

JALDCP/ENV/280-16

September 20, 2016

To,

Member Secretary  
U.P. Pollution Control Board  
Lucknow

Sub: Environment Statement Report (Form V) for financial year 2015-16 of Dalla  
Cement Factory (A Unit of Jaiprakash Associates Ltd.).

Dear Sir,

Please find enclosed herewith the Environment Statement for financial year 2015-16 of  
our Integrated Cement, Clinker & Captive Power Plant, as per the requirement under  
section 14 of Environment Protection Rules, 1986 amended till date.

Yours Faithfully,

For Dalla cement factory

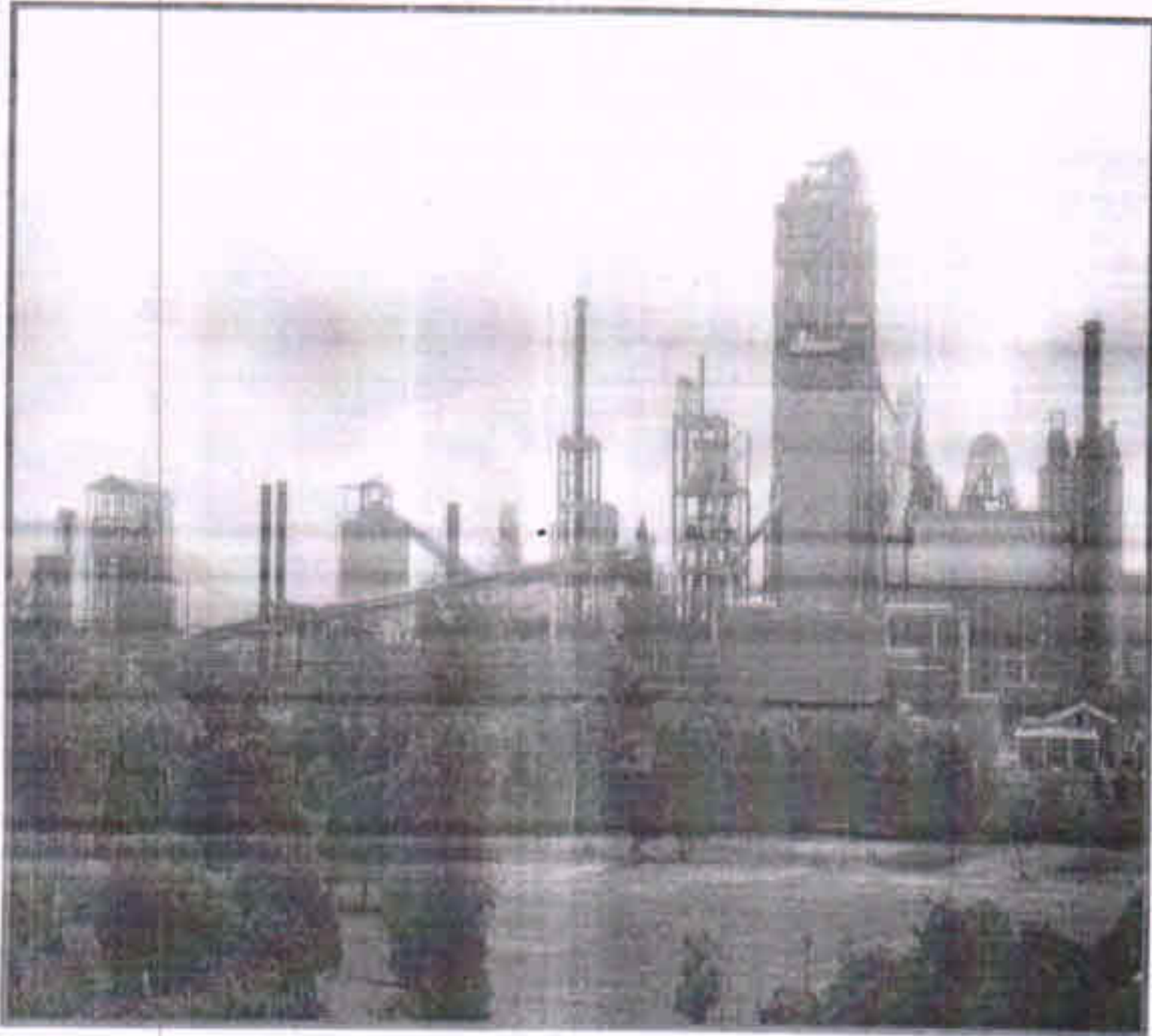
  
(S.Katiyar)

Sr. Vice-President (Tech.)

CC:

Regional Officer, UP Pollution Control Board, Robertsganj, Sonbhadra (UP)

**DALLA CEMENT FACTORY**  
(A UNIT OF JAIPRAKASH ASSOCIATES LIMITED)



**ENVIRONMENT STATEMENT REPORT**  
**[2015- 16]**

**SUBMITTED TO U.P. POLLUTION CONTROL BOARD**  
**LUCKNOW (U.P.)**

**ADDRESS OF THE UNIT:**

Dalla Cement Factory  
Dalla, Robertsganj,  
Distt: Sonbhadra (UP)  
Ph. 05445-265778, 265801, 265802  
Fax- 05445-265776

## INTRODUCTION

The Jaypee group is a blue chip diversified industrial conglomerate with a four decade experience of continuous growth and diversification in the fields of Engineering and Construction, Cement, Hydropower, Thermal Power, Wind Power, Express ways & High ways, Hospitality & Tourism, Real Estate, Hospitals, Minerals and Mining, Transmission, Information Technology, Education and sports. Achieving perfection, creating excellence, transforming every challenge into an opportunity and reaching new milestones in its stride has been the hallmark of Jaypee Group. Catering to India's growing cement consumption, the cement division of Jaiprakash Associates Limited (JAL) has 11 state-of-art fully computerized integrated cement plants (ICPs), 09 Grinding units and 2 blending units.

Jaiprakash Associates Limited (JAL) has acquired the Dalla Cement Factory from erstwhile Uttar Pradesh State Cement Corporation Limited (UPSCCL) as successful bidder ordered by Hon'ble High Court of Judicature, Allahabad. The unit has production capacity of 2.0 MTPA clinker, 0.5 MTPA cement, 27 MW power along with six nos. captive limestone mines. Environmental Clearance accorded by MoEF, GOI on 29/09/2009. The cement plant is located at Dalla, Tehsil- Robertsganj, Distt.-Sonebhadra (U.P.)

**"FORM – V"**

(See rule 14)

**ENVIRONMENTAL STATEMENT FOR THE FINANCIAL YEAR ENDING WITH  
31<sup>ST</sup> MARCH 2016**

**PART – A**

(I)	Name & Address of the Owner / Occupier of the Industry Operation or Process	Dalla Cement Factory (Unit of Jaiprakash Associates Limited) Dalla, Sonbhadra (UP)
(II)	Industry Category	Red Category and large (Cement Manufacturing)
(III)	Production Capacity	2.0 Million TPA (Clinker) 0.5 Million TPA (Cement) 27 MW Power
(IV)	Year of Establishment	2009
(V)	Date of last Environmental Statement Submitted	18/09/2015

## PART – B

### Water & Raw Material Consumption

#### A. Water

##### (i) Water Consumption (m<sup>3</sup>/Day)

Process & Cooling (Cement)	-	1189
Cooling (CPP)	-	185
Domestic	-	1357

##### (ii) Consumption per unit of production

Name of the Product	Process Water Consumption per unit of Product Output	
	During the Previous Financial Year (2014-15)	During the Current Financial Year (2015-16)
Clinker & Cement	0.1736 KL/MT	0.1790
Electricity	0.00045 KL/ Kwh	0.00039

#### B. Raw Material Consumption

Name of the Raw Material	Name of Product	Consumption of Raw Material per Unit Product Output (MT/MT of Clinker, Cement & MT/Kwh of Electricity)	
		During the Previous Financial Year (2014-15)	During the Current Financial Year (2015-16)
Limestone	Clinker	1.482	1.475
Iron ore		0.0102	0.0249
Coal		0.138	0.1368
Clinker	Cement	0.667	0.666
Gypsum		0.0381	0.0357
Fly ash		0.295	0.2981
Coal	Electricity (Kg/KWh)	1.004	0.90

PART - C

**Pollutant Discharged To Environment / Unit of Output**

(Parameters as specified in the consent issued)

S. No.	Pollutants	Quantity of Pollutants Discharged (Mass / day) (MT/day)	Concentrations of Pollutants in discharged (Mass / Volume) (mg/Nm <sup>3</sup> )	Percentage of variation from prescribed standard with reasons
(A)	<b>Water</b>			
i)	<b>Domestic</b>	Zero discharge is maintained. Treated domestic water is being used in Horticulture and sprinkling		
ii)	<b>Industrial</b>	<b>Zero Discharge</b>		
(B)	<b>Air</b>			
i)	<b>Ambient Air</b>	Ambient air quality parameters are well within prescribed limit. Report attached as Annexure-1		
ii)	<b>Stack Emission</b>	Report attached as annexure-2		
	<b>(i) Stack emission</b>			
	<b>(a) Line-1</b>			
	Raw mill –ESP	0.030	27.24	Well within permissible limits
	Coal Mill -Bag Filter	0.018	26.47	
	Cooler –ESP	0.025	26.88	
	<b>(b) Line-2</b>			
	Raw Mill -Bag House	0.033	27.98	
	Coal Mill -Bag Filter	0.021	27.71	
	Cooler- ESP	0.027	26.96	
	<b>(c) Cement Mill</b>			
	Cement Mill -1	0.012	24.68	
	Cement Mill -2	0.013	25.17	
	<b>(d) CPP</b>			
	Boiler ESP	0.030	26.82	

**PART – D**

**Hazardous Wastes**

(As specified under Hazardous Waste (Management, Handling & Trans-boundary Movement) Rules, 2008.

Hazardous Waste Generation		During the Previous Financial Year (2014-15)	During the Current Financial Year (2015-16)
(a)	From process* Used Oil (5.1) Waste Oil (5.2)	7.98 m <sup>3</sup> Nil	13.02m <sup>3</sup> NIL
(b)	From pollution control facilities	Nil	Nil

\*Note: Common Authorization obtained for Dalla Cement factory and Limestone Mines

Hazardous Waste/Non hazardous waste, Co-processed at our cement kiln		During the Current Financial Year (2015-16)
(a)	Paint Sludge (Hazardous Waste)	57.64 MT
(b)	RDF/Tyre Chips/Rice Husk (Non-Hazardous Waste)	5448.8 MT

**PART – E**

**Solid Wastes**

Solid Waste	Total Quantity	
	During the Previous Financial Year (2014-15)	During the Current Financial Year (2015-16)
(a) From Process	No solid waste is generated from the cement manufacturing process.	No solid waste is generated from the cement manufacturing process.
(b) From Pollution Control facilities	All the solid waste i.e. Particulate matter generated from the process is 100% automatically recycled in the process through the APCEs.	All the solid waste i.e. Particulate matter generated from the process is 100% automatically recycled in the process through the APCEs.
(c) (i) Qty. recycled or reused Within the unit. (ii) Sold (iii) Disposed	(i) Fly ash- 117059 MT (ii) 441.47 MT Used refractory brick sold to recycler. (iii) Nil	(i) Fly ash- 117176.95 MT (ii) 519.58 MT Used refractory brick sold to recycler. (iii) Nil

PART - F

PLEASE SPECIFY THE CHARACTERISATIONS (IN TERMS OF COMPOSITION AND QUANTUM) OF HAZARDOUS AS WELL AS SOLID WASTES AND INDICATE DISPOSAL PRACTICE ADOPTED FOR BOTH THESE CATEGORIES OF WASTES. Hazardous Waste:

The only hazardous wastes generated from the unit are used oil and waste oil. Chemical analysis of the same is as under:

Chemical Analysis of Used Oil

**Vimta Labs Limited**  
Regional Office  
142, 13A Phase II, Chennarayana  
Hyderabad-500 051, India  
T : +91 40 2726 4141  
F : +91 40 2726 3057



ISSUED TO:

**DALLA CEMENT FACTORY**  
(UNIT OF AAIPEKASH ASSOCIATES LIMITED)  
POST, DALLA DISTT. GONERHADRA (UP) 211 267

Report Number : 06838/15-17/VLL/000/07  
Issue Date : 2015-08-01  
Your Ref : RC NO. SUPD/ST/02/0002  
and Date : 2015-08-23

Sample Particulars: USED OIL SAMPLE

Page 1 of 1

Sample Registration date: 2015-07-18	Sampling Date: 2015-07-18
Analysis starting date: 2015-07-18	Analysis Completion date: 2015-07-30
Sample collected at: Used Oil	
Tests Requested: Polychlorinated Biphenyls (PCBs), Sediment, Lead, Arsenic, Cadmium + Nickel, Poly Aromatic Hydrocarbons (PAH), Total Halogens, Sulfur and Water Content	
SAMPLES COLLECTED BY VIMTA LABS LTD	
LAB REF: CC	

TEST RESULTS

Sl. No.	PARAMETER	UOM	Result
1	Polychlorinated Biphenyls (PCBs)	mg/L	<0.01
2	Poly Aromatic Hydrocarbons (PAH)	mg/L	<0.01
3	Sediment	%	0.24
4	Lead	mg/L	10.16
5	Arsenic	mg/L	<0.1
6	Cadmium + Nickel	mg/L	1.28
7	Total Halogens	%	0.04
8	Sulfur	%	1.23
9	Water Content	%	0.21

Dr. Subba Reddy Mallampa  
Group Leader- Environment



The hazardous waste i.e. used Oil and waste oil generated from the different processes of the plant is being collected in empty drums & barrels & then stored in the Authorized Hazardous waste storage area, permission for which has already been taken from UPCB and the same is sold to the authorized recyclers/vendors by CPCB, UPCB as per the provisions mentioned in Hazardous Waste (Management, Handling & Tran boundary Movement) Rules.

**Solid Waste:** Solid waste generated from process operations is especially through spillage or emissions of the various raw materials or the finished product i.e. Clinker & cement. This spilled material is being recycled into the process and used refractory sold to recycler. Hence, there is no solid waste generated during the process of cement manufacturing.

#### PART – G

#### **IMPACT OF THE POLLUTION ABATEMENT MEASURES TAKEN ON CONSERVATION OF NATURAL RESOURCES AND ON THE COST OF PRODUCTION.**

- 1) Water flow meters have been installed at all major water consumption points. Treated STP water is being utilized in gardening and dust suppression. At present the unit has attained "Zero liquid discharge" status as per the condition of Environmental Clearance.
- 2) Catchment area of three no. existing water ponds is enlarged for rain water harvesting of 1.5 Lac m<sup>3</sup> and 1.0 Lac m<sup>3</sup> and 1500 m<sup>3</sup>. This water is being used not only for raising water table in surrounding vicinity but also for water sprinkling on the roads for reduction of fugitive dust.
- 3) Approx. 275 TPD fly ash is generated from our 27MW Captive Power Plant. Due to its Pozzolonic property we make use of fly-ash in our cement making process. Maximum amount of fly-ash is being used at our Dalla unit. Balance amount is transported in closed Bulklers to our sister concern Chunar Cement Factory (CCF), Chunar, Mirzapur for 100 % utilization in cement manufacturing.
- 4) Utilization of Red Mud (Non Hazardous Waste- a waste product of alumina refinery) as raw material in place of Laterite in Cement Kiln.
- 5) Co-Processing of Paint sludge (Hazardous waste) generated from automobile and paint industries, RDF material, plastic waste etc. in our cement kiln as an alternative fuel to conserve natural resource and treat to environment.

6) Greenbelt strengthening is an ongoing process. Greenbelt plays an important role to control air pollution and also gives an aesthetic look to the site. We have covered more than 33% area in green belt development inside the plant and colony premises. The species planted are selected on the basis of their dust tolerance, low water requirement. Other than 33% area additional Plantation details has given in the following table.

Year	Total plantation	Nos. Of Plant survived	Survival rate in Percentage
2012-13	5842	4360	75%
2013-14	3440	3005	87%
2014-15	1500	1228	82%
2015-16	1500	807	53.8%
<b>Total</b>	<b>12282</b>	<b>9400</b>	<b>76.5 %</b>

7) APCEs (based on Latest technology) have been installed in the process to capture the dust covering all the point source of emission and material transfer points. Electrostatic Precipitator (ESP) & Bag Houses installed in clinkerization, Cement & CPP section to capture the particulate matter. Pulse Jet type Bag Filters also installed in the process at various material transfer points to capture the Particulate Matter having efficiency more than 99%. The material captured by the APCEs is automatically recycled in process, which in turn enhances the process economy.

8) Maintenance of all Pollution Control Devices are being done as per prescribed schedule by dedicated environmental management team which comprises of mechanical, electrical and environment engineers and monitoring of all these are done regularly as per UPPCB Norms.

#### Part-H

#### **ADDITIONAL MEASURES / INVESTMENT PROPOSALS FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT POLLUTION, PREVENTION OF POLLUTION.**

Additional measures the unit has taken for environment protection is as under:

- ✓ Installation of water meters at all water withdrawal & distribution points to evaluate the domestic and industrial water consumption on daily basis and accordingly optimize the wastage of water in a best possible way.
- ✓ Installation of dust suppression system (cold fog system) at Limestone and Coal Handling Plant with transfer points in significant reduction of fugitive dust emission for conducive environment.

- ✓ Reduction in consumption of fuel as well as fugitive dust emission for transportation of Limestone from Mines to Crusher by reducing travel distance from 7 Km to 1 Km by installing Limestone Crusher.
- ✓ System for firing of Pet Coke as well as incineration of combustible waste like plastic is in place for its utilization in cement kiln.
- ✓ Arrangement of closed belt conveyors and covered shed for coal storage of 13000 ton.
- ✓ Treated water from STP is being utilized in colony & plant through well connected gravity flow water line for green belt development and sprinkling on roads.
- ✓ A massive tree plantation is in progress inside as well as outside of the plant premises. Also small patches of gardens are developed inside the plant premises wherever the open space is available to improve the plant beautification.
- ✓ All internal roads are either concreted or blacktopped to reduce the fugitive dust emission inside the plant premises.
- ✓ 3 Nos. flush mounted Bag Filter of 2000 m<sup>3</sup>/hr capacity has been installed on each Weigh Feeders & Feed Belts to control dust emission.
- ✓ Bag filters have been installed at old crusher & Cement transfer conveyor at tunnel to control fugitive dust.
- ✓ Water sprinkling system has been installed at coal yard through aerial pipe line for dust suppression.
- ✓ All the roads in and around the plant have been duly concreted including the truck parking yards for clinker and cement which in turn has improved the ambient air quality in the area to a greater extent.
- ✓ Vermi-Compost system has been provided at DCF colony for waste debris and plant leaf litters for waste management.
- ✓ Dried STP sludge is being utilized in horticulture as organic manure.
- ✓ Rain water harvesting ponds have been developed to collect residential roof top and surface area run off rain water through dedicated drainage system to increase water table in the vicinity.
- ✓ Online Continuous Monitoring system has been installed to monitor Ambient Air Quality and Process stacks for Dust concentration and Gaseous on continuous basis.
- ✓ Provision has been made for potable water to the nearby community through dedicated water tankers & networks of water pipelines.

- ✓ World Environment day was celebrated at DCF, Dalla from 01th June to 05th June, 2015 to spread harmony and enthusiasm towards the awareness and protection of environment.
- ✓ DCF, Dalla Certified for the Integrated Management Systems which includes Quality Management Systems (ISO: 9001-2008), Environment Management Systems (ISO: 14001-200344d Occupational Health and Safety Management Systems (OHSAS: 18001-2007) & audits/surveillance audits being conducted by M/s Intertek (an internationally certified body).

Part-I

**Energy and resource Management**

Dalla Cement Factory has now stabilized its production processes. Fact is that cement production is highly energy intensive and resource exploitive. It is too critical for cement industries to manage these two aspects, which are rather key issues of environment management in general. However we have already started using pet-coke & red mud in cement kiln. Regarding energy efficiency various energy conservation projects are undertaken and successfully implemented, they lead to significant saving of energy.

Energy Consumption during preceding years

Sl. No.	Energy	2012-13	2013-14	2014-15	2015-16
1	Specific heat consumption	716	717	716	720
2	<b>Electric Energy Consumption</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
	a) Kwh/ton for clinkerisation	71.66	69.83	69.85	68.20
	b) Kwh/ton cement for Grinding and packing	30.39	31.41	30.42	30.90
	Total Kwh / Tone cement produced		82.81	81.14	81.16

For Dalla Cement Factory,  
(A Unit of Jaiprakash Associates Limited)

(NB 03/14)

(US. Choudhary)  
General Manager

**DALLA CEMENT FACTORY**  
(A Unit of Jaiprakash Associates Ltd.)

**STACK EMISSION MONITORING RESULTS (APRIL 2015 TO MARCH 2016)**

Location	K-4 Raw Mill	K-4 Coal Mill	K-4 Cooler	K-5 Raw Mill	K-5 Coal Mill	K-5 Cooler	Cement Mill -I	Cement Mill -II	CPP (ESP)	Limestone Crusher Bagfilter-1	Limestone Crusher Bagfilter-2
Parameter	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )	Particulate Matter, (mg/Nm <sup>3</sup> )
Month											
Apr-15	28.16	30.26	22.97	27.95	22.25	26.44	31.27	30.53	23.59	26.06	26.85
May-15	27.19	23.99	25.25	27.55	27.72	25.53	29.64	29.82	26.09	27.11	26.84
Jun-15	28.23	24.51	25.65	27.36	25.67	26.80	28.31	28.94	26.51	26.47	26.28
Jul-15	27.62	25.17	26.82	28.11	25.83	27.00	27.06	27.69	26.43	27.04	27.54
Aug-15	26.68	26.94	27.10	28.55	24.47	26.90	26.11	25.86	25.49	25.47	26.06
Sep-15	27.02	27.16	27.55	28.98	25.48	27.19	26.98	26.92	25.46	25.66	26.47
Oct-15	25.85	25.96	27.46	27.94	24.23	26.59	24.01	24.35	25.72	24.75	25.48
Nov-15	26.75	27.90	26.15	27.97	28.68	25.58	23.78	23.56	26.99	25.07	23.92
Dec-15	26.00	26.94	25.08	27.14	27.97	24.82	23.27	23.23	26.15	24.45	23.33
Jan-16	25.57	26.67	24.75	26.59	27.68	24.40	22.95	22.92	25.80	24.20	23.09
Feb-16	28.38	25.34	28.63	28.98	28.66	29.79	26.70	28.38	27.82	25.56	25.98
Mar-16	30.90	26.02	29.22	29.29	29.06	30.56	27.36	28.80	28.44	26.11	26.63
Avg. Value	27.24	26.47	26.88	27.98	27.71	26.96	24.68	25.17	26.82	25.02	24.74

**DALLA CEMENT FACTORY**  
(A Unit of Jaiprakash Associates Ltd.)

**AMBIENT AIR QUALITY MONITORING RESULTS FROM APRIL 2015 to MARCH 2016**

**PLANT AREA**

Location →	Main Gate Area				CPP Area				Estate Office Area			
Parameter →	PM 2.5, ( $\mu\text{g}/\text{m}^3$ )	PM 10, ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> , ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> , ( $\mu\text{g}/\text{m}^3$ )	PM 2.5, ( $\mu\text{g}/\text{m}^3$ )	PM 10, ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> , ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> , ( $\mu\text{g}/\text{m}^3$ )	PM 2.5, ( $\mu\text{g}/\text{m}^3$ )	PM 10, ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> , ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> , ( $\mu\text{g}/\text{m}^3$ )
↓ Month												
Apr-15	40.65	81.26	15.51	20.47	40.28	80.93	14.88	19.83	39.75	81.65	13.63	19.47
May-15	40.52	81.23	15.16	20.34	40.42	80.92	15.23	20.06	39.71	81.87	13.26	19.35
Jun-15	41.86	84.81	16.67	25.56	42.84	86.70	17.31	13.56	42.97	86.50	16.98	14.26
Jul-15	40.75	80.88	15.42	20.45	40.18	80.90	14.91	19.92	39.77	81.77	13.66	19.46
Aug-15	40.78	80.93	15.46	20.49	40.21	80.97	14.93	20.19	39.85	81.81	13.69	19.63
Sep-15	40.83	82.42	16.64	25.49	42.45	85.43	17.26	13.41	43.02	84.55	16.95	14.23
Oct-15	39.88	79.07	14.53	19.29	39.25	80.05	13.95	18.80	38.66	77.74	13.41	18.12
Nov-15	40.70	80.03	15.35	20.42	40.10	79.77	14.79	20.11	39.66	81.31	13.60	19.51
Dec-15	36.26	78.39	15.36	23.04	37.88	81.40	15.98	10.96	38.45	80.52	15.67	11.78
Jan-16	32.55	74.81	14.92	21.16	33.04	79.60	15.24	13.40	34.90	79.02	16.71	11.75
Feb-16	35.65	79.82	17.97	22.01	36.14	84.61	18.29	14.25	38.00	84.04	19.76	12.60
Mar-16	35.82	84.35	18.26	21.89	37.44	87.37	18.88	15.44	38.01	86.48	18.57	13.13

**DALLA CEMENT FACTORY**  
(A Unit of Jaiprakash Associates Ltd.)

**AMBIENT AIR QUALITY MONITORING RESULTS FROM APRIL 2015 to MARCH 2016**

**PLANT AREA**

Location →	Main Gate Area				CPP Area				Estate Office Area			
Parameter →	PM 2.5, ( $\mu\text{g}/\text{m}^3$ )	PM 10, ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> , ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> , ( $\mu\text{g}/\text{m}^3$ )	PM 2.5, ( $\mu\text{g}/\text{m}^3$ )	PM 10, ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> , ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> , ( $\mu\text{g}/\text{m}^3$ )	PM 2.5, ( $\mu\text{g}/\text{m}^3$ )	PM 10, ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> , ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> , ( $\mu\text{g}/\text{m}^3$ )
↓ Month												
Apr-15	40.65	81.26	15.51	20.47	40.28	80.93	14.88	19.83	39.75	81.65	13.63	19.47
May-15	40.52	81.23	15.16	20.34	40.42	80.92	15.23	20.06	39.71	81.87	13.26	19.35
Jun-15	41.86	84.81	16.67	25.56	42.84	86.70	17.31	13.56	42.97	86.50	16.98	14.26
Jul-15	40.75	80.88	15.42	20.45	40.18	80.90	14.91	19.92	39.77	81.77	13.66	19.46
Aug-15	40.78	80.93	15.46	20.49	40.21	80.97	14.93	20.19	39.85	81.81	13.69	19.63
Sep-15	40.83	82.42	16.64	25.49	42.45	85.43	17.26	13.41	43.02	84.55	16.95	14.23
Oct-15	39.88	79.07	14.53	19.29	39.25	80.05	13.95	18.80	38.66	77.74	13.41	18.12
Nov-15	40.70	80.03	15.35	20.42	40.10	79.77	14.79	20.11	39.66	81.31	13.60	19.51
Dec-15	36.26	78.39	15.36	23.04	37.88	81.40	15.98	10.96	38.45	80.52	15.67	11.78
Jan-16	32.55	74.81	14.92	21.16	33.04	79.60	15.24	13.40	34.90	79.02	16.71	11.75
Feb-16	35.65	79.82	17.97	22.01	36.14	84.61	18.29	14.25	38.00	84.04	19.76	12.60
Mar-16	35.82	84.35	18.26	21.89	37.44	87.37	18.88	15.44	38.01	86.48	18.57	13.13