Registered A/D

**BHILAI JAYPEE CEMENT LIMITED**

Date: 10.09.2015

BJCL/ENV/ESR/2014-15/01

To,
Member Secretary
MP Pollution Control Board
Paryavaran Pariser,
E-5, Arera colony
Bhopal (MP) -462016

**Sub: Submission of Environmental Statement Report for the year 2014-15**

Ref: 1. Environmental Clearance Letter No. J-11011/29/2008-1A-II(I) dated 21st July2009.
2. DG Set consent Letter No. 5246 & 5248/TS/MPPCB/2013 dtd. 23.07.2013.

Dear Sir,

Please find the following enclosed **Environment Statement Report (Form-V)** for the year **2014-15** of our Cement Plant capacity 1.09 MTPA Clinker, 0.6 MTPA Cement, Ispat Limestone Quarry ML-I capacity 0.6 MTPA, Ispat Limestone Quarry ML-II Capacity 1.5 MTPA and DG Set capacity 5x1500 KVA unit of Bhilai Jaypee Cement Limited, located at village Babupur, Satna (MP) for your kind information and record pl.

Enclosures:

1. Environment Statement Report of Cement Plant
2. Environment Statement Report of Ispat Limestone Quarry (ML-I)
3. Environment Statement Report of Ispat Limestone Quarry (ML-II)
4. Environment Statement Report of D.G Set ( 5X1500 KVA)

Regards,

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

B.K. Agrawal
Joint President (Technical)

16/9/2015

Cc to:

1. Director, Regional Office - For kind information pl.
Ministry of Environment & Forests,
Regional Office, (WZ), Kendriya Paryavaran Bhawan ,
Link Road -3, Ravishankar Nagar, Bhopal (M.P)-462016

2. Zonal Officer - For kind information pl.
Central Pollution Control Board, 3rd Floor, Sahkar Bhavan,
North T.T Nagar, Bhopal (M.P) – 462003

3. Regional Officer, MP Pollution Control Board - For kind information pl.
House No. 318, Gali No.-5, Dhwari
Satna(MP) – 485001

JAYPEE GROUP

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, Basand Lok, Vasant Vihar, New Delhi-110 057 (India)
Ph. : +91 (11) 26141540, 26147411 Fax : + 91 (11) 26145389, 26143591
website : www.bjcl.co.in, CIN : U26940CT2007PLC020250

A JV of SAIL & JAIPRAKASH ASSOCIATES LIMITED

**FORM- V**

**ENVIRONMENTAL STATEMENT REPORT FOR THE YEAR 2014-15**
**M/S BHILAI JAYPEE CEMENT LIMITED, BABUPUR, SATNA (MP)**

**PART- A**

| | | | |
|---|---|---|---|
| (i) | Name and address of the owner/ Occupier of the Industry, operation or process | : | **Bhilai Jaypee Cement Plant Babupur – 485112, Satna (M.P.)** |
| (ii) | Industry Category | : | Red and Large Industry |
| (iii) | Production Capacity | : | **1.09 MTPA (Clinker)** **0.6 MTPA (Cement)** |
| (iv) | Year of Establishment | : | **January, 2010** |
| (v) | Date of Last Environment Statement Submitted | : | **08.09.2014** |

**PART- B**
**WATER AND RAW MATERIAL CONSUMPTION**

**(i) Water Consumption**

| **Water consumption- $m^3$/day** | |
|---|---|
| Cooling: (Spraying) | **620.11** |
| Domestic | **245.38** |
| Process | **Nil** |

| **Name of Products** | **Water consumption per unit of Products** | |
|---|---|---|
| | **During the previous Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| 1. Clinker | 0.297 $M^3$/MT | 0.290 $M^3$/MT |

**(ii) Raw Material Consumption**

| **Name of raw material consume** | **Name of products** | **Consumption of raw material Per unit of Products (MT)** | |
|---|---|---|---|
| | | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| **1. Limestone** | **Clinker** | **1.50** | **1.48** |
| **2. Additive (Iron ore/ Laterite/ High Gr. Laterite/ Bauxite)** | | **0.051** | **0.039** |
| **3. Coal** | | **0.121** | **0.125** |

**PART- C**

**Pollution discharges to environment/ unit of output.**

**(Parameter as specified in the consent issued)**

| **(i) Pollution** | **Quality of Pollutants Discharged (Mass/day)** | **Concentration of Pollutants discharges (mass/volume)** | **Percentage of variation from prescribed standards** |
|---|---|---|---|
| (a) Colonial Waste Water | **Domestic waste water treated in 500 KLD capacity STP and treated water utilized in green belt development and dust suppression hence Zero discharge is maintained** | | |
| (b) Industrial | **No waste water is generated in process hence Zero discharge is maintained** | | |
| Stack emission | **a) Kiln B .H - 0.166 MT/Day** | **20.15 mg/Nm3** | Within the permissible limit |
| | **b) Cooler ESP Stack - 0.114 MT/day** | **19.46 mg/Nm3** | |
| | **c) Coal Mill Bag House stack - 0.030 MT/Day** | **18.44 mg/NM3** | |
| | **d) Limestone Crusher Bag filter - 0.014 MT/Day** | **19.45 mg/Nm3** | |

**PART- D**

**(HAZARDOUS WASTES)**

| **Hazardous Wastes** | **Total Quantity (MT) Disposed** | |
|---|---|---|
| | **During the current financial year (2013-14)** | **During the current financial year (2014-15)** |
| (a) From process | Used Oil : 2.36<br>Waste Oil : 1.40 | Used Oil : 1.63<br>Waste Oil : 2.50 |
| (b) E-Waste | Nil | 0.75 MT |
| (c) Used Batteries | 0.8 MT | 9.0 MT |
| (b) From pollution Control Facilities | Nil | Nil |

**PART- E**

**SOLID WASTES**

| **TOTAL QUANTITY (Ts)** | | |
|---|---|---|
| | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| (a) From Pollution Control Equipment | **No solid waste is generated from the cement manufacturing process as all are recycled back into process.** | **No solid waste is generated from the cement manufacturing process as all are recycled back into process.** |
| (b) From Process | **No solid waste is generated** | **No solid waste is generated from** |

| | | |
|---|---|---|
| | **from the cement manufacturing process as all are recycled back into process.** | **the cement manufacturing process as all are recycled back into process.** |

**PART- F**

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

**Hazardous waste:** All the used oil, waste oil, burnt grease generated from the different sections of plant is being collected in empty drums and barrels and then sent to Store Deptt for proper handling and storage. Collected hazardous waste at specified location as per Hazardous Waste (Management, Handling & Transboundary Movement) Rule, 2008 from where the stored hazardous waste is being sold out to authorized recyclers.

**Characteristic:**

1. **Used oil**

| SN | Parameter | Result | Unit | Requirements as per CPCB schedules-5 | Quantity in kg |
|---|---|---|---|---|---|
| 1 | Arsenic | < 1 | ppm | 5 Max | 1630 |
| 2 | Cadmium+Chromium+Nickel | < 1 | ppm | 500 Max | |
| 3 | Lead | < 1 | ppm | 100 Max | |
| 4 | Poly Chlorinated Biphenyls(PCB) | BDL | ---- | Below Detection Limit | |
| 5 | Polyaromatic Hydrocarbons ( PAH) | N.D. | % | 6 Max | |

2. **Waste Oil**

| SN | Parameter | Result | Unit | Requirements as per CPCB schedules-5 | Quantity in kg |
|---|---|---|---|---|---|
| 1 | Water Content | 65.02 | % v/w | --- | 2500 |
| 2 | Sediments | 3.68 | % by mass | 5 max | |
| 3 | Sulphur Content | 3.41 | % by mass | --- | |
| 4 | Arsenic + Cadmium + Chromium+ Lead+ Nickel | 102 | ppm | 605 Max | |
| 5 | PCB | BDL | --- | Below Detection Limit | |
| 6 | PAH | N.D | % | 6 Max | |
| 7 | Total Halogens | 780 | ppm | 4000 Max | |

| S.No. | Particulars | Quantity | Disposal (Sold to authorized recycler) |
|---|---|---|---|
| 1. | Used Oil | 1.63 MT | 1. M/s Bharat Oil Company, Kanpur |
| | Used Grease | 2.50 MT | 2. S.V Enterprises ,Kanpur |
| **Used Batteries:** | | | |
| | Batteries | 135 Nos | M/s Raj Industries, Rewa (M.P.) |

**Solid waste Disposal**: The solid waste is generated in the form of MS scrap sent to Hi-Tech casting centre for recycling. Used refractory bricks were collected by Refractory bricks manufacturer for reuse, used tyres, rejected rubber belts, filter bags, are generated during cement manufacturing process & these solid wastes are being sold to authorized parties

**PART- G**

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

- The plant is equipped with best available technology for Air Pollution Control devices such as Bag House, ESP, Bag Filters etc designed to control the emission level below 40 mg/$Nm^3$ from any of the stacks installed at our plant.

- We are successfully managing the ambient SPM level below the prescribed levels by installation of water spray system at each of the transfer points of raw materials conveying belts.

- Covered belt conveyors, water sprinklers of raw material & coal conveyors and concreted roads for vehicular movement inside the plant premises.

- The company has undertaken various energy efficiency improvement measures & process modifications which helped to significantly reduce the overall energy consumption to enable us to achieve our ultimate goal of GHG emission reduction and positive contribution.

Thus, the pollution abatement & other energy conservation practices adopted by us save precious raw material/ product and greatly help in conserving valuable natural resources.

- Blaster has been installed in Coal Mill due to which Coal Mill stoppage reduced.

- Retrofitting of roots blower pulley to conserve electricity.

- Installation of **Slip Power Recovery System (SPRS)** in the Pre-heater fans in Kiln for energy saving.

- Damper blades to be set right so that at 100% opening of damper, there is no pressure loss, it helps saving 35 KW per hour.

- Current transducer installed for belt conveyor to stop idle running to conserve electricity.

**PART- H**

Additional measures/ investment proposal for environmental protection including abatement of pollution, prevention of pollution.

1. Replacement of damaged **filter bags** in bag filters and Bag House to effectively control the dust emission during material transport to improve the air quality inside the plant premises.
2. Green belt development in and around the plant premises
3. Constructed concrete roads in and around factory premises.
4. Continuous water spraying on roads for controlling the fugitive emission.
5. Fog type water sprinkler installed at coal yard.
6. Good housekeeping practices being followed to avoid dust deposition on roads.
7. Procured Ride on type diesel operated sweeping machine for good housekeeping.

8. Recurring & Maintenance cost of Pollution Control Devices.
9. Extended coal storage shed.
10. Constructed Laterite shed to store laterite.
11. Installed two nos of CAAQMS.
12. Installed CEMS at main Stack at Kiln and RM Bag house

**PART- I**

Any other particulates in respect of environmental protection and abatement of pollution.

1. Proposal has been made for AFR usage in Cement Kiln.
2. Installation of feeding point for AFR in Cement Kiln

**Prepared By**
**Dated: 10.09.2015**

**For M/s Bhilai Jaypee Cement Ltd.**

**(Authorized signatory)**
**B.K Agrawal**
**Joint President (Tech)**

**FORM- V**

**ENVIRONMENTAL STATEMENT REPORT FOR THE YEAR 2014-15**

**M/S BHILAI JAYPEE CEMENT LIMITED, BABUPUR, SATNA (MP)**
**Unit: DG Set (5x1500 KVA)**

**ENVIRONMENTAL STATEMENT FOR THE FINANCIALYEAR ENDING THE 31st MARCH 2015**

**PART – A**

| | | |
|---|---|---|
| (I) | Name & Address of the Owner / Occupier of the Industry Operation or Process | **Bhilai Jaypee Cement Limited Babupur – 485112, Satna (M.P.)** |
| (II) | Industry Category | Red Category and Large industry |
| (III) | Production Capacity | 5 x 1500 KVA (DG Set) |
| (IV) | Year of Establishment | 5th August 2010 |
| (V) | Date of last Environmental Statement Submitted | **08.09.2014** |

**PART- B**
**WATER AND RAW MATERIAL CONSUMPTION**

(i) Water consumption - $m^3$ /day

Cooling: (Spraying) : **NIL (Stand by)**

Domestic : **DG Set installed in BJCL premises (No additional water req.)**

Process : **Nil**

| **Name of Products** | **Water consumption per unit of Products** | |
|---|---|---|
| | **During the previous Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| 1. Electricity | Nil | Nil |

(ii) **Raw Material Consumption**

| **Name of raw material consume** | **Name of products** | **Consumption of raw material / Unit of Product** | |
|---|---|---|---|
| | | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |

| | | | |
|---|---|---|---|
| **4. Diesel (HSD)** | **Electricity** | **0.418 Ltr/KWH** | **0.454 Ltr/KWH** |

**PART- C**

**Pollution discharges to environment/ unit of output.**

**(Parameter as specified in the consent issued)**

| **(i) Pollution** | **Quality of Pollutants Discharged (Mass/day)** | **Concentration of Pollutants discharges (mass/volume)** | **Percentage of variation from prescribed standards** |
|---|---|---|---|
| (a) Colonial Waste Water | **Nil** | | |
| (b) Industrial | **Nil** | | |
| Air (AAQM)<br>**East :**<br>**West :**<br>**North :**<br>**South :** | - | Annual Average data (PM-10)<br>**64.66 µg/m$^3$**<br>**71.57 µg/m$^3$**<br>**71.97 µg/m$^3$**<br>**64.01 µg/m$^3$** | Ambient air quality is within the permissible limits |

**PART- D**

**HAZARDOUS WASTES**

| **Hazardous Wastes** | **Total Quantity (Kg)** | |
|---|---|---|
| | **During the current financial year (2013-14)** | **During the current financial year (2014-15)** |
| (a) From process | NIL | Used Oil (5.1) – 0.400 MT |
| (b) From pollution Control Facilities | NIL | NIL |

**PART- E**

**SOLID WASTES**

| **TOTAL QUANTITY (Ts)** | | |
|---|---|---|
| | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| (c) From Pollution Control Equipment | **Nil** | **Nil** |
| (d) From Process | **Nil** | **Nil** |

**PART- F**

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

**Hazardous waste generation: Nil** (DG Set is standby unit and its running hours is very less. Small quantity waste generated is added with Plant HW)

**Solid waste disposal:** NIL

**PART- G**

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

DG Set is installed in the Plant premises.

**PART- H**

Additional measures/ investment proposal for environmental protection including abatement of pollution, prevention of pollution.

1 Green belt development in and around the Plant & DG Set premises
2. Concrete roads in and around factory premises.
3. Continuous water spraying on roads for controlling the fugitive emission.
4. Good housekeeping practices being followed to avoid dust deposition on roads.
5. Mechanical road sweeping machine is in operation.
6. Installed two nos of CAAQMS.

**PART- I**

Any other particulates in respect of environmental protection and abatement of pollution.

**DG Set is installed in the Cement Plant Premises**

**Prepared By**
**Dated: 10.09.2015**

**For M/S Bhilai Jaypee Cement Ltd.**

**(Authorized signatory)**
**B.K Agrawal**
**Joint President (Tech)**

**FORM- V**

**ENVIRONMENTAL STATEMENT REPORT FOR THE YEAR 2014-15**

**ISPAT LIMESTONE QUARRY (ML-I)**
**Mine Lease Area -- 590.22 ha**
**Unit : BHILAI JAYPEE CEMENT LTD. BABUPUR, SATNA(MP)**

**PART- A**

| | | | |
|---|---|---|---|
| (i) | Name and address of the owner/ Occupier of the Industry, operation or process | : | **Ispat Limestone Quarry (ML-I)**<br>**Unit : BHILAI JAYPEE CEMENT LTD.**<br>**Babupur, Satna (M.P.) - 485112** |
| (ii) | Industry Category | : | **Red and Large industry** |
| (iii) | Production Capacity | : | **0.6 MTPA Limestone** |
| (iv) | Year of Establishment | : | **January, 2010** |
| (v) | Date of last Environment Statement Submitted | : | **08.09.2014** |

**PART- B**
**WATER AND RAW MATERIAL CONSUMPTION**

(iii) Water consumption - $m^3$ /day

| | | |
|---|---|---|
| Cooling: (Spraying) | : | **53.0 (Mine pit water)** |
| Domestic | : | **15.0** |
| Process | : | **Nil** |

| **Name of Products** | **Water consumption per unit of Products $M^3$ /Ton** | |
|---|---|---|
| | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| 1. Limestone | 0.012 $M^3$ / MT of LS | 0.049 $M^3$ / MT of LS |

**Raw Material Consumption**

| **Name of raw material consume** | **Name of products** | **Consumption of raw material / Unit of Product** | |
|---|---|---|---|
| | | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| 5. Diesel (HSD)<br>6. Explosive (ANFO) | **Limestone** | 0.73 Lit /MT of Limestone<br>0.063 Kg /Tones of Limestone | 0.66 Lit /MT of Limestone<br>0.062 Kg /Tones of Limestone |

**PART- C**
**Pollution discharges to environment/ unit of output.**
**(Parameter as specified in the consent issued)**

| **(i)** | **Quality of Pollutants** | **Concentration of** | **Percentage of** |
|---|---|---|---|

| Pollution | Discharged (Mass/day) | Pollutants discharges (mass/volume) | variation from prescribed standards |
|---|---|---|---|
| (a) Colonial Waste Water | **Zero discharge is maintained** | | |
| (b) Industrial | **Zero discharge is maintained** | | |
| Air (AAQM) | Ambient Air Quality (Annual Avg.)<br>**PM $_{2.5}$**<br><br><br>**PM $_{10}$** | **Annual average data**<br>**Direction Avg. Result**<br>East - 27.81 µg/M$^3$<br>West - 32.68 µg/M$^3$<br>North - 33.93 µg/M$^3$<br>South - 26.98 µg/M$^3$<br><br>East - 64.66 µg/M$^3$<br>West - 71.57 µg/M$^3$<br>North - 71.97 µg/M$^3$<br>South - 64.01 µg/M$^3$ | Ambient air quality is within the permissible limits |

**PART- D**
**HAZARDOUS WASTES**

| Hazardous Wastes | Total Quantity (MT) | |
|---|---|---|
| | **During the current financial year (2013-14)** | **During the current financial year (2014-15)** |
| (a) From process | 2.16 (ML-I & ML-II) | 1.28 (ML-I & ML-II) |
| (b) From pollution Control Facilities | N.A. | N.A. |

**PART- E**
**SOLID WASTES**

| TOTAL QUANTITY (Ts) | | |
|---|---|---|
| | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| (a) From Process- Over Burden from mine | 56799.3 | 67871.8 |
| (b) From Pollution Control facilities | **Nil** | **Nil** |
| (c) Qty. recycled or reused Within the unit. | NIL | NIL |

**PART- F**

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

**Hazardous waste:** All the used oil, waste oil, generated from the HEME is being collected in empty drums and barrels and then sent to store deptt for proper handling and storage. Collected hazardous waste at specified location as per Hazardous Waste (Management, Handling & Transboundary Movement) Rule, 2008 from where the stored hazardous waste is being sold out to authorized recyclers.

**Solid waste** - Over burden dumped at earmarked location and will be reused for back filling in mined out area.

**PART- G**

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

**Pollution Control Measures Adopted for Control of Pollution**

1. Wet drilling system is adopted for control the fugitive dust emission.
2. Water sprinkling on haul roads by water tanker of capacity 8.0 KL for control of dust emission.
3. Blasting is done with Nonel to control the ground vibrations and AOP.
4. Top soil is stack at earmarked location and reused for plantation work.
5. Green Belt Development Measures: As a part of green belt development, planted more than 8150 plant saplings in Mine, Plant and Colony area during financial year 2014-15.

Monitoring: We have established fully equipped Environment Lab with modern instrument facilities for monitoring environment parameters under control of Jt. President (Technical).

**PART- H**

Additional measures/ investment proposal for environmental protection including abatement of pollution, prevention of pollution.

Ground vibration study was done by CIMFR, Dhanbad for optimized of blasting.

**PART- I**

Any other particulates in respect of environmental protection and abatement of pollution.

NIL

**Prepared By**
**Dated: 10.09.2015**

**For M/S Bhilai Jaypee Cement Ltd.**

**(Authorized signatory)**
**B.K Agrawal**
**Joint President (Tech)**

**FORM- V**

**ENVIRONMENTAL STATEMENT REPORT FOR THE YEAR 2014-15**

**ISPAT LIMESTONE QUARRY (ML-II)**
**Mine Lease Area -- 1033.99 ha**
**Unit : BHILAI JAYPEE CEMENT LTD. BABUPUR, SATNA(MP)**

**PART- A**

| | | | |
|---|---|---|---|
| (i) | Name and address of the owner/ Occupier of the Industry, operation or process | : | **Ispat Limestone Quarry (ML-II)**<br>**Unit : BHILAI JAYPEE CEMENT LTD.**<br>**Babupur, Satna (M.P.) - 485112** |
| (ii) | Industry Category | : | Red and Large Industry |
| (iii) | Production Capacity | : | **1.5 MTPA Limestone** |
| (iv) | Year of Establishment | : | **January, 2010** |
| (v) | Date of Last Environment Statement Submitted | : | **08.09.2014** |

**PART- B**
**WATER AND RAW MATERIAL CONSUMPTION**

(iv) Water consumption - $m^3$ /day

| | | |
|---|---|---|
| Cooling: (Spraying) | : | **53.0 (Mine pit water)** |
| Domestic | : | **15.0** |
| Process | : | **Nil** |

| **Name of Products** | **Water consumption per unit of Products $M^3$/Ton** | |
|---|---|---|
| | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| 1. Limestone | 0.006 $M^3$ / MT of LS | 0.021 $M^3$ / MT of LS |

**Raw Material Consumption**

| **Name of raw material consume** | **Name of products** | **Consumption of raw material / Unit of Product** | |
|---|---|---|---|
| | | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| 7. Diesel (HSD)<br>8. Explosive (ANFO) | **Limestone** | 0.73 Lit /MT of Limestone<br>0.063 Kg /Tones of Limestone | 0.66 Lit /MT of Limestone<br>0.062 Kg /Tones of Limestone |

**PART- C**

**Pollution discharges to environment/ unit of output.**

**(Parameter as specified in the consent issued)**

| **(i) Pollution** | **Quality of Pollutants Discharged (Mass/day)** | **Concentration of Pollutants discharges (mass/volume)** | **Percentage of variation from prescribed standards** |
|---|---|---|---|
| (a) Colonial Waste Water | **Zero discharge is maintained** | | |
| (b) Industrial | **Zero discharge is maintained** | | |
| Air (AAQM) | Ambient Air Quality (Annual average data)<br><br>**$PM_{2.5}$**<br><br><br><br>**$PM_{10}$** | Annual Average data<br>**Direction Avg. Result**<br>East - 27.81 µg/$M^3$<br>West - 32.68 µg/$M^3$<br>North - 33.93 µg/$M^3$<br>South - 26.98 µg/$M^3$<br><br>East - 64.66 µg/$M^3$<br>West - 71.57 µg/$M^3$<br>North - 71.97 µg/$M^3$<br>South - 64.01 µg/$M^3$ | Ambient air quality is within the permissible limits |

**PART- D**

**HAZARDOUS WASTES**

| **Hazardous Wastes** | **Total Quantity (MT)** | |
|---|---|---|
| | **During the current financial year (2013-14)** | **During the current financial year (2013-14)** |
| (a) From process | 2.16 | 1.28 |
| (b) From pollution Control Facilities | N.A. | N.A. |

**PART- E**

**SOLID WASTES**

| **TOTAL QUANTITY (Ts)** | | |
|---|---|---|
| | **During the Current Financial Year (2013-14)** | **During the Current Financial Year (2014-15)** |
| (a) From Process- Over Burden from mine | 88292.6 | **114896.0** |
| (b) From Pollution Control facilities | **Nil** | **Nil** |
| (c) Qty. recycled or reused Within the unit. | NIL | NIL |

**PART- F**

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

**Hazardous waste:** All the used oil, waste oil, generated from the HEME is being collected in empty drums and barrels and then sent to store deptt for proper handling and storage. Collected hazardous waste at specified location as per Hazardous Waste (Management, Handling & Transboundary Movement) Rule, 2008 from where the stored hazardous waste is being sold out to authorized recyclers.

**Solid waste**: Over burden dumped at earmarked location and will be reused for back filling in mined out area.

**PART- G**

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

**Pollution Control Measures Adopted for Control of Pollution**

6. Wet drilling system is adopted for control the fugitive dust emission.
7. Water sprinkling on haul roads by water tanker of capacity 8.0 KL for control of dust emission.
8. Blasting is done with Nonel to control the ground vibrations and AOP.
9. Top soil is stack at earmarked location and reused for plantation work.
10. Green Belt Development Measures: As a part of green belt development, planted more than 8050 plant saplings in Mine, Plant and Colony area during financial year 2014-15.

Monitoring: We have established fully equipped Environment Lab with modern instrument facilities for monitoring environment parameters under control of Sr. Vice President (Technical).

**PART- H**

Additional measures/ investment proposal for environmental protection including abatement of pollution, prevention of pollution.

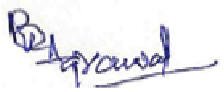
Ground vibration study was done by CIMFR, Dhanbad for optimized of blasting.

**PART- I**

Any other particulates in respect of environmental protection and abatement of pollution.

**Prepared By**
**Dated: 10.09.2015**

**For M/S Bhilai Jaypee Cement Ltd.**



**(Authorized signatory)**
**B.K Agrawal**
**Joint President (Tech)**