



## ANDHRA PRADESH POLLUTION CONTROL BOARD

Paryavarana Bhavan, A-III, Industrial Estate,  
Sanathnagar, Hyderabad-500 018

Phone : 040-23887500, Website : www.appcb.ap.nic.in

### AUTO RENEWAL OF CONSENT AND AUTHORIZATION ORDER FOR OPERATIONS

In response to your application dated 12.05.2017 for Auto Renewal of Consent for operation and Authorisation Order, the Board is hereby extending validity period of Consent and Authorisation order issued vide order No.APPCB/KNL/KNL/124/HO /CFO/2016 dt.16.08.2016, for further period of 5 (FIVE) years i.e., upto 30.09.2022 under sections 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and 21 of the Air (Prevention and Control of Pollution) Act, 1981 and Authorisation under Rule 6 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

1. All other conditions mentioned in Schedules A, B & C of the combined CFO&HWA order issued by the Board vide order dated 16.08.2016 will remain same.
2. The industry shall comply with the standards issued by MoEF&CC/CPCB from time to time.
3. The industry shall submit the compliance report to the Board every six months i.e. on 1<sup>st</sup> of January and 1<sup>st</sup> of July on the conditions stipulated in the CFO order.

Sd/-

MEMBER SECRETARY

Dated:16 .06.2017

To

The Occupier

M/s. JSW Cement Ltd.,  
Bilakalagudur (V), Gadivemula(M),  
Kurnool District - 518508.

Copy to:

1. The JCEE, Zonal Office, Kurnool for information and necessary action.
2. The JCEE.(Cess), APPCB, Hyderabad for information.
3. The Environmental Engineer, Regional Office, Kurnool for information and necessary action.

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

*K. S. S. S.*  
23/6/17  
JOINT CHIEF ENVIRONMENTAL ENGINEER  
(UNIT HEAD - IV)



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Sanathnagar, Hyderabad-500 018  
Phone : 040-23887500, Website : www.appcb.ap.nic.in

## CONSENT & AUTHORISATION ORDER

Consent Order No : APPCB/KNL/KNL/124/HO/2016-

Date: 16.08.2016

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. JSW Cement Ltd, (Plant),  
Bilakalagudur (V), Gadivemula (M),  
Kurnool District.

(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:

S.No.	Outlet description	Quantity in KLD	Point of disposal
1.	Process & Washings	1100 KLD	Recycled.
2.	DM Plant/RO Plant/Filtration unit/Clarifier	685 KLD	
3.	Others	150 KLD	
4.	Domestic	45 KLD	After treatment in STP, the treated domestic waste water shall be used for on land for gardening in the premises.

### ii) Emissions from chimneys:

Chimney No.	Description of Chimney
1.	Attached to Raw mill / Kiln
2.	Attached to Clinker Cooler
3.	Attached to Coal Mill
4.	Attached to Cement Mill
5.	Attached to Slag mill-1
6.	Attached to Slag mill-2
7.	Attached to Lime stone crusher
8.	Attached to Packer - I
9.	Attached to Packer - II
10.	Attached to Packer - III
11.	Attached to DG set of capacity - 1.6 MW (2nos)

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

M/s. JSW Cement Ltd, (Plant), Bilakalagudur (V), Gadivemula (M), Kurnool District is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of hazardous wastes namely:

#### HAZARDOUS WASTES WITH RECYCLE OPTION:

S.No	Name of the Hazardous waste	Stream	Quantity of Hazardous waste	Disposal Option.
1.	Waste /Used oil	5.1 Schedule -I	20 KL/Annum.	Shall be disposed to the authorized recyclers/ re-processors.
2.	Waste grease	5.2 Schedule -I	7650 Kg/Annum	
3.	Spent Organic Solvents	28.6 Schedule -I	24,000 TPA	Shall be used as alternative fuel for co-processing in the cement kiln after obtaining permission from CPCB.
4.	Distillation residue	36.1 Schedule -I		
5.	Spent Carbon	28.3 Schedule -I		

Digitally Signed By B S S Prasad (Member Secretary)

Date : 18-Aug-2016 17:06:30 IST

S.No	Name of the Non - Hazardous waste	Quantity of Non Hazardous waste	Disposal Option.
6.	Carbon black from Tyre chips	20,000 TPA	Shall be used as alternative fuel for co-processing in the cement kiln after obtaining permission from the Board.
7.	Biomass (Agro Waste)	18,000 TPA	
8.	Pet Coke	2,40,000 TPA	

This consent order is valid for manufacture of the following products along with quantities indicated only.

S.No	Products	Capacity
1.	Clinker	2.50 Million TPA
2.	Cement Production	4.80 MTPA (OPC - 1.1 MTPA + 3.7 PSC/ GGBS)

This order is subject to the provisions of 'the Acts' and the Rules' and orders made there under 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 **30<sup>th</sup> day of September 2017.**

**MEMBER SECRETARY**

**To**  
**M/s. JSW Cements Ltd.,**  
**Bilakalaguduru & Bhujanar (V),**  
**Gadivemula (M), Kurnool District - 518 501.**

**SCHEDULE - A**

1. 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.
2. 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.
3. 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.
4. 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. 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.

9. 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**

**WATER POLLUTION:**

1. The source of water is Bore wells. The following is the permitted water consumption :

S.No.	Purpose	Quantity in KLD
1.	Boiler feed	265
2.	Cooling	1600
3.	DM Plant / RO Plant / Filtration plant / clarifier	685
4.	Domestic	535
5.	Others	415
	Total	3500

Separate meters with necessary pipe-line shall be maintained for assessing the quantity of water used for each of the purposes mentioned above for Cess assessment purpose.

2. The effluent discharged should comply with the tolerance limits mentioned below:

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

**AIR POLLUTION:**

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 <sup>3</sup>
	SO <sub>2</sub>	100,700 and 1000 when pyritic Sulphur in the limestone is less than 0.25%, 0.25 to 0.5% and more than 0.5% respectively.
	NO <sub>x</sub>	(1) 800 for rotary kiln with In Line Calciner (ILC) technology (2) 1000 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 <sup>3</sup>
	HF	1 mg/Nm <sup>3</sup>
	TOC	10 mg/Nm <sup>3</sup>
	Hg and its compounds	0.05 mg/Nm <sup>3</sup>
	Cd+ Ti and their compounds	0.05 mg/Nm <sup>3</sup>
	Sb+As+Pb+Co+Cr+Cu+Mn+ Ni+V and their compounds	0.5 mg/Nm <sup>3</sup>
	Dioxins and Furans	0.1ng TEQ/Nm <sup>3</sup>

\* 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 ambient air quality standards of PM10 (Particulate Matter size less than 10µm) - 100µg/m<sup>3</sup>; PM2.5 (Particulate Matter size less than 2.5 µm) - 60 µg/ m<sup>3</sup>; SO<sub>2</sub> - 80 µg/ m<sup>3</sup>; NO<sub>x</sub> - 80 µg/ m<sup>3</sup>, outside the factory premises at the periphery of the industry.

Standards for 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)

5. 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.
6. The industry shall ensure regular maintenance and operation of the on-line stack emission monitoring systems and CAAQM stations with tamper proof mechanism having facilities for online calibration.

**GENERAL:**

7. The industry shall not manufacture any product, other than those mentioned in this order, without CFE & CFO of the Board. The industry shall not increase the capacity beyond the permitted capacity mentioned in this order, without obtaining CFE & CFO of the Board.
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. Kurnool.
13. The industry shall maintain and submit the records of daily operating hours of kiln, ESP and reasons for ESP tripping to R.O., Kurnool on monthly basis.
14. The cement concrete roads in the plant area shall be properly maintained to prevent dust emissions.
15. 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.
16. 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, recycled/reused.
  - d. Log Books for pollution control systems.
  - e. Hazardous/non hazardous solid waste generated and disposed.
  - f. Manifest copies of effluents / hazardous waste.
  - g. Inspection book.
17. The industry shall develop and maintain 33 % green belt of the total area with tall growing trees in the vacant spaces of the unit. The industry shall take proper measures for survival of the saplings planted.
18. The industry shall submit compliance report on the conditions mentioned in the consent order every 6 months to the Regional Office/Zonal Office.
19. The industry shall handover the original Consent order No. APPCB/KNL/KNL/124 /HO/CFO/2012-955, dt.03.01.2015, having validity upto 30.09.2017, to the RO, Kurnool after receipt of this order. The earlier CFO order dated 03.01.2015 stands cancelled from the date of receipt of this order.

**SCHEDULE - C**

**[See rule 6(2)]**

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

1. The following acceptance criteria shall be followed for utilization of Hazardous waste in the rotary kiln.

Specification of HW for use as Alternative raw material:

Parameter	Limit
Volatile Organic Hydrocarbon	<5000 ppm
Total Organic Carbon (TOC)	<1000ppm
CaO+SiO <sub>2</sub> +Al <sub>2</sub> O <sub>3</sub> +Fe <sub>2</sub> O <sub>3</sub> +SO <sub>3</sub> (In Ash)	>80%
Chloride	<1.5%
Sulphur	<1.5%
PCB/PCT (ppm)	<5.0
Heavy Metals (ppm)	
Hg	<10
Cd+Ti+Hg	<100
As+Co+Ni+Se+Te+Sb+Cr+Sn+Pb+V	<10,000

Specification of HW for use as use of energy recovery:

Parameter	Limit
Calorific value as received basis	>2500 K Cal/Kg
Ash	
Liquid	<5%
Solid	<20%
Chloride	<1.5%
Halogens (F+Br+I)	<1.0%
Sulphur	<1.5%
PCB/PCT (ppm)	<50
Heavy Metals (ppm)	
Hg	<10
Cd+ti+Hg	<100
As+Co+Ni+se+Te+Sb+Cr+Sn+Pb+V	<10,000
pH	4 to 12
Viscosity (cSt) for liquid	<100
Flash Point (Deg Centigrade) (for liquid)	>60

2. The industry shall feed the liquids only through main burners in the high combustion zone. The liquid feed system to the pre-calcinator shall be disconnected. The operations with respect to semi-liquid feed system are carried out in closed system only. Only diesel is used for heating requirements of the system.
3. Only the permitted alternate fuels should be used for the co-processing.
4. The industry should follow the guidelines for labeling, transportation, storage and disposal of hazardous waste.
5. The wastes of high calorific value have to be always fed into the high temperature combustion zones of the Kiln system. Such waste containing stable toxic components should be fed to the main burner only, to ensure complete combustion at the high temperatures and long retention time.
6. The industry shall take all safety measures to prevent accidents while handling the hazardous wastes.
7. The industry shall take all precautionary measures to prevent odour nuisance and spillages while handling the hazardous wastes.
8. The industry shall provide dyke walls for storage tanks / areas to contain spillages.
9. The industry shall follow the guidelines of CPCB on co-processing of hazardous wastes in the cement plants and submit compliance to the RO-Kurnool within a month.
10. Monthly emission monitoring reports should be submitted to all the critical parameters in the CPCB guidelines for co-processing of hazardous wastes.
11. The industry shall achieve at least 10% of TSR( Thermal Substitution Rate)alternative fuels
12. The industry shall provide adequate and proper Fire Fighting system in hazardous waste handling area.
13. The operator should follow the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016 notified by the Ministry of Environment & Forests, Government of India.
14. The industry shall not store hazardous waste for more than 90 days as per the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.
15. 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.
16. 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.
17. 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.

**MEMBER SECRETARY**

To  
**M/s. JSW Cements Ltd.,  
 Bilakalaguduru & Bhujanar (V),  
 Gadivemula (M), Kurnool District - 518 501.**