



ANDHRA PRADESH POLLUTION CONTROL BOARD

D.No.33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre,
Chalamavari Street, Kasturibaipet, Vijayawada - 520010

CONSENT & AUTHORISATION ORDER

Consent Order No : APPCB/KNL/TPT/75/HO/CFO/2017-

Date:08.08.2017

CONSENT is hereby granted for Operation under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation under Rule 6 of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules 2016 and the rules and orders made there under (hereinafter referred to as 'the Acts', 'the Rules') to:

**M/s. Zuari Cements Ltd.,
Krishna Nagar, Yerraguntla,
Kadapa District.
e-mail: v.madhavareddy@zcltd.com**

(Hereinafter referred to as 'the Applicant') authorizing to operate the industrial plant to discharge the effluents from the outlets and the quantity of emissions per hour from the chimneys as detailed below:

i) Out lets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge	Point of Disposal
1.	Domestic	135 KLD	After treatment in STP, the treated effluents should be used for onland for Plantation / Reuse.

ii) Emissions from chimneys:

(Line - I)

Chimney No.	Description of Chimney
1.	Stack attached to Kiln + Rawmill-1
2.	Stack attached to Calciner + Rawmill-2
3.	Stack attached to Cooler
4.	Stack attached to Coalmill -1
5.	Stack attached to Coalmill -2
6.	Stack attached to Cement mill - 1
7.	Stack attached to Cement mill - 2
8.	Stack attached to Cement mill - 3
9.	Stack attached to 1500 KVA DG Set
10.	Stack attached to 4 x 750 KVADG Set

(Line - II)

11.	Stack attached to Kiln + Rawmill + Cooler
12.	Stack attached to Coalmill -3
13.	Stack attached to Cement mill - 4
14.	Stack attached to Lime stone crusher

iii) HAZARDOUS WASTE AUTHORISATION (FORM - II) [See Rule 6 (2)]:

M/s. Zuari Cements Ltd., Krishna Nagar, Yerraguntla, Kadapa District is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and co-processing of Hazardous Wastes namely:

HAZARDOUS WASTES PROCURED FROM OTHER INDUSTRIES:

Sl.No.	Name of the Hazardous waste	Stream	Quantity of Hazardous waste	Disposal Option.
1.	Distillation Residue	36.1 Schedule -I	12000 MT/Annum.	Co-processing in the rotary kiln.
2.	Spent carbon	28.2 Schedule -I	12000 MT/Annum.	

HAZARDOUS WASTES GENERATED IN THE INDUSTRY PREMISES:

Sl.No.	Name of the Hazardous waste	Stream	Quantity of Hazardous waste	Disposal Option.
1.	Waste /Used oil	5.1 Schedule –I	2.5 KL/Annum.	Shall be burnt in the rotary kiln / Authorised recyclers / reproprocessors.
2.	Waste grease	5.2 Schedule -I	3 T/Annum	

The industry is permitted to use the following alternative fuels and alternative raw materials in the kiln to conserve the natural resources without increasing the production capacity as mentioned below:

Sl.No	Name of the Raw Materials / fuels	Quantity (MT/Annum)
1.	Chemical Gypsum	150000
2.	Feldspar	25000
3.	GCB dust	50000
4.	Carbon Black	50000
5.	Non – hazardous waste (automobile interiors) from automobile industry	20000
6.	Non –recyclable plastic waste and paper waste from paper industry	30000
7.	Mango seeds / stones / peels from pulp industries.	25000
8.	Bio-mass – Rice husk, Ground Nut husk, coconut coir	45000
9.	Bio-mass – Red gram stalks, coffee husk, palm seed shell, cotton seed waste,	20000
10.	Bio-mass –palm fruit bunches and bagasse from sugar industry, Sunflower Stack	20000
11.	Bio-mass –Areca Nut waste, Jawar Husk, Bengal gram waste	20000
12.	Bio-mass –Coconut waste, Sugarcane waste, Subable bark, Eucalyptus bark	20000
13.	Non-hazardous waste – Lime sludge from textile & paper industry as raw materials	25000
14.	FMCG expired / Batch rejects / off specification / packaging goods (Horlicks from Glaxo smith Kline, tooth paste, Cadbury, shampoos, candy waste, biscuit waste, etc.)	25000
15.	Expired food products like Maggi Noodles etc.	25000
16.	Non-hazardous waste from custom Depots, sea ports, air ports.	20000
17.	Non –hazardous waste (rejected liquid products like cool drinks, boiler ash, WTP sludge from Food and Beverages)	35000
18.	Non-recyclable rubber from footwear industries.	35000
19.	Black carbon and pyrolysis oil from tyre pyrolysis plants.	30000
20.	Dolochar / other byproducts from sponge iron industry.	150000
21.	Tapestry waste (carpet cuts, scothbrite) from automobile industries.	10000
22.	Non-hazardous (belt cuttings, conveyor belts, drive belts) from engineering industries.	15000
23.	Iron sludge from automotive and engineering industries.	50000
24.	Iron ore fines rejects / screened / iron sludge from other industry	60000
25.	Waste cotton cloth cuttings from textile industries.	10000
26.	Foundry waste from metal foundries as alternative raw materials.	10000
27.	Red mud from aluminum industry	30000
28.	Lead slag from steel industry	25000
29.	Non-hazardous waste-rail way coach waste (seat covers, card boards, foam waste etc.)	20000
30.	FRP waste	35000
31.	Non-hazardous waste from packing industry like thermo coal, bubble wrap etc.	10000
32.	Spent carbon (beverage industry)	15000
33.	Distillation Residue solid & liquid	50000
34.	Spent carbon from pharma industry	40000
35.	FE salt /Mix salt, insulation waste, used PPEs from pharma industry	25000
36.	Paint Sludge (Automobile industry)	15000

37.	Refinery sludge (Petro chemical industry)	20000
38.	Beverage industry Spent carbon	15000
39.	ETP Bio-solid (beverage industry)	10000
40.	WTP sludge (beverage industry)	10000
41.	Spent clay (reprocessing of used oil industry)	10000
42.	Mixed Waste (Pharmaceutical industry)	10000
43.	Spent catalyst, spent carbon, Date expired medicine & off specification drugs	10000
44.	Date expired / discarded medicines (Pharmaceutical industry)	15000
45.	Organic spent solvent (solid & liquid) from pharma industry	50000
46.	Organic Residue (solid & liquid) from pharma industry	40000
47.	ETP Sludge Chemical & pharma industry	30000
48.	Flyash	1000000
49.	Mineral Gypsum	50000
50.	South Africa Coal	500000
51.	Iron Ore	40000
52.	Indian Coal	500000
53.	Slag	300000

This consent order is valid to manufacture the following products along with quantities indicated below only.

S.No	Products	Capacity
1.	Cement (OPC /PPC/PSC)	5.4 Million TPA

* The cement production is inclusive of 4.3 MTPA of clinker production.

This order is subject to the provisions of 'the Acts' and the Rules' and orders made thereunder and further subject to the terms and conditions incorporated in the schedule A, B & C enclosed to this order.

This combined order of consent & Hazardous Waste Authorisation should be valid for a period ending with the **31st day of March 2018**.

Sd/-
MEMBER SECRETARY

To
M/s. Zuari Cements Ltd.,
Krishna Nagar, Yerraguntla,
Kadapa District - 516311.

//T.C.F.B.O.//

11/09/17

JOINT CHIEF ENVIRONMENTAL ENGINEER
UNIT HEAD - IV

SCHEDULE - A

- Any up-set condition in any industrial plant / activity of the industry, which result in, increased effluent / emission discharge and/ or violation of standards stipulated in this order shall be informed to this Board, under intimation to the Collector and District Magistrate and take immediate action to bring down the discharge / emission below the limits.
- The industry should carryout analysis of waste water discharges or emissions through chimneys for the parameters mentioned in this order on quarterly basis and submit to the Board.
- All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 should be followed as applicable.
- The industry should put up two sign boards (6x4 ft. each) at publicly visible places at the main gate indicating the products, effluent discharge standards, air emission standards, hazardous waste quantities and validity of CFO and exhibit the CFO order at a prominent place in the factory premises.

5. Notwithstanding anything contained in this consent order, the Board hereby reserves the right and powers to review / revoke any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Acts by the Board.
6. The industry shall file the water cess returns in Form-I as required under section (5) of Water (Prevention and Control of Pollution) Cess Act, 1977 on or before the 5th of every calendar month, showing the quantity of water consumed in the previous month along with water meter readings. The industry shall remit water cess as per the assessment orders as and when issued by Board.
7. The applicant shall submit Environment statement in Form V before 30th September every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
8. The applicant should make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under Hazardous and Other Wastes (Management & Transboundary Movement) Rules 2016 at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts and detailed compliance of CFO conditions for obtaining Consent & Haz & Other Wastes Authorization of the Board.
9. The industry should immediately submit the revised application for consent to this Board in the event of any change in the raw material used, processes employed, quantity of trade effluents & quantity of emissions. Any change in the management shall be informed to the Board. The person authorized should not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
10. Any person aggrieved by an order made by the State Board under Section 25, Section 26, Section 27 of Water Act, 1974 or Section 21 of Air Act, 1981 may within thirty days from the date on which the order is communicated to him, prefer an appeal as per Andhra Pradesh Water Rules, 1976 and Air Rules 1982, to Appellate authority constituted under Section 28 of the Water(Prevention and Control of Pollution) Act, 1974 and Section 31 of the Air(Prevention and Control of Pollution) Act, 1981.

SCHEDULE - B

1. The effluent discharged should not contain constituents in excess of the tolerance limits mentioned below :

Outlet No.	Parameter No.	Limiting Standards
1.	pH	5.5 – 9.0
	Suspended Solids	200 mg/l
	Oil and Grease	10 mg/l
	BOD	100 mg/l

2. The industry should take steps to reduce water consumption to the extent possible and consumption should NOT exceed the quantities mentioned below :

S.No.	Purpose	Quantity
1	Process & Cooling	2510 KLD
2	Washings	
3	Industrial Cooling	
4	Domestic	155 KLD
Total:		2665 KLD

3. The emissions shall not contain constituents in excess of the prescribed limits mentioned below:

Cement plant with co-processing of wastes	Parameter	Emission Standards
	Particulate Matter(PM)	30 mg/Nm ³
	SO ₂	100 mg/Nm ³ , 700 mg/Nm ³ and 1000 mg/Nm ³ when pyritic Sulphur in the limestone is less than 0.25%, 0.25 to 0.5% and more than 0.5% respectively.
	NO _x	(1) 800 mg/Nm ³ for rotary kiln with In Line Calciner (ILC) technology (2) 1000 mg/Nm ³ for rotary kiln using mixed stream of ILC, Separate Line Calciner (SLC) and suspension pre-heater technology or SLC technology alone or without Calciner.

	HCl	10 mg/Nm ³
	HF	1 mg/Nm ³
	TOC	10 mg/Nm ³
	Hg and its compounds	0.05 mg/Nm ³
	Cd+ Ti and their compounds	0.05 mg/Nm ³
	Sb+As+Pb+Co+Cr+Cu+Mn+Ni+V and their compounds	0.5 mg/Nm ³
	Dioxins and Furans	0.1ng TEQ/Nm ³

* Particulate matter from raw mill, kiln and pre-calciner system put together shall not exceed 0.125 Kg/tonne of clinker.

The industry shall comply with above revised standards as notified by the MoEF & CC, Govt of India in G.S.R. No. 497(E) dt.10.05.2016.

4. The industry shall comply with the standards notified by MoEF&CC/CPCB from time to time. The industry should comply with emission limits for DG Sets of capacity up to 800 KW as per the Notification G.S.R. 520(E), dated 01.07.2003 under Environment(Protection) Amendment Rules, 2003 and G.S.R. 448(E), dated 12.07.2004 under the Environment (Protection) Second Amendment Rules, 2004. In case of DG sets of capacity more than 800 KW should comply with emission limits as per the notification GSR 489(E), dated 09.07.2002 at Serial No.96, under the Environment(Protection) Act, 1986.

5. The industry should comply with ambient air quality standards of PM 10(Particulate Matter Size less than 10 um) – 100 ug/m³; PM 2.5 (Particulate Matter size less than 2.5 um) – 60 ug/m³; SO₂ – 80 ug/m³; NO_x-80ug/m³, outside the factory premises at the periphery of the industry.

Standards for the other parameters as mentioned in the National Ambient Air Quality Standards CPCB Notification No.B-29016/20/90/PCI-I, dated 18.11.2009.

Noise Levels:

Day time: (6 AM to 10 PM) – 75 dB(A)

Night time : (10 PM to 6 AM) – 70 Db(A)

6. The industry shall not produce beyond the permitted capacity as mentioned in this order, without obtaining prior CFE & CFO of the Board.
7. The industry shall ensure regular maintenance and operation of the on-line stack monitoring systems and CAAQM stations with tamper proof mechanism having facilities for online calibration.
8. The industry shall maintain interlocking system for air pollution control equipments provided with raw materials feeding system so that the feeding of raw materials would be stopped in case the air pollution control equipment fails.
9. Raw materials shall be stored under closed sheds.
10. The industry shall maintain 25% additional capacity of Bag filters and ESPs.
11. The industry shall ensure implementation of the requisite measures to prevent air pollution in the surrounding area.
12. The industry shall provide adequate dust collection and extraction system to control fugitive emissions at various transfer points and the dust collected from pollution control equipments should be recycled back into the process. The compliance status should be reported to R.O.Tirupati.
13. The industry shall maintain and submit the records of daily operating hours of kiln, ESP and reasons for ESP tripping to R.O., Tirupati on monthly basis.
14. The industry should maintain the records on the clinker production, utilized for cement production and stocks maintained at on site and should submit consolidated reports to the Regional Office of the Board.
15. The industry shall maintain the following records and the same shall be made available to the inspecting officers of the Board:
 - a. Daily production details (ER-1 Central Excise Returns).
 - b. Characteristics of effluents and emissions.
 - c. Quantity of Effluents generated, treated in ETP and treated water utilized for onland for irrigation.
 - d. Log Books for pollution control systems.
 - e. Hazardous/non hazardous solid waste generated and disposed.
 - f. Manifest copies of effluents / hazardous waste.
16. The industry shall submit compliance report on the conditions mentioned in the consent order every 6 months to the Regional Office/Zonal Office.
17. The industry shall develop and maintain green belt in an area of 33% of the total area and shall take proper measures for survival of the saplings planted.

18. The Board hereby cancelled the CFO & HWA order dt 13.03.2015 issued to the industry as this consent order is having the permission for usage of alternative fuels and alternative raw materials in the kiln along with the existing consent order details.
19. The applicant shall immediately surrender the original Consent order No. APPCB/KNL/TPT/75/HO/CFO/2015-2117, dt 13.03.2015 to the Board and submit the compliance.

SCHEDULE - C

[See rule 6(2)]

[CONDITIONS OF AUTHORISATION FOR OCCUPIER OR OPERATOR HANDLING HAZARDOUS WASTES]

1. The guidelines of CPCB on co-processing in cement plants shall be followed.
2. The industry shall comply with the conditions stipulated in the order dt. 27.06.2016 issued by the Board for regular permission for co processing of Hazardous waste in the cement kiln.
3. The industry shall comply with the conditions stipulated in the order dt. 20.03.2014 issued by the Board for regular permission for co processing of Non- Hazardous waste.
4. The industry shall comply with the conditions stipulated in the order dt. 20.03.2014 issued for regular permission for co processing of Non- Hazardous waste.
5. The operator should follow the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016 notified by the Ministry of Environment & Forests, Government of India.
6. The industry shall not store hazardous waste for more than 90 days as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
7. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal to the manufacturers / dealers on buyback basis.
8. The industry shall maintain 6 copy manifest system for transportation of waste generated and a copy shall be submitted to concerned Regional Office of APPCB. The driver who transports Hazardous Waste should be well acquainted about the procedure to be followed in case of an emergency during transit. The transporter should carry a Transport Emergency (TREM) Card.
9. The industry shall maintain proper records for Hazardous Wastes stated in Authorisation in FORM-3 and file annual returns in Form- 4 as per Rule 20(2) of the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.

Sd/-
MEMBER SECRETARY

To
M/s Zuari Cements Ltd.,
Krishna Nagar, Yerraguntla,
Kadapa District - 516311.
Email: v.madhavareddy@zcl.com

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10/08/17
JOINT CHIEF ENVIRONMENTAL ENGINEER
UNIT HEAD - IV