

JAL/CCF/EC- COMP-02/2022-23

May 14, 2022

To,
Director,
Regional Office (Central Region),
Ministry of Environment, Forest & Climate Change (MoEF & CC),
Lucknow (UP).

Sub: Revival & Expansion of Cement Grinding Unit (1.60 to 2.50 MTPA Portland Pozzolana Cement) along with a Captive Power Plant (38 MW) at Chunar, District Mirzapur, Uttar Pradesh by M/S Jai Prakash Associates Ltd. (Chunar Cement Factory)- Environment Clearance reg.

Reference: MoEF&CC, Environmental Clearance Letter No. F.No.J-11011/557/2007-IA II (i) Dated 19.12.2008

Dear Sir,

With reference to above mentioned Environmental Clearance letter vide dated 19.12.2008, we are pleased to enclosed herewith the Six Monthly EC Compliance Report of the conditions contained in the Environmental Clearance for the period October' 2021 to March' 2022 as per the guidelines.

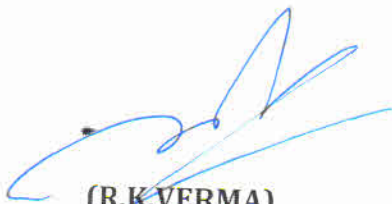
Kindly acknowledge the same.

Thanking you,

Yours faithfully

FOR CHUNAR CEMENT FACORY

(A Unit of Jaiprakash Associates Ltd.)



(R.K.VERMA)
VICE PRESIDENT

CC: Member Secretary, Central Pollution Control Board, New Delhi.
Member Secretary, U.P. Pollution Control Board, Lucknow (UP).
Regional Office, U.P. Pollution Control Board, Robertsganj (UP).

Encl: As Stated above


JAYPEE
GROUP

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Regd. Office: Sector 128, Noida - 201 304 U.P. (India)

Name of the Project: Chunar Cement Factory, (A unit of Jaiprakash Associates Ltd.) For Cement Grinding Unit (2.5 MTPA) and Captive Power Plant (38 MW), at Chunar, Distt. Mirzapur, U.P. 231311

Project Code: UP-117-301-2009

Clearance Letter from MOEF Government of India Ref. No.: F. No. J-11011/557/2007-IA II (I) Dt. 19.12.2008

Period of Compliance Report : (October 2021 to March 2022)

S.N	SPECIFIC CONDITIONS	COMPLIANCE STATUS
I	All the other necessary statutory clearances from the concerned Departments including 'No Objection Certificate' from the U.P. Pollution Control Board (UPPCB) shall be obtained prior to commencement of construction and/or operation. Other necessary statutory clearances from the concerned Departments including "No objection Certificate" from the U.P. Pollution Control Board (UPPCB) shall be obtained prior to commencement of construction and/ or operation.	No Objection certificate and all the statutory clearances which have already been taken from the State Pollution Control Board, prior to commencement of construction and for operations are as under: 1. No Objection Certificate from UPPCB obtained vide letter no. F 46396/C-2/NOC/3451/09 on dated 19/03/2009. Copy has already been submitted to MoEF vide our letter no. JAL/CCF/Env.12/2010 dated 30.11.2010. 2. Consent to Operate under Air (Prevention & control of pollution) Act 1981 and under Water (Prevention & Control of Pollution) Act 1974 is being obtained regularly from State Pollution Control Board
II	Electrostatic precipitator (ESP) to captive power plant (CPP) and highly efficient bag filters at other places including cement grinding mill shall be provided to control gaseous emissions within 50 mg/Nm ³ . Continuous on-line monitors for particulate emissions shall be installed. The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the UPPCB. At no time, the stack emissions from various sources shall exceed 50 mg/Nm ³ . Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the resources unit(s) is shut down automatically and reports submitted to the Ministry's Regional Office at Lucknow, CPCB and UPPCB regularly.	1. Captive Power Plant (38 MW):- I. ESP has been installed at CPP since the inception of the plant and it has been commissioned along with CPP on 23/07/2009 since then it has been running very efficiently and emission level has been observed to be well within prescribed limits (33 to 48 mg/Nm ³). II. Apart from ESP various pulse jet bag filters have also been provided for arresting/controlling the fugitive emissions. Total 5 Nos installed III. On-line suspended particulate matter emission monitoring equipment has been installed in CPP stack. 2. Cement grinding, Packing plant, Truck Tipplers for unloading of fly ash coal & clinker & Wagon tipplers for unloading clinker, coal & gypsum :- I- At all locations dedicated high efficiency pulse jet bag filters have been installed for arresting dust emission emanating from these locations. The emission level is observed to be lowest of the lower i.e. 22-26 mg/Nm ³ . The details of the bag filters installed at various locations are as under- A- Cement grinding- 46 nos B- Packing plant- 10 nos C- Fly ash truck tipplers- 8 nos D- Clinker truck tippler- 1 no E- Coal truck tippler- 5 nos

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F- Wagon tippers-

- a) Metso wagon tippers-**10 nos**
b) TRF wagon tippers- **05 nos**

II) On-line suspended particulate matter emission monitoring equipments have been installed in all the stacks of cement grinding mills.

3. Emission monitoring reports are being sent to regional office MoEF, CPCB and UPPCB regularly.

Average, Min & Max of Stack Monitoring data for the period October 2021 to March 2022 is given in the following table:-

Particulate Matter (mg/Nm ³)							
Unit	CEMENT MILL - 1	CEMENT MILL - 2	CEMENT MILL - 3	CEMENT MILL - 4	CEMENT MILL - 5	CEMENT MILL - 6	C.P.P. BOILER
CPCB /UPPCB Standard	30 mg/Nm ³	30 mg/Nm ³	30 mg/Nm ³	30 mg/Nm ³	30 mg/Nm ³	30 mg/Nm ³	50 mg/Nm ³
AVG	15.83	16.20	18.68	19.77	20.82	19.72	32.00
MAX	16.80	19.30	20.20	22.80	24.50	20.40	36.70
Min.	14.80	14.80	17.50	16.20	17.10	18.00	28.90

1. Five Ambient Air quality monitoring stations have been set up in consultation with the U.P Pollution Control Board.

Out of 5 Ambient Air Quality monitoring stations, two no online monitoring equipment installed and working remaining three nos are off -line and readings are being taken manually on regular basis.

2. Instrument used for ambient air quality/stack monitoring are calibrated timely as per the guideline of Pollution Control Board.

3. At present Ambient air quality is being monitored through off-line equipments at 3 locations & report of the same is being sent to UPPCB on regular basis. All the parameters for ambient air quality are well within prescribed limit. The average AAQMS data for the period October 2021 to March 2022 are as under (All values in µg/m³):-

III Ambient air quality monitoring stations (AAQMS) shall be set up as per statutory requirement in consultation with the U.P. Pollution Control Board (UPPCB). Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the State authorities. Monitoring of ambient air quality and shall be carried out regularly in consultation with UPPCB and data submitted to the Ministry's Regional Office at Lucknow, CPCB and UPPCB regularly. The instruments used for ambient air quality monitoring shall be calibrated time to time.

		<table><tr><th>Locations</th><th>NEAR CPP DM PLANT</th><th>NEAR WATER STORAGE TANK</th><th>NEAR FIELD HOSTAL FH- 1B</th><th>CPCB /UPPCB Standard</th></tr><tr><td>Parameters</td><td></td><td></td><td></td><td></td></tr><tr><td>AVG. PM₁₀</td><td>46.01</td><td>45.57</td><td>42.38</td><td>100 µg/m³</td></tr><tr><td>AVG. PM_{2.5}</td><td>22.90</td><td>18.61</td><td>17.55</td><td>60 µg/m³</td></tr><tr><td>AVG. SO₂</td><td>14.51</td><td>14.19</td><td>11.53</td><td>80 µg/m³</td></tr><tr><td>AVG. NO_x</td><td>16.77</td><td>16.94</td><td>14.18</td><td>80 µg/m³</td></tr></table>	Locations	NEAR CPP DM PLANT	NEAR WATER STORAGE TANK	NEAR FIELD HOSTAL FH- 1B	CPCB /UPPCB Standard	Parameters					AVG. PM ₁₀	46.01	45.57	42.38	100 µg/m ³	AVG. PM _{2.5}	22.90	18.61	17.55	60 µg/m ³	AVG. SO ₂	14.51	14.19	11.53	80 µg/m ³	AVG. NO _x	16.77	16.94	14.18	80 µg/m ³
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IV	The fugitive emissions during loading and unloading shall be suitably controlled. Bag filters shall be provided to control fugitive dust from raw material areas. The company shall install adequate dust collection and extraction system at appropriate places to control fugitive dust emissions from transfer points, hoppers, loading points, vehicular movement etc. storage of raw material shall be in closed roof sheds. Water sprinkling arrangement shall be made in the raw material stock yard and cement bag loading areas.	<ol style="list-style-type: none">Efficient dust collectors (Bag Filters) are installed at loading & unloading points i.e. Clinker, fly ash & coal loading for arresting fugitive emission.The raw material (Clinker, Gypsum & Fly ash) stored in covered shed.Water sprinklers are provided at coal stock yard and at other strategic points.For further bringing down fugitive emission generating due to vehicle movement in packing plant and other locations – water spray system is being strengthened and damage road is also being repaired.																														
V	Secondary fugitive emissions shall be controlled and shall be within the prescribed limits and regularly monitored. Guidelines/code of Practice issued by the CPCB in this regard shall follow.	<ol style="list-style-type: none">Water spray is being done on roads for controlling the secondary fugitive emission emanating due to road transport.Road sweeping is done by mechanical road sweeping Machines. All the swept material is collected and reused in the cement process.Guidelines/code of Practices issued by the CPCB in this regard is followed.																														

VI	Total ground water requirement shall not exceed 3,000 m ³ /day as per 'Permission' accorded by the State Ground Water Board, Mirzapur, vide letter dated 18 th September, 2007. A copy of the same shall be submitted to the Ministry's Regional Office at Lucknow/CPCB/UPPCB. No effluent shall be discharged from the process outside the premises and all the treated effluent shall be utilized for green belt development and other plant related activities. 'Zero' discharge shall be strictly adopted. Domestic wastewater in plant and township shall be treated in sewage treatment plant (STP).	<p>1. The Water consumption is not exceeding beyond the limit i.e. 304480 KL/Annum. Avg. Water consumption has been 785.86 KL/Day for the period October 2021 to March 2022 and same is being submitted regularly to board for assessing water cess against consumption.</p> <p>2. No effluent is being generated from the process. The plant has been designed and operated on Zero discharge basis. All the water is being used in the process for cooling purpose only and make-up water is being added against evaporation from the cooling tower.</p> <p>3. STP has been installed/ commissioned for treating domestic waste water from plant and colony. The treated water is used for water sprinkling and tree plantation. Test results analyzed in – house of the treated domestic waste water conform to the standards prescribed in the consent. Avg. STP Treated Water Result for the period October 2021 to March 2022 is as under:-</p> <table><tr><th>Parameter</th><th>pH</th><th>TSS, mg/l</th><th>BOD (20°C, 5 days), mg/l</th><th>COD, mg/l</th><th>O & G, mg/l</th></tr><tr><td>CPCB /UPPCB Standard</td><td>5.5 – 9.0</td><td>100 mg/l</td><td>30 mg/l</td><td>250 mg/l</td><td>10 mg/l</td></tr><tr><td>STP</td><td>7.73</td><td>31.12</td><td>18.22</td><td>80.80</td><td>0.80</td></tr></table>	Parameter	pH	TSS, mg/l	BOD (20°C, 5 days), mg/l	COD, mg/l	O & G, mg/l	CPCB /UPPCB Standard	5.5 – 9.0	100 mg/l	30 mg/l	250 mg/l	10 mg/l	STP	7.73	31.12	18.22	80.80	0.80
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STP	7.73	31.12	18.22	80.80	0.80															
VII	All the solid waste collected in different collection systems shall be recycled and reutilized in the cement plant itself. Sludge from the sewage treatment plant (STP) shall be used as manure for green belt development. Waste oil and grease shall be provided to the authorized recyclers/preprocessors.	<p>4. For ensuring the efficient running and improving further efficacy of the system annual maintenance contract with OEM planned and executed on regular basis as per maintenance contract.</p> <p>1. The dust collected from air pollution control device is being recycled in the process.</p> <p>2. Solid waste generated from sewage treatment plant is being utilized as manure for green belt development.</p> <p>3. Used waste oil and grease is collected and stored in a shed as per Hazardous and Other Wastes (Management and Tranboundary Movement) Rules, 2016 and sold to the Authorized recyclers i.e. Bharat Oil Company, Kanpur.</p>																		
VIII	Proper utilization of fly ash shall be ensured as per fly ash Notification, 1999 and subsequent amendment in 2003. Fly ash generated from captive power plant (CPP) shall be used for manufacturing Portland Pozzolana Cement (PPC). The utilization plan shall be submitted to the Regional Office at Lucknow within three months	Fly ash generated from our captive power plant i.e. 54.58 TPD (Total fly ash generation during October 2021 to March 2022 is 9891.42 MT) has been used for cement manufacturing. For Fly ash Handling, Pneumatic System has been installed to prevent fugitive emissions.																		

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IX	As proposed, green belt shall be developed in 33% area in the around the project site to mitigate the impact of air emissions as per CPCB guidelines in consultation with DFO.	Green belt has already been developed in 33% area around the project site. The process of fresh plantation is regularly followed. Details have already been submitted vide our letter no. JAL/CCF/ENV.12/2010 dated 30.11.2010. Details of the fresh Tree Plantation done during October 2021 to March 2022 are as under.						
	<table border="1"> <thead> <tr> <th>Total plantation in Nos.</th><th>Nos. Of Plant survived</th><th>Survival rate in Percentage</th></tr> </thead> <tbody> <tr> <td>1640</td><td>1476</td><td>90 %</td></tr> </tbody> </table>	Total plantation in Nos.	Nos. Of Plant survived	Survival rate in Percentage	1640	1476	90 %	
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X	Permission and recommendations of the State Forest Department regarding impact of proposed expansion of the reserve forest viz. NUAON shall be obtained and suggestions made, if any, shall be implemented.	We are complying with all the conditions as stipulated by State Forest Deptt. vide letter No.4080 Dt.12/5/2008 Details have already been submitted vide our letter no. JAL/CCF/ENV.12/2010 dated 30.11.2010.						
XI	All the recommendations mentioned in the Corporate Responsibility for Environment Protection (CREP) guidelines shall be followed and implemented.	Recommendations mentioned in the Corporate Responsibility for Environment Protection (CREP) have been complied with.						
XII	The company shall provide housing for construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Construction phase is over now and hence not applicable. However all the required amenities are being provided with.						
B. GENERAL CONDITIONS								
i	The project authority shall adhere to the stipulations made by U.P. Pollution Control Board (UPPCB) and State Government.	Stipulations made by U.P. Pollution Control Board (UPPCB) and State Government are fully adhered to.						
ii	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	Agreed and Noted.						
iii	The overall noise levels in and around the plant area shall be kept well within the standards (85 dB) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dB (day	Adequate noise control measures have been taken. The noise level is within the norms. . The average value in dB (A) of Ambient noise level of Six months are as under:						

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	time) and 70 dB (night time)																												
iv	Proper housekeeping and adequate occupational health programs shall be taken up.	<table><tr><th>Location</th><th>Mill House</th><th>Despach h Gate</th><th>Packing Plant Office</th><th>E.S.P in CPP</th><th>Central Store</th><th>Town Ship Gate</th><th>CPP Office</th><th>CPCB /UPPCB Standard</th></tr><tr><td>Day Time</td><td>66.7</td><td>58.3</td><td>65.3</td><td>71.5</td><td>50.3</td><td>43.0</td><td>68.7</td><td>75 dB (A)</td></tr><tr><td>Night Time</td><td>61.0</td><td>52.8</td><td>59.8</td><td>65.7</td><td>42.0</td><td>33.7</td><td>62.0</td><td>70 dB (A)</td></tr></table> <ol style="list-style-type: none">Proper housekeeping is being ensured in plant & colony area. Further actions are also being initiated to improve house keepings further.Regular medical checkup of the employee is being done by company doctor.211 employees have been examined and no occupational disease has been noticed so far during the period of October 2021 to March 2022.	Location	Mill House	Despach h Gate	Packing Plant Office	E.S.P in CPP	Central Store	Town Ship Gate	CPP Office	CPCB /UPPCB Standard	Day Time	66.7	58.3	65.3	71.5	50.3	43.0	68.7	75 dB (A)	Night Time	61.0	52.8	59.8	65.7	42.0	33.7	62.0	70 dB (A)
Location	Mill House	Despach h Gate	Packing Plant Office	E.S.P in CPP	Central Store	Town Ship Gate	CPP Office	CPCB /UPPCB Standard																					
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v	Rain water harvesting water measures shall be adopted for the augmentation of ground water, Besides, company must also harvest the rainwater from the roof tops and storm water drains to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	<ol style="list-style-type: none">Rain Water harvesting system has been installed for storm water. Details have already been submitted vide our letter no. JAL/CCF/ENV.12/2010 dated 30.11.2010.																											
vi	The company shall undertake eco-development measures including community welfare measures in the project area.	<ol style="list-style-type: none">We are providing free medicines, education and drinking water to the people of surrounding areas of Chunar Cement Factory.To encourage meritorious students, we are providing financial help to shape the carrier in their respective fields. <p>For Eco-development, we have Planted trees on both sides of roads, outside the premises of Factory. Details of Tree Plantation for the October 2021 to March 2022 are as under.</p> <table><tr><th>Total plantation Nos.</th><th>Nos. Of Plant survived</th><th>Survival rate in Percentage</th></tr><tr><td>380</td><td>323</td><td>85 %</td></tr></table>	Total plantation Nos.	Nos. Of Plant survived	Survival rate in Percentage	380	323	85 %																					
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vii	A separate environmental management cell to carry out various management and monitoring functions shall be set up under the control of Senior Executives	Separate environmental management cell has already been set up under the control of senior executive for undertaking various jobs for prevention & control of environmental pollution. Organizational Chart of Environmental Management Cell had already been submitted to vide our letter no. JAL/CCF/ENV.12/2010 dated 30.11.2010.																											

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viii	As proposed, Rs. 27.00 and Rs. 7.00 Crores shall be earmarked towards capital cost and recurring cost/annum respectively for environment pollution control measures and used judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.	A separate fund has been earmarked for environment pollution control measures as given below: Capital cost for Pollution Control Equipments is Rs. 27 crores and Recurring cost Rs. 93.80 Lakh (approx cost) during October 2021 to March 2022.
ix	The regional Office of this Ministry at Lucknow/CPCB/UPPCB shall monitor the stipulated conditions. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	A six monthly compliance report and the monitored data are submitted regularly to the regional Office of the Ministry at Lucknow/CPCB/UPPCB. The previous EC compliance report was submitted vide letter No. JAL/CCF/EC-COMP-1/2021-22, Dated 18 November, 2021. As per MOEF & CC notification no.-5845 (E) new Delhi dated 26 November 2018, Only soft copy of Six Monthly compliance is submitted through e-mail, to the Regional Office of MOEF, the respective Zonal Office of PCB and the SPCB
x	The Project Authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Already done .Cement Plant has been running since 23 February 2008. Captive Power Plant is in operation since July 22, 2009.
xi	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 U.P. Pollution Control Board and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in . This should 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 shall be forwarded to the Regional officer at Bhubaneswar.	The Project was accorded environmental clearance by the ministry of Environment & Forest on 19/12/2008 and same was published in local news paper in Hindi as well as English on dated 08.01.2009 & 25.01.2009 respectively. Copies already submitted vide our letter dated 17/05/2010.
7.0	The Ministry or any other competent authority may stipulate any further condition(s) on receiving reports from the project authorities. The above conditions shall be monitored by the Regional Office of this Ministry located at Bhopal.	Noted and agreed

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8.0	The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory. *	Noted and agreed
9.0	Any other condition or alteration in the above conditions shall have to be implemented by the project authorities in a time bound manner.	Noted and agreed
10.0	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	Noted and agreed
11.0	The above conditions shall be enforce, inter-alia under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 the Air (Prevention and Control of Pollution) Act, 1981 the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted and agreed


CHUNAR CEMENT FACTORY
 (A unit of Jaiprakash Associates Ltd.)
 P.O. CHITNA
 Dist. Guntur, A.P.