ISO 9001 ISO 14001 ISO 45001 ISO 50001
Certified Company

THE RAMCO CEMENTS LIMITED

Kumarasamy Raja Nagar – 521457
Jaggayyapet Mandal, Krishna District,
Andhra Pradesh, India
Phone: 08654 224400-04
Fax: 08654 222352
E-mail: mcljpm@ramcocements.co.in

RCL/PCB/50/2025-2026

13th September 2025

The Environmental Engineer,
AP Pollution Control Board,
Regional Office,
Plot No. 41, Kanakadurga Officers Colony,
Opp. SBH, Gurunanak Road,
VIJAYAWADA – 520 008.

Dear Sir,

Sub: Submission of Environmental Statement in Form - V for Cement Plant, Thermal Power Plant & Waste Heat Recovery Plant for the Financial Year 2024-2025 - Reg.

Please find enclosed herewith 2 copies of Environmental Statement in Form - V for Cement Plant, Thermal Power Plant & Waste Heat Recovery Plant for the Financial Year – 2024-2025 along with relevant enclosures.

This is for your kind information and records please.

Thanking you.

Yours faithfully,
For The Ramco Cements Limited,

ASHISH KUMAR SRIVASTAVA
Sr. President (Mfg.)

Encl.: As above.

ENVIRONMENTAL STATEMENT (FORM – V)
FOR FINANCIAL YEAR 2024-2025

for

CEMENT PLANT,
THERMAL POWER PLANT &
WASTE HEAT RECOVERY PLANT

An
QMS- IS/ISO 9001:2015,
EMS- IS/ISO 14001:2015,
OHSMS- IS/ISO 45001:2018,
EnMS – ISO 50001:2018
Certified Company

of

THE RAMCO CEMENTS LIMITED,
KUMARASAMY RAJA NAGAR – 521 457,
JAGGAIAHPET (M),
NTR DISTRICT, AP.

PART – A

1.	Name and address of the owner of the industry operation or process	:	**M/s. The Ramco Cements Limited** Kumarasamy Raja Nagar - 521 457, Jaggaiahpet Mandal, NTR Dt., A.P
	Industry operation or process	:	• Clinker manufacturing • Cement manufacturing • Generation of power from coal based thermal power plant • Generation of power from waste heat recovery boilers • Generation of DG power
2.	Industry category Primary-(STC Code) Secondary-(SIC Code)		
3.	Production capacity		Clinker – 4.685 Million TPA Cement – 3.65 Million TPA Thermal Power– 24 MW Waste Heat Recovery Power – 27 MW DG Power – 4 MW
4.	Year of Establishment		1986
5.	Date of the last environment audit report submitted	:	30th September 2024

PART – B

Water and Raw Material Consumption		
i) Water consumption	**4606.2**	KLD
Cement Plant Cooling, TPP Cooling, Boiler & Domestic (Plant & Colony)	4606.2	KLD

Name of the product(s)*	Water consumption per unit of products		
	Unit	During the previous financial year (2023-2024)	During the current financial year (2024-2025)
Cement	m^3/Tonne	0.9069	0.8271

*** The clinker, cement & power production details are given in Annexure – I.**

(ii) Raw material consumption:

Sl. No.	Name of the raw material	Name of the product	Consumption of raw material (as dry basis), Tonne	
			During the previous financial year (2023-2024)	During the current financial year (2024-2025)
1	Limestone (from captive mines)	Clinker / Cement	56,83,857.6	53,49,801.90
2	Laterite High Grade		6292	1,400.38
3	Laterite Low Grade		51279.4	87,760
4	Iron Rich Laterite		3,01,049	2,04,407
4	Indian Coal		3,168	0.0
5	Imported Coal		2,96,298.60	2,03,017.28
6	Pet Coke (Indian or Imported)		1,77,351.67	2,18,287.66
7	Alternate Fuel		3,732.38	0.0
8	Hazardous waste (solid)*		5,176.76	0.0
9	Hazardous waste (liquid)		917.95	90.15
10	Slag		73,648	95481.72
11	Fly ash		1,65,640	2,14,753.00
12	Gypsum		63,657.01	71,943.60
13	Imported Coal	Thermal Power	6,585.82	2,368.60
14	Indian Coal		81,065.47	95,206.38
15	Alternate Fuel		367.80	4,499.75

***Consumption of Hazardous waste (solid) in Tonne, including moisture loss.**

PART – C

POLLUTION GENERATED

(Parameter as Specified in the consent issued)

Pollutants	Quantity of Pollutants Discharged (mass/day) 2024-2025	Concentrations Of Pollutants in Discharges (mass/volume) 2024-2025 (average / range)	Prescribed Standards	Percentage of variation from prescribed standards with reasons
a) Waste Water (manual sampling through external agency)				
pH	Thermal Power Plant & WHRB Effluent	7.76 – 8.13	5.5 – 9.0	Well within the prescribed limits
Total Dissolved Solids		949.5 mg/L	2100 mg/L	
Total Suspended Solids		51.4 mg/L	100 mg/L	
COD		69.3 mg/L	250 mg/L	
BOD		23.9 mg/L	30 mg/L	
Oil & Grease		1.6 mg/L	10 mg/L	

pH	Sewage Treatment Plant Treated	7.51 - 7.99	5.5 – 9.0	Well within the prescribed limits
Total Dissolved Solids		751.4 mg/L	2100 mg/L	
Total Suspended Solids		28.7 mg/L	100 mg/L	
COD		41.3 mg/L	250 mg/L	
BOD		8.6 mg/L	30 mg/L	
Oil & Grease		2.3 mg/L	10 mg/L	
pH	Auto Garage Oil & Grease Trap	7.48 - 7.98	5.5 – 9.0	Well within the prescribed limits
Total Dissolved Solids		916.3 mg/L	2100 mg/L	
Total Suspended Solids		72.2 mg/L	100 mg/L	
COD		134.1 mg/L	250 mg/L	
BOD		44.1 mg/L	30 mg/L	
Oil & Grease		1.7 mg/L	10 mg/L	
(b) Air (manual sampling through external agency)				
i. Stack Monitoring				
PM	Kiln - I Bag House	23.1 mg/Nm^3	30 mg/Nm^3	Well within the prescribed limits
	Coal Mill - I Bag House	9.7 mg/Nm^3	30 mg/Nm^3	
	Cooler - I - ESP	13.2 mg/Nm^3	30 mg/Nm^3	
	Kiln - II RABH	18.9 mg/Nm^3	30 mg/Nm^3	
	Coal Mill - II Bag House	14.5 mg/Nm^3	30 mg/Nm^3	
	Cooler - II - ESP	20.6 mg/Nm^3	30 mg/Nm^3	
	Kiln - III Bag House	15.3 mg/Nm^3	20 mg/Nm^3	
	Coal Mill - III Bag House	12.6 mg/Nm^3	20 mg/Nm^3	
	Cooler - III - ESP	13.5 mg/Nm^3	20 mg/Nm^3	
	Cement Mill Separator Bag House	12.6 mg/Nm^3	30 mg/Nm^3	
	Cement Mill Vent Bag Filter	10.0 mg/Nm^3	30 mg/Nm^3	
	Slag Mill Bag House	13.5 mg/Nm^3	30 mg/Nm^3	
	JPM - Limestone Crusher Bag Filter	7.6 mg/Nm^3	30 mg/Nm^3	
	Budawada - Limestone Crusher Bag Filter	12.0 mg/Nm^3	30 mg/Nm^3	
	Thermal Power Plant ESPs	25.0 mg/Nm^3	50 mg/Nm^3	

SO_2	Kiln - I Bag House	BDL mg/Nm^3	100 mg/Nm^3	Well within the prescribed limits
	Kiln - II RABH	BDL mg/Nm^3	100 mg/Nm^3	
	Kiln - III Bag House	BDL mg/Nm^3	100 mg/Nm^3	
	Thermal Power Plant ESPs	468.3 mg/Nm^3	600 mg/Nm^3	
NOx	Kiln - I Bag House	480.2 mg/Nm^3	600 mg/Nm^3	Well within the prescribed limits
	Kiln - II RABH	409.1 mg/Nm^3	800 mg/Nm^3	
	Kiln - III Bag House	367.9 mg/Nm^3	600 mg/Nm^3	
	Thermal Power Plant ESPs	297.8 mg/Nm^3	450 Nm^3	
ii. **Ambient Air Quality Monitoring:**				
PM_{10}	Near Temple	72.4 µg/m^3	100 µg/m^3	Well within the prescribed limits
$PM_{2.5}$		25.9 µg/m^3	60 µg/m^3	
SO_2		16.7 µg/m^3	80 µg/m^3	
NOx		24.3 µg/m^3	80 µg/m^3	
PM_{10}	Near Slag Shed	69.0 µg/m^3	100 µg/m^3	Well within the prescribed limits
$PM_{2.5}$		25.2 µg/m^3	60 µg/m^3	
SO_2		18.5 µg/m^3	80 µg/m^3	
NOx		22.3 µg/m^3	80 µg/m^3	
PM_{10}	Mines Office	70.4 µg/m^3	100 µg/m^3	Well within the prescribed limits
$PM_{2.5}$		25.2 µg/m^3	60 µg/m^3	
SO_2		16.5 µg/m^3	80 µg/m^3	
NOx		21.0 µg/m^3	80 µg/m^3	

The analysis data (carried out by MoEF&CC approved external monitoring agency) of treated Thermal Power Plant Effluent Treatment Plant Treated Effluent, Sewage Treatment Plant Treated Waste Water, Auto Garage Oil & Grease Trap Treated Waste Water) for the financial year 2024-2025 is narrated in Annexure – II, III & IV respectively. No deviation is observed (with respect to quality) for 3 Nos. of waste water sources viz., Thermal Power Plant Effluent Treatment Plant Treated Effluent, Sewage Treatment Plant Treated Waste Water, Auto Garage Oil & Grease Trap Treated Waste Water from prescribed standards in the financial year 2024-2025.

On-line Thermal Power Plant Effluent Treatment Plant Treated Effluent monitoring data is being transmitted to APPCB & CPCB websites. Consolidated data on online effluent monitoring data (monthly average) for the financial year 2024-2025 is enclosed as Annexure - V.

Details of month wise stack monitoring carried out by MoEF&CC approved external monitoring agency in the financial year 2024-2025 are enclosed as Annexure - VI. No deviation is observed for stack monitoring data from Prescribed Standards in the financial year 2024-2025.

13 Nos. of online stack monitors are equipped with major stacks. On-line stack monitoring data is being transmitted to APPCB & CPCB websites. Consolidated data on online stack monitoring data (monthly average) for the financial year 2024-2025 is enclosed as Annexure - VII.

Details of month wise ambient air quality monitoring carried out near to the plant premises in the financial year 2024-2025 by MoEF&CC approved environmental monitoring agency are enclosed as Annexure - VIII. Data on ambient air quality monitoring carried out in the nearby villages (9 locations) for the same period is enclosed in Annexure – IX. No deviation is observed for ambient air quality data (adjacent to plant & in surrounding villages) from Prescribed Standards in the financial year 2024-2025.

5 Nos. of continuous ambient air quality monitoring stations are installed. On-line ambient air quality monitoring data is being transmitted to APPCB website.

Fugitive dust monitoring is being carried out at 16 locations across the plant. The fugitive dust monitoring data collected in the financial year 2024-2025 is enclosed as Annexure – X.

PART – D

HAZARDOUS WASTES

As specified under 1[Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2016)]

Hazardous Waste	During the previous financial year (2023-2024)	During the current financial year (2024-2025)
Waste oil	Used within the premises. No disposal to outside agencies.	Used within the premises. No disposal to outside agencies.
Waste grease		
Waste lead acid batteries	0.98 Tonne to M/s Southern Power Industries	0.42 Tonne to M/s Exide, 0.93 Tonne to M/s Novateur Electrical & Digital Systems Private and 1.29 Tonne to M/s Star Battery
Waste Hi-chrome Grinding Media	No disposal to outside agencies.	No disposal to outside agencies.

- Form - 4 (copy submitted to APPCB) - Hazardous Waste generation / receipts and consumption / disposal details for plant for the financial year 2024-2025 is enclosed as Annexure - XII.
- Waste oil / lubricants are used along with fresh grease for reclaimers.

The details of hazardous wastes co-processed in our cement plant kilns in the financial year 2024-2025 are:

1	**Quantity of waste received during the year:**	
(i)	Domestic sources:	For Cement Plant - Through APEMCL portal: • Hazardous waste (solid) – 0.0 Tonne • Hazardous waste (liquid) – 74.89 Tonne
(ii)	Imported (if applicable):	Not applicable
2	Quantity in stock at the beginning of the year:	For Cement Plant: • Hazardous waste (solid) – 0.0 Tonne • Hazardous waste (liquid) – 15.26 Tonne
3	Quantity recycled or co-processed or used:	Co-processed in Cement Kilns: • Hazardous waste (solid) – 0.0 Tonne (including moisture loss) • Hazardous waste (liquid) – 90.15 Tonne
4	Quantity of products dispatched (wherever applicable):	Not applicable
5	Quantity of waste generated:	Not applicable
6	Quantity of waste disposed:	Not applicable
7	Quantity re-exported (whether applicable):	Not applicable
8	Quantity in storage at the end of the year:	For Cement Plant: • Hazardous waste (solid) – 0.0 Tonne • Hazardous waste (liquid) – 0.0 Tonne

Note: All these materials are received through APEMCL portal, from the sources located within Andhra Pradesh.

PART – E
SOLID WASTES

	During the previous financial year (2023-2024)	During the current financial year (2024-2025)
(a) From process	No solid waste	No solid waste
(b) From pollution control facility		
From Cement Plant*	Not quantified.	
Fly Ash generation from Thermal Power	75,425 Tonne	43,372.18 Tonne
Sludge Cake generation from STP#	2.0 m^3	15.0 m^3
Sludge & Top Layers generation from ETP#	0 Tonne	0 Tonne
Vermi-compost from colony garbage$	50.0 Tonne	18.0 Tonne
(c) (1) Quantity recycled or re-utilized within the unit		
From Cement Plant*	Total recycled.	
Thermal Power plant Fly Ash re-utilized within the premises**	75,425 Tonne	39,504.18 Tonne
STP Sludge Cake utilized##	2.0 m^3	14.0 m^3
ETP Sludge & Top Layers##	0 Tonne	0 Tonne
Vermi-compost from colony garbage$	20.0 Tonne	15.0 Tonne
(2) Sold		

	During the previous financial year (2023-2024)	During the current financial year (2024-2025)
MS and other metal scrap sold out	1,834.5 Tonne	2,790.1 Tonne
(3) Disposed		
Thermal Power Plant Fly Ash disposed to outside agencies**	75,425 Tonne	1,230.5 Tonne

* Dust collected from cement plant pollution control equipments is being totally recycled in the respective circuits to make it as a part of the product of the respective section.

** 39,504.18 Tonne of fly ash generated from thermal power plant is used in cement plant, whereas 1,230.5 Tonne disposed to outside agencies.

Dried sludge cake from STP and Sludge & Top Layer from ETP of TPP are used as manure for greenbelt, in place of chemical fertilizers.

$ Vermi-composting for colony garbage is being used for greenbelt activities as manure, in place of fertilizers.

In the financial year 2024-2025, we have utilized the following solid / non-hazardous wastes as alternate fuel in our plant brought out from various sources, to conserve the natural resources:

S No.	Name of Alternate Fuel received	Source / Industry	Procured Quantity, MT
1	Coal Dust	M/s. Planet Energys, Hyderabad	4,949.4
		Total	**4949.4**

PART – F

(Please specify the characteristics in terms of concentration and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes

Type of waste	Quantity generated in 2024-2025	Disposal practice
Dust collected from cement plant pollution control equipment	Total recycled	Is being totally recycled / re-utilized in the respective circuits to make it as a part of the product of the respective section
Fly ash from TPP	43,372.18 Tonne	39,504.18 Tonne of fly ash generated from thermal power plant is used in cement plant, whereas 1,230.5 Tonne disposed to outside agencies.
Top & Bottom Sludge collected from TPP ETP	0.0 Tonne	Is being used as manure in greenbelt activities, in place of chemical fertilizers (if generated).
Sludge collected from STP	15 m^3	Is being used as manure in greenbelt activities, in place of chemical fertilizers.
Colony garbage	18 Tonne of compost	By Vermi-composting and compost is being used for greenbelt activities as manure, in place of chemical fertilizers.

Kitchen waste from colony	Not quantified	Kitchen waste is being composted in bio-gas plant. The generated bio-gas is used in industrial canteen, to partially replace the consumption of LPG.
MS and other metal scrap	2790.1 Tonne	Is being sold to local vendors
E-waste from plant & mines	IT waste – 2.657 Tonne Instrumentation waste – 1.199 Tonne	Is being disposed to APPCB authorized agencies. Returns are being submitted annually. Copy of the E-waste returns for the financial year 2024-2025 is enclosed as Annexure – XII. Total quantity by the end of FY 2024-2025 are: • Instrumentation waste – 0.156 Tonne • IT waste – 0.592 Tonne
Hazardous waste – Waste oil & waste grease	No waste oil & waste grease disposed to external agencies.	Waste oil along with fresh fuel is being used for kiln firing while light up & waste grease for reclaimer lubrication. Excess waste oil & waste grease are sold to APPCB authorized agents. Copy of the hazardous waste returns for the financial year 2024-2025 is enclosed as Annexure – XI.
Hazardous waste – Used hi-chrome grinding media	No waste oil & waste grease disposed to external agencies.	Waste oil along with fresh fuel is being used for kiln firing while light up & waste grease for reclaimer lubrication. Excess waste oil & waste grease are sold to APPCB authorized agents. Returns are being submitted annually to AP Pollution Control Board. Copy of the hazardous waste returns for the financial year 2024-2025 is enclosed as Annexure – XI.
Hazardous waste – waste lead acid batteries	2640 kg	Waste lead acid batteries are being disposed to the supplier on exchange basis or to APPCB authorized agency (M/s Southern Power Industries). Returns are being submitted annually to AP Pollution Control Board. Copy of the hazardous waste returns for the financial year 2024-2025 is enclosed as Annexure – XI.
Plastic waste collected from colony, mines and plant	16.23 Tonne	Being fired in the kilns.
Bio-medical waste from OHC	Yellow – 156.695 kg Red – 66.418 kg White – 22.483kg Blue – 27.794 kg	Operating Occupational Health Centre (OHC) to provide basic first aid facilities within the premises. Bio-medical waste from this OHC is being regularly collected by APPCB authorized agent, M/s Safenviron Bio-Medical Treatment Plant for onward treatment. The agency collects the bio-medical waste on 48-hour basis. Returns are being submitted annually (for the calendar year) to AP Pollution Control Board. Copy of Bio-Medical Annual Returns submitted for the calendar year 2024 is enclosed as Annexure – XIII.

PART - G

Impact of the pollution control measures taken on concentration of natural resources and on the cost of production

- All the surrounding areas are kept free from pollution.
- The cost of power consumed for operation of various pollution control equipment operated in cement plant & thermal power plant in the financial year 2024-2025 (air & water pollution equipment) is Rs. 873.27 lakh against Rs. 895.81 lakh in financial year 2023-2024 i.e., Rs. 42.96/Tonne of cement in the financial year 2024-2025 against Rs. 48.79/Tonne of cement in the financial year 2023-2024.
- Rs. 103.87 lakh incurred towards capital cost for various pollution control measures for cement plant, thermal power plant and mines in the financial year 2024-2025 against Rs. 97.44 lakh investment for capital cost in the financial year 2023-2024.
- Total environmental protection expenditure made in the financial year 2024-2025 (for cement plant, thermal power plant and mines) is Rs. 1959.11 lakh against Rs. 3101.52 lakh in financial year 2023-2024, i.e., nearly Rs. 96.37/Tonne of cement in financial year 2024-2025 against Rs. 168.94/Tonne of cement in financial year 2023-2024.
- The expenditure details for Environment Protection covering various measures carried out in the financial year 2024-2025 are enclosed as Annexure - XIV.
- An amount of Rs. 1611.20 lakh is allocated towards Environment Management Activities for the financial year 2025-2026 towards capital as well as recurring costs for plant & mines and being spent.

PART – H

Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution

- The following air pollution control equipment are in operation (by the end of financial year 2024-2025) in the present operating cement plant & thermal power plant to control process emissions as well as fugitive emissions from all vulnerable sources, etc.:
    - 168 Nos. of RABH / Bag Houses / Bag Filters
    - 5 Nos. of ESPs
    - 6 Nos. of Water Fogging Systems
- 1 No. of bag filter is under erection and commissioning stage. This will be commissioned along with associated process equipment.
- All the air pollution control equipment for cement plant Line – I and Line – II are designed for particulate emission level of 30 mg/Nm^3, whereas for cement plant Line – III are designed for 20 mg/Nm^3 respectively.
- As our pyritic sulphur in limestone is less than 0.25%, our SO_2 standard for Kiln – I, II & III is 100 mg/Nm^3. The sulphur content is absorbed in clinker and the emission levels are well within the limit.
- To meet the NOx standard of 600 mg/Nm^3, 800 mg/Nm^3 & 600 mg/Nm^3 for Kiln – I, II & III respectively, low NOx burners and low NOx calciners are installed.
- All the air pollution control equipment for TPP are designed for particulate emission level of 50 mg/Nm^3, SO_2 standard of 600 mg/Nm^3 and NOx standard of 450 mg/Nm^3 respectively.

- To control the process emissions & fugitive emissions, some of the bags (of bag houses and bag filters) are replaced in the air pollution control equipment. The cost incurred for this replacement in the financial year 2024-2025 is Rs. 24.716 lakh.
- The dust collected from APCE is being totally recycled to the respective process / storage facility.
- All conveyers are covered with GI sheets.
- 3 Nos. of road sweepers, 2 Nos. of industrial vacuum cleaners and 1 No. of mobile water sprinkler are in operation to maintain clean environment.

PART - I

Any other particulars for improving the quality of the environment

- Detailed environmental protection measures are enclosed as Annexure - I.
- Various Management Systems are being implemented in our premises, viz.,

Management System	Implemented from
Quality Management System - IS / ISO 9001:2015	1996
Environmental Management System - IS / ISO 14001:2015	2006
Occupational Health & Safety Management System – IS / ISO 45001:2018	2010
Energy Management System - ISO 50001:2018	2014
Work Place Management - 5S Certification	2016

ANNEXURE – I

ENVIRONMENTAL PROTECTION MEASURES

Ramco is a vibrant group of Companies with manufacturing activities in Cement, Textiles, Fibre-Cement Products, Wind Energy, Software Products, Surgical Dressings, Ready-Mix Concrete and Dry Mortar Plants.

The Ramco Cements Limited is a unit of the Ramco Group which has been growing steadily right from its inception with present capacity 23.05 Million Tonnes / Annum of cement. RCL, which has always been striving for Total Quality Management, possesses International Management System Certificates IS/ISO 9001:2015, IS/ISO 14001:2015, IS/ISO 45001:2018, ISO 50001:2018 and 5-S Workplace Management System.

The KSR Nagar plant was presented with an Award in recognition of practicing 'Cleaner Production Measures' from AP Pollution Control Board, Hyderabad for the year 2011-2012 on the eve of World Environment Day – 05th June 2012. Andhra Pradesh Pollution Control Board recommended for 'Better Environmental Practices Award - First in Cement Industry Category for the year 2016-2017 in the State of Andhra Pradesh'.

PRODUCTION DETAILS:

	Capacity	Production in the Financial Year 2023-2024	Production in the Financial Year 2024-2025
Clinker*	46,85,000 TPA	4285090.11 Tonne	4064203 Tonne
Cement	36,50,000 TPA	1835842.26 Tonne	2032761 Tonne
Coal Based Thermal Power	24 MW	1293.88 Lakh units	1404.93 Lakh units
Waste Heat Recovery Power	27 MW	1887.50 Lakh units	1726.54 Lakh units

* Part of the clinker produced is used in cement manufacturing within the premises and the balance clinker is exported to other cement grinding units.

AIR:

Air Pollution Control Measures:

- The following air pollution control equipment are in operation (by the end of financial year 2024-2025) in the present operating cement plant & thermal power plant to control process emissions as well as fugitive emissions from all vulnerable sources like transfer points, raw mill handling (unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas, etc.:
    - 168 Nos. of RABH / Bag Houses / Bag Filters
    - 5 Nos. of ESPs
    - 6 Nos. of Water Fogging Systems
- 1 No. of bag filter is under erection and commissioning stage. This will be commissioned along with associated process equipment.

- In the event of pollution control equipment not working, the respective unit(s) being stopped automatically in phased manner with associated interlocks.
- All the air pollution control equipment for cement plant Line – I and Line – II are designed for particulate emission level of 30 mg/Nm^3, whereas for cement plant Line – III are designed for 20 mg/Nm^3 respectively.
- As our pyritic sulphur in limestone is less than 0.25%, our SO_2 standard for Kiln – I, II & III is 100 mg/Nm^3. The sulphur content is absorbed in clinker and the emission levels are well within the limit.
- To meet the NOx standard of 600 mg/Nm^3, 800 mg/Nm^3 & 600 mg/Nm^3 for Kiln – I, II & III respectively, low NOx burners and low NOx calciners are installed.
- All the air pollution control equipment for TPP are designed for particulate emission level of 50 mg/Nm^3, SO_2 standard of 600 mg/Nm^3 and NOx standard of 450 mg/Nm^3 respectively.
- To control the process emissions & fugitive emissions, some of the bags (of bag houses and bag filters) are replaced in the air pollution control equipment. The cost incurred for this replacement in the financial year 2024-2025 is Rs. 24.716 lakh.
- The dust collected from APCE is being totally recycled to the respective process / storage facility.

Online Stack Monitoring:

13 Nos. of major stacks are equipped with online stack monitors. On-line monitoring data is being transmitted to APPCB & CPCB websites. The details are:

Parameter	Location of online stack monitoring instrument	Present equipment		Details of earlier equipment, if any – Make / Year of installation
		Make of	Year of installation	
PM	Kiln – I Stack	IFI	2018	Forbes Marshall / 2010
	Kiln – II Stack	IFI	2018	Durag / 2009
	Kiln – III Stack	Sick	2021	
	Cooler - I Stack	Sick	2023	IFI / 2017 & Durag / 2009
	Cooler – II Stack	Sick	2023	IFI / 2018 & Durag / 2009
	Cooler - III Stack	Sick	2021	
	Coal Mill – I Stack	IFI	2017	Durag / 2009
	Coal Mill – II Stack	IFI	2016	Durag / 2009
	Coal Mill – III Stack	Sick	2021	
	Cement Mill Vent Stack	IFI	2016	Durag / 2009
	Cement Mill Separator Stack	IFI	2018	Durag / 2009
	Slag Mill Stack	IFI	2018	Forbes Marshall / 2012 & Baltec / 2005
	Thermal Power Plant Stack	Sick	2024	Forbes Marshall / 2008 & IFI / 2017
SO_2	Kiln – I Stack	ABB	2017	
	Kiln – II Stack	ABB	2015	
	Kiln – III Stack	ABB	2021	

	Thermal Power Plant Stack	ABB	2015	
NOx	Kiln – I Stack	ABB	2017	
	Kiln – II Stack	ABB	2015	
	Kiln – III Stack	ABB	2021	
	Thermal Power Plant Stack	ABB	2015	

Remote calibration systems (of M/s Glens make) are installed for SO_2 and NOx analysers for Kiln – I, Kiln – II & Thermal Power Plant stacks in the year 2018 and for Kiln – III in the year 2021.

On-line stack monitoring data is being transmitted to APPCB & CPCB websites. Consolidated data on online stack monitoring data (monthly average) for the financial year 2024-2025 is enclosed as Annexure - VII.

Stack Monitoring by MoEF&CC Approved External Agency:

Major stacks are being monitored by MoEF&CC approved external agency on monthly basis and reports are being submitted to the APPCB. Data on stack monitoring in the financial year 2024-2025 is enclosed in Annexure - VI. Compiled data of stack monitoring in the financial year 2024-2025 is as follows:

S. No.	Stack Attached to	Norm	Average values, mg/Nm^3	
			Financial Year 2023-2024	Financial Year 2024-2025
I.	**PM Concentration**			
1	Kiln - I Bag House	30	17.6	23.1
2	Coal Mill - I Bag House	30	9.2	9.7
3	Cooler - I - ESP	30	15.2	13.2
4	Kiln - II RABH	30	20.2	18.9
5	Coal Mill - II Bag House	30	9.9	14.5
6	Cooler - II - ESP	30	21.3	20.6
7	Kiln - III Bag House	20	16.4	15.3
8	Coal Mill - III Bag House	20	14.8	12.6
9	Cooler - III - ESP	20	13.5	13.5
10	Cement Mill Separator Bag House	30	10.5	12.6
11	Cement Mill Vent Bag Filter	30	8.9	10.0
12	Slag Mill Bag House	30	11.8	13.5
13	JPM - Limestone Crusher Bag Filter	30	9.6	7.6
14	Budawada - Limestone Crusher Bag Filter	30	10.4	12.0
15	Thermal Power Plant ESPs	50	28.9	25.0
II.	**SO_2 Concentration**			
1	Kiln - I Bag House	100	14.9	BDL
2	Kiln - II RABH	100	23.4	BDL
3	Kiln - III Bag House	100	11.2	BDL

S. No.	Stack Attached to	Norm	Average values, mg/Nm^3	
			Financial Year 2023-2024	Financial Year 2024-2025
4	Thermal Power Plant ESPs	600	473.2	468.3
III.	**NOx Concentration**			
1	Kiln - I Bag House	600	487.3	480.2
2	Kiln - II RABH	800	496.4	409.1
3	Kiln - III Bag House	600	449.0	367.9
4	Thermal Power Plant ESPs	450	262.2	297.8

Continuous Ambient Air Quality Monitoring:

5 Nos. of Continuous ambient air quality monitoring stations are installed. On-line monitoring data is being transmitted to APPCB website. The details of Online Continuous Ambient Air Quality Monitoring equipment are:

S. No.	Location of continuous ambient air monitoring instrument	Make of equipment			
		Parameter - PM_{10}	Parameter - $PM_{2.5}$	Parameter - SO_2	Parameter - NOx
1	Plant Time Office	Metone	Metone	Horiba	Horiba
2	Mines Office	Metone	Metone	Horiba	Horiba
3	Plant NW Corner	Metone	Metone	Horiba	Horiba
4	Ravirala Limestone Mine (RF)	Metone	Metone	Horiba	Horiba
5	Ramco Budawada Limestone Mine (RF)	Metone	Metone	Horiba	Horiba

On-line ambient air quality monitoring data is being transmitted to APPCB website.

Ambient Air Quality Monitoring by MoEF&CC Approved External Agency – near to the plant boundary:

Ambient Air Quality is being monitored by MoEF&CC approved external agency on monthly basis at 3 locations (near to the boundary of the plant in 3 directions of the plant) and reports are being submitted to the APPCB. Compiled data on Ambient Air Quality monitoring in the financial year 2024-2025 is enclosed in Annexure - VIII.

Pollution Type	Unit	Pollution Board Norms	Near Temple		Near Slag Shed		Mines Office	
			2023-2024	2024-2025	2023-2024	2024-2025	2023-2024	2024-2025
PM_{10}	µg/m^3	100	75.0	72.4	67.3	69.0	70.0	70.4
$PM_{2.5}$	µg/m^3	60	31.7	25.9	27.3	25.2	28.8	25.2
SO_2	µg/m^3	80	20.8	16.7	18.2	18.5	20.3	16.5
NOx	µg/m^3	80	24.6	24.3	22.6	22.3	26.1	21.0

Ambient Air Quality Monitoring by MoEF&CC Approved External Agency – nearby villages:

Data on ambient air quality monitoring carried out in the nearby villages (9 locations) in the financial year 2024-2025 is enclosed in Annexure – IX. Average values of month wise ambient air quality monitoring carried out near to the plant are as follows:

Description	Average concentration of pollution type, µg/m³									
	Financial Year 2023-2024					Financial Year 2024-2025				
	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO	PM_{10}	$PM_{2.5}$	SO_2	NO_X	CO
Pollution Board Norms	100	60	80	80	2000	100	60	80	80	2000
Dharmavarapupadu Thanda	58.30	23.59	16.32	18.93	244.75	53.78	21.74	13.59	16.31	252.00
Jayanthipuram Village	58.98	23.86	15.48	18.38	249.08	54.31	21.96	14.74	17.64	251.28
Chillakallu Village	58.85	23.80	15.37	18.27	244.46	53.37	21.59	14.40	17.30	275.63
K Agraharam Village	56.48	22.89	14.98	17.73	256.08	54.00	21.89	14.33	17.56	279.63
Jaggayyapet	58.60	25.01	15.31	18.01	244.13	54.43	22.18	14.34	17.03	276.33
Budawada Village	59.02	23.77	14.98	17.68	261.83	52.42	21.13	14.31	17.01	261.58
Vedadri Village	60.85	32.88	15.04	17.59	260.67	54.87	22.10	14.81	16.71	266.46
Pochampalli Village	58.23	32.81	21.15	18.00	263.29	52.45	21.38	14.11	17.29	266.25
Ravirala Village	60.00	24.43	15.01	17.96	262.00	51.43	21.77	14.38	17.35	274.42

Fugitive dust monitoring is being carried out at 16 Nos. of locations across the plant. The fugitive dust monitoring data collected in the financial year 2024-2025 is enclosed as Annexure – X.

WATER:

Water Requirement:

- Mine seepage water is the source for water requirements.
- Mine seepage water is being allowed to settle in mine sump. The sump outlet water is used for:
  - cement plant process requirements,
  - thermal power plant & waste heat recovery system plant process requirements,
  - water sprinkling purpose,
  - greenbelt purpose,
  - domestic water requirements within the plant, colony and mines,
  - within 5 mining leases for process requirements, domestic requirements, veicle wash, etc.
- Panchayat Raj & Rural Development Department (nodal agency for Central Ground Water Dept) vide Lr. No. PRR05-11028/45/2018-SLNA-GIS-CORD dated 13.11.2021 (which is valid up to 12.11.2024) accorded permission for mine seepage water withdrawal @ 7000 m^3/day, for internal use. Renewal application is submitted and order is awaited.
- By considering 365 days of operation of plant, total water requirement for Cement Plant, Thermal Power Plant and for Domestic Purposes is 4606.2 m^3/day in the financial year 2024-2025 against 4561.3 m^3/day in the financial year 2023-2024. Total water requirement for Cement Plant, Thermal Power Plant and for Domestic Purposes is 0.9069 m^3/Tonne of cement produced in the financial year 2024-2025 against 0.9069 m^3/Tonne of cement produced in the financial year 2023-2024.

- By considering 305 days of operation of mines, the total water requirement for Captive Mines is 411.0 m^3/day in the financial year 2024-2025 against 382.0 m^3/day in the financial year 2023-2024.
- Total water requirement for Cement Plant, Thermal Power Plant, Captive Mines and for Domestic Purposes is 5017.5 m^3/day in the financial year 2024-2025 against 4943.3 m^3/day in the financial year 2023-2024.

Potable Water Supply System:

Reverse Osmosis (RO) plant is located at colony and purified water is being distributed to all offices, mines and colony houses. The analysis reports of RO plant inlet and outlet samples in the financial year 2024-2025 are enclosed as Annexure - XV.

Ground Water Quality Monitoring:

9 Nos. of ground water samples from the nearby villages are being analysed on quarterly basis by MoEF&CC approved external agency and reports are being submitted to the Board regularly. The analysis data (for the financial year 2024-2025) is narrated in Annexure – XVI.

Waste Water Treatment processes:

- No process effluent generation from cement manufacturing.
- TPP & WHRB effluent is being treated in effluent treatment plant (neutralization tank). The wastewater from boiler blow down, DM plant regeneration, UF & RO rejects and cooling tower blow down of TPP are being neutralized in this neutralization tank.
- Sewage treatment plant is in operation to treat domestic sewage from colony, plant, canteen and offices.
- Auto garage wash water is being treated separately at Oil & Grease Trap.

Waste Water Quality Analysis by MoEF&CC Approved External Agency:

- 3 Nos. of treated outlet samples are being analysed on monthly basis by MoEF&CC approved external agency and reports are being submitted to the Board regularly:
  - Effluent Treatment Plant (to treat Thermal Power Plant & WHRB effluents)
  - Sewage Treatment Plant (located at colony to treat sewage from plant & colony)
  - Auto Garage Oil & Grease Trap.
- The analysis data (for the financial year 2024-2025) is narrated in Annexure – II, III & IV respectively.

Average values of month wise outlet samples analysis of TPP & WHRB effluent treatment plant, sewage treatment plant and auto garage oil & grease trap are as follows:

(i) Thermal Power Plant & WHRB Effluent Treatment Plant Treated Effluent:

Pollution Type	Unit	Pollution Board Norms	Average Value / Range (2023-2024)	Average Value / Range (2024-2025)
p^H		5.5 - 9.0	7.71 - 7.98	7.76 – 8.13
TDS	mg/L	2100	980.3	949.5
TSS	mg/L	100	41.1	51.4
COD	mg/L	250	63.7	69.3
BOD	mg/L	100	23.8	23.9
O & G	mg/L	10	1.4	7.6

(ii) Sewage Treatment Plant Treated Waste Water:

Pollution Type	Unit	Pollution Board Norms	Average Value / Range (2023-2024)	Average Value / Range (2024-2025)
p^H		5.5 - 9.0	7.76 - 7.99	7.51 – 7.99
TDS	mg/L	2100	625.7	751.4
TSS	mg/L	100	22.5	28.7
COD	mg/L	250	38.2	41.3
BOD	mg/L	100	8.5	8.6
O & G	mg/L	10	1.4	2.3

(iii) Auto Garage Oil & Grease Trap Treated Waste Water:

Pollution Type	Unit	Pollution Board Norms	Average Value / Range (2023-2024)	Average Value / Range (2024-2025)
p^H		5.5 - 9.0	7.68 - 7.99	7.48 – 7.98
TDS	mg/L	2100	903.1	916.3
TSS	mg/L	100	69.7	72.2
COD	mg/L	250	133.8	134.1
BOD	mg/L	100	44.4	44.1
O & G	mg/L	10	1.9	1.7

Online Effluent Quality Analysis:

1 No. of online effluent quality monitoring station is installed at thermal power plant & WHRB effluent treatment plant outlet. On-line monitoring data is being transmitted to APPCB & CPCB websites. The details of online effluent quality monitoring station are:

Location of online effluent quality monitoring station	Parameter	Make of present equipment	Year of installation
Thermal Power Plant – Effluent Treatment Plant	pH	Daeyoon	2019
	Temperature	Daeyoon	2019
	TSS	Daeyoon	2019

Consolidated data on online effluent monitoring data (monthly average) for the financial year 2024-2025 is enclosed as Annexure - V.

Water Level Data:

Water levels are regularly monitored through piezometers on regular basis at 4 Nos. of mining leases. The location details are as follows:

S.No	Name of the Mine	No. of Piezometers		
		Manual	Automatic	Total
1	Jayanthipuram Limestone Mine (North Band)	3 Nos.	1 No	4 Nos.
2	Jayanthipuram Limestone Mine (South Band)	2 No	1 Nos.	3 Nos.
3	Ravirala Limestone Mine (RF)	1 No.	3 Nos.	4 Nos.
4	Ramco Budawada Limestone Mine(RF)	2Nos.	1 Nos.	3 Nos.
	Total	14 Nos.		

Details of these piezometers and data on water levels collected in the financial year 2024-2025 is enclosed as Annexure – XVII.

Water Conservation and Utilization of Treated Effluent / Sewage:

Various measures initiated to conserve water reserves are:

- Water collected in mine pits is being used for cement plant, thermal power plant, waste heat recovery boilers, mines and for domestic purposes. No ground water is being used.
- 48 Nos. of rain water harvesting structures are made to recharge the ground water in the colony by March 2025. 4 Nos. of rain water harvesting structures are made to recharge the ground water in the plant by March 2025. The locations of these pits are listed in Annexure - XVIII.
- Part of mine seepage water is supplied for agricultural fields (nearly 120 acre) in the nearby areas, after settling in settling ponds.
- To maintain 'zero discharge', treated effluent / sewage utilization is as follows:

Source	Utilized at
TPP effluents are being neutralized in neutralization tank	○ Partially for cement plant process ○ Water sprinkling purpose ○ Greenbelt ○ Excess treated waste water, if any, is being passed to the artificial ponds (about 0.5 ha & 0.15 ha area) in Jayanthipuram Limestone Mine (North band) to uplift the water table in the nearby area
Sewage treatment plant is in operation to treat domestic sewage	○ Greenbelt (by pumping into elevated tank and then by gravity to the nearby plantation area) ○ Water sprinkling purpose
Auto garage wash water is being treated at Oil & Grease Trap	○ Greenbelt
RO plant outlet	○ Greenbelt

NOISE:

RCL is regularly monitoring noise levels internally. Ear plugs / muffs are provided to the concerned employees, who are working at high noisy areas.

Noise level data collected in the financial year 2024-2025 is enclosed as Annexure - XIX.

OCCUPATIONAL HEALTH:

Occupational health check-ups are being carried out for newly joined employees at the time of joining into the organization and occupational health surveillance programme is carried out for all the employees regularly. Full-fledged occupational health centre is established and services are being rendered by qualified occupational health specialist.

Occupational health checkup at the time of recruitment is being carried for all the employees as per Mines Rules, with the following tests:

- Lung function test
- ECG
- Chest X-ray
- Blood analysis test
- Urine analysis test
- Audiometry
- Checking colour blindness
- Stool Analysis
- Sputum (Optional)

The employees who are working at the time of initiation of this programme are covered for these tests. If any person failed in this health checkup, was not recruited. Like so, a baseline data on the health status of workmen in the Pre-recruitment stage was established. The same is being repeated periodically to update and to take action accordingly.

Occupational health surveillance on regular basis is being carried for all the employees, with the following tests:

- Clinical examination including Neurological assessment
- Lung function test
- ECG
- Chest X-ray
- Blood analysis test
- Urine analysis test
- Audiometry
- Checking colour blindness

If any person failed in this health checkup, he will be shifted / transferred to non-hazardous activities. Till now, no such case is observed.

Occupational Health Centre (with qualified Occupational Health Specialist) is established with the following facilities:

- X-ray
- ECG
- Spirometry (lung function test)
- Audiometry
- Semi-auto analyser to carryout bio-chemical tests
- Clinical lab for micro-biological tests (including sputum test)
- Checking colour blindness
- Ambulances

First aid boxes are made available at various working areas of the plant for immediate treatment. First aid training is imparted to the selected employees regularly. The list of first aid members is being displayed at strategic places.

WASTE HANDLING & CLEANER PRODUCTION PRACTICES:

Type of waste	Quantity generated in 2024-2025	Disposal practice
Dust collected from cement plant pollution control equipment	Total recycled	Is being totally recycled / re-utilized in the respective circuits to make it as a part of the product of the respective section
Fly ash from TPP	43,372.18 Tonne	39,504.18 Tonne of fly ash generated from thermal power plant is used in cement plant, whereas 1,230.5 Tonne disposed to outside agencies.
Top & Bottom Sludge collected from TPP ETP	0.0 Tonne	Is being used as manure in greenbelt activities, in place of chemical fertilizers (if generated).
Sludge collected from STP	14 m^3	Is being used as manure in greenbelt activities, in place of chemical fertilizers.
Colony garbage	18 Tonne of compost	By Vermi-composting and compost is being used for greenbelt activities as manure, in place of chemical fertilizers.
Kitchen waste from colony	Not quantified	Kitchen waste is being composted in bio-gas plant. The generated bio-gas is used in industrial canteen, to partially replace the consumption of LPG.
MS and other metal scrap	2790.1 Tonne	Is being sold to local vendors
E-waste from plant & mines	IT waste – 2.657 Tonne Instrumentation waste – 1.199	Is being disposed to APPCB authorized agencies. Returns are being submitted annually. Copy of the E-waste returns for the financial year 2024-2025 is enclosed as Annexure – XII. Total quantity by the

	Tonne	end of FY 2024-2025 are: • Instrumentation waste – 0.156 Tonne • IT waste – 0.592 Tonne
Hazardous waste – Waste oil & waste grease	No waste oil & waste grease disposed to external agencies.	Waste oil along with fresh fuel is being used for kiln firing while light up & waste grease for reclaimer lubrication. Excess waste oil & waste grease are sold to APPCB authorized agents. Copy of the hazardous waste returns for the financial year 2024-2025 is enclosed as Annexure – XI.
Hazardous waste – Used hi-chrome grinding media	No waste oil & waste grease disposed to external agencies.	Waste oil along with fresh fuel is being used for kiln firing while light up & waste grease for reclaimer lubrication. Excess waste oil & waste grease are sold to APPCB authorized agents. Returns are being submitted annually to AP Pollution Control Board. Copy of the hazardous waste returns for the financial year 2024-2025 is enclosed as Annexure – XI.
Hazardous waste – waste lead acid batteries	2640 kg	Waste lead acid batteries are being disposed to the supplier on exchange basis or to APPCB authorized agency (M/s Southern Power Industries). Returns are being submitted annually to AP Pollution Control Board. Copy of the hazardous waste returns for the financial year 2024-2025 is enclosed as Annexure – XI.
Plastic waste collected from colony, mines and plant	16.23 Tonne	Being fired in the kilns.
Bio-medical waste from OHC	Yellow – 156.695 kg Red – 66.418 kg White – 22.483kg Blue – 27.794 kg	Operating Occupational Health Centre (OHC) to provide basic first aid facilities within the premises. Bio-medical waste from this OHC is being regularly collected by APPCB authorized agent, M/s Safenviron Bio-Medical Treatment Plant for onward treatment. The agency collects the bio-medical waste on 48-hour basis. Returns are being submitted annually (for the calendar year) to AP Pollution Control Board. Copy of Bio-Medical Annual Returns submitted for the calendar year 2024 is enclosed as Annexure – XIII.

Co-processing:

The details of hazardous wastes co-processed in our cement plant kilns in the financial year 2024-2025 are:

1	Quantity of waste received during the year:	
(i)	Domestic sources:	For Cement Plant - Through APEMCL portal: • Hazardous waste (solid) – 0.0 Tonne • Hazardous waste (liquid) – 74.89 Tonne
(ii)	Imported (if applicable):	Not applicable
2	Quantity in stock at the beginning of the year:	For Cement Plant: • Hazardous waste (solid) – 0.0 Tonne • Hazardous waste (liquid) – 15.26 Tonne
3	Quantity recycled or co-processed or used:	Co-processed in Cement Kilns: • Hazardous waste (solid) – 0.0 Tonne (including moisture loss) • Hazardous waste (liquid) – 90.15 Tonne
4	Quantity of products dispatched (wherever applicable):	Not applicable
5	Quantity of waste generated:	Not applicable
6	Quantity of waste disposed:	Not applicable
7	Quantity re-exported (whether applicable):	Not applicable
8	Quantity in storage at the end of the year:	For Cement Plant: • Hazardous waste (solid) – 0.0 Tonne • Hazardous waste (liquid) – 0.0 Tonne

Note: All these materials are received through APEMCL portal, from the sources located within Andhra Pradesh.

Usage of alternate fuels:

Pet coke:

Pet coke (imported / indigenous) is being used in cement plant as an alternate fuel. The permitted quantity for usage of imported / indigenous pet coke is 4,74,666 Tonne per annum. The quantity of pet coke used in the financial year 2024-2025 is 2,18,287.66 Tonne.

Alternate fuels:

Various alternate fuels (other than hazardous wastes) received in the financial year 2023-2024:

S. No.	Name of Alternate Fuel received	Source / Industry	Procured Quantity, MT
1	Coal Dust	Planet Energies, Hyderabad	4949.4
		Total	**4949.4**

Various cleaner production practices:

Various cleaner production practices are initiated to control air emissions as well as fugitive emissions from sources. These practices are:

- For better housekeeping, '5-S – Work Place Management' is implemented.
- Fuel required for cement plant is mostly received through railway wagons to the plant premises.
- 39,504.18 Tonne of fly ash generated from thermal power plant is used in cement plant, whereas 1,230.5 Tonne disposed to outside agencies.
- 3 Nos. of road sweepers, 2 Nos. of industrial vacuum cleaners and 1 No. of mobile water sprinkler are in operation to maintain clean environment. The operating cost of these is Rs. 43.68 lakh in the financial year 2024-2025 against Rs. 34.79 lakh in the financial year 2023-2024.
- Water spraying system installed ay limestone crusher hoppers to control fugitive dust.
- Duoflex Burners for kiln firing & low NOx calciners are used to reduce NOx levels.
- Usage of low grade limestone (of silica content up to 18%) to conserve the reserves in the captive limestone mines.
- Dedicated haul road from Ravirala Limestone Mine (RF) to crusher is paved with concrete to control fugitive emissions. Permanent Water Sprinkling System installed at mines haul road.
- Plant internal roads are paved with concrete to arrest fugitive dust.
- Landscaping and greenbelt development taken up in plant premises and township area for pleasant environment.
- Telescopic chute and hatch for the wagon loading spout are arranged at clinker truck loading and clinker wagon loading areas & limestone wagon loading areas respectively to reduce the fugitive emission.

GREENBELT ACTIVITIES:

Greenbelt is developed in an area of 130.24 ha by March 2025. Emphasis is being made to maintain 130.24 ha greenbelt area in and around plant premises. Emphasis is also being made in planting dust capturing plants in consultation with local DFO to mitigate the effects of air emissions.

High Density Plantation (Miyawaki method):

High density plantation is initiated in the financial year 2019-2020. The details of high density plantation carried out in the plant, captive mines and colony up to March 2025:

- No. of saplings planted – 22335.
- Total area covered – 6040 m^2.

SKILL DEVELOPMENT IN THE NEARBY VILLAGERS:

- Provided 90 days skill enhancement training to 10 unemployed youth from Budawada village on excavator and welding trade. They got placed in renowned leading companies such as Hyundai, Liugong India, Safara, GMR Airport and Leo Equipments etc.
- Apprentice training is being imparted to local ITI students for their onsite training in the industry.

- Post-academic industrial training is being imparted to the local Degree / Diploma holders for their onsite training in the industry.
- Industrial training is being imparted to the local Degree / Diploma holders as part of their academic curriculum.

EXPENDITURE INCURRED FOR ENVIRONMENT PROTECTION:

Various expenditures incurred in the financial year 2024-2025 for environment protection measures are listed in Annexure - XIV.

- The cost of power consumed for operation of various pollution control equipment operated in cement plant & thermal power plant in the financial year 2024-2025 (air & water pollution equipment) is Rs. 873.27 lakh against Rs. 895.81 lakh in financial year 2023-2024 i.e., Rs. 42.96/Tonne of cement in the financial year 2024-2025 against Rs. 48.79/Tonne of cement in the financial year 2023-2024.
- Rs. 103.87 lakh incurred towards capital cost for various pollution control measures for cement plant, thermal power plant and mines in the financial year 2024-2025 against Rs. 97.44 lakh investment for capital cost in the financial year 2023-2024.
- Total environmental protection expenditure made in the financial year 2024-2025 (for cement plant, thermal power plant and mines) is Rs. 1959.11 lakh against Rs. 3101.52 lakh in financial year 2023-2024, i.e., nearly Rs. 96.37/Tonne of cement in financial year 2024-2025 against Rs. 168.94/Tonne of cement in financial year 2023-2024.
- An amount of Rs. 1611.20 lakh is allocated towards Environment Management Activities for the financial year 2025-2026 towards capital as well as recurring costs for plant & mines and being spent.

RECENT SOCIO - ECONOMIC MEASURES CARRIED OUT:

As part of Corporate Social Responsibility, various socio-economic measures are being carried out. Cost of various socio-economic activities for the surrounding villages in the financial year 2024-2025 is Rs. 99,47,559/- against Rs. 1,01,20,449/- in the financial year 2023-2024.

Some of the major initiates taken in the financial year 2024-2025 are as follows:

- Procurement of Sewing machines & Embroidery machines to Sri Raghavendra Charitable Trust under CSR funds thru CEO CONNECT to ANDHRA, Planning Department, Government of Andhra Pradesh for the cause of Women empowerment, we contributed an amount of Rs. 10,00,000/- (Rupees Fifteen Lakh only) for the procurement of Sewing machines and Embroidery machines.
- Spent Rs. 13,43,237/- towards Supporting the recent unprecedented floods affected community in nearby villages under disaster relief programme. And spent Rs. 7,84,778 towards distribution of ration kit items to flood affected families in Vijayawada.
- Conducting medical camps in the nearby villages and distributing medicines in free of cost.
- Water supply for agriculture fields at Jayanthipuram Village.

- Water supply for Jayanthipuram village, Dharmavarappadu Thanda village & Budawada village (in summer season) for safe drinking water.
- Construction of 50 kL water tank for Ravirala village and construction of 10 kL drinking water tank & higher capacity water pump for pumping the drinking water to Jayanthipuram village, as part of infrastructural development facilities in the nearby villages.
- Supporting the formation of existing damaged gravel road from Ravirala BC Colony to farmers field crop in Ravirala habitation.
- Providing sports kit to Ravirala School (Football, Volley ball, Badminton kit, etc.).
- Fixing of LED Lights to surrounding villages.
- Construction of auction shed for fishermen community in Ravirala village.

ENERGY CONSERVATION:

- Certified for Energy Management System – ISO 50001:2018 and various initiates are being taken to optimize the energy consumption.
- The exit gases from kilns are being utilized for drying of raw materials while raw mills & coal mills. Vent gases from coolers are being utilized for cement grinding section.
- Waste Heat Boilers connected to Cement Plant Line – I, II & III circuits and power is being produced from the excess waste heat recovered from these circuits. Out of 313147590 units generated in the financial year 2024-2025, 172654500 units are generated from waste heat recovery boilers (55.135 %) and 140493090 units are generated from coal based thermal power plant (44.865 %). Whereas, out of 318138307 units generated in the financial year 2023-2024, 188750490 units are generated from waste heat recovery boilers (59.33 %) and 129387817 units are generated from coal based thermal power plant (40.67 %).
- The details of LED lights by the end of March 2025 are as follows:

Total LED light fittings	13166 Nos.
Total rating of LED lights	592074 W
Amount invested on LED lights (new or replaced)	Rs. 316.91 Lakh

- All the light fittings in plant and street lighting are fitted with LED lights.
- Fixing of LED lights in the neighbouring villages.

COMPLIANCE REPORT ON CREP CONDITIONS FOR CEMENT PLANTS:

S. No.	CREP Condition	Compliance
1	Implementation of standards in non-complying units	Complying with the latest notified norms
2	Plants in critically polluted or urban area (5 km distance outside urban boundary) will meet 100 mg/Nm^3 SPM emission	Not applicable as our cement plant is not located in critically polluted or urban area (5 km distance outside urban boundary). Moreover, • As per the latest particulate emission norm of 30 mg/Nm^3 for cement plants by CPCB (effect from 01.04.2017), upgradation projects are

S. No.	CREP Condition	Compliance
		made for some of the air pollution control equipment of cement plant and presently operating the plant with less than 30 mg/Nm^3 of PM emissions level. • The particulate emission norm of 20 mg/Nm^3 is defined for our cement plant Line – III.
3	The new cement kilns to be accorded NOC / EC for complying 50 mg/Nm^3 emission limit	• As per the latest particulate emission norm of 30 mg/Nm^3 for cement plants by CPCB (effect from 01.04.2017), upgradation projects are made for some of the air pollution control equipments of cement plant and presently operating the plant with less than 30 mg/Nm^3 of PM emissions level. • The particulate emission norm of 20 mg/Nm^3 is defined for our cement plant Line – III.
4	CPCB will evolve load based standards by June 2004	As per the latest load based standard of 0.125 kg/Tonne of clinker (particulate matter from raw mill, kiln and pre-calciner system put together) for cement plants by CPCB (effect from 01.04.2017), upgradation projects are made for some of the air pollution control equipments of cement plant
5	CPCB and NCBM will evolve SO_2 and NOx emission standards by June 2004	The new standards are formulated recently, as follows: • As our pyritic sulphur in limestone is less than 0.25%, our SO_2 standard for Kiln – I, II & III is 100 mg/Nm^3. The sulphur content is absorbed in clinker and the emission levels are well within the limit. • NOx standards are 600 mg/Nm^3 for Kiln – I & III and 800 mg/Nm^3 for Kiln – II respectively. To meet the same, low NOx burners and low NOx calciners are installed for 3 Nos. of Kiln circuits.
6	Control fugitive emissions from all the raw material and products storage and transfer points by December 2003. The feasibility for the control of fugitive emissions from limestone and coal storage areas will be decided by the NTF. The NTF shall submit its recommendations within three months	• Installed unit bag filters in all conveyor transfer points. • Installed closed conveyors to transport raw materials to avoid fugitive emissions. • Operating pneumatic systems to convey fly ash to silos and for extraction systems. • Provided water sprinklers in the raw material yards and roads. • Operating 3 Nos. of road sweepers and 2 Nos. of industrial vacuum cleaners for cleaning the concrete roads and floors.
7	CPCB, NCBM, BIS and Oil refineries will jointly prepare the policy on use of pet coke as fuel	As per SO 3518(E) dated 23.11.2016 and its amendments thereof, pet coke is permitted to use as feedstock for cement plant. The permitted

S. No.	CREP Condition	Compliance
	by July 2003	quantity for usage of imported / indigenous pet coke is 4,74,666 Tonne per annum. Pet coke is being used accordingly in cement plant.
8	NTF will decide feasible unit operations / sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring systems (CMS) by December 2003	Complied. 13 Nos. of online stack monitors are installed and online data is being transmitted to APPCB & CPCB websites.
9	Tripping in Kiln ESP to be minimize by July 2003	Not applicable as no ESPs are installed for Kiln exhaust gases emitting circuits.
10	Industries will submit the target date to enhance utilization of waste materials	Waste material from other industries like fly ash, iron sludge, gypsum, slag and pet coke are being used in our plant.
11	NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003	Utilizing the hazardous wastes from other industries (located in Andhra Pradesh) in cement kilns, which are procured through Andhra Pradesh Environment Management Corporation (APEMC), in our cement kilns.
12	Cement industry will carry out feasibility study and submit target date to CPCB for cogeneration of power by July 2003	Being complied. • The kiln exhaust gases are utilized for drying of raw materials at raw mill & coal mill grinding circuits. Cooler vent gases are utilized for cement grinding section. • Waste Heat Recovery Boilers connected to Cement Plant Lines – I, II & III are in operation to produce 27 MW power.

CELEBRATION OF WORLD ENVIRONMENT DAY:

- On the eve of World Environment Day – 5th June 2024, plantation activity conducted at plant premises, mines premises, colony premises and at surrounding areas.

Annexure - II

THE RAMCO CEMENTS LTD, KSR NAGAR

THERMAL POWER PLANT - EFLLUENT TREATMENT PLANT OUTLET QUALITY BY MoEF&CC APPROVED LABORATORY- YEAR 2024-2025

Parameter	Unit	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Norm	Average / Range	Min.	Max.
p^H		7.88	7.76	7.81	7.92	7.87	7.91	7.97	7.91	7.99	8.04	8.09	8.13	5.5 - 9.0	7.76 - 8.13	7.76	8.13
Total Dissolved Solids	mg/L	978	963	998	936	948	956	968	929	936	915	929	938	2100	949.5	915	998
Total Suspended Solids	mg/L	45.3	46.8	48.3	49.6	48.3	49.3	51.2	53.6	55.1	56.2	55.3	58.2	100	51.4	45.3	58.2
Chemical Oxygen Demand	mg/L	67.2	68.9	69.3	68.4	69.2	68.6	69.3	67.2	69.3	71.2	70.2	72.3	250	69.3	67.2	72.3
BOD (for 3 days at 27 ^{o}C)	mg/L	22.1	23.6	25.1	24.3	23.6	22.9	23.6	22.9	23.6	25.3	24.2	25.2	100	23.9	22.1	25.3
Oil & Grease	mg/L	1.2	1.4	1.8	1.6	1.4	1.2	1.4	1.3	1.8	2.2	2.0	2.4	10	1.6	1.2	2.4

Annexure - III

THE RAMCO CEMENTS LTD, KSR NAGAR
SEWAGE TREATMENT PLANT OUTLET QUALITY - YEAR - 2024-2025

Parameter	Unit	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Norm	Average / Range	Min.	Max.
p^H		7.89	7.91	7.87	7.79	7.87	7.96	7.99	7.81	7.79	7.68	7.51	7.59	5.5 - 9.0	7.51- 7.99	7.51	7.99
Total Dissolved Solids	mg/L	739	478	753	716	723	758	762	742	812	839	842	853	2100	751.4	478	853
Total Suspended Solids	mg/L	23.6	25.1	26.2	25.3	26.2	28.3	29.1	28.3	29.6	35.3	32.3	35.2	200	28.7	23.6	35.3
Chemical Oxygen Demand	mg/L	37.2	36.9	37.3	36.2	38.2	39.6	42.3	43.6	45.1	47.8	45.2	46.1	250	41.3	36.2	47.8
BOD (for 3 days at 27 ^{o}C)	mg/L	8.9	8.7	8.9	8.7	8.9	8.2	8.4	8.2	8.4	8.9	8.2	8.4	100	8.6	8.2	8.9
Oil & Grease	mg/L	1.0	1.6	1.8	2.2	2.1	2.0	2.3	2.0	2.8	3.2	3	3.8	10	2.3	1	3.8

Annexure - IV

THE RAMCO CEMENTS LTD, KSR NAGAR
AUTO GARAGE OIL & GREASE TRAP OUTLET QUALITY - YEAR 2024-2025

Parameter	Unit	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Norm	Average / Range	Min.	Max.
p^H		7.88	7.79	7.83	7.98	7.48	7.52	7.63	7.67	7.79	7.82	7.74	7.82	5.5 - 9.0	7.48 - 7.98	7.48	7.98
Total Dissolved Solids	mg/L	823	856	891	978	952	911	929	901	926	958	912	959	2100	916.3	823.0	978.0
Total Suspended Solids	mg/L	70.6	73.6	75.3	70.6	73.6	70.2	73.5	70.6	72.3	73.9	70.2	72.3	200	72.2	70.2	75.3
Chemical Oxygen Demand	mg/L	123	131	148	139	126	118	121	138	141	148	135	141	250	134.1	118.0	148.0
BOD (for 3 days at 27 ^{o}C)	mg/L	43.9	45.2	42.3	40.6	42.3	43.6	45.1	42.6	45.3	46.9	44.2	46.8	100	44.1	40.6	46.9
Oil & Grease	mg/L	2.4	2.8	2.2	1.3	1.4	1.7	1.9	1.4	1.1	1.4	1.2	1.8	10	1.7	1.1	2.8

Annexure - V

THE RAMCO CEMENTS LTD., KSR NAGAR
CONTINUOUS EFFLUENT QUALITY MONITORING DATA
(PERIOD - APRIL 2024 TO MARCH 2025)

Month	Concentration		
	pH Value	Total Suspended Solids (mg/l)	Temperature - (^{O}C)
Apr-24	8.29	36.21	33.05
May-24	8.28	35.94	32.65
Jun-24	8.24	36.5	31.39
Jul-24	7.84	32.95	29.14
Aug-24	8.13	35.22	29.9
Sep-24	8.43	33.7	29.68
Oct-24	8.23	40.29	30.28
Nov-24	8.15	64.43	28.24
Dec-24	8.13	33.63	26.83
Jan-25	8.4	45.32	25.81
Feb-25	8.16	35.68	28.57
Mar-25	8.18	35.79	30.21
Max	8.43	64.43	33.05
Min	7.84	32.95	25.81
Avg	8.21	38.81	29.65

Annexure - VI

THE RAMCO CEMENTS LTD., KSR NAGAR
STACK MONITORING DATA BY MoEF&CC APPROVED LABORATORY - FINANCIAL YEAR 2024-2025

S. No.	Stack Attached to	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Average	Norm
I.	**PM Concentration, mg/Nm^3**														
1	Kiln - I Bag House	23.2	22	23	28.1	26.5	23.8			16.6		15.5	29	23.1	30
2	Coal Mill - I Bag House	6.12	8.81	8.7	9.3	8.68	14			9.5		6.3	16.3	9.7	30
3	Cooler - I - ESP	10.1	11.8	15.6	12.7	10.8	11.1			11.3		13.6	21.9	13.2	30
4	Kiln - II RABH	27.2	26.6	14.2		13.4	20.5		16		10.1	19	22.8	18.9	30
5	Coal Mill - II Bag House	12.6	11.2	9.8		12.2	13.3		10.5		8.35	29.1	23.1	14.5	30
6	Cooler - II - ESP	26.5	26.7	23.5		21.6	14.7		9.81		21.5	21	20.3	20.6	30
7	Kiln - III Bag House	15.6	16.5	10.1		10.4	16.5		16.2	17.1	19	16.2	15.7	15.3	20
8	Coal Mill - III Bag House	17.4	15.5	7.9		5.02	12.5	9.69	13.8	14.2	11	16.8	14.9	12.6	20
9	Cooler - III - ESP	12.6	14.6	14.2		11	17.3	15.4	10.9	9.7	11.3	13.4	17.9	13.5	20
10	Cement Mill Separator Bag House	15.4					18.1	8.19	18.7	11.7	8.35	8.3	12.4	12.6	30
11	Cement Mill Vent Bag Filter	10.6					15.2	6.57	12.7	14.4	5.39	6.12	9.17	10.0	30
12	Slag Mill Bag House	10.6	5.1	13.9	6.02	13.3	10.2		7.8	15.5	18.9	25.5	22.1	13.5	30
13	JPM - Limestone Crusher Bag Filter	5.92	5.73	7.9		6.16	19.6			6.5	5.08	5.2	6.62	7.6	30
14	Budawada - Limestone Crusher Bag Filter	11.2				15.2	16.1					5.5		12.0	30
15	Thermal Power Plant ESPs	26.7	33.2	28.4	29.5	26.9	13.7	23.2	23.2	29.5	19.7	19.2	27.2	25.0	50
II.	**SO_2 Concentration,, mg/Nm^3**														
1	Kiln - I Bag House	BDL	BDL	BDL	BDL	BDL	BDL			BDL		BDL	BDL	#DIV/0!	100
2	Kiln - II RABH	BDL	BDL	BDL		BDL	BDL		BDL		BDL	BDL	BDL	#DIV/0!	100
3	Kiln - III Bag House	BDL	BDL	BDL		BDL	BDL		BDL	BDL	BDL	BDL	BDL	#DIV/0!	100
4	Thermal Power Plant ESPs	545	436	511	517	534	108	287	557	456	542	557	570	468.3	600
III.	**NOx Concentration,, mg/Nm^3**														
1	Kiln - I Bag House	462	399	510	347	482	596			528		563	435	480.2	600
2	Kiln - II RABH	396	383	342		421	240		347		290	712	551	409.1	800
3	Kiln - III Bag House	372	335	384		284	155		344	520	296	454	535	367.9	600
4	Thermal Power Plant ESPs	276	258	269	246	418	148	389	418	429	145	235	342	297.8	450

THE RAMCO CEMENTS LIMITED, KUMARASAMY RAJA NAGAR

CONTINUOUS EMISSION MONITORING DATA (PERIOD - APRIL 2024 TO MARCH 2025)

Stack Attached to	Thermal Power Plant			Kiln - I			Kiln - II			Kiln - III			Cooler - I	Cooler - II	Cooler - III	Coal Mill - I	Coal Mill - II	Coal Mill - III	Slag Mill	Cement Mill Separator	Cement Mill Vent
Month	PM	Nox	SO2	PM	Nox	SO2	PM	Nox	SO2	PM	Nox	SO2	PM	PM	PM	PM	PM	PM	PM	PM	PM
Apr-24	24.4	69.2	189.8	10.37	89.59	35.86	18.3	104.15	1.78	13.3	287.74	23.5	16.61	15.19	9.06	5.35	10.09	7.23	10.34	5.47	8.48
May-24	35.9	99.61	250.5	12.86	125.08	28.37	17.9	118.54	4.98	14.5	300.88	17.8	14.62	12.62	11.43	7.2	5.48	7.39	7.01	6.37	6.76
Jun-24	35.3	98.12	247.2	14.83	77.91	7.19	13	104.24	0.94	12.4	271.22	6.67	15.57	14.71	10.65	8.76	8.68	7.24	7.21	4.25	5.68
Jul-24	36.3	100.8	252	10.43	72.7	27.7	5.57	50.5	0	8.84	188.5	3.45	7.24	6.86	8.58	7.12	12.32	6.42	7.09	0.8	2.79
Aug-24	36.3	100.8	252	11.3	61.46	22.82	12.7	89.11	0	10.9	196.65	2.25	5.45	16.37	5.02	7.13	6.67	6.34	5.87	1.73	1.24
Sep-24	38.1	105.8	261.8	14.63	82.27	33.9	8.76	25.5	0	13	263.49	2.21	10.96	4.91	7.69	14.24	3.25	4.14	5.18	7.13	6.11
Oct-24	38.2	106.2	262.4	4.05	7.94	5.88	5.32	60.4	0	12	287.75	1.97	2.28	6.53	6.82	3.19	2.94	5.32	1.35	4.16	13.7
Nov-24	36.6	100.3	250.6	5.19	0	0	11.7	218.14	0	12.7	264.17	1.31	0.25	15.55	12.45	2.01	12.98	5.63	4.26	4.11	10.45
Dec-24	32.2	89.24	228.5	Site Shutdown	Site Shutdown	Site Shutdown	11.5	179.48	0	14.3	227.43	0.84	8.24	15.84	10.71	5.19	14.98	9.07	5.93	6.07	11.54
Jan-25	36.2	100.4	250.6	3.26	25.53	0	12.7	174.76	0	14.5	236.78	0.56	3.58	17.11	10.97	3.91	6.79	11.33	6.59	6.71	16.55
Feb-25	37.3	103.3	256.5	14.19	44.1	0.01	11.8	195.95	0	12.7	202.71	1.17	20.49	17.69	9.14	5.11	3.97	9.51	4.57	7.58	16.67
Mar-25	36.2	100.4	250.5	10	90.88	0	11.7	150.38	0	14.6	183.52	0.86	18.54	17.85	10.83	10.85	4.91	10.59	4.68	14.9	13.54
Max	38.18	106.17	262.42	14.83	125.08	35.86	18.28	218.14	4.98	14.55	300.88	23.50	20.49	17.85	12.45	14.24	14.98	11.33	10.34	14.90	16.67
Min	24.40	69.20	189.79	3.26	0.00	0.00	5.32	25.50	0.00	8.84	183.52	0.56	0.25	4.91	5.02	2.01	2.94	4.14	1.35	0.80	1.24
Avg	35.23	97.85	246.02	10.10	61.59	14.70	11.74	122.60	0.64	12.80	242.57	5.22	10.32	13.44	9.45	6.67	7.76	7.52	5.84	5.77	9.46

Note: All values are mentioned as mg/Nm^3.

Annexure - VIII

THE RAMCO CEMENTS LTD., KSR NAGAR

AMBIENT AIR QUALITY MONITORING DATA BY MoEF&CC APPROVED LABORATORY - YEAR 2024-2025

Month	Near Temple				Near Slag Shed				Mines Office			
	PM_{10}	$PM_{2.5}$	SO_2	NOx	PM_{10}	$PM_{2.5}$	SO_2	NOx	PM_{10}	$PM_{2.5}$	SO_2	NOx
Apr-24	75.1	32.9	17.3	26.8	68.4	27.3	19.1	22.3	68.3	29.8	17.2	21.9
May-24	78.6	34.5	18.9	28.3	71.3	29.6	20.6	25.4	73.9	30.2	19.7	23.9
Jun-24	83.5	33.1	19.2	29.1	78.6	27.2	22.3	23.2	75.9	32.3	18.3	21.6
Jul-24	72.1	25.1	15.3	18.2	69.3	24.0	16.2	20.6	70.6	24.8	14.9	17.9
Aug-24	75.3	26.9	16.3	20.4	74.8	23.6	16.5	20.9	72.9	22.9	15.3	18.6
Sep-24	70.2	20.9	14.6	22.3	66.3	21.4	14.1	21.4	64.9	20.6	13.9	17.6
Oct-24	65.3	21.6	15.9	23.6	61.6	23.9	15.6	20.9	63.8	22.8	14.6	18.3
Nov-24	72.3	24.1	16.8	25.2	69.8	26.2	17.9	21.4	71.6	25	15.1	20.6
Dec-24	70.2	25.2	17.2	23.2	68.3	28.3	18.3	24.6	69.1	23.9	19.3	22.3
Jan-25	73.2	23.2	16.3	25.1	70.4	24.1	18.9	20.6	72.9	25.3	17.2	23.8
Feb-25	65.2	20.9	15.9	24.1	63.6	22.7	17.4	21.8	71.3	23.8	16.1	20.9
Mar-25	68	22.6	16.2	25.2	66.1	23.5	25.3	23.9	69.8	21.4	16.8	24.6
Norm	100	60	80	80	100	60	80	80	100	60	80	80
Avg.	**72.4**	**25.9**	**16.7**	**24.3**	**69.0**	**25.2**	**18.5**	**22.3**	**70.4**	**25.2**	**16.5**	**21.0**

Note: All values are mentioned in $\mu g/m^3$.

Annexure - IX

THE RAMCO CEMENTS LTD., KSR NAGAR
AMBIENT AIR QUALITY MONITORING DATA - BUFFER ZONE VILLAGES
(PERIOD - APRIL 2024 TO MARCH 2025)

Location	Parameter	April-24		May-24		June-24		July-24		Aug-24		Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		Average	Limits
		I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night	I Fort-night	II Fort-night		
Dharmavarapupadu Tanda	PM 10	59.7	63.6	58.3	65.6	62.6	68.3	51.3	49.6	49.2	51.2	48.2	53.1	42.6	53.8	45.3	55.6	46.8	50.6	51.2	53.9	48.6	54.1	50.6	56.8	53.78	100
	PM 2.5	24.2	25.6	23.7	26.4	25.4	27.5	20.8	20.0	20.0	20.6	19.6	21.4	17.3	21.7	18.4	22.4	19.0	20.4	20.8	21.7	19.7	21.8	20.5	22.9	21.74	60
	SO_2	16.1	15.3	16.8	16.2	15.3	17.8	10.6	9.6	12.3	10.6	10.6	11.4	12.1	13.5	13.5	14.1	15.2	12.6	16.2	13.2	15.2	12.6	16.2	10.9	13.59	80
	NO_x	18.7	18.0	19.4	18.9	17.9	20.5	13.2	12.3	14.9	13.3	13.2	14.1	14.7	16.2	16.1	16.8	17.8	15.3	18.8	15.9	17.8	15.3	18.8	13.6	16.31	80
	CO	292.0	221.0	299.0	232.0	312.0	241.0	296.0	241.0	301.0	162.0	296.0	150.0	312.0	168.0	339.0	171.0	349.0	182.0	312	198.0	297.0	224.0	217.0	236.0	252.00	2000
Jayanthipuram	PM 10	63.9	62.9	65.2	63.6	68.3	70.2	49.6	50.3	50.6	53.6	51.2	52.4	50.3	50.6	51.2	53.1	50.6	46.3	53.9	48.6	50.4	47.3	51.2	48.2	54.31	100
	PM 2.5	25.6	25.7	26.1	25.9	27.4	28.6	19.9	20.5	20.3	21.9	20.5	21.4	20.2	20.6	20.5	21.7	20.3	18.9	21.6	19.8	20.2	19.3	20.5	19.7	21.96	60
	SO_2	16.9	16.2	17.3	16.3	18.3	18.3	12.3	12.3	13.1	12.3	12.9	13.5	13.8	12.9	15.2	15.3	16.9	13.8	15.9	14.1	14.7	13.5	15.3	12.6	14.74	80
	NO_x	19.8	19.1	20.2	19.2	21.2	21.2	15.2	15.2	16.0	15.2	15.8	16.4	16.7	15.8	18.1	18.2	19.8	16.7	18.8	17.0	17.6	16.4	18.2	15.5	17.64	80
	CO	281.0	241.0	296.0	248.0	286.0	252.0	13.8	252.0	326.0	154.0	324.0	149.0	336.0	212.0	346.0	226.0	356.0	159.0	368	167.0	322	186.0	318.0	212.0	251.28	2000
Chillakallu	PM 10	62.6	58.6	65.1	60.3	67.9	66.1	42.3	48.4	49.8	49.6	48.3	48.3	49.8	48.3	53.1	49.6	49.3	49.1	51.4	51.4	53.3	52.5	51.9	53.9	53.37	100
	PM 2.5	25.3	23.7	26.3	24.4	27.4	26.8	17.1	19.6	20.1	20.1	19.5	19.6	20.1	19.6	21.5	20.1	19.9	19.9	20.8	20.8	21.5	21.3	21.0	21.8	21.59	60
	SO_2	14.3	20.2	15.2	21.2	19.6	17.2	11.1	11.6	12.6	11.6	11.6	11.9	12.6	13.1	14.9	14.6	14.3	15.1	13.2	16.2	12.9	15.1	15.5	10.1	14.40	80
	NO_x	17.0	23.3	17.9	24.3	22.3	20.3	13.8	14.7	15.3	14.7	14.3	15.0	15.3	16.2	17.6	17.7	17.0	18.2	15.9	19.3	15.6	18.2	18.2	13.2	17.30	80
	CO	274.0	216.0	281.0	226.0	274.0	239.0	291	239.0	310	263.0	318.0	242.0	301.0	216.0	351.0	231.0	301.0	312.0	328	282.0	284	277.0	291.0	268	275.63	2000
K.Agraharam Village	PM 10	62.8	55.2	63.9	58.9	65.1	59.3	50.4	52.6	50.3	52.8	52.4	50.4	55.1	45.6	49.2	53.2	51.2	53.5	52.6	52.8	55.1	49.3	52.8	51.6	54.00	100
	PM 2.5	25.3	22.5	25.8	24.0	26.2	24.2	20.3	21.5	20.3	21.5	21.1	20.6	22.2	18.6	19.8	21.7	20.6	21.8	21.2	21.5	22.2	20.1	21.3	21.1	21.89	60
	SO_2	15.4	21.4	16.3	22.3	18.4	19.1	10.9	13.1	12.9	12.9	10.8	12.4	13.9	12.8	16.2	1.9	15.8	14.2	12.6	15.3	13.6	14.5	14.6	12.6	14.33	80
	NO_x	18.5	23.8	19.4	24.7	21.5	21.5	14	15.0	16	15.3	13.9	14.8	17.0	15.2	19.3	16.3	18.9	16.6	15.7	17.7	16.7	16.9	17.7	15.0	17.56	80
	CO	261.0	244.0	269.0	245	301.0	255.0	274	255.0	336	149.0	326.0	151.0	338.0	201.0	346.0	229.0	326.0	282.0	345	316.0	335	307.0	328.0	292.0	279.63	2000
Jaggayyapet	PM 10	66.1	58.3	68.4	56.2	72.3	58.2	50.9	50.3	52.6	48.2	51.6	49.3	53.9	51.8	57.2	52.3	47.3	48.4	49.8	49.1	52.2	54.5	53.5	53.8	54.43	100
	PM 2.5	27.2	23.6	28.1	22.7	29.7	23.5	20.9	20.3	21.6	19.5	21.2	19.9	22.2	20.9	23.5	21.1	19.4	19.6	20.5	19.8	21.5	22.0	22.0	21.7	22.18	60
	SO_2	16.2	19.2	15.9	21.4	17.1	22.3	10.7	10.2	13.2	10.6	12.6	11.6	12.8	13.2	15.1	15.1	16.2	13.9	10.1	14.1	12.2	15.2	15.1	10.2	14.34	80
	NO_x	18.6	22.2	18.3	24.4	19.5	25.3	13.1	13.2	15.6	13.6	15.0	14.6	15.2	16.2	17.5	18.1	18.6	16.9	12.5	17.1	14.6	18.2	17.5	12.8	17.03	80
	CO	268.0	212.0	288.0	232.0	293.0	248.0	256.0	248.0	324	254.0	313.0	248.0	309.0	192.0	328.0	212.0	298.0	213.0	311.0	248.0	273.0	523.0	292.0	249.0	276.33	2000
Budawada	PM 10	65.2	61.4	66.3	63.1	62.9	62.1	47.3	49.8	43.8	50.6	45.9	48.4	46.8	49.2	48.6	51.2	45.6	50.2	46.3	52.8	45.1	53.9	48.6	52.9	52.42	100
	PM 2.5	25.8	25.2	26.2	25.9	24.8	25.5	18.7	20.5	17.3	20.8	18.1	19.9	18.5	20.2	19.2	21.0	18.0	20.6	18.3	21.7	17.8	22.2	19.2	21.7	21.13	60
	SO_2	16.6	16.3	17.2	17.3	17.9	18.4	10.1	9.8	12.6	12.8	10.3	12.3	12.9	14.0	15.3	15.6	14.3	15.2	12.8	16.8	12.9	17.1	14.8	10.2	14.31	80
	NO_x	19.4	18.9	20.0	19.9	20.7	21.0	12.9	12.4	15.4	15.4	13.1	14.9	15.7	16.6	18.1	18.2	17.1	17.8	15.6	19.4	15.7	19.7	17.6	12.8	17.01	80
	CO	284.0	239.0	291.0	249	312.0	255.0	63.0	255.0	309	216.0	302.0	218.0	296	213.0	356.0	236.0	291.0	301.0	288.0	263.0	283	255.0	254	249	261.58	2000
Vedadri	PM 10	63.9	67.2	64.6	69.2	69.1	68.3	45.6	51.6	46.9	51.3	44.3	50.6	42.1	52.9	49.2	54.6	49.3	53.5	50.8	55.1	56.3	50.6	58.2	51.6	54.87	100
	PM 2.5	26.1	26.7	26.4	27.5	28.2	27.2	18.6	20.5	19.1	20.4	18.1	20.1	17.2	21.1	20.1	21.7	20.1	21.3	20.7	21.9	23	20.1	23.7	20.5	22.10	60
	SO_2	16.1	18.4	16.9	19.2	15.4	21.4	10.2	12.4	11.9	12.1	11.4	11.9	13.6	12.1	17.2	13.8	16.9	14.9	15.3	15.9	15.8	14.9	16.2	11.6	14.81	80
	NO_x	18.4	21.2	19.2	22	17.7	24.2	12.0	15.2	14	14.9	13.7	14.7	15.9	14.9	19.5	1.6	19.2	17.7	17.6	18.7	18.1	17.7	18.5	14.4	16.71	80
	CO	277.0	259.0	283.0	262	287.0	274.0	242.0	274.0	256	281.0	289.0	274.0	301.0	308.0	337.0	314.0	312.0	274.0	245.0	159.0	266	184.0	246.0	191	266.46	2000
Pochampalli	PM 10	61.6	59.1	67.2	61.2	63.2	59.6	43.8	47.3	45.2	49.2	42.9	47.3	42.2	46.3	51.6	48.3	48.4	54.2	49.7	56.2	52.9	54.3	56.4	50.8	52.45	100
	PM 2.5	25.2	24.0	27.5	24.8	25.8	24.2	17.9	19.2	18.5	20.0	17.5	19.2	17.7	18.8	21.1	19.6	19.8	22.0	20.3	22.8	21.6	22.0	23.1	20.6	21.38	60
	SO_2	16.2	17.1	17.3	18.9	16.2	17.3	12.3	10.6	13.6	12.4	12.9	12.6	12.1	13.5	16.1	13.9	14.6	16.2	12.9	16.5	13.3	1.9	14.9	15.3	14.11	80
	NO_x	19.1	19.4	20.2	21.2	19.1	19.6	15.2	12.9	16.5	14.7	15.8	14.9	15.0	15.8	19.0	16.2	17.5	18.5	15.8	18.8	16.2	18.2	17.8	17.6	17.29	80
	CO	273.0	256.0	292.0	259	263.0	263.0	258.0	263.0	263	288.0	274.0	279.0	288.0	296.0	341.0	301.0	288.0	263.0	229.0	211.0	241	237.0	238.0	226	266.25	2000
Ravirala	PM 10	62.8	58.4	66.9	62.3	70.6	65.2	42.9	45.2	43.6	47.8	41.7	45.6	43.8	48.4	5.8	53.6	50.6	55.9	52.3	56.3	53.7	53.2	55.1	52.6	51.43	100
	PM 2.5	25.6	23.8	27.2	25.4	28.7	26.6	17.5	18.4	17.7	19.5	17.0	18.6	17.8	19.7	21.9	21.9	20.6	22.8	21.3	23.0	21.9	21.7	22.4	21.5	21.77	60
	SO_2	16.9	16.9	17.8	17.4	16.0	18.2	11.1	12.2	12.8	13.2	13.5	11.1	10.8	12.9	12.3	14.1	15.8	15.8	13.6	16.3	12.6	15.1	14.6	14.1	14.38	80
	NO_x	19.9	19.8	20.8	20.3	19.0	21.1	14.1	15.1	15.8	16.1	16.5	14.0	13.8	15.8	15.3	17.0	18.8	18.7	16.6	19.2	15.5	18.0	17.5	17.6	17.35	80
	CO	312.0	274.0	333.0	283	274.0	291.0	212.0	291.0	258	299	261	283.0	291.0	288.0	369.0	297.0	256.0	222.0	231.0	272.0	244	267.0	252.0	226	274.42	2000

Note: All values are mentioned in $\mu g/m^3$

Annexure-X

THE RAMCO CEMENTS LIMITED, KSR NAGAR FUGITIVE DUST MONITORING - PLANT
PERIOD APRIL 2024 TO MARCH 2025

S. No	Location	Suspended Particulate Matter			
		Jun-24	Sep-24	Dec-24	Mar-25
1	Coal Mill - I area	116.6	124.20	110.4	134.9
2	Coal Mill - II area	125.0	143.6	129.7	128.0
3	Coal Mill - III area	138.9	154.7	171.1	150.7
4	Cooler - I area	97.2	87.5	100.4	120.0
5	Cooler - II area	88.9	92.5	73.1	81.3
6	Cooler - II area	69.4	75.4	88.3	146.3
7	Packing Plant area	194.4	210.4	196.6	206.3
8	Cement Plant (Mills) area	194.4	212.6	220.6	193.5
9	DG House area	166.7	178.1	156.6	174.6
10	Pump House area	180.5	190.3	190.5	177.4
11	Cooler stack area	178.6	145.8	158.1	144.0
12	Limestone stacker area	155.5	204.3	211.4	201.6
13	TPP Boiler area	88.9	110.4	121.3	119.0
14	CCR of Thermal Power Plant area	122.2	134.7	148.6	136.0
15	CCR of Cement Plant area	189.0	153.5	139.5	126.9
16	Line - III Bag House area	175.0	145.9	130.7	105.6

ANNEXURE - XI

ISO 9001 ISO 14001 ISO 45001 ISO 50001
Certified Company

THE RAMCO CEMENTS LIMITED

Kumarasamy Raja Nagar – 521457
Jaggayyapet Mandal, Krishna District,
Andhra Pradesh, India
Phone: 08654 224400-04
Fax: 08654 222352
E-mail: mcljpm@ramcocements.co.in

RCL/PCB/13/2025-2026

08th May 2025

The Environmental Engineer,
A .P. Pollution Control Board,
Regional Office, Plot No: 41,
Gurunanak Road,
Sri Kanakadurga Officers Colony,
Vijayawada – 521 018.

Dear Sir,

Sub: Submission of Annual Returns of Hazardous Wastes – Form – 4 for our Cement Plant, Thermal Power Plant and Waste Heat Recovery System for the financial year 2024-2025 - Reg.

Ref: i. CFO order for plant No. APPCB/VJA/VJA/488/HO/CFO/2017- dated 02.11.2021.
ii. CFO amendment order for plant No. APPCB/VJA/VJA/488/HO/CFO/2017- dated 02.12.2021.
iii. CTO Amendment Order No. APPCB/VJA/VJA/488/CTO/HO/2019 dated 30.11.2022.

Please find enclosed herewith duly filled in Form – 4 - 'Form for Filling Annual Returns' of Hazardous Wastes for the financial year 2024-2025 for our Cement Plant, Thermal Power Plant and Waste Heat Recovery System.

This is for your kind information please.

Thanking you,

Yours faithfully,
for The Ramco Cements Limited,

(ASHISH KUMAR SRIVASTAVA)
President (Mfg.)

Encl.: As above.

FORM 4

[See rules 6 (5), 13(8), 16(6) and 20 (2)]

FORM FOR FILLING ANNUAL RETURNS

[To be submitted to State Pollution Control Board by 30th June of every year for the preceding period April to March]

<table>
<tr><td>1</td><td>Name and address of facility:</td><td>The Ramco Cements Limited, Kumarasamy Raja Nagar - 521 457, Jaggayyapet (M), NTR Dist.</td></tr>
<tr><td>2</td><td>Authorization No. and Date of issue:</td><td>Authorization Nos.:
CFO order for plant No. APPCB/VJA/VJA/ 488/HO/CFO/2017- and dated 02.11.2021.
CFO amendment order for plant No. APPCB/VJA/VJA/ 488/HO/CFO/2017- and dated 02.12.2021.
CTO Amendment Order No. APPCB/VJA/VJA/ 488/CTO/HO/2019 dated 30.11.2022.
<table>
<tr><th>Name of the Product</th><th>Unit</th><th>Production capacity</th></tr>
<tr><td>Clinker</td><td>Tonne</td><td>46,85,000</td></tr>
<tr><td>Cement</td><td>Tonne</td><td>36,50,000</td></tr>
<tr><td>Thermal Power</td><td>MW</td><td>24</td></tr>
<tr><td>Waste Heat Recovery Power</td><td>MW</td><td>27</td></tr>
<tr><td>DG Power (standby)</td><td>MW</td><td>4</td></tr>
</table></td></tr>
<tr><td>3</td><td>Name of the authorized person and full address with telephone, fax number and e-mail:</td><td>Ashish Kumar Srivastava, President (Mfg.)
The Ramco Cements Limited, Kumarasamy Raja Nagar - 521 457, Jaggayyapet (M), NTR Dist.
Telephone: 08654 – 224400 to 04,
Fax: 08654 – 222352,
e-mail: mcljpm@ramcocements.co.in</td></tr>
<tr><td>4</td><td>Production during the year (product wise), whether applicable:</td><td>
<table>
<tr><th>Type of Product</th><th>Unit</th><th>Quantity in 2024-2025</th></tr>
<tr><td>Clinker</td><td>Tonne</td><td>40,64,203</td></tr>
<tr><td>Cement</td><td>Tonne</td><td>20,32,760.38</td></tr>
<tr><td>Thermal Power</td><td>kW/hr</td><td>14,04,93,090</td></tr>
<tr><td>Waste Heat Recovery Power</td><td>kW/hr</td><td>17,26,54,500</td></tr>
</table></td></tr>
</table>

Part A. To be filled by hazardous waste generators

<table>
<tr><td>1</td><td>Total quantity of waste generated category wise:</td><td>From cement plant, thermal power plant, waste heat recovery plant and limestone mines:
<table>
<tr><th>Type of hazardous waste</th><th>Quantity (in Tonne / kL / Nos.)</th></tr>
<tr><td>Waste Oil</td><td>0.5 kL</td></tr>
<tr><td>Waste Grease</td><td>Nil</td></tr>
<tr><td>Waste Hi-chrome Grinding Media</td><td>Nil</td></tr>
<tr><td>Waste Lead Acid Batteries</td><td>2.64 Tonne</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>2</td><td>Quantity dispatched:</td><td></td></tr>
<tr><td>(i)</td><td>To disposal facility:</td><td>Not applicable</td></tr>
<tr><td>(ii)</td><td>To recycler to co-processors or pre-processor:</td><td>From cement plant, thermal power plant, waste heat recovery plant and limestone mines:

<table>
<tr><th>Type of hazardous waste</th><th>Recycler</th><th>Unit</th><th>Quantity</th></tr>
<tr><td>Waste Oil</td><td>NA</td><td></td><td>Nil</td></tr>
<tr><td>Waste Grease</td><td>NA</td><td></td><td>Nil</td></tr>
<tr><td>Waste Hi-chrome Grinding Media</td><td>NA</td><td></td><td>Nil</td></tr>
<tr><td rowspan="3">Waste Lead Acid Batteries</td><td>M/s Exide</td><td>Tonne</td><td>0.42</td></tr>
<tr><td>M/s Novateur Electrical & Digital Systems Private</td><td>Tonne</td><td>0.93</td></tr>
<tr><td>M/s Star Battery</td><td>Tonne</td><td>1.29</td></tr>
</table></td></tr>
<tr><td>(iii)</td><td>Others:</td><td>Not applicable</td></tr>
<tr><td>3</td><td>Quantity utilized in-house, if any:</td><td>The waste oil & waste grease generated in the cement plant, thermal power plant, waste heat recovery plant and limestone mines are totally re-used within the premises as:

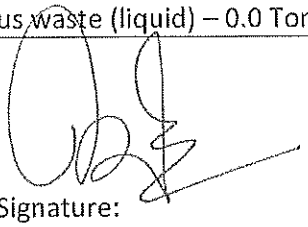
• Waste grease for lubrication of reclaimer chains along with fresh grease.
• Waste oil of 0.5 kL used for kiln light-up along with fresh HSD.</td></tr>
<tr><td>4</td><td>Quantity in storage at the end of the year:</td><td>From cement plant, thermal power plant, waste heat recovery plant and limestone mines:
<table>
<tr><th>Type of hazardous waste</th><th>Unit</th><th>Quantity</th></tr>
<tr><td>Waste oil</td><td>kL</td><td>Nil</td></tr>
<tr><td>Waste Grease</td><td>kL</td><td>Nil</td></tr>
<tr><td>Waste Hi-chrome Grinding Media</td><td>Tonne</td><td>Nil</td></tr>
<tr><td>Waste Lead Acid Batteries</td><td>Tonne</td><td>Nil</td></tr>
</table></td></tr>
</table>

Part B. To be filled by Treatment, storage and disposal facility operators

1	Total quantity of received:	Not applicable
2	Quantity in stock at the beginning of the year:	
3	Quantity treated:	
4	Quantity disposed in landfills as such and after treatment:	
5	Quantity incinerated (if applicable):	
6	Quantity processed other than specified above:	
7	Quantity in storage at the end of the year:	

Part C. To be filled by recyclers or co-processors or other users

1	Quantity of waste received during the year:	
(i)	Domestic sources:	For Cement Plant - Through APEMCL portal: • Hazardous waste (solid) – 0.0 Tonne • Hazardous waste (liquid) – 74.89 Tonne
(ii)	Imported (if applicable):	Not applicable
2	Quantity in stock at the beginning of the year:	For Cement Plant: • Hazardous waste (solid) – 0.0 Tonne • Hazardous waste (liquid) – 15.26 Tonne
3	Quantity recycled or co-processed or used:	Co-processed in Cement Kilns: • Hazardous waste (solid) – 0.0 Tonne (including moisture loss) • Hazardous waste (liquid) – 90.15 Tonne
4	Quantity of products dispatched (wherever applicable):	Not applicable
5	Quantity of waste generated:	Not applicable
6	Quantity of waste disposed:	Not applicable
7	Quantity re-exported (whether applicable):	Not applicable
8	Quantity in storage at the end of the year:	For Cement Plant: • Hazardous waste (solid) – 0.0 Tonne • Hazardous waste (liquid) – 0.0 Tonne



Date: 08.05.2025
Place: KSR Nagar

Signature:
Designation: President (Mfg.)

ANNEXURE - XII

ISO 9001 ISO 14001 ISO 45001 ISO 50001
Certified Company

THE RAMCO CEMENTS LIMITED

Kumarasamy Raja Nagar – 521457
Jaggayyapet Mandal, Krishna District,
Andhra Pradesh, India
Phone: 08654 224400-04
Fax: 08654 222352
E-mail: mcljpm@ramcocements.co.in

RCL/PCB/15/2025-2026

08th May 2025

The Environmental Engineer,
A .P. Pollution Control Board,
Regional Office, Plot No: 41,
Gurunanak Road,
Sri Kanakadurga Officers Colony,
Vijayawada – 18.

Dear Sir,

Sub: Submission of Annual Returns of E-Wastes – Form – 3 for our Cement Plant, Thermal Power Plant & Waste Heat Recovery Plant for the financial year 2024-2025 - Reg.

Ref: i. CFO order for plant No. APPCB/VJA/VJA/488/HO/CFO/2017- dated 02.11.2021.
ii. CFO amendment order for plant No. APPCB/VJA/VJA/488/HO/CFO/2017- dated 02.12.2021.
iii. CTO Amendment Order No. APPCB/VJA/VJA/488/CTO/HO/2019 dated 30.11.2022.

Please find enclosed herewith duly filled in Form – 3 - 'Form for Filing Annual Returns' of E-Wastes for the financial year 2024-2025 for our Cement Plant, Thermal Power Plant & Waste Heat Recovery Plant.

This is for your kind information please.

Thanking you,

Yours faithfully,
for The Ramco Cements Limited,

(ASHISH KUMAR SRIVASTAVA)
President (Mfg.)

Encl.: As above.

FORM-3

[See rules 4(5), 5(5), 8(6), 9(4), 10(8), 11(9), 13 (1) (xi), 13(2)(v), 13(3)(vii) and 13(4)(v)]

FORM FOR FILING ANNUAL RETURNS

[To be submitted by producer or manufacturer or refurbisher or dismantler or recycler by 30th day of June following the financial year to which that return relates].

Quantity in Metric Tonnes (MT) and numbers

<table>
<tr><td>1</td><td>Name and address of the producer or manufacturer or refurbisher or dismantler or recycler</td><td>The Ramco Cements Limited,
Kumarasamy Raja Nagar - 521 457,
Jaggayyapet (M), NTR Dist.

For Cement Plant, Thermal Power Plant & Waste Heat Recovery Plant</td></tr>
<tr><td>2</td><td>Name of the authorised person and complete address with telephone and fax numbers and e-mail address</td><td>Ashish Kumar Srivastava,
President (Mfg.)
The Ramco Cements Limited,
Kumarasamy Raja Nagar - 521 457,
Jaggayyapet (M), NTR Dist.
Telephone: 08654 – 224400 to 04,
Fax: 08654 – 222352,
e-mail: mcljpm@ramcocements.co.in</td></tr>
<tr><td>3</td><td>Total quantity of e-waste collected or channelised to recyclers or dismantlers for processing during the year for each category of electrical and electronic equipment listed in the Schedule I (Attach list) by PRODUCERS
Details of the above</td><td></td></tr>
<tr><td>3(A)*</td><td>BULK CONSUMERS: Quantity of e-waste</td><td>Cumulative quantity of generation in the financial year 2024-2025 for cement plant, thermal power plant, Waste Heat Recovery Plant & limestone mines:<table><tr><td>Type</td><td>Quantity</td></tr><tr><td>E-waste</td><td>1.106 Tonne</td></tr><tr><td>Printer Cartridges</td><td>1.642 Tonne</td></tr><tr><td>Total</td><td>2.748 Tonne</td></tr></table></td></tr>
<tr><td>3(B)*</td><td>~~REFURBISHERS: Quantity of e-waste:~~</td><td></td></tr>
<tr><td>3(C)*</td><td>~~DISMANTLERS:~~
~~i. Quantity of e-waste processed (Code wise);~~
~~ii. Details of materials or components recovered and sold;~~
~~iii. Quantity of e-waste sent to recycler;~~
~~iv. Residual quantity of e-waste sent to Treatment, Storage and Disposal Facility.~~</td><td></td></tr>
</table>

<table>
<tr><td>3(D)*</td><td>~~RECYCLERS:~~
~~i. Quantity of e-waste processed (Code wise);~~
~~ii. Details of materials recovered and sold in the market;~~
~~iii. Details of residue sent to Treatment, Storage and Disposal Facility~~</td><td></td></tr>
<tr><td>4</td><td>Name and full address of the destination with respect to 3(A)-3(D) above</td><td>On 18.04.2024 (In the financial year 2024-2025), 3.856 Tonne of e-waste is disposed to M/s Ecostar Recycling, Mumbai:<table><tr><td>Type</td><td>Quantity</td></tr><tr><td>E-waste</td><td>1.199 Tonne</td></tr><tr><td>Printer Cartridges</td><td>2.657 Tonne</td></tr><tr><td>Total</td><td>3.856 Tonne</td></tr></table></td></tr>
<tr><td>5</td><td>Type and quantity of materials segregated ~~or recovered~~ from e-waste of different codes as applicable to 3(A)-3(D)</td><td>Cumulative quantity available as on 31.03.2025 with respect to for cement plant, thermal power plant, Waste Heat Recovery Plant & limestone mines:<table><tr><td>Type</td><td>Quantity</td></tr><tr><td>E-waste</td><td>0.156 Tonne</td></tr><tr><td>Printer Cartridges</td><td>0.592 Tonne</td></tr></table></td></tr>
</table>

✓ Enclose the list of recyclers to whom e-waste have been sent for recycling.

Place: KSR Nagar
Date: 08.05.2025

Signature of the authorised person

Note:-

(1) * Strike off whichever is not applicable.
(2) Provide any other information as stipulated in the conditions to the authoriser.
(3) In case filing on behalf of multiple regional offices, Bulk Consumers and Producers need to add extra rows to 1 & 3(A) with respect to each office.

ANNEXURE - XIII

ISO 9001 ISO 14001 ISO 45001 ISO 50001
Certified Company

THE RAMCO CEMENTS LIMITED

Kumarasamy Raja Nagar – 521457
Jaggayyapet Mandal, Krishna District,
Andhra Pradesh, India
Phone: 08654 224400-04
Fax: 08654 222352
E-mail: mcljpm@ramcocements.co.in

RCL/PCB/65/2024-2025

05th March 2025

The Environmental Engineer
AP Pollution Control Board,
Regional Office, Plot No. 41,
Gurunanak Road,
Sri Kanakadurga Officers' Colony,
Vijayawada – 521 008.

Dear Sir,

Sub: Submission of Form – IV – Bio-Medical Waste Returns – Calendar Year 2024 – Reg.
Ref: Authorization Lr. No. R-9/BMW/APPCB/RO-VJA/2024-276 dated 04.07.2024.

This has reference to the above cited Bio-Medical Authorization letter issued for our Occupational Health Centre located at our cement plant. Please find enclosed herewith duly filled-in Form – IV – Bio-Medical Waste Returns for the Calendar Year 2024 (January 2024 to December 2024).

This is for your kind information and perusal please.

Thanking you,

Yours faithfully,
For The Ramco Cements Limited,

ASHISH KUMAR SRIVASTAVA
President (Mfg.)

Encl.: As above

Form – IV
(See rule 13)
ANNUAL REPORT

[To be submitted to the prescribed authority on or before 30th June every year for the period from January to December of the preceding year, by the occupier of Health Care Facility (HCF) or Common Bio-Medical Waste Treatment Facility (CBWTF)]

S. No.	Particulars	
1	Particulars of the Occupier	
	(i) Name of the authorised person (occupier or operator of facility)	Authorized Person - Ashish Kumar Srivastava Operator of Facility – Dr. S Raja Kesava Prasad
	(ii) Name of HCF or CBMWTF	Occupational Health Centre (The Ramco Cements Limited)
	(iii) Address for Correspondence	Kumarasamy Raja Nagar – 521 457, Jaggaiahpet Mandal, NTR District, AP.
	(iv) Address of Facility	
	(v)Tel. No, Fax. No	Tel. No.: 08654 – 224400 - 04 Fax No.: 08654 - 222352
	(vi) E-mail ID	mcljpm@ramcocements.co.in
	(vii) URL of Website	www.ramcocements.in
	(viii) GPS coordinates of HCF ~~or CBMWTF~~	N - 16° 52' 28.7" E - 80° 07' 40.0"
	(ix) Ownership of HCF ~~or CBMWTF~~	The Ramco Cements Limited (~~State Government or~~ Private ~~or Semi Govt. or any other~~)
	(x) Status of Authorisation under the Bio-Medical Waste (Management and Handling) Rules	Authorisation No. R-9/BMW/APPCB/RO-VJA/2024-276 dated 04.07.2024 valid up to 31.05.2029 (amendment request is submitted to extend the validity up to 30.09.2029).
	(xi) Status of Consents under Water Act and Air Act	Valid up to: 31.01.2027
2	Type of Health Care Facility	
	(i) Bedded Hospital	No. of Beds: 06 – Occupational Health Centre
	(ii) Non-bedded hospital (Clinic or Blood Bank or Clinical Laboratory or Research Institute or Veterinary Hospital or any other)	NA
	(iii) License number and its date of expiry	Factory Licence No. 9538 Expiry date: 31.12.2025
3	Details of CBMWTF	NA
	(i) Number healthcare facilities covered by CBMWTF	
	(ii) No. of beds covered by CBMWTF	
	(iii) Installed treatment and disposal capacity of CBMWTF	

<table>
<tr><td>S. No.</td><td>Particulars</td><td></td></tr>
<tr><td></td><td>(iv) Quantity of biomedical waste treated or disposed by CBMWTF</td><td></td></tr>
<tr><td>4</td><td>Quantity of waste generated or disposed in kg per annum (on monthly average basis)</td><td>Record of bio-medical waste generation is being maintained. Consolidated report (on month wise details) for the calendar year 2024 is enclosed as Annexure – I.</td></tr>
<tr><td></td><td></td><td>• Yellow Category: 156.695 kg per annum</td></tr>
<tr><td></td><td></td><td>• Red Category: 66.418 kg per annum</td></tr>
<tr><td></td><td></td><td>• White: 22.483 kg per annum</td></tr>
<tr><td></td><td></td><td>• Blue Category: 27.794 kg per annum</td></tr>
<tr><td></td><td></td><td>• General Solid waste: NA</td></tr>
<tr><td>5</td><td colspan="2">Details of the Storage, treatment, transportation, processing and Disposal Facility</td></tr>
<tr><td></td><td rowspan="3">(i) Details of the on-site storage facility</td><td>Size: Bins – 4 Nos.</td></tr>
<tr><td></td><td>Capacity: 20 L each – 4 Nos.</td></tr>
<tr><td></td><td>Provision of on-site storage (cold storage or any other provision) - Disposed to authorized treatment facility within stipulated time</td></tr>
<tr><td></td><td>disposal facilities</td><td>
<table>
<tr><th>Type of treatment equipment</th><th>No. of units</th><th>Capacity, kg/day</th><th>Quantity treated or disposed in kg per annum</th></tr>
<tr><td>Incinerators
Plasma Pyrolysis Autoclaves</td><td colspan="3">Not authorized</td></tr>
<tr><td>Microwave</td><td colspan="3">Not authorized</td></tr>
<tr><td>Shredder</td><td>01</td><td>----</td><td>----</td></tr>
<tr><td>Needle tip cutter or destroyer</td><td>01</td><td>----</td><td>----</td></tr>
<tr><td>Sharps encapsulation or concrete pit Deep burial pits</td><td colspan="3">Not authorized</td></tr>
<tr><td>Chemical disinfection</td><td>01</td><td>----</td><td>----</td></tr>
<tr><td>Any other treatment equipment</td><td colspan="3">Not authorized</td></tr>
</table>
</td></tr>
<tr><td></td><td>(iii) Quantity of recyclable wastes: sold to authorized recyclers after treatment in kg per annum</td><td>Consolidated report (on month wise details) bio-medical waste disposed to authorized recyclers after preliminary treatment for the calendar year 2024 is enclosed as Annexure – I.</td></tr>
</table>

S. No.	Particulars	
	(iv) No. of vehicles used for collection and transportation of biomedical waste	Vehicle of authorized treatment facility is used for transportation of biomedical waste.
	(v) Details of incineration ash and ETP sludge generated and disposed during the treatment of wastes in kg per annum	<table><tr><td></td><td>Quantity generated</td><td>Where disposed</td></tr><tr><td>Incineration ash</td><td colspan="2" rowspan="2">Not authorized</td></tr><tr><td>ETP sludge</td></tr></table>
	(vi) Name of the Common Bio-Medical Waste Treatment Facility Operator through which wastes are disposed of	M/s Safenviron Bio-Medical Treatment Plant, D. No. 29-3-14, Governorpet, 1st Venkateswara Rao Street, Vijayawada, NTR District.
	(vii) List of member HCF not handed over bio-medical waste	NA
6	Do you have bio-medical waste management committee? If yes, attach minutes of the meetings held during the reporting period	Committee meetings are being conducted.
7	Details trainings conducted on BMW	
	(i) Number of trainings conducted on BMW Management	BMW awareness training programme is done to paramedics at our OHC. Any changes / amendments in the BMW Rules will be updated during consequent training programmes.
	(ii) number of personnel trained	06
	(iii) number of personnel trained at the time of induction	06
	(iv) number of personnel not undergone any training so far	NIL
	(v) whether standard manual for training is available?	Yes
	(vi) any other information	NA
8	Details of the accident occurred during the year	
	(i) Number of Accidents occurred	NIL
	(ii) Number of the persons affected	NIL
	(iii) Remedial Action taken (Please attach details if any)	NA
	(iv) Any Fatality occurred, details	NIL
9	Are you meeting the standards of air Pollution from the incinerator? How many times in last year could not met the standards?	Not authorized
	Details of Continuous online emission monitoring systems installed	Not authorized

S. No.	Particulars	
10	Liquid waste generated and treatment methods in place. How many times you have not met the standards in a year?	Not authorized
11	Is the disinfection method or sterilization meeting the log 4 standards? How many times you have not met the standards in a year?	Not authorized
12	Any other relevant information	No

Certified that the above report is for the period from 01.01.2024 to 31.12.2024.

Date: 05.03.2025
Place: KSR Nagar

Name and Signature of the Head of the Institution
ASHISH KUMAR SRIVASTAVA
President (Mfg.)

AANEXURE - I

The Ramco Cements Limited, Kumarasamy Raja Nagar
Details of Bio Medical Waste Handled
(Period - January 2024 to December 2024)

Sl. No	Month	Weight (in kilogram) of Used Linen & Dressing material (Yellow)	Weight (in kilogram) of Used Disposable Syringes (without needles & fixed needle syringes) & Intravenous sets (Red)	Weight (in kilogram) of Used Needles, needles from needle tip cutter & blades (White)	Weight (in kilogram) of Broken or discarded glass medicine vials& Ampoules (Blue)
1	Jan-24	14.607	3.764	0.96	1.951
2	Feb-24	14.148	5.348	3.895	2.536
3	Mar-24	18.108	2.233	2.035	3.507
4	Apr-24	15.065	2.142	2.595	2.052
5	May-24	16.842	3.75	1.096	0.733
6	Jun-24	13.605	1.489	3.271	2.507
7	Jul-24	8.922	5.47	2.065	1.598
8	Aug-24	10.186	9.62	0.642	2.649
9	Sep-24	14.15	11.458	2.239	4.007
10	Oct-24	13.36	8.811	1.289	3.429
11	Nov-24	6.153	4.93	0.963	1.091
12	Dec-24	11.549	7.403	1.433	1.734
	Grand Total	156.695	66.418	22.483	27.794
	Monthly average	13.058	5.535	1.874	2.316

Annxure - XIV

THE RAMCO CEMENTS LIMITED, KSR NAGAR
ENVIRONMENTAL PROTECTION EXPENDITURE FOR YEAR 2024-2025

S. No.	Description	Expenditure incurred in 2024-2025, Rs.	Budget for 2024-2025, Rs.
1	Recurring Cost - Plant	103542072	125000000
2	Recurring Cost - Mines	74185100	21720000
3	Plantation (Plant & Mines)	7796255	8000000
4	Capital Cost - Plant & Mines	10387405	6400000
	Grand Total	**195910832**	**161120000**

ANNEXURE - XV

Governament of Andhra Pradesh

Rural Water Supply & Sanitation Department

State Level Water Testing Laboratory

O/o The Project Director

State Water Supply & Sanitation Mission

"C" Block,Vasudha shelter,LIC colony,Gollapudi,Vijayawada - 521225

TEST REPORT ON CHEMICAL ANALYSIS OF WATER(DRINKING)

General Physico- Chemical Parameters

Sample received from : The Ramco Cements Ltd.

Location : Jayanthipuram,Jaggayyapeta(Md),NTR Dist

Test Report ID No : 53/SLL/SWSM/RWS/ Private/2024

Description of the test items: Water Sample

Date of Collection : 09.09.2024 Date of Analysis : 10.09.2024

Date of Receipt : 09.09.2024 Date of issue: 13.09.2024

Sl.No.	Physcio-Chemical Parameters	Units	Test result of the water sample	As per IS (10500 - 2012)	
				Requirement (Acceptable Limit)	Permissible Limit (in the absence of alternative source)
1	Colour	Pt-Co	0	5	15
2	Turbidity	NTU	0	1	5
3	pH		7.5	6.5-8.5	No relaxation
4	Electrical Conductivity	micromhos/cm	147	-	-
5	Total Dissloved Solids	mg/L	95	500	2000
6	Salinity	gm/L	0.06	0.48	1.836
7	Total Alkalinity as $CaCO_3$	mg/L	40	200	600
8	Total Hardness as $CaCO_3$	mg/L	40	200	600
9	Calcium as Ca++	mg/L	9	75	200
10	Magnesium as Mg++	mg/L	4	30	100
11	Flouride as F^-	mg/L	0.22	1.0	1.5
12	Chloride as Cl^-	mg/L	34	250	1000
13	Nitrate as $NO3^-$	mg/L	0.7	45	No relaxation
14	Sulphate as SO_4^{-2}	mg/L	13.5	200	400
15	Total Iron as Fe	mg/L	0.23	1.0	No relaxation
16	Sodium Na^+	mg/L	29.3	-	-
17	Potassium K^+	mg/L	1.4	-	-
18	Silica	mg/L	3.6	-	-

Note :

1. The above said results are related only to the sample tested.
2. Sample is collected by the customer not by the laboratory.

S. Vasanthi
Lab Chemist

13/09/24
Asst. Chemist
State Level Water Testing Laboratory
Rural Water Supply & Sanitation Dept. A.P
VIJAYAWADA

Government of Andhra Pradesh
Rural Water Supply & Sanitation Department
State Level Water Testing Laboratory
O/o The Project Director
State Water & Sanitation Mission
"C" Block Vasudha shelters, Lic Colony, Gollapudi, Vijayawada -521225

Report on Bacteriological Parameters of Water (Drinking)

Received From : The Ramco Cements Ltd.

Location : Jayantipuram Village, Jaggayyapeta (MD),NTR Dist.

Lab Ref No : SLL/BCT/Private/012

Date of Collection : 09-09-2024

Date of Received : 09-09-2024

Date of Issue : 12-09-2024

Sl. No.	Source	Coliform/ CFU/100ml	E. Coli/ CFU/100ml	Residual Free Chlorine
1	RO	0	0	Nil

Results: Coliform bacteria & E.Coli bacteria are not detected in 100ml of sample.

Remarks: As per Drinking water - specification (IS 10500:2012, the total coliform bacteria and E. Coli or Thermo tolerant Coliform bacterial shall not be detected in any 100 ml. of water sample, which is intended for drinking purpose.

Note:

1. The above said results are related to the sample tested only.
2. Report shall not be reproduced half or full without approval / permission of the laboratory.
3. Sample is collected by the customer and not laboratory.

12/09/24
Lab. Microbiologist

Asst. Chemist
State Level Water Testing Laboratory
Rural Water Supply & Sanitation Dept. A.P
VIJAYAWADA

Annexure : XVI

THE RAMCO CEMENTS LTD., KSR NAGAR

GROUND WATER QUALITY DATA - SURROUNDING AREAS

PERIOD - APRIL 2024 TO MARCH 2025

S. No	Parameter	Unit	Dharmavarapadu Thanda				Chillakallu Open Well Water				K.Agraharam Bore Well Water				Pochampalli Bore Well Water				Jayanthipuram Village Bore Well Water				Ravirala Village Bore Well Water				Vedadri Village Bore Well Water				Budawada Bore Well Water				Jaggayyapet Bore Well Water				IS 10500-2012 Drinking water
			Apr-24 to Jun-24	Jul-24to Sep-24	Oct-24 to Dec-24	Jan-25 to Mar-25	Apr-24 to Jun-24	Jul-24to Sep-24	Oct-24 to Dec-24	Jan-25 to Mar-25	Apr-24 to Jun-24	Jul-24to Sep-24	Oct-24 to Dec-24	Jan-25 to Mar-25	Apr-24 to Jun-24	Jul-24to Sep-24	Oct-24 to Dec-24	Jan-25 to Mar-25	Apr-24 to Jun-24	Jul-24to Sep-24	Oct-24 to Dec-24	Jan-25 to Mar-25	Apr-24 to Jun-24	Jul-24to Sep-24	Oct-24 to Dec-24	Jan-25 to Mar-25	Apr-24 to Jun-24	Jul-24to Sep-24	Oct-24 to Dec-24	Jan-25 to Mar-25	Apr-24 to Jun-24	Jul-24to Sep-24	Oct-24 to Dec-24	Jan-25 to Mar-25	Apr-24 to Jun-24	Jul-24to Sep-24	Oct-24 to Dec-24	Jan-25 to Mar-25	Permissible Limits
1	p^H	-	7.68	7.78	7.78	7.52	7.76	7.53	7.84	7.41	7.49	7.59	7.56	7.63	7.81	7.46	7.93	7.89	7.78	7.61	7.69	7.79	7.61	7.98	7.82	7.84	7.58	7.67	7.64	7.53	7.56	7.68	7.88	7.68	7.81	7.83	7.93	7.69	6.5 - 8.5
2	Colour	Hazen	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5-15
3	Temperature	°C	28.8	28.9	26.3	33.1	28.1	27.6	25.9	32.6	27.3	26.8	26.1	30.7	29.6	28.3	27.8	32.8	29.0	28.6	25.3	32.9	28.1	27.3	27.2	31.6	27.3	29.6	25.8	33.4	29.1	28.8	24.9	30.9	31.2	27.6	26.2	32.6	–
4	Turbidity	NTU	1.2	1.3	1.5	1.8	1.4	1.5	1.8	1.1	1.3	1.1	1.3	2.5	1.8	1.6	1.6	1.8	1.6	1.9	1.8	1.5	1.9	1.6	1.3	1.3	1.3	1.3	1.7	1.7	1.1	1.1	1.4	1.4	2.0	1.5	1.2	1.6	1-5
5	Residual Chloride	mg/L	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2-1
6	Dissolved Oxygen	mg/L	4.1	4.2	4.3	4.9	4.9	4.9	4.9	5.3	4.6	4.8	4.8	4.5	4.8	4.6	4.5	4.8	4.3	5.4	4.8	4.8	4.1	4.6	4.3	5.1	4.2	5.8	4.5	4.9	4.6	4.7	4.1	5.3	4.7	4.9	4.3	4.7	–
7	Total Suspended Solids	mg/L	32.4	28.9	39.6	27.2	29.1	26.1	40.3	30.5	33.8	27.3	41.2	29.6	24.5	26.8	45.9	33.6	28.2	29.3	34.6	32.6	34.3	32.6	35.3	30.9	28.6	37.3	38.2	29.3	30.2	37.8	36.2	27.8	34.3	38.4	37.9	34.5	–
8	Electrical Conductivity	µmhos/cm	812	912.0	826	868.0	876	889.0	912	912.0	948	951.0	838	873.0	792	826.0	945	892.0	781	942.0	834	792.0	822	816.0	829	826.0	802	936.0	762	793.0	839	938	896	824	826	796.0	812	789.0	–
9	Total Dissolved Solids	mg/L	553	552.0	504	492.0	559	563.0	589	523.0	536	571.0	542	548.0	496	489.0	601	499.0	448	572.0	426	564.0	449	581.0	413	529.0	446	539.0	429	542.0	453	582.0	438	513.0	464	546.0	442	587.0	500-2000
10	Total Hardness (as $CaCO_3$)	mg/L	256	252.0	301	264.0	278	283.0	258	312.0	321	286.0	306	287.0	191	214.0	289	292.0	198	321.0	216	246.0	239	291.0	304	312.0	204	283.0	259	292.0	216	246.0	247	311.0	248	278.0	283	304.0	200-600
11	Calcium Hardness	mg/L	151	148.0	159	148.0	158	149.0	163	163.0	153	138.0	157	159.0	121	126.0	148	147.0	161	189.0	171	182.0	163	143.0	182	216.0	151	168.0	183	179.0	164	145.0	179	253.0	171	135.0	188	262.0	–
12	Magnesium Hardness	mg/L	126.0	107.0	142.0	112.0	139.0	115.0	95.0	131.0	141.0	136.0	149.0	126.0	132.0	151.0	141.0	109.0	42.6	129.0	45.0	58.3	64.3	118.0	122.0	92.6	52.6	136.0	76.0	120.0	41.9	139.0	68.0	60.9	73.2	128.0	95.0	48.3	–
13	Calcium (as Ca)	mg/L	55.3	55.6	50.2	48.3	65.9	65.2	54.3	50.2	68.3	63.1	51.9	49.2	49.1	55.1	50.6	51.4	52.0	56.2	55.3	60.6	53.9	53.9	50.6	53.9	56.1	53.7	52.9	54.6	54.6	58.3	53.8	58.2	48.4	47.1	54.6	56.1	75-200
14	Magnesium (as Mg)	mg/L	36.2	35.2	38.3	30.2	23.8	28.3	40.6	29.3	25.6	26.4	35.3	26.1	25.8	26.9	41.2	32.3	35.3	33.6	28.2	40.2	19.2	18.3	30.1	32.6	26.2	27.1	29.3	46.3	28.3	29.2	24.6	40.9	24.6	25.1	27.3	36.2	30-100
15	Sodium (as Na)	mg/L	48.3	44.2	52.3	52.3	47.1	41.6	50.6	50.6	52.3	48.3	54.3	51.4	39.2	39.6	50.9	52.9	57.2	57.3	59.6	45.3	48.3	45.2	50.3	52.6	48.9	49.1	52.6	49.8	42.6	48.2	48.4	46.2	33.6	36.8	54.6	50.9	-
16	Potassium (as K)	mg/L	1.6	1.6	2.3	1.8	4.9	4.1	2.5	2.2	7.1	7.9	2.4	1.9	1.8	1.9	2.7	1.4	3.9	2.8	4.1	5.3	4.1	3.1	2.8	4.9	5.7	5.4	3.6	5.6	3.6	3.8	4.3	4.7	3.1	2.7	4.7	5.8	-
17	Chloride (as Cl)	mg/L	153.0	153.0	172.0	126.0	152.0	174.0	161.0	141.0	159.0	145.0	178.0	139.0	127.0	138.0	159.0	136.0	171.0	179.0	184.0	215.0	153.0	142.0	179.0	286.0	161.0	158.0	169.0	319.0	152.0	151.0	183.0	274.0	131.0	139.0	172.0	252.0	250-1000
18	Sulphate (as SO_4)	mg/L	38.6	37.2	39.3	42.3	46.9	39.3	40.6	40.6	44.1	42.6	38.1	39.8	38.4	39.1	35.2	41.2	48.6	44.6	52.6	45.3	36.2	38.9	49.3	50.6	35.3	37.1	51.7	49.8	38.9	38.3	54.8	39.6	33.6	36.1	50.7	41.2	200-400
19	Total Alkalinity (as $CaCO_3$)	mg/L	145.0	136.0	148.0	124.0	148.0	128.0	161.0	104.0	121.0	109.0	153.0	113.0	130.0	124.0	149.0	109.0	139.0	131.0	182.0	242.0	142.0	137.0	179.0	218.0	112.0	132.0	181.0	225.0	106.0	139.0	17.0	278.0	103.0	99.2	188.0	302.0	200-600
20	BOD (for 3 days at 27 °C)	mg/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	–
21	Chemical Oxygen Demand	mg/L	17.2	19.1	18.9	20.3	25.3	24.3	15.3	19.4	35.2	27.3	14.6	18.3	18.3	23.6	15.9	19.2	23.6	22.9	25.3	24.3	24.8	23.6	29.7	30.2	26.9	19.1	20.6	25.2	23.8	17.2	19.8	31.4	22.7	17.1	24.6	23.9	--
22	Oil & Grease	mg/L	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	–
23	Iron (as Fe)	mg/L	0.26	0.2	0.31	0.23	0.31	0.28	0.37	0.21	0.28	0.3	0.34	0.18	0.07	0.1	0.35	0.22	0.24	0.1	0.37	0.24	0.09	0.04	0.29	0.34	0.18	0.19	0.31	0.23	0.11	0.17	0.26	0.32	0.05	0.08	0.33	0.29	0.3
24	Fluoride (as F)	mg/L	0.32	0.23	0.43	0.34	0.29	0.25	0.39	0.38	0.26	0.34	0.51	0.36	0.38	0.23	0.47	0.17	0.48	0.21	0.57	0.34	0.31	0.21	0.63	0.49	0.21	0.34	0.54	0.37	0.32	0.29	0.39	0.42	0.29	0.31	0.61	0.33	1.0-1.5
25	Nitrate (as NO_3)	mg/L	0.87	0.72	0.87	0.82	1.46	1.29	2.03	0.88	0.88	0.71	1.45	0.86	0.46	0.47	1.59	0.87	0.58	0.51	0.64	0.89	0.68	0.61	0.34	1.24	0.61	0.66	0.58	0.91	0.28	0.39	0.66	1.35	0.31	0.48	0.58	1.24	45
26	Phosphates (as PO_4)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	–
27	Cyanide (as CN)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--
28	Pesticides (as Malathoin)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	–
29	Phenolic Compounds (as C_6H_5OH)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	–
30	Manganese (as Mn)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	–
31	Chromium (as Cr^{+6})	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--
32	Copper (as Cu)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.5
33	Selenium as Se	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	–
34	Aluminium (as Al)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	–
35	Cadmium (as Cd)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	–
36	Arsenic as As	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05-0.2
37	Boron (as B)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	2
38	Mercury (as Hg)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--
39	Lead (as Pb)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.1
40	Zinc (as Zn)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	5-15
41	Percent Sodium	%	46.8	48.20	50.2	38.20	47.9	43.70	53.5	40.30	39.1	38.60	48.9	39.20	38.6	35.10	39.2	41.40	48.6	47.90	52.3	36.10	43.9	43.60	50.9	39.20	38.6	41.80	46.2	34.30	37.8	36.20	53.5	36.50	41.2	39.90	57.7	38.00	.
42	Total Coliforms	MPN/100 ml	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	50-5000
43	Faecal Coliforms	MPN/100 ml	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	Nil	Absent	-
44	E.Coli	MPN/100 ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	-

Annexure - XVII-1

THE RAMCO CEMENTS LIMITED
WATER LEVEL DATA - JAYANTHIPURAM LIMESTONE MINE (NORTH BAND)
PERIOD - APRIL 2023 TO MARCH 2024

I. PIEZOMETER DETAILS:

Location: Bore Well Footwall Side
RL - (+)40.013m
Latitude - N16^0 52' 28.4" Longitude - E80^0 06' 42.1"
Depth of well - 20.1 m

Location: Open Well Near X Road
RL - (+)40.01m
Latitude - N16 51 29.4 Longitude - E80 07 19.3
Depth of well - 20.0 m

Location: Near Magazine
RL - (+)42m
Latitude - N16 51 40.10 Longitude - E80 07 20.00
Depth of well - 50.0 m

Location: Pit-2 Area
RL - (+)48m
Latitude - N 16 52 39.0 Longitude - E 80 06 15.5
Depth of well - 50.0 m

II. WATER LEVEL DATA

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	4.59
2	30.04.2023	4.61
3	16.05.2023	4.62
4	31.05.2023	5.19
5	16.06.2023	5.65
6	30.06.2023	6.14
7	16.07.2023	5.49
8	31.07.2023	4.86
9	16.08.2023	4.08
10	31.08.2023	3.60
11	16.09.2023	3.15
12	29.09.2023	2.90
13	16.10.2023	3.13
14	31.10.2023	3.37
15	16.11.2023	4.23
16	30.11.2023	4.27
17	16.12.2023	4.30
18	30.12.2023	4.45
19	16.01.2024	4.49
20	31.01.2024	5.21
21	16.02.2024	5.90
22	29.02.2024	6.25
23	16.03.2024	8.02
24	31.03.2024	8.95

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	2.78
2	30.04.2023	2.82
3	16.05.2023	2.83
4	31.05.2023	2.68
5	16.06.2023	2.45
6	30.06.2023	2.38
7	16.07.2023	2.34
8	31.07.2023	2.29
9	16.08.2023	2.22
10	31.08.2023	2.16
11	16.09.2023	2.10
12	29.09.2023	1.90
13	16.10.2023	1.86
14	31.10.2023	1.88
15	16.11.2023	2.06
16	30.11.2023	2.24
17	16.12.2023	2.29
18	30.12.2023	2.35
19	16.01.2024	2.40
20	31.01.2024	2.65
21	16.02.2024	2.86
22	29.02.2024	3.01
23	16.03.2024	3.56
24	31.03.2024	3.84

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	9.76
2	30.04.2023	9.51
3	16.05.2023	9.36
4	31.05.2023	9.18
5	16.06.2023	9.02
6	30.06.2023	8.85
7	16.07.2023	8.71
8	31.07.2023	8.67
9	16.08.2023	8.45
10	31.08.2023	8.40
11	16.09.2023	8.54
12	29.09.2023	8.79
13	16.10.2023	8.54
14	31.10.2023	8.30
15	16.11.2023	9.10
16	30.11.2023	9.25
17	16.12.2023	9.37
18	30.12.2023	9.57
19	16.01.2024	9.62
20	31.01.2024	9.64
21	16.02.2024	9.68
22	29.02.2024	9.85
23	16.03.2024	9.89
24	31.03.2024	9.94

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	5.28
2	30.04.2023	5.86
3	16.05.2023	6.41
4	31.05.2023	6.45
5	16.06.2023	6.43
6	30.06.2023	6.40
7	16.07.2023	5.84
8	31.07.2023	5.19
9	16.08.2023	4.64
10	31.08.2023	4.20
11	16.09.2023	4.22
12	29.09.2023	4.26
13	16.10.2023	3.82
14	31.10.2023	4.54
15	16.11.2023	5.76
16	30.11.2023	4.50
17	16.12.2023	4.30
18	30.12.2023	4.4
19	16.01.2024	4.47
20	31.01.2024	5.54
21	16.02.2024	6.72
22	29.02.2024	6.85
23	16.03.2024	7.25
24	31.03.2024	7.64

Annexure - XVII - 1

THE RAMCO CEMENTS LIMITED

WATER LEVEL DATA - JAYANTHIPURAM LIMESTONE MINE (SOUTH BAND)

PERIOD - APRIL 2023 TO MARCH 2024

I. PIEZOMETER DETAILS:

Location: West Side Bore Well, Near Substation

RL - (+)36.00m

Latitude - N16^0 51' 32.4" Longitude - E80^0 06' 36.0"

Depth of well - 35.05 m

Location: North Side of ML

RL - (+)37.00m

Latitude - N 16^0 51' 29.0" Longitude - E 80^0 06' 44.3"

Depth of well - 50.00 m

Location: South Side of ML

RL - (+)43.20m

Latitude - N 16^0 51' 02.8" Longitude - E 80^0 06' 22.3"

Depth of well - 27.44 m

II. WATER LEVEL DATA

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	9.92
2	30.04.2023	9.98
3	16.05.2023	9.95
4	31.05.2023	9.62
5	16.06.2023	9.04
6	30.06.2023	8.86
7	16.07.2023	8.52
8	31.07.2023	8.06
9	16.08.2023	9.97
10	31.08.2023	10.03
11	16.09.2023	9.79
12	29.09.2023	9.72
13	16.10.2023	10.06
14	31.10.2023	10.18
15	16.11.2023	10.33
16	30.11.2023	10.28
17	16.12.2023	10.28
18	30.12.2023	11.07
19	16.01.2024	11.22
20	31.01.2024	11.42
21	16.02.2024	11.85
22	29.02.2024	12.14
23	16.03.2024	12.53
24	31.03.2024	12.84

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	8.97
2	30.04.2023	8.93
3	16.05.2023	8.89
4	31.05.2023	8.86
5	16.06.2023	8.73
6	30.06.2023	8.73
7	16.07.2023	8.70
8	31.07.2023	8.62
9	16.08.2023	9.01
10	31.08.2023	9.06
11	16.09.2023	8.80
12	29.09.2023	8.75
13	16.10.2023	9.09
14	31.10.2023	9.22
15	16.11.2023	10.05
16	30.11.2023	10.12
17	16.12.2023	10.18
18	30.12.2023	11.63
19	16.01.2024	12.13
20	31.01.2024	12.34
21	16.02.2024	12.11
22	29.02.2024	12.57
23	16.03.2024	13.09
24	31.03.2024	12.66

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	7.56
2	30.04.2023	7.77
3	16.05.2023	7.65
4	31.05.2023	7.32
5	16.06.2023	7.25
6	30.06.2023	7.20
7	16.07.2023	5.50
8	31.07.2023	5.15
9	16.08.2023	5.32
10	31.08.2023	5.28
11	16.09.2023	5.35
12	29.09.2023	5.46
13	16.10.2023	5.78
14	31.10.2023	6.23
15	16.11.2023	6.38
16	30.11.2023	6.95
17	16.12.2023	7.24
18	30.12.2023	7.26
19	16.01.2024	7.35
20	31.01.2024	7.42
21	16.02.2024	7.48
22	29.02.2024	7.54
23	16.03.2024	7.68
24	31.03.2024	7.80

Annexure - XVII - 3

THE RAMCO CEMENTS LIMITED
WATER LEVEL DATA - RAVIRALA LIMESTONE MINE (RESERVE FOREST)
PERIOD - APRIL 2023 TO MARCH 2024

I. PIEZOMETER DETAILS:

Location: South Side of Lease
RL - (+)51.00m
Latitude - N 16° 50' 27.6" Longitude - E80° 07' 58.2"
Depth of well - 45.0 m

Location: East Side of Mining Lease near 7-2 BH pillar
RL - (+) 61.00m
Latitude - N16° 50' 20.4" Longitude - E80° 08' 55.1"
Depth of well - 24.50 m

Location: West Side of Haul road
RL - (+) 44.00m
Latitude - N16° 50' 33.2" Longitude - E80° 08' 05.7"
Depth of well - 35.0 m

Location: South Side Near BH No. 3-7A
RL - (+) 55.00m
Latitude - N16° 50' 11.5" Longitude - E80° 08' 39.5"
Depth of well - 50.0 m

II. WATER LEVEL DATA

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	19.32
2	30.04.2023	19.85
3	16.05.2023	20.02
4	31.05.2023	19.86
5	16.06.2023	18.75
6	30.06.2023	17.60
7	16.07.2023	17.34
8	31.07.2023	17.08
9	16.08.2023	16.85
10	31.08.2023	16.78
11	16.09.2023	16.85
12	29.09.2023	16.78
13	16.10.2023	17.15
14	31.10.2023	17.56
15	16.11.2023	17.97
16	30.11.2023	18.14
17	16.12.2023	18.43
18	30.12.2023	18.64
19	16.01.2024	18.82
20	31.01.2024	18.97
21	16.02.2024	19.24
22	29.02.2024	19.46
23	16.03.2024	19.61
24	31.03.2024	19.84

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	19.29
2	30.04.2023	19.38
3	16.05.2023	19.41
4	31.05.2023	19.52
5	16.06.2023	19.50
6	30.06.2023	19.43
7	16.07.2023	19.29
8	31.07.2023	19.28
9	16.08.2023	18.94
10	31.08.2023	18.79
11	16.09.2023	18.95
12	29.09.2023	19.01
13	16.10.2023	19.04
14	31.10.2023	19.09
15	16.11.2023	19.12
16	30.11.2023	19.21
17	16.12.2023	19.35
18	30.12.2023	19.48
19	16.01.2024	19.64
20	31.01.2024	19.79
21	16.02.2024	19.92
22	29.02.2024	20.14
23	16.03.2024	20.22
24	31.03.2024	20.34

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	22.10
2	30.04.2023	22.49
3	16.05.2023	22.51
4	31.05.2023	22.98
5	16.06.2023	21.86
6	30.06.2023	21.76
7	16.07.2023	21.52
8	31.07.2023	20.67
9	16.08.2023	21.04
10	31.08.2023	21.02
11	16.09.2023	20.85
12	29.09.2023	21.42
13	16.10.2023	21.56
14	31.10.2023	21.69
15	16.11.2023	22.15
16	30.11.2023	22.39
17	16.12.2023	20.26
18	30.12.2023	20.78
19	16.01.2024	20.97
20	31.01.2024	21.04
21	16.02.2024	21.41
22	29.02.2024	21.79
23	16.03.2024	22.45
24	31.03.2024	22.81

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	26.49
2	30.04.2023	26.58
3	16.05.2023	26.89
4	31.05.2023	27.01
5	16.06.2023	26.86
6	30.06.2023	26.81
7	16.07.2023	26.43
8	31.07.2023	26.18
9	16.08.2023	26.71
10	31.08.2023	26.98
11	16.09.2023	26.71
12	29.09.2023	26.40
13	16.10.2023	26.37
14	31.10.2023	26.64
15	16.11.2023	26.69
16	30.11.2023	27.01
17	16.12.2023	26.21
18	30.12.2023	26.74
19	16.01.2024	27.29
20	31.01.2024	27.47
21	16.02.2024	27.79
22	29.02.2024	28.06
23	16.03.2024	28.45
24	31.03.2024	28.83

Annexure - XVII - 4

THE RAMCO CEMENTS LIMITED

WATER LEVEL DATA - RAMCO BUDAWADA LIMESTONE MINE (RESERVE FOREST)
PERIOD - APRIL 2023 TO MARCH 2024

Location: North Side of Lease
RL - (+)51.00m
Latitude N 16 51 48.0 Longitude - E80 04 34.7
Depth of well - 45.0 m

Location: South West Side of Lease
RL - (+)51.00m
Latitude - N 16 51 17.7 Longitude - E80 04 01.6
Depth of well - 45.0 m

Location: West Side of Lease
RL - (+)51.00m
Latitude - N 16 51 30.2 Longitude -E80 03 47.7
Depth of well - 45.0 m

II. WATER LEVEL DATA

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	26.15
2	30.04.2023	26.73
3	16.05.2023	27.45
4	31.05.2023	27.95
5	16.06.2023	28.45
6	30.06.2023	28.92
7	16.07.2023	24.14
8	31.07.2023	24.32
9	16.08.2023	25.19
10	31.08.2023	25.11
11	16.09.2023	24.38
12	29.09.2023	22.79
13	16.10.2023	21.89
14	31.10.2023	25.03
15	16.11.2023	24.06
16	30.11.2023	25.01
17	16.12.2023	25.56
18	30.12.2023	26.02
19	16.01.2024	26.45
20	31.01.2024	26.94
21	16.02.2024	27.25
22	29.02.2024	27.81
23	16.03.2024	28.45
24	31.03.2024	29.16

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	15.78
2	30.04.2023	16.93
3	16.05.2023	17.42
4	31.05.2023	18.98
5	16.06.2023	19.52
6	30.06.2023	20.05
7	16.07.2023	14.53
8	31.07.2023	14.59
9	16.08.2023	15.12
10	31.08.2023	15.10
11	16.09.2023	15.06
12	29.09.2023	14.32
13	16.10.2023	14.56
14	31.10.2023	15.01
15	16.11.2023	14.92
16	30.11.2023	14.68
17	16.12.2023	15.65
18	30.12.2023	16.02
19	16.01.2024	17.05
20	31.01.2024	17.95
21	16.02.2024	18.67
22	29.02.2024	20.12
23	16.03.2024	21.25
24	31.03.2024	21.96

S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2023	24.28
2	30.04.2023	24.56
3	16.05.2023	24.86
4	31.05.2023	25.62
5	16.06.2023	26.04
6	30.06.2023	26.78
7	16.07.2023	23.26
8	31.07.2023	23.76
9	16.08.2023	23.55
10	31.08.2023	22.19
11	16.09.2023	22.06
12	29.09.2023	19.49
13	16.10.2023	19.43
14	31.10.2023	19.98
15	16.11.2023	19.62
16	30.11.2023	19.44
17	16.12.2023	21.02
18	30.12.2023	22.43
19	16.01.2024	23.56
20	31.01.2024	24.61
21	16.02.2024	26.18
22	29.02.2024	27.56
23	16.03.2024	28.94
24	31.03.2024	29.54

Annexure-XVIII

THE RAMCO CEMENTS LTD., KSR NAGAR
DETAILS OF RAIN WATER HARVESTING PITS

S. No.	LOCATION	TO ACCOMMODATE	PIT NUMBERING	No. OF PITS	ROOF TOP ARAES (m^2)	PAVED AREA (m^2)	UNPAVED AREA (m^2)	PIT DIMENSIONS		LATITUDE	LONGITUDE
								LENGTH, m	WIDTH, m		
I.	COLONY AREA										
1	C+ Qtrs buildings(C+1 -C+8)	Building roof top & Open yard	10	4	1200			3.45	1.5	16°52'26.55" N	80°07'45.85" E
			11					3.45	1.5	16°52'24.84" N	80°07'45.61" E
			12					3.45	1.5	16°52'25.05" N	80°07'44.10" E
			13					3.45	1.5	16°52'26.86" N	80°07'44.32" E
2	New school building	Building roof top & Open yard	1	4	3075			3.2	1.6	16°52'33.29" N	80°07'48.71" E
			2					3.1	1.8	16°52'32.42" N	80°07'46.66" E
			3					3.3	2.7	16°52'30.19" N	80°07'49.25" E
			4					2.2	3.2	16°52'28.98" N	80°07'47.78" E
3	Occupational Health Centre	Building roof water	6	2	200			3.3	1.7	16°52'28.03" N	80°07'39.65" E
			7					3.1	2.2	16°52'29.01" N	80°07'39.94" E
4	New Administration building	Building roof top & Open yard	9	1	540			3.2	2.4	16°52'30.10" N	80°07'35.84" E
5	Reading room	Building roof top water	8	1	120			1.1	1.8	16°52'26.79" N	80°07'41.36" E
6	D40 area	D40 quarter open yard	23	1			500	2.3	2.3	16°52'17.46" N	80°07'34.77" E
7	B Type quarter area (near B2 1 No. and B4 backside 1 No.)	School ground	21	2			1000	2.7	2.2	16°52'18.27" N	80°07'36.65" E
			22					1.7	1.7	16°52'20.10" N	80°07'36.08" E
8	C30	Open yard	15	1			200	2.3	2.5	16°52'26.13" N	80°07'43.14" E
9	Near Volley Ball ground	East of play ground	16	1		200		3.8	2	16°52'24.58" N	80°07'41.27" E
10	Near culvert @ Cricket ground	Open land near C ground	5	1			3000	3.4	2.7	16°52'32.07" N	80°07'44.40" E
11	Bachelor hostel area	Rain water collection pit through natural ground	14	2		550		2.1	2.3	16°52'26.75" N	80°07'31.59" E
			20					1.7	2.8	16°52'25.34" N	80°07'31.05" E
12	CMD guest house area	Building roof top & Open yard	17	3	1000			1.5	1.5	16°52'24.0" N	80°07'44.43" E
			18					0.6	0.9	16°52'23.71" N	80°07'43.52" E
			19					0.7	0.7	16°52'23.56" N	80°07'44.53" E
13	D - 1 block Apartment	D41 - D44 block roof top and open land	39	1	200			3	1.6	16°52'16.74" N	80°07'33.50" E
14	D - 2 block Apartment	D45 - D48 block roof top and open land	40	1	200			3.4	2.1	16°52'16.59" N	80°07'32.04" E
15	D - 3 block Apartment	D49 - D52 block roof top and open land	41	1	200			3.3	1.7	16°52'16.68" N	80°07'32.15" E
16	D -4 block Apartment	D53 - D56 block roof top and open land	42	1	200			2.6	1.8	16°52'16.55" N	80°07'33.26" E
17	D - 5 block Apartment	D57- D60 block roof top and open land	43	1	200			2.8	1.8	16°52'16.41" N	80°07'34.34" E
18	D - 6 block Apartment	D61 - D64 block roof top and open land	44	1	200			2	2	16°52'18.75" N	80°07'32.10" E
19	D - 7 block Apartment	D64 - D68 block roof top and open land	45	1	200			2.5	2	16°52'18.48" N	80°07'33.31" E
20	E - 1 Block Apartment	E41 - E52 block roof top and open land	27	2	295			3.3	1.7	16°52'20.92" N	80°07'30.66" E
			28					3.2	1.6	16°52'19.92" N	80°07'30.12" E
21	E - 2 Block Apartment	E53 - E64 block roof top and open land	25	2	295			3.3	2.1	16°52'22.31" N	80°07'30.97" E
			26					3.3	2.1	16°52'21.23" N	80°07'30.77" E
22	F - 1 Block Apartment	F75 - F86 block roof top and open land	29	2	293			3	2	16°52'18.04" N	80°07'30.41" E
			30					3.4	2.2	16°52'19.35" N	80°07'30.39" E
23	F - 2 Block Apartment	F87 - F98 block roof top and open land	31	2	293			3	2.1	16°52'16.38" N	80°07'30.18" E
			32					3	2.1	16°52'17.76" N	80°07'30.27" E
24	F - 3 Block Apartment	F99 - F110 block roof top and open land	33	2	293			3.3	2.3	16°52'16.53" N	80°07'28.64" E
			34					3	2.1	16°52'17.75" N	80°07'28.85" E
25	F - 4 Block Apartment	F111 - F122 block roof top and open land	35	2	293			2.9	1.3	16°52'18.33" N	80°07'28.98" E
			36					2.6	1.8	16°52'19.53" N	80°07'28.99" E
26	F - 5 Block Apartment	F123 - F134block roof top and open land	37	2	293			2.9	1.3	16°52'19.96" N	80°07'29.10" E
			38					2.4	1.5	16°52'21.09" N	80°07'29.33" E
27	STP Area	Rain water collection pit through natural ground	46	1		400	1000	1.5	1.5	16°52'20.61" N	80°07'34.85" E
28	C-Type quarters area	Rain water collection pit through natural ground	47	1			500	2.8	2.7	16°52'22.97" N	80°07'39.48" E
29	C-18 Quarter backside	Rain water collection pit through natural ground	48	1			1000	2.5	2.5	16°52'22.05" N	80°07'40.37" E
30	E3& E4 Block Apartments	Roof tp and open land	49	1	305			1.2	1.3	16°52'23.53" N	80°07'30.43" E
	COLONY TOTAL			48							
II.	PLANT AREA										
31	CCR	Roof top and open land	1	1	1100			3	2	16°52'33.16" N	80°07'19.21" E
32	Mines office	Roof top and open land	2	2	350			1.4	1.4	16°52'21.07" N	80°07'11.11" E
			3					1.5	1.5	16°52'21.58" N	80°07'11.82" E
33	Thermal Power Plant area	Cooling tower building surrounding surface water	4	1				1.5	1.5	16°52'26.34" N	80°07'11.11" E
	PLANT TOTAL			4							
	Total			52	11345	1150	7200				

ANNEXURE - XLX

THE RAMCO CEMENTS LIMITED, KUMARASAMY RAJA NAGAR
NOISE LEVEL MONITORING – PLANT
(PERIOD - APRIL 2024 TO MARCH 2025)

Sl. No.	Section	Location	Standard, dB(A)	June, 2024			Sep, 2024			Dec, 2024			Mar, 2025		
				Date of measurement	Time of measurement	Noise Level dB(A)	Date of measurement	Time of measurement	Noise Level dB(A)	Date of measurement	Time of measurement	Noise Level dB(A)	Date of measurement	Time of measurement	Noise Level dB(A)
1	Limestone Crusher	Crusher front side	85	03-06-24	08.30 am	70	04-09-24	08.50 am	68	07-12-24	2.00pm	70	08-03-25	08.40 am	70
2	Additive Crusher	Additive Crusher front side Crusher front side	85	03-06-24	08.40am	65	04-09-24	09.00am	63	07-12-24	2.10pm	65	08-03-25	08.50am	65
3	Coal Crusher	Coal Crusher front side	85	03-06-24	09.00am	60	04-09-24	09.20am	62	07-12-24	2.20pm	60	08-03-25	09.10am	60
4	Raw Mill – I	Near mill	85	03-06-24	10.50am	55	04-09-24	11.00am	52	07-12-24	2.30pm	55	08-03-25	9.20am	55
5	Raw Mill - II	Near mill	85	03-06-24	10.35am	57	04-09-24	10.45am	54	07-12-24	2.40pm	53	08-03-25	9.25am	57
6	Raw Mill – III	Near mill	85	03-06-24	9.10am	56	04-09-24	9.30am	57	07-12-24	2.25pm	56	08-03-25	9.15am	56
7	Coal Mill – I	Near mill	85	03-06-24	9.40am	50	04-09-24	10.00am	53	07-12-24	3.00pm	51	08-03-25	9.40am	50
8	Coal Mill - II	Near mill	85	03-06-24	10.20am	58	04-09-24	10.40am	56	07-12-24	2.45pm	54	08-03-25	9.30am	58
9	Coal Mill – III	Near mill	85	03-06-24	9.20am	59	04-09-24	9.40am	58	07-12-24	3.25 pm	56	08-03-25	10.00am	59
10	Kiln– I	Outlet	85	03-06-24	10.05am	55	04-09-24	10.15am	59	07-12-24	3.10pm	57	08-03-25	9.45am	55
11	Kiln - II	Outlet	85	03-06-24	10.10am	58	04-09-24	10.30am	59	07-12-24	3.00pm	58	08-03-25	9.35am	58
12	Kiln - III	Outlet	85	03-06-24	9.30am	57	04-09-24	9.40am	60	07-12-24	3.30pm	57	08-03-25	10.10am	57
13	Cooler – I	Near drive	85	03-06-24	10.10am	54	04-09-24	10.25am	56	07-12-24	3.15pm	57	08-03-25	9.50am	54
14	Cooler – II	Near drive	85	03-06-24	10.15am	56	04-09-24	10.35am	57	07-12-24	3.05pm	59	08-03-25	9.40am	56
15	Cooler – III	Near drive	85	03-06-24	9.35am	57	04-09-24	9.50am	59	07-12-24	3.35pm	58	08-03-25	10.20am	57
16	VRPM	Near mill	85	03-06-24	2.10pm	60	04-09-24	2.00pm	62	07-12-24	3.55pm	63	08-03-25	10.40am	60
17	Cement Mill	Near mill	85	03-06-24	2.15pm	64	04-09-24	2.10pm	63	07-12-24	3.50pm	65	08-03-25	10.35am	64
18	Slag Mill	Near mill	85	03-06-24	2.25pm	62	04-09-24	2.20pm	61	07-12-24	3.45pm	59	08-03-25	10.30am	62
19	Packing Plant	Packer floor	85	03-06-24	2.45pm	54	04-09-24	2.35pm	55	07-12-24	4.10pm	53	08-03-25	11.00am	54
20	CCR building	Inside CCR	85	03-06-24	11.05am	42	04-09-24	11.15am	41	09-12-24	2.00pm	43	08-03-25	11.05am	42
21	Locomotive	Shed inside	85	04-06-24	3.05pm	40	05-09-24	2.45pm	42	09-12-24	2.15pm	40	08-03-25	2.05pm	40
22	Time Office	Office room	85	04-06-24	3.15pm	41	05-09-24	3.00pm	40	09-12-24	2.20pm	41	08-03-25	2.15pm	41
23	Power Plant - DG		85	04-06-24	3.25pm	NR	05-09-24	3.15pm	NR	09-12-24	2.35pm	NR	08-03-25	2.25pm	NR
24	Pump House	Office room	85	04-06-24	3.35 pm	49	05-09-24	3.25 pm	47	09-12-24	2.45pm	49	08-03-25	2.35 pm	49
25	Electrical Workshop	Inside building	85	04-06-24	3.40pm	47	05-09-24	3.30pm	44	09-12-24	2.50pm	42	08-03-25	2.40pm	47
26	Mechanical Workshop	Near lathe machines	85	04-06-24	3.45pm	48	05-09-24	3.35pm	45	09-12-24	2.55pm	44	08-03-25	2.45pm	48
27	Auto Garage	Shed inside	85	04-06-24	4.15pm	43	05-09-24	4.05pm	42	09-12-24	3.15pm	41	08-03-25	3.15pm	43
28	Mines office	Office room	85	04-06-24	4.20pm	42	05-09-24	4.15pm	42	09-12-24	3.25pm	40	08-03-25	3.20pm	42