clinics	No	
	e. Identification / Formation of Network of HIV + ve Person	No	
	f. One to One sessions	No	
	g. No of health centres	No	
	h. No of people benefited	No	
В	Workplace Programme		
	a. Awareness session for Staff / Families / contract staff / laboures /	Nic	
	Truckers / Students / Rural community	No	
	b. Master Trainers / peer educators		
	c. Peer Educators Training Programme	No	
	d. Doctors CME ( Continous Medical Education) W/for Doctors	No	
	e. People benefitted from HIV Testing	No	
9	Skill and Entrepreneurship Development Programme		
	a. No of institute		1

Sr. No	Locations : Ambujanagar	Unit	
	Activities		
	b. No of batches / courses	No	11
	c. Entrepreneurs trained under SEDI / ITI	No	197
	d. No of trainees placed	No	106
	e. No of trainees persuing (Continuation)	No	239
10	Women and Youth Development		
	a. No of SHG formed		32
	No of members		416
	b. Training & Exposure (women)	No	52
	No of participants	No	2030
	c. Training & Exposure (Youth)		6
	No of participants	No	248
	d. No of Federations Formed	No	
11	Rural Infrastructure Development Programme		
	a. Construction of Common Pathways / Village Roads	No / Mtrs	2194
	b. Street Light installation	No	
	c. Drainage construction	Mtrs	
	d. Crematorium / Ghats construction/ Drinking water facilities	No	
	e. Community Centre construction / School classroom	No	1
	f. Development of Play Grounds/Retaining wall	No / Mts	
	g. Support for Social and Cultural Events	No	6
	h. Bus Shelters / compound walls	No	1
	i. House repairing	No	
	j. Construction of culverts / bridge	No	
	k. Low cost housing project	No	
	I.Construction of new School	No	
	m. No of villages covered	No	26
12	Gir Forest Conservation project		
	a. Construction of Parapet wall around wells to protect wild animals	No	
13	Krishi Vigyan Kendra - Kodinar		
	a. No of villages covered	No	6
	b. No of farmers trained	No	3286
	c. No of technology transfered	No	12
	d. No of technology tested	No	7
14	Over all coverage		
	a.No of villages	No	6
	a.Approx No of People benefited		
15	KVY III programmes		
	a. IPM,INM&IDM practice adopted	Acre	24968
	b.Soil testing	Farmers	501
	c.Village information centre	Villages	2

Sr. No	Locations : Ambujanagar	Unit	
	Activities		
	d. SMS base agri. information system 3 SMS/month	Farmers	6880
16	Community safety awarness programmes		
	Community safety	No	118
	Total participents in community safety	No	3872

# <u>Stack Monitoring Results )</u> (October2016-March2017)

	Stack attached to								
		Boiler III							
Month	РМ	SOx	NOx	PM	SOx	NOx			
	mg/Nm <sup>3</sup>	ppm	ppm	mg/Nm <sup>3</sup>	ppm	ppm			
Oct-16	37.00	40.50	21.70	42.00	36.90	19.30			
Nov-16	35.00	41.80	20.40	39.00	37.50	18.90			
Dec-16	35.00	38.60	17.70	39.00	42.70	20.80			
Jan-17	33.00	41.80	19.80	38.0	38.90	17.50			
Feb-17	31.00	40.90	16.90	35.0	37.50	18.30			
Mar-17	34.00	38.60	18.90	31.0	40.70	20.50			
Minimum	31.0	38.6	16.9	31.0	36.9	17.5			
Maximum	37.0	41.8	21.7	42.0	42.7	20.8			
Average	34.2	40.4	19.2	37.3	39.0	19.2			
Permissible Limit	100.0	100.0	50.0	100.0	100.0	50.0			

# <u>Ambient Air Quality Monitoring Results</u> (October 2016 - March2017)

	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-16	29.8	48.5	12.5	16.5	27.8	48.6	11.8	15.8	26.1	49.9	11.8	15.7
Nov-16	31.3	50.1	12.6	16.4	25.5	46.4	11.4	15.7	25.7	47.9	11.6	14.7
Dec-16	30.8	50.3	12.4	16.4	25.1	46.3	11.7	15.7	25.8	48.1	11.7	15.5
Jan-17	31.4	52.3	12.3	16.3	26.0	47.2	11.5	15.5	24.5	46.0	11.7	15.4
Feb-17	32.3	54.6	11.9	15.6	25.4	45.9	12.4	16.2	23.5	43.1	12.0	16.0
Mar-17	30.3	52.5	12.3	16.2	26.5	46.8	11.4	15.8	24.6	44.9	11.7	15.7
Minimum	29.8	48.5	11.9	15.6	25.1	45.9	11.4	15.5	23.5	43.1	11.6	14.7
Maximum	32.3	54.6	12.6	16.5	27.8	48.6	12.4	16.2	26.1	49.9	12.0	16.0
Average	31.0	51.4	12.3	16.2	26.0	46.9	11.7	15.8	25.0	46.7	11.8	15.5

# Annexure 7

# Fly Ash generation at 3\*30 TPP

# (October'16 to March'17)

Month	Quantity (MT)
Oct	3316.13
Nov	3215.61
Dec	3144.69
Jan	3573.67
Feb	4626.06
March	4907.18

# **ANNEXURE – 8**

# Green belt around periphery of Thermal Power Plant







Greenary inside Thermal Power Plant









ESP to control Dust emission at source



Dust Sweeping Machine





Properly covered Fly ash storage silo



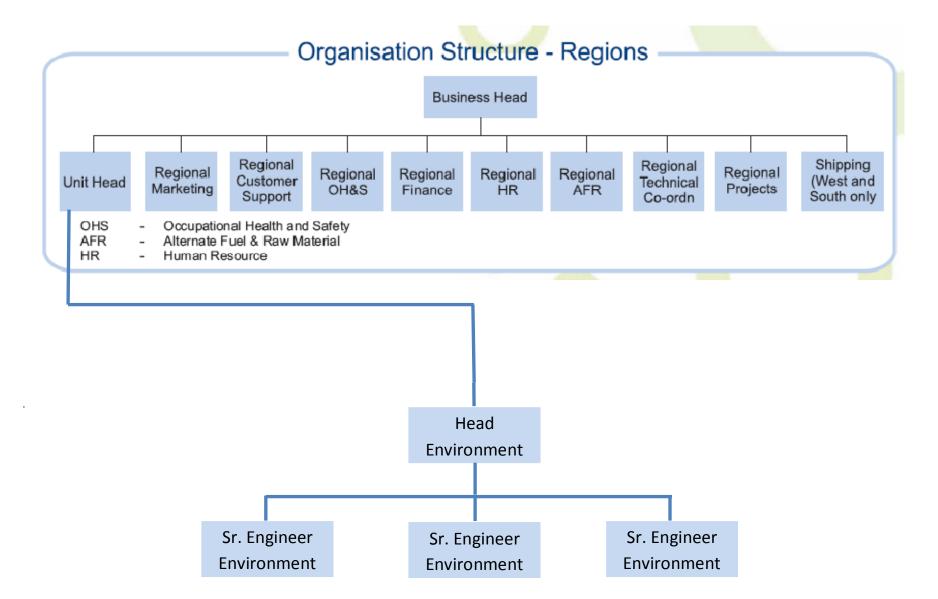
Covered belt conveyor from Coal storage area to Boiler

"JAI HIND" DATED- 24-03-2005



# "INDIAN EXPRESS" DATED 24-03-05





# (A) Capital Investment for Environmental Monitoring :

	Total: Rs. 57.08 Lakh
(3) Others (Monitoring Van & DG sets)	: 10.00 Lakh
(2) Environmental Laboratory	: 10.00 Lakh
(1) Monitoring Equipments	: 37.08 Lakh

# (B) Recurring expenditure for the period of October'16 to March'17 :

(1) Green belt development	: 0.88 Lakh
(2) Manpower Cost*	: 15.93 Lakh
(3) House Keeping	: 7.41 Lakh
(4) Maintenance of Pollution Control Equipments	: 17.52 Lakh
(5) Other Env. Protection (Environmental Monitoring)	: 2.41 Lakh
(6) Environmental Awareness*	: 0.09 Lakh

### Total : Rs. 44.24 Lakh

\*Expenditures common for all plants & mines

# (C) Community Development expenditure by Ambuja : Rs. 1217.79 lakh Cement Foundation\*\*

\*\* Community development expenditure is common for all plant & mines at Ambujanagar for the period of October'16 to March'17. Programme Wise Expenditure Details is as below:

	Ambu	ja Cement Found	ation - Ambuja	nagar			
	Details for program	me wise expendi	ture from Oct.	2016 to march	2017		
							(Rs. In lakhs)
Sr.No	Programme	Funds from ACF Resources	*Funds received through Government	** Funds from other Donors / Donor Agencies	***People's Contribution	****Direct Funding to Communities	Total Exp.
	GUJARAT - Kodinar						
1	Water Resource Mangement & Drinking Water Projects						
	a.Water Resource Devlopment	32.77	-	7.89	-	-	40.66
	B .Drinking Water Programme	5.69	-	12.59	12.50	51.05	81.83
	c. Salinity Prevention (KVY III)	11.28	-	43.90	66.82	59.10	181.10
2	Agriculture Development( Farm Forestry & Afforesation)	5.28	-	5.89	33.60	49.09	93.86
3	Better Cotton Initiative (BCI)	3.17	-	29.83	92.76	7.31	133.07
4	Krishi Vigyan Kendra (KVK)	10.49	99.46	-	-	-	109.95
5	Health & Sanitation Programme	15.00	-	4.34	114.69	187.32	321.35
6	Skill and Enterprunership Development Programme	66.86	-	20.68	15.72	-	103.26
7	Village Knowledge Centre & Anganwadi exp	1.25	-	-	-		1.2
8	Women / Youth Development & Others	6.79	-		-		6.79
9	Integrated Community Development Programme	99.03	-	-	-	-	99.03
10	Co-ordination & Administration Expenses	42.15	-	-	-	-	42.15
	Capital Expenditure	3.49	-	-	-	-	3.49
	TOTAL	303.25	99.46	125.12	336.09	353.87	1,217.7