

# Ambuja Cement

ACL/SK/ENV/10-18/253

Date: 11.10.2018

The Ministry of Environment, Forest & Climate Change,  
Eastern Regional Office,  
A/3, Chandrasekharpur,  
Bhubaneswar-751023  
Orissa

Kind Attention: Dr. A. K. Gupta  
Jt. Director( S)

**Sub: Six Monthly Compliance Report towards Environment Clearance dated 23.06.2011 for the period April-2018 to September-2018**

**Ref: EC letter no. J-11011/547/2010-IA-II (I) dated 23.06.2011**

Dear Sir,

As per provisions of EIA Notification 2006, please find attached herewith the subject report for the period from **April-2018 to September-2018**.

Thanking you,  
Yours faithfully,

For **Ambuja Cements Ltd.**  
Unit: **Sankrail**

  
(Arun Kumar Jha)  
Sr. Vice President & Unit Head

CC to :

(i) The Scientist D, **CPCB** Zonal Office, South End Conclave, Block 508, 1582 Rajdanga Main Rd, Kol -700707

(ii) Sr. SEE (EIM), **WBPCB**, Paribesh Bhavan, Salt lake, Kolkata-700098

## AMBUJA CEMENTS LIMITED

Unit : Sankrail

Jaladhulagori, Vill. & P.O. : Dhulagori, P.S. : Sankrail, Dist. : Howrah (W.B.) - 711302

Phone : 033 - 6608 7100 (4 Lines), Fax : 033 2679 8423

(Regional Off. : "INDICON VIVA", 6th Floor, 53A, Lesla Roy Sarani, Kolkata - 700 019, Phone : 033 - 4403 3900, Fax : 2461 7744 / 8413)

(Regd. Off. : P.O. : Ambujanagar, Taluka : Kodinar, District : Gir Somnath, Gujarat - 362715)

CIN Nos. L26942GJ1981 PLC004717, Website : [www.ambujacement.com](http://www.ambujacement.com)

*Compliance of Environmental Clearance Conditions for Ambuja Cements Grinding Unit of Capacity 2.4 MTPA at Village Jala Dhulagori, Tehsil Sankrail, District Howrah in West Bengal*

*(Period: April-2018-Sept-2018)*

Compliance Status of Environmental Clearance Conditions accorded by MoEF for existing cement grinding unit of capacity 2.4 MTPA at Village Jala Dhulagori, Tehsil Sankrail, District Howrah in West Bengal of M/s. Ambuja Cements Ltd.

Ref. No. J-11011/547/2010 IA-II(I)

Date: 23<sup>rd</sup> June 2011

A	Specific Condition	Status of Compliance
	<b>Condition</b>	<b>Status of Compliance</b>
i	Particulate emissions shall be controlled within 50 mg/Nm <sup>3</sup> by installing adequate air pollution control system viz. Bag filters and stacks of adequate height etc. Data on ambient air, fugitive and stack emissions shall be submitted to the Ministry's Regional Office at Bhubaneswar, SPCB and CPCB regularly	As per MoEF & CC Notification dated 10 <sup>th</sup> May 2016, particulate matter emission is maintained below 30 mg/Nm <sup>3</sup> in all the stacks by installing Bag house in Roller Press & Bag Filter in all remaining stacks. Minimum – 0.2 mg / Nm <sup>3</sup> , Maximum – 27.5 mg / Nm <sup>3</sup> is observed in stack emission. Stack emission result data monitored by NABL accredited laboratory [R V Briggs & Co. Private Ltd.] is mentioned in <i>Annexure I</i> . Ambient Air data is provided in <i>Annexure II</i> . Fugitive emission data is provided in <i>Annexure III</i> .
ii	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 should be followed	Ambient Air Quality data is being monitored as per the National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> November, 2009 and the same is being provided in <i>Annexure II</i>
iii	Gaseous emissions including secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB should be followed	Since Ambuja Cements Limited, Unit : Sankrail is a grinding unit hence there is no occurrence of gaseous emission. However, secondary fugitive emissions from all the sources are being controlled within the latest permissible limits issued by the Ministry and regularly monitored. Monitored fugitive emission data is provided in <i>Annexure III</i>
iv	The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas. All the raw material stock piles should be covered. A closed clinker stockpile system shall be provided. All conveyors should be covered with GI sheets. Covered sheds for storage raw materials and fully covered conveyors for transportation of materials shall be provided besides coal, cement, fly ash and clinker shall be stored in silos. Pneumatic system shall be used for fly ash handling	The company has installed Bag Filters throughout the plant for dust collection and extraction system to control fugitive dust emissions at various transfer points (i.e. unloading, conveying, transporting, stacking), bagging and packing areas. Gypsum Stock piles are stored under covered shed (Figure 1) Clinker is stored inside two no. silos of 25,000 MT each (Figure 3). Fly-Ash is stored inside a 4000 MT Silo. – (Figure 4). Finished Cement is stored in 4 no. Cement Silos of 5,000 MT (Figure 5). All conveyors are covered with GI sheets (Figure 2) Fly Ash is handled through Pneumatic system (Figure 6)
v	Asphalting/concreting of roads and water spray all around the stockyard and loading/unloading areas in the cement plant shall be carried out to control fugitive emissions.	All internal roads in the plant are concreted / pitched. Water sprinkler is used for dust suppression at the raw material stock yards, cement bag loading areas, truck





*Compliance of Environmental Clearance Conditions for Ambuja Cements Grinding Unit of Capacity 2.4 MTPA at Village Jala Dhulagori, Tehsil Sankrail, District Howrah in West Bengal*

*(Period: April-2018-Sept-2018)*

	Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of SPM and RSPM such as haul road, loading and unloading points, transfer points and other vulnerable areas. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard	yard, roads etc. Photograph of water sprinkler arrangement is provided in Figure 9. Pedestrian Pathway (Figure 7) inside the factory premises are constructed to ensure safe vehicular movement beside concreted road (Figure 8).  AAQ is being monitored as per directions issued by MoEF and CPCB. AAQ is being maintained well below the prescribed limit. Monitored AAQ data is provided in <i>Annexure II</i>
vi	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw materials including fly ash should be transported in the closed containers only and should not be overloaded. Vehicular emissions should be regularly monitored	Clinker and Gypsum are transported to the plant through covered wagons (Figure 10) Fly-ash is transported through closed bulkers only and over loaded quantity is not allowed. (Figure 6). Vehicular Emission is regularly monitored through checking of vehicle Pollution Certificate under PUC norms
vii	Total ground water requirement shall not exceed 270 m <sup>3</sup> /day and necessary permission from the competent authority for the drawl of water shall be obtained. Efforts shall be made to further reduce water consumption by using air cooled condensers. All the treated wastewater should be recycled and reused in the process and/or for dust suppression and green belt development and other plant related activities etc. No process wastewater shall be discharged outside the factory premises and 'zero' discharge should be adopted	Ground water consumed for the period is within 270 m <sup>3</sup> /day and continuous efforts are made for water conservation through developing rain water harvesting, STP effluent water utilization. Permission obtained from Ground Water Resource Development Authority, Govt. of West Bengal. Permit No. P060900201074000000ITLE dt. 21.06.2011 & P060900201963000000ITSE dt. 13/02/2012 for 180 m <sup>3</sup> /day & 90 m <sup>3</sup> /day drawn of ground water through Tube wells. The copies of the permissions are provided in <i>Annexure IV &amp; V</i> . Waste water treatment scheme is based on "Zero Discharge" concept. Waste water is recycled and reused to minimize fresh water usage. Present treated water discharged from STP being used for gardening & dust suppression within plant boundary. (Figure 9 & 11). Cement grinding process is a dry process hence no waste water is generated.
viii	Efforts shall be made to make use of rain water harvested. If needed, capacity of the reservoir shall be enhanced to meet the maximum water requirement. Only balance water requirement shall be met from other sources	Roof top rain water harvesting on roofs of the colony quarters is prepared. Rain water harvesting provision at the roof of Packing Plant with an area of 7500 sq mtr is in progress.
ix	All the bag filter dust, raw meal dust, coal dust, clinker dust and cement dust from pollution control devices should be recycled and reused in the process used for cement manufacturing. Spent oil and batteries should be sold to authorized recyclers / re-processors only	All the bag filter dust, clinker dust and cement dust from pollution control devices are recycled and reused in the process used for cement manufacturing. Used grease ( 3.23 MT) & Waste Oil ( 8.66 MT) is sold to authorized recyclers / re-processors only for financial year 2017-2018. Batteries are recycled under buy-back scheme by the suppliers.
x	Green belt shall be developed in at least 33% area in and around the cement plant as per the CPCB guidelines to mitigate the effects of air emissions in consultation with local DFO	Out of the total existing plant area i.e. 18.36 ha, 4.78 ha area has already been developed into green belt / plantation and continuous effort is made to develop more of area into plantation. Local species have been planted





Compliance of Environmental Clearance Conditions for Ambuja Cements Grinding Unit of Capacity 2.4 MTPA at Village Jala Dhulagori, Tehsil Sankrail, District Howrah in West Bengal

(Period: April-2018-Sept-2018)

		as per guidelines. Tree density is 1179 No./acre [estimated by Quick Field method] and survival rate is 98%. Around 600 saplings of different plants varieties [eg. Neem, Akashvani, Mahogany, Arjun, Chatim and Kadam] are planted at different locations in the plant premises in this tenure of April-September. Some of photographs of plantation attached in <i>Annexure-XI</i>
xi	At least 5 % of the total cost of the project shall be earmarked towards the Enterprise Social Commitment based on locals need and item-wise details along with time bound action plan should be prepared and submitted to the Ministry's Regional Office at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner	For the period from April-2018-September-2018, we have incurred Rs.1,21,73,011/- towards CSR. Details attached in <i>Annexure XI-A</i> .
<b>B General Condition</b>		
i	The project authorities must strictly adhere to the stipulations made by the West Bengal Pollution Control Board and the State Government	Noted and complied
ii	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests	Noted and being complied.
iii	The gaseous emissions from various process units shall conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time. The State Pollution Control Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location	Since it is a cement grinding unit no gaseous emission occurred during process.
iv	At least four ambient air quality monitoring stations should be established in the downward direction as well as where maximum ground level concentration of PM10, SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the SPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar and the SPCB/CPCB once in six months	Ambient air quality [ <i>Annexure-II</i> ] measured by third party [along with NO <sub>x</sub> and SO <sub>2</sub> ] and stack emission [ <i>Annexure-I</i> ] data are submitted along with this report.
v	Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose	No industrial waste water is generated as this is a cement grinding unit which has a dry process plant. Domestic waste water is collected in sewage treatment plant [zero discharge concepts] and recycled and reused to minimize fresh water usage. Present water discharged from STP being used for gardening & dust suppression within plant boundary. The STP water quality analysis report is included in <i>Annexure-VI</i> . (Figure 9 & 11 of <i>Annexure-IX</i> ).
vi	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The	The overall noise levels are monitored in and around the plant area and are within the prescribed limits. Ambient Noise monitoring is carried out at 6 designated locations in & around the plant and are within limits. Proper noise





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	ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime)	control measures are used in plant area and PPE are used for more than five minutes exposure of high noise. The results of Ambient Noise Monitoring is enclosed in <i>Annexure-VII</i>
vii	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act	Health check up of all employee including contractual workmen has been conducted regularly as per Factories Act and it is a regular process and record has been maintained. Annual health check-up is done once every year covering Test of Blood, Ur ine, ECG, PFT, Chest X-ray, Audiometry, Eye Test, Skin Test.
viii	The company shall develop surface water harvesting structures to harvest the rain water for utilization in the lean season besides recharging the ground water table	Ground water recharging is not permissible as per the NoC of West Bengal Pollution Control Board. Water savings done through Systematic Rice Intensification (SRI) cultivation by Ambuja Cement Foundation is 415577 m <sup>3</sup> for this tenure.
ix	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programs, educational programs, drinking water supply & health care etc	Noted and complied. Photographs along with detailed activities are attached in <i>Annexure XI(A)</i>
x	As proposed, Rs 2.0 Crores and Rs. 0.20 Crores shall be earmarked towards capital cost and recurring cost/annum for environment pollution control measures to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. An implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Regional Office of the Ministry at Bhubaneswar. The funds so provided shall not be diverted for any other purpose	The cost towards environment pollution control measures, incurred during the period of April-September is Rs.846288 towards Bag filter maintenance. The details are enclosed in <i>Annexure-VIII</i>
xi	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent	The copies of clearance letter has been sent to Dhulagori Gram Panchayat on dt. 20/08/2011, Zilla Parishad on dt. 20/08/2011.  No suggestion is received from the above bodies.  The clearance letter has also been put in company website
xii	The project proponent shall upload the status of compliance of the stipulated environment clearance 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 the MOEF at Bhubaneswar. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM10, SO <sub>2</sub> , NOx (ambient levels as well as stack emissions) or	Online AAQM has been installed. This has been started from the month of April 2012. Data has been uploaded on website. The critical parameters are displayed on the main gate of the company. SO <sub>2</sub> , NOx data of Ambient measured by third party are attached in <i>Annexure-II</i>



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*(Period: April-2018-Sept-2018)*

	critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain	
xiii	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bhubaneswar / CPCB / SPCB shall monitor the stipulated conditions	Noted and complied
xiv	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respective Regional Office of the MOEF at Bhubaneswar by e-mail	The Form-V for the year ended 31 <sup>st</sup> March 2018 has been submitted to West Bengal Pollution Control Board on 25/09/2018. Attached photocopy of the same as <i>Annexure-IX</i> . It has been uploaded in website also.
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 of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . 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 shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the Regional office at Bhubaneswar	Newspaper publications on 29 <sup>th</sup> June 2011 are enclosed in <i>Annexure X</i>
xvi	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 commencing the land development work	The copy of NoC has been sent to MoEF and Regional Office on dt 26/12/2011.



# Annexure-I

## Stack Emission Data





## Annexure-I



# R. V. BRIGGS & CO. PRIVATE LTD.

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CIN : U51109WB1931PTC007007



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## TEST REPORT

No. AP-FG/18-19/53A

Date: April 18, 2018

Page 1 of 1

Issued to : M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL).					
Address : Jaladhiulagori, VII & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.					
Sample Description : Stack Gas					
Date & time of sampling : 18.04.2018 at 02:20 P.M.	Test Completed on : 18.04.2018				
<b>A. General information about stack :</b>					
1. Stack connected to : Roller Press					
2. Emission due to : Cement Grinding					
3. Material of construction of stack : M.S.					
4. Shape of stack : Circular					
5. Whether stack is provided with permanent platform & ladder : Yes					
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack (a) from ground level : 71.5 M	(b) from roof level : ---				
2. Diameter of the stack (a) at bottom : ---	(b) at top : 1.5 M				
3. Diameter of the stack at sampling point : 1.5 M					
4. No. of Traverse point : 12 Nos.					
5. Height of the sampling point from GL : 36.0 M					
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Nil	2. Fuel consumption : Nil				
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Baremetric pressure : 752 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1	Temperature of emission	IS 11255 : Part 3 : 1985	°C	84	N.A.
2	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	7.91	N.A.
3	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	41440	N.A.
4	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A.
5	Carbon dioxide	APHA - ORSAT	% v/v	0.3	N.A.
6	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	16	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

(T. NANDI)

Authorised Signatory

For R.V.BRIGGS & CO. (P) LTD.

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- \* Results relate only to the parameters tested.







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E-mail : rvbriggs.kolkata@gmail.com, Website : www.rvbriggs.com

CIN : U51109WB1931PTC007007

## TEST REPORT

No. AP-FG/17-18/277

Date: August 06, 2018

Page 1 of 1

Issued to	: M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL)				
Address	: Jaldhulagoni, VII & P.O. Dhalagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.				
Your Ref.	: SAP PO No/Plant 280070196/774E13 dtd. 02.05.2018				
Sample Description	: Stack Gas				
Date & time of sampling	: 01.08.2018 at 12:00 P.M.				Test Completed on : 04.08.2018
<b>A. General information about stack :</b>					
1. Stack connected to	: Cement Mill No.-1 ( Hopper )				
2. Emission due to	: Material Transferring				
3. Material of construction of stack	: M.S				
4. Shape of stack	: Circular				
5. Whether stack is provided with permanent platform & ladder	: Yes				
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack	(a) from ground level : 30.0 M	(b) from roof level : ---			
2. Diameter of the stack	(a) at bottom : ---	(b) at top : 0.60 M			
3. Diameter of the stack at sampling point	: 0.60 M				
4. No. of Traverse point	: 8 Nos.				
5. Height of the sampling point from GL	: 22.2 M				
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used	: Nil				
2. Fuel consumption	: Nil				
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 745 mmHg.					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	38	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	19.14	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	Nm <sup>3</sup> /hr	18341	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.2	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	22	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

(J. MUKHERJEE)  
Quality Manager

Authorised Signatory  
For R.V.BRIGGS & CO. (P) LTD.

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Certificate No. T-0701

## TEST REPORT

No. AP-FG/18-19/50A

Date: April 18, 2018

Page 1 of 1

Issued to	: M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL).				
Address	: Jaldhufagori, VII & P.O. Dhalagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.				
Sample Description	: Stack Gas				
Date & time of sampling	: 18.04.2018 at 11:15 A.M.		Test Completed on : 18.04.2018		
<b>A. General information about stack :</b>					
1. Stack connected to	: Cement Mill No -1 ( Mill Venting )				
2. Emission due to	: Cement Grinding				
3. Material of construction of stack	: M.S				
4. Shape of stack	: Circular				
5. Whether stack is provided with permanent platform & ladder	: Yes				
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack	(a) from ground level : 32.0 M	(b) from roof level : ---			
2. Diameter of the stack	(i) at bottom : ---	(ii) at top : 1.05 M			
3. Diameter of the stack at sampling point	: 1.05 M				
4. No. of Traverse point	: 12 Nos.				
5. Height of the sampling point from GL	: 22.6 M				
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used	: Nil		2. Fuel consumption : Nil		
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 750 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	68	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	4.55	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	12233	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.3	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	11	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

( T. NANDI )

Authorised Signatory

For R.V.BRIGGS & CO. (P) LTD.

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## TEST REPORT

No. AP-FG/18-19/51A

Date: April 18, 2018

Page 1 of 1

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Address	: Jaldaputagori, VII & P.O. Dhalagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.				
Sample Description	: Stack Gas				
Date & time of sampling	: 18.04.2018 at 11:50 A.M.		Test Completed on : 18.04.2018		
<b>A. General information about stack :</b>					
1. Stack connected to : Cement Mill No.-2 ( OSEPA )					
2. Emission due to : Cement Grinding					
3. Material of construction of stack : M.S					
4. Shape of stack : Circular					
5. Whether stack is provided with permanent platform & ladder : Yes					
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack (a) from ground level : 32.0 M (b) from roof level : ---					
2. Diameter of the stack (a) at bottom : --- (b) at top : 1.05 M					
3. Diameter of the stack at sampling point : 1.05 M					
4. No. of Traverse point : 12 Nos.					
5. Height of the sampling point from GL : 22.6 M					
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Nil					
2. Fuel consumption : Nil					
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 750 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	89	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	9.63	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	24383	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.3	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	15	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

( T. NANDI )

Authorised Signatory

For R.V.BRIGGS & CO. (P) LTD.

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CIN : U51109WB1931PTC007007

### TEST REPORT

No. AP-FG/17-18/278

Date: August 06, 2018

Page 1 of 1

Issued to	: M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL)				
Address	: Jaladnhutagori, VII & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.				
Your Ref.	: SAP PO No/Plant 2000701965/NR13 JAL 02.05.2018				
Sample Description	: Stack Gas				
Date & time of sampling	: 01.08.2018 at 02:20 P.M.				
Test Completed on : 04.08.2018					
<b>A. General information about stack :</b>					
1. Stack connected to	: Cement Mill No.-2 ( Hopper )				
2. Emission due to	: Material Transferring				
3. Material of construction of stack	: M.S.				
4. Shape of stack	: Circular				
5. Whether stack is provided with permanent platform & ladder :	Yes				
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack	(a) from ground level : 30.0 M	(b) from roof level : ---			
2. Diameter of the stack	(a) at bottom : ---	(b) at top : 0.60 M			
3. Diameter of the stack at sampling point	: 0.60 M				
4. No. of Traverse point	: 8 Nos.				
5. Height of the sampling point from GL	: 22.2 M				
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used	: Nil				
2. Fuel consumption	: Nil				
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 748 mmHg.					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	35	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	19.31	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	18757	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.2	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	18	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

(J. MUKHERJEE)  
Quality Manager

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### TEST REPORT

No. AP-FG/18-19/54A

Date: April 18, 2018

Page 1 of 1

Issued to		: M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL).			
Address		: Jaladitlagori, Vill & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.			
Sample Description		: Stack Gas			
Date & time of sampling		: 18.04.2018 at 05:20 P.M.		Test Completed on : 18.04.2018	
<b>A. General information about stack :</b>					
1. Stack connected to		: Cement Mill No.-2 ( Mill Venting )			
2. Emission due to		: Cement Grinding			
3. Material of construction of stack		: M.S			
4. Shape of stack		: Circular			
5. Whether stack is provided with permanent platform & ladder :		Yes			
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack		(a) from ground level : 32.0 M		(b) from roof level : ---	
2. Diameter of the stack		(a) at bottom : ---		(b) at top : 1.05 M	
3. Diameter of the stack at sampling point		: 1.05 M			
4. No. of Traverse point		: 12 Nos.			
5. Height of the sampling point from GL		: 22.6 M			
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used		: Nil		2. Fuel consumption : Nil	
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 750 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	88	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	7.77	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	19784	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.4	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	27	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

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### TEST REPORT

No. AP-FG/17-18/271

Date: August 06, 2018

Page 1 of 1

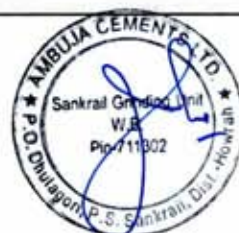
Issued to	: M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL)				
Address	: Jakhobdugori, VII & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.				
Your Ref.	: SAP PO No/Plant 2800704967/NE13 dtd. 02.05.2018				
Sample Description	: Stack Gas				
Date & time of sampling	: 31.07.2018 at 02:15 P.M.				Test Completed on : 04.08.2018
<b>A. General information about stack :</b>					
1. Stack connected to : Packer - I					
2. Emission due to : Cement Packing					
3. Material of construction of stack : M.S					
4. Shape of stack : Circular					
5. Whether stack is provided with permanent platform & ladder : Yes					
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack (a) from ground level : 30.0 M (b) from roof level : ---					
2. Diameter of the stack (a) at bottom : --- (b) at top : 1.0 M					
3. Diameter of the stack at sampling point : 1.0 M					
4. No. of Traverse point : 12 Nos.					
5. Height of the sampling point from GL : 21.0 M					
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Nil					
2. Fuel consumption : Nil					
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 748 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	35	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	12.93	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	34863	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.4	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	19	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

(J. MUKHERJEE)  
Quality Manager

Authorised Signatory

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No. AP-FG/17-18/272

Date: August 06, 2018

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<b>Address</b> : Jaladhalguri, Vill & P.O. Dhalaguri, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.					
<b>Your Ref.</b> : SAP PO No/Plant 2800704967/NE13 dtd. 02.05.2018	<b>Test Completed on</b> : 04.08.2018				
<b>Sample Description</b> : Stack Gas					
<b>Date &amp; time of sampling</b> : 31.07.2018 at 03:10 P.M.					
<b>A. General information about stack :</b>					
1. Stack connected to : Packer - 2					
2. Emission due to : Cement Packing					
3. Material of construction of stack : M.S.					
4. Shape of stack : Circular.					
5. Whether stack is provided with permanent platform & ladder : Yes					
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack (a) from ground level : 30.0 M (b) from roof level : ---					
2. Diameter of the stack (a) at bottom : --- (b) at top : 1.0 M					
3. Diameter of the stack at sampling point : 1.0 M					
4. No. of Traverse point : 12 Nos.					
5. Height of the sampling point from GL : 21.0 M					
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Nil					
2. Fuel consumption : Nil					
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 748 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	36	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	15.11	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	40614	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.3	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	15	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

(J. MUKHERJEE)  
Quality Manager

Authorised Signatory  
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## TEST REPORT

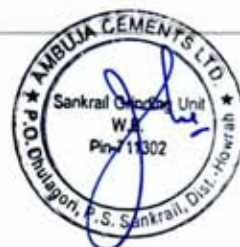
No. AP-FG/17-18/274		Date: August 06, 2018		Page 1 of 1	
Issued to		: M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL)			
Address		: Jaleshulagan, VII & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.			
Your Ref.		: SAP PO No/Plant 2800704967/NE13 dtd. 02.05.2018			
Sample Description		: Stack Gas			
Date & time of sampling		: 31.07.2018 at 04:30 P.M.		Test Completed on : 04.08.2018	
<b>A. General Information about stack :</b>					
1. Stack connected to		: Packer - 3 (Auxiliary)			
2. Emission due to		: Cement Packing			
3. Material of construction of stack		: M.S.			
4. Shape of stack		: Circular.			
5. Whether stack is provided with permanent platform & ladder		: Sample was taken from roof top.			
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack		(a) from ground level : 36.5 M		(b) from roof level : ---	
2. Diameter of the stack		(a) at bottom : ---		(b) at top : 0.85 M	
3. Diameter of the stack at sampling point		: 0.85 M			
4. No. of Traverse point		: 12 Nos.			
5. Height of the sampling point from GL		: 34.5 M			
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Nil		2. Fuel consumption : Nil			
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
		Barometric pressure : 748 mmHg			
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	37	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	9.81	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	Nm³/hr	18990	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.4	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm³	12	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

(J. MUKHERJEE)  
Quality Manager

Authorised Signatory

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### TEST REPORT

No. AP-FG/17-18/273

Date: August 06, 2018

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Issued to	: M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL)				
Address	: Jatachulagori, Vill & P.O. Dhalagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.				
Your Ref.	: SAP PO No/Plant 2800704967/NE13 dtd. 02.05.2018				
Sample Description	: Stack Gas				
Date & time of sampling	: 31.07.2018 at 03:50 P.M. Test Completed on : 04.08.2018				
<b>A. General information about stack :</b>					
1. Stack connected to	: Packer - 3				
2. Emission due to	: Cement Packing				
3. Material of construction of stack	: M.S				
4. Shape of stack	: Circular.				
5. Whether stack is provided with permanent platform & ladder	: Sample was taken from roof top.				
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack	(a) from ground level : 36.5 M	(b) from roof level : ---			
2. Diameter of the stack	(a) at bottom : ---	(b) at top : 1.1 M			
3. Diameter of the stack at sampling point	: 1.1 M				
4. No. of Traverse point	: 12 Nos.				
5. Height of the sampling point from GL	: 34.5 M				
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used	: Nil				
2. Fuel consumption	: Nil				
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 748 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	36	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	9.49	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	Nm <sup>3</sup> /hr	30865	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.3	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	17	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

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Quality Manager

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### TEST REPORT

No. AP-FG/17-18/276

Date: August 06, 2018

Page 1 of 1

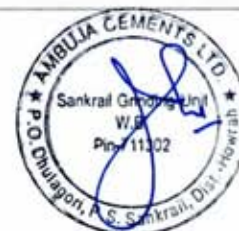
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<b>Address</b> : Jaladialagori, VII & P.O. Dhalagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.					
<b>Your Ref.</b> : SAP PO No/Plant 2806704967/14B13 dtd. 02.05.2018					
<b>Sample Description</b> : Stack Gas					
<b>Date &amp; time of sampling</b> : 01.08.2018 at 10:45 A.M.	<b>Test Completed on</b> : 04.08.2018				
<b>A. General information about stack :</b>					
1. Stack connected to	: Packer - 4 (Auxiliary)				
2. Emission due to	: Cement Packing				
3. Material of construction of stack	: M.S.				
4. Shape of stack	: Circular.				
5. Whether stack is provided with permanent platform & ladder	: Yes.				
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack (a) from ground level : 37.7 M	(b) from roof level : —				
2. Diameter of the stack (a) at bottom : —	(b) at top : 1.1 M				
3. Diameter of the stack at sampling point	: 1.1 M				
4. No. of Traverse point	: 12 Nos.				
5. Height of the sampling point from CL	: 35.5 M				
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Nil	2. Fuel consumption : Nil				
<b>D. Results of sampling &amp; analysis of gaseous emission :</b> Barometric pressure : 745 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	35	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	9.80	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	31841	N.A
4.	Carbon monoxide	APHA - OIRSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - OIRSAT	% v/v	0.4	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	11	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

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Quality Manager

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### TEST REPORT

No. AP-FG/17-18/275

Date: August 06, 2018

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Address : Jaladholaguri, VII & P.O. Dhulaguri, P.S. Sankrail, Dist. Howrah, Sankrail, Pin: 711302, West Bengal, India.					
Your Ref. : SAP PO No/Plant 2800704967/NE13 dtd. 02.05.2018	Test Completed on : 04.08.2018				
Sample Description : Stack Gas					
Date & time of sampling : 01.08.2018 at 10:15 A.M.					
<b>A. General information about stack :</b>					
1. Stack connected to : Packer - 4					
2. Emission due to : Cement Packing					
3. Material of construction of stack : M.S.					
4. Shape of stack : Circular.					
5. Whether stack is provided with permanent platform & ladder : Yes.					
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack (a) from ground level : 27.7 M (b) from roof level : ---					
2. Diameter of the stack (a) at bottom : --- (b) at top : 1.1 M					
3. Diameter of the stack at sampling point : 1.1 M					
4. No. of Traverse point : 12 Nos.					
5. Height of the sampling point from GL : 35.5 M					
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Nil					
2. Fuel consumption : Nil					
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 745 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	36	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	10.65	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	34487	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.3	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	20	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

(J. MUKHERJEE)  
Quality Manager

Authorised Signatory

For R.V.BRIGGS & CO. (P) LTD.

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E-mail : rvbri.gs.kolkata@gmail.com, Website : www.rvbri.gs.com

CIN : U51109WB1931PTC007007

### TEST REPORT

No. AP-FG/17-18/279

Date: August 06, 2018

Page 1 of 1

Issued to	: M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL)				
Address	: Jaladhrulagori, VII & P.O. Dhrulagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India				
Your Ref.	: SAP PO No/Plant 2899704967/NE13 dtd. 02.05.2018				
Sample Description	: Stack Gas				
Date & time of sampling	: 02.08.2018 at 03:20 P.M.				Test Completed on : 04.08.2018
<b>A. General information about stack :</b>					
1. Stack connected to : Wagon Tippler Chimney					
2. Emission due to : Material transfer.					
3. Material of construction of stack : M.S.					
4. Shape of stack : Circular.					
5. Whether stack is provided with permanent platform & ladder : Yes					
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack (a) from ground level : 28.0 M (Approx) (b) from roof level : ---					
2. Diameter of the stack (a) at bottom : --- (b) at top : 2.10 M					
3. Diameter of the stack at sampling point : 2.10 M					
4. No. of Traverse point : 24 Nos.					
5. Height of the sampling point from GL : ---					
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Nil					
2. Fuel consumption : Nil					
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 748 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	37	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	11.02	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	130161	N.A
4.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
5.	Carbon dioxide	APHA - ORSAT	% v/v	0.2	N.A
6.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	16	30 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Bag Filter.					

  
J. MUKHERJEE  
Quality Manager

Authorised Signatory  
For R.V.BRIGGS & CO. (P) LTD.

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E-mail : rvbriggs.kolkata@gmail.com, Website : www.rvbriggs.com

CIN : U51109WB1931PTC007007

### TEST REPORT

No. AP-FG/17-18/280

Date: August 06, 2018

Page 1 of 1

<b>Issued to</b> : M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL)					
<b>Address</b> : Jaldhulagori, VII & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.					
<b>Your Ref.</b> : SAP PO No/Plaza 2800704967/NE13 Jtd. 02.05.2018	<b>Test Completed on</b> : 04.08.2018				
<b>Sample Description</b> : Stack Gas					
<b>Date &amp; time of sampling</b> : 02.08.2018 at 11:10 A.M.					
<b>A. General information about stack :</b>					
1. Stack connected to : DG - 1					
2. Emission due to : Burning of Furnace Oil					
3. Material of construction of stack : M.S.					
4. Shape of stack : Circular.					
5. Whether stack is provided with permanent platform & ladder : Yes					
6. Generator capacity : 6 MW					
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack (a) from ground level : 60.0 M (b) from roof level : ---					
2. Diameter of the stack (a) at bottom : --- (b) at top : 1.0 M					
3. Diameter of the stack at sampling point : 1.0 M					
4. No. of Traverse point : 12 Nos.					
5. Height of the sampling point from GL : 30.0 M					
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Furnace Oil					
2. Fuel consumption : 1100 LL/hr.					
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 746 mmHg.					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	231	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	7.56	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	12428	N.A
4.	Sulphur dioxide	CPCB (ER), 1985	mg/Nm <sup>3</sup>	160.0	N.A
5.	Nitrogen dioxide	ASTM D 1603	mg/Nm <sup>3</sup>	143.0	N.A
6.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
7.	Carbon dioxide	APHA - ORSAT	% v/v	7.8	N.A
8.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	41	150 max.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : Nil.					

(J. MUKHERJEE)  
Quality Manager

Authorised Signatory

For R.V.BRIGGS & CO. (P) LTD.

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CIN : U51109WB1931PTC007007

### TEST REPORT

No. AP-FG/17-18/281

Date: August 06, 2018

Page 1 of 1

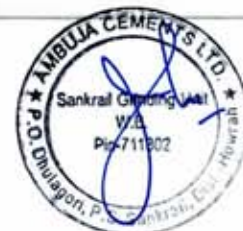
Issued to : M/S. AMBUJA CEMENTS LIMITED. (UNIT - SANKRAIL)					
Address : Jaldhulagori, Vill & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail, Pin : 711302, West Bengal, India.					
Your Ref. : SAP PO No/Plant 2800104967/NB13 dtd. 02.05.2018					
Sample Description : Stack Gas					
Date & time of sampling : 02.08.2018 at 12:15 P.M.	Test Completed on : 04.08.2018				
<b>A. General information about stack :</b>					
1. Stack connected to : DG - II					
2. Emission due to : Burning of Furnace Oil					
3. Material of construction of stack : M.S.					
4. Shape of stack : Circular.					
5. Whether stack is provided with permanent platform & ladder : Yes					
6. Generator capacity : 4 MW					
<b>B. Physical characteristics of stack :</b>					
1. Height of the stack (a) from ground level : 60.0 M	(b) from roof level : ---				
2. Diameter of the stack (a) at bottom : ---	(b) at top : 1.0 M				
3. Diameter of the stack at sampling point : 1.0 M					
4. No. of Traverse point : 12 Nos.					
5. Height of the sampling point from G.L. : 30.0 M					
<b>C. Analysis / Characteristic of stack :</b>					
1. Fuel used : Furnace Oil	2. Fuel consumption : 900 Lt./hr.				
<b>D. Results of sampling &amp; analysis of gaseous emission :</b>					
Barometric pressure : 746 mmHg					
Sl No	Test Parameters	Test Method	Unit	Results	Norms as per CPCB
1.	Temperature of emission	IS 11255 : Part 3 : 1985	°C	217	N.A
2.	Velocity of gas in duct	IS 11255 : Part 3 : 1985	m/sec	6.24	N.A
3.	Quantity of gas flow	IS 11255 : Part 3 : 1985	NM <sup>3</sup> /hr	10552	N.A
4.	Sulphur dioxide	CPCB (ER), 1985	mg/Nm <sup>3</sup>	152.0	N.A
5.	Nitrogen dioxide	ASTM D 1508	mg/Nm <sup>3</sup>	139.0	N.A
6.	Carbon monoxide	APHA - ORSAT	% v/v	<0.2	N.A
7.	Carbon dioxide	APHA - ORSAT	% v/v	7.6	N.A
8.	Particulate Matters	IS 11255 : Part 1 : 1985	mg/Nm <sup>3</sup>	39	150 MAX.
<b>E. Pollution control device</b>					
Details of pollution control devices attached with the stack : NIL.					

(J. MUKHERJEE)  
Quality Manager

Authorised Signatory

For R.V.BRIGGS & CO. (P) LTD.

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**Stack Emission Data for April-2018-Sept-2018 along with Stack details**

Month	Unit	CM-1 Vent	CM-2 Vent	Roller Press	Packer-1	Packer-2	Packer-3 Main	Packer-4 Main	Wagon Loading	Standard
		Dia.:(m): 1.05 Height(m): 32	Dia.:(m): 1.05 Height(m): 32	Dia.:(m): 1.5 Height(m): 71.5	Dia.:(m): 1 Height(m): 30	Dia.:(m): 1 Height(m): 30	Dia.:(m): 1.1 Height(m): 36.5	Dia.:(m): 1.1 Height(m): 37.7	Dia.:(m): 2.1 Height(m): 28	
April	mg/Nm3	10.7	3.1	10.1	11.5	14.2	12.8	6.7	6.9	30 mg/Nm3
May		11	6.65	9.6	11.75	14.25	12.7	6.5	6.55	
June		11.4	4.75	10.05	12.15	13.9	12.25	12.5	12.8	
July		11.4	10.1	12.8	12.1	13.4	6.2	11.5	11.4	
Aug		9.05	2	10.7	11.9	6.8	12.35	12.5	12.7	
Sept		8.5	2.75	11.15	11.65	4.5	12.75	11.15	11	



# Annexure-II

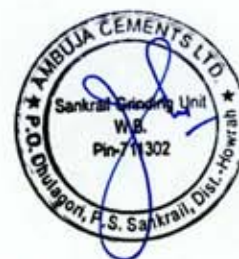
## Ambient Air Data



**Annexure-II**

**Ambient Air Quality Monitoring Result (April-Sept-2018)**

Sl. No	Station Name	PM-10 in $\mu\text{g}/\text{m}^3$	PM-2.5 in $\mu\text{g}/\text{m}^3$	SO <sub>2</sub> in $\mu\text{g}/\text{m}^3$	NO <sub>2</sub> in $\mu\text{g}/\text{m}^3$	CO in $\text{mg}/\text{m}^3$
1	Near Contractor Room	45	27	4.9	37.5	1.23
2	Near RO Plant	41	25	5.1	34.3	1.21
3	Near Railway Gate	64	35	5.9	40.2	1.27
4	Near Main Gate	52	29	5.5	41	1.26
NAAQM standard		100	60	80	80	4





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### TEST REPORT

No. AP-AAQ/18-19/234

Date: August 06, 2018

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Address : Jaladhulagori, Vill & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail,  
Pin : 711302, West Bengal, India.  
Your Ref. No. : SAP PO No/Plant 2800710186/NE13 dtd. 02.06.2018  
Description of Sample : Ambient Air.  
Location : Near Contractor's Room.  
Date of Monitoring : 30.07.2018  
Analysis completed on : 05.08.2018

#### ENVIRONMENTAL CONDITION

(i) Barometric Pressure : 750 - 746 mmHg

(ii) Temperature : 32.0°C - 24.0°C

#### TEST FINDINGS:-

Sl. No.	Test Parameters	Test method	Unit	Results Time weighted average (24hrs.)	Norms as per MOE & F Notification, New Delhi, 16 <sup>th</sup> November, 2009
1.	Particulate Matter (PM <sub>10</sub> ), Size $\leq 10\mu\text{m}$	IS 5182 (Part - 23) : 2006 Reaffirmed 2012	$\mu\text{g}/\text{m}^3$	45	100 (24 Hourly)
	Particulate Matter (PM <sub>2.5</sub> ), Size $\leq 2.5\mu\text{m}$	USEPA 1997a, 40 CFR Part 50, Appendix L	$\mu\text{g}/\text{m}^3$	27	60 (24 Hourly)
3.	Sulphur Dioxide as SO <sub>2</sub>	IS 5182 (Part - 2) : 2001 Reaffirmed 2006	$\mu\text{g}/\text{m}^3$	4.9	80 (24 Hourly)
4.	Nitrogen Dioxide as NO <sub>2</sub>	IS 5182 (Part - 6) : 2006 1 <sup>st</sup> Revision	$\mu\text{g}/\text{m}^3$	37.5	80 (24 Hourly)
5.	Carbon Monoxide as CO	IS : 5182 (Part - 10), 1999 Non Dispersive Infra-Red (NDIR) spectroscopy	$\text{mg}/\text{m}^3$	1.23	04 (1 Hourly)

(J. MUKHERJEE)  
Quality Manager

Authorised signatory  
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No. AP-AAQ/IS-19/235

Date: August 06, 2018

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Address : Jaladhulagori, Vill & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail,  
Pin : 711302, West Bengal, India.  
Your Ref. No. : SAP PO No/Plant 2800710186/NE13 dtd. 02.06.2018  
Description of Sample : Ambient Air.  
Location : Near RO Plant.  
Date of Monitoring : 30.07.2018  
Analysis completed on : 05.08.2018

#### ENVIRONMENTAL CONDITION

(i) Barometric Pressure : 750 - 746 mmHg

(ii) Temperature : 32.0°C - 24.0°C

#### TEST FINDINGS :-

Sl. No.	Test Parameters	Test method	Unit	Results Time weighted average (24hrs.)	Norms as per MOE & F Notification, New Delhi, 16 <sup>th</sup> November, 2009
1.	Particulate Matter (PM <sub>10</sub> ), Size $\leq 10\mu\text{m}$	IS 5182 (Part - 23): 2006 Reaffirmed 2012	$\mu\text{g}/\text{m}^3$	41	100 (24 Hourly)
-	Particulate Matter (PM <sub>2.5</sub> ), Size $\leq 2.5\mu\text{m}$	USEPA 1997, 40 CFR Part 50, Appendix L.	$\mu\text{g}/\text{m}^3$	25	60 (24 Hourly)
3.	Sulphur Dioxide as SO <sub>2</sub>	IS 5182 (Part - 2): 2001 Reaffirmed 2006	$\mu\text{g}/\text{m}^3$	5.1	80 (24 Hourly)
4.	Nitrogen Dioxide as NO <sub>2</sub>	IS 5182 (Part - 6): 2006 1 <sup>st</sup> Revision	$\mu\text{g}/\text{m}^3$	34.3	80 (24 Hourly)
5.	Carbon Monoxide as CO	IS : 5182 (Part - 10), 1999 Non Dispersive Infra-Red (NDIR) spectroscopy	$\text{mg}/\text{m}^3$	1.21	04 (1 Hourly)

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Address : Jaladhulagori, Vill & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail,  
Pin : 711302, West Bengal, India.  
Your Ref. No. : SAP PO No/Plant 2800710186/NE13 dtd. 02.06.2018  
Description of Sample : Ambient Air.  
Location : Near Railway Gate.  
Date of Monitoring : 31.07.2018  
Analysis completed on : 05.08.2018

#### ENVIRONMENTAL CONDITION

(i) Barometric Pressure : 750 - 746 mmHg

(ii) Temperature : 32.0°C - 22.0°C

#### TEST FINDINGS :-

Sl. No.	Test Parameters	Test method	Unit	Results Time weighted average (24hrs.)	Norms as per MOE & F Notification, New Delhi, 16 <sup>th</sup> November, 2009
1.	Particulate Matter (PM <sub>10</sub> ), Size $\leq 10\mu\text{m}$	IS 5182 (Part - 23) : 2006 Reaffirmed 2012	$\mu\text{g}/\text{m}^3$	64	100 (24 Hourly)
2.	Particulate Matter (PM <sub>2.5</sub> ), Size $\leq 2.5\mu\text{m}$	USEPA 1997a, 40 CFR Part 50, Appendix L	$\mu\text{g}/\text{m}^3$	35	60 (24 Hourly)
3.	Sulphur Dioxide as SO <sub>2</sub>	IS 5182 (Part - 2) : 2001 Reaffirmed 2006	$\mu\text{g}/\text{m}^3$	5.9	80 (24 Hourly)
4.	Nitrogen Dioxide as NO <sub>2</sub>	IS 5182 (Part - 6) : 2006 1 <sup>st</sup> Revision	$\mu\text{g}/\text{m}^3$	40.2	80 (24 Hourly)
5.	Carbon Monoxide as CO	IS : 5182 (Part - 10), 1999 Non Dispersive Infra-Red (NDIR) spectroscopy	$\text{mg}/\text{m}^3$	1.27	04 (1 Hourly)

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Page 1 of 1

Issued to : M/S. AMBULIA CEMENTS LIMITED. (UNIT - SANKRAIL).  
Address : Jaladhalagori, Vill & P.O. Dhulagori, P.S. Sankrail, Dist. Howrah, Sankrail,  
Pin : 711302, West Bengal, India.  
Your Ref. No. : SAP PO No/Plant 2800710186/NE13 dtd. 02.06.2018  
Description of Sample : Ambient Air.  
Location : Near Main Gate.  
Date of Monitoring : 31.07.2018  
Analysis completed on : 05.08.2018

#### ENVIRONMENTAL CONDITION

(i) Barometric Pressure : 750 - 746 mmHg

(ii) Temperature : 32.0°C - 22.0°C

#### TEST FINDINGS:-

Sl. No.	Test Parameters	Test method	Unit	Results Time weighted average (24hrs.)	Norms as per MOE & F Notification, New Delhi, 16 <sup>th</sup> November, 2009
1.	Particulate Matter (PM <sub>10</sub> ), Size $\leq 10\mu\text{m}$	IS 5182 (Part - 23) : 2006 Reaffirmed 2012	$\mu\text{g}/\text{m}^3$	52	100 (24 Hourly)
	Particulate Matter (PM <sub>2.5</sub> ), Size $\leq 2.5\mu\text{m}$	USEPA 1997a, 40 CFR Part 50, Appendix L.	$\mu\text{g}/\text{m}^3$	29	60 (24 Hourly)
3.	Sulphur Dioxide as SO <sub>2</sub>	IS 5182 (Part - 2) : 2001 Reaffirmed 2006	$\mu\text{g}/\text{m}^3$	5.5	80 (24 Hourly)
4.	Nitrogen Dioxide as NO <sub>2</sub>	IS 5182 (Part - 6) : 2006 1 <sup>st</sup> Revision	$\mu\text{g}/\text{m}^3$	41.0	80 (24 Hourly)
5.	Carbon Monoxide as CO	IS : 5182 (Part - 10), 1999 Non Dispersive Infra-Red (NDIR) spectroscopy	$\text{mg}/\text{m}^3$	1.26	04 (1 Hourly)

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# **Annexure-III**

## **Fugitive Emission Data**

Annexure-III

Fugitive Emission Monitoring Data [ $\mu\text{g}/\text{m}^3$ ]			
Sr. No.	Location	2nd Quarter of 2018	3rd Quarter of 2018
		Total Particulate Matter	Total Particulate Matter
		microgram/ $\text{m}^3$	microgram/ $\text{m}^3$
1	Near Hopper Bld.	1286.35	1228.66
2	Near Roller Press Building	1826.28	1930.80
3	B/h Clinker Silo	1827.35	1736.42
4	Packer ground floor	4118.09	4339.27
5	Near FA silo	3036.12	2990.41
6	Near Wagon Tippler	2765.49	2844.44



**Annexure-IV & V**  
**Ground Water Permission**



# Annexure-IV

## FORM 4

[See Rules 9(3) and 16(5)]

(EMBLEM OR HOLOGRAM OF THE CONCERNED AUTHORITY)

### PERMIT FOR SINKING OF NEW WELL

(U/S 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.)

033730

PERMIT NO. P0602002010740000001 TLE

1. (a) Name of the applicant (user) : Shri/Smt. AMBULJA CEMENTS LTD.
- (b) Son / Daughter of : DHOLAGORI, SANKRAIL
- (c) Address of the applicant : Small Farmer / Marginal Farmer / Others
- (d) Category of farmer (Please tick) (in case of irrigation well) : BP/A, 0154, S. Land, 2-3-2011
- (e) Serial No. of application Form and date of submission : Annex
- (f) Specimen signature of the user : Annex
2. Location particulars---
  - (a) District : HOWRAH
  - (b) Block, Mouza, I.L. No., Plot No. : SANKRAIL, DALADHOLAGORI, 002, 1074
  - (c) Municipality / Corporation : N.A.
  - (d) Ward No. / Borough No., Holding No. : N.A.
3. Particulars of the proposed well and pumping device---
  - (a) Type of the well : TUBEWELL
  - (b) Approx. depth of the well (m) : 250 m.
  - (c) Purpose of the well : Industrial
  - (d) Assembly size (for tube well) : 200 mm. X 200 mm.
  - (e) Approx. strainer length (for tube well) : 30 m.
  - (f) Diameter (for dug well) : — m.
  - (g) Type of pump to be used : SUBMERSIBLE
  - (h) H. P. of the pump : 50 H.P.
  - (i) Operational device : ELECTRIC MOTOR
  - (j) Rate of withdrawal (m<sup>3</sup>/hr.) : 30 m<sup>3</sup>/hr.
  - (k) Maximum allowable running hours per day : 6 hr./day

This permit authorizes the owner applicant (user) to sink a well in the location specified at S1. (2) for extraction of ground water at a rate not exceeding that as shown at S1. (3) (j) and for running hours / day as shown at S1. (3) (k), and is valid subject to the observance of the conditions stated overleaf.

Place : HOWRAH

Date : 21/6/2011

#### Conditions:

- (1) In case of any change of ownership of the proposed well, fresh permission has to be obtained.
- (2) No change of location, design, rate of withdrawal and pumping of the proposed well as shown in this permit shall be made without prior permission of the Competent Authority. Any change in this regard shall result in cancellation of this permit.
- (3) In case, any of the particulars / information furnished by the applicant in the application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- (4) Any other condition imposed by the concerned Authority.

B.C.L./4050/000700



Singh  
21/6/2011  
Signature of the Issuing Authority  
Member Secretary

Ground Water Resources  
Howrah District



# Annexure-V

## FORM 4

[See Rules 9(3) and 10(5)]

(EMBLEM OF HOLOGRAM OF THE CONCERNED AUTHORITY)

### PERMIT FOR SINKING OF NEW WELL

[US 7(3)(b) / 7(4)(b) / 7(5)(a) of the West Bengal Ground Water Resources (Management, Control and Regulation) Act 2005.]

PERMIT NO. P060900201963 000000ITSE

033739

169

1. (a) Name of the applicant (user)
- (b) Son / Daughter of
- (c) Address of the applicant
- (d) Category of farmer (Please tick) (in case of irrigation well)
- (e) Serial No. of application Form and date of submission
- (f) Specimen signature of the user
2. Location particulars—
  - (a) District
  - (b) Block, Mouza, J.L. No., Flor No.
  - (c) Municipality/Corporation Ward No./Borough No., Holding No.
3. Particulars of the proposed well and pumping device
  - (a) Type of the well
  - (b) Approx. depth of the well (m)
  - (c) Purpose of the well
  - (d) Assembly size (for tube well)
  - (e) Approx. strainer length (for tube well)
  - (f) Diameter (for dug well)
  - (g) Type of pump to be used
  - (h) H.P. of the pump
  - (i) Operational device
  - (j) Rate of withdrawal (m<sup>3</sup>/hr.)
  - (k) Maximum allowable running hours per day



Subsint M/G ANBUJA CEMENTS LTD.

N.A.

Dhulagori, Sankrail; Howrah

Small Farmer / Marginal Farmer / Other

BP/c154; 21-3 dt 6/11

Ann

Howrah

Sankrail / Taladulagori / 002

Plot - 1963

Tube Well

350m

Domestic

127 mm X 762mm

18 m

m

Submersible

3.5 H.P.

Electric Motor

15 m<sup>3</sup>/hr.

6 hrs/day

This permit authorizes the owner applicant (user) to sink a well in the location specified at S1, (2) for extraction of ground water at a rate not exceeding that as shown at S1, (3) (j) and for running hours / day as shown at S1, (3) (k), and is valid subject to the observance of the conditions stated overleaf.

Place Howrah

Date: 13/2/19

OFFICE  
SEAL

Chinmayi Ray

Signature of the Competent Authority

and Designation

Member Secretary

Ground Water Resources

Development Authority

#### Conditions:

- (1) In case of any change of ownership in the proposed well, fresh registration has to be obtained.
- (2) No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated in (2) and (3) of this certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this permit.
- (3) In case, any of the particulars / information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, his permit is liable for cancellation.
- (4) Any other condition imposed by the concerned Authority.

It is observed that mandatory recharge structures in the Complex should be done.

OFFICE  
SEAL

B.C.E. JAGMOHAN



**Annexure-VI**  
**Effluent Water Analysis Report**



**Annexure-VI**

**Water Testing Report of STP outlet**

**April-Sept-2018**

Sl. No	Test Parameters	Unit	Result	Standard GSR 422(E) dated 19 <sup>th</sup> May:1993
1	pH at 26 °C	-	7.37	5.5 to 9
2	Total Suspended Solids	mg/l	28	100
3	Biochemical Oxygen Demand ( for 3 days at 27°C)	mg/l	9.2	30
4	Chemical Oxygen Demand	mg/l	40	250
5	Oil & Grease	mg/l	< 1.4	10



**Annexure-VII**  
**Ambient Noise Monitoring**  
**Report**

**Annexure-VII**

**Ambient Noise Monitoring**

Sl. No	Location	Unit	Noise level dB(A)												Standard (dB(A))	
			April-18		May-18		June-18		July-18		Aug-18		Sept-18			
			Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
1	Near Main-Gate	dB(A)	60.5	50	60.5	48.5	60	50	61	48.5	58.5	48.5	62.5	50	75	70
2	Near Admin Building		58	41.5	56.5	42.5	56	42.5	57	41.5	53	41	55.5	43		
3	ACL Colony		50	40	52	42	52.5	42	53	41	49.5	39.5	51	39		
4	Worker Canteen Area		59.5	50.5	59.5	50	59.5	51	58	50	61	50	60	52		
5	Near Stores		59	47.5	60	48.5	60.5	49.5	60	46.5	62	47.5	61.5	48.5		
6	Near Hopper Building		58.5	48.5	60	50.5	58.5	51	57	48.5	57.5	49.5	59.5	49.5		





# **Annexure-VIII**

## **Bag-Filter Maintenance Cost**

**Annexure-VIII**

**Bag-Filter Maintenance( April-Sept-2018)**

<b>Material Code-Wise Summary</b>						
<b>Sl. No</b>	<b>Item Code</b>	<b>Description</b>	<b>Bag Replacement Qty.</b>	<b>Service Cost (INR)</b>	<b>Material Cost (INR)</b>	<b>Total Material &amp; Service Cost (INR)</b>
1	458000050776	FILTER BAG;8B-PE-550-149-3650;NM	1134	88452	320922	409374
2	458000080109	FILTER BAG;11B-PE-600-149-3665;NM	72	5616	22104	27720
3	458000080115	FILTER BAG;11B-PE-600-150-3660;NM	206	16068	63654	79722
4	458000081425	FILTERBAG;149X4565MM;PTFE; NORMAL	352	27456	302016	329472
		<b>TOTAL in INR</b>	<b>1764</b>	<b>137592</b>	<b>708696</b>	<b>846288</b>



Annexure-IX

Form-V



**Annexure-IX**

**Environment Statement**

**Ambuja  
Cement**

ACL/SK/ENV/09-18/ 242  
Date: 25.09.2018

To,  
The West Bengal Pollution Control Board,  
(Department of Environment, Govt. of West Bengal)  
Howrah Regional Office,  
Minority Bhawan, 5<sup>th</sup> Floor,  
Near Alipore Police Court,  
Kolkata: 700027

Kind Attention: Mr. Arup Dey  
Environmental Engineer & In-Charge of Office

Sub: Environment Statement Report of M/s. Ambuja Cements Ltd ( Unit: Sankrail) for  
the year 2017-2018


Sir,

Please find enclosed herewith duly filled Form-V (Rule-14), Environment Statement Report  
(2017-2018) for your kind perusal.

This is for your kind information and necessary records.

Thanking you,  
Yours faithfully,

For Ambuja Cements Ltd.  
Unit: Sankrail

  
(Arun Kumar Jha)  
Sr. Vice President & Unit Head

**AMBUJA CEMENTS LIMITED**

Unit : Sankrail

Jaladholagori, VII. & P.O. : Dhulagori, P.S. : Sankrail, Dist. : Howrah (W.B.) - 711302

Phone : 033 - 8606 7100 (4 Lines), Fax : 033 2679 6423

(Regional Off. : "INDICON VIVA", 6th Floor, 53A, Leela Roy Sarani, Kolkata - 700 019, Phone : 033 - 4493 3000, Fax : 2461 7744 / 5413)

(Regd. Off. : P.O. : Ambujanagar, Taluka : Kodinar, District : Gir Somnath, Gujarat - 362715)

CIN Nos. L26942GJ1981 PLCO04717, Website : www.ambujacementl.com

## UNIT: SANKRAIL

## ANNUAL ENVIRONMENTAL STATEMENT

2017-2018

**FORM-"V"**  
(See Rule 14)

Environmental Statement for the Financial Year Ending on 31<sup>st</sup> March 2018

**PART A**

<b>I</b>	<b>Name &amp; Address of the Owner/Occupier of the Industry</b>	Shri . Arun Kumar Jha Sr. Vice President & Unit Head Village: Jaladhulagori, PO : Dhulagori, PS: Sankrail, Howrah-711302 Tel No. :- 033 6608 7100 Fax No. :- 033 2679 8423
<b>II</b>	<b>Industry Category Primary- ( STC Code) Secondary ( STC Code)</b>	Red
<b>III</b>	<b>Production Capacity</b>	2.40 million ton Cement per year
<b>IV</b>	<b>Year of establishment</b>	2001
<b>V</b>	<b>Date of last Environmental Statement submitted</b>	22.09.2017

**PART B**

### Water and Raw Material Consumption

### I. Water Consumption m<sup>3</sup>/day

SL No.	Particular	Unit	Qty
1	Water Consumption	m3/d	190 (approx)
2	Process	m3/d	Nil
3	Domestic	m3/d	60 (approx)
4	Boiler Feeding	m3/d	Nil
5	Cooling/ Industrial	m3/d	130 (approx)

Name of the Products	Process water consumption per unit of product output	
	During the previous Financial Year(2016-2017)	During the Current Financial Year(2017-2018)
	(1)	(2)
Cement	Not Applicable, Cement Production is a dry process	



# AMBUJA CEMENTS LIMITED

UNIT: SANKRAIL

## ANNUAL ENVIRONMENTAL STATEMENT

2017- 2018

### PART-D

#### Hazardous Wastes

As specified under the Hazardous Waste (Management, Handling and Transboundary), Rules 2016

Hazardous Wastes	Total Quantity	
	During the previous Financial Year(2016-2017)	During the Current Financial Year(2017-2018)
(i) From process		
> Waste Oil	0 MT	8.66 MT
> Waste/Residue containing Oil	6.55 MT	3.23 MT
(ii) From Pollution Control facilities	Not Applicable	Not Applicable

### PART-E

#### Solid Wastes

Wastes	Total Quantity	
	During the previous Financial Year(2016-2017)	During the Current Financial Year(2017-2018)
(a) From process	NA	NA
(b) From Pollution Control facilities	NA	NA
(c)	No solid waste is generated from Process and Pollution Control facilities	
(1) Quantity recycled or re-utilized within the unit		
(2) Sold	NA	NA
(3) Disposal	NA	NA





**AMBUJA CEMENTS LIMITED**  
**UNIT: SANKRAIL**

**ANNUAL ENVIRONMENTAL STATEMENT**

**2017- 2018**

**II. Raw Material Consumption**

Name of Raw Materials	Name of product	Consumption of Raw Material per unit of output	
		During the previous Financial Year(2016-2017)	During the Current Financial Year(2017-2018)
Clinker	Cement	0.6559	0.6527
Gypsum		0.0376	0.0356
Fly ash		0.3026	0.3088
Granulated Slag		0.0039	0.0029

**PART - C**

**Pollutant discharged to environment/unit of output**  
**(Parameters as specified in the consent issued)**



Pollutants	Quantity of Pollutants discharged [mass/day]	Concentrations of Pollutants discharges [mass/day]	Percentage of variation from prescribed standards with reasons	Statutory Limit
	ton/day	mg/Nm3		mg/Nm3
Cement Mill-1 Hopper	0.0103	23	NA	30
Cement Mill-1 Venting	0.0083	13	NA	
Roller Press	0.0188	22	NA	
Cement Mill-2 Hopper	0.009	20	NA	
Cement Mill-2 Venting	0.0146	24	NA	
Cement Mill-2 Separator	0.0116	23	NA	
Packer-1	0.0175	22	NA	
Packer-2	0.0139	15	NA	
Packer-3	0.0079	11	NA	
Packer-4	0.0082	10	NA	
DG-1	0.0214	38	NA	150
DG-2	0.0207	40	NA	

# **AMBUJA CEMENTS LIMITED**

**UNIT: SANKRAIL**

## **ANNUAL ENVIRONMENTAL STATEMENT**

**2017- 2018**

### **PART - F**

**Please specify the characterizations (in terms of composition of quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.**

Hazardous waste generated are disposed to PCB certified Recycler

### **PART G**

**Impact of the Pollution Abatement Measures taken on conservation of natural resources and on the cost of production.**

M/s Ambuja Cements Ltd. is committed for Environment Excellence through environmental friendly activities. Company wishes to conserve the Environment as well as to reduce the production cost by minimizing the waste and by optimizing the process. Efforts for achieving the above goals and for minimizing the adverse effect on environment along with economic growth are as follows:

Installation of Pollution Control Equipments: Efficient and modern state of art pollution control equipment (Bag Filter/House) is being attached to every stack so that the gases emitted to the surrounding atmosphere has components below or as per Statutory norms and do not cause harm to any living being in the surrounding.

Adequate initiatives have been taken for effective fugitive dust suppression like Dust sweeping machine, covered conveyor belts, storage in Silos.

Intensive housekeeping has been maintained to minimize any spillage from which fugitive dust emission is generated. Concrete road has been made in the plant.



**Pedestrian Pathway & Concreted Road**



# AMBUJA CEMENTS LIMITED

UNIT: SANKRAIL

## ANNUAL ENVIRONMENTAL STATEMENT

2017- 2018



Clinker Storage Silo

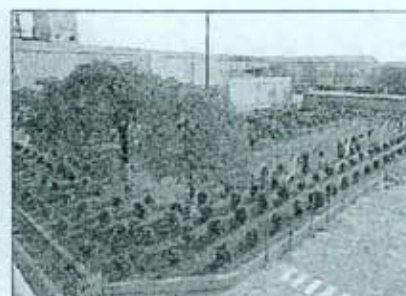
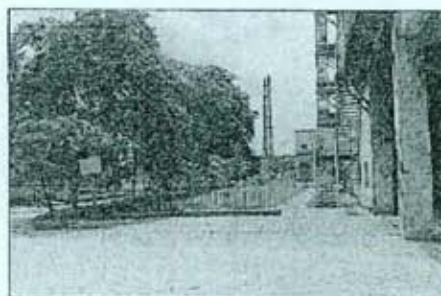


Cement Silo



Fly-Ash Silo

- **Water Management:** No waste water is being/will be generated from cement manufacturing process, as it is based on dry process technology. Domestic waste water generated from the colony is being treated in **Sewage Water Reclamation Plant (SWRP)** and treated water is being used for green belt development. Rain water harvesting measures for Packing Plant Roof in progress.
- **Storage Facility :** To control the dust emission effectively, M/s ACL stores the process materials and end products in concrete silos.
- In its endeavor to remain environment friendly, M/s ACL has made dedicated efforts for developing **Green-Belt**. This plantation are not only meant for its aesthetic value but it also serves as an effective carbon-dioxide sink.



Plantation in Plant Area





# AMBUJA CEMENTS LIMITED

UNIT: SANKRAIL

## ANNUAL ENVIRONMENTAL STATEMENT

2017- 2018

### PART - H

#### Additional Measures / Investment Proposal for environmental protection including abatement of pollution, prevention of pollution.

Additional investment for Rain Water Harvesting, Recycling RO reject, Venting line modification of Clinker Handling Circuit to reduce fugitive dust emission

### PART - I

#### Any other particulars for improving the quality of the environment.

The Corporate Philosophy of Ambuja Cements Ltd. is to develop and grow along with considering the interests of employees and community at large. Hence the company always gives highest priority to the quality of environment in its vicinity. For serving the aforesaid purpose, the company has taken serious efforts for up-gradation of the surrounding environmental condition.

- Installed Continuous Ambient Air Quality Monitoring Station (CAAQMS) at plant to monitor Ambient Air Quality continuously and display board installed at the Main gate facing the road for the public.
- Meteorological station comprising facilities to monitor rainfall, maximum and minimum temperature, relative humidity, barometric pressure, wind direction, velocity, and solar radiation has been established
- Installed Continuous Dust Monitoring Systems at various chimney stacks.
- Concretization of truck yard.
- Reuse of recycled water from Sewage Treatment Plant for dust suppression and gardening project in progress.
- Development and installation of network of dust collection at plant through Industrial Vacuum Cleaner.
- Plant road cleaning with the help of Hako cleaner.
- Roof top rain water harvesting at Packing Plant terrace is in progress.
- Venting line modification of Clinker Handling Circuit to reduce fugitive dust emission.
- Plantation at different locations of plant.
- Roller Press has been installed as a pre-grinder to Cement Mill-1, helps to reduce specific energy consumption.
- Identification of e-wastes and disposal to authorized party.
- Recycled water sprinkling on roads through water sprinkler
- Promotion and awareness given to villagers to produce paddy through SRI cultivation which gives more yield and need less water consumption.
- Training on inputs identification, tank and fish managements, linking with the inputs suppliers, feed preparation to the villagers.



# **AMBUJA CEMENTS LIMITED**

**UNIT: SANKRAIL**

## **ANNUAL ENVIRONMENTAL STATEMENT**

**2017- 2018**

- Rural Infrastructure / community assets creation leading to installation of Tube well and their Repairing.
- Women Empowerment Programme to form SHG, capacity building exposure,
- Skill Entrepreneurship Development Institute is training students in various trades like Retail Management, Beautician ,Mobile Repairing ,Basic Electrical,2/3 Wheeler Repairing Customer Support Executive and Smart Sewing Machine Operator courses and likewise providing placements.



# **Annexure-X**

## **Newspaper Publications**



KOLKATA TUESDAY 28 JUNE 2011

The Statesman

2

# ered J Dey killing'

of seven. The revolver and 25 cartridges were displayed by Commissioner Mr Arup Patraik and Mr Roy at the Press conference.

The state home minister Mr RR Paul announced Rs 10 lakh cash reward to the crime branch for the methodical investigation. Mr Roy confirmed that police would name Chhota Raju as accused with seven hired contract killers in the Dey murder case.

Kalya immediately accepted the offer and started assembling other accomplices. The target was identified by his appearance and accessories. Dey's motorcycle number was given. Raju further informed Kalya that he and his accomplices could get the target either at Peninsula Centre, Lower Panel, where Mid-Day office is located or from a

streeted from Mumbai, three, including Kalya from Rameshwar and one from Solapur in Maharashtra.

All seven held alleged killers at gun. Kalya Dey from his office to home to determine where to target him. Near office at Peninsula Centre was ruled out on security

comparative statement on

## JADAVPUR UNIVERSITY

Kolkata-700032

A work in advance will be held in the Audio-Visual Room of Mechanical Engineering Department on 06 July, 2011 at 12 noon for 5 Research Fellow for (4) Interprojects (1) Modeling and finite element simulation of Uniaxial and Bi-axial low cycle fatigue and fracture. (2) Micro Macroscopic and meso-scale system. (3) Modeling and experimental verification of Spray formation by atomization of liquid and solid sheets for design of advanced fuel injection for gas turbine combustor.

The selected candidates will have the opportunity to register for Ph.D. at Jadavpur University in the respective area of work.

Minimum Qualification: Bachelor's Degree in Mechanical Engineering. Desirable Qualification: Master's Degree in Mechanical Engineering or 2 years' experience in Research.

For 1: Expertise in finite element methods, Fracture mechanics and plasticity.

For 2: Expertise in FEM and compressible fluid flow analysis.

For 3: Expertise in FIV / spray.

Candidates may know in person directly in the interview with filled up application form available from the Information Office of the University, along with copy of advertisement and brochures (enclosed).

Advocate  
309, Puda Sankar Place  
Dum Dum, Kolkata-700020  
Phone No. 2584340  
Mobile No. 963098249  
96922469

**CAPACITY enhancement**  
from 150 MT/A to 240 MTPA of various grades of cement for the existing Cement Grinding Unit of M/s Ambuja Cement Ltd. at Jaldhulagan, Sankrail, Howrah has been awarded Environmental Clearance by the Ministry of Environment and Forests. Copies of the clearance letter are available with the West Bengal Pollution Control Board and may also be seen at website of the Ministry of Environment and Forests at <http://mef.nic.in>

**ARNAB Bhattacharya, P.O. URA, Beel Road, Kolkata-700017**, shall henceforth be known as Papun Kumar Bhattacharya, vide affidavit sworn before the Notary Public at Kolkata on 23rd Dec, 2010.

**JENNIHER Baker** Who Krish Patrick Baker, do hereby declare that my son, Peter Leo Baker, shall henceforth be known as Peter Leo Baker, vide affidavit sworn before the Notary Public at Kolkata on 27-05-2004.

**I, EAM Bishu Ram**, do hereby declare that Ram Bishu Tenzal, Ramabishu Tenzal and Ram Bishu Tenzal is not and have person, vide affidavit sworn before the

**MY CLIENT**  
Soyamrup Roy has lost / misplaced the original Lease Deed being No. 47 for the year 1987 duly Registered before A.D.S.R. Soddah, 24 Pk. (S) and a written complaint has been lodged before Koba P.S. vide GDE No. 2386 dated 22-02-2011. If any person finds the original document or have any knowledge please return the same to the undersigned within 10 days from the date of publication and thereafter no claim will be entertained through the said Original Lease Deed.

**Sankhat Roy**  
Advocate  
988220860  
96336807

## TENDERS

**STEEL AUTHORITY OF INDIA LIMITED**  
(A Govt of India Enterprise)  
**SAIL Refractory Unit**  
(Bundelkhand)  
P.O. Bundelkhand-209302,  
Dist. Bhojpur  
Jharkhand (India)  
(Formerly Bhojpur Refractory Limited)  
(Bundelkhand Refractory Plant)  
Phone Number 06549290211 / 06549290220 (Fax) / 0654221672 Bhojpur (Pin)  
MILSAL / SRUB / PUR-26 (8-9) / 10 / 38  
Dated: 22-06-2011  
NOTICE INVITING TENDER (ABRIGATED)  
S. No. 08, Description of Work: Chimney Linings

No. Qty. required (in No.)  
Cost of tender document Rs. 50 (Rupees five hundred) only by Cash and Rs. 500 (Rupees five hundred) by Post.  
Last date of submission of tender: 26.07.2011 up to 1.00 pm.

Date of opening of tender: 26.07.2011 at 3.00 pm.  
For details please visit our website: [www.sail.gov.in](http://www.sail.gov.in)

**Manager (S & P)**  
Attachment: Technical Specification  
Description: Electrically heated chamber type final heating furnace using Kanchal tubes, molybdenum electrode heating elements having maximum temperature of 1200°C with working temperature of 1000°C for continuous run. The furnace should have facility of operating by final board control panel.

Special feature: The furnace should have independent operating system and programmable temperature control with segments.

Construction: Welded single box frame floor model type construction of two sections with short metal painting. Top section comprises of heating, heavy assembly and lower section houses the transformer, electrical etc. The door will be port type swing side parallel moving door with port lock.

Refactory: Internal refractory should be such that it withstands 1000°C with maximum working temperature and die temperature maintained below 100°C.

Heating Element: (Loss in two side walls)  
Molybdenum  
MoSi2 U shape heating element.  
Grade Kanthal 5.  
100°C.  
Dia - 632 mm.  
Lx225 mm, Lx250 mm  
5 or 6 m. No. of steel - 6 Nos.  
Operating Temperature: Continuous  
Temperature 1000°C.  
Guarantee: One year of servicing guarantee against any manufacturing defect from date of commissioning except heating elements.  
Service Contract: 3 year annual maintenance contract after one year of the date of commissioning.  
(0002)

## OFFICE OF THE JT. CHIEF UTILITY ENGINEER

North Bengal Division  
TENDER NOTICE NO. JT. CHIEF 000011/2011  
D. 27-06-2011

General orders for the following works are invited: the Jt. Chief Utility Engineer from the competent authorities. Earn Money 2% of the Estimated Value.

1) Replacement of existing street lighting including supporting structure, etc. other necessary works in the portion of N.B.D. from



# জ্ঞাপন

## বিজ্ঞপ্তি

vited for a system and ansor along r. The sys- mart class n, audio, ith record- is to quote quotation within 7 of the Chandra Birblum, 296233

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রস্ট প্রজ্ঞা  
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৪৫.১০-এই  
৪৫.১০৫.১০  
২৯৬২১

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U illege  
২৯৬২২

অনুজ্ঞা সিনেটস মিটিংয়ে জলাদুলাখোড়ী, সাঁকরাইল, হাওড়া দ্বারা অবগত করা হইতেছে যে, ইহা- বিকির প্রকার সিনেট উৎপাদন ক্ষমতা ১.৫০ মিলিয়ন টন (বার্ষিক) হইতে বাড়িয়া ২.৪০ মিলিয়ন টন (বার্ষিক) করিবার জন্য কেন্দ্রীয় পরিবেশ এবং বনমন্ত্রকের হাউসের পাইল্যায়ে অনুমতিপত্রের প্রকির্ষিনি 'শক্তিমবল' মুদ্রণ নিয়ম পূর্ববর্ত নিকট উপায় এবং কেন্দ্রীয় পরিবেশ এবং বনমন্ত্রকের ওয়েবসাইটে (<http://envfor.nic.in>) বিপিবদ্ধ আছে।

S.D-Dy.Mgr-Env, 296257

ডিজিটাল ডেলিভারি অস্বাভাবিক অস্বাভাবিক  
উইল প্রক্টে কেস নং ৯১/১১  
দত্তবাস্তবকারী ১- টারলিবি মির  
একদ্বারা সর্বসাধারণকে জানানো হইতেছে যে উপরোক্ত দত্তবাস্তবকারী তাহার মৃত সৎ প্রাণী শিবিরকুমার মির, সাং পৌর মন্ডল কোড, হাইন বোডের নিকট পোষ্ট ও ফান-আলামনসোল, জিলা বর্ধমান কর্তৃক ইং ৯.০.০৮ তাি কর্তৃক সম্পাদিত ও প্রকাশিত হইবার প্রক্টে পাইবার জন্য অত্র অফিসে উক্ত কেস চলু করিয়াছেন।  
তাহারো অংশটি থাকিলে এই বিজ্ঞপ্তি প্রকাশের এক মাসের মধ্যে কারণ বর্ণনাক্রমে নতুন উক্ত সম্প্রদায়ের এক ভরণ্য প্রদানী হইবে।

আবেদনাদ্বারা  
যোগাযোগ করুন  
সেবাস্তানার  
২৯৬২৬

ডিজিটাল ডেলিভারি অস্বাভাবিক অস্বাভাবিক  
সাক্ষ্যসমা কেস নং ৯০/১১  
দত্তবাস্তবকারী ১- দামারী দেবী  
একদ্বারা সর্বসাধারণকে জানানো হইতেছে যে উপরোক্ত দত্তবাস্তবকারী তাহার মৃত সৎ প্রাণী মনোহর সিং, সাং পুনবাস্তবকারী এলিয়া কমন্স, পোষ্ট 'চপলী, থানা-জামুগিয়া, জিলা বর্ধমান এর এসসিআর ১.৯৮.৪১০ টাকার আদায়ের ৪০২১

## পরমিতাণি

বহুত্বের চেইং মেটোতে পারি আমেরা। বহুত্ব ও বোড রিলেশন। K.V.C. 8001172942/3 296271

ফ্রেডস ওয়ার্ড  
ইকর মিন শেখ। ফি 500/-  
শক্তিমবল প্রত্যেকটি মহাকুমায়  
বহুত্ব। 8017647175 296272

ফ্রেডস ওরু  
বহুত্বের পর বহুত্ব সঠিক পরিবেশ।  
সঠিক ও সৎ বহুত্ব। বোড রিলেশন।  
ফি-400/- 9831318566 296273

হারি ক্লাব  
খারাবি সহ সঠিক বহুত্ব কখন হই  
খোফাইল মহিলাদের সহ।  
ফি-500/- 9748509750. 296274

শিক ক্লাব  
বহুত্ব মনের মহিলাদের সঙ্গে বহুত্ব।  
কোনো বহুত্ব নই। বহুত্ব না পেলে  
টাকা কেইং। 8420649709. 296275

বনি ক্লাব  
হাই প্রোফাইল দেশ-বিদেশি মহিলা  
সহ বহুত্ব। ১০০% প্রাতিফি।  
ফি-450/- 8697442765 296276

ফ্রেডস ডালি  
বহুত্বের চেইং মেটোতে পারি আমেরা।  
বহুত্ব ও বোড রিলেশন।  
8017455103/8017454887 296277

পতীর সম্পর্ক বহু/বাহুবীর জন্য  
গোম করুন বিশাণের সাথে।  
8017398210/8820371819 296278  
নিবেশ জীবনকে আঘাতিত করতে  
হাই/মিডিয়াম প্রোফাইল মহিলাদের  
সহ স্পট ডেলিভারি রিলেশন।  
9836303408, 8981668162 296279

Deepika Club : বহুত্বের  
হাউসিং ও উচ্চ অনুষ্ঠিত চেইং। ফি-  
500/-9748285735/ 9748778467/  
9051538829 296280

বহুত্ব করাবো  
প্রত্যেককে সাধুস্বীকৃত করতে বোহা  
বহু/বাহুবীর সঞ্চয় প্রায় ৪  
ফি। 9334626460 / 9330626403/  
9330626380/ 9330626470

## শিক্ষা

D.Ed (P.T.T.),  
B.Ed, B.P.Ed,  
NCTE & UGC অনুমোদিত কোর্সে  
ভর্তির জন্য বেঙ্গল সার্ভিশন  
সেন্টারের নিম্নলিখিত প্রাঙ্গণে  
যোগাযোগ করুন।  
সেনারপুর-8902040388,  
বলিরহাট-9831822159,  
রানাবাট-9734319827,  
পড়বাঁতা-9733563181,  
গুদুগু- 9474539452,  
বহরমপুর- 9733599694,  
রানপুরহাট - 8768501518,  
দুর্গাভূমি - 9153557604,  
আলাজালা - 9641925769  
মালদা- 9735912770

সম্পাদক লবন চৌধুরী, বেঙ্গল  
সার্ভিশন সেন্টার, ডিনকোনিয়া  
বাসস্টাড, রামকুমার মার্কেট কমন্স  
(ফিডল) বর্ধমান। M-9434211612  
পি. প্র-জ্ঞানচাইলি নিচে আগ্রহী  
ব্যক্তিগণ সম্পাদকের কোন নথির  
যোগাযোগ করুন। 296277

ইতিহাস ও বাংলা (H.S-Hons)  
পড়ানো হয়। কোর্স : 9831910602/  
8961314247. 296278

গ্রিমিং শিক্ষায় স্বনির্ভর হোন।  
ভারতবর্ষে এই প্রথম কত সময়ে,  
কম খরচে আন্তর্জাতিক যোগা ও  
শেখা করানো সঠিক ডিকিয়ার  
পদ্ধতি শিখে গ্রিমিং সেরাশিষ্ট ও  
ওবিসিটি কমসালটেই হিসেবে কাজ  
করুন। কোর্স শুরু হোকই  
আশাতীত আয়ের সুযোগ। ১০০%  
কালের সাহায্য।

অতীতস কমপ্লিট গ্রিমিং  
সলিউশন অ্যান্ড  
ট্রেনিং সেন্টার  
9831316829, 9038968454  
296279

UGC-DEC স্বীকৃত  
State Govt. University  
M.Tech, B.Tech, Dip. in Egn.  
B.A., B.Sc, B.Com, MA, M.Sc,  
M.Com, BBA, MBA, MSc(IT),  
BCA, MCA, B.Lib, M.Lib-উ  
ভর্তি চলিতেছে। (বাংলায়  
পরীক্ষার ব্যবস্থা আছে) VIPS-  
বাসবলর 9477091571



**Annexure-XI**  
**Photographs of Plant**



**Annexure-XI**  
**Photographs of Plant**



**Fig 1 : Gypsum Shed**



**Fig 2 : Covered Conveyors**



**Fig 3 : Clinker Storage Silos**



**Fig 4 : Fly ash Silo**



**Fig 5 : Cement Storage Silos**



**Fig 6 : Fly Ash Bulker Unloading**



**Fig 7 : Pedestrian Pathway**





**Fig 8 : Concrete Road**



**Fig 9: Water Sprinkler**



**Fig 10 : Covered Clinker Rake**



**Fig 11 : Sewage Treatment Plant**



**Fig. 12 Plantation**



**Fig. 13 Growing Saplings**



**Annexure-XI(A)**  
**ACF Progress Report**



**Annexure-XI-A**  
**Ambuja Cement Foundation, Sankrail**  
**Progress Report (April 2018 to Sept 2018)**

Sr. No.	Activities	Unit	Cumulative Achievement	Details of the activity
				Issue / Area/ village
1	Agro-based Livelihood			
1	Promotion of System of Rice Intensification			
a	Farmer's Training Programme	Farmers (No)	2422	Capacity building programme conducted with 2422 no of farmers in different issues of improved agricultural practices such as SRI, aquaculture, livestock management, vegetable cultivation and kitchen gardening with exposure in the field & Krishi Vikas Kendra.
b	SRI Promotion	acres	98 acres with 254 farmers	ACF Sankrail aims to ensure food security of the local population in a sustainable and eco-friendly manner. To improve productivity of food crops through improved practices [average increase of production by 43% and expenditure to agriculture decreases approximately by 12%] and management of natural resources [especially water, approximately less water consumption of 30%]. We have promoted SRI in 98 acres of land with 254 farmers. fertility of land increases due to uses of spacing, use of organic manures etc.
c	Off-season Vegetable Cultivation Program (Rain shelter & Scaffolding)	Farmers (no)	205	Farmers are harvesting leafy vegetables like Indian spinach (Palak), radish, coriander etc. They are raising saplings of cauliflower and tomato. Farmers are harvesting ridge gourd, snake gourd, bitter gourd, cow pea, cucumber etc.
d	Outscaling Carp prawn mix culture	Farmers (No)	280	Farmers are preparing home made balanced fish feed and applying the same. Aquaculture programme implemented 280 no of ponds. Farmers are preparing and applying fish feed, preparing a solution with yeast powder to multiply the nutritional value and volume of fish feed, testing the water with PH paper, applying lime and KMno4
e	IEC material for Paraprofessionals	No	2	Training material prepared for Paraprofessionals on off-season Veg. cultivation, scaffolding, aquaculture & SRI



2	Education				
a	School Infrastructure Support	No	4	Construction of field, pathway at Bhagabatipur MSK. Big size Dust bin given to Dhulagarh High School, Mohisgote primary school & Abada Primary school.	
b	Education support / Events / Sports	No	12	12 nos different type cultural and sports events organized in collaboration with local clubs	
3	Health & Sanitation				
a	No. of STD work place clinics	Days	132	It is a regular clinic with cement plant which gives benefits to the contract labourers, truckers and helpers at workplace. In the current year such camps held 6 days/week. In the last two quarter 369 patients treated	
b	Sanitation programme awareness, motivation & IEC - CLTS	No	22	22 nos Sanitation awareness programme with rally held in core villages for making Open Defecation Free village.	
4	HIV/AIDS HCC PROJECT				
a	IPC (Target group covered)	No	8271	8271 truckers & allied covered in IPC / group session.	
b	No. of STI clinics	No	128	The clinic proved to be very effective in terms of accessibilities and acceptability by the target population as the clinic is situated in the heart of Dhulagori with all basic facilities along with a team of self motivated professionals. As the target population like truckers don't access the medical facilities outside Dhulagori due to distance, lack of time and safety of their trucks. 3396 truckers treated at HCC.	
c	Street Play	No	4	Street play held in the important transit points to raise awareness on HIV/AIDS among the public	
d	Magic Show / Puppet show	No	2	Magic & Puppet shows held in the different important transit points to raise awareness on HIV/AIDS among the truckers.	
e	P.E. Monthly Meetings	No	6	Monthly meeting of peer educator, who imparts guidance at villages during awareness sessions held regularly	
i	Orientation of Stakeholder	No	2	HCC performance and vision project	
j	Counseling Session	No	2690	Counselling services provided to 2690 no of truckers & helpers.	





l	Social Marketing Codom	No	14900	14900 no of condom distributed through social marketing channel.
m	Satelite Clinic	No	12	12 nos of satellite clinic held in various transit point which covered 298 patients
5	Rural Infrastructure / Community Assets Creation			
a	Road /Guard wall Construction	m	320	Construction of 320 meters Concrete road at Mohisgote & Dhulagarh village completed. Guard-wall - 125 meters constructed in Mohisgote & Dhulagarh village.
6	Women Empowerment Programme			
a	New SHG formation	No	16	16 No new SHG formed. ACF Sankrail is working with 69 women SHG involving 804 members.
b	Capacity Building/ Exposure /IWD	No	49	49 No training and 3 no exposure visit held with SHG members. 21 Group Management trainings, 15 Book keeping trainings, 6 Leadership development trainings, 2 loan Management trainings and 3 financial Literacy trainings and 2 credit planning training were conducted during the period
c	Meeting with the women for formation of group, selection of Name, rules & regulation and other social & safety issues	No	33	33 no meet held for new group formation and also various Social Issues/Safety Awareness.
b	Support for IGA & Marketing	No	97	Four No of IGA like Agriculture and allied (Livestock, bird, fish), small vending, Tailoring, Zari etc adopted by 97 members during the period. Preparation of IGA plan for individual SHG is under progress. Plan has been prepared for 487 members.
7	Skill Entrepreneurship Development Institute			
a	Nos of students trained	No	273	SEDI has been working closely with local industries, and communities, to reach out to rural mass with special emphasis on the youth and thereby them an opportunity to transform their lives. SEDI Sankrail has successfully trained 273 candidates in various trades like Retail Management, Beautician ,Mobile Repairing ,Basic Electrical,2/3 Wheeler Repairing , Customer Support Executive and Smart Sewing Machine Operator courses





b	No. of students placed	No	171	Our approach to training and placement is holistic and is geared towards each candidate our brand ambassador. Market Exposure and Mock Interviews are conducted periodically to make the trainees more familiar with the needs of the industry and also to build their confidence. We provide trainees with Internship opportunities trades like Retail Management and Customer Care Executive
8	Stakeholder Engagement Events			
b	Community Engagement events	No	2	2 events held (Inauguration of DDU-GKY Training programme & 1 no Community Advisory Panel)
c	Safety Awareness Programme	No	54	54 Nos of Safety Awareness programme at community level held in the issues of Domestic Safety at Household level, Medical safety issues - Use of medical equipment, hand-washing, thinks to remind during purchase of medicine, importance of Blood donation, myths and misconceptions etc., Agricultural safety issues, Road Safety and Automobile safety etc.

Expenditure Details April'18 To Sept'18		
Ambuja Cement Foundation - Sankrail		
Sr. No	Programme / Activities	Expenses Rs. In Lakhs
		APR'18 to SEPT'18
1	Agro-Based Livelihood	962044
2	Health & Sanitation	981832
3	Women Empowerment & CB Events	150391
4	Rural Infrastructure Development	717993
5	Skill & Entrepreneurship Development Institute (SEDI)	8369167
6	Establishment	991584
Grand Total		12173011



## Photographs of Activities of ACF



Fig.14 Inauguration of DDU-GKY Programme



Fig. 15 Health Camp



Fig.16 Video-Show on Road Safety



Fig. 17 Street Drama



Fig.18 SHG Workshop for Women



Fig. 19 Farmer's Capacity Building Programme





**Fig.20 Rain-Shelter for Crop Protection**



**Fig.21 SRI Field-Use of Weeder Machine**

