

**JAYPEE**  
GROUP

JALIDCFIENV/282-11

September 20, 2016

विवेक चंद्र प्रसाद एन.ए.एम.

**JAI PRAKASH**  
ASSOCIATES LIMITED

(Cement Division)

To,

**Member Secretary**

U.P. Pollution Control Board

Lucknow

**Sub: Environment statement (Form V) for financial year 2015-16 of Captive Limestone Mines i.e. Dalla, Julgul, Bhalua and Padrach Limestone Mine.**

Dear Sir,

Please find enclosed herewith the Environment Statement of our Captive Limestone Mines i.e. Dalla Limestone Mine Julgul, Bhalua and Padrach Limestone Mine for financial year 2015-16, 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)



Intertek



Works: State Highway-5, Post: Dalla, Distt. Sonbhadra (U.P.), India  
Pin: 231 207, Ph.: 05445-265778, 265801, 265802, Fax 05445-265776

Corp. & Regd. Office: Sector - 128 Noida - 201304, (U.P.), India  
Ph.: 0120 - 4609000, 2470800, Fax: 0120 - 4609464, 4609496

**JAYPEE**  
**CEMENT**



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

**Dalla Limestone (Kajrahat) Mine), Julgul, Bhalua and Padrach Lime stone Mines**



**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: Sonebhadra (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.-Sonbhadra (U.P.)

Out of Four Dalla, Julgul, Bhalua, Padrach lime stone mines, only non- forest area of Julgul Limestone mines and Bhalua Lime stone mines are in operation.

"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, Sonebhadra (UP)
(II)	Industry Category	Red Category and large
(III)	Production Capacity	Julgul 53000 MT/ Month Bhalua- 107000 MT/Month ( Limestone)
(IV)	Year of Establishment	2010
(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

Mines Spraying - 50

Domestic - 15

(ii) Consumption per unit of production

Name of the Product	Process Water Consumption per unit of Product Output m <sup>3</sup> /MT	
	During the Previous Financial Year (2014-15)	During the Current Financial Year (2015-16)
Lime stone	0.069096	0.012024

**B. Raw Material Consumption:**

Name of the Raw Material	Name of Product	Consumption of Raw Material per Unit of Product Output (MT/MT of Limestone)	
		During the Previous Financial Year (2014-15)	During the Current Financial Year (2015-16)
HSD	Limestone	0.000628	0.000541
Explosive (ANFC)		0.000167	0.000139

**PART - C**

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

(Parameters as specified in the consent issued)

S. No.	Pollutants	Quantity of Pollutants Discharged (Mas <sup>5</sup> / day) (tonne/day)	Concentrations of Pollutants in discharged (Mass / Volume) (mg/Nm <sup>3</sup> )	Percentage of variation from prescribed standard with reasons
(A)	Water	Zero Discharge		
(B)	Air	Ambient Air Quality Monitoring Report is attached as Annexure-1		

**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 integrated Limestone mines

**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	2.95 Lac MT Over burden waste is generated during mining operation and stacked at earmarked location.	1.40 Lac MT Over burden waste is generated during mining operation and stacked at earmarked location.
(b)	From Pollution Control facilities	NA	NA
(c)	Qty. recycled or reused Within the unit.	NIL	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**  
 Registered Office  
 112, 5th Floor, S. Chinnayya  
 Hyderabad-500 057, India  
 T: +91 40 3726 4144  
 F: +91 40 3726 3657



BSIEDTO

DALLA CEMENT FACTORY  
 (UNIT OF JAIHAKASH ASSOCIATES LIMITED)  
 POST: DALLA DIST. VONERHADRRA (U.P) - 211 297

Report Number: 06838/16-17/VLL/000/07  
 Issue Date: 2016-08-01  
 Your Ref: PGM/01/PPD/03/04/05/06/07  
 Inv Date: 2016-06-23

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Sample Particulars: USED OIL SAMPLE

Sample Registration date: 2016-07-18      Sampling Date: 2016-07-18  
 Analysis starting date: 2016-07-18      Analysis Completion date: 2016-07-20  
 Samples collected at: Used Oil  
 Tests required: Polychlorinated Biphenyls (PCBs), Sediment, Lead, Arsenic, Cadmium + Nickel, Poly Aromatic Hydrocarbon + (PAH), Total Halogens, Sulfur and Water Content.  
 SAMPLES COLLECTED BY VIMTA LABS LTD.      LAB REF. 00

**TEST RESULTS**

Sl. No	PARAMETER	UDM	Result
1	Polychlorinated biphenyls (PCBs)	mg/L	<0.01
2	Poly Aromatic Hydrocarbon (PAH)	mg/L	<0.01
3	Sediment	mg/L	0.24
4	Lead	mg/L	10.16
5	Arsenic	mg/L	<0.1
6	Cadmium + Nickel	mg/L	1.36
7	Total Halogens	mg/L	0.04
8	Sulfur	mg/L	1.54
9	Water Content	%	0.31

**Dr. Subha Reddy Mallampati**  
 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 & Transboundary Movement) Rules.

**Solid Waste:**

Waste generated so far has been stacked separately as per approved Mining Plan (333.228 Ha). However it acts as an Active Dump because this material is Sub Grade Limestone having > 4.50 % MgO. So this is being used as blending material whenever we are getting some good grade Limestone (<3.00% MgO). In Conceptual Stage when we will mine below surface general ground level and achieve Ultimate Pit Depth i.e. 150 MSL for Julgul and Bhalua Mines, then only backfilling of waste material will be started. For this purpose non-mineralized /worked out area will be selected for back filling for making dump. Afterward, used for Plantation after spreading one layer of (1 feet) top soil over waste material (After labelling the top surface and sides of Dormant Dumps). Suitable Native Species will be planted to arrest erosion and Surface Run off. Monitoring & management of reclaimed area will be done by Horticulture Dept. of Dalla Cement Factory, Dalla.

External dump heights will be maintained 30 mts. with benches of 10 mtrs. height, Over all slope is 28°. Trenching work around mines area at present (333.228 Ha.), around Waste Dump and Top soil Dump has been made. Soak Pit/Sedimentation Pit is made to arrest Silt before final discharge of water to Natural course of Nallah. At Present one Natural course of Nallah in the middle of hillocks exists on Non-Mineralized Area (Arangi Shale), which finally meets with the Nallah with Small check Dams/Retaining walls. At present as we are mining above ground level so no accumulated Water is present only Rain water Runoff is present which naturally flows towards Natural Nallahs. Although we have generated a reservoir at the bottom bench of the pit, in which water accumulates & finally goes to natural course of nallah through siltation tank, Check dam & a reservoir (pond).

PART – G

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

- Our Management is very keen towards Rain Water Harvesting. Our horticulture department is using accumulated water in naturally formed Ponds in plantation.



Conceptual Stage Stepwise, we have planned to cut trenches all around our Mine Boundary area, connecting the same with creating Reservoir. Accumulated water will be used for Plantation/Agriculture. We have generated a reservoir at the bottom bench of the pit, in which water accumulates & finally goes to natural course of nallah through siltation tank, Check dam & a reservoir (pond).

- Deep Hole Drilling & Blasting are being done in our present Billi – Markundi (Jugul) Limestone Mine. Sharp Drill Bits are being used. Sequential Blasting pattern is being used. By using of wet drilling Machines, dust pollution is minimized.
- Non – electric detonators & Delay detonators are being used to control Noise Pollution and Ground Vibrations. We have engaged Indian Bureau of Mines, Nagpur for Controlled Blasting Study with minimized ground vibrations / sound level with maximum output and good fragmentations. We are implementing their recommendations in drilling & blasting. We have already received permission for Mechanized Mining with use of Deep Hole Drilling & Blasting and Heavy Earth Moving Machines by Directorate General of Mines Safety, Dhanbad.
- We are not doing Secondary Blasting like Pop Shooting / Plaster Shooting to avoid Noise pollution / Fly Rock. We are using Rock Breakers to Break Big Size Boulders.
- Now In Conceptual Stage Company has planned to develop a dense green belt all along Mining Lease Boundary to control pollution due to mining activities.
- We have identified 10.00 Ha. area within our Dalla Limestone Mining Lease. It is Non – Mineralized area, having naturally grown trees, bushes and grasses. DFO, Obra has given his consent for protecting Flora & Fauna of this area.

#### 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:

- ✓ 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.
- ✓ Treated water from STP is reused in colony through well connected gravity flow water line for green belt development and sprinkling on roads.

- ✓ Regular Water sprinkling arrangement is provided for dust suppression.
- ✓ Arrangement of Vermi-Compost system for colony waste debris and plant leaf litters for waste management.

Part-I

**ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF ENVIRONMENT.**

Plantation carried out in mines and plants are as follows.

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>

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

(Handwritten signature)  
(U.S. Choudhary)

(Handwritten signature)  
(U.S. Choudhary)  
(General Manager)



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

AMBIENT AIR QUALITY MONITORING RESULTS FROM APRIL 2015 to MARCH 2016

INTEGRATED MINES

Location	Drilling Site				L/S Loading Site				Haulage Road				Near Mine Office			
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> , ( $\mu\text{g}/\text{m}^3$ )	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	38.10	78.24	15.65	20.15	36.78	76.11	14.56	19.45	35.25	75.79	15.66	21.02	33.81	74.44	15.87	20.25
May-15	39.45	72.19	20.49	22.35	38.59	75.85	20.18	24.54	35.04	75.78	19.21	24.66	33.84	74.49	18.57	22.90
Jun-15	46.20	78.61	19.70	24.31	41.10	78.21	19.60	23.26	39.51	82.01	21.11	24.31	41.24	78.44	20.47	26.42
Jul-15	37.47	78.32	15.59	20.08	36.78	76.11	14.56	19.45	35.25	75.79	15.66	21.02	33.81	74.44	15.87	20.25
Aug-15	39.44	72.17	20.48	22.35	38.22	76.08	20.73	24.53	35.07	75.79	19.24	24.64	33.88	74.49	18.57	22.92
Sep-15	45.95	78.65	19.58	24.31	41.10	78.02	19.60	23.26	39.51	81.76	21.11	24.31	41.24	78.44	20.47	26.42
Oct-15	35.14	76.15	16.48	19.58	35.36	75.54	14.14	19.60	34.29	74.80	12.72	17.81	32.81	72.94	15.07	17.55
Nov-15	39.78	70.10	18.65	20.98	37.71	78.70	21.66	23.27	35.78	76.05	18.30	24.09	34.00	74.17	20.83	22.23
Dec-15	44.84	78.75	17.50	24.92	41.07	74.18	19.16	22.71	37.57	80.73	21.06	24.92	41.41	80.09	20.13	27.59
Jan-16	38.46	74.98	16.48	21.58	34.69	70.41	16.43	19.37	31.19	76.96	18.33	21.58	35.03	76.32	17.40	24.25
Feb-16	39.82	74.84	17.83	20.97	34.72	74.44	17.69	19.92	33.13	78.24	18.72	20.97	34.86	74.67	17.91	23.08
Mar-16	40.80	76.84	20.43	23.07	35.70	76.44	20.29	22.02	34.11	80.24	21.32	23.07	35.84	76.67	20.51	25.18