



ANDHRA PRADESH POLLUTION CONTROL BOARD
D.No.33-26-14D/2, Near Sunrise Hospital, Pushpa Hotel Centre,
Chalamalavari Street, Kasturibaipet, Vijayawada – 520 010
Phone. No.0866-2463200, Website : https://pcb.ap.gov.in

RED CATEGORY
COMBINED CONSENT & AUTHORIZATION ORDER

Consent Order No: APPCB/VJA/VJA/488/HO/CFO/2017- 02/11/2021

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 & Amendments thereof and the rules and orders made there under (hereinafter referred to as 'the Acts', 'the Rules') to:

M/s. The Ramco Cements Ltd.,
Kumarasamy Raja Nagar, Jaggaiahpet,
Krishna Dist, A.P.
Email: mcljpm@ramcocements.co.in

(The CFO Order No. APPCB/VJA/VJA/488/HO/CFO/2017, dt.28.07.2021 issued for Expansion line-III, valid upto 30.06.2026 is withdrawn)

(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. Outlets for discharge of effluents:

Outlet No.	Outlet Description	Max Daily Discharge After Expansion	Point of Disposal
1	Boiler blow down, cooling bleed off & RO and DM Plant rejects	990.0 KLD	After treatment, used for greenbelt and dust suppression
2.	Domestic	670.0 KLD	Onland for gardening after treatment

ii. **Emissions from chimneys:**

Chimney No.	Description of Chimney	Quantity of Emissions at peak flow (m ³ /hr)
Line-I & II		
1.	Attached to Kiln – I	810000
2	Attached to Cooler – I	490680
3	Attached to Coal Mill – I	100000
4	Attached to Kiln – II	936000
5	Attached to Cooler – II	444960
6	Attached to Coal Mill – II	155000
7	Attached to Cement Mill Vent	90000
8	Attached to Cement Mill Separator	87000
9	Attached to Slag Mill vent	436000
10	Attached to Limestone Crusher	100000
11	Attached to Coal Crusher	---
12	Attached to 2x76 TPH AFBC Boilers	2 x 140400

13	Attached to Captive Power Plant DG set – 4 MW (standby)	---
Line-III		
14.	Attached to 4350 TPD capacity Kiln – III	---
15.	Attached to 45 TPH capacity Coal Mill - III	---
16.	Attached to 4350 TPD capacity Cooler - III	---

iii. Hazardous Waste Authorisation (Form - II) [See Rule 6 (2)]:

M/s.The Ramco Cements Limited (Combined), Krishna District is hereby granted an authorization to operate a facility for collection, reception, storage, treatment, transport and disposal of Hazardous Wastes namely:

S.No.	Name of the Hazardous waste	Stream	Quantity of Hazardous waste	Disposal Option
1.	Hi-chrome grinding media	17 of Schedule - IV	260 TPA	Return back to the supplier for recycling
2.	Waste oil	5.1 of Schedule - I	500 LPA	Shall be disposed to the authorized recyclers / re-processors through M/s.APEMC (or) co-processing within the industry.
3.	Used Lead Acid Batteries	--	200 Nos. per annum	To authorized dealers on buy-back basis.

The authorization is hereby given to handle and produce the following high calorific value hazardous waste / non-hazardous waste with quantities listed below to use as a raw material / alternate fuel for co-processing in cement kilns.

S. No.	Material	Quantity
1	Gypsum	180000 TPA
2	Pet Coke (Indian or Imported) for Cement Plant	474666 TPA
3	Organic Waste / residue (liquid)	1800 TPM
4	Organic Waste / residue (solid)	1800 TPM
5	Spent Carbon	1500 TPM
6	Spent Solvents	1500 TPM
7	Waste Oils (Furnace oil sludge, Gear Box oil, Lube oil and Used grease)	150 TPA
8	Iron ore fines, rejects / screened / iron sludge	20000 TPA
9	Waste Tyre / Rubber	1000 TPM
10	Municipal Waste (RDF) / Plastic Waste	100 TPM
11	Agro wastes – Agro ash, Rice husk, Coir waste, Shells, Bio-compost & other wastes	41000 TPA

This consent order is valid for the following products along with quantities indicated only:

S. No.	Name of the Product	Total Capacity
1	Clinker for Cement manufacture	1.964 Million TPA
	Clinker for export to other units	2.721 Million TPA
	Total Clinker	4.685 Million TPA
2	Total Cement (OPC, PPC, PSC, CC & SRC)	3.65 Million TPA
3	Electricity (Coal based captive power plant)	24 MW
4	DG Power plant (standby)	4 MW
5	Waste Heat recovery power generation	27 MW

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 Authorization shall be valid for a period ending with the **31st January,2026**.

BATCHU SIVA PRASAD, CEE(BSP), O/o CHIEF ENVIRONMENTAL ENGINEER-APPCB
To
M/s. The Ramco Cements Ltd.,
Kumarasamy Raja Nagar, Jaggaiahpet,
Krishna Dist, A.P.
Email:mcljpm@ramcocements.co.in

Copy to:

1. The JCEE, Zonal Office, **Vijayawada** for information and necessary action.
2. The EE, Regional Office, **Vijayawada** for information and necessary action.

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 shall ensure that there shall not be any change in the process technology, source & composition of raw materials and scope of working without prior approval from the Board.
3. The applicant shall make applications through Online for renewal of Consent (under Water and Air Acts) and Authorization under HWM Rules 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 & HW 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 shall not let out the premises / lend / sell / transfer their industrial premises without obtaining prior permission of the State Pollution Control Board.
4. The industry shall 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. The industry shall 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.

6. 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.
7. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991 shall be followed as applicable.
8. Rain Water Harvesting (RWH) structure(s) shall be established on the plant site. The industry/facility/unit shall be ensured that effluent shall not enter the Rain Water Harvesting structure.
9. The industry shall be liable to pay Environmental Compensation / Other Environmental Taxes, if any environmental damage caused to the surroundings, as fixed by the Collector & District Magistrate or any other competent authority as per the Rules in vogue.
10. The industry may explore the possibility of tapping the solar energy for their energy requirements.
11. 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.
12. 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

Special Conditions:

1. **The industry shall obtain Fire NOC from A.P.State Disaster Response and Fire Services Department within a month i.e., by 01.12.2021**
2. **The industry shall install additional 2 CAAQM stations within 3 months time i.e., by 31st January 2022 and compliance shall be submitted to the RO, Vijayawada.**

Water Pollution:

3. The industry shall comply the following effluent standards based on the disposal points permitted:

Outlet	Parameter	Concentration
1	pH	5.5 - 9.0
	Suspended Solids	100 mg/l
	Oil and Grease	10 mg/l
	BOD	30 mg/l
	Temperature	not more than 5°C higher than the intake water temperature

4. The source of water is mine seepage water. The following is the permitted water consumption:

S. No	Purpose	Quantity After Expansion
1.	Boiler feed, cooling make up, UF & RO and DM Plant	4530.0 KLD
2.	Domestic – Township, Hostel, Gardening & Canteen and New Industrial Canteen	722.0
	Total	5252.0 KLD

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.

5. Under no circumstances the waste water shall be discharged outside the factory premises.

Air Pollution:

6. The industry shall contain constituents in excess of the prescribed limits mentioned below, as notified by the MoEF&CC, GoI vide G.S.R. No. 612 (E), dated 25.08.2014 and G.S.R. No. 497 (E), dated 10.05.2016.

Chimney No.	Parameter	Emission Standards
1 to 9	Particulate Matter (PM)	30 mg/Nm ³
	SO ₂ **	100 mg/Nm ³
	NOX	600 mg/Nm ³ for rotary kiln with In Line Calciner (ILC) Technology. (Kiln-I) 800 mg/Nm ³ for rotary kiln with In Line Calciner (ILC) Technology. (Kiln-II)
12	Particulate Matter (PM)	50 mg/Nm ³
	SO ₂ **	600 mg/Nm ³
	NOX	450 mg/Nm ³
14 to 16	Particulate Matter (PM)	20 mg/Nm ³
	SO ₂ **	100 mg/Nm ³
	NOX	600 mg/Nm ³ for rotary kiln with In Line Calciner (ILC) Technology. (Kiln-III)

** Assuming pyritic sulphur to the limestone is less than 0.25 %

Particulate matter from raw mill, kiln and pre-calciner system put together shall not exceed 0.125 Kg/tonne of clinker (with effect from 01.01.2017)

The fugitive emission sources are as below:

S. No	Sources of Pollution
1	Limestone conveyors
2	Additive conveyors
3	Coal conveyors
4	Clinker conveyors
5	Raw Mill Hoppers

7. The industry shall complete the laying of balance CC roads by 31.03.2022 and shall maintain properly to avoid fugitive dust emissions. Vacuum / pneumatic dust collection system shall be used for cleaning the internal roads.
8. The industry shall comply with ambient air quality standards of PM₁₀ (Particulate Matter size less than 10 μ m) - 100 g/ m³; PM_{2.5} (Particulate Matter size less than 2.5 μ m) - 60 g/ m³; SO₂ - 80 g/ m³; NO_x - 80 g/m³, 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)

9. The industry shall furnish details of fly ash brought from the nearby Coal based Thermal Plants and quantity of fly ash consumed per each ton of product, inventory of fly ash at onsite along with details of measures implemented to mitigate fugitive emissions at various transfers to R.O., Vijayawada for every three months.
10. The industry shall maintain interlocking facility between APC equipment and raw material feeding system to regulate the feeding of raw material into the Kiln, so that feeding of raw materials would stop automatically in case the air pollution control equipment fails. The industry should regularly calibrate the performance of interlocking system & furnish report to the Board.
11. The industry shall maintain closed storage facility in respect of fly ash and maintain the good housekeeping.
12. The industry shall maintain and operate dust collection and extraction system to control fugitive emissions at various transfer points & the dust collected from pollution control equipments should be recycled back into the process.
13. The industry shall maintain the water sprinkling upto crusher hopper located in the plant from main gate.

General:

14. This combined CFO&HWA Order is issued for all 3 production lines. The excess CFO fee already paid by the industry would be adjusted in future CFO renewals.
15. The industry shall maintain flow meters preferably Electro Magnetic flow meters with totalisers for water and effluent quantity measurements for different streams of effluents and different categories of water usage stipulated in this order.
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.
 - b. Quantity of Effluents generated, treated, and disposed.
 - c. Log Books for pollution control systems.
 - d. Characteristics of ambient air quality, effluents and emissions.
 - e. Hazardous/non hazardous solid waste generated and disposed.
 - f. Inspection book.
 - g. Manifest copies of hazardous waste.
17. The industry shall develop green belt in all the vacant places. In future, excess green belt over and above 33 % of total area can be utilized for industrial activity as per requirement of industry.
18. The industry shall install & maintain online monitoring systems and connect monitoring system to APPCB/CPCB websites as per CPCB directions dated 05.02.2014 & 02.03.2015 and guidelines issued regarding online monitoring systems from time to time.
19. The industry shall comply with standards and directions issued by CPCB / MoEF & CC as and when notifications are issued.
20. The industry shall dispose solid waste (NON HAZARDOUS) as follows:

S. No	Name of the Solid Waste	Quantity	Disposal
1.	Boiler Ash	172.8 TPD	Used in cement manufacturing.
2.	STP sludge	10 TPA	Used as manure after composting.

21. The industry shall submit compliance reports on the conditions mentioned in the consent order, safety audit reports, Fire NOC, Onsite / Offsite emergency plans (modifications if any), every six months i.e., on 1st of January and July of every year to the Regional Office/ Zonal Office.

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:

Specification of HW for use as 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+Tl+Hg	< 100
As+Co+Ni+Se+Te+Sb+Cr+Sn+Pb+V	< 2500
pH	4 To 12
Viscosity (cSt) for liquid	<100
Flash Point (Deg Centigrade) (for liquid)	>60

2. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
3. The authorisation shall be produced for inspection at the request of an officer authorised by the State Pollution Control Board.
4. The person authorised shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorisation.
5. Any unauthorised change in personnel, equipment or working conditions as mentioned in the application by the person authorised shall constitute a breach of his authorisation.
6. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
7. The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on “Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty”.
8. It is the duty of the authorised person to take prior permission of the State Pollution Control Board to close down the facility.
9. An application for the renewal of an authorisation shall be made as laid down under these Rules.
10. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to

time.

11. Only the permitted alternate fuels should be used for the co-processing.
12. The industry should follow the guidelines for labeling, transportation, storage and disposal of hazardous waste.
13. 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 to ensure complete combustion in the high temperature and long retention time.
14. The industry shall verify the compatibility of the different wastes before blending the waste.
15. The industry shall take all safety measures to prevent accidents while handling the hazardous wastes.
16. The industry shall take all precautionary measures to prevent odour nuisance and spillages while handling the hazardous wastes.
17. The industry shall provide dyke walls for storage tanks / areas to contain spillages.
18. Monthly emission monitoring reports should be submitted to all the critical parameters in the CPCB guidelines for co-processing of hazardous wastes through NABL accredited laboratory.

Specific Conditions:

19. The industry shall enter an agreement with the generator to receive of utilizable waste for co-processing.
20. The industry shall comply with the provisions of HWM Rules, 2016 in terms of interstate transport of Hazardous Waste and manifest document prescribed Under Rule 18 and 19 of the HWM Rules, 2016.
21. The industry shall not store hazardous waste for more than 90 days as per the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
22. The cement plant shall take the hazardous wastes only from the authorized generator through APEMC.
23. Cement industry shall provide adequate covered storage area for the hazardous waste in accordance with hazardous waste Rules and guidelines for storage of hazardous waste. The occupier shall also ensure that there is no leaching of any pollutant.
24. The industry shall accept the hazardous waste/ other wastes as a raw material and alternative fuel for co-processing in cement kiln through online manifest system as per Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
25. The industry shall carryout pre-processing and co-processing of wastes as per the guidelines of CPCB and Standard Operating Procedures (SOPs) specified in the guidelines.
26. A log book shall be maintained for the quantity of waste received from generators, storage details & co-processed and same shall be submitted to RO: Vijayawada APPCB on monthly basis.
27. The actual quantity of hazardous waste co-processed monthly shall be reported by cement plant and hazardous waste generator to RO: Vijayawada, APPCB.
28. 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.
29. The industry shall receipt the hazardous waste through vehicle fitted with authorized GPS tracking system.
30. The industry shall accept the waste through 7 copy online manifest system from generators 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.
31. The industry shall maintain proper records for Hazardous and Other Wastes stated in Authorisation in Form-3 i.e., quantity of Incinerable waste, land disposal waste, recyclable waste etc., and file annual returns in Form-4 as per Rule 20 (2) of the Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
32. In case of any violations in the conditions stipulated, the permission can be withdrawn at any

time.

The industry shall submit Half yearly compliance reports to all the stipulated conditions in Environmental Clearance (EC), Consent for Establishment (CFE) and Consent for Operation (CFO) through website i.e., <https://pcb.ap.gov.in> by 1st of January and 1st July of every year. The first half yearly compliance reports may be furnished by the industry and second half yearly compliance reports shall be audited through MoEF&CC recognized and National Accreditation Board for Laboratory Testing (NABL) accredited third party

**BATCHU SIVA PRASAD, CEE(BSP), O/o CHIEF ENVIRONMENTAL ENGINEER-APPCB
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