

**CHILHATI LIMESTONE MINES OF M/S NUVOCO VISTAS CORP.LTD
VILLAGE CHILHATI
DISTT. BILASPUR, CHHATTISGARH**

Environment clearance

Environment clearance, Letter No. J-11015/210/2010-IA.II (M) GOI and MoEF dated 18/9/2014 for production of 4.0 MTPA for Chilhati Limestone mine.

CONSENT TO OPERATE

Air Consent Letter NO. 1009/TS/CECB/2018 Date 18/04/2018 for 1.38 MTPA
Water Consent Letter NO. 1007/1S/CECB/2018 Date 18/04/2018 for 1.38 MTPA

Monitoring Data for the Month of Mar 21

KEY PARAMETERS																	
A) STATIC INFORMATION																	
1	MINE LEASE AREA		:		1085.365 Hect.												
2	PRODUCTION		:		1.38 MTPA												
3	LEASE DURATION		:		2065												
4	DATE OF COMMENCEMENT OF WORK		:		Mines operated since 19 th April 2017												
B) DYNAMIC PARAMETERS																	
(i) Ambient Air Quality																	
Ambient Air Quality Monitoring Station																	
Parameters (µg/m ³)	Mines office		Drilling Area		Haulage Road		Loading Area		Chilhati Village		Jaitpuri Village		Semradih Village		Pataidih Village		
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	
PM10	65.1	61.8	68.3	70.6	71.2	65.2	69.3	70.7	59.1	59.3	55.4	58.7	59.2	57.3	60.2	58.4	
PM2.5	25.1	36.2	40.3	42.4	42.2	35.4	38.2	40.6	30.6	37.4	31.4	33.1	33.9	29.2	35.3	31.7	
Sulphur Dioxide SO ₂	9.2	9.7	10.2	10.2	9.7	8.9	10.4	10.5	9.7	9.9	10.6	8.7	9.1	10.4	10.2	10.5	
Nitrogen Dioxide NO ₂	11.6	10.8	10.8	10.3	13.4	11.3	10.4	10.9	11.2	10.6	11.5	12.1	11.5	10.1	10.1	9.8	
Carbon Monoxide CO	0.18	0.25	0.2	0.22	0.21	0.28	0.22	0.21	0.24	0.24	0.19	0.21	0.2	0.21	0.22	0.21	
NAAQ STD- PM10-100 µg/m³, PM2.5-60 µg/m³ SO₂ & NO₂-80 µg/m³ and CO-4 mg/m³																	
(ii) Vibration (PPV) 3.1/ Sec at the distance of 350 meter from blast site.																	
(iii) Quality of Discharge Water:- Zero Discharge Water From Mines																	
1	Total Dissolved Solid (TDS)		:		-												
2	Dissolved Oxygen(DO)		:		-												
3	PHI		:		-												
4	Total Suspended solids (TSS)		:		-												
(iv) Greenbelt /Plantation																	
1	Nos. of Trees planted till date -		:		16963 nos. Plantation at Chilhati Mines												
2	Calendar year wise (progressive)		:		2019						2020						
					2378						3800						

Raghu
(Raghavendra Prasad Janigirdar)
Sr. Vice President - ACP

For Nuvoco Vistas Corp.Ltd
Arasmeta Cement Plant

Nuvoco Vistas Corp. Ltd.

Arasmeta Cement Plant, P.O. Gopalnagar, Dist. Janigir - Champa, Chhattisgarh - 495663 (India)

Website: www.nuvoco.org | CIN: U26900MH1999PLC118229

Registered Office: Equinox Business Park, Tower-3, East Wing, 4th Floor, LBS Road, Kurla (West), Mumbai-400070

**KIRARI LIMESTONE MINES OF M/S NUVOCO VISTAS CORP.LTD
VILLAGE KIRARI - CHORBHATTI
DIST. JANJGIR - CHAMPA, CHHATTISGARH**

Environment clearance

Environment clearance. Letter No. J11015/23/2002- IA, II (M) GOI, and MoEF dated 9/12/2003 for production of 0.36 MTPA for Kirari limestone mine.


CONSENT TO OPERATE

Air Consent Letter NO. 2290/RO/TS/CECB/2018 Date 04/08/2018 for 0.36 MTPA

Water Consent Letter NO. 2289/RO/TS/CECB/2018 Date 04/08/2018 for 0.36 MTPA

Monitoring Data For the Month of Mar '2021

KEY PARAMETERS																	
A) STATIC INFORMATION																	
1	MINE LEASE AREA		:		167.048 Hect.												
2	PRODUCTION		:		0.36 MTPA												
3	LEASE DURATION		:		25/08/2050												
4.	DATE OF COMMENCEMENT OF WORK		:		Mines operated since 2006												
B) DYNAMIC PARAMETERS																	
(i) Ambient Air Quality																	
Ambient Air Quality Monitoring Station																	
Parameters (µg/m ³)	Mines office		Drilling Area		Haulage Road		Loading Area		Khapri - North		Kirari - South		Banahil - west		Chorbhati - East		
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	
PM10	72.6	74.1	81.2	NR	75.7	76.2	78.4	79.3	64.8	63.7	69.5	70.6	70.9	71.8	67.3	68.7	
PM2.5	42.3	43.6	49.5	NR	44.1	44.8	46.3	47.6	37.4	36.9	40.7	41.5	41.2	41.9	38.9	39.4	
Sulphur Dioxide SO ₂	10.5	10.2	12.8	NR	11.5	11.1	12.1	12.4	8.3	7.9	11.2	10.8	11.9	12.4	9.7	9.5	
Nitrogen Dioxide NO ₂	12.6	12.3	15.2	NR	13.8	13.5	14.6	15.6	10.5	9.8	12.9	12.7	13.5	13.9	11.7	11.2	
Carbon Monoxide CO	0.21	0.19	0.27	NR	0.23	0.21	0.25	0.28	0.16	0.14	0.22	0.2	0.24	0.26	0.19	0.18	
NAAQ STD- PM10-100 µg/m³, PM2.5-60 µg/m³ SO₂ & NO₂-80 µg/m³ and CO-4 mg/m³																	
(ii) Vibration (PPV) 2.4 / Sec at the distance of 200 meter from blast site.																	
(iii) Quality of Discharge Water:- Zero Discharge Water From Mines																	
1	Total Dissolved Solid (TDS)		:		-												
2	Dissolved Oxygen(DO)		:		-												
3	PH		:		-												
4	Total Suspended solids (TSS)		:		-												
(iv) Greenbelt/Plantation																	
1	Nos. of Trees planted till date -		:		49860 nos. Plantation at Kirari Mines (Upto Dec 2020)												
2	Calendar year wise (progressive)		:		2019						2020						
					2000 Nos.						2500 Nos.						


(Raghavendra Bahadur)
Sr. Vice President - ACP
For Nuvoco Vistas Corp.Ltd
(Arasmeta Cement Plant)

Nuvoco Vistas Corp. Ltd.

Arasmeta Cement Plant, P.O. Gopalnagar, Dist. Janjgir - Champa, Chhattisgarh - 495663 (India)

Website: www.nuvoco.in | CIN. U26940MH1999PLC118229

Registered Office: Equinox Business Park, Tower.3, East Wing, 4th Floor, LBS Road, Kurla (West), Mumbai 400070

NUVOCO

ARASMETA LIMESTONE MINES OF M/S NUVOCO VISTAS CORP.LTD VILLAGE ARASMETA, DISTT. JANJGIR - CHAMPA, CHHATTISGARH

Environment clearance

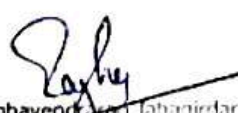
Letter No. J11015/64/2003- IA, II (M) GOI, and MoEF dated 18//2005 for production of 2.7 MTPA for Arasmeta Limestone mine.

CONSENT TO OPERATE

Air Consent & Water 7100/TS/CECB/2019 Dated 11/01/2019 for 2.7 MTPA

Monitoring Data for the Month Mar` 2021

KEY PARAMETERS																		
A) STATIC INFORMATION																		
1	MINE LEASE AREA		:		499.987 Hect													
2	PRODUCTION		:		2.7 MTPA													
3	LEASE DURATION		:		31/03/ 2030													
4.	DATE OF COMMENCEMENT OF WORK		:		Mines operated since 1982													
B) DYNAMIC PARAMETERS																		
(i) Ambient Air Quality																		
Ambient Air Quality Monitoring Station																		
Parameters ($\mu\text{g}/\text{m}^3$)	Mines office		Drilling Area		Haulage Road		Loading Area		Crusher Area		Arasmeta Village		Parsada Village		Amora Village		Sonsari Village	
	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II	I	II
PM10	71.5	70.6	79.2	77.2	78.5	76.4	75.8	73.9	74.3	72.9	69.7	64.2	68.7	65.6	69.3	66.4	70.6	68.1
PM2.5	47.1	41.3	48.3	46.2	47.4	45.1	46.2	44.4	45.8	42.8	39.6	36.8	38.5	37.5	39.1	38.1	40.1	38.4
Sulphur Dioxide SO ₂	11.5	10.0	11.2	12.1	13.2	12.5	12.3	11.6	12.3	11.9	11.4	9.8	9.8	8.7	11.2	9.1	10.4	11.2
Nitrogen Dioxide NO ₂	13.9	13.4	13.1	13.3	16.3	16.1	15.5	13.2	15.2	14.9	13.6	11.8	12.1	10.5	13.4	11.4	12.8	12.9
Carbon Monoxide CO	0.26	0.26	0.27	0.33	0.29	0.35	0.3	0.28	0.28	0.32	0.21	0.23	0.2	0.18	0.24	0.22	0.22	0.25
NAAQ STD- PM10-100 $\mu\text{g}/\text{m}^3$, PM2.5-60 $\mu\text{g}/\text{m}^3$ SO₂ & NO₂-80 $\mu\text{g}/\text{m}^3$ and CO-4 mg/m³																		
(ii) Vibration (PPV) 2.03/ Sec at the distance of 200 meter from blast site.																		
(iii) Quality of Discharge Water:- Zero Discharge Water From Mines																		
1	Total Dissolved Solid (TDS)		:		-													
2	Dissolved Oxygen(DO)		:		-													
3	PH		:		-													
4	Total Suspended solids (TSS)		:		-													
(iv) Greenbelt/Plantation																		
1	Nos. of Trees planted till date -		:		1044897 Around Plant, Colony & Included Arasmeta Mines & Harihar Project up to Dec 2020)													
2	Calendar year wise (progressive)		:		2019							2020						
					5000							5000						


(Raghavendra Singh Jahagirdar)
Sr. Vice President - ACP
For Nuvoco Vistas Corp.Ltd
(Arasmeta Cement Plant)

Nuvoco Vistas Corp. Ltd.

Arasmeta Cement Plant, P.O. Gopalnagar, Dist. Janjgir - Champa, Chhattisgarh - 495663 (India)

Website: www.nuvoco.in | CIN: U26940MH1999PLC118229

Registered Office: Equinox Business Park, Tower.3, East Wing, 4th Floor, LBS Road, Kurla (West), Mumbai 400070

**ARASMETA CEMENT PLANT OF M/S NUVOCO VISTAS CORP.LTD.
VILLAGE ARASMETA, PO- GOPALNAGAR, DISTT.
JANJGIR - CHAMPA, CHHATTISGARH**

CONSENT TO OPERATE

PLANT: - AIR Consent Letter No. 3454/TS/CECB/2018 dated 23/07/2018 for Cement 22.4 Lacs MT/Annum
Water Consent Letter No. 3452/TS/CECB/2018 dated 23/07/2018 for Cement 22.4 Lacs MT/Annum

D.G Set: - AIR & Water Consent Letter No. 3666/TS/CECB/2020 date 21/07/2020 for 3 x 6 = 18 MW.

Monitoring Data For the Month of Mar` 2021

A. Stack Emission – Consent Condition for Particulate matter -Max. 30 mg/Nm³

S.N.	Stack Attached to	PCEs	Particulate Matter (Mg/Nm ³)
1	KILN & RAW MILL -1	Bag Filter	15.7
2	PC & RAW MILL -2	Bag Filter	17.5
3	COOLER	ESP	28.5
4	COAL MILL -1	Bag Filter	15.3
5	COAL MILL -2	Bag Filter	18.5
6	CEMENT MILL -1	Bag Filter -1	16.8
7	CEMENT MILL -1	Bag Filter -2	18.4
8	CEMENT MILL -2	ESP	15.5
9	CEMENT MILL -2	Bag Filter	17.8
10	DG-3	-	NR
11	DG-4	-	NR
12	DG-5	-	NR

SD-Shut down, NR- Not running ND-Not done

B. Ambient Air Quality –

Pollutants	Ambient Air Quality (Monthly Average)				
	NAAQ STD.	LOCATION			
		Near Wagon Tippler - East	Near Main Security Gate - West	Near Rail way TXR Office -North	Near Old Truck Tippler (Near Petrol Pump) – South
PM10 (µg/m ³)	100	76.7	72.1	69.7	74.2
PM2.5 (µg/m ³)	60	46.3	41.9	39.8	44.4
Sulphur Dioxide SO ₂ (µg/m ³)	80	14.2	12.0	10.2	13.3
Nitrogen Dioxide NO ₂ (µg/m ³)	80	18.0	14.0	12.4	15.6
Carbon Monoxide CO (mg/m ³)	4	0.365	0.295	0.22	0.32

C- Discharge Water Quality:

Cement plant maintained Zero Discharge, for cooling water close circuit arrangement, Plant domestic water discharge through Sock pit. Sewage Treatment Plant installed in colony for treatment of Domestic wastewater, Treated water used for Horticulture purpose.

Quality of Treated water of STP:

S.N.	Pollutants	Monthly average Results	CECB Standard (Max)
1	pH	7.55	5.5 - 9.0
2	Suspended Solids	42	100 mg/Ltr.
3	Chemical Oxygen Demand (COD)	68	250 mg/Ltr
4	Biological Oxygen Demand (BOD)	21	30 mg/Ltr
5	Oil & Grease	<1	10 mg/Ltr



(Raghavendra Jahagirdar)

Sr. Vice President –ACP

For Nuvoco Vistas Corp.Ltd

(Arasmeta Cement Plant)

Nuvoco Vistas Corp. Ltd.

Arasmeta Cement Plant, P.O. Gopalnagar, Dist. Janjgir – Champa, Chhattisgarh – 495663 (India)

Website: www.nuvoco.in | CIN: U26940MH1999PLC118229

Registered Office: Equinox Business Park, Tower.3, East Wing, 4th Floor, LBS Road, Kurla (West), Mumbai 400070