

**Compliance of Conditions of Environment Clearance by MoEF for
Cement Grinding Unit of Ambuja Cements Ltd. at village Navagraon,
Tehsil Nalagarh, Distt. Solan (H.P.)**

Sl. No.	Condition	Compliance Status
i	The particulate matter emissions from various sources shall not exceed 50 mg/Nm ³ . The fugitive emissions during loading and unloading shall be suitably controlled. Bag house/ filters shall be provided to control air emissions to achieve the prescribed standards.	To achieve the prescribed standards of Ambient air and Stack emissions, 27 Nos. of Bag filters and one main Bag House have been installed. Stack emissions are maintained well below the prescribed limit of 50 mg/Nm ³ . Stack emission data from June 2013 to November 2013 is enclosed as Table – 1
ii	The locations of ambient air quality monitoring stations shall be set up as per statutory requirement in consultation with the Himachal Pradesh Pollution Control Board (HPPCB) and additional stations shall be installed, if required, in the downwind direction as well as where maximum ground level concentrations are anticipated.	Six Ambient Air quality monitoring stations have been fixed and the report is being submitted to State Pollution Control Board on monthly basis. Ambient Air Quality monitoring data from June 2013 to November 2013 is enclosed as Table – 2
iii	The company shall obtain permission for drawl of 400 m ³ /day ground water from the Central Ground Water Authority/ Central Ground Water Board and copy of the same shall be submitted to the ministry and its Regional Office at Chandigarh within three months from the date of issue of this letter.	Required permission has been obtained and a copy of permission letter has already been submitted to the Regional office of MoEF, at Chandigarh vides our letter dated 22 nd June 2010
iv	Green belt shall be developed at least in 33% of plant area to mitigate the effect of fugitive emissions all around the plant as per the guidelines of Central Pollution Control Board.	Provision has been kept for development of Green Belt. Plantation work is in progress. Month wise detail of plantation up to November 2013 is enclosed as Table – 3
V	The project authorities shall transport the raw materials and cement in covered means to avoid fugitive emission during transport.	All the raw materials and Cement are transported in covered trucks to avoid fugitive emission.
Vi	No clinker manufacturing facility shall be installed by the company	Clinker manufacturing facility has not been installed.
Vii	All the recommendations mentioned in the CREP guidelines for the cement plants shall be followed and complied.	Being Complied. Compliance status enclosed as Annexure -1
	GENERAL CONDITIONS	

Ambuja Cements Limited (Unit: Nalagarh)

Village Navagraon, P.O. Jajhra, Tehsil Nalagarh, Distt. Solan (H.P.) 174 101
(Regd. Off.: P.O. Ambujanagar, Taluka Kodinar, Distt. Junagarh, Gujarat – 362 715)

I	The project authorities shall strictly adhere to the stipulations of the SPCB/ state government or any other statutory body.	All stipulations are being complied and shall be taken care in future also.
ii	All other necessary statutory clearances from the concerned Departments including "No Objection Certificate" from the Himachal Pradesh Pollution Control Board (HPPCB) shall be obtained prior to commencement of construction and/ or operation.	No Objection Certificate obtained from HPPCB. All other Statutory Clearances have been obtained.
iii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	The point has been noted and will be taken care in future.
iv	At no time, the emissions shall exceed the prescribed limits. In the event of failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.	Process interlocking system has been provided which shall trip off the complete system in case of failure of any pollution control system.
V	The gaseous emissions (SO ₂ , Nox) and particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the concerned authorities from time to time.	Emissions are being monitored regularly and found well below prescribed norms.
Vi	The company shall undertake following Waste Minimization measures:	
	Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.	No by product being generated from process.
	Use of "Close pneumatic" system for transport of fine material.	All fine materials are transported in closed systems to avoid any leakage/spillage.
	All venting systems shall be connected with dust arresting equipments.	All the material transfer points are equipped with Bag Filters.
	Dust collect in pollution control equipments shall be reused.	Dust collected in pollution control equipment is automatically recycled in the respective process.
Vii	Fugitive emissions in the work zone environment, product and raw materials storage area shall be regularly monitored.	Condition is being complied with.

	The emissions shall conform to the limits imposed by the State Pollution Control Boards/Central Pollution Control Board.	
Viii	The overall noise levels in all around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	All possible noise control measures have been taken. Ambient Noise is regularly monitored. A Report of Ambient Noise Monitoring for the period from June 2013 to November 2013 is enclosed as Table – 4
Ix	The company shall develop rain water harvesting structures to harvest the run off water for recharge of ground water.	Two rain water harvesting structures with proper drainage system have been made for collection of rain water to recharge the ground water.
X	Occupational health and safety measures shall be undertaken. Periodic monitorial for exposure to dust on the workers should be conducted and records maintained including health records of the workers. The company shall engage a doctor who is trained in occupational health.	Occupational Health & Safety is given the top most priority in our company. A small dispensary has been set up with a qualified doctor and a pharmacist. Regular medical checkup has been conducted for the workers as well as employees on annual basis. The company has set up a separate OH&S Deptt. that ensures strict adherence to all safety norms. Latest Examinations have been conducted in February 2013. Copies of some reports have already been submitted vide our office letter No. ACL(Nlg)/EMD/2013/06-04 dtd. 24 th June 2013 Next examination is due in February 2014.
Xi	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment. The eco-development plan should be submitted to the SPCB within three months of receipt of this letter for approval.	Ambuja Cement Foundation (a Non-Governmental Organization), has been set up by the company for looking after Eco-developmental and community welfare measures in the project area and is working since the inception of the project.
Xii	A separate Environmental Management	To look after the environmental

	Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	management in the company, a separate Environmental Management Cell equipped with full-fledged laboratory has been set up.
Xiii	The project authorities shall earmark Rs. 2.20 Crores to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for all the conditions stipulated herein shall be submitted to the Ministry's Regional Office. The funds so provided shall not be diverted for any other purpose.	Though a sum of Rs.2.20 Crores was earmarked to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government, we have spent more than Rs.35 Crores on Environment Protection measures and other related activities.
Xiv	The implementation of the project vis-à-vis environmental action plans shall be monitored by the concerned Regional Office of the Ministry/SPCB/CPCB. A six monthly compliance status report shall be submitted to monitoring agencies and shall be posted on the website of the Company.	Six monthly Compliance Report is being submitted regularly and the same will be posted on the website.
Xv	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one should be in the Vernacular language of the locality and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	The condition has been complied with.
Xvi	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of project.	The project was approved by the state govt. on March 11, 2008; EC was granted by MoEF on August 22, 2008. The project activities at site were formally started in January, 2009. Consent to Operate was issued by State Pollution Control Board on March 23, 2010 and production started on March 27, 2010.

**Compliance of Conditions of CREP recommendations
Ambuja Cements Limited (Cement Grinding Unit) Navagraon - Nalagarh (H.P.)**

Sl. No.	Recommendation	Compliance Status
1	Cement Plants, which are not complying with notified standards, shall do the following to meet the standards; Augmentation of existing Air Pollution Control Devices - by July 2003 Replacement of existing Air Pollution Control Devices - by July 2004	Cement Grinding Unit is already meeting the emission standard of 50 mg/Nm ³
2	Cement Plants located in critically polluted or urban areas (including 5 km distance outside urban boundary) will meet 100mg/ Nm ³ limit or particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm ³ .	Emission level is maintained below 50 mg/Nm ³
3	The new cement kilns to be accorded NOC/Environmental Clearance w.e.f 1.04.2003 will meet the limit of 50 mg/Nm ³ for particulate matter emissions.	Not Applicable.
4	CPCB will evolve load based standards by December 2003.	Shall be complied.
5	CPCB and NCBM will evolve SO ₂ and NO _x emission standards by June 2004.	Shall be complied.
6	The Cement industries will control fugitive emissions from all the raw material and products storage and transfer points by December 2003. However, the feasibility for the control of fugitive emissions from limestone and coal storage areas will be decided by the National Task Force (NTF). The NTF shall submit its recommendations within three months.	All the material transfer points are equipped with Bag Filters. Raw materials are stored in covered areas. Maximum area inside plant has been concreted to prevent fugitive emission. All the roads are also concreted. Development of Green Belt is in progress.
7	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum cokes as fuel in cement kiln by July 2003.	Not Applicable
8	After performance evaluation of various types of continuous monitoring	Continuous emission monitoring system has been installed at

	equipment and feedback form the industries and equipment manufactures, NTF will decide feasible unit operations/sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring systems (CMS) by December 2003	Cement Mill Stack. Also a Continuous Ambient Air Quality Monitoring Station (CAAQMS) has been installed.
9	Tripping in kiln ESP to be minimized by July 2003 as per the recommendations of NTF.	Not Applicable
10	Industries will submit the target date to enhance the utilization of waste material by April, 2003.	All the particulate matter collected through APCEs is automatically recycled in the respected processes. More over we are using fly ash for making Pozolona Portland Cement (PPC) which is waste of Thermal Plants.
11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	Not Applicable
12	Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003. * Non complying units shall given bank guarantee to respective SPCBs.	Not Applicable

Annexure - 2

AMBUJA CEMENTS LIMITED (UNIT - NALAGARH)

CEMENT PRODUCTION DATA FROM JUNE 2013 TO NOVEMBER 2013

MONTH	CEMENT PRODUCTION (METRIC TONNES) OPC+PPC
JUNE 2013	44452
JULY 2013	46700
AUGUST 2013	42800
SEPTEMBER 2013	87000
OCTOBER 2013	56893
NOVEMBER 2013	18887
TOTAL	296732

Table - 1

Stack Emission Monitoring Report (June 2013 – November 2013)

(Average values)

Months	PM Values in mg/Nm ³					
	Cement Mill Bag House	D.G. Set	Clinker Dump Hopper Bag Filter -1	Clinker Dump Hopper Bag Filter - 2	Packing Plant Bag Filter - 1	Packing Plant Bag Filter - 2
JUNE 2013	9.03	*	11.37	12.08	13.17	13.61
JULY 2013	8.46	*	12.17	11.94	12.88	13.08
AUGUST 2013	9.53	*	11.74	14.55	12.78	13.77
SEPTEMBER 2013	9.46	*	11.81	13.03	11.30	13.34
OCTOBER 2013	9.12	*	12.31	13.42	12.93	12.73
NOVEMBER 2013	8.62	*	13.53	11.94	14.76	12.99

* DG not running.

Table - 2

Ambient Air Quality Monitoring Report (June 2013 – November 2013)

(Average Values)

Parameter Station Name	RSPM Values ($\mu\text{g}/\text{M}^3$)											
	Station No. 1 (Near Adm. Office)		Station No. 2 (Near Scrap Yard)		Station No. 3 (MPSS)		Station No. 4 (Towards Navagraon)		Station No. 5 (Towards Pater Phaloo)		Station No. 6 (Towards Ratyor)	
	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
JUNE 2013	73.4	29.90	67.6	28.61	69.6	27.46	70.9	30.72	65.2	29.58	62.4	27.56
JULY 2013	68.3	23.75	63.4	27.31	59.7	27.70	66.4	26.31	62.2	26.37	64.7	27.22
AUGUST 2013	70.3	25.1	69.5	27.37	65.8	28.28	64.9	26.79	66	24.48	69.3	23.88
SEPTEMBER 2013	66.3	27.65	68.1	26.96	64.6	25.33	70.9	27.28	64.8	28.37	65.4	26.81
OCTOBER 2013	68.0	23.05	69.8	24.05	63.8	25.28	65.1	22.32	64.4	23.65	66.3	25.19
NOVEMBER 2013	70.2	26.65	71.2	28.00	66.8	25.76	68.4	27.12	73.2	25.96	70.0	24.35

Table-3**AMBUJA CEMENTS LIMITED (UNIT - NALAGARH)**
Plantation Data upto November 2013

Month	Trees planted	Shrubs planted
Upto May 2010	1240	25
June 2010 to November 2010	400	8943
December 2010	-	-
January 2011	-	-
February 2011	100	800
March 2011	70	1435
April 2011	30	500
May 2011	90	1000
June 2011	156	2000
July 2011	408	3028
August 2011	184	2559
September 2011	51	6684
October 2011	12	80
November 2011	0	276
December 2011	60	533
January 2012	144	745
February 2012	24	0
March 2012	22	0
April 2012	142	349
May 2012	21	170
June,2012	80	620
July 2012	151	800
August 2012	227	120
September 2012	118	15
October 2012	0	0
November 2012	0	16
December 2012	0	0
January 2013	0	0
February 2013	70	1200
March 2013	120	800
April 2013	40	300
May 2013	0	0
June 2013	75	
July 2013	70	60
August 2013	150	0
September 2013	45	20
October 2013	0	0
November 2013	0	0
Total	4300	33078

Table - 4

**Ambient Noise Monitoring Results along the boundary wall of the company
(June 2013 – November 2013)**

Location/Months	Noise Reading in dB(A)																	
	June 2013		July 2013		August 2013		September 2013		October 2013		November 2013							
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
Near Switch Yard	46.9	43.5	43.9	40.7	42.4	40.3	46.7	42.4	52.5	41.7	55.1	42.3						
Near Batching Plant	50.2	42.3	51.8	42.3	56.9	41.1	49.9	44.3	54.8	44.8	61.6	41.3						
Near Bore well – I	56.4	41.4	54.2	43.5	57.2	41.9	51.5	40.6	51.5	42.3	53.7	40.8						
Near Stores Building.	52.5	42.2	51.8	43.9	51.3	40.6	56.8	40.5	66.2	40.4	59.6	43.1						
At Material Gate	63.9	60.6	71.7	66.8	66.5	46.8	62.3	44.8	69.4	43.2	71.5	44.8						
Near Weigh Bridge	57.5	41.5	56.2	43.8	70.8	42.7	56.5	40.4	60.1	41.5	69.5	42.2						
Near Scrap yard	51.5	41.5	55.4	43.9	61.9	44	48.5	42.3	63.8	44.7	70.4	41.8						
Near Rain Water Harvesting Structure I	52.4	44.6	53.8	43.7	50.5	40.4	49.1	40.4	47.2	42.5	43.8	40.4						
Near STP	57.1	41.9	55.1	42.7	61.8	43.2	56.3	48.1	66.9	44.5	59.5	42.3						
At AAQM Station on MPSS	55.4	40.7	53.8	43.7	46.7	41.5	46.2	41.7	52.8	41.5	47.4	43.1						