

**JAYPEE BELA PLANT**

Ref: JAL/ EC/ MoEF/ 2014-15/ *cd/13*  
May 20, 2014

→ **Director,**  
**Ministry of Environment & Forest (Regional office)**  
**Govt. of India,**  
**Kendriya Paryavaran Bhawan**  
**Link Road No. 3, E-5 Ravi Shankar Nagar**  
**Bhopal – 462016**

**Sub: Submission of Six Monthly Environmental Compliance Report.**

Dear Sir,

Please find enclosed herewith the six monthly Environmental Compliance report for the period of **October 2013 to March 2014** of following Cement Plant & Mines are as:

- Jaypee Bela Plant, EC reference nos.: No. J-11011/79/2003-IA-II (I) dated April 21, 2004.
- Jaypee Lime Stone Mine (ML area – 519.82 ha), EC reference nos.: J-11016/202/2003-IA-II (M) Dated 6<sup>th</sup> Jan 2005.

Please find attached the soft copy of above EC compliance reports in CD.

Thanking You

Yours Faithfully  
For Jaiprakash Associates Limited

*G.V. Bhat*  
**(G.V. Bhat)**  
**Sr. President (Tech.)**

CC to:

**1) Zonal Office**

Central Pollution Control Board,  
III<sup>rd</sup> Floor, Sahkar Bhawan,  
North T.T. Nagar,  
**Bhopal – (M.P.) 462016**

- For kind information please.

**2) Member Secretary**

Madhya Pradesh pollution Control Board,  
Paryavaran Parisar, E – 5, Arera Colony  
**Bhopal (M.P.) 462016**

- For kind information please.

**3) Regional Officer**

Madhya Pradesh pollution Control Board,  
HIG – 190 – 191 Nehru Nagar **Rewa (M.P.) 486001**

- For kind information please.

*Bhopal 22/5/14*  
**JAYPEE**  
GROUP

ISO 9001  
ISO 14001  
OHSAS 18001  
**BUREAU VERITAS**  
Certification



Works JBP : Post Office : Jaypee Puram – 486 450, District Rewa (M.P.) India  
Ph. : +91 (7662) 229244 to 229284 Fax : +91 (7662) 229245  
Head Office : 'JA House', 63, Basant Lok, Vasant Vihar, New Delhi - 110 057 (India)  
Ph. : +91 (11) 26141540, 26147411 Fax : +91 (11) 26145389, 26143591  
Regd. Office: Sector-128, Noida - 201 304, Uttar Pradesh (India)

**Status of Compliance as on 31<sup>st</sup> March (Period: October, 2013 – March, 2014) to the conditions stipulated in the Environmental Clearance granted by MoEF vide letter No. J-11011/79/2003-IA-II (I) dated April 21, 2004 for Jaypee Bela Plant, of M/s Jaypee Cement Limited for enhancement of cement production from 1.5 MTPA to 2.5 MTPA at Jaypee Puram, District Rewa , Madhya Pradesh.**

**A. Specific Conditions**

No.	Conditions	Status of Compliance
1	The gaseous & particulate emissions from various process units shall conform to the standard prescribed by the State Pollution Control Board. The company shall make efforts to restrict the particulate emissions to as low as possible & at no time the particulate emission from the stacks should exceed 100 mg/Nm <sup>3</sup> . The company shall also take appropriate additional measures to improve the design & operating practices of pollution control equipment to achieve a load based norm of 227 gms/T of feed. Tripping in kiln ESP shall be minimized. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution equipment not working, the respective unit (s) shall be shut down automatically.	Particulate emissions from various process units conform to the standard prescribed by the MPPCB. Monitoring data attached as <b>Annexure- I</b> . Tripping in the kiln ESP has minimized by installation of efficient Duoflox Burner and interlocking facility was provided.  Load based emission: Raw mill + Kiln - 45.54 g/tonne of feed Coal mill - 168.52 g/tonne of feed
2	Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA/by state authorities. Monitoring of ambient air quality and stack emissions shall be carried out regularly in consultation with SPCB and report submitted to the Board quarterly & to the Ministry's Regional Office half yearly. Continuous stack monitoring system shall be installed.	Ambient Air Quality and Ambient Noise level are within the standards prescribed under the EPA / by state authorities. Monitoring data of Ambient Air Quality and Ambient Noise level are attached as <b>Annexure- II &amp; III</b> respectively. Continuous stack emission monitoring system was installed in all major stacks and Continuous Ambient Air Quality Monitoring System (CAAQMS) was also installed at two locations in upwind & downwind direction.
3	The company shall install adequate dust collection & extraction system to control the fugitive dust emissions at various transfer points. The dust collected from the pollution control equipment shall be recycled back into the process. Close circuit grinding shall be provided in all the grinding sections of the plant. Storage of raw materials shall be in closed roof sheds. Water sprinkling arrangement shall be made in the raw material stockyard and cement bag loading areas.	Dust collection and extraction system (Bag Houses, ESPs, Bag filters) to control fugitive dust emissions have already been provided at all point source and transfer points. Dust collected in APCDs is recycled back into the process. Close circuit grinding is provided in all grinding mills. Storage of raw material is in covered sheds / stock yards. Water sprinkling system has also been provided in strategic areas.
4	As per Charter on Corporate Responsibility for Environmental Protection in respect of cement industries, the company shall reduce CO <sub>2</sub> emission to 0.75 tonne/tonne of cement production.	CO <sub>2</sub> emission has been reduced and is well below 0.75 tonne / tonne of cement production. Action plan is enclosed as <b>Annexure-IV</b> .

	Action plan in this regard shall be submitted to the Ministry.	
5	Green belt of adequate width and density shall be provided to mitigate the effects of fugitive emission all around the plant. A minimum of 25% of the area shall be developed as green belt with local species in consultation with the DFO, and as per CPCB's guidelines.	Green belt was developed all around the plant. Tree plantation work is continual process and till date it covers more than 33% area under green belt. Details of tree plantation is attached as <b>Annexure- V</b> .
6	No discharge of treated effluent from utilities and domestic effluent shall be done outside the premises and all the treated effluent shall utilized for green belt development and other plant related activities.	Zero Discharge status is maintained as there is no discharge of water outside the plant premises. STP with tertiary treatment system was installed and in operation. Treated water is used for green belt and in plant operation.
7	Occupational health surveillance of the workers shall be done on the regular basis and records shall be maintained as per factory acts.	Occupational health check up of workers is carried out on regular basis and records are being maintained as per factory Acts. Detail of Occupational health check up carried out during last six months is attached as <b>Annexure -VI</b> .
8	All the recommendations of the Charter on Corporate Responsibilities for Environmental protection (CREP) for the cement sector shall be strictly implemented.	The recommendation / Action points of the Charter on Corporate Responsibility for Environmental Protection (CREP) for the cement sector have been implemented. The compliance status is attached as <b>Annexure – VII</b> .
9	The company shall undertake the rainwater harvesting measures to harvest rainwater for their own utilization & for recharging the ground water.	Rainwater harvesting is carried out by channelization of 4.2 Km long garland drain & water is collected in the mines reservoirs. The water collected in the mines reservoirs is being utilized in the cement plant & in CPP.
10	The company shall obtain necessary permission for drawal of ground water for township & domestic use in the plant from the concern state agency.	No permission is required , as the unit does not fall in critical area as per ground water resource guideline and vide letter no 21-4(5) NCR/CGWA/05 dated 22.07.2005 of CGWA. Copy of the letter is attached as <b>Annexure- VIII</b> .

11	The company shall setup a conventional type of permanent meteorological station within their complex, as per the suggestion of India Meteorological Department.	Online meteorological station was installed within the complex and data are recorded on daily basis.
12	As per the policy decision taken vide this Ministry's circulars No. J-21011/8/98/IA. II(I) dated 14 <sup>th</sup> May 2002 & dated 23 <sup>rd</sup> June 2003, the company shall earmark a separate fund of 1% of the total project cost, with a minimum of Rs. 50,000/- (as the unit was set up prior to 5/11/1998), for eco-development measures including community welfare in the project area. The amount shall be deposited by the company in a separate account within three months to be maintained by the Madhya Pradesh Pollution Control Board (MPPCB). The action plans in this regard shall be submitted to the MPPCB as well as to this Ministry within three months of issue of this letter. After approval of the action plan by the MPPCB, the amount deposited will be released in two installments to the project authorities based on the progress of implementation. The MPPCB shall ensure that implementation of action plan for eco development measures is completed within two years from the date of its approval by MPPCB. Further, the interest accrued during this period on the amount deposited by the project authorities with the MPPCB shall be ploughed back to the same eco development fund.	In the year of 2013-14 (for the period October, 2013 to March, 2014) company has spent Rs. 125.36 lacs for eco-development measures including community welfare under Comprehensive Rural Development Programme (CRDP). Expenditure details are attached as <b>Annexure-IX</b> . The money spent for pollution control and environment protection measures during the October, 2013 to March, 2014 as recurring expenditure is Rs. 559.42 lacs. For details please refer <b>Annexure-X</b> .

## B. General Conditions

No.	Conditions	Status of Compliance
1	The project authority shall strictly adhere to the stipulation made by the Madhya Pradesh Pollution Control Board & the state Govt.	Strictly adhering to the stipulation made by the Madhya Pradesh Pollution Control Board & the State Govt.
2	No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment & Forest.	Noted and Agreed
3	At least four ambient air quality monitoring stations shall be establish in the downward direction as well as where maximum ground level concentration of SPM, SO <sub>2</sub> & NO <sub>x</sub> are anticipated in consultation with the State Pollution Control Board. Data on ambient air quality & stack emissions shall be regularly submitted to this Ministry including its Regional Office at Bhopal & the State Pollution Control Board/Central pollution control board once in six months.	Four Ambient Air Quality stations were established, Ambient Air Quality monitoring is done on regular basis and data are being submitted to State Pollution Control Board on monthly basis. Please refer sr. no.2 Monitored environmental data of last six month have already been submitted vide our letter no. JAL/Env./JBP/2013-14/5679 date 21.11.2013.
4	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 (nighttime).	Noise level is being monitored around the plant and the measured values are well within the prescribed limits. Please refer Annexure - III. All the cooling fans are attached with silencer to control noise level.
5	Proper housekeeping & adequate occupational health surveillance programme shall be done on a regular basis and record maintained. The programme shall include lung function and sputum analysis tests once in six months.	Proper housekeeping is maintained. Mechanical road sweeping machine has been deployed for cleaning of internal roads. The periodic occupational health check-up of all employees are being done.
6	The company shall comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report.	Complying with the Environmental Protection measures and safeguards recommended in the EIA / EMP report.
7	A separate environmental management cell with full-fledged laboratory facilities to carry out various management and monitoring functions should be set up under the control of Senior Executive.	Environmental Management Cell, with full fledged laboratory was setup and is operational. Organizational Chart of Env. Cell is attached as <b>Annexure-XI</b> .
8	The project authorities shall provide adequate funds both recurring & non-recurring to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government alongwith the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Funds for recurring & non- recurring as per EIA/EMP report have been earmarked for environment protection measures. The money spent for pollution control and environment protection measures during the October, 2013 to March, 2014 as recurring expenditure is Rs. 559.42 lacs. Please refer <b>Annexure-X</b> .
9	The Regional Office of this Ministry at Bhopal / Central Pollution Control Board/State Pollution Control Board will monitor the	We are regularly submitting six monthly compliance report and monitored data alongwith statistical interpretation to the

	stipulated conditions. A six monthly compliance report and the monitored data alongwith statistical interpretation shall be submitted to them regularly.	Ministry / CPCB / MPPCB. The latest report was submitted vide our letter no. JAL/env./JBP/2013-14/5679 date 21.11.2013
10	The company 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 State Pollution Control Board / Committee and may also be seen at website of the Ministry of Environment & Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . This shall be advertise within seven days from the state of issue of 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.	Advertised in two local newspapers i.e. The Dainik Bhasker and The Dainik Jagaran dtd. 27.04.2004 regarding the grant of Environmental Clearance by MoEF, GOI, New Delhi.
11	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.	Noted and Agreed
12	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted and Agreed
13	The Ministry reserve the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.	Noted and Agreed

**JAYPEE BELA PLANT**  
(Unit of Jaiprakash Associates Limited)

**HALF YEARLY REPORT OF PARTICULATE MATTER EMISSION FROM POINT SOURCE (STACK)**

Period: October, 2013 to March, 2014

Unit Stack Attached With PCE (Pollution Control Equipment)	Dust Conc. (mg/Nm <sup>3</sup> )						
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Avg.
Limestone Crusher Bag Filter	23.9	25.6	27.7	25.8	32.5	30.8	27.6
Raw Mill + Kiln Bag House	32.2	34.8	35.4	37.4	38.3	34.3	34.6
Coal Mill ESP	78.6	74.5	76.7	79.6	74.7	72.9	76.8
Cooler ESP	68.2	70.2	72.6	75.5	68.2	67.8	70.8
Cement Mill No.-1 ESP	76.3	64.4	70.6	68.3	65.3	76.4	70.4
Cement Mill No.2 ESP	70.6	69.8	74.4	72.5	75.6	78.7	73.7
Fly Ash Dryer ESP	69.4	72.5	77.1	76.3	80.2	73.8	74.5

**JAYPEE BELA PLANT**  
(A Unit of Jaiprakash Associates Limited)  
**AMBIENT AIR QUALITY MONITORING REPORT**

Period : October, 2013 - March , 2014

LOCATION : NEAR TIME OFFICE						
Month	Particulars	PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )	CO ( $\mu\text{g}/\text{m}^3$ )
October		39.9	10.8	6.7	16.0	155.8
November		25.6	11.4	7.1	13.0	133.4
December		48.2	23.4	7.4	15.6	185.1
January		41.1	24.2	8.2	13.9	172.0
February		38.3	22.9	6.5	13.8	151.3
March		43.7	24.9	6.6	17.2	169.1
<b>Minimum</b>		25.6	10.8	6.5	13.0	133.4
<b>Maximum</b>		48.2	24.9	8.2	17.2	185.1
<b>Average</b>		39.5	19.6	7.1	14.9	161.1
LOCATION : NEAR DESPATCH OFFICE						
October		40.2	10.5	6.8	14.5	158.4
November		28.3	12.3	7.0	14.8	134.0
December		36.7	20.6	8.8	15.1	181.9
January		40.7	24.7	7.8	14.3	172.3
February		38.9	22.2	7.0	13.5	150.9
March		44.6	22.3	7.3	16.1	160.7
<b>Minimum</b>		28.3	10.5	6.8	13.5	134.0
<b>Maximum</b>		44.6	24.7	8.8	16.1	181.9
<b>Average</b>		38.2	18.8	7.5	14.7	159.7
LOCATION : NEAR DM PLANT (CPP-II)						
October		34.4	11.6	7.0	15.6	152.0
November		26.2	12.7	7.9	15.1	134.1
December		40.2	23.3	8.9	16.5	187.8
January		38.4	25.8	8.1	14.5	173.6
February		39.5	21.2	7.0	13.7	158.0
March		42.2	22.3	7.1	13.9	154.0
<b>Minimum</b>		26.2	11.6	7.0	13.7	134.1
<b>Maximum</b>		42.2	25.8	8.9	16.5	187.8

<b>Average</b>		36.8	19.5	7.7	14.9	159.9
<b>LOCATION : NEAR SARASWATI GATE</b>						
October		41.6	10.5	7.2	16.6	153.5
November		29.9	12.2	7.2	15.2	133.9
December		40.9	20.3	9.2	15.3	189.5
January		39.3	22.8	8.2	14.0	173.4
February		39.5	21.0	7.0	14.1	160.9
March		38.3	24.3	7.7	13.7	159.2
<b>Minimum</b>			29.9	10.5	7.0	13.7
<b>Maximum</b>		41.6	24.3	9.2	16.6	189.5
<b>Average</b>		38.3	18.5	7.7	14.8	161.7

**Jaypee Bela Plant**  
**(Unit of Jaiprakash Associates Limited)**  
**Ambient Noise Level Measurement Report**

Period : October,2013 to March,2014

Unit- dB(A)

<b>Location : Near Time Office</b>												
Month	Oct.13		Nov.13		Dec.13		Jan.14		Feb.14		Mar.14	
Sr. No.	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night	Day	Night
1	64.2	58.2	62.8	57.4	64.8	58.1	63.5	56.8	63.7	55.8	64.5	58.1
2	63.3	56.4	62.4	56.2	64.5	57.7	64.5	57.1	64.1	57.3	64.7	57.7
3	62.2	56.7	63.2	55.8	63.3	57.3	64.8	56.7	64.3	56.9	63.8	57.3
4	62.4	56.3	62.7	56.4	65.1	56.9	66.2	55.8	62.9	56.3	65.2	56.8
<b>Location : Near Saraswati Gate</b>												
1	64.8	57.7	65.1	56.2	66.6	56.8	65.4	57.3	61.3	58.1	67.1	57.7
2	66.2	57.4	64.8	57.6	66.3	57.9	64.8	58.1	67.4	58.3	65.8	58.3
3	65.5	56.8	66.2	56.3	65.8	57.2	66.4	57.2	66.7	57.6	66.3	57.4
4	65.7	58.1	64.9	57.7	66.1	56.4	65.7	56.8	66.5	56.8	67.1	56.8
<b>Location : Near DM Plant</b>												
1	64.4	55.5	61.8	54.7	65.4	55.3	64.4	55.3	64.4	54.4	65.1	55.1
2	63.7	56.1	62.6	53.8	63.8	54.7	63.5	55.8	63.8	56.1	64.8	54.8
3	64.2	54.2	62.4	55.5	64.5	54.2	65.2	54.7	65.1	54.8	63.7	56.2
4	64.1	54.7	62.8	54.5	64.2	53.8	65.3	56.1	65.3	55.2	65.3	55.7
<b>Location : Near Dispatch Office</b>												
1	65.2	52.1	64.8	53.3	64.4	58.1	64.7	57.3	65.3	55.4	65.8	54.8
2	65.4	53.7	65.2	54.1	63.8	56.8	65.2	56.8	64.8	53.8	66.2	53.9
3	64.8	53.4	65.4	54.7	65.4	56.2	66.3	55.8	66.1	57.1	65.4	55.2
4	65.3	55.1	63.8	53.8	65.2	57.4	65.8	57.2	65.7	55.2	64.8	54.8

**JAYPEE BELA PLANT  
(UNIT OF JAIPRAKASH ASSOCIATES LIMITED)  
Plantation Detail**

<b>S. No.</b>	<b>Period (Year)</b>	<b>No. of Saplings Planted</b>
1	Up to 31.03.05	12215
2	2005 – 06	199
3	2006 – 07	1650
4	2007 – 08	530
5	2008 – 09	1500
6	2009-10	1800
7	2010-11	6150
8	2011-12	5050
9	2012- 13	1550
10	2013-14	1300
<b>Total Nos. of Plant</b>		<b>31944</b>