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OFFICE OF THE STATE POLLUTION CONTROL BOARD, ODISHA

(Department of Forest & Environment, Govt. of Odisha)

Paribesh Bhawan, A/118, Nilakanthanagar, Unit-VIII

Bhubaneswar – 751012

By Regd. Post

No. 7467 1

IND-II-NOC- 6109

Date 25-06-20181

OFFICE MEMORANDUM

In consideration of the online application no. 2090797 for obtaining Consent to Establish for M/s Odisha Cement Plant (A unit of Shree Cement Limited), the State Pollution Control Board is pleased to convey its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 for installation of Clinker Grinding Unit of capacity 5.5 MTPA for production of cement i.e. Portland Pozzolana Cement (PPC), Ordinary Portland Cement (OPC) and Portland Slag Cement (PSC) in two phases (Phase - I: 3.0 MTPA along with DG sets 2x500 KVA + 1x250 KVA and phase - II : 2.5 MTPA along with 20 MW Captive Thermal Power Plant and Residential Colony of 100 dwelling units) near village -Chandrabalishyampur (Khata No. & Plot No. as mentioned in the application form over an area of 68.370 acres with project cost of ₹ 600 crores), Block - Athagarh, Dist.- Cuttack with the following conditions. This Consent to Establish order supersedes earlier Consent to Establish order issued vide Office Memorandum vide OM no. 18114, dated 24.12.2016 for establishment of a Cement Blending unit of capacity 5.5 MTPA along with installation of DG sets of capacities 1X125 KVA, 1X250 KVA & 1X500 KVA for power back up at the same location.

GENERAL CONDITIONS:

- 1. This Consent to establish is valid for the raw materials, product, manufacturing process and capacity mentioned in the application form. This order is valid for five years. The proponent shall commence construction of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this consent to establish shall be sought by the proponent.
- 2. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended from time to time, Hazardous Chemical Rules, / Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
- 3. The industry is to apply for grant of Consent to Operate under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & Air (Prevention & Control of Pollution)



Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board.

4. This Consent to Establish is subject to statutory and other clearances from Govt. of Odisha and/or Govt. of India, as and when applicable.

SPECIAL CONDITIONS:

A. GENERAL:

- The proponent shall obtain Environmental Clearance for the proposal as per EIA Notification, 2006 and amendment thereafter and the construction activity for the proposal shall commence after obtaining Environmental Clearance.
- 2. The proponent shall return the original Consent to Establish order granted by the Board vide OM no. 18114, dated 24.12.2016 for establishment of Cement Blending unit of capacity 5.5 MTPA along with installation of DG sets, At–Village Chandrabalishyampur, under Ghantikhal G.P. of Athagarh in the district of Cuttack within 15 days from the date of issue of this Consent to Establish as same has been withdrawn due to present proposal for Consent to Establish. The proponent shall also not take any step for installation of Cement Blending Unit.
- Ground water shall only be used during construction period with prior approval from the concerned authority and obtain permission from concerned authorities for drawal of surface / ground water for industrial purpose.
- 4. The proponent shall not use pet coke as fuel in Captive Power Plant (CPP) and Hot Air Generator (HAG).
- 5. The land on which the unit is proposed to be established shall be converted to industrial use Kisam by the competent authority. The copy of said land conversion document shall be submitted to the Board along with consent to operate application.
- 6. This consent to establish is granted for the capacity as mentioned above and any expansion in the capacity change or modification in the process addition, alternation any nature has to be undertaken with prior approval of the Board. For any change in the site or area, fresh consent to establish has to be obtained from the Board. The proponent shall carry out construction activity as per approved lay out map (copy enclosed). If the proponent wants to change the approved plant layout map, they can submit a modified plant layout map with adequate justification for such modification.
- 7. The green belt of adequate width and density preferably with local species along the periphery of the plant shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% (33 acres as proposed) of the total land area shall be under permanent green cover. The proponent shall ensure the maintenance of green belt throughout the year and for all time to come. It is advised that they may engage professionals in this field for creation and maintenance of the green belt. An action plan for this purpose shall be prepared and shall be submitted accordingly.
- 8. The unit shall not use land earmarked for green belt development and plantation i.e. 22.56 acres for any other purpose.





- The proponent shall comply to the provisions of E-Waste (Management) Rules, 2016 and amendment thereafter and shall handover e-waste to authorized collection centers/ register dismantlers / recyclers for proper disposal of e-waste.
- 10. The construction and demolition wastes to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".
- 11. Municipal Solid Waste shall be disposed off as per the Solid Waste Management Rules, 2016 and amendment thereafter.
- 12. The plastic waste if any generated from the industry as well as colony shall be sent to nearby Cement Kiln for co-processing.
- 13. The civil construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the civil construction may carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A statement indicating use of fly ash bricks during construction period shall be submitted to the Board quarterly for record.
- The construction material which has potential to be air borne shall be transported in covered trucks.
- 15. No production activity shall commence prior to installation of all pollution control measures. In case, it is found that the plant is operating without installation of appropriate pollution control equipment (s) and without permission for trial operation from the Board, a direction of closure shall be issued u/s 31-A of Air (PCP) Act, 1981 and / or u/s 33-A of Water (PCP) Act, 1974 without any further notice in this regard.
- 16. The Board may impose further condition or modify the conditions as stipulated in this order during installation and / or at the time of obtaining consent to operate and may revoke this order in case the stipulated conditions are not implemented and / or information is found to have been suppressed / wrongly furnished in the application form.
- 17. The unit shall abide by Environment (Protection) Act, 1986 and rules framed there under.

B. WATER POLLUTION:

- 18. The unit shall provide adequate capacity of rain water harvesting pond at suitable location to collect the rain water of the plant area and shall use the same in the plant.
- RO rejects from RO plant and Softener rejects from Softener shall be used for mill spray & dust suppression.
- 20. The domestic wastewater generated from the residential colony shall be treated in Sewage Treatment Plant of capacity 60 KLD to meet the following standards as notified by the MoEF&CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017. The treated water shall be reused for flushing, gardening and plantation to the maximum possible extent.

SI. No.	Parameters	Standards
1.	pH	6.5-9.0
2.	BOD(mg/l)	30
3.	TSS(mg/l)	<100
4.	Fecal Coliform (MPN/100ml)	< 1000





 Under no circumstance the industry shall discharge wastewater to outside. The industry shall completely recycle the waste water and adopt Zero Liquid Discharge (ZLD) concept as proposed.

C. AIR POLLUTION:

- 22. The emission standards issued by the MoEF&CC, Govt. of India vide G.S.R. No. 612 (E) dated 25th August, 2014 and subsequent amendment dated 9th May, 2016 and 10th May, 2016 regarding cement plants with respect to particulate matter, SO₂ and NOx shall be followed as hot gases from Hot Air Generator (HAG) will be vented through cement mill main stack.
- 23. The unit shall comply the following prescribed stack emission standards attached to the ESP of Captive Power Plant as per the Gazette of MoEF&CC, Govt. of India vide S.O. 3305 (E), dated 07.12.2015.

SI. No.	Parameters	Prescribed standard (mg/Nm³)
1.	Particulate Matter (PM)	30
2.	Sulphur Dioxide (SO ₂)	100
3.	Oxides of Nitrogen (NOx)	100
4.	Mercury (Hg)	0.03

- 24. The Unit shall install online stack monitoring system at the stack attached to cement mill for online real time data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.
- 25. Diesel power generating sets proposed as source of backup power shall be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Only low sulphur diesel will be used. The location of the DG sets may be decided in consultation with State Pollution Control Board.
- 26. The height of the stack attached to the D.G set shall confirm to the following:
 - H = h + 0.2√KVA (Where, h = Height of the building where it is installed in meter KVA = Capacity of D.G Set and H = Height of the stack in meter above ground level).
- 27. Necessary preventive measures shall be taken during construction phase so that the ambient air quality including noise shall conform to National ambient air quality standards and standards for noise in industrial area as per Annexure I and Annexure II respectively. Six monthly air quality monitoring report shall be submitted to the Board regularly. At least three (03) permanent ambient air quality monitoring station shall be established in consultation with the concerned Regional Officer of the Board.
- 28. The internal road shall be made concreted / black topped and dust suppression arrangement shall be provided on haul road by using water sprinklers.
- 29. Bag filters and suitable dust extraction system shall be installed at all potential dust generating sources to control fugitive dust emission.
- 30. Adequate pneumatic dust handling system shall be installed at the final product storage area and packaging area to avoid dust nuisance.





- 31. Pneumatic dust handling system shall also be installed at all the bag filter hoppers with common silo and telescopic chute arrangement.
- 32. Clinker shall be stored in closed silos and transfer operation shall be carried out in a closed system. Enclosures shall be provided for belt conveyors and transfer points to control fugitive emission. Transfer points shall be connected with dust extraction system.
- 33. Gypsum, slag, fly ash etc. shall be stored in covered sheds and adequate dust suppression measures shall be taken to control fugitive emission from handling of gypsum.
- 34. All internal transfers shall be carried out through closed conveyor belts and all transfer points of raw material handling will be connected with dust extraction system to control fugitive emission.
- 35. Cement from the cement grinding section shall be transported to the storage silo through air slides and bucket elevator and same shall be of closed type and connected to the dust extraction system.
- 36. Transportation of materials shall be carried out through covered container and adequate steps shall be taken to control fugitive emission during unloading.
- 37. All Pollution control equipment may be provided with separate energy meter for continuous recording of power consumption in a log book. Non-functioning of Pollution control equipment should be recorded in the same logbook along with reasons for nonfunctioning of the Pollution Control Equipment.

D. SOLID AND HAZARDOUS WASTE:

- 38. Ash generation from Captive Power Plant (CPP). Hot Air generator (HAG) and dust generation from APC Devices shall be completely reused in Cement manufacturing process.
- 39. Used Oil / used Lubricants shall be sold to authorized re-processors/ recyclers.
- 40. Separate application shall be made to obtain letter of authorization for disposal of all hazardous wastes under Hazardous and Other Wastes (Management and Trans boundary Movement) Rules, 2016 and amended thereafter.
- 41. STP sludge shall be used as manure for greenbelt development / plantation.
- 42. Garbage / food waste from Colony, Canteen & Guest House shall be used for vermicomposting and to be used as manure for green belt development.

Enclosed: Plant layout map and Annexure - I & II

MEMBER SECRETARY

To

The Vice President

M/s Odisha Cement Plant (A unit of Shree Cement Ltd.),

Near village Chandrabalishyampur,

City: Tehsil: Athagarh District: Cuttack, Odisha.



Memo No	/Date	_/
Conv forwarded to:		_

- 1. The Collector & District Magistrate, Cuttack.
- 2. The Director, Factories & Boiler, Bhubaneswar.
- 3. The DFO, Cuttack.
- 4. The District Industries Centre, Cuttack.
- 5. The Sr. Env. Engineer(C), S.P.C. Board, BBSR.
- 6. The Regional Officer, S.P.C. Board, Cuttack.
- 7. Hazardous Waste Management Cell, S.P.C. Board, BBSR.
- 8. Copy to Guard file

SR. ENV. SCIENTIST, L-I (N)

रियागः :

ा.जब कभी और अहां भी किसी अपने-अपने प्रवर्ग के लिये दो क्रमिक प्रबोधन दिनों पर मापित मूल्य, ऊपर विनिर्देश सीमा से अधिक हो ती इसे नियमित या निरंतर प्रबोधन तथा अतिरिक्त अन्वेषण करवाने के लिये पर्याप्त कारण समझा जायेगा ।"।

[फा. सं. क्यू-15017/43/2007-सी.पी.डब्ल्यू.] रजनीश दुबे, संयुक्त सचिव

टिप्पण : मूल नियम, भारत के राजपत्र में असाधारण सं.का.आ.844 (अ), तारीख 19 नवम्बर 1986 द्वारा प्रकाशित किये गये थे और पश्चातवर्ती संशोधन सं.का.आ.433 (अ), तारीख 18 अप्रैल 1987, सा.का.नि. 176 (अ), तारीख 2 अप्रैल 1996 और हाल में ही सा.का.नि. 97 (अ), तारीख 18 फरवरी 2009; सा.का.नि. 149 (अ), तारीख 4 मार्च, 2009: सा.का.नि. 512 (अ), तारीख 9 जुलाई, 2009; सा.का.नि. 543 (अ), तारीख 22 जुलाई, 2009; सा.का.नि. 596 (अ), तारीख २१ अगस्त, २००९: और सा.का.नि. ९७४ (अ) तारीख, ०४ नवम्बर २००९ द्वारा प्रकाशित किए गए ।

MINISTRY OF ENVIRONMENT AND FORESTS

NOTIFICATION

New Delhi, the 16th November, 2009

G.S.R. 826(E).— In exercise of the powers conferred by section 6 and section 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following rules further to amend the Environment (Protection) Rules, 1986, namely:-

- 1. (1) These rules may be called the Environment (Protection) Seventh Amendment Rules, 2009.
 - (2) They shall come into force on the date of their publication in the Official Gazette.
- 2. In the Environment (Protection) Rules, 1986 (hereinafter referred to as the said rules), in rule 3, in sub-rule (3B), for the words, brackets, figures and letters, "in columns (3) to (5) of Schedule VII", the words, brackets, figures and letters "in columns (4) and (5) of Schedule VII" shall be substituted.
- 3. For Schedule VII to the said rules and entries relating thereto, the following Schedule and entries shall be substituted, namely:-

"[SCHEDULE VII] [See rule 3(3B)] NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollatant	Time Weighted Average	Concentration in Ambient Air		
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	. (4)	(5)	(6)
1	Sulphur Dioxide (SO ₂), µg/m ³	Annual*	50	20	- Improved West and Gaeke
	B AND TO SERVICE AND THE SERVI	24 hours**	80	80	-Ultraviolet fluorescence
2	Nitrogen Dioxide (NO ₂), µg/m ³	Annual*	40	30	- Modified Jacob & Hochbeiser (Na-
		24 hours**	80	80	Arsenite) - Chemiluminescence
3	Particulate Matter (size less than	Annual*	60	60	- Gravimetric - TOEM
	10µm) or PM ₁₀ µg/m ¹	24 hours**	100	100	- Beta attenuation
4	Particulate Matter (size less than	Annual*	40	40	- Gravimetric - TOEM
	2.5μm) or PM _{2.5} μg/m ³	24 hours**	60	60	- Beta attenuation

(2)	(3)	(4)	(5)	(6)
Ozone (O ₁)	8 hours**	100	100	- UV photometric - Chemilminescence
	1 hour**	180	180	- Chemical Method
Lead (Pb)	Annual*	0.50	0.50	- AAS /ICP method after sampling on EPM 2000
	24 hours**	1.0	1.0	or equivalent filter pape - ED-XRF using Teflon filter
Carbon Monoxide(CO)	8 hours**	02	02	- Non Dispersive Infra Red (NDIR)
mg/m³	A CONTRACT OF A CONTRACT OF THE PARTY OF THE	04	04	spectroscopy
Ammonia(NH ₁)	1	The second secon	100	-Chemiluminescence
μg/m³	24 hours**	400	400	-Indophenol blue method
Benzene (C ₄ H ₄) µg/m ³	Annual*	05	05	Gas chromatography based continuous analyzer Adsorption and Desorption followed by GC analysis
Benzo(a)Pytene (BaP) - particulate phase only, ng/m³	Annual*	01	01	 Solvent extraction followed by HPLC/GC analysis
Arsenic (As), ng/m³	Annual*	06	06	AAS /ICP method after sampling on EPM 2000 or equivalent filter paper
Nickel (Ni), ng/m ³	Annual*	20	20	- AAS /ICP method after sampling on EPM 2000
	Ozone (O ₃) µg/m³ Lead (Pb) µg/m³ Carbon Monoxide(CO) mg/m³ Ammonia(NH ₃) µg/m³ Benzene (C ₄ H ₆) µg/m³ Benzene (BaP) - particulate phase only, ng/m³ Arsenic (As), ng/m³	Ozone (O ₃) µg/m³ 1 hour** Lead (Pb) µg/m³ 24 hours** Carbon Monoxide(CO) mg/m³ 1 hour** Ammonia(NH ₃) µg/m³ 24 hours** Benzene (C ₄ H ₆) µg/m³ Annual* µg/m³ Annual*	Ozone (O ₃) 8 hours** 100 μg/m² 1 hour** 180 Lead (Pb) Annual* 0.50 μg/m³ 24 hours** 1.0 Carbon 8 hours** 02 Monoxide(CO) 04 Annual* 100 μg/m³ 24 hours** 400 Benzene (C ₄ H ₆) Annual* 05 μg/m³ Annual* 01 Arsenic (As), ng/m³ Annual* 06 Arsenic (As), ng/m³ Annual* 06	Ozone (O ₃) 8 hours** 100 100 μg/m³ 1 hour** 180 180 Lead (Pb) Annual* 0.50 0.50 μg/m³ 24 hours** 1.0 1.0 Carbon 8 hours** 02 02 Monoxide(CO) 1 hour** 04 04 Ammonia(NH ₃) Annual* 100 100 μg/m³ 24 hours** 400 400 Benzene (C ₄ H ₄) Annual* 05 05 Benzene (BaP) - particulate phase only, ng/m³ Annual* 01 01 Arsenic (As), ng/m³ Annual* 06 66

- Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.
- ** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note.— Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation."

[F. No. Q-15017/43/2007-CPW]
RAJNEESH DUBE, Jr. Secy.

Note.— The principal rules were published in the Gazette of India, Extraordinary vide number S.O.844(E), dated the 19th November, 1986; and subsequently amended vide numbers S.O. 433(E), dated the 18th April, 1987; G.S.R. 176 (E), dated the 2th April 1996; and were recently amended vide numbers G.S.R. 97(E), dated the 18th February, 2009; G.S.R. 149(E), dated the 4th March, 2009; G.S.R. 512(E), dated the 9th July, 2009; G.S.R. 543(E), dated the 22th July, 2009; G.S.R. 595(E), dated the 21th August, 2009; and G.S.R. 794(E), dated the 4th November, 2009.

SCHEDULE

(see rule 3(1) and 4(1)

Ambient Air Quality Standards in respect of Noise

Area Code	Category of Area/Zone	Limits in dB(A) Leq *	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note

- 1. Day time shall mean from 06:00 A.M. to 10:00 P.M.
- 2. Night time shall mean from 10:00 P.M. to 06:00 A.M.
- 3. Silence zone is defined as an area comprising not less than 100 meters around hospitals, educational institutions and courts. The silence zones are zones which are declared as such by the competent authority.
- 4. Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.
- *dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A "decibel" is a unit in which noise is measured.

"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq: It is an energy mean of the noise level, over a specified period.

[F. No. Q-14012/l/96-CPA] VIJAI SHARMA, R. Secy.

SCHEDULE

(see rule 3(1) and 4(1)

Ambient Air Quality Standards in respect of Noise

Area Code	Category of Area/Zone	Limits in dB(A) Leq *	
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