



ANDHRA PRADESH POLLUTION CONTROL BOARD

D. No. 33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre,
Chalamalavari Street, Kasturibaipet, Vijayawada - 520 010
Website: www.pcb.ap.gov.in

CONSENT ORDER FOR ESTABLISHMENT

Order No.289/APPCB/CFE/RO-KNL/HO/2019

18/11/2020

Sub: APPCB – CFE – **M/s. Ramco Cements Limited, Kalvatala (V), Kolimigundla (M), Kurnool District** – Consent for Establishment of the Board for **Waste Heat Recovery Power Plant (WHRPP)** under Sec.25 of Water (P&C of P) Act, 1974 and Under Sec.21 of Air (P&C of P) Act, 1981 – Issued – Reg.

- Ref:
1. CFE order dt.12.05.2019.
 2. Industry's CFE application received through AP Single Desk System on 17.10.2020.
 3. R.O's inspection report dt.31.10.2020.
 4. CFE Committee meeting held on 11.11.2020.
 5. Industry mail dt.11.11.2020.

- The Board vide reference 1st cited issued CFE for **Integrated Cement plant & Coal based Thermal Power Plant**, with a project cost of Rs.1500 Crores (In two-phases). Subsequently, the industry had obtained CFE (amendment) order dt. 10.12.2019 w.r.t area of land, Sy.nos. etc.
2. In the reference 2nd cited, an application was submitted to the Board seeking Consent for Establishment (CFE) for **Waste Heat Recovery Power Plant (WHRPP)** with an additional investment of Rs.280 Crores.

S. No.	Products	As per CFE order dt.12.05.2019	Applied as per application
1.	Cement	2.0 Million TPA	---
2.	Clinker (2x1.575 MTPA)	3.15 Million TPA	---
3.	Electricity (Coal based Captive Power Plant)	2 x 25 MW	---
3.	Power generation from waste heat recovery from exhaust gases of Kiln	---	24.3MW (2 x 12.15 MW)

3. As per the application, the above activity is to be located within the existing Cement plant premises at **Kalvatala (V), Kolimigundla (M), Kurnool District** in an area of 2.1acres, out of total area of the site is 177.07 Ha.

4. The above site was inspected by the Environmental Engineer, Regional Office, Kurnool, A.P Pollution Control Board on 28.10.2020 and found that the site is surrounded by

North : Open lands

South : Open lands followed by SH-57 connecting Kolimigundla – Tadipatri – Ananthapuram

East : Open lands

West : Open lands, Belum caves are at a distance of 3 km in N-W direction.

5.The Board, after careful scrutiny of the application and verification report of Regional Officer hereby issues **CONSENT FOR ESTABLISHMENT** for **installation of Waste Heat Recovery Power Plant (WHRPP)** under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to the activity as mentioned at para (1) only.**

5.This Consent Order now issued is subject to the conditions mentioned in Annexure.

6.This order is issued from pollution control point of view only. Zoning and other regulations are not considered.

7.**This order is valid for a period of 7 years from the date of issue.**

Encl: Annexure

**BATCHU SIVA PRASAD, JCEE(BSP), O/o JOINT CHIEF ENVIRONMENTAL
ENGINEER1-APPCB
Joint Chief Environmental Engineer**

To
M/s. Ramco Cements Limited,
Kalvatala (V), Kolimigundla (M),
Kurnool District.
reddynagaraju@ramcocements.co.in

Copy to: 1. The JCEE, Z.O: Kurnool for information and necessary action.
2. The E.E., R.O: Kurnool for information and necessary action.

ANNEXURE

1. The proponent shall obtain Consents for Operation (CFO) from APPCB, as required Under Sec.25/26 of the Water (P & C of P) Act, 1974 and under sec. 21/22 of the Air (P & C of P) Act, 1981, before commencement of the activity.

Water:

2. The source of water is Owk Reservoir. The maximum permitted water consumption after installation of WHRPP is as following:

S. No.	Purpose	Qty as per CFE order dt.12.05.2019 (KLD)	Proposed qty (KLD)	Total qty after installation of WHRP Plant (KLD)
a.	Process (Cement Plant)	1000	--	1000
b.	Boiler	500	170	670
c.	Dust suppression	200	--	200
d.	Gardening	350	--	350
e.	Domestic (Plant & colony)	250	--	250
f.	Cooling water	--	192	192
	Total	2300 KLD	362 KLD	2662 KLD

The maximum waste water generation for the following after installation of WHRP:

S. No.	Source	Qty as per CFE order dt.12.05.2019 (KLD)	Proposed qty (KLD)	Total qty after installation of WHRP Plant (KLD)
a.	Domestic (Plant & Colony)	200	--	200
b.	Boiler blow down	100	86	186
c.	Cooling bleed off	---	38	38
	Total	300 KLD	124 KLD	424 KLD

Treatment & Disposal:

Source of effluent	Treatment proposed	Mode of final disposal
Domestic,	Sewage Treatment Plant (STP) of capacity 250 KLD.	After treatment in STP shall be partly reused and partly utilized for dust suppression/gardening.

Boiler blow down, Cooling tower bleed off	Neutralisation	Reused in the industry for cooling, ash quenching, dust suppression etc.
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3. The waste water shall not be discharged outside the factory premises under any circumstances. The zero discharge shall be implemented as stipulated in the General condition no.III (ii) of EC order dt. 14.01.2019.
4. The sewage shall be treated to the on land for irrigation standards, stipulated under Environment (Protection) Rules, 1986, notified and published by Ministry of Environment and Forests, Government of India as specified in Schedule VI vide G.S.R.422 (E), dt.19.05.1993 and its amendments thereof.
5. Separate flow meters with totalisers to necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned below.
 - a) Process and washings.
 - b) Industrial cooling
 - c) Boiler feed
 - d) Domestic purposes

Air:

6. The proponent shall comply with the following to control air pollution after installation of WHRP Plant:

As per the CFE order dt.12.05.2019:

S. No.	Stack Attached to	Capacity	Stack height	Control Equipment
1	Limestone Crusher-I	1000 TPH	30m	Bag House
2	Limestone Crusher-II	1000 TPH	30m	Bag House
3	Raw Mill-I/Kiln-I	4500 TPH	115m	Bag House
4	Raw Mill-II/Kiln-II	4500 TPH	115m	Bag House
5	Clinker Cooler- I	4500 TPH	50m	ESP
6	Clinker Cooler- II	4500 TPH	50m	ESP
7	Coal Mill- I	80 TPH	55m	Bag House
8	Coal Mill- II	80 TPH	55m	Bag House
9	Cement Mill	250 TPH	55m	Bag House
10	Thermal Power Plants 2 Nos.	2 x 100TPH Boilers	45m	ESPs
11	DG set (for standby operations)	1250 KVA x 2 Nos.	7.8m each	Silencer with acoustic enclosure

No additional emissions are anticipated from the power plant by WHRB system

Solid Waste:

7. The industry shall comply with the following after installation of WHRPP:

S. No	Type of waste	Existing qty as per CFE order dt.12.05.2019	Quantity Proposed	Total qty after installation of WHRP Plant (KLD)	Mode of Disposal
1.	STP Sludge	50 kg/day	---	50 kg/day	Used as manure after drying
2.	Waste oil/Lubricating oil	2500 LPA	2.5 KL/annum	5000 LPA	Used as lubricant within the premises / to authorized Re-processors / Recyclers / to the Cement industries to use as alternate fuel in the kiln.
3.	Waste Grease / Waste residue contain oil	---	2.0 TPA	2.0 TPA	
4	Solid waste from colony – garbage & organic waste	500 kg/day	--	500 kg/day	To produce vermin - compost
5	Fly ash	410 kg/day	--	410 kg/day	To be used for Cement manufacturing
6	Dust from bag filters	5 TPD	--	5 TPD	To be reused in the process

8. All the bag filter dust, raw meal dust, coal dust, clinker dust and cement dust from pollution control devices shall be 100% recycled and reused in the process and used for cement manufacturing. Solid waste from sewage treatment plant (STP) shall be used as manure. No solid waste shall be disposed off from the cement plant. Spent oil, grease and grinding media shall be disposed to licensed vendors.

9. The following rules and regulations notified by the MoEF & CC, GoI shall be implemented.

- a) Regulation of Persistent Organic Pollutants Rules, 2018.
- b) Hazardous waste and other wastes (Management and Transboundary Movement) Rules, 2016.
- c) Plastic Waste Management Rules, 2016.
- d) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989
- e) Fly Ash Notification, 2016.
- f) Batteries (Management & Handling) Rules, 2010.
- g) E-Waste (Management) Rules, 2016.
- h) Construction and Demolition waste Management Rules, 2016.
- i) Solid Waste Management Rules, 2016.
- j) The Public Liability Insurance Act, 1991 and its amendments thereof.

Other Conditions:

The proponent shall comply with all the Conditions stipulated in the EC order dt.14.01.2019 and 27.05.2019.

11. All other conditions stipulated in the CFE orders dt.12.05.2019 and 10.12.2019 remain the same.
12. The existing green belt shall not be disturbed for the proposed activity. The area of the greenbelt shall not be less than 36% of the total area as stipulated at Condition no.12 of EC (amend) order dt. 27.05.2019.
13. **The industry shall submit compliance to the conditions stipulated in the EC and CFE orders to the concerned Regional Officer of APPCB every six months and shall upload the same at APPCB website viz., https://pcb.ap.gov.in/UI/Submission_Compliance_of_EC_CFE_CFO_Direction.aspx.**
14. The noise levels in and around the plant shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc., on all sources of noise generation.
15. The proponent shall ensure that there shall not be any change in the process technology and scope of working without prior approval from the Board.
16. Concealing the factual data or submission of fabricated data and failure to comply with any of the conditions mentioned in this order attracts action under the provisions of relevant pollution control Acts.
17. Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power Under Sec.27(2) of Water (Prevention and Control of Pollution) Act, 1974 and Under Sec.21(4) of Air (Prevention and Control of Pollution) Act, 1981 to revoke the order, to review any or all the conditions imposed herein and to make such modifications as deemed fit and stipulate any additional conditions by the Board.
18. 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 such authority (hereinafter referred to as the Appellate Authority) constituted under Section 28 of Water (Prevention and Control of Pollution) Act,1974 and Section 31 of the Air (Prevention and Control of Pollution) Act, 1981.

**BATCHU SIVA PRASAD, JCEE(BSP), O/o JOINT CHIEF ENVIRONMENTAL ENGINEER1-APPCB
Joint Chief Environmental Engineer**

**To
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