THE RAMCO CEMENTS LIMITED

ISO 9001 ISO 14001 ISO 45001 ISO 50001
Certified Company

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-Form-V/238/190

Date: 16.09.2024

The Environmental Engineer,
AP Pollution Control Board,
Regional Office, Plot No. 41,
Kanakadurga Officer's Colony,
Opp. SBI, Gurunanak Road,
VIJAYAWADA – 520 008.

Dear Sir,

Sub: Submission of Environmental Statement in Form - V for Jayanthipuram Limestone Mine (North Band), Jayanthipuram Limestone Mine (South Band), Ravirala Limestone Mine (RF) and Ramco Budawada Limestone Mine (RF) for the Financial Year 2023-2024 - Reg.

Please find enclosed herewith two sets of Environmental Statement in Form - V for the following Captive Mines of us for the financial year 2023-2024 along with relevant enclosures:

1)Jayanthipuram Limestone Mine (North Band)

2)Jayanthipuram Limestone Mine (South Band)

3)Ravirala Limestone Mine (RF)

4)Ramco Budawada Limestone Mine (RF)

This is for your information and records please.

Thanking you.

Yours faithfully,
For The Ramco Cements Limited,

(ASHISH KUMAR SRIVASTAVA)
President (Manufacturing)

Encl.: As above.

ENVIRONMENTAL STATEMENT (FORM – V)

FOR FINANCIAL YEAR 2023-2024

JAYANTHIPURAM LIMESTONE MINE (NORTH BAND)
JAYANTHIPURAM LIMESTONE MINE (SOUTH BAND)
RAVIRALA LIMESTONE MINE (RF)
RAMCO BUDAWADA LIMESTONE MINE (RF)

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

THE RAMCO CEMENTS LIMITED,
KUMARASAMY RAJA NAGAR - 521457
JAGGAIAHPET (M),
NTR DIST., AP.

ENVIRONMENTAL STATEMENT (FORM – V)

(See rule 14)

Environmental statement for the financial year ending the 31st March 2024

PART – A

<table>
<tr><td>1.</td><td>Name and address of the owner / ~~occupier~~ of the industry operation or process</td><td>:</td><td>The Ramco Cements Limited
Kumarasamy Raja Nagar - 521 457,
Jaggaiahpet Mandal, NTR Dt., A.P</td></tr>
<tr><td></td><td>Industry operation or process</td><td>:</td><td>Captive Limestone Mines:
1) Jayanthipuram Limestone Mine (North Band)
2) Jayanthipuram Limestone Mine (South Band)
3) Ravirala Limestone Mine (RF)
4) Ramco Budawada Limestone Mine (RF)</td></tr>
<tr><td>2.</td><td>Industry category Primary – (STC Code) Secondary – (SIC Code)</td><td></td><td></td></tr>
<tr><td>3.</td><td>Production capacity</td><td></td><td>Production capacities are:
<table>
<tr><th>Mine</th><th>Limestone EC Capacity, Million TPA</th><th>Limestone achived in Million TPA</th></tr>
<tr><td>Jayanthipuram Limestone Mine (North Band)</td><td>1.80</td><td>1.753</td></tr>
<tr><td>Jayanthipuram Limestone Mine (South Band)</td><td>1.75</td><td>0.159</td></tr>
<tr><td>Ravirala Limestone Mine (RF)</td><td>2.75</td><td>2.734</td></tr>
<tr><td>Ramco Budawada Limestone Mine (RF)</td><td>1.10</td><td>1.099</td></tr>
</table></td></tr>
<tr><td>4.</td><td>Year of Establishment</td><td></td><td>1986</td></tr>
<tr><td>5.</td><td>Date of the last environment audit report submitted</td><td>:</td><td>25.09.2023</td></tr>
</table>

PART – B

WATER AND RAW MATERIAL CONSUMPTION

Water consumption m^3/day:

Process & greenbelt	382.0 m^3/day
Total	382.0 m^3/day

Note: Water consumption is considered for 305 days of mine operation.

Name of the product(s)	Water consumption per unit of products (m^3/MT of Limestone)	
	During the previous financial year (2022-2023)	During the current financial year (2023-2024)
Limestone	0.031	0.020

Note:

- Water consumption for drinking purpose is being transported from water treatment plant located in cement plant. This quantity is included in the cement plant domestic use category, hence not mentioned here.
- The limestone production details are given in **Annexure – I.**

Raw material consumption:

Sl. No.	Name of the raw material	Consumption of raw material	
		During the previous financial year (2022-2023)	During the current financial year (2023-2024)
1	Diesel Oil, L	35,15,416	45,60,288
2	Lubricant Oil, L	1,68,617	64,481
3	Grease, kg	28,462	11,573
4	ANFO, kg	6,98,250	8,87,100
5	Slurry explosives – Large dia. (above 32mm)., kg	5,85,113	6,62,997
6	Electrical Detonators – Ordinary, Nos.	4,720	718
7	Electrical Detonators – Delay, Nos.	4,220	5,740
8	Nonel Detonators, Nos.	4,54,885	4,97,404
9	Detonating fuse, m	13,465	5,250

PART- C

Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentrations of Pollutants discharges (Mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water			
p^H	Auto Garage Oil & Grease Trap Treated Waste Water - Not quantified in the financial year 2023-2024	7.78 - 7.99	Well within the prescribed limits
TDS		903.1 mg/L	
TSS		69.7 mg/L	
COD		133.8 mg/L	
BOD		44.4 mg/L	
O & G		1.9 mg/L	

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentrations of Pollutants discharges (Mass/volume), µg/m^3	Percentage of variation from prescribed standards with reasons
(b) Air - Ambient Air Quality Monitoring in the nearby areas:			
PM_{10}	Dharmavarappadu Thanda Village	58.30	Well within the prescribed limits
$PM_{2.5}$		23.59	
SO_2		16.32	
NOx		18.93	
CO		244.75	

PM_{10}	Jayanthipuram Village	58.98	Well within the prescribed limits
$PM_{2.5}$		23.86	
SO_2		15.48	
NOx		18.38	
CO		249.08	
PM_{10}	Chillakallu	58.85	Well within the prescribed limits
$PM_{2.5}$		23.80	
SO_2		15.37	
NOx		18.27	
CO		244.46	
PM_{10}	K Agraharam Village	56.48	Well within the prescribed limits
$PM_{2.5}$		22.89	
SO_2		14.98	
NOx		17.73	
CO		256.08	
PM_{10}	Jaggayyapet	58.60	Well within the prescribed limits
$PM_{2.5}$		25.01	
SO_2		15.31	
NOx		18.01	
CO		244.13	
PM_{10}	Budawada Village	59.02	Well within the prescribed limits
$PM_{2.5}$		23.77	
SO_2		14.98	
NOx		17.68	
CO		261.83	
PM_{10}	Vedadri Village	60.85	Well within the prescribed limits
$PM_{2.5}$		32.88	
SO_2		15.04	
NOx		17.59	
CO		260.67	
PM_{10}	Pochampalli Village	58.23	Well within the prescribed limits
$PM_{2.5}$		32.81	
SO_2		21.15	
NOx		18.00	
CO		263.29	
PM_{10}	Ravirala Village	60.00	Well within the prescribed limits
$PM_{2.5}$		24.43	
SO_2		15.01	
NOx		17.96	
CO		262.00	

Mine	Location	Average concentration, µg/m³				
		PM_{10}	$PM_{2.5}$	SO_2	NOx	CO
Jayanthipuram Limestone Mine (North Band)	Mines Office	63.50	25.72	18.02	20.57	567.13
	Workshop	59.56	24.29	18.24	21.09	562.00
	Sub-station	60.53	24.70	17.90	20.70	569.21
	Magazine Area	62.24	26.42	18.00	21.05	813.54
Jayanthipuram Limestone Mine (South Band)	Mines Office	62.33	25.19	18.17	20.67	580.67
	Pump House	62.21	25.20	18.50	21.40	584.38
	Haul Road	61.70	26.48	18.26	21.01	582.04
	Loading Area	59.60	24.22	18.29	21.14	602.75
Ravirala Limestone Mine (RF)	Mines Office	63.7	25.7	16.5	19.1	553.7
	ML3 Tower Light Area	62.9	25.5	16.1	19.2	571.0
	ML4 Tower Light Area	60.9	24.7	16.5	19.5	554.5
	View Point Tower Light Area	59.7	24.1	16.6	19.6	562.1
Ramco Budawada Limestone Mine (RF)	Drilling Area	63.61	25.72	15.97	18.50	578.54
	Loading Area	60.88	24.88	17.23	19.93	569.63
	Haul Road - 1	62.87	25.77	16.41	19.38	562.63
	Haul Road - 2	62.62	25.83	17.52	20.20	567.71

Note:

- The analysis data of Auto Garage Oil & Grease Trap Treated Waste Water generated for the financial year 2023-2024 is narrated in **Annexure - II.** No deviation is observed from Prescribed Standards in this period.
- Data on ambient air quality monitoring carried out in the nearby villages (9 locations) in the financial year 2023-2024 by MoEF&CC approved environmental monitoring agency is enclosed **in Annexure – III**. No deviation is observed (with respect to quality) for ambient air quality data (in the surrounding villages) from Prescribed Standards in the financial year 2023-2024.
- Data on core zone air monitoring carried out in four mining leases in the financial year 2023-2024 is enclosed as **Annexure - III.**

PART – D
HAZARDOUS WASTES

As specified under 1[Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008)]

Hazardous Waste	During the previous financial year (2022-2023)	During the current financial year (2023-2024)
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#	62 Nos of disposed to M/s R Ess Iron & Steel Pvt. Ltd.	980 kg of used lead acid batteries disposed to M/s Southern Power Industries

- Copy of Form - 4 (submitted to APPCB) - Hazardous Waste generation / receipts and consumption / disposal details for mines for the financial year 2023-2024 is enclosed **as Annexure - IV.**
- Part of the waste oil / lubricants is used along with fresh grease for reclaimers.

Waste lead acid batteries from cement plant, thermal power plant, waste heat recovery plant and limestone mines.

PART – E
SOLID WASTES

Location	During the previous financial year (2022-2023)	During the current financial year (2023-2024)
(a) From process		
I. Overburden / waste Generation, Tonne		
i. Jayanthipuram Limestone Mine (North Band)	23,12,578	30,84,025
ii. Jayanthipuram Limestone Mine (South Band)	1,28,821	22,711
iii. Ravirala Limestone Mine (RF)	4,11,804	6,89,634
iv. Ramco Budawada Limestone Mine	0	0
II. Top Soil Generation, Tonne		
i. Jayanthipuram Limestone Mine (North Band)	0	0
ii. Jayanthipuram Limestone Mine (South Band)	0	0
iii. Ravirala Limestone Mine (RF)	0	0
iv. Ramco Budawada Limestone Mine	0	0
(b) From pollution control facility (wet drilling, water sprinkling, etc.)	No solid waste generated	
(c) Quantity recycled or re-utilized (for reclamation), Tonne		
i. Jayanthipuram Limestone Mine (North Band)	23,12,578	30,84,025
ii. Jayanthipuram Limestone Mine (South Band)	0	0
iii. Ravirala Limestone Mine (RF)	0	0
iv. Ramco Budawada Limestone Mine	0	0

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

Solid Waste Handling & Reclamation:

- Total solid waste handled in the financial year 2023-2024 is as follows:

Name of the Mine	Solid Waste, Tonne		
	Generated	Used in reclamation	Dumped in dumps
Jayanthipuram Limestone Mine (North Band)	30,84,025	30,84,025	0
Jayanthipuram Limestone Mine (South Band)	22,711	0	22,711
Ravirala Limestone Mine (RF)	6,89,634	0	6,89,634
Ramco Budawada Limestone Mine	0	0	0

- 19.60 ha of area is reclaimed by the end of financial year 2023-2024 at Jayanthipuram Limestone Mine (North Band).
- Details of handling / disposal of various wastes generated from mines, plant and colony are given in **Annexure – I.**

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.
- No capital expenditure incurred for environmental protection measures in financial year 2023-2024, with respect to mining leases.
- The recurring expenditure incurred for environmental protection measures in financial year 2023-2024 is Rs. 822.40 lakh for all four operating mining leases i.e., nearly Rs. 14.31 per Tonne of limestone production against Rs. 13.27 per Tonne of limestone production in the financial year 2022-2023.
- Various expenditures incurred for environment protection measures for 4 Nos. of mining leases are listed in **Annexure - V**.
- An amount of Rs. 840.840 lakh is allocated towards Environment Management Activities for the financial year 2024-2025 towards capital as well as recurring costs for mines and being spent.

PART – H

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

- As part of environmental protection measures, 3.07 ha is reclaimed during the financial year 2023-24 and a cumulative of 19.60 ha by the end of financial year 2023-24 at Jayanthipuram Limestone Mine (North Band).

PART – I

Any other particulars for improving the quality of the environment

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 group of Companies have diversified 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 16.5 Million Tonnes / Annum of cement. RCL, which has always been striving for Total Quality Management, possesses International Management Systems 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'.

Captive Limestone Mines are obtaining awards in Mines Environmental & Mineral Conservation Week and in Mines Safety Week celebrations. Captive Mines is using Nonel Delay Detonators, to reduce ground vibration, to avoid fly rocks & fugitive dust. Permanent water sprinkling system is installed on mines haul road to reduce fugitive dust.

PRODUCTION DETAILS:

Name of the Mine	Production Capacities of Mines as per EC, TPA	For Current Financial Year 2023-2024, Tonne	
		Production	Despatch
Jayanthipuram Limestone Mine (North Band)	18,00,000	17,53,761	17,65,000
Jayanthipuram Limestone Mine (South Band)	17,50,000	1,59,220	1,59,220
Ravirala Limestone Mine (RF)	27,50,000	27,34,000	27,34,000
Ramco Budawada Limestone Mine (RF)	11,00,000	10,99,165	10,99,000

AIR:

Air Pollution Control Measures:

- Dedicated concrete road is made from Ravirala Limestone Mine (RF) area to Crusher at JPM Plant, covering a length of 5.5 km to control fugitive dust.
- Permanent water sprinkling system installed on mines haul road to reduce fugitive dust.
- Non-el delay detonators are used to reduce ground vibration, to avoid fly rocks & fugitive dust.
- Massive greenbelt development all along the haul roads.
- Dozer is used for dozing haul roads regularly.

- Mobile water sprinklers are used for water sprinkling on internal haul roads & muck pile.

Ambient Air Quality Monitoring:

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

Data on ambient air quality monitoring carried out in the nearby 9 Nos. of villages (buffer zones of limestone mining leases) in the financial year 2023-2024 is enclosed as **Annexure - III**. Data on core zone air monitoring carried out in four mining leases in the financial year 2023-2024 is enclosed as **Annexure - III**. The values are within the specified limits. The average values are:

Location / Norm	Average concentration of pollution type, µg/m³									
	Financial Year 2022-23					Financial Year 2023-2024				
	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
Dharmavarappadu Thanda	56.0	22.70	14.70	17.40	239.9	58.30	23.59	16.32	18.93	244.75
Jayanthipuram Village	55.20	22.30	14.40	17.30	249.10	58.98	23.86	15.48	18.38	249.08
Chillakallu	55.80	22.60	14.40	17.30	247.50	58.85	23.80	15.37	18.27	244.46
K.Agraharam Village	54.9	22.3	14.80	17.50	257.80	56.48	22.89	14.98	17.73	256.08
Jaggayyapet	56.10	22.90	14.40	17.10	254.70	58.60	25.01	15.31	18.01	244.13
Budawada Village	57.20	23.10	14.20	*16.90*	261.00	59.02	23.77	14.98	17.68	261.83
Vedadri Village	55.10	22.20	14.30	16.80	251.50	60.85	32.88	15.04	17.59	260.67
Pochampalli Village	54.80	22.30	14.20	16.80	247.60	58.23	32.81	21.15	18.00	263.29
Ravirala Village	53.30	21.70	14.40	17.30	244.40	60.00	24.43	15.01	17.96	262.00

Mine	Location	Average concentration, µg/m³									
		Financial Year 2022-23					Financial Year 2023-24				
	Pollution Board Norms	PM_{10}	$PM_{2.5}$	SO_2	NOx	CO	PM_{10}	$PM_{2.5}$	SO_2	NOx	CO
		100	60	80	80	2000	100	60	80	80	2000
Jayanthipuram Limestone Mine (North Band)	Mines Office	60.95	24.69	17.29	19.84	569.45	63.50	25.72	18.02	20.57	567.13
	Workshop	60.75	24.79	16.73	19.58	565.04	59.56	24.29	18.24	21.09	562.00
	Sub-station	59.00	24.07	17.26	20.06	556.45	60.53	24.70	17.90	20.70	569.21
	Magazine Area	60.24	24.49	17.01	20.06	570.16	62.24	26.42	18.00	21.05	813.54
Jayanthipuram Limestone Mine (South Band)	Mines Office	60.39	24.40	16.72	19.22	572.92	62.33	25.19	18.17	20.67	580.67
	Pump House	59.85	24.23	16.43	19.33	575.88	62.21	25.20	18.50	21.40	584.38
	Haul Road	59.10	24.17	16.47	19.22	566.96	61.70	26.48	18.26	21.01	582.04
	Loading Area	57.34	23.31	16.51	19.36	576.75	59.60	24.22	18.29	21.14	602.75
Ravirala Limestone Mine (RF)	Mines Office	62.07	25.07	16.93	19.57	573.00	63.7	25.7	16.5	19.1	553.7
	ML3 Tower Light Area	58.63	23.73	16.70	19.74	574.70	62.9	25.5	16.1	19.2	571.0
	ML4 Tower Light Area	60.33	24.52	16.57	19.60	567.95	60.9	24.7	16.5	19.5	554.5
	View Point Tower Light Area	57.30	23.11	17.08	20.12	576.16	59.7	24.1	16.6	19.6	562.1
Ramco Budawada Limestone Mine (RF)	Drilling Area	60.87	24.61	17.38	19.93	583.88	63.61	25.72	15.97	18.50	578.54
	Loading Area	62.06	25.33	17.45	20.15	587.88	60.88	24.88	17.23	19.93	569.63
	Haul Road - 1	61.02	25.01	17.15	20.10	561.83	62.87	25.77	16.41	19.38	562.63
	Haul Road - 2	62.80	25.87	18.08	20.73	566.97	62.62	25.83	17.52	20.20	567.71

(ii) Continuous Ambient Air Quality Monitoring:

2 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:

Location of continuous ambient air monitoring instrument	Parameter	Make of present equipment	Year of installation	Details of earlier equipment, if any
Time Office	PM_{10}	Metone	2013	
	$PM_{2.5}$	Metone	2013	
	SO_2	Horiba	2015	
	NOx	Horiba	2015	
Mines Office	PM_{10}	Metone	2020	DKK, Japan installed in the year 2010 at Time Office is shifted in the year 2013.
	$PM_{2.5}$	Metone	2014	
	SO_2	Horiba	2015	
	NOx	Horiba	2015	

WATER:

Water Requirement:

- Mine seepage water is the source for water requirements.
- By considering 305 days of operation of mines, the total water requirement for Captive Mines is 382.0 m^3/day in the financial year 2023-2024 against 513.0 m^3/day is consumed for year 2022-2023.

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 for cement plant, thermal power plant, township and captive mines.

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:

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

Details of these piezometers and data on water levels collected in the financial year 2023-2024 is enclosed as **Annexure – VI.**

Permission to Work Below Water Table:

Panchayat Raj & Rural Development Department (nodal agency for Central Ground Water Dept) accorded permission to work below water table vide:

Mine Name	NOC No., Date of Issue &	Valid Up To
Jayanthipuram Limestone Mine (North Band)	No. PRR05-11028/14/2018-SLNA-GIS-CORD dated 10.07.2024	09.07.2026
Jayanthipuram Limestone Mine (South Band)	No. PRR05-11028/13/2018-SLNA-GIS-CORD dated 02.01.2024	01.01.2026
Ravirala Limestone Mine (RF)	No. PRR05-11028/15/2018-SLNA-GIS-CORD dated 02.01.2024	01.01.2026
Ramco Budawada Limestone Mine (RF)	No. PRR05-11028/16/2019-SLNA-GIS-CORD dated 11.07.2024	10.07.2026

Water Quality Analysis:

- Ground water for the samples collected in the nearby villages is being monitored by MoEF&CC approved external agency. Compiled data for the same in the financial year 2023-2024 is enclosed as **Annexure – VII.**
- Surface water for the samples collected in the nearby sources is being monitored by MoEF&CC approved external agency. Compiled surface water quality data for the samples collected in the financial year 2023-2024 is enclosed as **Annexure – VIII.**

Waste Water Quality Analysis:

- No process effluent generation from limestone extraction.
- Domestic wastewater generated from mining lease is being treated in respective septic tanks followed by soak pits.
- Mine seepage water is being allowed to settle in mine sump located in respective mine, before letting out. Mine seepage water quality data for the samples collected in financial year 2023-2024 is enclosed as **Annexure – IX**. The values are within the specified limits.
- Workshop effluents are being treated in oil & grease trap located and the treated outlet water is being used for greenbelt development. Compiled data on analysis reports of workshop oil & grease trap outlet water carried out in the financial year 2023-2024 by MoEF&CC approved external agency is enclosed as **Annexure - II**. The values are within the specified limits. The average values are:

Pollution Type	Unit	Pollution Board Norms	Average Value / Range (2022-2023)	Average Value / Range (2023-2024)
p^H		5.5 - 9.0	7.68 - 7.99	7.78 - 7.99
TDS	mg/L	2100	939.3	903.1
TSS	mg/L	100	75.7	69.7
COD	mg/L	250	137.6	133.8
BOD	mg/L	100	43.0	44.4
O & G	mg/L	10	2.5	1.9

Rain Water Harvesting Pits & Check Dams:

- 48 Nos. of rain water harvesting structures are made to recharge the ground water in the colony and 4 Nos. of rain water harvesting structures are made to recharge the ground water in the plant by March 2024. The locations of these pits are listed in **Annexure – X.**
- 1 No. of check dam is constructed near Jayanthipuram Limestone Mine (North Band) and 2 No. of check dam is located near Ramco Budawada Limestone Mine (R.F).
- 2 Nos. of ponds of size around 0.5 ha & 0.15 ha made in Jayanthipuram Limestone Mine (North band) to recharge the water table in the vicinity.

Water Conservation:

Water collected in mine pits is being used for:

- Cement plant & power plant process requirements.
- Water sprinkling for dust suppression purpose (plant & mines).
- Greenbelt development purpose.
- Domestic water requirements of plant, mines & colony.
- Domestic water requirements of nearby villages.
- Part of this outlet water is used for agricultural purpose in the nearby areas.
- Part of the excess waste water is being passed to pond (about 0.5 ha & 0.15 ha area) in our own lands to uplift the water table in the nearby area and balance is being let out.

Drinking Water:

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 2023-2024 are enclosed as **Annexure – XI.**

NOISE & VIBRATION LEVELS:

- Noise level data collected in the mines areas in the financial year 2023-2024 is listed out in **Annexure – XII.**
- Vibration levels are being monitored by Minimate instrument regularly. The vibration reports collected while blasting at four mining leases [Jayanthipuram Limestone Mine (North Band), Jayanthipuram Limestone Mine (South Band), Ravirala Limestone Mine (RF) and Ramco Budawada Limestone Mine (RF)] in the financial year 2023-2024 are enclosed as **Annexure – XIII**. These values are within the specified limits.

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 at the time of recruitment, he/she won't get 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
- Dental chair
- Ambulance

The first aid box is made available for immediate treatment, at all working mining leases. First aid training is imparted to the selected employees regularly. The list of first aid trained members is being displayed at strategic places.

WASTE HANDLING & CLEANER PRODUCTION PRACTICES:
Solid Waste Handling & Reclamation:

- Total solid waste handled in the financial year 2023-2024 is as follows:

Name of the Mine	Solid Waste, Tonne		
	Generated	Used in reclamation	Dumped in dumps
Jayanthipuram Limestone Mine (North Band)	30,84,025	30,84,025	0
Jayanthipuram Limestone Mine (South Band)	22,711	0	22,711
Ravirala Limestone Mine (RF)	6,89,634	0	6,89,634
Ramco Budawada Limestone Mine (RF)	0	0	0

- 19.60 Ha. of area is reclaimed by the end of financial year 2023-2024 at Jayanthipuram Limestone Mine (North Band).

Handling and disposal practices of various wastes are:

S.No	Type of waste	Quantity handled in 2023-24	Disposal practice
1	Top Soil Generation	Nil	No top soil generation in the financial year 2023-2024 from all the mining leases.
2	Dust generation during drilling	Nil	Controlled by Wet drilling
3	Dust generation during loading	Nil	Water sprinkling on muck piles
4	Dust generation during transportation	Nil	Water sprinkling on haul roads (by permanent water sprinkler of 2 km length of main haul roads and by water tanker on minor haul roads
5	Sludge collected from STP	2 m^3	Is being used as manure in greenbelt activities, in place of chemical fertilizers.
6	Colony garbage	50 Tonne of compost	By Vermi-composting and compost is being used for greenbelt activities as manure, in place of chemical fertilizers.
7	Kitchen waste from colony	Not quantified	Kitchen waste is being composted in bio-gas plan. The generated bio-gas is being used in industrial canteen, to partially replace the consumption of LPG.

S.No	Type of waste	Quantity handled in 2023-24	Disposal practice
8	E-waste from plant & mines	IT waste – 0.1 Tonne Instrumentation waste – 0.68 Tonne	Is being disposed to APPCB authorized agencies. Returns are being submitted annually. Copy of the E-waste returns for the financial year 2023-2024 is enclosed as **Annexure – XIV.** Total quantity by the end of FY 2023-2024 are: Instrumentation waste – 0.249 Tonne IT waste – 1.60732 Tonne
9	Haz. waste – Waste oil & waste grease from mines	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 **(Annexure – IV).**
10	Haz. waste – waste lead acid batteries from mines	No waste lead acid batteries disposed to external agencies.	Waste lead acid batteries are being disposed to the supplier on exchange basis or to APPCB authorized agencies. Returns are being submitted annually **(Annexure – IV).**
11	Plastic waste collected from colony, mines and plant	14.01 Tonne	Being fired in the kilns.
12	Bio-medical waste from OHC	Yellow – 205.277 kg Red – 10.368 kg White – 1.858 kg Blue – 41.015 kg	Bio-medical waste from Occupational Health Centre is being regularly collected by APPCB authorized agent, M/s Safenviron Bio-Medical Treatment Plant for onward treatment. They collect the bio-medical waste on 48-hour basis. Copy of BMW Annual Returns submitted for the calendar year 2023 is enclosed as **Annexure – XV.**

CLEANER PRODUCTION PRACTICES:

To control air emissions as well as fugitive emissions from various sources, various cleaner production practices are initiated. These are:

- Dedicated concrete road is made from Ravirala Limestone Mine (RF) area to Crusher at JPM Plant, covering a length of 5.5 km to control fugitive dust.
- Permanent water sprinkler system is installed for a length of nearly 2 km at mines haul road.
- Mobile Water sprinkling on mines internal haul roads.
- Nonel delay detonators instead of conventional detonators.
- Minimate vibration monitor is used to measure the ground vibrations and to control them accordingly.
- Reclamation & rehabilitation initiated at mined out areas.
- For better housekeeping, '5-S – Work Place Management' is implemented.

GREENBELT ACTIVITIES:

Greenbelt developed within ML areas as on 31.03.2024 are as follows:

Name of the Mine	Greenbelt Area in Ha. specified in EC	Greenbelt Developed Extent in Ha. up to	
		31.03.2023	31.03.2024
Jayanthipuram Limestone Mine (North Band)	62.39	66.40	66.60
Jayanthipuram Limestone Mine (South Band)	21.07	21.58	22.08
Ravirala Limestone Mine (RF)	3.19	10.49	10.49
Ramco Budawada Limestone Mine (RF)	0.0	3.50	3.50

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-2024:

- No. of saplings planted – 22335.
- Total area covered – 6040 m2.

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 2003-2024 is Rs. 1,01,20,449/- against Rs. 1,20,10,872/- in the financial year 2022-2023.

Some of the major initiates taken in the financial year 2023-2024 are as follows:

- Contribution for the Butterfly Park road development at Mulapadu, NTR District, AP.
- 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 are proposed to contribute an amount of Rs. 15,00,000/- (Rupees Fifteen Lakh only) for the procurement of Sewing machines and Embroidery machines.
- Laying of Earthen Road leading to Agriculture lands at Ravirala Village activities in the financial year 2023-2024.
- 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 Open Drains at Jayanthipuram Village. As part of infrastructural development facilities in the nearby villages.
- Construction of Washing Platform facility at paleru river bank at K Agraharam Village. As part of infrastructural development facilities in the nearby villages.

EXPENDITURE INCURRED FOR ENVIRONMENT PROTECTION:

- The recurring expenditure incurred for environmental protection measures in financial year 2023-2024 is Rs. 822.40 lakh for all four operating mining leases i.e., nearly Rs. 14.31 per Tonne of limestone production against Rs. 13.27 per Tonne of limestone production in the financial year 2022-2023.
- Various expenditures incurred for environment protection measures (other than socio-economic measures) for 4 mining leases [Jayanthipuram Limestone Mine (North Band), Jayanthipuram Limestone Mine (South Band), Ravirala Limestone Mine (RF) and Ramco Budawada Limestone Mine (RF)] for the financial year 2023-24 are listed in **Annexure - V.**
- An amount of Rs. 840.840 lakh is allocated towards Environment Management Activities for the financial year 2024-2025 towards capital as well as recurring costs for mines and being spent.

CELEBRATION OF WORLD ENVIRONMENT DAY:

- On the eve of World Environment Day – 5th June 2023, plantation activity conducted at plant premises, mines premises, colony premises and at surrounding areas.

Annexure :: II

THE RAMCO CEMENTS LTD, KSR NAGAR

AUTO GARAGE OIL & GREASE TRAP OUTLET QUALITY

PERIOD - APRIL 2023 TO MARCH 2024

Parameter	Unit	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-22	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Norm	Average / Range	Min.	Max.
p^H		7.97	7.99	7.82	7.79	7.82	7.93	7.87	7.79	7.86	7.78	7.81	7.96	5.5 - 9.0	7.68 - 7.99	7.78	7.99
Total Dissolved Solids	mg/L	963	996	912	901	878	891	884.00	878.00	891.00	864.00	891.00	888.00	2100	903.1	864.0	996.0
Total Suspended Solids	mg/L	76.3	76.3	70.6	68.4	69.3	67.2	65.30	64.20	65.30	69.30	71.20	73.20	200	69.7	64.2	76.3
Chemical Oxygen Demand	mg/L	161	161	154	139	141	139	124.00	112.00	121.00	118.00	121.00	114.00	250	133.8	112.0	161.0
BOD (for 3 days at 27 ^{O}C)	mg/L	49.2	49.7	45.3	42.6	43.9	42.4	43.60	42.90	43.80	42.60	43.60	42.60	100	44.4	42.4	49.7
Oil & Grease	mg/L	2.1	2.1	2.0	1.8	1.7	1.5	1.10	1.30	2.10	2.00	2.40	2.60	10	1.9	1.1	2.6

Note: All values are mentioned as mg/L, except p^H.

Annexure :: III/1

THE RAMCO CEMENTS LTD., KSR NAGAR

AMBIENT AIR QUALITY MONITORING DATA - BUFFER ZONE VILLAGES

(PERIOD - APRIL 2023 TO MARCH 2024)

Location	Parameter	April-23		May-23		June-23		July-23		Aug-23		Sep-23		Oct-23		Nov-23		Dec-23		Jan-24		Feb-24		Mar-24		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	65.1	65.3	58.9	55.9	65.2	68.9	60.5	48.3	62.4	45.3	60.3	48.3	53.9	51.2	56.2	55.3	58.9	58.3	56.3	60.6	58.4	62.3	59.6	63.9	58.30	100
	PM 2.5	26.4	26.3	23.9	22.5	26.5	27.8	24.6	19.5	25.3	18.3	24.5	19.5	21.9	20.6	22.8	22.3	23.9	23.5	22.9	24.4	23.7	25.1	24.2	25.8	23.59	60
	SO_2	16.3	19.2	16.2	17.2	16.2	19.6	12.3	18.2	13.4	17.3	12.9	18.2	13.5	19.8	12.8	17.2	13.5	18.3	14.5	19.1	15.6	16.3	16.2	17.8	16.32	80
	NO_x	18.9	21.9	18.8	19.9	18.0	22.3	14.9	20.9	16.0	20.0	15.5	20.9	16.1	22.5	15.4	19.9	16.1	21.0	17.1	21.8	18.2	19.0	18.8	20.5	18.93	80
	CO	291.0	277.0	239.0	272.0	312.0	278.0	284	248.0	214.0	254.0	199.0	261.0	212.0	274.0	242.0	161.0	252.0	161.0	261.0	169.0	281.0	215.0	296.0	221.0	244.75	2000
Jayanthipuram	PM 10	62.3	62.1	62.3	60.2	61.3	60.6	59.6	52.6	58.3	50.1	56.9	53.6	58.4	55.9	60.3	54.2	62.3	56.1	60.4	58.3	62.3	61.4	63.5	62.6	58.98	100
	PM 2.5	25.0	25.3	25.0	24.6	24.6	24.7	23.9	21.5	23.4	20.4	22.8	21.9	23.4	22.8	24.2	22.1	25.0	22.9	24.2	23.8	25.0	25.1	25.5	25.5	23.86	60
	SO_2	16.1	17.1	15.9	16.3	15.3	18.3	13.5	16.3	13.1	15.1	11.6	16.3	12.4	17.4	13.6	18.1	14.2	15.3	15.2	16.2	16.3	15.4	16.1	16.3	15.48	80
	NO_x	19.0	20.0	18.8	19.2	18.2	21.2	16.4	19.2	16.0	18.0	14.5	19.2	15.3	20.3	16.5	21.0	17.1	18.2	18.1	19.1	19.2	18.3	19.0	19.2	18.38	80
	CO	256.0	289.0	261.0	269.0	303.0	269.0	212	212.0	202.0	223.0	206.0	242.0	221.0	245.0	259.0	284.0	263.0	284.0	269.0	174.0	274.0	236.0	284.0	241.0	249.08	2000
Chillakallu	PM 10	59.1	63.8	56.3	58.3	62.4	64.9	60.4	43.5	61.4	44.6	60.5	59.1	61.6	56.3	63.8	53.9	65.1	55.2	62.6	57.9	62.5	59.3	58.4	61.4	58.85	100
	PM 2.5	23.9	25.8	22.7	23.6	25.2	26.3	24.4	17.6	24.8	18.1	24.4	23.9	24.9	22.8	25.8	21.8	26.3	22.4	25.3	23.4	25.3	24.0	23.6	24.9	23.80	60
	SO_2	16.9	18.3	16.1	17.9	17.3	15.6	12.6	14.2	12.9	12.9	10.9	14.5	11.2	15.3	12.9	17.3	13.1	16.9	13.9	18.3	15.4	19.2	16.9	18.4	15.37	80
	NO_x	19.6	21.4	18.8	21.0	20.0	18.7	15.3	17.3	15.6	16.0	13.6	17.6	13.9	18.4	15.6	20.4	15.8	20.0	16.6	21.4	18.1	22.3	19.6	21.5	18.27	80
	CO	245.0	278.0	259.0	301.0	321.0	274.0	236	235.0	209	239.0	201.0	249.0	216.0	253.0	213.0	221.0	242.0	221.0	252.0	202.0	263	214.0	271.0	252.0	244.46	2000
K.Agraharam Village	PM 10	58.3	64.6	60.1	56.1	60.6	65.3	58.3	42.6	59.2	41.9	57.3	43.6	58.9	45.1	61.6	50.6	62.3	53.1	61.9	55.6	63.9	54.1	62.1	58.3	56.48	100
	PM 2.5	23.5	26.4	24.2	22.9	24.4	26.6	23.5	17.4	23.9	17.1	23.1	17.8	23.7	18.4	24.8	20.6	25.1	21.7	24.9	22.7	25.8	22.1	25.0	23.8	22.89	60
	SO_2	15.4	17.9	16.8	15.8	16.2	17.1	11.9	10.1	12.1	10.8	11.4	12.6	11.9	13.9	13.5	18.2	13.1	18.3	12.6	19.4	13.9	20.3	14.6	21.6	14.98	80
	NO_x	18.5	20.3	19.9	18.2	19.3	19.5	15	12.5	15.2	13.2	14.5	15.0	15.0	16.3	16.6	20.6	16.2	20.7	15.7	21.8	17	22.7	17.7	24.0	17.73	80
	CO	259.0	274.0	291.0	289.0	296.0	278.0	284	242.0	274	248.0	252.0	256.0	259.0	261.0	221.0	226.0	239.0	236.0	248.0	212.0	254	236.0	263.0	248.0	256.08	2000
Jaggayyapet	PM 10	57.2	58.4	62.9	72.1	63.5	60.2	54.6	58.4	53.5	56.2	51.6	58.1	53.5	59.7	55.9	52.4	58.3	53.9	62.8	55.3	65.3	56.2	66.8	59.6	58.60	100
	PM 2.5	23.5	23.6	52.9	29.1	26.1	24.3	22.4	23.6	22	22.7	21.2	23.5	22.0	24.1	23.0	21.2	24.0	21.8	25.8	22.3	26.8	22.7	27.5	24.1	25.01	60
	SO_2	17.8	17.1	17.2	16.5	18.2	18.3	13.1	10.9	13.4	11.1	12.6	13.5	13.6	14.2	13.9	15.4	14.3	16.2	14.6	17.3	15.1	18.4	15.4	19.3	15.31	80
	NO_x	20.2	20.1	19.6	19.5	20.6	21.3	15.5	13.9	15.8	14.1	15.0	16.5	16.0	17.2	16.3	18.4	16.7	19.2	17.0	20.3	17.5	21.4	17.8	22.3	18.01	80
	CO	271.0	263.0	287.0	326.0	289.0	261.0	236.0	223.0	212	239.0	189.0	241.0	211.0	248.0	262.0	225.0	245.0	225.0	246.0	205.0	259	209.0	269.0	218.0	244.13	2000
Budawada	PM 10	61.3	67.3	65.6	59.7	62.8	69.1	55.3	52.9	52.8	50.3	50.8	52.6	52.6	53.8	60.6	53.8	62.4	54.2	65.1	56.8	66.9	60.3	67.6	61.8	59.02	100
	PM 2.5	24.2	27.7	25.9	24.5	24.8	28.4	21.8	21.7	20.9	20.7	20.1	21.6	20.8	22.1	23.9	22.1	24.6	22.3	25.7	23.3	26.4	24.8	26.7	25.4	23.77	60
	SO_2	15.9	16.8	15.3	17.9	16.9	16.2	12.8	12.3	12.9	12.5	12.3	13.9	13.4	14.1	14.2	16.3	15.2	15.4	15.9	16.2	16.3	15.3	15.3	16.2	14.98	80
	NO_x	18.7	19.4	18.1	20.5	19.7	18.8	15.6	14.9	15.7	15.1	15.1	16.5	16.2	16.7	17.0	18.9	18	18.0	18.7	18.8	19.1	17.9	18.1	18.8	17.68	80
	CO	258.0	292.0	310.0	318.0	268.0	292.0	254.0	246.0	231	244.0	245.0	255.0	253.0	262.0	265.0	239.0	274	239.0	281	223	274	236.0	281.0	244.0	261.83	2000
Vedadri	PM 10	58.2	61.3	63.1	62.3	64.6	63.5	61.2	60.6	60.4	54.3	58.9	58.2	59.1	61.6	58.2	56.1	59.1	58.2	61.4	62.3	62.6	65.1	63.9	66.2	60.85	100
	PM 2.5	23.7	24.4	25.7	24.8	26.4	25.3	25.0	24.1	24.6	21.6	24.0	23.2	24.1	24.5	23.7	223.0	24.1	23.2	25.1	24.8	25.5	25.9	26.1	26.3	32.88	60
	SO_2	16.3	17.1	16.9	18.2	17.1	16.9	14.2	11.2	13.2	12.8	12.5	13.8	12.9	14.5	13.1	14.3	13.8	15.1	14.7	16.1	15.4	17.9	14.6	18.4	15.04	80
	NO_x	18.6	19.9	19.2	21.0	19.4	19.7	16.5	14.0	15.5	15.6	14.8	16.6	15.2	17.3	15.4	17.1	16.1	17.9	17	18.9	17.7	20.7	16.9	21.2	17.59	80
	CO	274.0	274.0	290.0	291.0	271.0	274.0	235.0	248.0	232	251.0	252.0	263.0	258.0	269.0	264.0	242.0	263	242.0	266	241	265	253.0	277.0	261.0	260.67	2000
Pochampalli	PM 10	60.4	56.3	68.2	61.6	61.3	58.6	58.3	53.5	59.3	51.6	57.1	53.5	58.4	55.2	59.3	50.9	61.6	53.1	60.9	56.9	62.8	58.4	60.6	59.7	58.23	100
	PM 2.5	24.7	22.9	27.9	25.0	25.1	23.8	23.8	21.7	24.3	20.9	23.4	21.7	23.9	22.4	24.3	20.7	25.2	21.6	24.9	23.1	25.7	23.7	24.8	242.0	32.81	60
	SO_2	15.5	16.9	17.3	17.1	15.3	17.1	13.5	14.1	13.3	14.2	13.1	15.1	13.5	15.5	14.5	16.1	14.9	16.9	153	15.4	15.5	16.6	16.1	17.1	21.15	80
	NO_x	18.4	19.2	20.2	19.4	18.2	19.4	16.4	16.4	16.2	16.5	16.0	17.4	16.4	17.6	17.4	18.4	17.8	19.2	18.2	17.7	18.4	18.9	19.0	19.4	18.00	80
	CO	288.0	268.0	312.0	307.0	299.0	259.0	216.0	261.0	229	268.0	236.0	274.0	241.0	284.0	253.0	259.0	258	259.0	264	236	269	248.0	278.0	253.0	263.29	2000
Ravirala	PM 10	57.9	60.2	64.1	60.8	65.9	62.8	59.7	60.1	57.1	55.3	55.4	57.9	56.2	58.3	61.4	53.7	63.9	54.1	64.6	57.2	65.1	59.3	68.4	60.6	60.00	100
	PM 2.5	23.6	24.2	26.1	24.8	26.8	25.6	24.3	24.5	23.2	22.6	22.5	23.6	22.9	23.8	25.0	21.9	26	22.1	26.3	23.3	26.5	24.2	27.8	24.7	24.43	60
	SO_2	15.1	16.5	16.5	15.8	16.8	16.4	11.6	13.8	11.9	14.1	11.6	15.3	12.1	15.9	13.8	15.4	14.2	15.1	14.4	15.9	16.3	16.7	16.8	18.3	15.01	80
	NO_x	18.1	19.4	19.5	18.7	19.8	19.3	14.6	16.7	14.9	17.0	14.6	18.2	15.1	18.8	16.8	18.3	17.2	18.0	17.4	18.8	19.3	19.6	19.8	21.2	17.96	80
	CO	263.0	214.0	301.0	288.0	286.0	246.0	272.0	216.0	268	221.0	258.0	213.0	262.0	215.0	266.0	261.0	276	261.0	296	252	301	269.0	312.0	271.0	262.00	2000

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

THE RAMCO CEMENTS LTD., KSR NAGAR

CORE ZONE AIR QUALITY MONITORING DATA - JAYANTHIPURAM LIMESTONE MINE (NORTH BAND)

(PERIOD - APRIL 2023 TO MARCH 2024)

Location	Parameter	April-23		May-23		June-23		July-23		Aug-23		Sep-23		Oct-23		Nov-23		Dec-23		Jan-24		Feb-24		Mar-24		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		
Mines office	PM 10	70.3	69.1	71.6	76.9	72.3	63.2	62.9	56.3	63.5	58.9	60.2	55.3	64.5	60.9	66.3	63.6	62.1	60.6	60.7	58.4	62.6	59.1	63.5	61.2	63.50	100
	PM 2.5	28.4	28.1	28.9	31.2	29.2	25.7	25.4	22.9	25.7	23.9	24.3	22.5	26.1	24.7	26.8	25.8	25.1	24.6	24.5	23.7	25.3	24.0	25.7	24.8	25.72	60
	SO_2	21.2	22.3	19.6	21.4	21.4	20.6	18.2	18.6	17.2	19.2	16.8	18.3	17.8	19.7	18.2	18.4	15.3	16.2	15.3	15.3	16.2	14.6	15.3	15.4	18.02	80
	NO_x	23.8	24.8	22.2	23.9	24.0	23.1	20.8	21.1	19.8	21.7	19.4	20.8	20.4	22.2	20.8	20.9	17.9	18.7	17.9	17.8	18.8	17.1	17.9	17.9	20.57	80
	CO	612	601	639	654	601	612	263	561	489	584	476	591	529	622	538	628	521	612	536	624	521	621	537	639	567.13	2000
Workshop	PM 10	65.9	71.2	73.5	70.3	65.3	69.1	60.1	50.1	62.4	52.1	58.3	50.6	62.1	53.8	63.9	54.2	60.6	52.3	56.2	50.6	58.3	53.8	59.6	55.1	59.56	100
	PM 2.5	26.8	29.2	29.8	28.8	26.5	28.3	24.4	20.5	25.3	21.4	23.7	20.7	25.2	22.1	25.9	22.2	24.6	21.4	22.8	20.7	23.7	22.1	24.2	22.6	24.29	60
	SO_2	20.3	20.6	20.3	20.6	20.6	19.4	16.1	15.3	16.9	16.8	15.9	15.9	16.9	19.1	19.1	20.1	16.2	19.5	16.9	18.4	18.2	17.3	19.1	18.2	18.24	80
	NO_x	23.2	23.4	23.2	23.4	23.5	22.2	19.0	18.1	19.8	19.6	18.8	18.7	19.8	21.9	22.0	22.9	19.1	22.3	19.8	21.2	21.1	20.1	22.0	21.0	21.09	80
	CO	623	632	624	639	623	589	529	528	531	536	502	542	536	551	546	561	539	551	548	559	552	543	558	546	562.00	2000
Substation	PM 10	68.6	59.3	70.4	72.7	68.2	61.6	63.5	52.6	66.1	55.1	65.4	52.9	60.3	60.1	64.1	60.9	59.3	54.6	59.1	52.9	56.2	54.2	58.3	56.2	60.53	100
	PM 2.5	28.1	24.1	28.8	29.6	27.9	25.1	26.0	21.4	27.0	22.4	26.7	21.5	24.7	24.5	26.2	24.8	24.3	22.2	24.2	21.5	23.0	22.1	23.8	22.9	24.70	60
	SO_2	21.2	21.3	20.5	22.9	20.6	21.2	17.3	17.1	17.5	17.9	16.1	15.3	17.3	15.3	17.2	19.3	15.4	19.0	14.2	18.2	15.3	17.9	15.4	16.2	17.90	80
	NO_x	23.9	24.2	23.2	25.8	23.3	24.1	20.0	20.0	20.2	20.8	18.8	18.2	20.0	18.2	19.9	22.2	18.1	21.9	16.9	21.1	18.0	20.8	18.1	19.1	20.70	80
	CO	589	624	610	650	589	563	536	562	501	571	489	563	521	559	529	638	501	612	526	623	528	612	536	629	569.21	2000
Magazine Area	PM 10	69.3	62.4	74.5	71.5	63.6	62.3	58.4	50.8	61.8	53.9	60.9	51.8	65.2	55.2	66.2	63.7	62.4	58.3	65.1	61.6	63.9	62.3	65.2	63.5	62.24	100
	PM 2.5	28.3	25.2	30.5	28.0	26.0	25.5	23.9	20.5	25.3	21.8	24.9	20.9	26.7	22.3	27.1	25.7	25.5	23.6	26.6	24.9	26.1	52.3	26.7	25.7	26.42	60
	SO_2	21.4	18.9	18.4	19.9	19.1	18.3	17.9	16.9	18.2	17.1	16.3	17.8	15.8	17.9	17.3	20.4	16.0	18.4	15.8	19.3	16.4	20.6	16.6	17.3	18.00	80
	NO_x	24.4	22.0	21.4	23.0	22.1	21.4	20.9	20.0	21.2	20.2	19.3	20.9	18.8	21.0	20.3	23.5	19.0	21.5	18.8	22.4	19.4	23.7	19.6	20.4	21.05	80

THE RAMCO CEMENTS LTD., KSR NAGAR

CORE ZONE AIR QUALITY MONITORING DATA - JAYANTHIPURAM LIMESTONE MINE (SOUTH BAND)

(PERIOD - APRIL 2023 TO MARCH 2024)

Location	Parameter	April-23		May-23		June-23		July-23		Aug-23		Sep-23		Oct-23		Nov-23		Dec-23		Jan-24		Feb-24		Mar-24		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		
Mines office	PM 10	69.7	61.2	75.1	74.6	70.6	63.5	65.3	53.8	62.4	55.1	65.3	56.2	62.8	60.1	65.1	63.6	59.3	60.4	57.2	57.2	59.3	58.4	58.6	61.2	62.33	100
	PM 2.5	28.2	24.7	30.3	30.1	28.5	25.7	26.4	21.7	25.2	22.3	26.4	22.7	25.4	24.3	26.3	25.7	24.0	24.4	23.1	23.1	24.0	23.6	23.7	24.7	25.19	60
	SO_2	20.2	20.1	21.6	23.5	21.4	19.1	18.2	18.3	19.3	19.2	20.4	18.4	18.6	19.8	17.3	18.4	15.6	16.2	13.9	14.3	14.6	15.6	15.4	16.6	18.17	80
	NO_X	22.5	22.8	23.9	26.2	23.7	21.8	20.5	21.0	21.6	21.9	22.7	21.1	20.9	22.5	19.6	21.1	17.9	18.9	16.2	17.0	16.9	18.3	17.7	19.3	20.67	80
	CO	583	593	710	723	601	612	521	582	538	592	549	589	586	568	601	608	584	524	563	512	564	528	563	542	580.67	2000
Pump House	PM 10	60.6	63.2	78.9	79.1	61.2	62.4	63.9	50.6	65.1	52.8	62.9	55.1	66.1	58.3	68.2	62.8	62.6	58.3	60.3	56.9	62.6	59.3	63.5	58.4	62.21	100
	PM 2.5	24.7	25.5	32.1	31.9	24.9	25.1	26.0	20.4	26.5	21.3	25.6	22.2	26.9	23.5	27.8	25.3	25.5	23.5	24.5	22.9	25.5	23.9	25.8	23.5	25.20	60
	SO_2	18.3	18.9	19.8	20.6	20.6	18.9	17.3	16.2	18.4	17.3	21.2	16.9	20.1	18.3	21.2	20.1	18.4	18.3	16.2	17.1	15.3	18.9	16.3	19.3	18.50	80
	NO_X	21.0	22.0	22.5	23.7	23.3	22.0	20.0	19.3	21.1	20.4	23.9	20.0	22.8	21.4	23.9	23.2	21.1	21.4	18.9	20.2	18.0	22.0	19.0	22.4	21.40	80
	CO	591	583	658	714	589	601	512	541	526	563	539	551	621	542	638	596	612	548	603	539	623	546	638	551	584.38	2000
Haul Road	PM 10	62.3	62.1	73.6	73.5	63.5	64.6	59.6	52.9	61.6	54.6	60.8	50.6	53.9	61.6	66.3	63.9	61.4	60.1	62.9	58.4	63.9	61.2	65.1	62.3	61.70	100
	PM 2.5	25.5	25.3	30.2	30.0	26.0	26.4	54.4	21.6	25.3	22.3	24.9	20.6	22.1	25.1	27.2	26.1	25.2	24.5	25.8	23.8	26.2	25.0	26.7	25.4	26.48	60
	SO_2	19.5	19.5	23.5	21.4	21.3	19.3	18.1	18.1	18.7	18.9	21.9	16.3	18.9	16.1	17.8	19.2	16.1	16.1	15.4	15.3	14.9	17.4	15.9	18.6	18.26	80
	NO_X	22.1	22.4	26.1	24.3	23.9	22.2	20.7	21.0	21.3	21.8	24.5	19.2	21.5	19.0	20.4	22.1	18.7	19.0	18.0	18.2	17.5	20.3	18.5	21.5	21.01	80
	CO	556	587	636	736	563	623	523	522	538	535	541	526	578	574	626	638	601	589	592	562	612	528	621	562	582.04	2000
Loading Area	PM 10	58.9	61.4	70.1	70.2	58.3	63.1	52.6	54.1	55.3	56.8	56.9	52.9	60.7	55.9	67.3	60.6	63.5	54.8	61.4	52.3	64.2	55.9	66.2	56.9	59.60	100
	PM 2.5	24.0	24.9	28.5	28.5	23.7	25.6	21.4	22.0	22.5	23.1	23.2	21.5	24.7	22.7	27.4	24.6	25.8	22.2	25.0	21.2	26.1	22.7	26.9	23.1	24.22	60
	SO_2	17.9	21.4	20.9	18.9	20.6	19.6	15.4	17.4	16.6	18.1	20.8	17.6	22.4	17.9	18.9	17.1	15.3	14.3	16.9	18.2	17.2	19.6	16.2	19.8	18.29	80
	NO_X	20.8	24.2	23.8	21.7	23.5	22.4	18.3	20.2	19.5	20.9	23.7	20.4	25.3	20.7	21.8	19.9	18.2	17.1	19.8	21.0	20.1	22.4	19.1	22.6	21.14	80

THE RAMCO CEMENTS LTD., KSR NAGAR

CORE ZONE AIR QUALITY MONITORING DATA - RAVIRALA LIMESTONE MINE (RESERVE FOREST)

(PERIOD - APRIL 2023 TO MARCH 2024)

Location	Parameter	April-23		May-23		June-23		July-23		Aug-23		Sep-23		Oct-23		Nov-23		Dec-23		Jan-24		Feb-24		Mar-24		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		
Mines Office	PM 10	65.1	66.3	73.5	76.1	65.2	68.9	60.4	59.6	63.5	58.3	60.2	60.2	63.5	63.5	62.9	63.9	63.5	60.6	60.2	58.3	63.9	62.2	65.2	62.6	63.7	100.0
	PM 2.5	26.4	26.7	29.8	30.7	26.4	27.8	24.5	24.0	25.7	23.5	24.4	24.3	25.7	25.6	25.5	25.8	25.7	24.4	24.4	23.5	25.9	24.7	26.4	25.2	25.7	60.0
	SO_2	21.4	18.5	21.2	19.6	20.1	19.4	15.3	14.3	16.1	13.8	17.4	14.6	15.7	15.4	15.9	16.3	14.2	15.3	13.7	13.9	15.2	15.2	16.1	16.2	16.5	80.0
	NO_X	24.1	21.1	23.9	22.2	22.9	22.0	18.0	16.9	18.8	16.4	20.1	17.2	18.4	18.0	18.6	18.9	16.9	17.9	16.4	16.5	17.9	17.8	18.8	18.8	19.1	80.0
	CO	556	558	671	696	563	589	512	516	515	521	524	578	537	551	551	563	542	514	523	520	549	536	556	548	553.7	2000.0
ML3 Tower Light Area	PM 10	62.3	58.9	80.2	68.3	68.9	59.6	62.1	63.2	60.4	60.5	63.8	58.3	61.6	59.6	63.6	65.1	60.1	62.3	58.4	60.4	60.6	63.5	62.3	65.1	62.9	100.0
	PM 2.5	25.0	24.1	32.2	27.9	27.6	24.4	24.9	25.8	24.2	24.7	25.6	23.8	24.7	24.4	25.5	26.6	24.1	25.5	23.4	24.7	24.3	26.0	25.0	26.6	25.5	60.0
	SO_2	19.2	18.3	20.6	20.3	19.3	18.3	16.9	12.1	17.1	12.9	17.6	15.3	16.9	15.9	13.6	17.4	12.1	14.2	12.9	15.1	13.9	16.3	15.4	15.3	16.1	80.0
	NO_X	22.8	20.8	24.2	22.8	22.9	20.8	20.5	14.6	20.7	15.4	21.2	17.8	20.5	18.4	17.2	19.9	15.7	16.7	16.5	17.6	17.5	18.8	19.0	17.8	19.2	80.0
	CO	591	548	731	731	589	612	523	539	531	542	539	553	589	562	596	541	581	523	569	519	571	508	589	526	571.0	2000.0
ML4 Tower Light Area	PM 10	60.4	63.5	76.1	72.4	61.6	65.3	58.3	58.2	55.1	56.2	56.9	60.9	58.9	62.4	58.4	64.8	56.2	61.6	54.1	59.6	56.8	61.4	58.4	63.9	60.9	100.0
	PM 2.5	24.2	26.1	30.5	29.8	24.7	26.8	23.4	23.9	22.1	23.1	22.8	25.0	23.6	25.6	23.4	26.6	22.5	25.3	21.7	24.5	22.8	25.2	23.4	26.3	24.7	60.0
	SO_2	19.3	21.2	22.4	18.4	21.4	20.2	15.4	13.2	15.0	13.1	15.3	14.9	15.3	15.1	15.8	16.2	14.2	16.1	13.6	14.6	15.6	15.4	16.3	16.9	16.5	80.0
	NO_X	22.2	24.4	25.3	21.6	24.3	23.4	18.3	16.4	17.9	16.3	18.2	18.1	18.2	18.3	18.7	19.4	17.1	19.3	16.5	17.8	18.5	18.6	19.2	20.1	19.5	80.0
	CO	568	523	658	701	601	596	511	526	526	523	536	540	542	549	563	558	554	515	546	509	548	523	554	539	554.5	2000.0
View Point Tower Light Area	PM 10	59.1	58.2	71.4	77.7	60.3	59.7	61.6	52.1	56.2	50.9	52.3	61.2	53.6	63.1	56.1	67.1	54.3	65.4	52.9	61.6	55.0	62.3	56.2	64.2	59.7	100.0
	PM 2.5	23.6	23.6	28.6	31.5	24.1	24.2	24.6	21.2	22.5	20.7	20.9	24.8	21.4	25.6	22.4	27.2	21.7	26.6	21.2	25.0	22.0	25.3	22.5	26.1	24.1	60.0
	SO_2	20.1	20.4	19.9	22.7	18.6	19.1	16.8	15.9	16.2	15.2	16.9	14.0	15.1	15.2	16.1	18.3	14.9	15.2	12.9	15.9	12.1	16.9	14.9	14.2	16.6	80.0
	NO_X	22.9	23.7	22.7	26.0	21.4	22.4	19.6	19.2	19.0	18.5	19.7	17.3	17.9	18.5	18.9	21.6	17.7	18.5	15.7	19.2	14.9	20.2	17.7	17.5	19.6	80.0

THE RAMCO CEMENTS LTD., KSR NAGAR

CORE ZONE AIR QUALITY MONITORING DATA - RAMCO BUDAWADA LIMESTONE MINE (RESERVE FOREST)

(PERIOD - APRIL 2023 TO MARCH 2024

Location	Parameter	April-23		May-23		June-23		July-23		Aug-23		Sep-23		Oct-23		Nov-23		Dec-23		Jan-24		Feb-24		Mar-24		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		
Drilling Area	PM 10	63.6	70.6	71.2	73.5	63.5	71.2	60.6	53.5	60.6	58.3	63.5	55.9	63.9	60.6	66.3	63.8	62.6	60.3	65.1	62.8	63.9	63.6	62.1	65.7	63.61	100
	PM 2.5	25.8	28.5	28.7	29.6	25.8	28.7	24.6	21.6	24.6	23.5	25.8	22.5	25.9	24.4	26.9	25.7	25.4	24.3	26.4	25.3	25.9	25.6	25.2	26.5	25.72	60
	SO_2	19.3	20.2	19.8	22.7	19.8	19.8	16.3	13.9	14.3	15.9	15.1	14.8	15.8	14.3	16.3	15.9	14.2	14.3	13.2	12.9	12.9	13.5	13.5	14.6	15.97	80
	NO_X	22.1	22.5	22.1	25.0	22.6	22.1	19.1	16.2	17.1	18.2	17.9	17.1	18.6	16.6	19.1	18.2	17.0	16.6	16.0	15.2	15.7	15.8	16.3	16.9	18.50	80
	CO	683	658	652	623	658	652	586.0	501	621	515	601	523	635	528	612	601	596	502	528	489	520	523	539	539	578.54	2000
Loading Area	PM 10	67.1	69.3	70.3	70.6	69.2	70.3	63.8	50.6	61.3	55.1	62.9	53.8	58.6	63.9	60.2	65.2	58.4	52.6	56.2	55.1	52.6	56.2	58.3	59.6	60.88	100
	PM 2.5	27.1	28.6	29.0	29.1	28.0	29.0	25.8	20.8	24.8	22.7	25.4	22.2	23.7	26.3	24.3	26.9	23.6	21.7	22.7	22.7	21.3	23.2	23.6	24.6	24.88	60
	SO_2	19.6	21.4	21.2	20.6	20.2	21.2	15.4	15.1	17.1	14.6	16.2	15.3	18.3	16.9	19.2	17.3	16.1	16.2	15.4	15.1	14.6	16.2	15.1	15.3	17.23	80
	NO_X	22.3	24.1	23.9	23.3	22.9	23.9	18.1	17.8	19.8	17.3	18.9	18.0	21.0	19.6	21.9	20.0	18.8	18.9	18.1	17.8	17.3	18.9	17.8	18.0	19.93	80
	CO	659	656	698	611	669	698	510.0	489	510	521	523	512	536	536	601	639	524	523	541	541	532	549	542	551	569.63	2000
Haul Road-1	PM 10	65.2	66.2	72.4	71.4	66.8	72.4	61.6	54.2	62.9	54.3	60.2	55.2	64.8	58.6	66.8	62.6	61.6	61.2	59.3	63.9	54.3	65.1	59.6	68.3	62.87	100
	PM 2.5	26.9	27.0	29.5	29.1	27.5	29.5	25.4	22.1	25.9	22.2	24.8	22.5	26.7	23.9	27.5	25.5	25.4	25.0	24.4	26.1	22.4	26.6	24.6	27.9	25.77	60
	SO_2	18.3	20.3	21.3	21.3	19.1	21.3	16.1	13.9	15.4	14.7	16.5	14.2	16.2	15.7	16.8	16.4	14.8	14.9	15.1	14.3	13.9	15.3	13.2	14.9	16.41	80
	NO_X	21.1	23.4	24.4	24.4	21.9	24.4	18.9	17.0	18.2	17.8	19.3	17.3	19.0	18.8	19.6	19.5	17.6	18.0	17.9	17.4	16.7	18.4	16.0	18.0	19.38	80
	CO	626	639	636	642	636	636	531.0	521	512	539	539	535	539	521	638	624	512	512	503	526	531	538	536	531	562.63	2000
Haul Road-2	PM 10	68.9	65.3	75.1	73.8	71.2	75.1	65.9	52.9	61.8	52.1	62.3	54.6	65.9	62.8	67.9	67.1	63.9	58.4	61.4	48.2	60.5	51.4	62.8	53.6	62.62	100
	PM 2.5	28.1	27.2	31.2	30.7	29.0	31.2	26.9	22.0	25.2	21.7	25.4	22.7	26.9	26.1	27.7	27.9	26.1	24.3	25.1	20.1	24.9	21.4	25.9	22.3	25.83	60
	SO_2	20.1	22.6	18.3	19.8	21.3	18.3	14.2	13.6	16.9	14.1	15.3	14.8	18.9	17.1	19.1	17.8	17.2	16.1	18.3	18.2	16.2	17.1	16.9	18.2	17.52	80
	NO_X	22.6	25.4	21.1	22.6	23.8	21.1	16.7	16.4	19.4	16.9	17.8	17.6	21.4	19.9	21.6	20.6	19.7	18.9	20.8	21.0	19.0	19.9	19.7	21.0	20.20	80

ANNEXURE - IV

ISO 9001 ISO 14001 ISO 45001 ISO 50001
Certified Company

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

THE RAMCO CEMENTS LIMITED

RCL/PCB/25/2024-2025

26th June 2024

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 4 Nos. Of Limestone Mines for the financial year 2023-2024 - Reg.

Ref:
1. CFO order for mines No. APPCB/VJA/VJA/488/HO/CFO/2021 dated 07.11.2022.
2. CFO Order No. APPCB/VJA/VJA/488/HO/CFO/2021 dated 27.07.2022 issued for Ravirala Limestone Mine (RF) expansion project from 1.20 to 2.75 MTPA limestone.
3. CTO amendment Order No. APPCB-11022/134/2021-TEC-CFO-APPCB dated 24.01.2024 issued for Ramco Budawada Limestone Mine (RF) railway wagon proposal.

Please find enclosed herewith duly filled in Form – 4 - 'Form for Filling Annual Returns' of Hazardous Wastes for our following Limestone Mines for the financial year 2023-2024:

a. Jayanthipuram Limestone Mine (North Band)
b. Jayanthipuram Limestone Mine (South Band)
c. Ravirala Limestone Mine (RF)
d. Ramco Budawada Limestone Mine (RF)

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 22 (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 mines No. APPCB/VJA/ VJA/488/HO/CFO/2021 dated 07.11.2022.
CFO Order No. APPCB/VJA/VJA/488/HO/ CFO/2021 dated 27.07.2022 issued for Ravirala Limestone Mine (RF) expansion project from 1.20 to 2.75 MTPA limestone.
CTO amendment Order No. APPCB-11022/134/2021-TEC-CFO-APPCB dated 24.01.2024 issued for Ramco Budawada Limestone Mine (RF) railway wagon proposal.
<table>
<tr><th>Name of the Mine</th><th>Unit</th><th>Production capacity</th></tr>
<tr><td>Jayanthipuram Limestone Mine (North Band)</td><td>Tonne</td><td>18,00,000</td></tr>
<tr><td>Jayanthipuram Limestone Mine (South Band)</td><td>Tonne</td><td>17,50,000</td></tr>
<tr><td>Ravirala Limestone Mine (RF)</td><td>Tonne</td><td>27,50,000</td></tr>
<tr><td>Ramco Budawada Limestone Mine (RF)</td><td>Tonne</td><td>11,00,000</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>Name of the Mine</th><th>Unit</th><th>Production in 2023-2024</th></tr>
<tr><td>Jayanthipuram Limestone Mine (North Band)</td><td>Tonne</td><td>17,53,761</td></tr>
<tr><td>Jayanthipuram Limestone Mine (South Band)</td><td>Tonne</td><td>1,59,220</td></tr>
<tr><td>Ravirala Limestone Mine (RF)</td><td>Tonne</td><td>27,34,000</td></tr>
<tr><td>Ramco Budawada Limestone Mine (RF)</td><td>Tonne</td><td>10,99,165</td></tr>
</table></td></tr>
</table>

Part A. To be filled by hazardous waste generators

1 — Total quantity of waste generated category wise:

From cement plant, thermal power plant, waste heat recovery plant and limestone mines:

Type of hazardous waste	Quantity (in Tonne / kL / Nos.)
Waste Oil	Nil
Waste Grease	Nil
Waste Hi-chrome Grinding Media	Nil
Waste Lead Acid Batteries	0.98 Tonne

2 — Quantity dispatched:

(i) To disposal facility: Not applicable

(ii) To recycler to co-processors or pre-processor:

From cement plant, thermal power plant, waste heat recovery plant and limestone mines:

Type of hazardous waste	Recycler	Quantity (in Tonne / kL / Nos.)
Waste Oil	NA	Nil
Waste Grease	NA	Nil
Waste Hi-chrome Grinding Media	NA	Nil
Waste Lead Acid Batteries	M/s Southern Power Industries	0.98 Tonne

(iii) Others: Not applicable

3 — Quantity utilized in-house, if any:

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 for kiln light-up along with fresh HSD.

4 — Quantity in storage at the end of the year:

From cement plant, thermal power plant, waste heat recovery plant and limestone mines:

Type of hazardous waste	Quantity (in Tonne / kL / Nos.)
Waste oil	Nil
Waste Grease	Nil
Waste Hi-chrome Grinding Media	Nil
Waste Lead Acid Batteries	Nil

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:	Not applicable
(i)	Domestic sources:	
(ii)	Imported (if applicable):	
2	Quantity in stock at the beginning of the year:	
3	Quantity recycled or co-processed or used:	
4	Quantity of products dispatched (wherever applicable):	
5	Quantity of waste generated:	
6	Quantity of waste disposed:	
7	Quantity re-exported (whether applicable):	
8	Quantity in storage at the end of the year:	

Date: 26.06.2024
Place: KSR Nagar

Signature:
Designation: President (Mfg.)

Annexure: V

THE RAMCO CEMENTS LIMITED

JAYANTHIPUAM GROUP OF LIMESTONE MINES

ENVIRONMENTAL PROTECTION ACCOUNT - RECURRING EXPENDITURE DETAILS - FINANCIAL YEAR 2023-24

Capital / Recurring	Description	For the year 2023-2024, Lakh Rs.					Projected for 2024-2025, Lakh Rs.				
		Jayanthipuram Limestone Mine (North Band)	Jayanthipuram Limestone Mine (South Band)	Ravirala Limestone Mine (RF)	Ramco Budawada Limestone Mine (RF)	Total	Jayanthipuram Limestone Mine (North Band)	Jayanthipuram Limestone Mine (South Band)	Ravirala Limestone Mine (Forest)	Ramco Budawada Limestone Mine (RF)	Total
Recurring	Pollution Control - Nonel detonators	28.13	1.07	15.78	7.49	52.470	29.00	1.00	16.50	13.00	59.50
	Pollution Control - Water Sprinkling	29.98	1.59	27.34	10.27	69.18	32.00	1.60	28.00	18.00	79.60
	Pollution Monitoring	1.74	1.50	1.51	1.29	6.040	1.74	1.50	1.51	1.29	6.040
	Wet drilling	0.50	0.02	0.32	0.15	0.99	0.55	0.10	0.35	0.20	1.20
	Greenbelt	13.57	4.38	8.69	18.65	45.290	11.00	6.50	9.00	18.00	44.500
	Reclamation	648.43	0.00	0.00	0.00	648.430	650.00	0.00	0.00	0.00	650.000
Total		722.35	8.56	53.64	37.85	822.40	724.29	10.70	55.36	50.49	840.840

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

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

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 16^0 50' 27.6" Longitude - E80^0 07' 58.2"
Depth of well - 45.0 m

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

Location: East Side of Mining Lease near 7-2 BH pillar
RL - (+) 61.00m
Latitude - N16^0 50' 20.4" Longitude - E80^0 08' 55.1"
Depth of well - 24.50 m

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

Location: West Side of Haul road
RL - (+) 44.00m
Latitude - N16^0 50' 33.2" Longitude - E80^0 08' 05.7"
Depth of well - 35.0 m

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

Location: South Side Near BH No. 3-7A
RL - (+) 55.00m
Latitude - N16^0 50' 11.5" Longitude - E80^0 08' 39.5"
Depth of well - 50.0 m

S. No.	Date of Monitorin	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

II. WATER LEVEL DATA

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

THE RAMCO CEMENTS LTD., KSR NAGAR

GROUND WATER QUALITY DATA - SURROUNDING AREAS

PERIOD - APRIL 2023 TO MARCH 2024

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-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-23	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-23	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-23	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-23	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-	Jan-24 to Mar-24	Permissible Limits
1	ρ^H	-	7.61	7.63	7.52	7.48	7.63	7.49	7.68	7.36	7.55	7.52	7.59	7.58	7.69	7.38	7.61	7.74	7.68	7.67	7.76	7.83	7.79	7.91	7.91	7.91	7.51	7.63	7.56	7.49	7.59	7.61	7.61	7.67	7.79	7.92	7.84	7.93	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	^0C	28.30	27.20	31.20	32.30	27.60	28.10	33.10	34.10	28.10	27.20	29.70	29.80	28.40	29.10	31.80	31.00	29.90	29.10	28.40	35.20	28.50	29.80	29.10	31.30	28.90	28.30	27.60	31.40	28.30	29.10	28.90	28.30	29.80	28.40	28.60	31.60	--
4	Turbidity	NTU	1.40	1.10	1.30	1.70	1.10	1.40	1.80	1.90	1.20	1.20	1.60	2.30	1.60	1.50	1.70	1.60	1.50	1.80	1.60	1.70	1.80	1.90	1.70	1.60	1.40	1.70	1.30	1.80	1.60	1.80	1.40	1.40	1.70	1.20	1.10	1.00	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	4.80	4.80	4.10	4.70	4.30	4.10	4.80	5.10	4.50	4.70	5.20	4.40	4.10	4.90	4.40	4.60	4.40	5.10	5.20	5.40	4.70	4.90	4.90	4.90	4.60	5.20	5.10	5.30	4.80	4.90	4.70	4.60	4.90	4.60	4.60	4.70	--
7	Total Suspended Solids	mg/L	28.10	29.60	29.10	28.30	27.20	28.30	27.20	31.20	31.20	28.60	29.10	33.90	20.60	27.10	27.00	29.60	26.10	28.60	26.20	27.30	35.20	33.10	32.10	32.30	29.90	38.60	33.80	34.20	31.20	36.80	32.60	31.30	35.10	39.60	33.10	32.90	--
8	Electrical Conductivity	µmhos/cm	845.00	921.00	839.00	853.00	889.00	874.00	856.00	869.00	936.00	946.00	941.00	946.00	783.00	839.00	784.00	832.00	774.00	938.00	829.00	815.00	815.00	873.00	763.00	783.00	799.00	912.00	735.00	774.00	812.00	926.00	842.00	853.00	809.00	789.00	699.00	684.00	--
9	Total Dissolved Solids	mg/L	548.00	543.00	536.00	541.00	541.00	542.00	448.00	484.00	529.00	561.00	542.00	548.00	487.00	471.00	521.00	439.00	436.00	561.00	534.00	553.00	431.00	568.00	516.00	546.00	438.00	542.00	529.00	549.00	441.00	563.00	536.00	548.00	452.00	539.00	481.00	483.00	500-2000
10	Total Hardness (as $CaCO_3$)	mg/L	248.00	242.00	241.00	253.00	256.00	271.00	278.00	269.00	299.00	292.00	289.00	298.00	187.00	223.00	196.00	187.00	191.00	312.00	289.00	323.00	226.00	282.00	232.00	299.00	198.00	274.00	231.00	253.00	207.00	251.00	262.00	262.00	241.00	254.00	234.00	251.00	200-600
11	Calcium Hardness	mg/L	145.00	140.00	137.00	151.00	143.00	137.00	138.00	151.00	141.00	141.00	139.00	149.00	115.00	108.00	116.00	153.00	151.00	181.00	168.00	171.00	159.00	159.00	143.00	162.00	145.00	161.00	145.00	153.00	159.00	142.00	131.00	128.00	168.00	121.00	99.60	95.30	--
12	Magnesium Hardness	mg/L	115.00	108.00	115.00	119.00	127.00	212.00	108.00	131.00	138.00	128.00	112.00	141.00	119.00	142.00	109.00	138.00	40.90	134.00	142.00	136.00	66.70	123.00	116.00	118.00	53.50	145.00	126.00	121.00	43.60	142.00	128.00	134.00	75.90	123.00	122.00	149.00	--
13	Calcium (as Ca)	mg/L	54.20	54.10	52.60	53.60	63.90	63.10	63.80	66.90	65.20	64.20	61.60	57.20	47.10	53.10	48.40	46.30	53.60	55.30	55.10	56.30	51.60	54.60	53.60	51.80	55.20	54.90	54.80	54.20	53.70	57.10	55.10	54.80	46.10	46.20	44.60	44.60	75-200
14	Magnesium (as Mg)	mg/L	35.10	33.60	31.20	34.20	25.30	26.80	23.10	26.30	24.80	27.10	24.20	23.70	24.60	26.20	23.60	27.90	34.10	32.30	33.60	33.60	18.20	19.60	18.30	19.80	25.10	26.80	24.20	23.10	29.60	28.40	28.30	25.30	23.50	23.70	22.90	27.20	30-100
15	Sodium (as Na)	mg/L	46.10	46.20	43.50	48.40	45.80	43.50	46.80	49.20	50.20	49.10	4.30	45.20	37.30	38.60	39.20	39.60	56.10	56.20	52.60	54.50	42.60	43.10	39.10	38.30	47.30	48.60	43.50	42.60	44.10	49.30	42.60	41.80	34.10	37.10	33.70	33.90	-
16	Potassium (as K)	mg/L	1.70	1.80	1.60	1.60	4.50	4.30	4.70	4.90	7.80	7.10	7.90	8.10	1.90	1.80	1.10	1.70	3.70	2.90	2.70	2.80	4.30	3.30	3.80	4.10	5.90	5.10	5.30	5.60	3.40	3.60	216.00	3.70	2.90	2.90	2.80	2.60	-
17	Chloride (as Cl)	mg/L	148.00	148.00	140.00	135.00	146.00	141.00	145.00	124.00	151.00	137.00	141.00	131.00	121.00	121.00	116.00	109.00	169.00	170.00	140.00	147.00	148.00	153.00	139.00	131.00	156.00	152.00	138.00	136.00	148.00	148.00	121.00	147.00	128.00	131.00	1.90	111.00	250-1000
18	Sulphate (as SO_4)	mg/L	39.10	36.10	38.20	39.20	45.20	38.60	43.60	44.60	44.60	44.10	42.90	43.90	36.80	38.20	33.50	31.90	44.10	45.10	43.10	42.90	35.20	36.20	34.20	37.30	34.30	36.10	35.10	34.60	37.20	36.90	31.20	37.40	34.30	334.00	30.60	32.00	200-400
19	Total Alkalinity (as $CaCO_3$)	mg/L	131.00	145.00	131.00	114.00	139.00	139.00	142.00	107.00	115.00	112.00	121.00	99.30	126.00	119.00	116.00	108.00	131.00	139.00	121.00	124.00	128.00	136.00	108.00	111.00	108.00	138.00	105.00	118.00	104.00	141.00	115.00	109.00	96.30	98.30	95.10	96.30	200-600
20	BOD (for 3 days at 27 ^0C)	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	16.80	18.60	17.60	18.20	24.10	25.40	23.80	26.30	34.20	29.90	32.70	31.80	19.90	24.20	21.40	21.20	22.30	23.10	18.30	21.80	25.10	22.10	21.60	25.20	25.30	18.60	24.20	22.30	22.30	18.90	17.10	19.10	21.60	17.80	18.60	18.30	--
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	0.19	0.00	0.21	0.17	0.17	0.21	0.23	0.15	0.24	0.23	0.15	0.13	0.08	.0.7	0.09	0.09	0.19	0.13	0.18	0.19	0.08	0.06	0.07	0.03	0.15	0.17	0.16	0.19	0.19	0.19	0.13	0.16	0.07	0.09	0.09	0.07	0.3
24	Fluoride (as F)	mg/L	0.25	0.17	0.27	0.14	0.21	0.28	0.24	0.21	0.28	0.31	0.29	0.31	0.31	0.29	0.36	0.34	0.42	0.24	0.28	0.33	0.37	0.25	0.34	0.42	0.24	0.31	0.31	0.33	0.28	0.28	0.22	0.31	0.27	0.34	0.12	0.24	1.0-1.5
25	Nitrate (as NO_3)	mg/L	0.82	0.89	0.81	0.77	1.38	1.23	1.47	1.47	0.91	0.78	0.79	0.81	0.38	0.41	0.41	0.38	0.58	0.59	0.48	0.53	0.67	0.67	0.62	0.69	0.59	0.62	0.51	0.54	0.26	0.37	0.27	0.31	0.24	0.41	0.24	0.37	45

ANNEXURE - VII

Annexure : VIII/1

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

S. No	Parameter	Unit	Upstream				Downstream				Limits
			Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-23	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-23	Jan-24 to Mar-24	
1	p^H	-	7.41	7.37	7.48	7.53	7.51	7.49	7.58	7.59	6.5 - 8.5
2	Colour	Hazen	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5-15
3	Temperature	^0C	27.90	29.1	28.30	31.4	28.20	29.90	26.30	33.60	NS
4	Turbidity	NTU	2.40	2.20	26.00	1.90	2.60	2.30	2.70	1.40	1-5
5	Residual Chloride	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2-1
6	Dissolved Oxygen	mg/L	4.20	3.40	4.70	4.60	4.50	3.70	4.10	4.80	NS
7	Total Suspended Solids	mg/L	46.30	47.10	47.20	46.20	39.70	43.50	38.20	44.10	NS
8	Electrical Conductivity	µmhos/cm	751.00	763.00	761.00	786.00	836.00	849.00	814.00	874.00	NS
9	Total Dissolved Solids	mg/L	391.00	412.00	384.00	412.00	542.00	536.00	529.00	487.00	500-2000
10	Total Hardness (as $CaCO_3$)	mg/L	183.00	189.00	191.00	179.00	291.00	281.00	286.00	286.00	200-600
11	Calcium Hardness	mg/L	95.10	96.20	96.20	95.30	151.00	141.00	143.00	148.00	NS
12	Magnesium Hardness	mg/L	87.10	88.30	88.30	86.90	128.00	123.00	131.00	123.00	NS
13	Calcium (as Ca)	mg/L	35.20	38.20	36.10	38.40	58.20	56.10	59.30	56.20	250-1000
14	Magnesium (as Mg)	mg/L	19.90	19.10	18.30	22.30	24.30	24.10	25.20	28.20	30-No Relaxation
15	Sodium (as Na)	mg/L	34.90	34.20	35.20	38.90	55.20	55.10	54.30	53.60	NS
16	Potassium (as K)	mg/L	1.03	1.07	1.07	1.06	1.14	1.08	1.12	1.18	NS
17	Chloride (as Cl)	mg/L	96.10	93.60	97.20	96.90	141.00	131.00	139.00	17.30	250-1000
18	Sulphate (as $SO_{4)}$	mg/L	29.90	29.30	28.30	33.60	45.10	42.80	46.20	48.40	200-400
19	Total Alkalinity (as $CaCO_3$)	mg/L	86.30	87.10	87.20	88.60	121.00	123.00	118.00	134.00	200-600
20	BOD (for 3 days at 27 ^0C)	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
21	Chemical Oxygen Demand	mg/L	28.70	28.10	29.10	29.10	29.10	29.30	28.30	32.30	NS
22	Oil & Grease	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NS
23	Iron (as Fe)	mg/L	0.24	0.24	0.27	0.42	0.28	0.27	0.27	0.41	0.3 No Relaxation
24	Fluoride (as F)	mg/L	0.33	0.38	1.31	0.35	0.64	0.91	0.61	0.42	1.0-1.5
25	Nitrate (as $NO_{3)}$	mg/L	0.80	0.60	0.72	0.70	1.50	1.30	1.20	1.30	45 No Relaxation
26	Phosphates (as $PO_{4)}$	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NS

Annexure : VIII/2

THE RAMCO CEMENTS LIMITED, KSR NAGAR
SURFACE WATER QUALITY DATA - JAYANTHIPURAM LIMESTONE MINE (SOUTH BAND)
PERIOD - APRIL 2023 TO MARCH 2024

S. No	Parameter	Unit	Upstream				Downstream				Limits
			Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-23	Jan-24 to Mar-24	Apr-23 to Jun-23	Jul-23to Sep-23	Oct-23 to Dec-23	Jan-24 to Mar-24	
1	p^H	-	7.81	7.61	7.88	7.78	7.97	7.68	7.97	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	5-15
3	Temperature	^0C	28.30	29.60	29.20	35.60	29.10	31.20	29.90	33.80	NS
4	Turbidity	NTU	2.60	2.50	2.70	2.80	2.40	2.90	2.60	2.90	1-5
5	Residual Chloride	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2-1
6	Dissolved Oxygen	mg/L	4.40	4.30	4.60	4.10	4.50	4.50	4.70	4.80	NS
7	Total Suspended Solids	mg/L	46.10	44.60	47.20	45.20	49.20	48.30	48.30	46.80	NS
8	Electrical Conductivity	µmhos/cm	741.00	739.00	752.00	771.00	846.00	841.00	851.00	888.00	NS
9	Total Dissolved Solids	mg/L	412.00	352.00	423.00	429.00	551.00	531.00	572.00	574.00	500-2000
10	Total Hardness (as $CaCO_3$)	mg/L	191.00	178.00	178.00	235.00	281.00	263.00	291.00	296.00	200-600
11	Calcium Hardness	mg/L	96.30	95.10	97.20	96.20	151.00	151.00	163.00	153.00	NS
12	Magnesium Hardness	mg/L	85.10	83.60	86.20	85.30	141.00	141.00	148.00	134.00	NS
13	Calcium (as Ca)	mg/L	42.60	38.30	43.10	38.60	58.30	59.10	59.20	58.90	250-1000
14	Magnesium (as Mg)	mg/L	19.10	17.90	19.80	22.60	25.30	26.30	26.20	27.20	30-No Relaxation
15	Sodium (as Na)	mg/L	31.20	34.10	32.30	33.50	54.10	55.10	55.30	54.60	NS
16	Potassium (as K)	mg/L	1.08	1.04	1.06	1.09	1.09	1.09	1.12	1.12	NS
17	Chloride (as Cl)	mg/L	98.30	96.30	97.20	98.30	141.00	151.00	139.00	148.00	250-1000
18	Sulphate (as $SO_{4)}$	mg/L	29.20	28.30	28.30	31.20	45.10	45.20	46.20	45.20	200-400
19	Total Alkalinity (as $CaCO_3$)	mg/L	85.20	84.10	86.10	85.10	141.00	141.00	139.00	139.00	200-600
20	BOD (for 3 days at 27 ^0C)	mg/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NS
21	Chemical Oxygen Demand	mg/L	25.30	25.20	24.20	26.50	32.40	28.20	33.60	29.80	NS
22	Oil & Grease	mg/L	<0.1	<0.1	<0.1	<0.1	<1.0	<0.1	<1.0	<0.1	NS
23	Iron (as Fe)	mg/L	0.24	0.22	0.27	0.21	0.21	0.25	0.24	0.39	0.3 No Relaxation
24	Fluoride (as F)	mg/L	0.26	0.27	0.29	0.33	0.45	0.49	0.49	0.47	1.0-1.5
25	Nitrate (as $NO_{3)}$	mg/L	0.71	0.69	0.74	0.78	0.94	0.81	0.91	0.96	45 No Relaxation
26	Phosphates (as $PO_{4)}$	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	NS

Annexure : IX

THE RAMCO CEMENTS LIMITED
MINE DISCHARGE WATER QUALITY DATA
PERIOD - APRIL 2023 TO MARCH 2024

S. No	Parameter	Unit	Month												Limits
			Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	
I.	**JAYANTHIPURAM LIMESTONE MINE (NORTH BAND)**														
1	p^H		7.66	7.71	7.73	7.78	7.71	7.74	7.84	7.78	7.81	7.62	7.71	7.78	5.5 - 9.0
2	Total Suspended Solids	mg/L	57.3	59.6	59.6	61.2	60.3	65.3	66.9	68.6	69.1	69.3	73.4	75.1	10
3	Total Dissolved Solids	mg/L	969	983	973	984	952	961	976	983	974	942	953	963	100
4	Chlorides (as Cl)	mg/L	259	262	241	253	249	252	249	253	261	251	262	274	2100
5	Sulphates (as SO_4)	mg/L	74.6	75.1	75.3	76.1	74.2	75.3	76.1	78.2	79.2	80.3	82.1	83.2	30
6	BOD (for 3 days at 27 ^oC)	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	250
7	Chemical Oxygen Demand	mg/L	19.90	20.20	21.30	21.80	20.90	21.60	20.90	22.30	23.60	22.60	23.90	24.20	1000
8	Oil & Grease	mg/L	<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
9	Iron (as Fe)	mg/L	0.31	0.34	0.34	0.36	0.41	0.47	0.52	0.58	0.61	0.59	0.64	0.68	1000
10	Fluoride (as F)	mg/L	0.38	0.41	0.42	0.47	0.49	0.53	0.57	0.59	0.58	0.61	0.64	0.71	30
II.	**JAYANTHIPURAM LIMESTONE MINE (SOUTH BAND)**														
1	p^H		7.69	7.78	7.78	7.84	7.74	7.63	7.88	7.92	7.82	7.88	7.91	7.69	5.5 - 9.0
2	Total Suspended Solids	mg/L	54.3	56.1	56.9	57.3	56.3	58.9	61.2	63.5	61.6	62.9	63.6	68.9	10
3	Total Dissolved Solids	mg/L	712	723	731	729	706	723	789	801	784	791	786	812	100
4	Chlorides (as Cl)	mg/L	118	121	121	118	109	112	134	151	146	151	145	151	2100
5	Sulphates (as SO_4)	mg/L	61.6	63.5	62.9	63.5	62.6	63.1	65.2	68.3	67.2	68.3	69.1	68.3	30
6	BOD (for 3 days at 27 ^oC)	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	250
7	Chemical Oxygen Demand	mg/L	13.80	14.20	14.20	14.80	15.30	15.90	16.10	16.90	15.30	16.20	17.30	16.20	1000
8	Oil & Grease	mg/L	<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
9	Iron (as Fe)	mg/L	0.15	0.18	0.18	0.19	0.21	0.24	0.34	0.38	0.46	0.49	0.55	0.51	1000
10	Fluoride (as F)	mg/L	0.21	0.24	0.23	0.25	0.29	0.31	0.37	0.41	0.48	0.51	0.59	0.49	30
III.	**RAVIRALA LIMESTONE MINE (RF)**														
1	p^H		7.91	8.02	7.98	7.96	7.90	7.94	7.88	7.79	7.84	7.84	7.78	7.83	5.5 - 9.0
2	Total Suspended Solids	mg/L	55.20	56.3	56.3	52.1	53.9	55.1	59.30	56.2	57.3	57.3	56.2	58.9	10
3	Total Dissolved Solids	mg/L	843	852	852	848	827	836	851	842	852.0	852.0	863.0	874.0	100
4	Chlorides (as Cl)	mg/L	218	223	223	212	201	241	262	254	261	261	274	283	2100
5	Sulphates (as SO_4)	mg/L	72.6	73.4	73.5	71.2	70.4	52.7	53.1	50.6	52.8	52.8	53.5	51.6	30
6	BOD (for 3 days at 27 ^oC)	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	250
7	Chemical Oxygen Demand	mg/L	17.90	18.60	18.20	17.30	16.90	17.60	18.90	17.20	17.90	17.90	18.20	19.30	1000
8	Oil & Grease	mg/L	<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
9	Iron (as Fe)	mg/L	0.51	0.54	0.54	0.52	0.50	0.54	0.61	0.60	0.64	0.64	0.69	0.77	1000
10	Fluoride (as F)	mg/L	0.62	0.69	0.69	0.67	0.64	0.69	0.72	0.69	0.71	0.71	0.78	0.83	30

Note: All values are mentioned as mg/L, except p^H.

ANNEXURE - X

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°07'39.85" 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°52'17.48" 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°07'33.28" 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°52'22.06" 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							

ANNEXURE-XI

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 : SLL/SWSM/RWS/ Private/080

Description of the test Items: Water Sample

Date of Collection :28.12.2023 **Date of Analysis : 01.01.2024**

Date of Receipt : 28.12.2023 **Date of issue: 04.01.2024**

Sl.No.	Physclo-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		7.29	6.5-8.5	No relaxation
4	Electrical Conductivity	micromhos/cm	158	-	-
5	Total Dissloved Solids	mg/L	102	500	2000
6	Salinity	gm/L	0.05	0.48	1.836
7	Total Alkalinity as $CaCO_3$	mg/L	14	200	600
8	Total Hardness as $CaCO_3$	mg/L	16	200	600
9	Calcium as Ca++	mg/L	4	75	200
10	Magnesium as Mg++	mg/L	1	30	100
11	Flouride as F^-	mg/L	0.21	1.0	1.5
12	Chloride as Cl^-	mg/L	9	250	1000
13	Nitrate as $NO3^-$	mg/L	0.1	45	No relaxation
14	Sulphate as SO_4^{-2}	mg/L	23	200	400
15	Total Iron as Fe	mg/L	0.2	1.0	No relaxation
16	Sodium Na^+	mg/L	15.8	-	-
17	Potassium K^+	mg/L	1.8	-	-
18	Silica	mg/L	1.6	-	-

Note :

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

S. Vasanthi
Lab .Chemist

04/01/24
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)

Date of Collection :28.12.2023

Received Date : 28.12.2023

Recived From : The Ramco Cements Ltd-2

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

Date Of Issue : 03.01.2024

Sl. No.	Lab Ref no	Source	H_2S-producing Bacteria	Coliform/ CFU/ 100ml	E.Coli/ CFU/ 100ml	Residual Free Chlorine
1	SLL/BCT/Private/050	R.O	Negative	<1	0	Nil

Results : Coliform bacteria and E.coli bacteria is 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 / permision of the laboratory.

3.Sample is collected by the customer and not laboratory.

T.N Sandeep
Lab.Microbiologist

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

Annexure : XII

THE RAMCO CEMENTS LIMITED,
NOISE LEVEL MONITORING - JAYANTHIPURAM LIMESTONE MINES
PERIOD - APRIL 2023 TO MARCH 2024

Sl. No	Date of monitoring	Name Of the Mine	Machine / Location	Day time (6AM to 10PM)	Permissible Limit dB(A)	Night time (10PM to 6AM)	Permissible Limit dB(A)
1	27.09.2023	Ravirala Limestone Mine (Reserve Forest)	Drilling area	70.1	< 75	62.7	< 70
2			Loading area	72.3	< 75	62	< 70
3			Haul road	71.4	< 75	63	< 70
4			Unloading area	70.3	< 75	62.8	< 70
5			Mines office	52.1	< 75	39.6	< 70
6			Dumping area	50.3	< 75	41.2	< 70
7			Pump house	62.1	< 75	44.8	< 70
8			Weigh bridge	61.6	< 75	47	< 70
9			Ravirala View point	64.3	< 75	47.3	< 70
10			Near ML-4 Tower Light	61.2	< 75	44.2	< 70
1	27.09.2023	Jayanthipuram Limestone Mine (North Band)	Drilling area	72.8	< 75	62.1	< 70
2			Loading area	71.7	< 75	62.9	< 70
3			Haul road	73	< 75	60.6	< 70
4			Unloading area	71.9	< 75	63.7	< 70
5			Mines office	52.6	< 75	39.9	< 70
6			Crusher Hopper	60.5	< 75	52.8	< 70
7			Sub Station	62.1	< 75	52.6	< 70
8			Pump House	71.2	< 75	61.4	< 70
9			Weigh Bridge	63.8	< 75	53.7	< 70
10			PMC Camp	53.1	< 75	42.9	< 70
1	27.09.2023	Jayanthipuram Limestone Mine (South Band)	Drilling area	71.9	< 75	63.7	< 70
2			Loading area	71.6	< 75	63	< 70
3			Haul road	71.3	< 75	61.2	< 70
4			Unloading area	70.6	< 75	61.9	< 70
5			Mines office	53.9	< 75	39.6	< 70
6			Dump Yard	52.6	< 75	54.3	< 70
7			RSMS Camp	64.3	< 75	51.6	< 70
8			R&B road	71.4	< 75	53	< 70
9			Pump House	62.8	< 75	53.9	< 70
10			SB Bund Area	53.9	< 75	46.2	< 70
1			Drilling area	72.9	< 75	63.9	< 70

ANNEXURE - XIII

......Jayanthipuram.......LIMESTONE MINE

THE RAMCO CEMENTS LIMITED

BLASTING REPORT

Date : 24/01/2024 Time : 1:00pm Blast No. : JPM/ ... /01/23-24

Distance of Instrument from Blasting Site = 200 mtrs

Distance of Village from Blasting Site = 2100 mtrs

Blast Location : Pit - II Bench (E)

No. of Holes : 38 + 31 Toe's

Bench Height (Mtrs) : 9.4

Total Meterage (Mtrs) : 358.1 (Three Hundred and fifty eight point one)

Avg. Depth of Holes (Mtrs) : 9.4

Burden (Mtrs) : 3

Spacing (Mtrs) : 5

ROM Blasted (Expected Tons) : 11300

Production (Ton / Mtr) 31.48

Explosive & Accessories Used

Boost Non Cap Sensitive 83mm (Kg) : 575 kg

S. plus Cap Sensitive 83mm (Kg) : 550 kg

ANFO (Kg) : 800 kg

IED (Nos) : --

A.E.D EDD (Nos) : 09 no's

cord (Mtrs) : --

Nonels (Nos) : 69 no's

Boost 25 mm (Kg) : --

Cast Booster (Kg) : --

Powder Factor (Tons / Kg) : 5.8

Total Explosive : 1925 kg

max charge / Delay = 151.9 kg

P.P.V = 2.29 mm/sec

Nonels :

1. S. det's -- 13 mtr's → 38 no's
2. Excel -- 6 mtr's → 31 no's
3.
4.

Remarks : There are no public / private structure with in the Danger zone

Noise -- 124.6 dB(L)

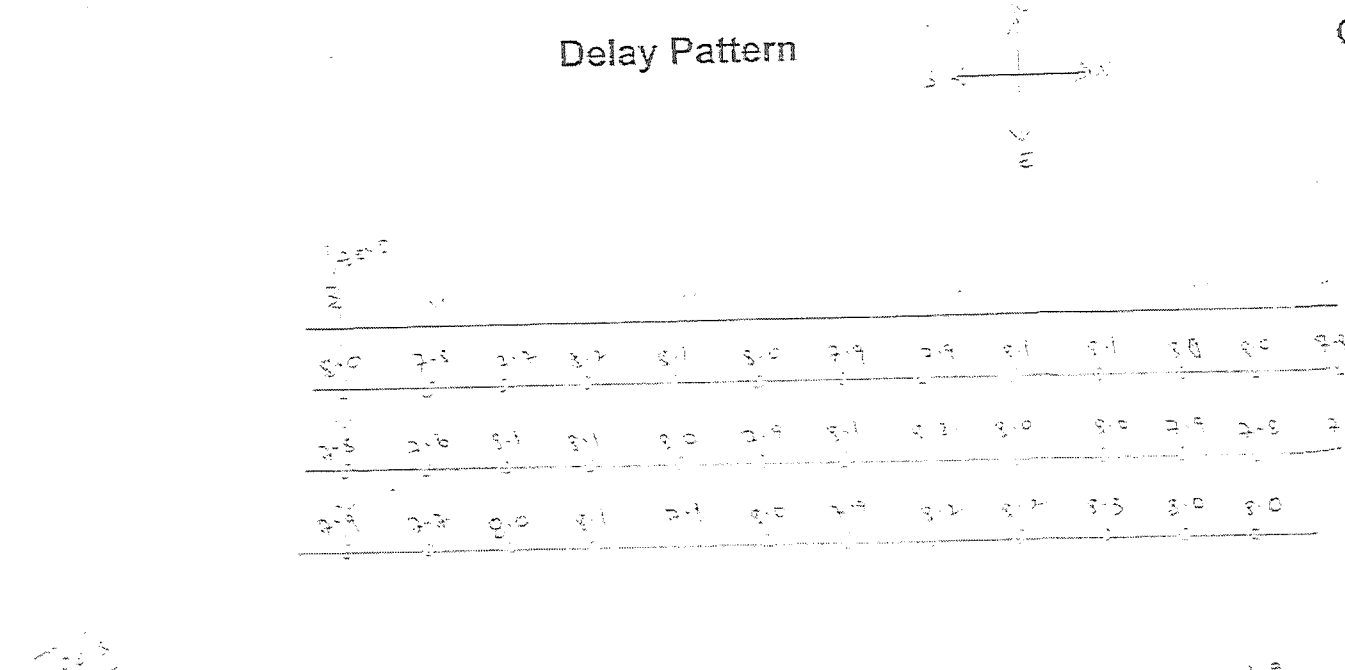
fly Rock Distance -- 6 mtr's

Direction of Instrument from Blasting Site = East

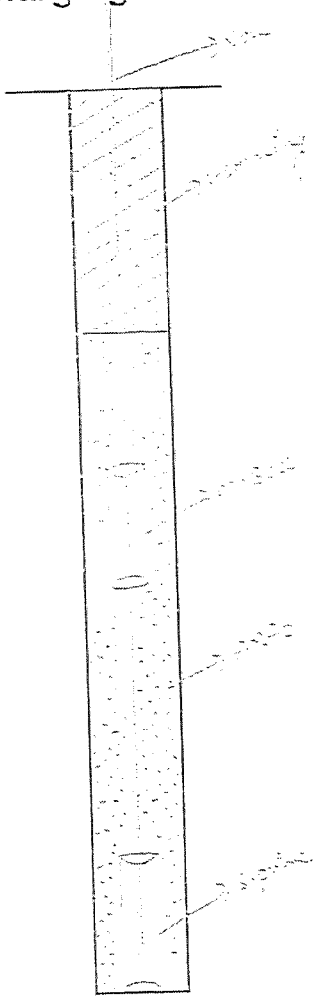
Direction of Village from Blasting Site = South

Blasting Foreman Asst. Manager (D&B) Mines Manager

Delay Pattern



Charging Pattern



Instantel

Event Report

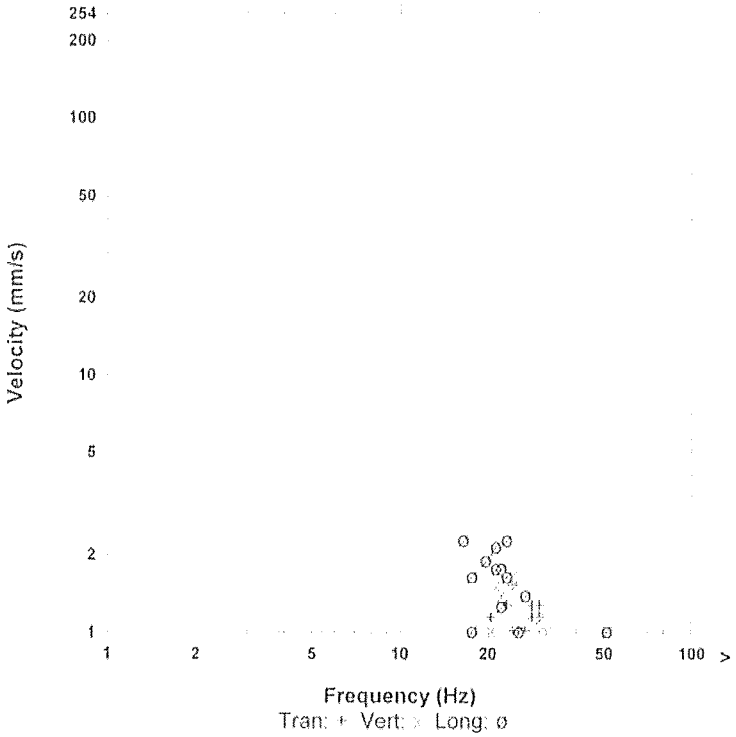
Date/Time	Long at 13:04:55 January 24, 2024
Trigger Source	Geo: 0.510 mm/s
Range	Geo : 254 mm/s
Record Time	2.0 sec at 1024 sps
Job Number:	84
Notes	
Location:	Jayanthipuram Lst mine pit2 6th Bench
Client:	M/s. The Ramco Cements Limited
User Name:	T.Naidu
General:	

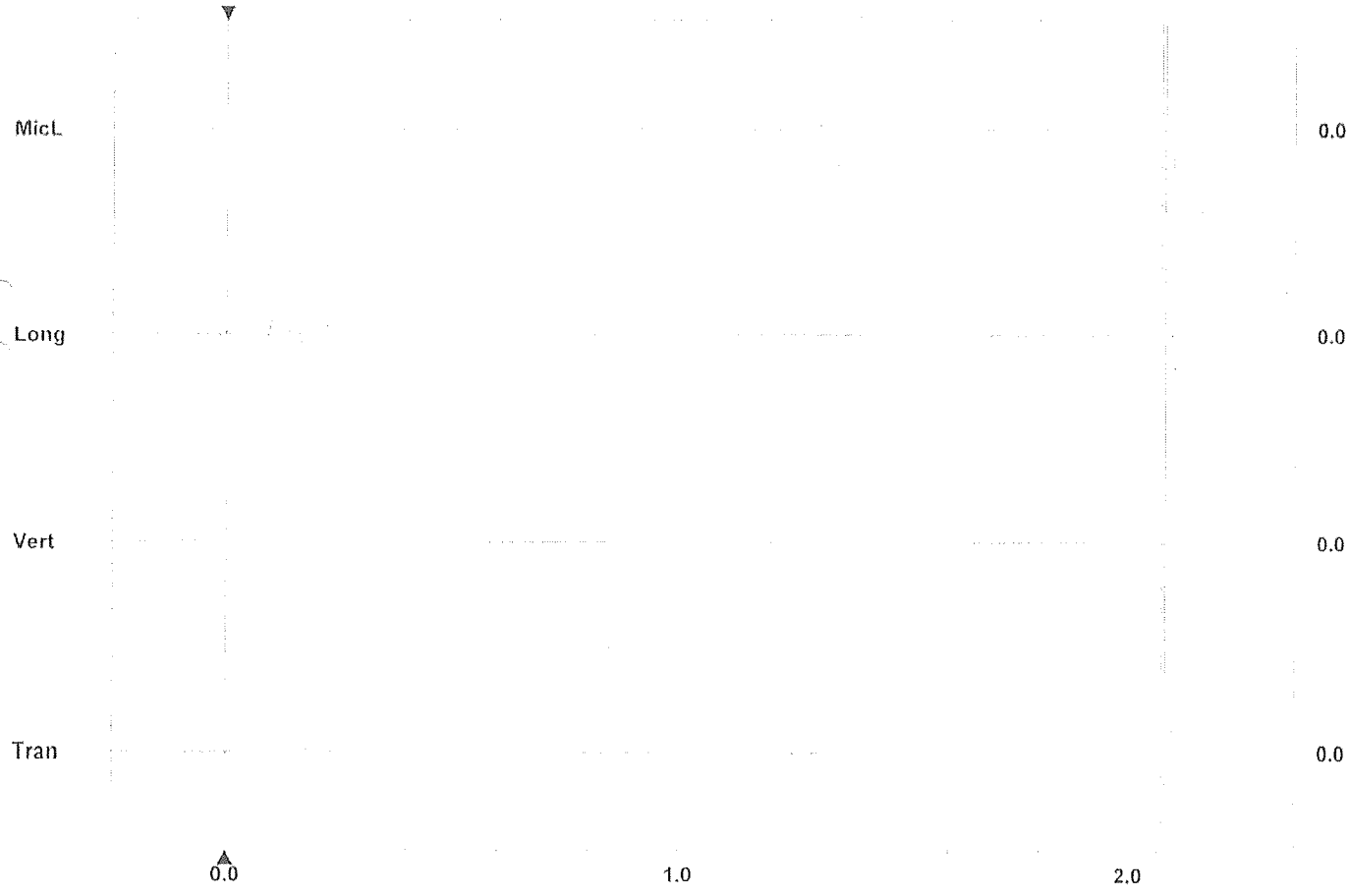
Serial Number	BE15430 V 10.72-1.1 Minimate Blaster
Battery Level	6.2 Volts
Unit Calibration	July 20, 2023 by UES New Delhi
File Name	__TEMP.EVT
Scaled Distance	158.1 (50.0 m, 0.1 kg)

Microphone	Linear Weighting
PSPL	127.6 dB(L) at 1.341 sec
ZC Freq	7.1 Hz
Channel Test	Passed (Freq = 20.1 Hz Amp = 474 mv)

	Tran	Vert	Long	
PPV	1.52	2.03	2.29	mm/s
PPV	54.7	57.2	58.2	dB
ZC Freq	24	20	23	Hz
Time (Rel. to Trig)	0.312	0.280	0.242	sec
Peak Acceleration	0.0398	0.0398	0.0663	g
Peak Displacement	0.00974	0.0145	0.0205	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.7	7.4	7.4	Hz
Overswing Ratio	3.6	3.6	3.6	

Peak Vector Sum 2.63 mm/s at 0.242 sec





Time Scale: 0.20 sec/div **Amplitude Scale:** Geo: 2.00 mm/s/div Mic: 20.0 pa.(L)/div Sensor Check
Trigger = ▶ ◀

Pagarthi quarry ..... LIMESTONE MINE

THE RAMCO CEMENTS LIMITED

BLASTING REPORT

Date : 27/01/24 Time : 1200 Hrs Blast No. : TPm/ 496/D/27-01-24

Distance of Engineered from blasting site = 230 mts

Distance of village from blasting site = 87.0 mts

Blast Location	:	PIT - III I (13) (W)
No. of Holes	:	32 + 04 (Del) = 36 Nos
Bench Height (Mtrs)	:	5.6
Total Meterage (Mtrs)	:	194.9 (One Seventy four point nine only)
Avg. Depth of Holes (Mtrs)	:	5.6
Burden (Mtrs)	:	5
Spacing (Mtrs)	:	3
ROM Blasted (Expected Tons)	:	4100
Production (Ton / Mtr)		23.04

Explosive & Accessories Used

Non Cap Sensitive 83mm (Kg)	:	-
Cap Sensitive 83mm (Kg)	:	17.5
ANFO (Kg)	:	750
AED (Nos)	:	05
EDD (Nos)	:	-
cord (Mtrs)	:	-
Nonels (Nos)	:	36
Boost 25 mm (Kg)	:	-
Cast Booster (Kg)	:	-
Powder Factor (Tons / Kg)	:	4.4

Total Explosive : 92.5 Kgs

Max Charge / delay = 536 kg

P.P.V = 0.635 mm/sec

Nonels :

1. 5 delay - 10 mts = 10 Nos
2. 9 - 9 mts = 22 Nos
3. 9 - 5 mts = 04 Nos
4.

Remarks : There are no public / private structures within Danger zone.

Noise = 126.2 dB(L)

Sky Route distance = 6 mts

Direction of Engineered from Blasting site = West

Direction of village from Blasting site = East

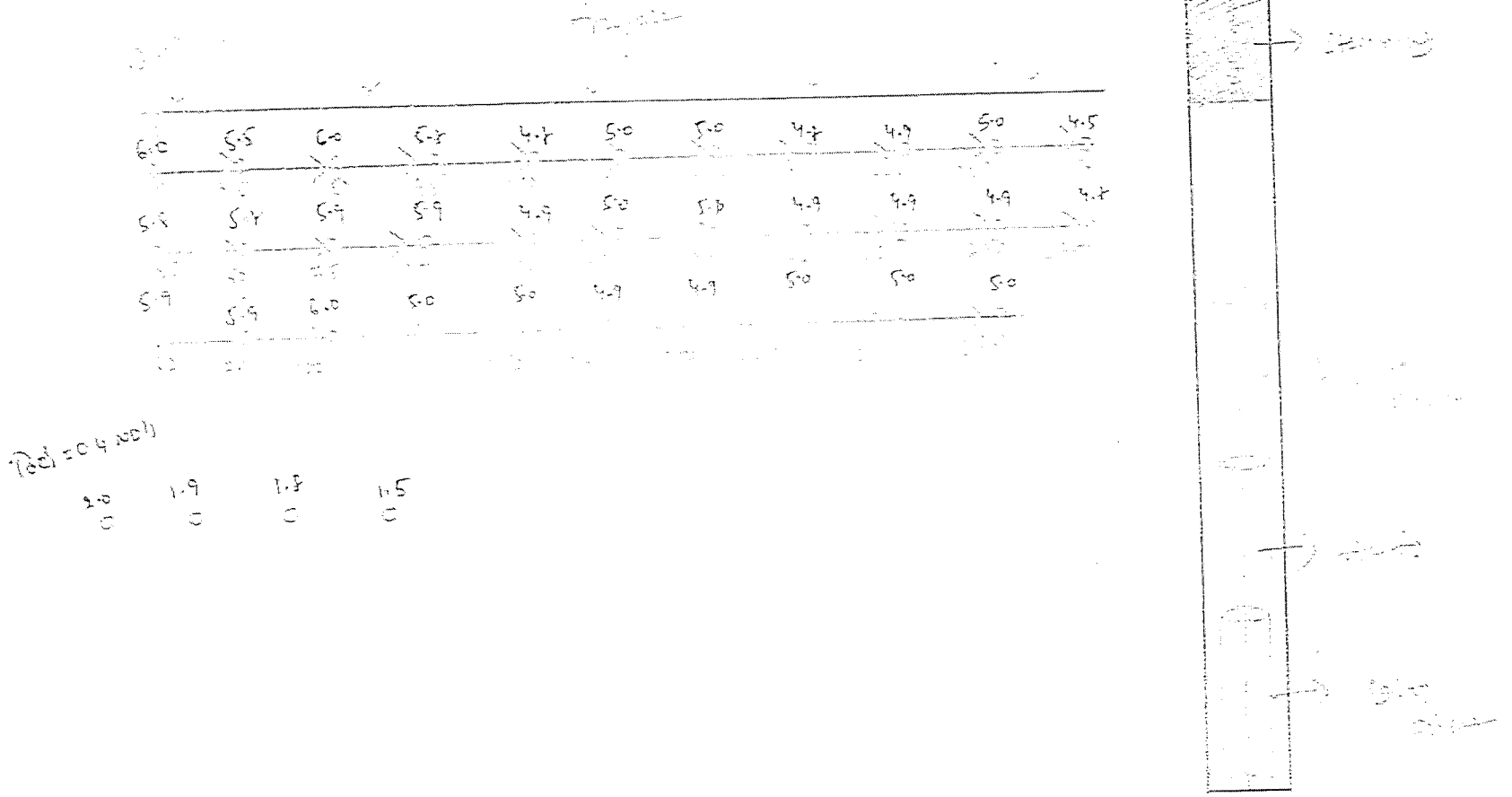
Blasting Foreman

Asst. Manager (D&B)

Mines Manager.

Delay Pattern

Charging Pattern



Instantel Event Report

Date/Time	Vert at 14:59:55 January 27, 2024
Trigger Source	Geo: 0.510 mm/s
Range	Geo : 254 mm/s
Record Time	2.0 sec at 1024 sps
Job Number:	86
Notes	
Location:	Jayanthipuram pit3 1st Bench South
Client:	M/s. The Ramco Cements Limited
User Name:	T.Naidu
General:	

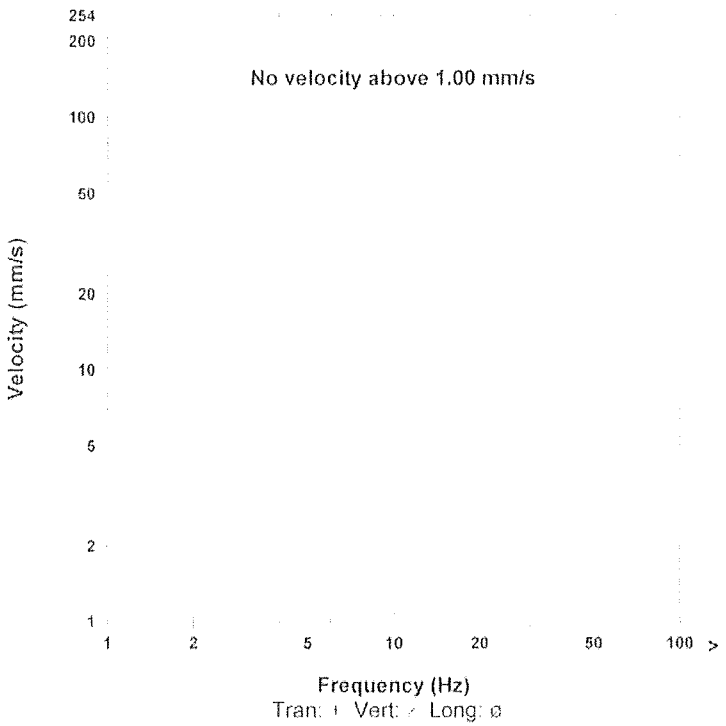
Serial Number	BE15430 V 10.72-1.1 Minimate Blaster
Battery Level	6.1 Volts
Unit Calibration	July 20, 2023 by UES New Delhi
File Name	__TEMP.EVT
Scaled Distance	158.1 (50.0 m, 0.1 kg)

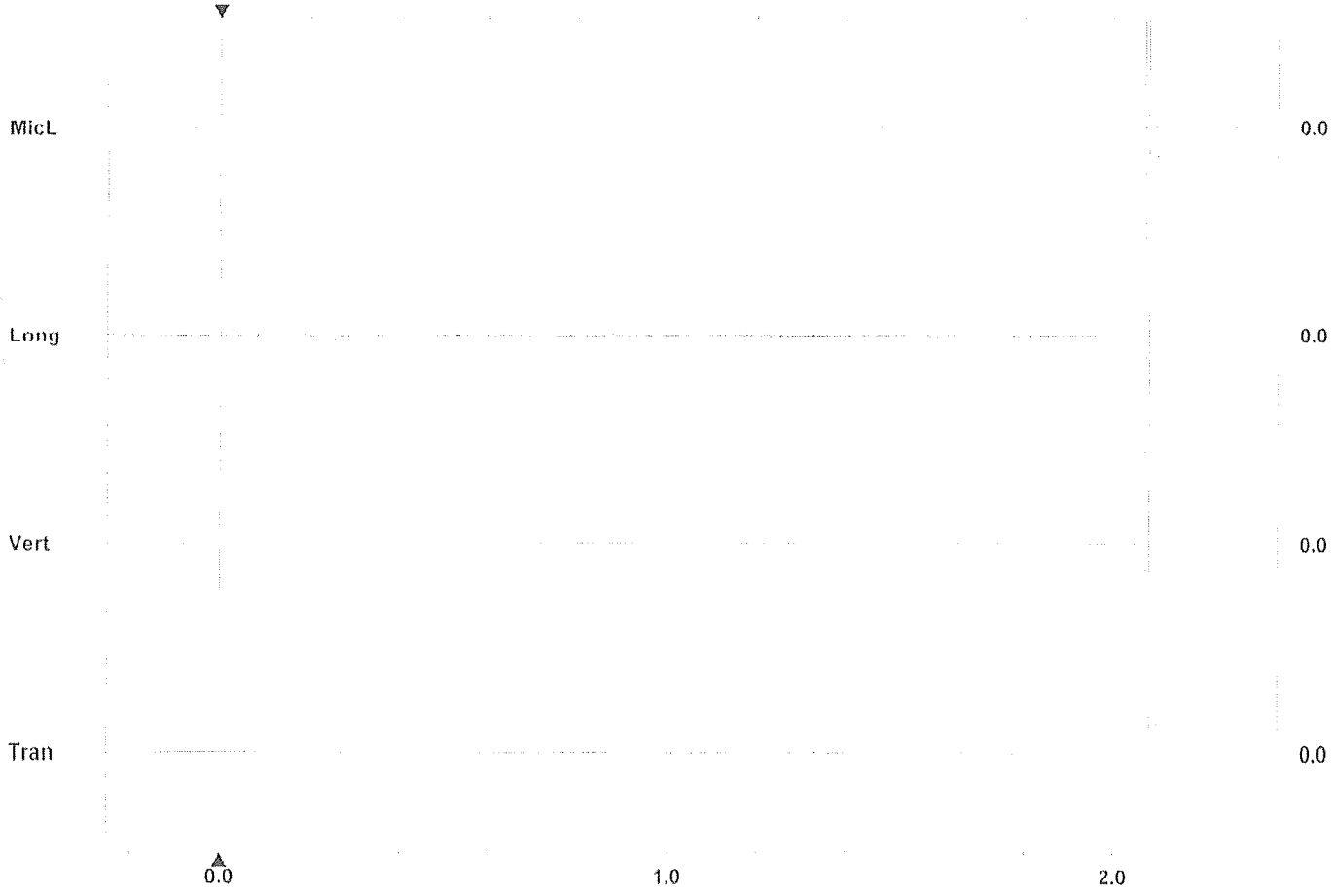
Microphone	Linear Weighting
PSPL	126.2 dB(L) at 0.937 sec
ZC Freq	3.4 Hz
Channel Test	Passed (Freq = 20.1 Hz Amp = 506 mv)

	Tran	Vert	Long	
PPV	0.508	0.635	0.635	mm/s
PPV	45.1	47.1	47.1	dB
ZC Freq	23	22	20	Hz
Time (Rel. to Trig)	0.143	0.062	0.029	sec
Peak Acceleration	0.0265	0.0133	0.0265	g
Peak Displacement	0.00453	0.00484	0.00620	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.6	7.3	7.4	Hz
Overswing Ratio	3.6	3.6	3.5	

Peak Vector Sum 0.823 mm/s at 0.029 sec

USBM RI8507 And OSMRE





Time Scale: 0.20 sec/div **Amplitude Scale:** Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div Sensor Check
Trigger = ▶ ◀

..Bastola.....LIMESTONE MINE

THE RAMCO CEMENTS LIMITED

BLASTING REPORT

RR-BS11-5

Date : 05/02/24 Time : 12:00pm Blast No. : RR/250/0123-24

Distance of Instrument from Blasting site : 250mtrs

Distance of village from Blasting site : 2.5km

Blast Location : RR - X Bench (N)

No. of Holes : 46

Bench Height (Mtrs) : 9.4

Total Meterage (Mtrs) : 341.1 (Three Hundred and forty one point one)

Avg. Depth of Holes (Mtrs) : 9.4

Burden (Mtrs) : 3

Spacing (Mtrs) : 4

ROM Blasted (Expected Tons) : 10300

Production (Ton / Mtr) 30.19

Explosive & Accessories Used

Non Cap Sensitive 83mm (Kg) : —

S. prime Cap Sensitive 83mm (Kg) : 395 kg

ANFO (Kg) : 2486kg — SMS

IED (Nos) : —

A.E.D EDD (Nos) : 02 nos

cord (Mtrs) : —

Nonels (Nos) : 46 nos

Boost 25 mm (Kg) : —

Cast Booster (Kg) : —

Powder Factor (Tons / Kg) : 3.6

Total Explosive : 2861 kg

max charge/delay : 2.19 kgs

P.P.V : 5.46 mm/sec

Remarks : There are no public/private structure with in the Danger 2.0m

Abop : 121.6 dB(L)

Fly rock Distance - 8mtrs

Direction of Instrument from Blasting site; South

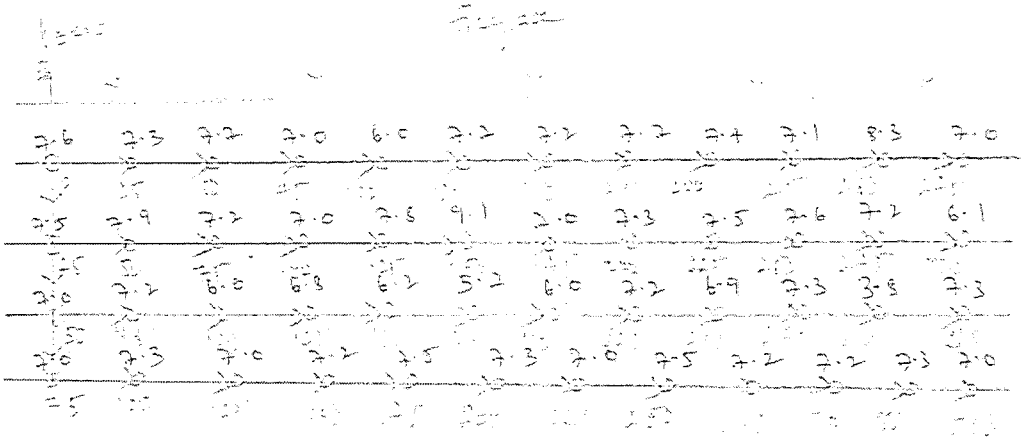
Direction of village from Blasting site : South

Nonels :

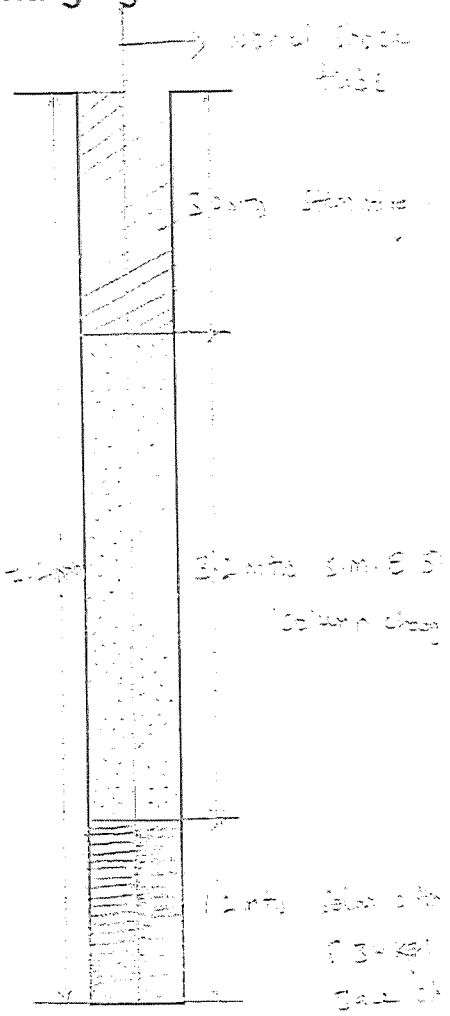
1. 5 dels — 13mtrs → 46 nos
2.
3.
4.

Blasting Foreman Asst. Manager (D&B) 2/2/2024 Mines Manager.

Delay Pattern



Charging Pattern



Instantel

Event Report

Date/Time	Long at 12:36:14 February 7, 2024
Trigger Source	Geo: 0.510 mm/s
Range	Geo : 254 mm/s
Record Time	2.0 sec at 1024 sps
Job Number:	96
Notes	
Location:	Ravirala Limestone Mine 10th Bench
Client:	M/s. The Ramco Cements Limited
User Name:	T.Manikanta
General:	

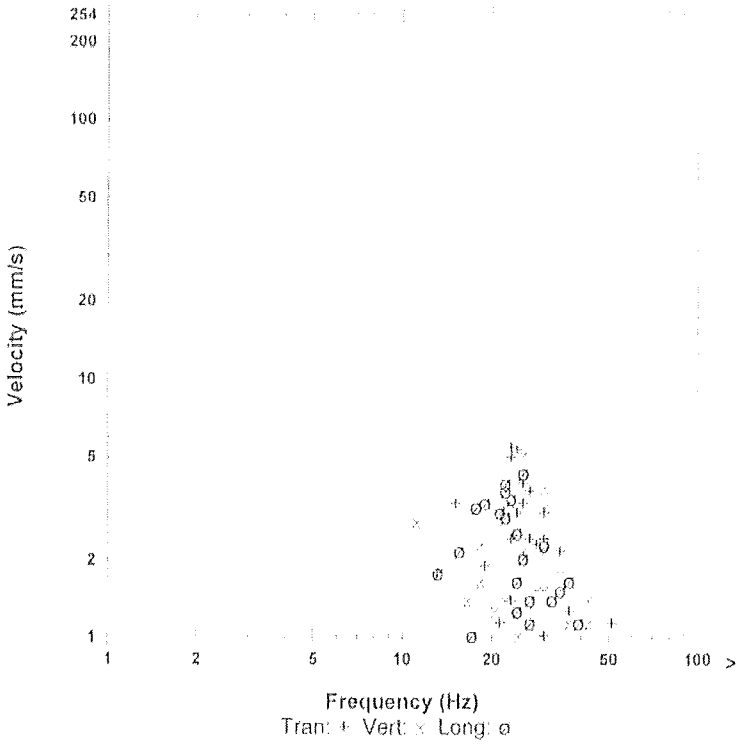
Serial Number	BE15430 V 10.72-1.1 Minimate Blaster
Battery Level	6.1 Volts
Unit Calibration	July 20, 2023 by UES New Delhi
File Name	__TEMP.EVT
Scaled Distance	158.1 (50.0 m, 0.1 kg)

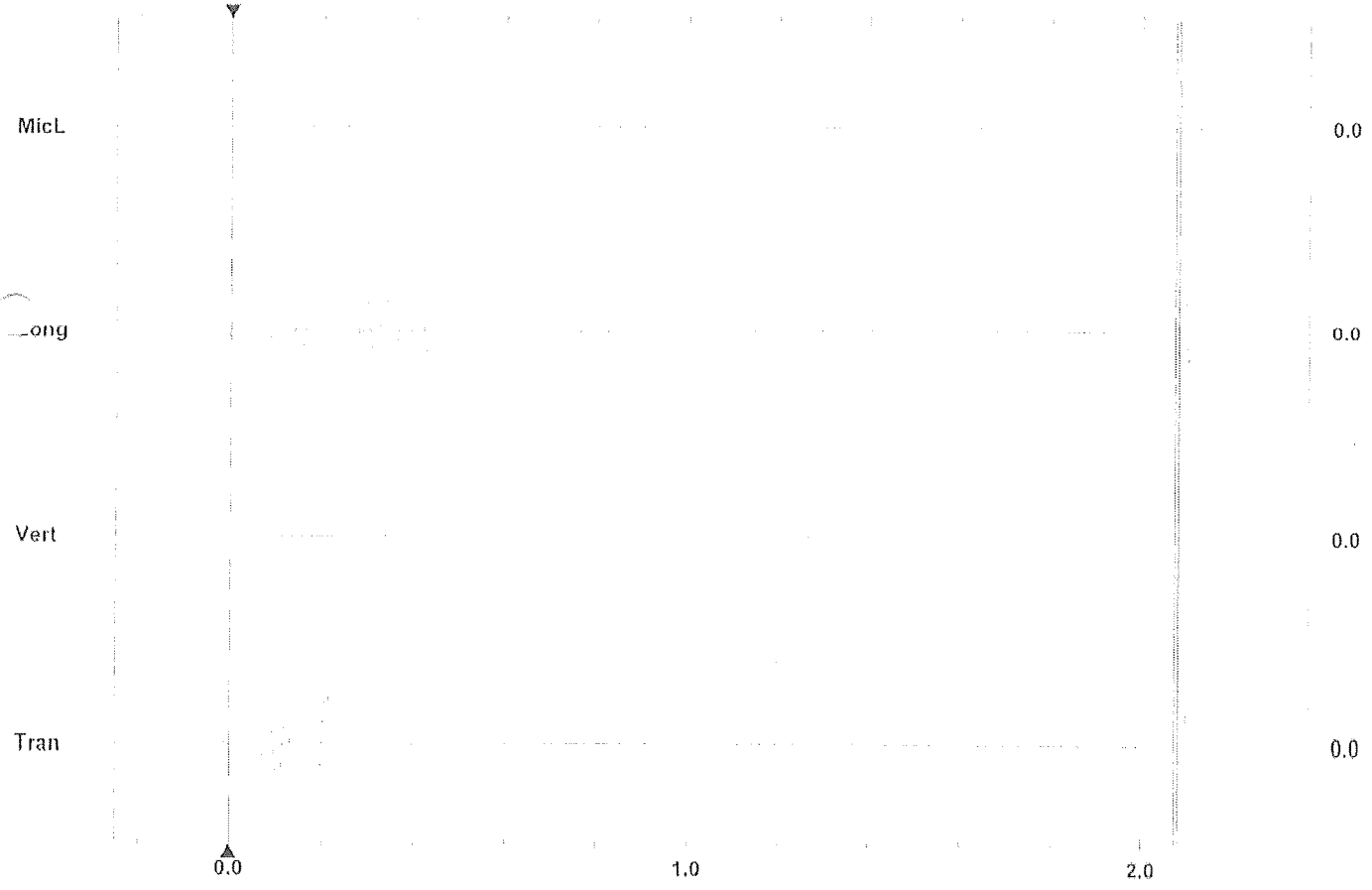
Microphone	Linear Weighting
PSPL	121.6 dB(L) at 0.801 sec
ZC Freq	7.2 Hz
Channel Test	Passed (Freq = 19.7 Hz Amp = 450 mv)

	Tran	Vert	Long	
PPV	5.46	5.08	4.32	mm/s
PPV	65.7	65.1	63.7	dB
ZC Freq	23	26	26	Hz
Time (Rel. to Trig)	0.406	0.135	0.312	sec
Peak Acceleration	0.0928	0.0928	0.0795	g
Peak Displacement	0.0364	0.0316	0.0286	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.5	7.4	7.4	Hz
Overswing Ratio	3.6	3.5	3.5	

Peak Vector Sum 6.56 mm/s at 0.153 sec

USBM RI8507 And OSMRE





Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div Sensor Check
Trigger = ▶ ◀

Ramco Budawada .....LIMESTONE MINE

THE RAMCO CEMENTS LIMITED

BLASTING REPORT

RB-BSTL5

Date : 06/02/2024 Time : 3:00pM Blast No. : RB/134/D/23-24

Distance of Instrument from blasting site = 200 mts

Distance of village from Blasting site = 2.5 Km

Blast Location : RB- II B

No. of Holes : 21

Bench Height (Mtrs) : 9.0

Total Meterage (Mtrs) : 179.7 [one hundred and seventy nine point seven]

Avg. Depth of Holes (Mtrs) : 8.5

Burden (Mtrs) : 3

Spacing (Mtrs) : 6.5

ROM Blasted (Expected Tons) : 8760

Production (Ton / Mtr) :- 48.75

Explosive & Accessories Used

Non Cap Sensitive 83mm (Kg) : —

prime Cap Sensitive 83mm (Kg) : 175

ANFO (Kg) : 1400 — S.M.E

MED (Nos) : 02

EDD (Nos) : —

cord (Mtrs) : —

Nonels (Nos) : 21

Boost 25 mm (Kg) : —

Cast Booster (Kg) : —

Powder Factor (Tons / Kg) : 5.5

Total Explosive : 1575 Kgs

Nonels :

1. S. det -15mts — 21 nos
2.
3.
4.

Max charge / delay :- 225 kg

Remarks : It is a trial blast conducted with SME in the presence of K. Ayaneswar, DDMS, Hyd Reg-3. There are no public/private structures within the danger zone.

ppv :- 8.51 mm/s

Abop :- 117.8 d(B)L

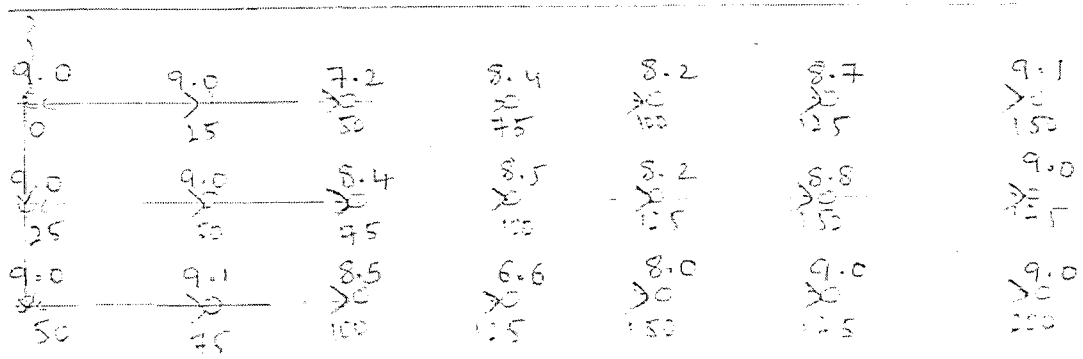
Fly rock dist(m) : 8.5m

Direction of Instrument from blasting site : South

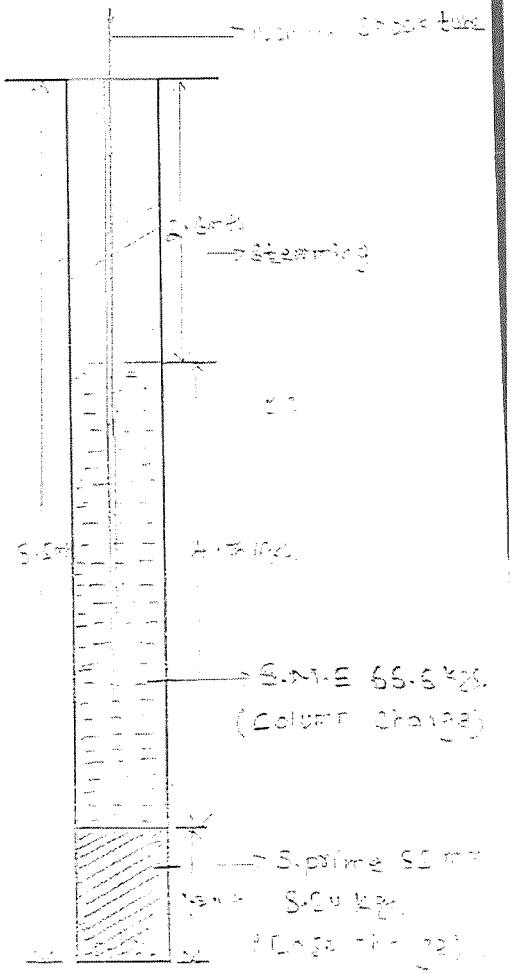
Direction of village from blasting site : East

Blasting Foreman Asst. Manager (D&B) Mines Manager.

Delay Pattern



Charging Pattern



Blaster

Asst. Manager

manager

6/2/2024

NIT-Representative
ROURKELA

06/02/2024

Solar Representative.

Instantel

Event Report

Trail Blast with SMS

Date/Time	Vert at 13:07:21 February 6, 2024
Trigger Source	Geo: 0.510 mm/s
Range	Geo : 254 mm/s
Record Time	2.0 sec at 1024 sps
Job Number:	94
Notes	
Location:	Ramco Budawada 2nd Bench
Client:	M/s. The Ramco Cements Limited
User Name:	P.B.K Kumar
General:	

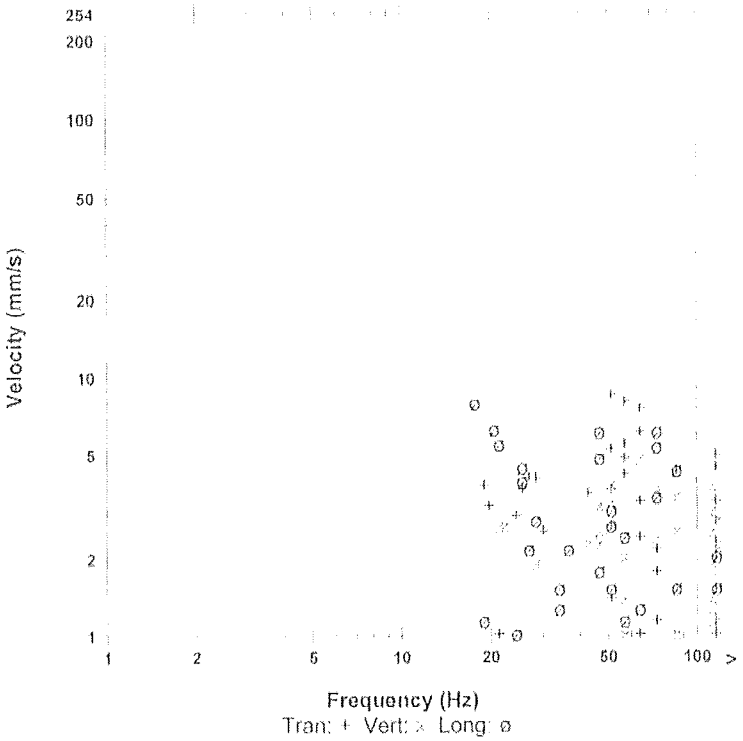
Microphone	Linear Weighting
PSPL	117.8 dB(L) at 0.727 sec
ZC Freq	3.0 Hz
Channel Test	Passed (Freq = 20.1 Hz Amp = 507 mv)

	Tran	Vert	Long	
PPV	8.51	5.46	7.87	mm/s
PPV	69.6	65.7	68.9	dB
ZC Freq	51	>100	18	Hz
Time (Rel. to Trig)	0.241	0.221	0.166	sec
Peak Acceleration	0.530	0.318	0.305	g
Peak Displacement	0.0267	0.0181	0.0478	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.5	7.5	7.4	Hz
Overswing Ratio	3.6	3.5	3.6	

Peak Vector Sum 11.5 mm/s at 0.241 sec

Serial Number	BE15430 V 10.72-1.1 Minimate Blaster
Battery Level	6.2 Volts
Unit Calibration	July 20, 2023 by UES New Delhi
File Name	__TEMP.EVT
Scaled Distance	158.1 (50.0 m, 0.1 kg)

USBM RI8507 And OSMRE



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.00 mm/s/div Mic: 10.00 pa.(L)/div Sensor Check
Trigger = ▶ ◀

ANNEXURE - XIV

ISO 9001 ISO 14001 ISO 45001 ISO 50001
Certified Company

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

THE RAMCO CEMENTS LIMITED

RCL/PCB/23/2024-2025

26th June 2024

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 Limestone Mines for the financial year 2023-2024 - Reg.

Ref: 1. CFO order for mines No. APPCB/VJA/VJA/488/HO/CFO/2021 dated 07.11.2022.
2. CFO Order No. APPCB/VJA/VJA/488/HO/CFO/2021 dated 27.07.2022 issued for Ravirala Limestone Mine (RF) expansion project from 1.20 to 2.75 MTPA limestone.
3. CTO amendment Order No. APPCB-11022/134/2021-TEC-CFO-APPCB dated 24.01.2024 issued for Ramco Budawada Limestone Mine (RF) railway wagon proposal.

Please find enclosed herewith duly filled in Form – 3 - 'Form for Filing Annual Returns' of E-Wastes for our following Limestone Mines for the financial year 2023-2024:

a. Jayanthipuram Limestone Mine (North Band)
b. Jayanthipuram Limestone Mine (South Band)
c. Ravirala Limestone Mine (RF)
d. Ramco Budawada Limestone Mine (RF)

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

1	Name and address of the producer or manufacturer or refurbisher or dismantler or recycler	The Ramco Cements Limited, Kumarasamy Raja Nagar - 521 457, Jaggayyapet (M), NTR Dist Capitve Limestone Mines: a. Jayanthipuram Limestone Mine (North Band) b. Jayanthipuram Limestone Mine (South Band) c. Ravirala Limestone Mine (RF) d. Ramco Budawada Limestone Mine (RF)
2	Name of the authorised person and complete address with telephone and fax numbers and e-mail address	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
3	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	
3(A)*	BULK CONSUMERS: Quantity of e-waste	Cumulative quantity of generation in the financial year 2023-2024 for cement plant, thermal power plant, Waste Heat Recovery Plant & limestone mines:

Type	Quantity
E-waste	0.051 Tonne
Printer Cartridges	1.452 Tonne
Total	1.503 Tonne

3(B)*	~~REFURBISHERS: Quantity of e-waste:~~	

3(C)*	~~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.~~	
3(D)*	~~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~~	
4	Name and full address of the destination with respect to 3(A)-3(D) above	In the financial year 2023-2024, 0.78 Tonne of e-waste is disposed to M/s Global Tech Recyclers, Bangalore: Type – Quantity – No E-waste – 0.68 Tonne Printer Cartridges – 0.10 Tonne Total – 0.78 Tonne
5	Type and quantity of materials segregated ~~or recovered~~ from e-waste of different codes as applicable to 3(A)-3(D)	Cumulative quantity available as on 31.03.2024 with respect to cement plant, thermal power plant & limestone mines: Type – Quantity E-waste – 0.249 Tonne Printer Cartridges – 1.60732 Tonne

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

Place: KSR Nagar
Date: 26.06.2024

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 - XV

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/75/2023-2024

09th February 2024

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 2023 – Reg.
Ref: Authorization Lr. No. BMW/APPCB/RO-VJA/2021-419 dated 05.08.2021.

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 2023 (January 2023 to December 2023).

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

orm – 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. BMW/APPCB/RO-VJA/2021-419 dated 05.08.2021 valid up to 30.09.2024.
	(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 2023 is enclosed as Annexure – I.</td></tr>
<tr><td></td><td></td><td>• Yellow Category: 205.277 kg per annum</td></tr>
<tr><td></td><td></td><td>• Red Category: 10.368 kg per annum</td></tr>
<tr><td></td><td></td><td>• White: 1.858 kg per annum</td></tr>
<tr><td></td><td></td><td>• Blue Category: 41.015 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</td><td colspan="3" rowspan="2">Not authorized</td></tr>
<tr><td>Plasma Pyrolysis Autoclaves</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 2023 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	No.
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 01.01.2023 to 31.12.2023.

Date: 09.02.2024
Place: KSR Nagar

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

The Ramco Cements Limited, Kumarasamy Raja Nagar
Details of Bio Medical Waste Handled
(Period - January 2023 to December 2023)

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-23	11.6	0	0	2.48
2	Feb-23	14.8	0	0	1.84
3	Mar-23	14.575	1.3	0	4.04
4	Apr-23	18.28	2.54	0	3.55
5	May-23	18.56	0.8	0	5.66
6	Jun-23	23.65	0	0	3.76
7	Jul-23	15.195	0	0	2.42
8	Aug-23	16.095	0	0	2.01
9	Sep-23	17.167	0.7	0	2.949
10	Oct-23	21.896	1.148	0	3.252
11	Nov-23	17.538	1.62	0	3.9
12	Dec-23	15.921	2.26	1.858	5.154
	Grand Total	205.277	10.368	1.858	41.015
	Monthly average	17.106	0.864	0.155	3.418