MAHARASHTRA POLLUTION CONTROL BOARD

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KALPATARU POINT, 3rd Floor. Sion-Matunga Scheme Rd. No.8. Opp. Sion Circle, Sion (East). Mumbai-400 022.

Date:08/05/2012

RED/ LSI

Consent No. BO /JD (APC)/EIC No. CH-0843-12/R/CC- (A(-422

Consent to Operate under Section 26 of the Water (Prevention & Control of Pollution) Act. 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act. 1981 and Authorization / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Trans Boundary Movement) Rules 2008. [To be referred as Water Act, Air Act and H W (M, H & TM) Rules respectively].

CONSENT is hereby granted to

M/s. Ultratech Cement Ltd., Awarpur Cement Works, P.O.Awarpur, Tal-Korpana,Dist- Chandrapur.

located in the area declared under the provisions of the Water Act. Air act and Authorizatic: under the provisions of H W (M, H & TM) Rules subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

1. The Consent to Operate is granted for a period up to 31.03.2015.

2. The Consent is valid for the manufacture of –

<u>Sr.No.</u>	Product	Maximum Quantity
1.	Portland Cement	4.48 million ton/year
2.	Lime Stone	5.0 Million ton/Year
3.	Electricity	3 x 23 MW
4.	Clean Coal	0.71 million ton/year.
5.	Middling	0.38 million ton/year.
6.	Rejects	0.11 million ton/year.
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3. CONDITIONS UNDER WATER ACT :

- (i) The daily quantity of trade effluent from the factory shall be 1693.00 m^3 .
- (ii) The daily quantity of sewage effluent from the factory shall not exceed 858.0 m^3
- (iii) Trade Effluent Treatment: The applicant shall provide comprehensive treatment system consisting of primary / secondary and/or tertiary treatment as is warranted with reference to influent quality and operate and maintain the same continuously so as to achieve the quality of the treated effluent to the following standards:

1	рН	Between	5.5 to 9.0
2	Oil & Grease	Not to exceed	10 mg/l
3	Suspended Solids	Not to exceed	100 mg/l.
4	BOD 3 days 27° C.	Not to exceed	100 mg/l.
5	COD	Not to exceed	250 mg/l
6	TDS	Not to exceed	2100 mg/l.
7	Chlorides	Not to exceed	600 mg/l.
8	Sulphates	Not to exceed	1000 mg/l
9	Phenol	Not to exceed	1.0 mg/l

(iv) The industrial effluent arising from various sections of Power Plant shall be given such treatment either collective or individually as the site condition permits that the final quality of effluent shall have following character standards:

I. Condensor Cooling Water :

 pH Between 6.5 to 8.5
 Temperature Not to exceed 5 Degree C. Higher than the intake water temperature.
 Free available Chlorine Not to exceed 0.5 mg/l

11.	Boiler Blowdown :			
	1) Suspended Solids	Not to exceed	100	mg/l.
	2) Oil & Grease	Not to exceed	20	mg/l.
	 Copper (Total) 	Not to exceed	1	mg/l.
	4) Iron (Total)	Not to exceed	1	mg/l.
III.	Cooling Tower Blowdown :			-
	 Free available Chlorine 	Not to exceed	0.5	mg/l.
	2) Zinc	Not to exceed	1	mg/l.
	 Chromium (Total) 	Not to exceed	0.2	mg/l.
	 Phosphate 	Not to exceed	5	mg/l.
IV.	Ash Pond Effluent :			•
	1) pH	Between 6.5 to	0 8.5	
	Suspended Solids	Not to exceed	100	mg/l.
	3) Oil & Grease	Not to exceed	20	mg/l.

(v) Trade Effluent Disposal: The treated effluent shall be recycle/reused to the maximum extent for cooling, ash quenching, ash slurry & dust separation and remaining disposed on land for gardening/plantation purpose in the factory premises only.

(vi) Sewage Effluent Treatment: The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the same continuous, so as to achieve the quality of treated effluent to the following standards.

- (1)Suspended SolidsNot to exceed100 mg/l.(2)BOD 3 days 270 C.Not to exceed100 mg/l.
- (vii) **Sewage Effluent Disposal:** The treated domestic effluent shall be recycle/reused in the process for cooling; dust suppression etc to the maximum extent and remaining shall be used on land for gardening.

(viii) Non-Hazardous Solid Wastes:

Sr.No	Type of waste		Treatment	Disposal
		Quantity		
1	Fly Ash	12,600 Ton/day		Re-cycled in cement making Dispose as per Govt. of India Guidelines Notification vide no.SO 763(E)dated 14.9.1999.

(ix) Other conditions:

- 1) The industry shall monitor effluent quality regularly.
- 2) Green Belt a forestation shall be done up to 33/% on available open space land.
- 4. The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules there under:

The daily water consumption for the following categories is as under:

(i) Domestic	 1072	CMD
(ii) Industrial Processing	 521.0	CMD
(iii) Industrial Cooling/boiler	 10557	CMD
(iv) Agriculture/Gardening	 10.0	CMD

The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

5. CONDITIONS UNDER AIR ACT :

(i) The applicant shall install a comprehensive control system consisting of control equipments as is warranted with reference to generation of emission and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:

:2:

A) Control Equipment:

1) For Cement Plant

I) Dust collector of sufficient capacity shall be provided to

a) Coal mill I & II, b) Packers I to X , operated properly.

II) Electrostatic Precipitator of 99 % efficiency provided to Kiln I & II.

Cooler I & II, Cement Mill I to IV, shall be operate & maintain properly.

2) For Lime Stone Mine :-

1) Lime handling plant will be provided with dust collector and Automatic Water Sprinkler.

2) Spraying of water on all working area, dump area, stock piles.

3)Lime shall be properly covered during transportation

4) The applicant shall carry out tree plantation along road side and around dumps or compulsory afforestation as per proposal approved by forest department. The tree plantation programme shall be taken up well in advance of the actual mining activity, so that green belt of sufficient width and height is developed between mining area/roads and surrounding environments.

5) Black topped metalled roads shall be provided and well maintained to prevent dust formation.

6) Overloading of dumper shall be avoided to prevent spillages.

7)The correct type of quantity of explosives shall be used to avoid the excess dust formation and vibration in the surrounding areas

8) The slope of overburden shall have slope but not more than 28 degree to the horizontal. The overburden shall be properly covered by vegetation for stabilization.

3) For Captive Power Plant:-

i) Electrostatic Precipitator to Boiler to limit the particulate matter should be operated & maintained properly.

ii) Dust collection system / automatic water sprinkler system provided to coal handling plant should be operated & maintained properly.

iii) Dust collector of sufficient capacity / automatic water sprinkler system should be provided to prevent coal crusher and any other sources of SPM shall be operated and maintained properly.

iv) There shall not be any fugitive emission from coal storage yard.

vi) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain safe environment in and around the factory premises.

4) For Coal Washery Unit:-

- i) Coal handling plant shall be provided with Dust Collector, complete dust extraction arrangement and Automatic Water Sprinkler with fog nozzles shall be provided where necessary for dust-suppression Dust generation points / machinery shall be covered by hoods.
- ii) Bag filters of sufficient capacity shall be provided to coal crusher. pulverizes & all sources of dust emission and operate it properly.
- iii) Spraying of water through mist sprays and water curtains on all working area, dump area, stock piles.
- iv) Coal shall be properly covered during transportation.
- v) The applicant shall carry out tree plantation along road side.
- vi) All internal roads shall be paved and well maintained to prevent dust emissions.
- vii) Overloading of dumpers shall be avoided to prevent spillages.
- viii) Water or Water mixed chemical shall be sprayed at all strategic coal transfer points such as conveyors, loading unloading points etc. As far as practically possible conveyors, transfer points etc. shall be provided with enclosures.

- ix) The crushers/ pulverizes of the coal washeries shall be provided with enclosures, fitted with suitable air pollution control measures and finally emitted through a stack of minimum height of 30 m., conforming particulate emission standard of 100 mg/Nm³ or provided with adequate water sprinkling arrangement.
- x) Water sprinkling by using fine atomizer nozzles arrangement shall be provided on the coal heaps and on land around the crushers/ pulverisers.
- xi) Area, in and around the coal washery shall be pucca either asphalted or concreted.
- xii) Green belt shall be developed along the road side, coal handling plants residential complex, office building an all around the boundary line of the coal washery.
- xiii) Storage bunkers, hoppers, rubber decks, in chutes and centrifugal chutes shall be provided with proper rubber linings.
- xiv)Vehicles movement in the coal washery area shall be regulated effectively to avoid traffic congestion. High pressure horn shall be prohibited. Smoke emission form heavy duty vehicle operating in the coal washeries should confirm the standards prescribed under Motor Vehicle Rules 1989.
- xv) The coal transportation shall be done by conveyor system wherever possible or mechanically covered vehicles shall be provided for transportation of coal.

B) Standards for Ambient Air Pollutants :

i) PM ₁₀	_	Not exceed 100 µg / m ³ .
ii) PM _{2.5}		Not exceed 60 µg / m ³ .
iii) SO2	-	Not exceed 80 μ g / m ³
iv) NO2	_	Not exceed 80 µg / m ³ .
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C) Standards for Emissions of Air Pollutants:

i) Particulate Matter Not to exceed 50 mg/Nm³ (For Captive Power Plant)

ii) Particulate Matter Not to exceed 100 mg/Nm³ (For Cement Plant & its expansion unit iii) SO₂ Not to exceed 365 MT/day.

D) Condition of Lime Crushing:

The Suspended particulate matter measured between three meters and ten meters from any processes equipment of a lime crushing unit shall not exceed 600 μ g / m³. This unit must also adopt the following pollution control measures.

i)Dust Contaminant – cum – suppression system for the equipment.

ii) Construction of wind breaking walls

iii) Regular cleaning and wetting of the ground within the premises.

iv) Construction of the metalled roads within the premises.

v) Growing of green belt along the periphery.

E) Control Equipments for Lime Crushing:-

i) Lime handling plant will be provided with dust collector and Automatic Water Sprinkler.

ii) Spraying of water on all working area, dump area, stock piles.

iii) Lime shall be properly covered during transportation.

iv) Black topped metalled roads shall be provided and wellmaintained to prevent dust formation.

v) Overloading of dumper shall be avoided to prevent spillages.

(ii) The applicant shall observe the following fuel pattern:-

<u>Sr.No</u> .	Type of Fuel		Quantity
1.	Coal		36000 MT/day
2.	LDO		1.3 KL/day
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(Coal should have max.34% ash & 0.5% sulphur content and attempt shall be made to reduce ash content to 29%. Industry shall comply with the Fly ash Notification of Gol dated 14.9.1999 and as amended to date).

(iii) The applicant shall erect the chimney(s) of the following specifications:-

•••		ing opeometrions
<u>Sr. No.</u>	Chimney attached to	Height in meter
1.	Kiln & Raw Mill No. I	80.0
2.	Kiln & Raw Mill No. II	89.0
3.	Cooler I & II	40.0each
4.	Cement mill I & II	35.0 each
5.	Cement mill III& IV	35.0 each
6.	Coal mill I & II	40.0 each
7.	Packers (1 to10)	30.0 each
8.	Lime Stone Crusher	25.0
9.	CPP Boiler – I & II	98.0
10.	CPP Boiler – III	93.0
Conditions	for D.C. Cati	

(a) Conditions for D.G. Set:-

- 1] Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- 2] Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/acoustic treatment of the room should be designed for minimum 25 dB(A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB(A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 metres from acoustic enclosure/room and then average.
- 3] The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB/a during the night time. Day time is reckoned between 6 a.m. to 10 p.m. and night time is reckoned between 10 p.m to 6 a.m.
- 4] Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
- 5] Installation of DG Set much be strictly in compliance with recommendations of DG Set manufacturer.
- 6] A proper routine and preventive maintenance procedure for DG set should be set and follower: in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
- 7] D.G. Set shall be operated only in case of power failure.
- 8] The applicant should not cause any nuisance in the surrounding area due to operation of D G Set.
- (iv) The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2 etc. and these shall be painted /displayed to facilitate identification.
- (v) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB(A) during day time and 70 dB(A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

(vi) Other Conditions :

- 1. The applicant shall install online continuous monitoring system for stack emission analysis & same shall be directly connected to MPCB website <u>http://mpcb.gov.in</u> as well as to the respective Regional Office.
- 2. The applicant shall install additional two continuous automatic ambient air and micrometeorological monitoring station at location indicated by State Board to be set up and operate at its own cost measure SO₂, NO_x and particulate matter. These CAAQMS shall also have necessary provision of networking to the Air Quality Monitoring network of MPCB website <u>http://mpcb.gov.in</u> as well as to the respective Regional Office within next six months.
- 3. If due to any technological improvements or otherwise this Board is of opinion that all or any of the conditions referred above require variation (including the change of any control equipment eitner in whole or in part), this Board shall after g ving the applicant an opportunity of being heard very affor any of such conditions and thereupon the applicant shall be bound to comply with the conditions so varied.

- 4. The coal handling system shall be covered with proper hooding and ventilation arrangements connected to dust suppress agent so as not to allow any fugitive emissions.
- 5. A green belt with tree plantation shall be maintained up to a distance not less than 200 mtrs around the Plant.
- 6. There shall not be any fugitive emissions.
- 7. The factory authorities shall install a separate interlinked metering system showing the consumption of energy for operation of domestic and industrial effluent treatment plants. The quarterly returns of the energy / consumption shall be submitted to Board Office under intimation to respective Regional and Sub Regional Officer on each 10th of January, April, July & October.
- 8. The firm shall provide continuous flow meter for the measurement of the flow of the effluent.
- 9. The industry shall not cause any nuisance in surrounding area.
- 10. The industry shall monitor stack emissions & ambient air quality regularly.
- (vii) The applicant shall take adequate measures for control of noise levels from its own sources as follows-

Sr. No.	Location	Permissible Norms	Desired minimum
		{in dB(s)}	Thickness of Green Bel;
1	Road	65 (Commercial Area)	20
2	In Colonies	55 (Residential Area)	20
3	Near Opencast Mines	75 (Industrial (Area)	10(*40)
4	Near LSHPs	75	30
5	Near Shafts	75	20

(Open cast Mine need to be surrounded by a green belt of sufficient width as per the guidelines)

6. Hazardous Wastes (Management, Handling & Trans Boundary Movement) Rules 2008:

(i) –	The applicant shall handle hazardous wastes as specified below:	

Sr. No	Item No. of Process generating HW as per Schedule-I		Quantity	Disposal
1	5.1	Used Oil	218 kg/day	Shall be sent to CPCB/SPCB Authorised re-processor

- (ii) The authorization is hereby granted to operate a facility for collection, storage, transport and discose of hazardous waste.
- 7. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board concerned Police Station, office of Directorate of Health Services. Department of Explosives. Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.

8. General conditions:

- (i) The applicant shall bring minimum 33% of the available open land under green coverage plantation. The applicant shall submit a yearly statement by 30th September every year or available open plot area, no. of trees surviving as on 31st March of the year and no. of trees planted by September end.
- (ii) The applicant shall provide for an alternate electric power source sufficient to operate all pollution control facilities installed by he applicant and operate the same in case of power failure to maintain compliance with the terms and conditions of the consent. In the absence of same, the applicant shall stop, reduce or otherwise, control production to abide by terms & conditions of this consent regarding pollution levels.
- (iii) The firm shall submit MPCB, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as pre the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992 before 30th September every year.
- (iv) The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained. The applicant shar also submit a comparative statement of designed power and chemical consumptions vis-a-vis actual power and chemical consumption along with Environmental statement.

- Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of collection system with arrangement for measuring the form No efficient shall be admitted in the pipes/sewers down- stream of the terminal manholes No effluent shall find its way other than in designed and provided collection system. Neither storm water nor discharge from other premises shall be allowed to mix with the
- (vi) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous wastes to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf. An inspection book shall be opened and made available to the Board's officers during their visit to
- (vii) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- Applicant shall ensure to implement mitigation measures mentioned in Environment Management Plan.
- The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent. The applicant shall not change or alter quantity, quality, the rate of cischarge temperature or the mode of the effluent/ emissions or hazardous wastes or control equipments 10. provided for without previous written permission of the Board.
- This is issued pursuant to the decision of Consent Appraisal Committee meeting of the Board held on 16th 11. April: 2012
- The applicant shall submit the irrevocable bank guarantee of Rs.50.0/- Lakhs drawn in favor of RO MPCB Chandrapur within 15 days valid for one year period, in order to achieve SPM/TPM -50 mg/Nm² within 3 years period for existing cement plant and its expansion. The Captive Power 12. Plant shall achieve the SPM/TPM -50 mg/Nm³ as per the consent conditions.
- The applicant shall comply with the conditions of Environmental Clearance.
- This consent is issued with the overriding effect of the consent to operate granted to Coal 13. Washery Unit vide letter No. BO/PCI-II/EIC No.CH-0595-11/R/CC-39 dated 28.11.2011. 14.
- The total capital Investment of the industry is Rs. 961.59/- Crore.

For and on Behaif of the Maharashtra Pollution Control Board,

(Millind Mhaiskar, IAS) Member Secretary

To.

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M/s. Ultratech Cement Ltd., Awarpur Cement Works, P.O.Awarpur, Tal-Korpana,Dist- Chandrapur.

1) Regional Officer, MPC Board, Chandrapur 2) Sub Regional Officer, MPC Board, Chandrapur. They are directed to obtain the bank guarantee of Rs.50.0/- Lakhs from the industry within 15 days and submit the compliance report along with monitoring results within one month period.

3) Chief Accounts Officer, MPC Board, Mumbai.

Received Consent fe	e 01 -	Dete	Drawn on
Amount	13 D NO.	20.01.2012	HDFC Bank
Rs. 57,69,644/- Rs. 60,00,000/-	118888	2.03.2012	HDFC Bank HDFC Bank
Rs. 60,00,0001-	119921	24.04.2012	CP of Env Deptt, GoM, dated 25.8.2011.
Consent Fees receiv	ed as per revis	ed consent fee	GR of Env Deptt, GoM, dated 25.8.2011.

4) Cess Branch, MPC Board, Mumbai. 5) Master file.