# ECO CEMENTS LTD.

# STATUS OF ENVIRONMENTAL COMPLIANCE OCTOBER 2017 TO MARCH 2018

ECO PLUS
CEMENT & STEEL

**To,**
**The Chairman,**
**Bihar State Pollution Control Board,**
**Beltron Bhavan, 2nd Floor, Lal Bahadur Shastri Nagar,**
**Patna- 800023**

**Dated : 25.06.2018**

**Our Ref :ECO/BIHAR/SEC/25062018/13**

**Sub :Revised Status of Environmental Compliance of M/s. Eco Cements Limited, Bhabhua for the period of OCT 2017 to MARCH 2018**

Dear Sir,
This refers to above mentioned subject. In this matter, please find attached Status of Environmental Compliance of M/s. Eco Cements Limited, Bhabhua for the period of OCT 2017 to MARCH 2018.

Kindly acknowledge the receipt and oblige.

Thanking you in anticipation,
For Eco Cements Limited
ECO CEMENTS LTD.
Authorized Sign. Auth. Signatory

**Encl.**

1. **Status of Environmental Compliance of M/s. Eco Cements Limited, Bhabhua for the period of OCT 2017 to MARCH 2018**

**Copy to.**

1. **Ministry of Environment and Forests,**
   **BANGLOW NO. A-2, SHYAMLI CALONY,**
   **RANCHI-834002, JHARKHAND**
   **PH. 0651-2410007, 2410002**

2. **Scientist 'E' & In-charge,**
   **Central Pollution Control Board,**
   **Southernd Conclave, Block 502, 5TH & 6TH Floors,**
   **1582 Rajdanga Main Road,**
   **Kolkata – 700107 (W.B.)**

| ECO CEMENTS LIMITED, BHABHUA, BIHAR | | |
|---|---|---|
| Compliance report of Environment Clearance for Bhabhua Cement Plant<br>(For the Period from OCT-2017 TO MARCH-2018)<br>Reference Letter from MOEF, New Delhi - F. No. J-11011/287/2010-IA-II (I) dated 31.10.2011 | | |
| **Compliance of Specific Condition as per EC** | | |
| **Sl.No.** | **Particulars** | **Status of Compliance** |
| 1 | Particulate emissions shall be controlled within 50 mg/Nm$^3$ 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. | We are maintaining Particulate emissions within 30 mg/Nm3. Data on ambient air, fugitive and stack emissions is being submitted to the Ministry's Regional Office at Ranchi, SPCB and CPCB regularly. **(REPORTS ATTACHED SEE ANNEXURE - 1)** |
| 2 | The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 should be followed. | We are following The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009. **(REPORTS ATTACHED SEE ANNEXURE - 2)** |
| 3 | Gaseous emission levels 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. | We are following the Guidelines of Practice issued by the CPCB. The gaseous emission levels including secondary fugitive emissions from all the sources is being controlled within the latest permissible limits issued by the Ministry and it will be regularly monitored. **(REPORTS ATTACHED SEE ANNEXURE - 3)** |
| 4 | The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various transfer points, raw meal handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. All the raw material stock piles should be covered. A closed clinker stockpile system shall be provided. All conveyers should be covered with GI sheets. Covered sheds for storage of raw materials and fully covered conveyers for transportation of materials shall be provided besides cement, fly ash and clinker shall be stored in silos. Pneumatic system shall be used for fly ash handling. | Adequate no of dust collector are installed at all dust emission points. All the raw material are kept under covered yards and silos and all the conveyors are covered. Cement, fly ash and clinker are stored in Silos. Pneumatic system is used for fly ash handling. **(SEE ATTACHED PHOTOS OF DUST COLLECTORS AND SILOS ANNEXURE - 4)** |
| 5 | 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. Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM 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. | Concreting of road has been completed and provision has been made for regular water sprinkling by a tractor mounted sprinklers and pipe sprinklers has been laid near areas prone to air pollution. **(SEE ATTACHED PHOTOS - ANNEXURE - 5)** |

| | | |
|---|---|---|
| 6 | 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. | We are using closed vehicles and bulkers for the transportation of fly ash and other raw materials and end product i.e. cement and the handling sections are equipped with dust collection equipments. Vehicular emissions are regularly monitored and it is assured that there should not be any impact of the transport of the raw materials and end products on the surrounding environment including agricultural land. **(SEE ATTACHED ANNEXURE - 6)** |
| 7 | Total ground water requirement for the cement plant shall not exceed 200 $m^3$/day and necessary permission for the drawl of water shall be obtained from the Competent Authority. 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. | Total ground water requirement for the cement plant is well below 200 m3/day our requirement is less than 5 m3/day and we wish to inform you that we got NOC from CGWA for abstracting ground water for drinking and domestic purposes and Industry use with **Certificate no.- CGWA/NOC/IND/ORIG/2018/3756; Dated: 19.06.2018, Valid till: 18.06.2020 (SEE ATTACHMENT MAIL FROM CPCB).** We will send you the copy of certificate as soon as we get it. No process wastewater is generated/ discharged outside the factory premises and 'zero' discharge has been adopted. All other conditions are complied. **(REPORTS ATTACHED - SEE ANNEXURE- 7)** |
| 8 | 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. | We have adopted a pond outside our factory premises of 0.1498 hectare (1498 sq. meter) area and having an average depth of 3.0 meter with Khatauni no.- 43 & Khasra no.- 53, for rain water harvesting. Along with this we have made a water reservoir of 270 meter long, 5 meter wide & 5 meter deep for maintaining the water requirement of our plant. **(PHOTOS OF SOAK PIT AND POND ATTACHED - SEE ANNEXURE - 8)** |
| 9 | All the bag filter dust, raw meal 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 / reprocessors only. | We are recycling and reusing all the bag filter dust, raw meal dust, clinker dust and cement dust from pollution control devices in the process used for the cement manufacturing. We will also sell off spent oil and batteries to authorized recyclers/ reprocessors only. **(REPORTS ATTACHED - SEE ANNEXURE- 9)** |
| 10 | 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. Green belt development shall be started within 3 months after obtaining EC and completed within 3 years or before commissioning of the plant whichever is earlier. | Green Trees are planted 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. Green belt has been developed by planting trees all around the plant. **(SEE ANNEXURE - 10)** |
| 11 | 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 at Bhubaneswar. Implementation of such program should be ensured accordingly in a time bound manner. | We have fixed 5% of the project cost towards Enterprise Social Commitment **(SEE ATTACHED ANNEXURE - 11).** And we have started community development programmes and participated in harit kranti. |

| | | |
|---|---|---|
| 12 | The company shall provide housing for construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. | The construction stage is over. The condition is not applicable at present. We had provided housing for construction labor within the site with all necessary infrastructure and facilities |

| ECO CEMENTS LIMITED, BHABHUA, BIHAR | | |
|---|---|---|
| Compliance report of Environment Clearance for Bhabhua Cement Plant<br>(For the Period from OCT 2017 - MARCH 2018)<br>Reference Letter from MOEF, New Delhi - F. No. J-11011/287/2010-IA-II (I) dated 31.10.2011 | | |
| **Compliance of General Condition as per EC** | | |
| **Sl.No.** | **Particulars** | **Status of Compliance** |
| 1 | The project authorities must strictly adhere to the stipulations made by the Bihar State Pollution Control Board and the State Government. | We wish to inform you that our application with all relevant documents along with fee was accepted by SPCB, Patna & we have been granted consent to operate vide letter no. T-7001 & T-7002 dated - 27.12.2017, valid till - 31.3.2022. **(SEE THE APPLICATION ATTACHED - ANNEXURE - 12)** |
| 2 | No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. | We will take no further expansion or modifications in the plant without prior approval of the Ministry of Environment and Forests. |
| 3 | 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. | We conform to the load/mass based standards notified by this Ministry on 19th May, 1993 and standards prescribed from time to time for the gaseous emissions from various process units. **(REPORTS ATTACHED SEE ANNEXURE - 13)** |
| 4 | 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, $SO_2$ and $NO_X$ 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. | We have established four ambient air quality monitoring stations in the downward direction as well as where maximum ground level concentration of PM10, PM2.5, SO2 and NOX are anticipated in consultation with our Pollution Consultant. Data on ambient air quality and stack emission are regularly submitted to this Ministry including its Regional Office at Kolkata and the SPCB/CPCB once in six months. (**REPORTS ATTACHED SEE ANNEXURE - 2)** |
| 5 | 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 form time to time. The treated wastewater shall be utilized for plantation purpose. | No industrial waste water is being generated as cement manufacturing is a dry process. |
| 6 | 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 ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time). | Noise control measures including noise dampener sheet in ball mill, acoustic hoods, silencers, enclosures etc. are installed on all sources of noise generation so that the overall noise levels in and around the plant area shall be kept well within the standards (85 dBA). The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time). **(REPORTS ATTACHED SEE ANNEXURE- 14)** |
| 7 | Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act. | We conduct occupational health surveillance of the workers on a regular basis and records (FORM-32) are maintained as per the Factories Act. (**REPORTS ATTACHED SEE ANNEXURE - 15)** |

| | | |
|---|---|---|
| 8 | 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. | We have adopted a pond outside our factory premises of 0.1498 hectare (1498 sq. meter) area and having an average depth of 3.0 meter with Khatauni no.- 43 & Khasra no.- 53, for rain water harvesting. Along with this we are maintaining a cylindrical soak pit of 8 meter dia and 5 meter depth, inside the factory premises for water sprinkling through tractor and Green Belt development. **(PHOTOS OF SOAK PIT AND POND ATTACHED - SEE ANNEXURE - 8)** |
| 9 | 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 programmes, educational programmes, drinking water supply and health care etc. | We are complying with all the environmental protection measures and safeguards recommended in the EIA/EMP report. We are undertaking socio-economic development activities such as drinking water supply (PIYAU), sports items distribution among nearby villages, distribution of bags in nearby schools, etc. **(SEE THE ATTACHED ANNEXURE - 11)** |
| 10 | As proposed, Rs. 5.6 Crore and Rs 0.85 Crore 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. | As proposed in EIA/EMP report the project cost considered was 100 Crore. But, the actual project cost is 60.40 Crore. Accordingly, capital cost & recurring cost are mentioned below, and we are complying accordingly. **(REPORTS ATTACHED SEE ANNEXURE - 16)** |
| 11 | A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila 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 web site of the company by the proponent. | We have created a website and a copies of the clearance letter have been put on the website. www.ecocement.in **(SEE ATTACHED CLEARENCE LETTER ANNEXURE - 17)** |
| 12 | 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, $SO_2$, NOx (ambient levels as well as stack emissions) or 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. | We have uploaded the status of compliance of the stipulated environment clearance conditions, including results of monitored data on our website (www.ecocement.in) and shall update the same periodically. We send it to the Regional Office of the MOEF at Ranchi. The respective Zonal Office of CPCB and the SPCB. We have made a display board near main gate And we monitor and display the criteria pollutant levels namely; PM10, PM2.5, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects at a location near the main gate of the company in the public domain. **(SEE ATTCHED PHOTOS OF DISPLAY BOARD ANNEXURE - 18)** |

| | | |
|---|---|---|
| 13 | 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. | We 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. |
| 14 | The environmental statement for each financial year ending 31st 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. | We submit the environmental statement for each financial year ending 31st March in Form-V as to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently. We will also put it on the website of the company after creating it along with the status of compliance of environmental conditions and will also send it to the respective Regional Office of the MOEF at RANCHI by e-mail. **(SEE ATTACHED FORM - V ANNEXURE - 19)** |
| 15 | 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 http:/envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one 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. | We have informed 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 http:/envfor.nic.in. We have advertised this in two local newspapers that are widely circulated in the region of which one is in the vernacular language of the locality concerned and a copy of the same was forwarded to the Regional office at RANCHI. |
| 16 | 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. | We have informed 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. **(See the attached letter - ANNEXURE - 20)** |

ANNEXURE - 1

| Stack Emission Level Monitoring Report for the period OCT 2017 TO MARCH 2018 All Values in mg/m3 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sr. No. | Location / Month | Particulate Matter Emission (mg/Nm3) | | | | | |
| | | Stack Attached with Bag House of Cement Mill | Stack Attached with Bag House of gypsum & clinker feeding | Stack Attached with Bag House of Clinker & gypsum unloader | Stack Attached with DG 500 KVA | Stack Attached with DG 125 KVA | Standard Limit of Particulate Matter Emission |
| 1 | Oct-17 | 24.7 | 24.9 | 23.8 | 50.2 | 53.4 | 50 mg/Nm3 |
| 2 | Nov-17 | 25.9 | 23.0 | 22.1 | 41.5 | 44.1 | |
| 3 | Dec-17 | 22.4 | 25.2 | 20.0 | 44.6 | 47.4 | |
| 4 | Jan-18 | 23.9 | 24.0 | 21.4 | 53.8 | 57.2 | |
| 5 | Feb-18 | 32.0 | 25.9 | 19.1 | 45.3 | 48.2 | |
| 6 | Mar-18 | 33.9 | 20.9 | 20.6 | 48.6 | 51.7 | |
| Average Values | | 27.1 | 24.0 | 21.2 | 47.3 | 50.3 | |

ANNEXURE - 2

| Ambient Air Quality Monitoring Report (All Values in µg/m3) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year: 2017 - 2018 (OCT 2017 TO MARCH 2018) | | | | | | | | | | | | | | | | | |
| S. No | Location | Near Main Gate | | | | Near CCR | | | | Near Canteen | | | | Near Gypsum & Clinker Storage | | | |
| | Month | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_2$ |
| 1 | Oct-17 | 53.4 | 31.3 | 12.1 | 21.3 | 49.6 | 28.6 | 8.4 | 14.7 | 44.7 | 27.3 | 7.4 | 15.8 | 52.6 | 29.8 | 6.2 | 12.8 |
| 2 | Nov-17 | 58.0 | 34.4 | 14.6 | 27.1 | 49.3 | 28.4 | 9.6 | 15.1 | 46.3 | 27.2 | 7.0 | 12.6 | 52.4 | 29.6 | 5.8 | 11.5 |
| 3 | Dec-17 | 65.2 | 36.5 | 10.3 | 22.3 | 60.2 | 35.8 | 7.4 | 14.3 | 56.5 | 33.6 | 6.8 | 13.2 | 56.8 | 33.8 | 8.1 | 12.6 |
| 4 | Jan-18 | 50.2 | 29.2 | 11.4 | 21.2 | 41.7 | 24.3 | 8.3 | 16.6 | 40.9 | 23.6 | 7.4 | 14.1 | 42.6 | 24.6 | 7.8 | 15.6 |
| 5 | Feb-18 | 48.4 | 28.2 | 13.3 | 24.5 | 38.1 | 22.2 | 9.6 | 19.2 | 32.3 | 18.6 | 8.6 | 16.3 | 39.7 | 22.9 | 9.0 | 18.1 |
| 6 | Mar-18 | 55.5 | 32.4 | 12.0 | 27.9 | 44.8 | 26.3 | 9.6 | 15.8 | 41.2 | 24.0 | 7.6 | 16.8 | 44.9 | 26.1 | 7.3 | 13.5 |
| **Average** | | **55.12** | **32.00** | **12.28** | **24.05** | **47.28** | **27.60** | **8.82** | **15.95** | **43.65** | **25.72** | **7.47** | **14.80** | **48.17** | **27.80** | **7.37** | **14.02** |


Corp. Off.: 72, Jawahar Nagar Extn., Bhelupur, Varansi, U.P.- 221010, PH.- 0542-2277704, 2277074
Factory: Plot No. 1644, Bheriya Road, Kulharia, Durgauti, Bhabhua, Bihar

ANNEXURE - 3

| Fugitive Dust Emission Level Monitoring Report for the period OCT 2017 TO MARCH 2018 | | | | | | |
|---|---|---|---|---|---|---|
| Concentration of Total Dust (All Values in mg/m$^3$) | | | | | | |
| Sl.No. | Location / Month | Mill Section Ground Floor | Mill Section 1st Floor | Mill Section 2nd Floor | South Side of Mill Section | North side of Mill Section |
| 1 | Oct-17 | 6.44 | 5.87 | 7.38 | 6.18 | 5.43 |
| 2 | Nov-17 | 8.77 | 4.38 | 6.19 | 5.76 | 6.22 |
| 3 | Dec-17 | 7.36 | 5.16 | 4.78 | 6.17 | 5.44 |
| 4 | Jan-18 | 7.52 | 5.14 | 6.55 | 6.10 | 5.70 |
| 5 | Feb-18 | 6.89 | 5.76 | 5.43 | 4.18 | 6.14 |
| 6 | Mar-18 | 7.40 | 5.26 | 6.07 | 5.68 | 5.79 |
| Average Values | | **7.40** | **5.26** | **6.07** | **5.68** | **5.79** |

# ANNEXURE - 4

# ANNEXURE - 5

**ANNEXURE - 6**

# प्रदूषण नियन्त्रण जांच प्रमाण-पत्र

(परिवहन विभाग, उत्तर प्रदेश द्वारा अधिकृत)

| कोड 70-571 | | |
|---|---|---|

हेल्प लाइन नं0 - 18001800151 संख्या D 715023

वैधता 9/8/18 तक (वैधता छः माह) प्रमाण-पत्र शुल्क ₹ 150/-

अधिकृत केन्द्र कोड

वाहन पंजीयन संख्या U.P. 65 CT 7878 वाहन मेक TRUCK.

वाहन की चेसिस सं० निर्माण वर्ष 2013

इन्जन संख्या

## डीजल चालित वाहनों के लिए

| परीक्षण की विधि | निर्धारित मानक प्रकाश अवशोषण गुणांक (१/एम) | मापित स्तर प्रकाश अवशोषण गुणांक (१/एम) | निर्धारित मानक स्मोक डेनसीटी हेट्रीज यूनिट (HSU) | मापित स्तर स्मोक डेनसीटी हेट्रीज यूनिट (HSU) |
|---|---|---|---|---|
| भारत स्टेज- IV मानक के पूर्व के निर्मित टर्बो चार्ज्ड इंजन व नेचुरली एस्पीरेटेड इंजन के लिए फ्री एक्सलरेशन टेस्ट | 2.45 | | 65 | 4.1.3.1 |
| भारत स्टेज-IV के मानक के अनुसार निर्मित टर्बो चार्ज्ड इंजन व नेचुरली एस्पीरेटेड इंजन के लिए फ्री एक्सलरेशन टेस्ट | 1.62 | | 50 | |

(प्रमाणित किया जाता है कि इस वाहन का मापित स्तर के. मो. यान नियमावली 1989 के नियम 115(2) में निर्धारित स्तर के अनुरुप है।)

| केन्द्र का नाम एवं मुहर | जारी तिथि 10/2/18 समय 5.40 P.M | परीक्षणकर्ता का नाम व हस्ताक्षर | वाहन स्वामी अथवा चालक का हस्ताक्षर/ अंगूठा निशानी |
|---|---|---|---|

टिप्पणी :- यदि आपकी कोई शिकायत है तो कृपया प्रदूषण नियंत्रण प्रकोष्ठ, सहायक परिवहन आयुक्त (सड़क सुरक्षा/प्रदूषण नियंत्रण) परिवहन आयुक्त कार्यालय, टेहरी कोठी, लखनऊ से सम्पर्क करें।

वाहन स्वामी का नाम संजय सिंह पता चौकाघाट - वाराणसी

मुद्रक : उ०प्र० उपभोक्ता सहकारी संघ लि०, लखनऊ (Sept. 2013)

ANNEXURE - 6

# प्रदूषण नियन्त्रित जाँच प्रमाण-पत्र

# POLLUTION CONTROL CHECK CERTIFICATE

**परिवहन विभाग, उत्तर प्रदेश सरकार द्वारा अधिकृत**

**AUTHORISED BY TRANSPORT DEPARTMENT GOVT. OF UTTAR PRADESH**

**Valid in Delhi 90 Days Only**

संख्या
**S. No.** 00498

प्रमाण-पत्र संख्या
**PUCC No.** 560000498
**UP**

वाहन पंजी. संख्या
**Vehicle Reg. No.** UP665AT/3675

मेक
**Make** TATA

मॉडल
**Model** 2515

वर्ग
**Category** TRUCK

वर्ष
**Year** 2010

ईंधन
**Fuel** Diesel

दिनांक
**Date :** 04/Apr/2018

समय
**Time :** 10:32:58 AM

वैधता
**Valid Upto** 03/Oct/2018

**VALID IN ALL OVER INDIA**

**VALID IN UP**.....

प्रमाणित किया जाता है कि इस चाहन का धूम्र घनत्व केन्द्रीय मोटर वाहन नियम 1989 के नियम 115 (ग) में निर्धारित स्तर के अनुसार है। यदि आप को कोई शिकायत या टिप्पणी है तो कृपया प्रदूषण नियंत्रण प्रकोष्ठ, परिवहन आयुक्त कार्यालय, टेहरी कोठी लखनऊ, उ. प्र. को लिखें।

**In case of any Comment/complaint, please write to Pollution Control Cell, Transport Commissioner Office, Tehari Kothi Lucknow, U.P.**

eqDr Ro;Z lhek ;kstuk ;qDr okgu ds fy, Hkkj Ro lhek 65 HSU

Prescribed Smoke Density limit At Free Acceleration 2.45 1/m

| Flushing Cycle | | | | | |
|---|---|---|---|---|---|
| | 0006 | 0006 | | | |
| S.No. | Min.rpm | Max.rpm | K-1/m | HSU % | Temp. |
| 1 | : 0015 | 0015 | 0.04 | 01.5 | 82.0 |
| 2 | : 0012 | 0012 | 0.03 | 01.2 | 81.7 |
| 3" | : 0012 | 0012 | 0.03 | 01.2 | 81.7 |
| 4" | : 0013 | 0013 | 0.03 | 01.3 | 81.8 |
| 5" | : 0012 | 0012 | 0.03 | 01.2 | 81.7 |
| 6" | : 0015 | 0015 | 0.04 | 01.5 | 82.0 |
| Avg: | 0013 | 0013 | 0.03 | 01.3 | 81.8 |

Zero Drift : 00.0 %
Pres.max = 04.5 cm(H2O)
Temp.Mean. 80.2 deg.C

**Dated on : 4/4/2018** **PASS**
**0560**

UP65AT 3675

**Time : 10:32:58 AM**

हस्ताक्षरकर्ता
Authorised Signature

नाम
Name

अधिकृत केन्द्र कोड
Authorised Center Code **5 6 0**

RAJA SERVICE STATION LONDAJHASI CHANDAULI

**M/s. RAJA SERVICE STATION**
**LONDA JHANSI, CHANDAULI (U.P.)**

**ALL OVER INDIA VALID**
VALID IN DELHI FOR 90 DAYS

# प्रदूषण नियंत्रित जाँच प्रमाण-पत्र

## POLLUTION CONTROL CHECK CERTIFICATE

परिवहन विभाग, बिहार सरकार द्वारा अधिकृत

AUTHORISED BY TRANSPORT DEPARTMENT, GOVT. OF BIHAR

संख्या
S.No.

प्रमाण पत्र संख्या
PUCC No.: D **X-5468 000247**

वाहन पंजी. संख्या**UP61J-0274**
Vehicle Reg. No. :

मेक **TATA**
Make

मॉडल **TRUCK**
Model

वर्ग **Truck**
Catogary

वर्ष **2008**
Year

ईंधन **Diesel**
Fuel.

दिनांक**26-Dec-17**
Date :

समय **11:49:34 AM**
Time :

**25-Jun-18**
वैधता
Valid Upto :

मुक्त त्वरण विधि द्वारा निर्धारित धूम घनत्व सीमा — 65 HSU
Prescribed Smoke Density limit At Free Acceleration — 2.45 1/m

| FLOSH | CYCLE | MEAN |
|---|---|---|
| MIN RPM | MAX RPM | OIL. TEMP |
| 00576 | 02899 | 077 |

| Sr | MINRPM | MAXRPM | K | HSO | TEMP |
|---|---|---|---|---|---|
| 1 | 00509 | 02619 | 00.82 | 030.0 | 075 |
| 2 | 00542 | 02685 | 00.83 | 032.1 | 077 |
| 3 | 00551 | 02703 | 00.84 | 033.1 | 077 |
| 4 | 00576 | 02752 | 00.85 | 035.2 | 078 |
| 5 | 00649 | 02899 | 00.88 | 039.4 | 082 |
| 6 | 00654 | 02908 | 00.88 | 040.4 | 082 |
| 7 | 00655 | 02911 | 00.88 | 040.4 | 082 |
| | Mean | | 0.86 | 37.42 | |

प्रमाणित किया जाता है कि इस वाहन का धूम घनत्व केन्द्रीय मोटर वाहन नियम 1989 के नियम 115 ( 2 ) में निर्धारित स्तर के अनुसार है। यदि आप को कोई शिकायत या टिप्पणी है तो कृपया प्रदूषण नियंत्रण प्रकोष्ठ, परिवाहन आयुक्त कार्यालय, पटना को लिखे।

In case of any comment/ complaint, please write to Pollution Control Cell, Transport Commissioner office, Patna

UP61J
0274
अधिकृत केन्द्र कोड
Authorised Centre Code

हस्ताक्षरकर्त्ता
Authorised Signature :

नाम
Name :

P-293

## ANNEXURE - 7

### (I) WATER CONSUMPTION:

| | |
|---|---|
| Process | N.A. (As plant is based on dry process technology) |
| Cooling and Dust Suppression | 318.26 KL |
| Domestic (6 months) | 153.00 KL |

| Name of Product | Process water consumption per unit of product Output | |
|---|---|---|
| | During Current Financial Year( 2016-17) | During Current Financial Year( 2017-18) |
| PPC Cement | 0.00119 KL/ MT OF CEMENT PRODUCTION | 0.00127 KL/ MT OF CEMENT PRODUCTION |

Note:

*We have 17 Workers in our factory.

*Our current year production FROM OCT - 2017 TO MARCH -2018 is 250599.41 MT.

# ANNEXURE - 7

From: <no-reply@cgwa-noc.gov.in>
Date: Tue, Jun 19, 2018 at 11:22 AM
Subject: Your Application No- 21-4/254/BR/IND/2017 is Approved
To: <ba.ecocement@gmail.com>

Dear BIPIN AGARWAL / ba.ecocement@gmail.com,

Your Application Number 21-4/254/BR/IND/2017 has been Approved and No Objection Certificate (NOC) No. CGWA/NOC/IND/ORIG/2018/3756 for ground water abstraction to M/s ECO CEMENTS LTD has been granted.

The NOC start date is 19/06/2018 and is valid upto 18/06/2020 .

Hardcopy of NOC shall be sent by speed post and scanned copy of same would be uploaded in NOCAP system. You can view/download scanned copy of NOC through your Login.

This is an auto-generated email. Do not reply to this email.

# ANNEXURE - 8

# ANNEXURE – 9

HAZARDOUS WASTE

(As specified under Hazardous Waste (Management, Handling and Trans boundary Movement) Rules, 2008

| Hazardous Waste | Total Quantity (Ltrs) | |
|---|---|---|
| | During Current Financial Year (APR 2017-SEP 2017) | During Current Financial Year (OCT 2017-MARCH 2018) |
| | We are having common authorization for Hazardous Waste Management & Handling for Clinker Grinding Unit (Cement 1.0 MTPA ,500 &125 KVA D. G. Set) | |
| a) From Process, Cement manufacturing (Grinding) is based on "Dry Process" No Hazardous waste is generated from the process except used oil which is drained from Machinery / Equipments | Total Quantity Generated in APR 16 – SEP 17: 55 Ltrs<br>Old Stock : 975 Ltrs<br>Sale out : NIL Ltrs<br>Balance : 1030 Ltrs | Total Quantity Generated in OCT 2017-MARCH 2018: 60 Ltrs<br>Old Stock : 1030 Ltrs<br>Sale out : NIL Ltrs<br>Balance : 1060 Ltrs |
| (b) From Pollution Control Facilities | N.A | N.A |

# ANNEXURE - 10

# ANNEXURE - 11

निःशुल्क पाऊ

Sponsored By
ECO PLUS
ECO CEMENTS LTD.

Sponsored By
TRUST OF INDIA
ECO PLUS
CEMENT & STEEL
ECO CEMENTS LTD.

Sponsored By
TRUST OF INDIA
ECO PLUS
CEMENT & STEEL
ECO CEMENTS LTD.

TRUST OF INDIA
ECO PLUS
CEMENT & STEE
खुशियों को घर लायें...

Sponsored By
ECO PLUS

# 86 बच्चों को दिये गये स्कूली बैग

बच्चों को बैग वितरित करते संस्था के कर्मचारी

आगे बढ़े. इस दौरान संस्थान चारों ओर से अभयकरण सिंह, डॉ. जयशंकर प्रसाद, रामकुमार सिंह, दीपक कुमार सहित अन्य शामिल थे. वहीं, विद्यालय के प्रधानाध्यापक डॉ. घटवारी राम, उषा देवी, रामानंद सिंह, मोहम्मद इस्तियाक, आनंद कुमार सिंह सहित अन्य शिक्षक उपस्थित थे.

ANNEXURE - 12

**BIHAR STATE POLLUTION CONTROL BOARD**
Parivesh Bhawan, NSB-2, Patliputra Industrial Area
Patliputra, Patna - 800 010

Ref.no- T-7002

Patna, dated- 27.12.17

## DISCHARGE CONSENT ORDER

With reference to the application ID: **824913**, dated **14.04.2017** of **M/s ECO Cement Ltd., At-72, Jawahar Nagar Extn., Bhelupur, Dist.-Varanasi** for consent under sections 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, he/they is/are granted consent to bring into use his/their new/altered/existing outlet(s) for discharge of trade effluent and/or domestic sewage of unit **At- 1644, Bheria Road, Kulharia, Durgawati, Bhabua, Dist.-Kaimur-821105** for the period **upto 31.03.2022** with the following conditions:- **(Capacity- PPC Portland Pozzolana Cement-3030MT/day)**

1 That, he/they shall not make any alteration, addition, deletion or modification in the plant without the prior clearance from the Board and shall also abide by the obligations under sections 24,31 and 33A of the Water (Prevention & Control of Pollution ) Act,1974 and further shall extend co-operation to the Board in performing its functions entrusted under sections 20,21,23,30 and 32 of the Act ;

2 That, he/they shall comply with the the provisions of the Water (Prevention and Control of Pollution) Cess Act, 1977, rule 14 of the Environment (Protection) Rules, 1986; previsions of the Hazardous Wastes (Management, Handling & Tran boundary Movement) rules, 2008; rules 4,5,7,8,10,11,12,13, 15,17 and 18 of the Manufacture, Storage and Import of Hazardous Chemical Rules,1989; and the provisions of the Public Liability Insurance Act,1991 whichever is applicable;

3 That, he/they shall monitor his/their effluent(s) regularly and maintain its quality in conformity with Board's standards and shall produce its proof, as and when asked for;

4 That, he/they shall submit application for consent again 30 days before the expiration of the period of consent i.e. ***28.02.2022 or*** within 30 days from the date of receipt of this order, whichever is applicable.

5 ***That, all treated waste water shall be recycled and reused in the process and/or for dust suppression and green belt development and related activities etc.***

6 ***That, no process waste water shall be discharged outside the factory premises and zero discharge shall be maintained.***

7 ***That, the rain water harvesting shall be carried out. They shall ensure that the waste water shall not mix with rain water harvesting system.***

8 ***That, the industrial waste water, if any, shall be properly collected, treated so as to conform to the latest standards prescribed under the E(P) rules, 1986.***

9 ***That, certificate for underground water withdrawal from competent authority shall be obtained.***

Issued under the instruction of the competent authority.

To,

Sri Bipin Agarwal
M/s ECO Cement Ltd.
At-72, Jawahar Nagar Extn.
Bhelupur, Dist.-Varanasi

26/12/17

(Alok Kumar)
Member-Secretary

EPABX: 0612-2261250/2262265, Fax: 0612-2261050
E-mail: bspcb@yahoo.com, Website: http://bspcb.bih.nic.in

BIHAR

# BIHAR STATE POLLUTION CONTROL BOARD

Parivesh Bhawan, NSB-2, Patliputra Industrial Area
Patliputra, Patna - 800 010

Ref. No T-7001 Patna, dated- 27.12.17

## EMISSION CONSENT ORDER

With reference to the application ID. **824913**, dated **14.04.2017** of **M/s ECO Cement Ltd., At-72, Jawahar Nagar Extn., Bhelupur, Dist.-Varanasi** for consent under sections 21 of the Air (Prevention & Control of Pollution) Act, 1981, he/they is/are granted consent to operate his/their plant **At- 1644, Bheria Road, Kulharia, Durgawati, Bhabua, Dist.-Kaimur-821105** for the period **upto 31.03.2022** with the following conditions:- **(Capacity- PPC Portland Pozzolana Cement-3030MT/day)**

1. That, he/they shall not make any alteration, addition, deletion or modification in the plant without the prior clearance from the Board and shall also abide by the obligations under sections 22,23 and 31A of the Air (Prevention & Control of Pollution ) Act,1981 and further shall extend co-operation to the Board in performing its functions entrusted under sections 24,25 and 26 of the Act ;
2. That, he/they shall comply with the requirements of rule 14 of the Environment(Protection) Rules, 1986; rules 4,5,7,9,10 and 11 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules,2008; rules 4,5,7,8,10,11,12,13,15,17 and 18 of the Manufacture, Storage and Import of Hazardous Chemical Rules,1989; and the provisions of the Public Liability Insurance Act,1991,whichever is applicable;
3. That, he/they shall monitor his/their emission(s) and the ambient air quality from representative point regularly and shall maintain its quality in conformity with Board's standards and shall produce its proof, as and when asked for;
4. That, he/they shall submit application for consent again 30 days before the expiration of the period of consent i.e. **28.02.2022** or within 30 days from the date of receipt of this order, whichever is applicable.
5. ***That, the air pollution control devices (bag filter) shall be operated regularly to keep particulate emission within 50mg/Nm$^3$.***
6. ***That, the Gaseous emission level including secondary fugitive emission from all the sources shall be controlled within the latest permissible limit issued by the MoEF and shall be regularly monitored.***
7. ***That, the dust collection system and extraction system to control fugitive dust emission at various transfer points, raw material handling (unloading, conveying, transporting, stacking), vehicular movements, bagging & Packing areas shall be operated regularly.***
8. ***That, the regular water spraying/sprinkling on roads all around the cement plant and critical areas prone to air pollution shall be carried out to control fugitive emission to conform to the norms of the ambient air quality parameters.***
9. ***That, all raw materials including fly ash and end products shall be transported in closed containers only to reduce impact on the surrounding environment including agricultural land .***
10. ***That, all the dust from bag filters, clinker dust , and cement dust from pollution control devices shall be recycled in the process of cement manufacturing.***
11. ***That spent oil and batteries shall be sold to authorized recyclers/ reprocessors only.***
12. ***That, the green belt shall be developed and maintained as prescribed in E.C.***
13. ***They shall install continuous (24x7) online monitoring devices to monitor emission in ambient air from stacks and data shall be shared to this Boards.***
14. ***The overall noise level in and around the plant area shall be kept well within the standards 85dBA. The ambient noise level shall conform to the standard i.e.75dBA (day time) and 70dBA (night time)***
15. ***That, they shall comply with all the conditions mentioned in the Environmental clearance.***
16. ***The unit shall have a display board near the site stating name of unit/Industry with address/name of proprietor with address and ref memo no and date of consent with its validity period granted by the Board.***

***Issued under the instruction of the competent authority.***

To,

Sri Bipin Agarwal
M/s ECO Cement Ltd.
At-72, Jawahar Nagar Extn.
Bhelupur, Dist.-Varanasi

26/12/17
(Alok Kumar)
Member-Secretary

EPABX: 0612-2281250/2282265, Fax: 0612-2281050
E-mail: bspcb@yahoo.com, Website: http://bspcb.bih.nic.in

# ANNEXURE - 13

## LOAD / MASS BASED DATA

| Sr. No. | YEAR/ MONTH | STACK ATTACHED TO | Pollution Control Measures | Dimension of Stack, Mtrs | Temp. | Velocity (m/sec) | Flow (Nm3/Hr.) | PM (Mg/Nm3) | OUT PUT Tone/Hr | PM IN Kg/Tone |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | OCT 17 TO MARCH 18 | CEMENT MILL | BAG HOUSE | 1.20 | 45 | 7 | 28486 | 21.2 | 100 | 0.0060 |
| 3 | | CLINKER AND GYPSUM UNLOADING | BAG HOUSE | 0.75 | 51 | 7.3 | 10676 | 24 | 79.300 | 0.0032 |
| 4 | | CLINKER AND GYPSUM FEEDING | BAG HOUSE | 0.60 | 56 | 7.9 | 8037 | 27.1 | 79.300 | 0.0027 |

**TOTAL CEMENT PRODUCTION (MT):**

| During Previous Financial Year (2016-2017) | During Current Financial Year (2017-2018) |
|---|---|
| 260414.338 | 444090.555 |

**(I) RAW MATERIAL CONSUMPTION: (CEMENT PLANT)**

| Name of Raw Material | Name of Product | Consumption of Raw Material per unit of Output (Cement) | |
|---|---|---|---|
| | | During Previous Financial year (16-17) | During Current Financial year (17-18) |
| Clinker | PPC Cement | 0.741 | 0.737 |
| Gypsum | | 0.036 | 0.056 |
| Fly Ash | | 0.252 | 0.227 |

**NOTE:-**

CPCB / MOEF&CC formulated norms for clinker grinding unit for PM emission and SO2, NOx & PM for kiln stack. There is no load based standards formulated for clinker grinding unit, it is formulated only for kiln stack (MoEF notification no. GSR 612(E) dated 25 Aug 2014). However reports (Annex) are enclosed for your kind reference.

ANNEXURE - 14

| Ambient Noise level Monitoring Report From OCT 2017 TO MARCH 2018 dB(A) TIME WEIGHTED AVERAGE (TWA) OF NOISE LEVEL IN dB(A) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **S. No.** | **Location** / **Month** | **Plant boundary near Main gate** | **Plant boundary near CCR** | **Plant boundary near Canteen** | **Plant boundary near Gypsum storage** | **Plant boundary near Clinker storage** | **Prescribed Standard Limit (dB(A))** |
| **1** | Oct-17 | 69.8 | 67.8 | 68.3 | 62.9 | 63.1 | 75dB(A) in day & 70 dB(A) in night |
| **2** | Nov-17 | 71.3 | 69.4 | 67.5 | 63.2 | 66.8 | |
| **3** | Dec-17 | 68.4 | 66.2 | 63.8 | 64.9 | 62.8 | |
| **4** | Jan-18 | 70.2 | 67.1 | 66.2 | 62.8 | 63.7 | |
| **5** | Feb-18 | 72.4 | 69.3 | 64.1 | 65.7 | 67.2 | |
| **6** | Mar-18 | 69.1 | 66.2 | 61.2 | 67.1 | 64.8 | |
| **Average Values** | | **70.2** | **67.7** | **65.2** | **64.4** | **64.7** | |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0001
2. Name of Worker : MR. NITIN MELHOTRA
3. Sex : MALE
4. Date of birth/age : 05/01/1985

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | JUNIOR ENGINEER | CLINKER, FLYASH, GYPSUM & CEMENT | 7/10/10 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr. Sanjeev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

# ANNEXURE - 15

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0002
2. Name of Worker : MR. ANKIT SHARMA
3. Sex : MALE
4. Date of birth/age : 06/08/1987

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | ELECTRICAL ENGINEER | CLINKER, FLYASH, GYPSUM & CEMENT | 21/11/10 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr Sanjeev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0003
2. Name of Worker : MR. AJAY SINGH
3. Sex : MALE
4. Date of birth/age : 30/06/1986

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | INSTRUMENT ENGINEER | CLINKER, FLYASH, GYPSUM & CEMENT | 2/04/12 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr. Satyadev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0004
2. Name of Worker : MR. RISHI SAXENA
3. Sex : MALE
4. Date of birth/age : 19/03/1989

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | SENIOR ENGINEER | CLINKER, FLYASH, GYPSUM & CEMENT | | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr Satish Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0005
2. Name of Worker : MR. YOGENDRA PATEL
3. Sex : MALE
4. Date of birth/age : 16/02/1989

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | SENIOR ENGINEER | CLINKER, FLYASH, GYPSUM & CEMENT | 20/03/12 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr. Sanjeev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0006
2. Name of Worker : MR. VIKASH GOEL
3. Sex : MALE
4. Date of birth/age : 02/06/1989

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| ACCOUNT | - | - | SKILLED | CLINKER, FLYASH, GYPSUM & CEMENT | 1/08/12 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr Satyadev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0007
2. Name of Worker : MR. NIRANJAN NAYER MILLAN
3. Sex : MALE
4. Date of birth/age : 02/02/1976

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | SKILLED | CLINKER, FLYASH, GYPSUM & CEMENT | 1/04/15 | - | - | 21/7/17<br>11/11/17 | SATISFACTORY | PHYSICAL EXAMINATION<br>LAB TESTS<br>AUDIOMETRY TEST<br>SPIROMETRY TEST<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT<br>FIT<br>FIT<br>FIT | - | - | - | - | Dr. Satish Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0008
2. Name of Worker : MR. UPENDRA SHARMA
3. Sex : MALE
4. Date of birth/age : 15/10/1986

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | HELPER | CLINKER, FLYASH, GYPSUM & CEMENT | 1/08/12 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr. Sandeep Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0009
2. Name of Worker : MR. VISHWAKANT PANDEY
3. Sex : MALE
4. Date of birth/age : 04/02/1965

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| PRODUCTION | - | - | HELPER | CLINKER, FLYASH, GYPSUM & CEMENT | 1/08/12 | - | - | 20/7/17 | SATISFACTORY | PHYSICAL EXAMINATION | FIT | - | - | - | - | Dr Sanjeev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |
| | | | | | | | | | | LAB TESTS | FIT | | | | | |
| | | | | | | | | | | AUDIOMETRY TEST | FIT | | | | | |
| | | | | | | | | 11/11/17 | | SPIROMETRY TEST | FIT | | | | | |
| | | | | | | | | | | X-RAY CHEST (AS PER REPORT) | FIT | | | | | |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0010
2. Name of Worker : MR. SADHU SARAN KUSHWAHA
3. Sex : MALE
4. Date of birth/age : 19/10/1982

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | SKILLED | CLINKER, FLYASH, GYPSUM & CEMENT | 1/08/12 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr. Satyadev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0011
2. Name of Worker : MR. JAI PRAKASH YADAV
3. Sex : MALE
4. Date of birth/age : 26/07/1978

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | HELPER | CLINKER, FLYASH, GYPSUM & CEMENT | 1/08/12 | - | - | 21/7/17 | SATISFACTORY | PHYSICAL EXAMINATION | FIT | - | - | - | - | Dr Satyadev Agrawal MBBS, MRCP (U K.) Consultant Chest & General Physician |
| | | | | | | | | | | LAB TESTS | FIT | | | | | |
| | | | | | | | | | | AUDIOMETRY TEST | FIT | | | | | |
| | | | | | | | | 11/11/17 | | SPIROMETRY TEST | FIT | | | | | |
| | | | | | | | | | | X-RAY CHEST (AS PER REPORT) | FIT | | | | | |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0012
2. Name of Worker : MR. GANESH KUMAR
3. Sex : MALE
4. Date of birth/age : 29/01/1987

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| PRODUCTION | - | - | HELPER | CLINKER, FLYASH, GYPSUM & CEMENT | 1/08/12 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr. Sanjeev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0013
2. Name of Worker : MR. AWADHESH YADAV
3. Sex : MALE
4. Date of birth/age : 15/02/1990

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| PACKING | - | - | HELPER | CLINKER, FLYASH, GYPSUM & CEMENT | 1/08/12 | - | - | 21/7/17 | SATISFACTORY | PHYSICAL EXAMINATION | FIT | - | - | - | - | Dr. Sanjeev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |
| | | | | | | | | | | LAB TESTS | FIT | | | | | |
| | | | | | | | | | | AUDIOMETRY TEST | FIT | | | | | |
| | | | | | | | | 11/11/17 | | SPIROMETRY TEST | FIT | | | | | |
| | | | | | | | | | | X-RAY CHEST (AS PER REPORT) | FIT | | | | | |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0014
2. Name of Worker : MR. RAM AWADH LATH
3. Sex : MALE
4. Date of birth/age : 12/02/1986

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| TECHNICAL | - | - | HELPER | CLINKER, FLYASH, GYPSUM & CEMENT | 1/08/12 | - | - | 20/7/17 | SATISFACTORY | PHYSICAL EXAMINATION | FIT | - | - | - | - | Dr Sanjeev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |
| | | | | | | | | | | LAB TESTS | FIT | | | | | |
| | | | | | | | | | | AUDIOMETRY TEST | FIT | | | | | |
| | | | | | | | | 11/11/17 | | SPIROMETRY TEST | FIT | | | | | |
| | | | | | | | | | | X-RAY CHEST (AS PER REPORT) | FIT | | | | | |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0015
2. Name of Worker : MR. OM PRAKASH SINGH
3. Sex : MALE
4. Date of birth/age : 10/11/1971

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| COMMERCIAL | - | - | SKILLED | CLINKER, FLYASH, GYPSUM & CEMENT | 1/09/12 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr. Sanjeev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0016
2. Name of Worker : MR. DHIRENDRA PRATAP SINGH
3. Sex : MALE
4. Date of birth/age : 24/09/1988

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| ACCOUNTS | - | - | ACCOUNTANT | CLINKER, FLYASH, GYPSUM & CEMENT | 1/09/14 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr. Satyadev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

**FORM NO. 32**
(Prescribed under Rule 68-T and 102)

## Health Register

1. Serial Number in the Register : 0017
2. Name of Worker : MR. PANKAJ KUMAR JHA
3. Sex : MALE
4. Date of birth/age : 12/01/1980

| Department Works | Name of Hazardous process | Dangerous process/operation | Nature of job or occupation | Raw materials, products or By-products likely to be exposed to | Date of posting | Date of leaving/transfer to or transfer | Reasons for Discharge/ leaving or transfer | Medical examination Results therefore | | | | If declared unfit for work | | | | Signature with date of the factory Medical Officer/ the Certifying Surgeon. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Date | Signs and symptoms Observed during examination | Nature of tests & results thereof | Result Fit/Unfit | Period of temporary Withdrawal from that work | Reasons for such withdrawal | Date of declaring him Unfit for that work | Date of issuing fitness Certificate | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| PRODUCTION | - | - | SUPERVISOR | CLINKER, FLYASH, GYPSUM & CEMENT | 1/05/16 | - | - | 5/12/17 | SATISFACTORY | PULMONARY FUNCTION TEST (SPIROMETRY TEST)<br>X-RAY CHEST<br>(AS PER REPORT) | FIT<br>FIT | - | - | - | - | Dr Satyadev Agrawal MBBS, MRCP (U.K.) Consultant Chest & General Physician |

ANNEXURE - 17

ECOCEMENT
ADIG . AJAR . AMAR

TO,

Dated – 2011-11-05

The Gram Pradhan

Gram Panchayat

Kulharia, Bheriyan, Durguati, Bhabua ( Kamoor) Bihar.

Dear Sir,

This to inform you that, Eco Cements limited, Plot no. 1644, Bherian More, Kulharia, Durguati, Bhabua, Bihar has been awarded Envirenment clearance from MOEF, wide EC letter no. F. No. J-11011/287/2010-IA-II (I) dated 31.10.2011.

This is for your information/ Record please.

Yours Sincerely,

Manager

ECO CEMENTS LTD.
Auth. Signatory

Eco Cements Ltd.

Encl. : EC letter no. F. No. J-11011/287/2010-IA-II (I) dated 31.10.2011.

**ECO CEMENTS LIMITED**

**Corp. Office :** 72, Jawahar Nagar Extn. Bhelupur, Varanasi - 221010 (U.P.) INDIA, Telefax : + 91 - 542 - 2277074, web : www.ecocement.co.in
**Zonal Office :** HIG-195, Saileshree Vihar, Chandrasekharpur, Bhubaneswar, Orissa, e-mail : info@ecocem.in
: 1638, Mahmoodpur Beriya Road, Karmnasha, Bhabhua, Bihar

ANNEXURE - 17

ECOCEMENT
ADIG . AJAR . AMAR

Dated – 2011-11-05

TO,

The President / Member

The Zila Parisad,

Bhabua ( Kamoor) Bihar.

Dear Sir,

This to inform you that, Eco Cements limited, Plot no. 1644, Bherian More, Kulharia, Durguati, Bhabua, Bihar has been awarded Envirenment clearance from MOEF, wide EC letter no. F. No. J-11011/287/2010-IA-II (I) dated 31.10.2011.

This is for your information/ Record please.

Yours Sincerely,

Manager

ECO CEMENTS LTD.

Eco Cements Ltd.

Auth. Signatory

तारा देवी

सदस्य जिला परिषद
कैमूर (भभुआ)
दुर्गावती भाग-2

Encl. : EC letter no. F. No. J-11011/287/2010-IA-II (I) dated 31.10.2011

**ECO CEMENTS LIMITED**

**Corp. Office :** 72, Jawahar Nagar Extn. Bhelupur, Varanasi - 221010 (U.P.) INDIA, Telefax : + 91 - 542 - 2277074, web : www.ecocement.co.in
**Zonal Office :** HIG-195, Saileshree Vihar, Chandrasekharpur, Bhubaneswar, Orissa, e-mail : info@ecocem.in
: 1638, Mahmoodpur Beriya Road, Karmnasha, Bhabhua, Bihar

## Ambient Air Quality Monitoring Data (All Values in ug/m3)

Year: 2017-2018

| S. NO. | Location → / Month | Near Main Gate | | | Near C.C.R. | | | Near Canteen | | | Near Gypsum & Clinker Storage | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $PM_{10}$ | $SO_2$ | $NO_2$ | $PM_{10}$ | $SO_2$ | $NO_2$ | $PM_{10}$ | $SO_2$ | $NO_2$ | $PM_{10}$ | $SO_2$ | $NO_2$ |
| 1 | April-17 | 51.5 | 17.1 | 32.6 | 68.6 | 13.7 | 17.5 | 53.2 | 14.2 | 18.8 | 56.4 | 11.7 | 15.4 |
| 2 | May-17 | 83.3 | 10.3 | 26.1 | 75.2 | 8.2 | 14.0 | 72.4 | 8.5 | 15.1 | 74.1 | 6.6 | 9.2 |
| 3 | June-17 | 62.5 | 14.3 | 22.7 | 56.4 | 9.5 | 10.6 | 54.3 | 11.6 | 17.3 | 55.6 | 10.4 | 16.1 |
| 4 | July-17 | 55.0 | 16.4 | 19.3 | 49.7 | 10.9 | 12.2 | 47.8 | 13.4 | 19.9 | 48.9 | 12.0 | 18.5 |
| 5 | Aug-17 | 56.1 | 14.0 | 18.3 | 60.5 | 9.3 | 11.6 | 53.1 | 11.4 | 14.9 | 66.1 | 18.2 | 17.6 |
| 6 | Sept-17 | 62.8 | 8.7 | 13.9 | 57.5 | 7.9 | 12.9 | 52.4 | 9.7 | 11.2 | 53.3 | 11.9 | 17.4 |
| 7 | Oct-17 | 53.4 | 12.1 | 21.3 | 49.6 | 8.4 | 14.7 | 44.7 | 7.4 | 15.8 | 52.6 | 6.2 | 12.8 |
| 8 | Nov-17 | 58.0 | 14.6 | 27.1 | 49.3 | 9.6 | 15.1 | 46.3 | 7.0 | 12.6 | 52.4 | 5.8 | 11.5 |
| 9 | Dec-17 | 65.2 | 10.3 | 22.3 | 60.2 | 7.4 | 14.3 | 56.5 | 6.8 | 13.2 | 56.8 | 8.1 | 12.6 |
| 10 | Jan-18 | 50.2 | 11.4 | 21.2 | 41.7 | 8.3 | 16.6 | 40.9 | 7.4 | 14.1 | 42.6 | 7.8 | 15.6 |
| 11 | Feb-18 | 48.4 | 13.3 | 24.5 | 38.1 | 9.6 | 19.2 | 32.3 | 8.6 | 16.3 | 39.7 | 9.0 | 18.1 |
| 12 | Mar-18 | 55.5 | 12.0 | 27.9 | 44.8 | 9.6 | 15.8 | 41.2 | 7.6 | 16.8 | 44.9 | 7.3 | 13.5 |
| | Average | 58.49 | 12.88 | 23.10 | 54.30 | 9.37 | 14.54 | 49.76 | 9.47 | 15.50 | 53.02 | 9.58 | 14.8 |

## Stack Particulate Matter Emission Data (mg/Nm3)

Year: 2017-2018

| Sr. No. | Month & Year | Stack Attached with Bag House of cement Mill | Stack Attached with Bag House of flyash unloader | Stack Attached with Bag House of clinker & gypsum unloader | Stack Attached with Bag House of gypsum & clinker Feeding | Stack Attached with DG 500 KVA | Stack Attached with DG 125 KVA | Standard Limit of particulate matter Emission |
|---|---|---|---|---|---|---|---|---|
| 1 | April-17 | 25.6 | 24.8 | 25.1 | 26.5 | 39.1 | 44.6 | 50 mg/Nm3 |
| 2 | May-17 | 28.1 | 26.8 | 23.3 | 24.5 | 46.3 | 45.2 | |
| 3 | June-17 | 26.6 | 23.9 | 21.1 | 26.8 | 53.4 | 42.6 | |
| 4 | July-17 | 23.5 | 22.3 | 22.5 | 25.5 | 46.1 | 48.7 | |
| 5 | Aug-17 | 25.6 | 22.2 | 20.1 | 27.6 | 50.3 | 51.6 | |
| 6 | Sept-17 | 22.7 | 24.1 | 21.6 | 22.2 | 43.8 | 46.3 | |
| 7 | Oct-17 | 24.7 | - | 24.9 | 23.8 | 50.2 | 53.4 | |
| 8 | Nov-17 | 25.9 | - | 23.0 | 22.1 | 41.5 | 44.1 | |
| 9 | Dec-17 | 22.4 | - | 25.2 | 20.0 | 44.6 | 47.4 | |
| 10 | Jan-18 | 23.9 | - | 24.0 | 21.4 | 53.8 | 57.2 | |
| 11 | Feb-18 | 32.0 | - | 25.9 | 19.1 | 45.3 | 48.2 | |
| 12 | Mar | 33.9 | - | 20.9 | 20.6 | 48.6 | 51.7 | |
| | Average Values | 26.24 | 11.84 | 23.13 | 23.34 | 46.92 | 49.42 | |

# ANNEXURE - 18

# ANNEXURE - 19

**ENVIRONMENTAL STATEMENTS**

**FORM-V**

**(See Rule-14)**

The Ministry of Environment & Forest its vide its notification dated 13th March,1992 directed all industries which need to have consent under Water (Prevention & Control of Pollution) Act,1974 and Air (Prevention & Control of Pollution) Act,1981 to file the environmental statement under Environmental Protection Act.1986 every year. This is to be filed for the period ending of March by September every year The format for the same is as follows:-

**PART — A**

| | | |
|---|---|---|
| **1** | Name and address of the Owner / Occupier of the Industry operation or process | **Eco Cements Limited, Plot No. 1644, Bheriya More, Kulharia, Durgauti, Bhabua, Bihar, Pin code- 821105** |
| **2** | Industry Category<br>Primary (S.T.C. Code)<br>Secondary (S.T.C. Code) | **Red Category** |
| **3** | **Production Capacity**<br>Cement :<br>D. G. Set | **1.00 MTPA**<br>**500 KVA&125 KVA** |
| **4** | Year of Establishment | **2012** |
| **5** | Date of the last Environmental Statement submitted. | **25.06.2017** |

## PART — B

## WATER AND RAW MATERIAL CONSUMPTION

### (I) WATER CONSUMPTION:

| | |
|---|---|
| Process | N.A. (As plant is based on dry process technology) |
| Cooling and Dust Suppression | 563.995 KL |
| Domestic | 310.25KL |

| Name of Product | Process water consumption per unit of product Output | |
|---|---|---|
| | During Previous Financial Year (2016-17) | During Current Financial Year (2017-18) |
| PPC Cement | .00119 KL/ MT OF CEMENT PRODUCTION | .00127 KL/ MT OF CEMENT PRODUCTION |

### (II) RAW MATERIAL CONSUMPTION: (CEMENT PLANT)

| Name of Raw Material | Name or Product | Consumption of Raw Material per unit of Output ( Cement) | |
|---|---|---|---|
| | | During Previous Financial year (16-17) | During Current Financial year (17-18) |
| Clinker | PPC Cement | 0.741 | 0.756 |
| Gypsum | | 0.036 | 0.057 |
| Fly Ash | | 0.252 | 0.212 |

### RAW MATERIAL CONSUMPTION: (D.G. SET)

| Name of Raw Material | Name of Product | Consumption of Raw Material per unit of Output( Cement) | |
|---|---|---|---|
| | | During Previous Financial Year 16-17 | During Current Financial Year 17-18 |
| Fuel/ Diesel | Power | 0.299 | 0.123 |

### (III) POWER CONSUMPTION (KWH/T OF CEMENT):

| During Previous Financial Year 16-17 | During Current Financial Year 17-18 |
|---|---|
| 41.71 KWH/T | 41.85 KWH/T |

### (IV) TOTAL CEMENT PRODUCTION (MT):

| During Previous Financial Year (2016-2017) | During Current Financial Year (2017-2018) |
|---|---|
| 260414.338 MT | 444090.555 MT |

## PART-C

## DISCHARGED TO ENVIRONMENTAL / UNIT OF OUTPUT

| Pollutants | Quantity of Pollutants Discharged ( Mass/Day) | Concentration of Pollutants in Discharges ( Mass/ day) | Percentage of variation from prescribed standards with reasons |
|---|---|---|---|
| (a) | Water | As the plant is being operated on dry process technology, no liquid effluent is generated from the plant,<br>Waste water generated from office toilet and mess is disposed-off in a soak pit via septic tank | |
| (b) | Air | Please refer **Annexure - I, II & III** | |

## PART — D
## HAZARDOUS WASTE
**(As specified under Hazardous Waste (Management, Handling and Trans boundary Movement) Rules, 2008**

| Hazardous Waste | Total Quantity (Ltrs) | |
|---|---|---|
| | During Previous Financial Year (April 2016- March 2017) | During Current Financial Year (April 2017-March 2018) |
| | We are having common authorization for Hazardous Waste Management & Handling for Clinker Grinding Unit (Cement 1.0 MTPA & 125 KVA& 500 KVA D. G. Set) | |
| a) From Process, Cement manufacturing (Grinding) is based on "Dry Process" No Hazardous waste is generated from the process except used oil which is drained from Machinery / Equipments | Total Quantity Generated in 2016-17: 110Ltrs<br>Old Stock : 865Ltrs<br>Sale out : NIL Ltrs<br>Balance : 975Ltrs | Total Quantity Generated in 2017-18: 115 Ltrs<br>Old Stock : 975Ltrs<br>Sale out : NIL Ltrs<br>Balance : 1090 Ltrs |
| (b) From Pollution Control Facilities | N.A | N.A |

**PART — E**
**SOLID WASTE**

| | | Total Quantity | |
|---|---|---|---|
| | | During Previous Financial Year | During Current Financial Year |
| (a) | From Process | Nil | Nil |
| (b) | From Pollution Control Facility | Dust collected in the Bag Houses and Bag Filters is recycled/reused in process. | |
| (c) | 1) Quantity rejected or re-utilized | 100% | 100% |
| | 2) Sold | Nil | Nil |
| | 3) Disposed | Nil | Nil |

**PART —F**

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

**Hazardous Wastes**

Cement manufacturing is based on "Dry Process". No Hazardous waste is generated from **the** process except used oil which is drained from machineries /equipments. Used oil is **sold to the** authorized recyclers/self-used for lubrication.

Solid Wastes: - N.A.

**PART —G**

**IMPACT OF THE POLLUTION CONTROL MEASURES ON CONSERVATION OF NATURAL RESOURCES AND CONSEQUENTLY ON THE COST OF PRODUCTION**

Clinker grinding unit is being operated on dry process technology, which is cost effective and environmentally clean technology. The stack emissions from the plant arc controlled by equipment like bag houses and bag filters installed at various material transfer points to clean the process and arrest the fugitive emissions. The particulate matter collected in the pollution control equipment is recycled / reused in process and neutralizing the cost of operation of pollution control equipments and hence no cost impact on the production cost.

## PART — H

## ADDITIONAL MEASURES / INVESTMENTS PROPOSAL FOR ENVIRONMENT PROTECTION INCLUDING ABATEMENT OF POLLUTION

Green belt development and tree plantation is our ongoing process. Every year we are doing new tree plantation to increase the bio-diversity of the area. Up to March, 2018, we have covered 3.08 hectare, around 4580 trees with the surviva1 rate of 92.58% , this is around 33.13 % green area of the total plant area (9.3 hect.). Additional to this we have planted 1500 tree saplings at Nearby schools, outside plant area, both side of Bheria road to enhance the greenery and prosperity of the area.

## PART — I

## ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT.

I. We have full-fledged Environment Department with three separate cells, one for monitoring, one for maintenance of pollution control equipment and one for green belt development.

2. Monitoring of stack emission, ambient air quality & ambient noise and water quality is being monitored regularly.

3. Maintenance department is doing regular checking and scheduled maintenance of all the pollution control devices.

4. Civil and Personal & Administration departments taking care for of House- keeping.

5. Horticulture section is taking care of tree plantation and green belt development. Every year we are growing new tree plantation.

**On support of above, we are enclosing herewith following Annexure:-**

**Annexure-1 :** Ambient Air Quality Monitoring Report for the year 2017-18
**Annexure-II :** Stack Emission Level Monitoring Report for the year 2017-18
**Annexure-Ill :** Ambient Noise level Monitoring Report for the year 2017-18

## Annexure-I

# Ambient Air Quality Monitoring Report for the year 2017-18

| Ambient Air Quality Monitoring Report (All Values in µg/m3) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year: 2017 - 2018 (APR 2017 TO MARCH 2018) | | | | | | | | | | | | | | | | | |
| S. No. | Location | Near Main Gate | | | | Near CCR | | | | Near Canteen | | | | Near Gypsum & Clinker Storage | | | |
| | Month | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_2$ | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | $NO_2$ |
| 1 | Apr-17 | 51.5 | 40.5 | 17.1 | 32.6 | 68.6 | 44.2 | 13.7 | 17.5 | 53.2 | 36.9 | 14.2 | 18.8 | 56.4 | 44.3 | 11.7 | 15.4 |
| 2 | May-17 | 83.3 | 43.5 | 10.3 | 26.1 | 75.2 | 39.3 | 8.2 | 14.0 | 72.4 | 37.8 | 8.5 | 15.1 | 74.1 | 38.7 | 6.6 | 9.2 |
| 3 | Jun-17 | 62.5 | 32.7 | 14.3 | 22.7 | 56.4 | 29.5 | 9.5 | 10.6 | 54.3 | 28.4 | 11.6 | 17.3 | 55.6 | 29.1 | 10.4 | 16.1 |
| 4 | Jul-17 | 55.0 | 28.8 | 16.4 | 19.3 | 49.7 | 25.9 | 10.9 | 12.2 | 47.8 | 24.9 | 13.4 | 19.9 | 48.9 | 25.6 | 12.0 | 18.5 |
| 5 | Aug-17 | 56.1 | 33.3 | 14.0 | 18.3 | 60.5 | 35.9 | 9.3 | 11.6 | 55.1 | 32.7 | 11.4 | 14.9 | 66.1 | 39.2 | 18.2 | 17.6 |
| 6 | Sep-17 | 62.8 | 37.2 | 8.7 | 13.9 | 57.5 | 34.1 | 7.9 | 12.9 | 52.4 | 31.1 | 9.7 | 11.2 | 53.3 | 31.6 | 11.9 | 17.4 |
| 7 | Oct-17 | 53.4 | 31.3 | 12.1 | 21.3 | 49.6 | 28.6 | 8.4 | 14.7 | 44.7 | 27.3 | 7.4 | 15.8 | 52.6 | 29.8 | 6.2 | 12.8 |
| 8 | Nov-17 | 58.0 | 34.4 | 14.6 | 27.1 | 49.3 | 28.4 | 9.6 | 15.1 | 46.3 | 27.2 | 7.0 | 12.6 | 52.4 | 29.6 | 5.8 | 11.5 |
| 9 | Dec-17 | 65.2 | 36.5 | 10.3 | 22.3 | 60.2 | 35.8 | 7.4 | 14.3 | 56.5 | 33.6 | 6.8 | 13.2 | 56.8 | 33.8 | 8.1 | 12.6 |
| 10 | Jan-18 | 50.2 | 29.2 | 11.4 | 21.2 | 41.7 | 24.3 | 8.3 | 16.6 | 40.9 | 23.6 | 7.4 | 14.1 | 42.6 | 24.6 | 7.8 | 15.6 |
| 11 | Feb-18 | 48.4 | 28.2 | 13.3 | 24.5 | 38.1 | 22.2 | 9.6 | 19.2 | 32.3 | 18.6 | 8.6 | 16.3 | 39.7 | 22.9 | 9.0 | 18.1 |
| 12 | Mar-18 | 55.5 | 32.4 | 12.0 | 27.9 | 44.8 | 26.3 | 9.6 | 15.8 | 41.2 | 24.0 | 7.6 | 16.8 | 44.9 | 26.1 | 7.3 | 13.5 |
| **Average** | | **58.49** | **34.00** | **12.88** | **23.10** | **54.30** | **31.21** | **9.37** | **14.54** | **49.76** | **28.84** | **9.47** | **15.50** | **53.62** | **31.28** | **9.58** | **14.86** |

# Annexure-II

## Stack Emission Level Monitoring Report for the period APRIL 2017 TO MARCH 2018

| Stack Emission Level Monitoring Report for the period APRIL 2017 TO MARCH 2018<br>All Values in mg/m3 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Sr. No. | Location | Particulate Matter Emission ( mg/Nm3) | | | | | | |
| | Month | Stack Attached with Bag House of Cement Mill | Stack Attached with Bag House of flyash unloader | Stack Attached with Bag House of Clinker & gypsum unloader | Stack Attached with Bag House of gypsum & clinker feeding | Stack Attached with DG 500 KVA | Stack Attached with DG 125 KVA | Standard Limit of Particulate Matter Emission |
| 1 | Apr-17 | 25.6 | 24.8 | 25.1 | 26.5 | 39.1 | 44.6 | 50 mg/Nm3 |
| **2** | May-17 | 28.1 | 26.8 | 23.3 | 24.5 | 46.3 | 45.2 | |
| 3 | Jun-17 | 26.6 | 23.9 | 21.1 | 26.8 | 53.4 | 42.6 | |
| **4** | Jul-17 | 23.5 | 22.3 | 22.5 | 25.5 | 46.1 | 48.7 | |
| 5 | Aug-17 | 25.6 | 20.2 | 20.1 | 27.6 | 50.3 | 51.6 | |
| **6** | Sep-17 | 22.7 | 24.1 | 21.6 | 22.2 | 43.8 | 46.3 | |
| 7 | Oct-17 | 24.7 | - | 24.9 | 23.8 | 50.2 | 53.4 | |
| **8** | Nov-17 | 25.9 | - | 23.0 | 22.1 | 41.5 | 44.1 | |
| 9 | Dec-17 | 22.4 | - | 25.2 | 20.0 | 44.6 | 47.4 | |
| **10** | Jan-18 | 23.9 | - | 24.0 | 21.4 | 53.8 | 57.2 | |
| 11 | Feb-18 | 32.0 | - | 25.9 | 19.1 | 45.3 | 48.2 | |
| **12** | Mar-18 | 33.9 | - | 20.9 | 20.6 | 48.6 | 51.7 | |
| **Average Values** | | 26.24 | 11.84 | 23.13 | 23.34 | 46.92 | 48.42 | |

## Annexure-III

# Ambient Noise level Monitoring Report for the year 2017-18 (dB(A)

**TIME WEIGHTED AVERAGE (TWA) OF NOISE LEVEL IN dB(A)**

| Ambient Noise level Monitoring Report From APRIL 2016 TO MARCH 2017 dB(A) TIME WEIGHTED AVERAGE ( TWA) OF NOISE LEVEL IN dB(A) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **S. No.** | **Location** / **Month** | **Plant boundary near Main gate** | **Plant boundary near CCR** | **Plant boundary near Canteen** | **Plant boundary near Gypsum storage** | **Plant boundary near clinker storage** | **Prescribed Standard Limit dB(A)** |
| **1** | Apr-17 | 72.1 | 69.2 | 70.9 | 65.2 | 67.3 | 75dB(A) in day & 70 dB(A) in night |
| **2** | May-17 | 68.9 | 70.8 | 66.4 | 64.2 | 68.3 | |
| **3** | Jun-17 | 73.2 | 72.3 | 69.7 | 63.3 | 64.4 | |
| **4** | Jul-17 | 70.5 | 69.5 | 64.8 | 68.6 | 66.1 | |
| **5** | Aug-17 | 69.4 | 71.6 | 67.1 | 64.9 | 65.1 | |
| **6** | Sep-17 | 71.6 | 68.3 | 66.8 | 65.5 | 67.1 | |
| **7** | Oct-17 | 69.8 | 67.8 | 68.3 | 62.9 | 63.1 | |
| **8** | Nov-17 | 71.3 | 69.4 | 67.5 | 63.2 | 66.8 | |
| **9** | Dec-17 | 68.4 | 66.2 | 63.8 | 64.9 | 62.8 | |
| **10** | Jan-18 | 70.2 | 67.1 | 66.2 | 62.8 | 63.7 | |
| **11** | Feb-18 | 72.4 | 69.3 | 64.1 | 65.7 | 67.2 | |
| **12** | Mar-18 | 69.1 | 66.2 | 61.2 | 67.1 | 64.8 | |
| **Average Values** | | **70.6** | **69.0** | **66.4** | **64.9** | **65.6** | |

*** Day time reckoned from 06 00AM to 10:00 PM**
**** Night time reckoned from 10:00 PM to 06:00 AM**

ANNEXURE - 20

ECO PLUS
CEMENT & STEEL

**EXTRACT OF THE BOARD MEETING OF BOARD OF DIRECTORS OF M/S ECO CEMENTS LIMITED HELD AT ITS REGISTERED OFFICE AT 1E, 1ST FLOOR, ASHUTOSH APARTMENT, 295/2 GT ROAD SALKIA HOWRAH, (W.B.) ON 01/07/2012 AT 11 AM**

The Board of Directors has decided in its meeting after due deliberation and discussion regarding final completion and its cost of Project and date of commercial production of Cement Grinding Unit at Bhabhua, Bihar, which are as follows:

"**RESOLVED THAT** It is hereby decided to approve the total Cost of Cement Grinding Unit at Bhabhua Bihar is Rs. 60.40 Crores and the unit has completely installed and ready for Commercial Production as compared to Estimated Cost of Project of Rs. 100 Crores."

"**FURTHER RESOLVED THAT** it has decided to start commercial Production from The Cement Grinding Unit at Bhabhua Bihar from 05/07/2012 and Mr. Bipin Kumar Agarwal, Director be and hereby authorized to inform all the concerned Departments and Authorities in this respect."

-sd-

CHAIRMAN OF THE MEETING

**CERTIFIED TURE COPY**

FOR: ECO CEMENTS LIMITED

ECO CEMENTS LIMITED

Director

Date: 10/11/2017

Place: Howrah

Bipin Kumar Agarwal

Director