BHILAI JAYPEE CEMENT LIMITED

Registered A/D

BJCL/Env/ECC/2020-21/02

Date: 22.05.2021

To,
The Director,
Regional Office (Western Zone)
Ministry of Environment & Forests
Kendriya Paryavaran Bhawan
E-5 , Arera Colony, Link Road -3,
Ravishankar Nagar, Bhopal (M.P)-462016

Sub: Submission of EC Compliance report for the period Oct -2020 to March- 2021.

Ref: Environmental Clearance Letter No. J-11011/29/2008-1A-II(I) dated 21st July2009 & Amended vide MoEF letter No. J- 11011/29/2008-IA-II (I) Dated 10th September, 2015 for Clinker capacity 1.3MTPA.

Dear Sir,
As per above subjected letter we are enclosing herewith Environment Clearance Compliance report for the period of Oct - 2020 to March -2021 of Bhilai Jaypee Cement Ltd. & Ispat Limestone Quarry (ML-I & II) located at Village- Babupur, District- Satna (MP) for your kind information please.

Thanking you,

Yours faithfully
For Bhilai Jaypee Cement Ltd.
Babupur (Satna) MP

P.K Singh
Vice President
(Authorized Signatory)

Cc to

1. The Member Secretary - For kind information pl.
   Central Pollution Control Board
   Parivesh Bhawan, East Arjun Nagar, Delhi – 110032
2. Member Secretary - For kind information pl.
   MP Pollution Control Board
   Paryavaran Pariser , E-5, Arera colony, Bhopal (MP) -462016
3. Regional Directorate - For kind information pl
   Central Pollution Control Board
   3rd Floor, Sahkar Bhavan,
   North T.T Nagar, Bhopal (M.P) - 462003
4. The Regional Officer - For kind information pl.
   MP Pollution Control Board
   Rewa -Maihar Bi-pass Road
   Dist - Satna (MP)-485001

Office of the M.P. Pollution Control Board Bhopal

एकीकृत क्षेत्रीय कार्यालय
Integrated Regional Office
Ministry of Environment, Forest & Climate Change
भारत सरकार/Govt of India, Bhopal

Plant : Post Babupur, Satna (M.P.) Pin- 485112 Ph.:+ 91(7672) 415500,415600
Regd. Office : Bhilai Township, Bhilai Durg, Chattisgarh - 490 006
Head. Office : 'JA House', 63, Basant Lok, Vasant Vihar, New Delhi -110 057 (India)
Ph. : +91 (11) 26141540, 26147411 Fax : + 91 (11) 26145389, 26143591
website : www.bjcl.co.in, CIN : U26940CT2007PLCO20250
A JV of SAIL & JAIPRAKASH ASSOCIATES LIMITED

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BJCL/Env/ECC/2020-21/02

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A JV of SAIL & JAIPRAKASH ASSOCIATES LIMITED

FORMAT FOR FILLING UP COMPLIANCE REPORT

Name of the Project: Bhilai Jaypee Cement Limited, Babupur, Tehsil-Raghuraj Nagar, District Satna (MP)-485112

Project Code : 02MP146

Clearance Letter No.: - 11011/29/2008-IA-II (I) dtd. 21st July 2009 and Amended vide MoEF letter F. No. J- 11011/29/2008-IA-II (I) Dated 10th September, 2015 for Clinker Production (1.09 to 1.3 MTPA), Cement grinding (0.6 MTPA) and Limestone Mining 2.1 MTPA [ML-I: 590.52 Hact. and ML-II (1033.99Hact.) at village Babupur, Tehsil Raghurajnagar, District- Satna, Madhya Pradesh of M/s Bhilai Jaypee Cement Ltd.

Period of Compliance Report: Oct-2020 to March- 2021

A. SPECIFIC CONDITIONS

Sr. No.	Details of Conditions	Status

<table>
<tr><td>I.</td><td>The Company shall comply with the conditions stipulated in the mining plan approval letter no. 314(3)/2008-MCCM(C)/MP-46 dated 25th March, 2009 and 314(3)/2008-MCCM(C)/MP-47 dated 26th March, 2009 issued by the Indian Bureau of Mines and conditions of mining leases.</td><td>All conditions stipulated in the mining plan are being complied.</td></tr>
<tr><td>II</td><td>The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the M.P. Pollution Control Board. At no time, particulate emissions from the cement plant including kiln, coal mill, cement mill and cooler shall not exceed 50 mg/Nm^3. Continuous on-line monitors for particulate emissions shall be installed. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit (s) is shut down automatically.</td><td>The gaseous and particulate matter stack emissions from various units are being monitored and found well below the limits of 30 mg/Nm^3 prescribed by the MPPCB. Continuous on-line monitors for particulate matter emissions are already installed in all major stacks and CEMS real time data linked with CPCB website. All major pollution control equipments are Interlocked with main process equipments. Data of stack emission are as below.</td></tr>
<tr><td></td><td colspan="2"><u>HALF YEARLY REPORT OF PARTICULATE MATTER EMISSION FROM POINT SOURCE (STACK)</u>
Period : October-2020 to March- 2021
<table>
<tr><th rowspan="2">Unit Stack Attached With PCE (Pollution Control Equipment)</th><th colspan="6">Dust Conc. (mg/Nm^3)</th></tr>
<tr><th>Oct-20</th><th>Nov-20</th><th>Dec-20</th><th>Jan-21</th><th>Feb-21</th><th>Mar -21</th></tr>
<tr><td>Kiln & Raw Mill BH Stack</td><td>24.29</td><td>18.03</td><td>20.40</td><td>18.78</td><td>21.35</td><td>23.51</td></tr>
<tr><td>Cooler ESP Stack</td><td>26.04</td><td>21.82</td><td>19.38</td><td>22.02</td><td>25.49</td><td>20.49</td></tr>
<tr><td>Coal Mill BH Stack</td><td>23.80</td><td>19.17</td><td>18.14</td><td>25.00</td><td>19.68</td><td>17.75</td></tr>
<tr><td>Limestone Crusher BDC</td><td>23.38</td><td>14.23</td><td>18.27</td><td>20.41</td><td>16.63</td><td>21.44</td></tr>
</table></td></tr>
<tr><td>III</td><td>Secondary fugitive emissions shall be controlled within the prescribed limits and regularly monitored. Guidelines/Code of Practice issued by the CPCB in this regard shall be followed. The company shall install adequate dust collection and extraction system to control fugitive dust emissions at material transfer points. Atomized water spray system with reclaimer shall be installed in silo used for the storage of ash. Storage of other raw materials shall be in closed roof sheds. Covered conveyer belts shall be used to reduce fugitive emissions. Concreting of all the roads, water sprinkling system at limestone and coal handling area shall be ensured to reduce fugitive emissions.</td><td>For controlling the secondary fugitive emission, dust collection and extraction system like Bag filters installed and working efficiently at material transfer points of limestone conveyor belt, coal conveyor belt, Raw material storage hoppers and blending silos, Limestone crusher and Hoppers, clinker silos and coal crusher to control the dust emission during crushing and transportation of raw materials. Water spray systems are installed and working efficiently at Limestone crusher, belt conveyor and coal belts for controlling the dust emission. Covered conveyer belts are used for transportation of raw material as well as fine product to reduce fugitive emissions. Concreting of roads inside the plant premises has been completed. Raw coal is stored in covered shed.</td></tr>
</table>

		Water spray arrangement is provided in belt and hopper for controlling the dust emission. Good housekeeping practices are being followed for controlling the dust emission as per CPCB Guidelines.
IV	The proponent shall upload the status of compliance of the stipulated EC conditions, including monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPC. The criteria pollutant namely; SPM, RSPM, SO_2, NOx (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at the convenient location near the main gate of the Company in the public domain.	Status of compliance of stipulated EC conditions, including monitored data are being uploaded in BJCL website and submitted to Regional office of MoEF, CPCB and SPCB on six monthly basis with monitoring data. The criteria pollutant namely; PM_{10}, $PM_{2.5}$, SO_2, NOx (Ambient levels as well as stack emissions) are monitored and displayed near the main gate of the factory. The six monthly EC compliance reports for the period April -2020 to September -2020 has been submitted vide letter No. BJCL/Env/ECC /2020-21/01 dtd. 20.11.2020.
V	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 MPPCB and data for air emissions shall be submitted to the CPCB and MPPCB regularly. The instruments used for ambient air quality monitoring shall be calibrated time to time.	Ambient air quality including ambient noise levels are being monitored regularly as per guidelines of MPPCB .The monitored data of AAQ and ambient noise level are being submitted to the RO, MoEF, CPCB and MPPCB regularly. The instruments used for ambient air quality monitoring are calibrated timely. We have installed two nos. continuous real times A.A.Q. monitoring stations in plant premises and its data is linked with CPCB & MPPCB website. Ambient Air Quality Monitoring results of Cement Plant and Mines (ML-I & II) are given below.

CEMENT PLANT A. A. Q MONITORING RESULTS FROM : October-2020 to March–2021

Month of Sampling	Particulars		SO2	NOX	Noise dB (A)	Noise dB (A)	PM 2.5	PM-10
		Place	($\mu g/M^3$)	($\mu g/M^3$)	Day time	Night Time	($\mu g/M^3$)	($\mu g/M^3$)
October-2020 to March 2021	Average	Near Substation	7.64	16.26	69.42	61.03	28.47	65.99
		In front of FH-2	7.36	17.51	69.34	61.08	29.38	67.32
		Near Annapurna	7.67	15.97	68.81	59.78	27.83	67.14
		Near Scrape Yard	7.38	16.76	69.33	60.09	26.66	67.50
	Minimum	Near Substation	4.85	12.94	63.20	56.20	19.90	54.94
		In front of FH-2	3.64	16.27	66.35	57.65	17.32	59.66
		Near Annapurna	4.97	11.78	64.55	53.05	14.86	57.19
		Near Scrape Yard	5.64	13.99	61.60	54.25	16.17	56.24
	Maximum	Near Substation	9.80	19.15	72.70	68.90	35.71	79.03
		In front of FH-2	9.88	20.62	72.20	66.70	36.06	77.90
		Near Annapurna	9.85	17.68	72.00	65.00	34.76	78.51

		Near Scrape Yard	10.00	19.12	74.00	66.85	33.41	80.26

MINES (ML-I &II) AMBIENT AIR QUALITY MONITORING DATA OF FROM: : October -2020 to March– 2021

Date	Particulars		SO2	NOX	Noise dB (A)	Noise dB (A)	PM 2.5	PM-10
		Place	($\mu g/M^3$)	($\mu g/M^3$)	Day time	Night Time	($\mu g/M^3$)	($\mu g/M^3$)
October-2020-March-2021	Average	Near Magazine Khamaria village (East)	**7.43**	**16.89**	**69.95**	**60.27**	**26.51**	**65.87**
		Near Mines Office Babupur (West)	**7.61**	**17.26**	**69.43**	**61.02**	**27.51**	**66.84**
		Near Camp Office (North)	**6.88**	**17.05**	**69.50**	**59.82**	**27.03**	**67.21**
		Near Weigh bridge (South)	**6.51**	**17.70**	**69.81**	**60.68**	**25.58**	**64.85**
	Minimum	Near Magazine Khamaria village (East)	**3.75**	**12.49**	**64.05**	**56.45**	**17.12**	**57.14**
		Near Mines Office Babupur (West)	**4.16**	**14.95**	**65.70**	**54.50**	**16.88**	**58.66**
		Near Camp Office (North)	**5.60**	**14.44**	**66.00**	**52.80**	**17.06**	**56.48**
		Near Weigh bridge (South)	**4.93**	**13.26**	**63.60**	**55.10**	**18.08**	**57.72**
	Maximum	Near Magazine Khamaria village (East)	**10.35**	**22.80**	**72.95**	**65.15**	**32.12**	**76.97**
		Near Magazine Khamaria village (East)	**11.53**	**19.09**	**72.90**	**66.85**	**37.15**	**77.08**
		Near Mines Office Babupur (West)	**8.25**	**19.25**	**72.15**	**66.40**	**35.61**	**75.75**
		Near Camp Office (North)	**9.61**	**21.93**	**74.40**	**64.85**	**31.45**	**73.45**

VI	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land.	Adequate measures such as water spray on the road and avoid overloading to reduce impact of transport of raw materials and end products on the surrounding environment are being taken. Coal and clinker are transported through Railway.
VII	The company shall make the efforts to utilize the high calorific hazardous waste in the cement kiln and necessary provisions shall be made accordingly. The company shall keep the record of the waste utilized and shall submit the details to ministry's	Proper arrangement has been made to utilize the high calorific value non hazardous waste materials in cement Kiln. AFR 16965 MT pet coke materials were used in Cement Kiln as Co processing during April 2020 to March 2021.

	Regional Office at Bhopal, CPCB and SPCB.	
VIII	Total ground water requirement shall not exceed 1400 m^3/day for plant and mines. A copy of permission letter shall be submitted to Ministry's Regional Office at Bhopal. The treated wastewater from STP and utilities shall be reutilized for green belt development and other plant related activities i.e. cooling and dust suppression in raw material handling area etc. after necessary treatment. 'Zero' discharge shall be strictly adopted and no effluent from the process shall be discharged outside the premises.	Total ground water requirement is not exceeding to the limit of 1400 m^3/day for plant and mines. Permission for use of ground water has already obtained and renewed vide letter no.21-4(50)/NCR/CGWA/2009/579 dtd. 09th April 2015 and its further renewal is under processing. Treated waste water from STP is being used for green belt development and also in water sprinkling and dust suppression and maintaining zero discharge status.

STP Treated Water Analysis Report Oct-2020 – March- 2021

Location : Plant Area

Parameters (Treated Water)	MPPCB Limit	Month						Avg.	Min	Max
		Oct	Nov	Dec	Jan	Feb	Mar			
pH	**6.5-9.0**	7.30	7.4	7.6	7.2	8.1	7.8	**7.6**	**7.2**	**8.1**
Temperature (°C)	**40**	27°C	17°C	16°C	17°C	28°C	29 °C	22.3 °C	16°C	**29**°C
Odor	**-**	-	-	-	-	-	-	**-**	**-**	**-**
BOD (mg/ltr)	**10**	8.90	6.3	6.3	6.8	6.2	6.7	**6.9**	**6.2**	**8.9**
COD (mg/ltr)	**50**	40.60	34.6	33.6	36.8	39.5	37	**37.0**	**33.6**	**40.6**
Suspended Solids (mg/ltr)	**20**	16.50	14	16.5	17.5	16.7	17.5	**16.5**	**14.0**	**17.5**
Total Solids (mg/ltr)	**-**	1420	1440	1530	2985	2845	3085	**2217.5**	**1420**	**3085**

Location : Colony Area

Parameters (Treated Water)	MPPCB Limit	Month						Avg.	Min	Max
		Oct	Nov	Dec	Jan	Feb	Mar			
pH	**6.5-9.0**	7.9	7.8	7.9	7.7	7.5	7.9	**7.8**	**7.5**	**7.9**
Temperature (°C)	**40**	25°C	18° C	17°C	18°C	31°C	30°C	23.2°C	17°C	31°C
Odor	**-**	-	-	-		-	-	**-**	**-**	**-**
BOD (mg/ltr)	**10**	8.7	8.2	8.8	8.3	7.6	7	**8.1**	**7.0**	**8.8**
COD (mg/ltr)	**50**	41.5	38	37.5	35.5	33.5	33.5	**36.6**	**33.5**	**41.5**
Suspended Solids (mg/ltr)	**20**	17.5	14.0	16.0	16.5	18.0	17.0	**16.5**	**14.0**	**18.0**

	Total Solids (mg/ltr)	**-**	1450	1100	1350	1750	2050	2600	**1716.7**	**1100.0**	**2600.0**
IX	Rainwater harvesting measures shall be adopted for the augmentation of ground water at cement plant, colony and mine site. Besides, company must also harvest the rainwater from the rooftops and storm water drains to recharge the ground water. The company must also collect rain water in the mined out pits of captive lime stone mine and use the same water for the various activities of the project to conserve fresh water and reduce the water requirement pressure from the river. The Company shall construct the rain water harvesting and groundwater recharge structures outside the plant premises also in consultation with local Gram Panchayat and Village Heads to augment the ground water level. An action plan shall be submitted to Ministry's Regional Office at Bhopal within 3 months from date of issue of this letter.	The Rain water harvesting studies have been carried out for Plant and Mines by M/s Hydro Geosurvey Consultants, Jodhpur, and Rajasthan and for Township by M/s Hydrominviron Consultancy Pvt Ltd., Jaipur. The reports have been submitted to Regional Director, MoEF, Bhopal, CGWB, Bhopal, MPPCB and CPCB Bhopal. Based on the recommendation of the consultants, the RWH measures have been adopted at Plant, Mines and Colony. Six water recharge structures have been made at Plant and one at the colony to recharge underground water. Water reservoir has also been made in the mined out area (2 acre approx.) for RWH. The rain water thus collected in reservoir is being used for sprinkling on haul roads for dust suppression and green belt development and accordingly the fresh water is being conserved. The roof top rain water harvesting is carried out by channelizing water through pipe lines in recharging pits. The pit is further advanced by puncturing the strata for recharging of ground water as recommended. We have also made a pond outside the plant for rain water harvesting in consultation with local Gram Panchayat and Village Heads.								
X	The project proponent shall modify the mine plan of the project at the time of seeking approval for the next mining scheme from the Indian Bureau of Mines so as to reduce the area for external over burden dump by suitably increasing the height of the dumps with proper terracing. It shall be ensured that the overall slope of the dump does not exceed 28^0.	The overburden will be used for back filling. The mining scheme of ML-I&II has approved vide letter dtd. 06.03.2016 and valid upto March 2021 from Indian Bureau of Mines further renewal is under process. The height of the dump will be increased to reduce the dumping area with proper terracing as per EC conditions. The overall slope of the dump will not exceed 28^0.								
XI	Topsoil, if any, shall be stacked with proper slope at earmarked site(s) only with adequate measures and shall be used for reclamation and rehabilitation of	Topsoil being stored carefully at earmarked site and will be used for reclamation and plantation. The quantity of top soil is generated /removed is								

	mined out areas.	19977.77 Ts. in April -2020 to March 2021 in FY 2020-21
XII	The project proponent shall ensure that no natural water course shall be obstructed due to any mining and plant operations. The company shall make the plan for protection of the natural water course passing through the plant and mine area premises and submit to the ministry's Regional Office at Bhopal.	No natural water course was obstructed due to mining and plant operation as no natural water course passing through the mining lease area.
XIII	The inter burden and other waste generated shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The total height of the dumps shall not exceed 30 m in three terraces of 10 m each and the overall slope of the dump shall be maintained to 28^0. The inter burden dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office, Bhopal on six monthly bases.	Presently no Inter burden encountered during mining. However, at a later stage, if any inter burden is encountered, EC condition will be complied. The Overburden and other waste generated in ML-I is 167185.14. Ts. & ML-II is 87976.25 Ts. in FY 2020-21 upto March-2021 will be used in back filling/ stacked at earmarked dump site(s) and shall not be kept active for long period. The waste dump site(s) total height of the dump is made in 3x10 m lift each an overall slope 28^0. The interactive benches will be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas will continue until the vegetation becomes self-sustaining. Compliance report is submitted to the Ministry of Environment & Forests and its Regional Office, Bhopal on six monthly bases.
XIV	The void left unfilled shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation to be done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.	The void left at the end of mining shall be converted into water body. The mining activities have been started from 1.1.2010.
XV	Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, inter burden and mineral dumps to arrest flow of silt and sediment. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after monsoon, and maintained properly.	All garland drains are well maintained and de silted before rainy season. The collected water in sump used for water spray on haul roads and loading points for dust suppression.

		 **Photogrph: Setling pit of Mines (ML-I&II)**
XVI	Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter burden dumps and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.	Garland drain of appropriate size, gradient and length is constructed all around the mine pit and sump of sufficient storage capacity made by taking all safety measures.  **Photogrph: Garland Drain of Mines (ML-I&II)**
XVII	Dimension of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run-off and siltation shall be based on the rain fall data.	At present there is no inter burden strata within the mines, hence inter burden benches are not required within the working quarries. Toe bunds/retaining wall are constructed at the dump site to check the run-off and siltation, wherever required. The photograph of retaining wall is given below for reference pl.

		 **Photograph: Retaining wall in Mines ML-I&II**
XVIII	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board. The frequency of monitoring shall be four times a year-pre-monsoon (April / May), monsoon (August), post-monsoon (November), and winter (January). Data thus collected shall be sent at regular intervals to Ministry of Environment and Forests and its Regional Office at Bhopal, Central Ground Water Authority and Central Ground Water Board.	The ground water monitoring is being carried out by M/s Hydrominviron Consultancy Pvt Ltd., Jaipur, through 32 dug wells located within the 10 Km buffer zone around Mines and Plant, hence it was not found necessary to install the piezometers because the purpose of ground water level monitoring is fulfilled as per condition. Regular monitoring of the Ground water level and quality monitoring work is being done and its latest report submitted to Regional Director, CGWB and Regional Director, MoEF and MPPCB Bhopal vide our letter dtd.22.02.2021 for period Post Monsoon November-2020.
XIX	Blasting operation shall be carried out only during the daytime. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented.	Controlled blasting is in practice. Blasting operation is being done only during daytime. Mitigation measures have been adopted to control ground vibrations and fly rocks.
XX	The project proponent shall adopt wet drilling.	All the drilling machines are fitted with wet drilling system.
XXI	As proposed, green belt shall be developed in 33 % in and around the plant as per the CPCB guidelines.	Green belt has been planned to be developed in 33 % area in and around the plant as per the CPCB guidelines. As per Green Belt Development Plan Total 118325 nos. of sapling have been planted in FY 2020-21 in Cement Plant & Mines Area. The total area covered under plantation in Cement Plant area is about 33.42 ha and in Mines the area covered is about 20.41 ha. Further plantation in Plant and Mines area is ongoing process.

		
XXII	All the recommendations of the Corporate Responsibility or Environmental Protection (CREP) for cement plant shall be strictly followed.	Recommendations of Corporate Responsibility for Environmental Protection (CREP) for cement plant are followed.

Charter on Corporate Responsibility for Environmental Protection (CREP)

Sr. No.	CREP Conditions	Status of Compliance
1	Cement Plant which are not complying with notified standard, shall do the following to meet the standard : • Augmentation of existing Air Pollution Control Device - By July 2003. • Replacement of Air Pollution Control Device –by 2004	BJCL plant has been working since Jan 2010. We have adopted and installed latest air pollution control technology like Bag house, ESP & Bag filters in Cement plant and the emission level monitored are found well within the prescribe limits of 30 mg/Nm3.
2.	Cement Plants located in critically polluted or urban areas (including 5 km distance outside urban boundary) will meet 100 mg/Nm3 limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter to 50 mg/Nm3.	We are complying standard of particulate matter of 30 mg/Nm3 as prescribed by the MPPCB.
3.	The new cement kilns to be accorded NOC/ Environmental Clearance w.e.f. 01.04.2003 will meet the limit of 50 mg/Nm3 for particulate matter emissions.	Environment Clearance is obtained and meeting the prescribed norms 30 mg/Nm3.
4.	CPCB will evolve load based standards by December 2003.	Emission standard prescribe by Board being followed.
5.	CPCB and NCBM will evolve SO2 and NOx emission standards by June 2004.	SO2 and NOx emission well within the prescribe limit as per guidelines and its real time data is being uploaded in CPCB website,
6.	The Cement Industries will control fugitive emission from all the raw material and products storage and transfer points by Dec-2003. However, the feasibility for the control of fugitive emission from limestone and coal storage areas will be decided by the National Task Force (NTF).The NTF shall submit its recommendations within three months.	For controlling the dust emission from cement plant, we have installed adequate capacity of bag house for Kiln & Raw mill, one Electro Static Precipitators for Clinker cooler, one bag house for coal mill and 25 Nos. Bag dust collectors in various raw material transfer points and storage silos such as raw meal, coal meal and various material transfer points, Clinker being stored in 24000Ts. Capacity Clinker silo. Clinker silo also equipped with adequate capacity of bag filter to control the dust emission. Water is spraying on roads and other area for controlling the fugitive dust emission. Fugitive emission is controlled by implementing CPCB guidelines.
7.	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum coke as fuel in cement kiln by July 2003.	Being followed.
8.	After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit	The continuous Emission monitoring systems are installed at Kiln & Raw mill Bag House, Cooler ESP and coal mill stacks and working efficiently. The Real time

	operation/sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring systems (CMS) by December 2003.	data of CEMS is uploaded in CPCB /MPPCB and Company web site.
9.	Tripping in kiln ESP to be minimized by July 2003 as per the recommendation of NTF.	We have installed bag house for the Kiln & Raw Mill and Coal mill. Tripping is not applicable.
10.	Industries will submit the target date to enhance the utilization of waste material by April 2003.	As, we are manufacturing clinker only. Therefore, solid waste material such as fly ash is not generated/ consumed. We have used approx 16965MT Pet coke as AFR in Cement Kiln upto in FY 2020-21.
11.	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003.	Noted and to be followed.
12.	Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003.	Feasibility study will be carried out for co-generation of power.

XXIII	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.	Noted. All the vehicles operating in mining area have valid PUC certificate. The vehicles are used for transportation of mineral are avoided overloading. The vehicles are maintained regularly.
XXIV	Digital processing of the entire lease area using remote sensing technique shall be done regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bhopal.	The digital processing of entire lease area using remote sensing technique has been carried out by M/s Anacon Laboratories Pvt Ltd., Nagpur in Nov-2015 which reports has been submitted to Regional office, MoEF Bhopal, Member Secretary, MPPCB, Bhopal, and Member Secretary CPCB, New Delhi further we have completed digital processing study and its report will be submitted shortly.
XXV	A Final Mine Closure Plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure, for approval.	The progressive mine closure plan along with Corpus fund of ML-I & ML-II has been submitted to IBM dated 02.05.2011.
XXVI	Necessary permission and recommendation of the State Forests department shall be obtained regarding impact of the proposed cement plant and mining on the surrounding reserve and protected forests and suggested conservation plan shall be implemented.	District forest officer, Satna vide letter No. DM/955 dtd. 11.02.2009 has certified that plant complex (Area 101.71 hect.) including two Mining lease (ML-I area 590.22 hect. and ML-II area 1033.99) does not have any National Park, Wild life Sanctuaries, Biospheres reserves, wild life corridors, Tiger/Elephant reserves and migratory paths /roots within 10 KM radius.
XX VII	The company shall comply with all the commitments made during public hearing on 21.12.2008	Commitments made during public hearing have been complied. We have provided compensation as per rules and jobs provided to related land losers according to their qualifications as

		additional benefits.
XXVIII	Provision shall be made for the housing of 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	Provision was made for the housing of construction labours within the plant site with all necessary infrastructure and facilities such as fuel for cooking, toilets, Safe drinking water, medical health care facilities etc. Now, all temporary structure has removed.
GENERAL CONDITIONS		
	Details of Conditions	**Status**
I	The project authority shall adhere to the stipulations made by State Pollution Control Board (SPCB) and State Government.	Noted and agreed.
II	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	Noted and agreed.
III	At least four ambient air quality monitoring stations shall be established in the down wind direction as well as where maximum ground level concentration of SPM, SO_2 and NO_X are anticipated in consultation with the SPCB. Data on ambient air quality and stack emissions shall be regularly submitted to this Ministry including its Regional Office and SPCB / CPCB once in six months.	Eight ambient air quality monitoring stations (4 each at Plant & Mines) have been established. Monthly and six monthly monitoring data is being submitted to all concerned authorities and also uploaded on company website. Monitoring report has been submitted regularly on monthly and six monthly to all concerned authorities.
IV	Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	The treated waste water is used for plantation purpose. However no industrial wastewater is generated from the cement plant.
V	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 Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Noise level within the plant is maintained within the norms. Monitoring of noise level is carried out periodically as per MPPCB guidelines and reports being submitted regularly.
VI	Proper housekeeping and adequate occupational health program shall be taken up. Occupational Health Surveillance program shall be done on a regular basis and records maintained properly for at	Good housekeeping practice has been followed. Mechanized Road sweeping machine is used for cleaning of roads in Plant area. Occupational Health Surveillance program are regularly carried

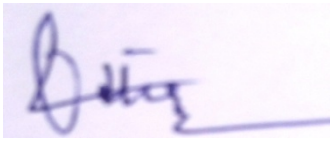
	least 30-40 years. The program shall include lung function and sputum analysis tests once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.	out and record is maintained.
VII	The company shall undertake eco-development measures including community welfare measures in the project area.	The eco-development and community welfare measures are being taken by the company. The BJCL is committed towards the safety, health and environment of employees and public of surrounding villages. The financial assistance to nearby educational, social and religious organization is being provided. Medical facilities are extended to nearby villagers. The total expenditure of Rs.10.5 Lac has been incurred in the financial year 2020-21 towards CSR and Eco development activities.
VIII	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP.	Yes, We are complying the environmental protection measures and safeguards as recommended in the EIA/ EMP.
IX	A separate environmental management cell with full fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of Senior Executive.	A separate Env. Management cell has been working with full fledged laboratory facilities to carry out various Env. Management and monitoring functions.
X	Adequate fund shall be allocated to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. Time bound implementation schedule for implementing all the conditions stipulated herein shall be submitted. The funds so provided shall not be diverted for any other purpose.	A separate fund has been created for the exclusive use for the Environmental protection and Pollution control activities.
XI	The Regional Office of this Ministry / CPCB / SPCB shall monitor the stipulated conditions. The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports. A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Full cooperation is extended to the visiting officials. Six monthly compliance report and along with the monitored data is regularly submitted to the Regional Office of this Ministry / CPCB / SPCB.
XII	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both on hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	Yes, We are submitting six monthly reports on the status of compliance as per stipulated EC conditions.

XIII	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests. No change in the calendar plan including excavation, quantum of limestone and waste shall be made.	Noted and Agreed.
XIV	Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM etc. shall be provided with ear pluggs/ muffs.	Noise level is controlled within the stipulated norms by adopting adequate noise control measures. Personnel protective equipment has been provided to the workers engaged in operations of HEMM etc. Awareness/ training program are being organized regularly.
XV	Industrial waste water (workshop and waste water from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	Zero discharge of water is maintained. Oil and grease trap is installed for workshop effluents.
XVI	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Personnel working in mines/ dusty areas have been provided personnel protective equipment/ respiratory devices and providing adequate training and information on safety and health aspects. Occupational health surveillance program of the employees are undertaken periodically.
XVII	The project authorities shall inform to the Regional Office located regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	The Clinker production unit's financial closure booked in A/c is 15.12.2009 at a cost of Rs. 445 Crores. The commercial production of clinker was started from 03.01.2010 as communicated to RO, MoEF Bhopal vide our letter No. BJCL/COORD/DG/2010-11 dtd. 17Th July 2010, Regional Officer, MPPCB, Satna and Member Secretary, MPPCB, Bhopal on 27.04.2010. Further, we would like to submit that the installation of Grinding unit for which EC has been granted, is approved by JAL Board and now under consideration by the Board of Directors of SAIL, as this unit is a joint venture of JAL & SAIL. After due approval from SAIL Board, the installation of Cement grinding unit will be taken up and accordingly financial closure will be intimated to MoEF.
XVIII	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad	EC letter sent to concerned authorities and receipt is taken.

	/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 put up on the website of the Company by the proponent.	
XIX	The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at "http://envfor.nic.in" and a copy of the same shall be forwarded to the Regional Office of this Ministry.	Advertised in the News paper "The Desh Bandhu, The Nav Bharat & The Dainik Bhaskar" on Dt. 28.07.2009.
XX	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 EC conditions and shall also be sent to the respective regional Office of the MoEF by e-mail.	Environmental statement of last FY 2019-20 was submitted on 28.05.2020.
XXI	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.	Noted and agreed.
XXII	The Ministry may revoke or suspend the clearance if implementation of any of the above conditions is not satisfactory.	Noted and Agreed.
XXIII	Any other conditions or alteration in the above conditions shall have to be implemented by the project authorities in a time bound manner.	Noted and Agreed
XXIV	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, Second Floor, Trikoot-I, Bhikaji Cama Place, New Delhi-110066, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.	Noted and Agreed.

XXV	The above conditions shall be enforced, 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.
	MoEF vide letter F. No. J- 11011/29/2008-IA-II (I) Dated 10th September, 2015	
1.	The Project Proponent should install 24x7 air and water monitoring devices to monitor air emission and effluent discharge, as provided by CPCB and submit report to Ministry and its Regional Office.	We have installed 24x7 air monitoring devices to monitor air emission and its data uploaded to CPCB website and also submit reports to Ministry and its Regional Office. We have maintained zero effluent discharge.
2.	The company shall obtain fresh Environmental Clearance in case of any change in the scope of the project.	Being followed.

For Bhilai Jaypee Cement Ltd.
(Babupur) Satna



P.K Singh
Vice President
(Authorized Signatory)