



CONSENT & HWA ORDER (EXPANSION)
RED CATEGORY

Consent Order No: 240525160768

Date:22.06.2024

(Consent Order for Existing/New or altered discharge of sewage and/or trade effluents/outlet under Section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and amendments thereof, Operation of the plant under section 21/22 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof and Authorisation / Renewal of Authorisation under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules 2016 & Amendments thereof.

CONSENT is hereby granted under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, under section 21/22 of Air (Prevention & Control of Pollution) Act 1981 and amendments thereof, and Authorisation under the provisions of HW (MH & TM) Rules, 2016 (hereinafter referred to as 'the Acts', 'the Rules') and amendments thereof and the rules and orders made there under to **M/s. Deccan Cements Ltd., (Cement plant & WHRB based Power Plant), Bhavanipuram, Mahankaligudem, Ravipahad (V), Palakeedu (M), Suryapet District** (hereinafter referred to as 'the Applicant / Project') and the project is authorized to operate and to discharge the Effluents and the quantity of Emissions from the chimneys, by operating pollution control equipment, as detailed below,

i) Out lets for discharge of Effluents:

Outlet No.	Description of Outlet	Max Daily Discharge in KLD	Method of Treatment and Disposal
1.	Captive Power Plant		Shall be treated in the ETP and the treated water to be used for dust suppression or reuse in cement plant / gardening.
	Filter back wash	21	
	DM Plant regeneration	21	
	Cooling tower bleed off	450	
	Boiler blow down	40	
	Service water wash	45	
	Clarifier blow down	20	
2.	Domestic effluents	260	Shall be treated in the STP of capacity 260 KLD. After treatment, treated water shall be used for onland for plantation duly meeting the standards stipulated at Schedule-B.
	Total	857.0 KLD	

ii) Emissions from chimneys:

Chimney No.	Description of Chimney
	Existing unit-I & II
1	Stack attached to Rotary Kiln - 1 followed by Raw Mill –1 & 2
2	Stack attached to Cooler - 1
3	Stack attached to Coal Mill - 1
4	Common stack attached to Cement Mill–1 & 2
5	Stack attached to Kiln – 2 followed by VRM Raw Mill
6	Stack attached to Cooler - 2
7	Stack attached to Coal Mill - 2
8	Stack attached to Cement Mill–3
9	Stack attached to Slag VRM Cement Mill
10	Stack attached to Boiler(70 TPH) in Captive Power Plant
11	Stack attached to Lime Stone Crusher
12	Attached to 1000 KVA DG set
	For Clinkerization unit
13	Stack attached to Rotary Kiln - 3, Raw Mill-3

14	Stack attached to Rotary Kiln Cooler-3
15	Stack attached to Rotary Kiln Coal Mill-3

iii) **HWA**Authorisation No. : **240525160768**

Date:22.06.2024

HAZARDOUS WASTE AUTHORISATION
(FORM – II)
[See Rule 6 (2)]

M/s. Deccan Cements Ltd., (Cement plant & WHRB based Power Plant), Bhavanipuram, Mahankaligudem, Ravipahad (V), Palakeedu (M), Suryapet District (Waste Heat Recovery based power plant) is hereby granted an authorisation to operate a facility for collection, reception, storage, transport and disposal of the following wastes with quantities as below:

• **Hazardous wastes with recycle option:**

S. No	Name of the Hazardous waste	Stream	Quantity	Disposal Option.
1.	Waste Lubricating Oil	5.1 of Schedule – I	44.0 KL/Year	Shall be used for lubrication of drag chains & elevators (or) disposed to authorized Re-processors / Recyclers
2.	Waste Grease	5.1 of Schedule - I	7200 Kg/year	
3	Production / Formulation of Drugs / Pharma	28 of Schedule-1	1000TPA	Used for Co- Processing in cement rotary Kiln

• **Non-hazardous wastes with recycling option:**

S. No	Name of the Hazardous waste	Stream	Quantity	Disposal Option.
1.	Power Plant- Flyash Power Plant-Bottom Ash	-	280 TPD	Used for PPC production
2.	Shredded Refused Derived Fuel (ROF)	-	1000 TPA	Used for Co-Processing in cement rotary Kiln
3.	Segregated Municipal Solid Waste (MSW)	-	1000 TPA	Used for Co-Processing in cement rotary Kiln
4.	Biomass (Rice Husk/Saw Dust/Soya Husk/Other Agriculture Wastes)	-	500 TPA	Used for Co-Processing in cement rotary Kiln
5.	Plastic Waste	-	5000 TPA	Used for Co-Processing in cement rotary Kiln

This consent order is valid to manufacture the following product along with quantities only:

S. No	Products	Capacity/ Quantity (for unit - I, II & III)
1	Cement	2.20 MMTPA (7600 TPD)
2	Clinker	3.20 MTPA (9650 TPD)
3	Captive power plant	18 MW
4	Power Generation (From Waste Heat Recovery boilers)	7 MW

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 order of consent & Hazardous Waste Authorisation is valid for a period upto the **31st December, 2029**

**Sd/-
MEMBER SECRETARY**

To
M/s. Deccan Cements Ltd.,
(Cement plant & WHRB based Power Plant),
Bhavanipuram, Mahankaligudem, Ravipahad (V),
Palakeedu (M), Suryapet District

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

M. Phani 21/6/2024

**SENIOR ENVIRONMENTAL ENGINEER
(CFO – UNIT-III)**

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SCHEDULE – A

1. The applicant shall make applications through online for renewal of Consent (under Water & Air Acts) and Authorisation under HWM Rules at least 120 days before the date of expiry of this order, along with prescribed fee under Water and Air Acts for obtaining Consent & HW Authorisation of the Board. The applicant can also apply for Auto Renewal of the CFO atleast 30 days before the expiry of this order as per the procedure and eligibility stipulated in the Board Circular dt.19.11.2015 & 08.12.2015 (available in Board's Website: <http://tspcb.cgg.gov.in/Pages/Circulars.aspx>).
2. This order is issued in line with Board's CFE order dt. 10.08.2022. Concealing the factual data or submission of false information/ fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts. The industry shall comply with all other conditions CFE order dt. 10.08.2022 is still applicable.
3. 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 Rules, to such authority (hereinafter referred to as the 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.
4. The industry may explore the possibility of tapping the solar energy for their energy requirements.
5. The Board reserves its right to modify above conditions or stipulate any further conditions and to take action including revoke of this order in the interest of protection of public health and environment.

SCHEDULE – B

1. The existing CFO & HWA orders dt. 01.02.2023 (For unit - I & II) and 09.10.2023 (For unit-III) Phase-I valid upto 31.12.2027 stands cancelled.
2. Total Water Consumption shall not exceed 3474 KLD.

S.No	Purpose	Quantity in KLD
A	Cement plant	
1	Cooling	645.0
B	Captive Power Plant	
1	Filter back wash	21.0
2	DM Plant regeneration	21.0
3	Cooling water make up	2252.0
4	Boiler feed	50.0
5	Service water wash	40.0
6	Clarifier make up	18.0
7	Domestic	387.0
8	Gardening	40.0
9.	Washings	-
	Total	3474 KLD

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

Outlet	Parameter	Limiting Standards
1	pH	6.5 – 8.5
	Total Suspended Solids	100 mg/l
	Oil and Grease	10 mg/l
	Biochemical Oxygen Demand (3 days at 27° C)	100 mg/l
	Chemical Oxygen Demand	250 mg/l
	Total Dissolved Solids (TDS)	2100 mg/l

2	pH	6.0 – 9.0
	Oil & Grease	10 mg/l
	Biochemical Oxygen Demand (BOD)	≤10 mg/l
	Chemical Oxygen Demand (COD)	250 mg/l
	Ammonical Nitrogen	50 mg/l
	Arsenic	0.2 mg/l
	Mercury	0.01 mg/l
	Lead	1.0 mg/l
	Cadmium	1.0 mg/l
	Hexavalent Chromium	2.0 mg/l
	Total Chromium	2.0 mg/l
	Zinc	15 mg/l
	Copper	3.0 mg/l
	Turbidity NTU	≤ 2 mg/l
	E.coli (MPN count /100 ml)	None
	Residual chlorine	Preferably in the range of 1 mg/l – 3 mg/l

4. Storm Water:

- Storm-water shall not be allowed to mix with effluent, treated sewage, scrubber water and or floor washings.
 - Storm-water within battery limits of industry shall be channelized through separate drain(s).
5. The emissions shall not contain constituents in excess of the prescribed limits mentioned below.

(A)

Chimney Nos.	Parameter	Emission Standards
1 & 13	Sulphur Dioxide (SO ₂)	100 mg/Nm ³
	Nitrogen Dioxide (NO _x)	800 mg/Nm ³
1 to 10, 13,14,15	Particulate Matter	30 mg/Nm ³
5 & 6	Particulate Matter	30 mg/Nm ³
	Sulphur Dioxide (SO ₂)	100 mg/Nm ³
	Nitrogen Dioxide (NO _x)	800 mg/Nm ³
	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 +Tl 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	0.1 ngTEQ/Nm ³
11	Particulate Matter	50 mg/Nm ³
	Sulphur Dioxide (SO ₂)	600 mg/Nm ³
	Nitrogen Dioxide (NO _x)	300 mg/Nm ³
	Mercury(Hg)	0.03 mg/Nm ³
12	SPM	115 mg/Nm ³

Note: The abbreviations used in the above Table shall mean as under:

SO₂ - Sulphur Dioxide; NO_x – Oxides of Nitrogen; HCl – Hydrogen Chloride; HF – Hydrogen Flouride; TOC – Total Organic Carbon; Hg – Mercury; Cd – Cadmium; Tl – Thallium; Sb- Antimony; As – Arsenic; Pb – Lead; Co- Cobalt; Cr- Chromium; Cu- Copper; Mn-Manganese; Ni- Nickel; and V- Vanadium.

- (B) The height of each individual stack connected to Kiln, Clinker Cooler, Cement Mill, Coal Mill, Raw Mill, Packaging section, etc. shall be of a minimum of 30 metres or, as per the formula, $H=14 (Q1)^{0.3}$ and $H= 74 (Q2)^{0.27}$, whichever is more, where "H" is the height of stack in metres and "Q1" is the maximum quantity of SO₂ expected to be emitted in kg/hr and "Q2" is the maximum quantity of PM expected to be emitted in Tonnes/hr through the stack at 100 percent rated capacity of the plant;
- (C) Above norms shall be applicable even if pet coke is mixed with coal for clinker making in the kiln.
- (D) The monitored values of SO₂, NO_x, HCl, HF, TOC, Metals and Dioxins and Furans at main Kiln stack shall be corrected to 10% Oxygen, on dry basis and the norms for SO₂, NO_x, HCl, HF, TOC, Metals and Dioxins and Furans shall be applicable to the main Kiln Stack and the norms for Particulate Matter (PM) shall be applicable to all the stacks in the plant. PM, SO₂, NO_x shall be monitored continuously. HCl, HF, TOC, Metals and Dioxins and Furans shall be monitored once in a year.
- (E) Scrubber meant for scrubbing emissions shall not be used as quencher and plants having separate stack for gaseous emission for the scrubbing unit, the height of this stack shall be atleast equal to the main stack.
6. The industry shall not manufacture any un-consented products and exceeding capacities without obtaining prior Consent for Establishment (CFE) and Consent for Operation (CFO) of the Board.
7. The industry shall comply with emission limits for DG sets upto 800 KW as per the Notification G.S.R.520 (E), dated 01.07.2003 under the 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 more than 800 KW should comply with emission limits as per the Notification G.S.R.489 (E), dated 09.07.2002 at serial no.96, under the Environment (Protection) Act, 1986.
8. The industry shall comply with ambient air quality standards of PM₁₀ (Particulate Matter size less than 10µm) - 100 µg/ m³; PM_{2.5}(Particulate Matter size less than 2.5 µm) - 60 µg/ m³; SO₂ - 80 µg/ m³; NO_x - 80 µg/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 has paid CFO fee of Rs. 12,36,400/- for a period upto 30.04.2025.
10. The industry shall pay balance consent fee annually as per rates notified in G.O.Ms.No.22. The payment of annual consent fee shall be made at the concerned RO for every financial year (i.e., April to March) within the stipulated time period i.e., 1st quarter of every financial year (April to June) is mandatory for the industry / project, failing which, the validity of the Consent Order automatically stands cancelled and operation industry / project without valid consent attracts penal action under the provision of Water Act, Air Act & Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
11. The industry either paying annual fee or total fee for Consented period, shall pay the balance fee as per the revised rates as applicable from time to time.
12. The industry shall maintain online AAQM and stack monitoring systems for Kiln and raw mill, Clinker cooler, Coal mill & Cement mills and connect the data to the TSPCB server.
13. The industry shall maintain dust suppression system at all fugitive dust generating points to meet the AAQM standards.
14. The industry shall take up regular cleaning of internal roads by sweeping machines to avoid fugitive dust emissions due to vehicular movement.

15. The industry shall store all the raw materials in closed sheds to avoid fugitive emissions.
16. The industry should provide water sprinklers at various dust generating points.
17. The industry shall completely recycle the cooling waste water and shall operate STP for treatment of domestic effluents and treated effluents shall be used for plantation. Records shall be maintained for STP operation.
18. The industry shall maintain 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.
19. The industry shall maintain interlocking system for Air Pollution Control Equipments provided with raw material feeding system so that the feeding of raw material would be stopped in case of the air pollution control equipments fails.
20. The industry should maintain the records on captive consumption of clinker produced, fly ash utilization & cement production etc., and the consolidated records should be furnished to concerned RO every month.
21. The industry is permitted to use additional Raw material i.e., pet coke – 0.096 MTPA for low grade Lime stone mineral conservation as fuel in the Kiln.
22. The industry shall co-process the Hazardous Waste in the kiln duly following the procedure.
23. The spent solvent / mix solvent generated by chemical industry should be co-processed in cement kiln.
24. As per the Directions issued by the Hon'ble National Green Tribunal (NGT), Principal Bench, New Delhi in Original Application (OA) No. 199 of 2014 vide Judgement dt. 22.12.2016, in the matter of Management of Municipal Solid Waste in Local Bodies, the industry shall buy and use Refused Derived Fuel (RDF) as fuel in the Cement Plant, generated from the RDF Plants located within a 100 Km radius of the Cement Plant."
25. The Hon'ble NGT order dt.18.11.2026 in OA No.33 of 2016 directed to monitor the industry regularly.
26. The industry shall comply with load of Mass based standard for Particulate Matter i.e., SPM emissions from Raw Mill, Kiln and Pre-Calcliner system put together - 0.125 kg/tonne of Clinker.
27. The industry shall operate the Air Pollution Control Equipments regularly and maintain the log registers.
28. The industry shall provide water meters for recording the water consumption for recording category-wise water consumption.
29. The industry shall not discharge any wastewater outside the plant premises.
30. The industry shall maintain separate energy meters for recording energy consumption for air pollution control equipments and maintain record for daily energy consumption.
31. The industry shall maintain greenbelt around the plant premises, as per the norms.
32. The industry shall submit quarterly report on usage of domestic petcoke / imported petcoke to the RO, Naglonda and to the Board Office.
33. All the roads in the plant area shall be asphalted / concreted and water should be sprayed to reduce fugitive dust emissions.
34. The industry shall not store dry Gypsum in open area.

35. The industry shall renew the Bank Guarantee Rs. 25 lakhs (BG No. 0910324BG0000185, dt. 13.03.2024) after expiry i.e., 01.03.2027. The Bank Guarantee amount will be forfeited, if the industry fails to comply with standards / conditions / directions of the Board. The industry shall renew the Bank Guarantee till further orders of the Board.
36. The industry shall comply with the Task Force directions issued from time to time.
37. The industry shall carryout co-processing of Hazardous waste and comply the stipulated emission standards therein.
38. The industry shall maintain bag filters for de-dusting of additional blending silo, cement silos, fly ash silo & packing plants and other transfer points to control fugitive emissions.
39. The industry shall submit consolidated statement of Production details, effluent generated & effluent treated, Hazardous/ solid waste generated & disposed, Hazardous/ solid waste received from various industries/ outside sources & co-processed, records of operation of pollution control equipment on monthly basis to the Concerned Regional Officer and daily records (RG-I records, Central Excise Returns etc) shall also be made available to the Board Officials during the inspection.
40. The applicant shall submit Environment Statement in Form V to the Regional office before 30th September of every year as per Rule No.14 of E(P) Rules, 1986 & amendments thereof.
41. All the rules & regulations notified by Ministry of Law and Justice, Government of India regarding Public Liability Insurance Act, 1991, should be followed.
42. The conditions stipulated in this Order are without any prejudice to rights and contentions of this Board in any Hon'ble court of Law.

SCHEDULE – C

[see rule 6(2)]

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

1. The industry shall give top priority for waste minimization and cleaner production practices.
2. The industry shall not store hazardous waste for more than 180 days as per the Hazardous and other Wastes (Management, Handling and Transboundary Movement) Rules, 2016 and amendments thereof. The industry shall maintain 6 copy manifest system for transportation of waste generated and copies of receipt of Consignee shall be submitted to the Concerned Regional office. The industry shall maintain proper records for Hazardous 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, Handling & Transboundary Movement) Rules, 2016 and amendments thereof.
3. The industry shall dispose /sell the Hazardous Waste to only industries/agencies authorized by the State Pollution Control Boards. The industry shall verify the authorization of the Board given to the Party before disposing its waste to the External Party.
4. The industry shall maintain proper records for Hazardous Wastes disposal and its concurrence with authorization. In case of variation in generation, industry shall submit explanation and obtain amendment in Environmental Clearance/ CFE/CFO in this regard.
5. The industry shall store Used / Waste Oil and Used Lead Acid Batteries in a secured way in their premises till its disposal. Waste oils shall be disposed to the authorized Reprocessors/ Recyclers and Used Lead Acid Batteries shall be disposed to the manufacturers / dealers on buyback basis. The industry shall take necessary practical steps for prevention of oil spillages and carryover of oil from the premises. The industry shall check the Certificate/ Authorisation/order of MoEF issued to the Re-user/Recycle units while disposing the waste oil.

6. The industry shall dispose of e-waste to the authorised recyclers only.
7. The industry shall maintain good house keeping.
8. The industry shall submit the condition wise compliance report of the conditions stipulated in Schedule B & C of this Order on half yearly basis to Board Office, Hyderabad and concerned Regional Office.

Sd/-
MEMBER SECRETARY

To
M/s. Deccan Cements Ltd.,
(Cement plant & WHRB based Power Plant)
Bhavanipuram, Mahankaligudem, Ravipahad (V),
Palakeedu (M), Suryapet District

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

M. Phani *22/6/2024*

SENIOR ENVIRONMENTAL ENGINEER
(CFO – UNIT-III)

[Signature]

