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THE RAMCO CEMENTS LIMITED

RCL/MoEF&CC/JPM NB-239/275

Dt. 26.11.2024

Ministry of Environment, Forests and Climate Change, Integrated Regional Office, Green House Complex, Gopala Reddy Road, VIJAYAWADA - 520 010.

Respected Sir,

Submission of Half-Yearly Compliance Report for Environmental Clearance for Sub: Jayanthipuram Limestone Mine (North Band) of The Ramco Cements Limited for the

period from April 2024 to September 2024 - Reg.

Ref: EC Lr. No. J-11015/377/2006-IA.II(M) dated 18.05.2007.

We are herewith submitting the Half-Yearly Compliance Report for the above cited Environmental Clearance order for the period from April 2024 to September 2024 along with relevant enclosures for our Jayanthipuram Limestone Mine (North Band) located at Jaggayyapet Mandal, NTR (previously Krishna) District, Andhra Pradesh. Name, designation and contact details of person in-charge of environmental division are:

ASHISH KUMAR SRIVASTAVA President (Mfg.) Phone No. 08654 - 224400, Fax No. 08654 - 222352, e-mail: mcljpm@ramcocements.co.in

This is for your kind information and perusal please.

Thanking you,

Yours faithfully,

For The Ramco Cements Limited,

(Formerly known as Madras Cements Ltd.,)

ASHISH KUMAR SRIVASTAVA

President (Mfg.)

Encl.: As above.

Cc to: Central Pollution Control Board, No. 77A, 2nd Floor, South Avenue Road, Ambattur

Industrial Estate, Chennai – 600 058.

HALF-YEARLY COMPLIANCE REPORT

Environmental Clearance		J-11015/377/2006-IA.II (M) and dated 18.05.2007		
Letter/s No. and Date				
Name of the Project		Jayanthipuram Limestone Mine (North Band) of The Ramco Cements Limited (Formerly Madras Cements Ltd.) – 1.8 Million TPA Capacity of Limestone.		
Period of Compliance Rep	ort	April 2024 to September 2024		

A. Specific Conditions:

S.No.	Condition	 Compliance Status Being complied. At present, no topsoil is available in this mining lease. Topsoil extracted from this mining lease was used for greenbelt development as well as for top layer on reclamation area in the mining lease. Backfilling is carried out in 20.25 ha as on September 2024, where mineral got exhausted. 			
•	Top soil shall be stacked properly with proper slope with adequate safeguards and shall be backfilled for reclamation and rehabilitation of mined out area.				
ii.	Garland drains shall be constructed to arrest silt and sediment flows from soil and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, greenbelt development etc., The drains shall be regularly de-silted particularly after monsoon and maintained properly. Garland drain (size, gradient and length) shall be constructed for both mine pit and for waste dump and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years' data) and maximum discharge in the area adjoining the mine site. Sump capacity shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and de-silted at regular intervals.	 Being complied. Various measures taken are: Garland drains (5665 m*2.0m* 1.5m) with a gradient of about 1 in 100 are made all along the waste dump - North Eastern side of the Lease area, Eastern side of the ML area. Water collected through this garland drain is connected to the settling tank & water recharge pit over an area of 0.50 ha (South Eastern side of ML area). One more recharge pit is made over an area of 0.15 Ha in North - East side of Mining Lease area. Drains and settling tank are de-silted regularly. 			
iii.	Drilling and blasting shall be by using dust extractors / wet drilling.	Being complied. Wet drilling is being practiced. Controlled blasting is being done.			
iv.	Plantation shall be raised in an area of	Being complied.			

S.No.	Condition	Compliance Status			
	195.54 Ha including a greenbelt of	 An area of 66.70 ha within ML has been 			
	adequate width by planting the native	covered under plantation with native plant			
	species around the ML area, roads, OB	species up to September 2024.			
The state of the s	dump sites etc., in consultation with the	Greenbelt development will be further			
	local DFO / Agriculture department. The	extended in a phased manner.			
	density of the trees shall be around	All saplings including fruit bearing species			
	2500 plants per Ha. The company shall	are planted and regular maintenance is			
	avoid plantation of mono culture	being done by involving local people.			
	species. Further greenbelt shall be	The plantation will be continued in phased			
	developed in the North to NE direction	manner up to conceptual stage.			
	of mine to protect the temple from dust	A TO Love to a submitted to the			
	emission. Fruit bearing species shall be planted by involving local people	An EC amendment request is submitted to the			
	especially women with the help of self	Ministry on 07.01.2015 for this condition			
	help groups.	because at the time of obtaining EC, the existing			
	Heip groups.	greenbelt area is 24.00 ha. As per approved Mining Plan and the proposed greenbelt area at			
		the conceptual stage is 62.39 Ha. The same is			
		mentioned in page Nos. 69 & 86 of Rapid EIA			
		report.			
		Teport			
		In page 1 of EC letter also, it is mentioned that			
		62.39 Ha of greenbelt area is to be developed,			
		but in page No. 2 of specific condition No. iv, it			
		is mentioned that 195.54 Ha of greenbelt is to			
		be developed. The proposed land use pattern at			
		Conceptual stage specified that 62.39 Ha of			
		greenbelt will be developed in EIA report and			
		approved Mining Plan.			
		Hence an EC amendment request is submitted			
		to the Ministry on 07.01.2015 for amendment			
		of this condition, to amend the greenbelt area			
		from 195.54 Ha to 62.39 Ha. EAC committe			
		recommended to amend this condition in th			
		meeting held on 28.10.2015 and the EC			
		amendment order is awaited. We have			
		requested to the MoEF&CC regarding the same			
		vide letter No. RCL/MoEF&CC/237/388, dt.			
		02.03.2021. The extract of the EAC minutes and			
		letter dated 02.03.2021 are enclosed as			
	The company shall dayslan 50 m wide	Annexure - I.			
V.	, ,	Being complied. The greenbelt developed with a width of 50 m			
	greenbelt barrier along the mine lease since distance between the last point of	along the mining lease boundary towards the			
	the mine and river is 1.0 km.	River.			
	uie mine and river is 1.0 km.	IMVCI,			

S.No.	Condition	Compliance Status
Vi.	The company shall prepare Wild life conservation in consultation with CWLW / State Forest Department for implementation.	 Wildlife conservation plan prepared for Schedule - I species and submitted to Chief Wildlife Warden, Govt. of A.P, Forest Department. Accordingly, The Prl. Chief Conservator of Forests & Chief Wild Life Warden, Government of Andhra Pradesh has approved the Wild Life Conservation plan vide letter No. 21024/19/2022/ WL-2 dated 11.07.2024. The same is being implemented for conservation of Schedule - I species.
vii.	There shall be no advancement of mine benches laterally. Orientation of mine benches shall be across the strike to minimize the decline in the ground water level.	Being complied. There is no advancement of mine benches laterally and the movement of benches is across the strike only.
Viii	Risk assessment study shall be undertaken for entire north band and report submitted to the Ministry.	 Being complied. Risk assessment study is carried out and the report is incorporated in EIA / EMP report and submitted to the Ministry vide Lr. No. MCL/MoEF/ 4009/2007 dated 05.10.2007. Risk assessment study is being reviewed regularly and updated up to January 2024.
ix.	The company shall develop pisciculture in the water body(s) after mining activity is over. A fisherman cooperative society shall be formed with the affected people as members and initial financial support by the company. The company shall involve local people in the afforestation programme.	 Pisciculture will be taken up at final stage of mining activities. Local people are being engaged in greenbelt development activity.
X.	The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with the Regional Director, Central Ground water board.	 Being complied. Suitable ground water conservative measures are being taken up such as garland drains, check dams, recharge pit and rainwater harvesting pits etc. The rain water collected in mine pit is being used for dust suppression, greenbelt development and domestic purposes after settling of silt in mine sump and through settling tank. As part of the CSR activities, mine seepage water is being supplied to nearby villages in Jaggayyapet Mandal, to conserve the water resources in the vicinity. A pond of 160 m * 30 m size (nearly 0.5 ha

S.No.	Condition	Compliance Status
xi.	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing well and constructing new piezometers during the mining operation. The monitoring shall be carried out four times in a year – Pre-monsoon (April-May), Monsoon (August), Post-Monsoon (November) and Winter (January) and the data thus collected may be sent regularly to MOEF, Central Ground Water Authority and Regional Director, Central Ground Water Board.	area) is made at SE corner of lease area which is helping ground water recharge in the nearby area and excess mine seepage water is being pumped into this pond. One more pond of 60 m * 35 m size (nearly 0.15 ha area) is made at Northeast side of lease area which is helping ground water recharge in the nearby area. Excess mine pit water is also being supplied for agricultural purposes for about 85 acres on need basis so as to conserve the ground water resources in the vicinity. Check dam is constructed on Vagu outside the mining lease in the NW side to recharge groundwater in the surrounding area. NOC obtained vide their letter Lr. No. PRR05-11028/14/2018-SLNA-GIS-CORD, dated 10.07.2024 from Department of Panchayat Raj & Rural Development, Government of Andhra Pradesh (agency authorized to issue NOC for Andhra Pradesh projects). The conditions stipulated in this NOC are being followed and yearly compliance reports are being submitted to the concerned. This order is valid up to 09.07.2026. Being complied. Ground water levels are being monitored regularly (at 4 locations) and readings are being recorded. Ground & surface water quality is being analysed by MoEF&CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad). Compiled data on the surface water quality data for the period April 2024 to September 2024 is enclosed as Annexure – II. The ground water level data and ground water quality data for the period April 2024 to September 2024 is being submitted to the CGWB, copy is enclosed as Annexure – III. The monitoring is being carried out four times in a year – Pre-monsoon (April-May), Monsoon (August), Post-Monsoon (November) and Winter (January).
xii.	The company shall obtain forestry	Noted.

S.No.	Condition	Compliance Status			
	clearance under the Forest (Conservation) Act, 1980.	Total mining lease area is non-forest area, hence not applicable. Being complied. Permission obtained from the Department of Panchayat Raj and Rural Development Department, Government of Andhra Pradesh (agency authorized to issue NOC for Andhra Pradesh projects) for extraction of Ground water vide Letter No. PRR05-11028/14/2018-SLNA-GIS-CORD, dt. 10.07.2024 from the available quantity of water from the mine dewatering only. This order is valid up to 09.07.2026.			
xiii	Prior permission from the competent authority shall be obtained for drawl of ground water, if any.				
XIV	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operation & in transportation of mineral. The vehicles shall be covered with a tarpaulin and shall not be overloaded.	 Vehicles are being maintained properly at our workshop located at cement plant. Vehicle emission levels are being monitored regularly and kept under control. With proper supervision regularly, it is 			
XV.	A final mine closure plan along with details of Corpus Fund shall be submitted to the MOEF 5 years in advance of final mine closure for approval.	• The life of the mine is estimated up to the year of 2031-2032.			

B. **GENERAL CONDITIONS**:

S.No.	Condition	Compliance Status			
i.	No change in mining technology and scope of working shall be made without prior approval of the MoEF.	Being complied. No change in mining technology and the scope of working.			
ji.	No change in the calendar plan including excavation, quantum of mineral and waste shall be made.	 Being complied. No change in the calendar plan. In the financial year 2023-2024, the limestone production was 1.753 million tonne against production capacity of 1.80 			

S.No.	Condition	Compliance Status			
		million TPA. • Waste of 1340880.4 cu.m generated during the financial year 2023-2024 against IBM approved quantity of 1350173.00 cu.m.			
iii.	Conservation measures for protection of flora and fauna in the core & buffer zone shall be drawn up in consultation with the local forest and wildlife department.	 Wildlife conservation plan prepared for Schedule - I species and submitted to Chief Wildlife Warden, Govt. of A.P, Forest Department. Accordingly, The Prl. Chief Conservator of Forests & Chief Wild Life Warden, Government of Andhra Pradesh has approved the Wild Life Conservation plan vide letter No. 21024/19/2022/ WL-2 dated 11.07.2024. The same is being implemented for conservation of Schedule - I species 			
iv.	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO ₂ , NO _x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive in consultation with State Pollution Control Board.	Being complied. 4 Nos. & 9 Nos. of ambient air quality monitoring stations in core zone & buffer zone respectively are established based on the meteorological data, topographical features and environmentally and ecologically sensitive in consultation with State Pollution Control Board and regular monitoring (fortnightly) is being carried out through MoEF&CC approved external environmental monitoring agency for PM ₁₀ , PM _{2.5} , SO ₂ , NOx monitoring.			
V.	Data on Ambient Air Quality (RPM, SPM, SO ₂ , NO _X) should be regularly submitted to the Ministry including its RO located at Bangalore and the SPCB / CPCB once in six months.	Being complied. Data of the Ambient Air Quality is being submitted to the Regional Office, MoEF&CC located at Chennai and the SPCB / CPCB regularly once in six months. Compiled data for the period April 2024 to September 2024 is enclosed as Annexure – IV.			
vi.	Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.				

S.No.	Condition	Compliance Status
		used to control dust emission on other main haul road leading to the limestone crusher. Water is being sprayed on internal ramp roads, muck piles and unloading points (on dumps) by mobile water tankers. Wet drilling is being practiced. Water fogging system is being operated at limestone crusher dump hopper (limestone unloading point) to suppress the fugitive emissions. To avoid spillage of material while transporting, the following measures are being in practice: Moderate loading of tippers. The body height of the vehicle is raised by 1 foot.
vii.	Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM etc., shall be provided with ear plugs / muffs.	 Vehicles are being maintained properly for control of noise level and the noise level is well below the limit. Ear plugs / muffs are provided to respective HEMM operators. Compiled data of Noise levels measured in the mining lease area in the period from April 2024 to September 2024 is enclosed as Annexure – VI.
viii.	Industrial waste water (workshop and wastewater from the mine) should be properly collected, treated so as to confirm to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	 Oil and Grease trap is installed at Workshop to separate oil & grease before letting wastewater out. Samples of Oil and Grease trap outlet are being regularly analysed by MoEF&CC approved external environmental agency. The data for the period April 2024 to September 2024 is enclosed as Annexure – VII. There is no generation of wastewater from the mine. Treated mine discharge water is being analysed by MoEF&CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad). Compiled data for the period April 2024 to September 2024 is enclosed as Annexure
ix.	Personal working in dusty areas shall	- VIII. Being complied.

S.No.	Condition	provided to the personnel working in dusty				
	wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.					
x.	Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	 Occupational health surveillance programme is taken up periodically and records are being maintained. Corrective measures will be taken to the contractions due to exposures of dust, if needed. A full-fledged Occupational Health Centre with a qualified Occupational Health Specialist with supporting staff is established with the following facilities: X-ray ECG Spirometry (lung function test) Audiometry Semi-auto analyser to carryout biochemical tests Clinical lab for micro-biological tests (including sputum test) Checking colour blindness Dental chair 				
xi.	A separate environmental management cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the organization.	 Being complied. Environment management cell is established with qualified personnel to look after the environment management related activities and is reporting to Head of the Unit of the company. The organization chart is enclosed as Annexure - IX. 				
xii. & xiv.	The project authorities shall inform to the RO located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	 Date of financial closure for this project is not required as the total funding for this project is from own funds. The same is informed to the Regional Office on 02.06.2007. 				
xiii.	The funds earmarked for environmental protection measures shall be kept in separate account and should not be diverted for other purposes. Year-wise expenditure shall be reported to the	n The funds earmarked for environment protection are not diverted for other purposes.				

S.No.	Condition	Compliance Status				
7	Ministry and its RO located at Bangalore.	expenditure along with funds allotted for the next financial year are being submitted to the Ministry along with half-yearly compliance reports regularly. Being complied. The copy of this half-yearly compliance report is mailed to eccompliance-ap@gov.in, vide Notice from MoEF&CC, Chennai dated 13.08.2019. The same is also uploaded in PARIVESH portal. Necessary co-operation along with relevant data is being provided.				
XV.	The RO of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer(s) of the RO by furnishing the requisite data / information / monitoring reports.					
xvi.	A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while processing the proposal.	Noted.				
xvii.	SPCB should display a copy of the clearance letter at RO, district industries centre and Collector's Officer / Tahsildar's office for 30 days.	Noted.				
xviii.	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the SPCB and also at website of the MOEF at http://envor.nic.in and a copy of the same shall be forwarded to the RO of	Complied. Advertised in "Eenadu" Telugu daily and "The Hindu" English daily on 27.05.2007 and copy of the same is submitted to RO, Bangalore vide Lr. No. MCL/Mines/North Band/165 dated 02.06.2007.				
ana	this Ministry located Bangalore.					

(Signature)

approved by Indian Bureau of Mines (IBM) vide letter no 314(3)/2009-MCCM(CZ)/MP/MS/PMCP-9 dated 31.12.2009.

The mining is proposed on the hill top and the depth of the mine from hill top will be 24m. The method of mining will be opencast mechanized. The lease area of the mine is 293.12 ha which out of which 19.24 ha which was a private revenue land and 273.88 ha was forest land. Application for diversion of forest land was submitted on April, 18th, 2011. The mine will be captive to 2.5 MTPA Cement Plant. The water table is at a depth of 10m below ground level. Mining will not intersect the ground water table. No National Park/Sanctuary/Eco-sensitive Zone is located within 10 km radius of the mine. The Pada Vegu River and Bapu River are flowing at a distance of 1.5 and 2.0 km respectively. The OB will be dumped in the non-mineralised area with construction of garland drain to prevent spillage of waste. It was informed by the PP that mine site is located outside the Critically Polluted Area.

Baseline data was collected from March 2010 to May 2010. All environmental parameters are to be within permissible limits. Public Hearing was conducted on 26.4.2011. The PH was presided over by the District Collector, Chandrapur. Public hearing was conducted successfully and issues raised by public were addressed by the project proponent with commitment for implementation of development activities. Total cost of the project is Rs. 4232.71 lakhs.

The proposal of EC was earlier considered by the Committee in its meeting held during December 19-21, 2012 wherein the Committee recommended the project for environmental clearance subject tosubmission of the copy of Mining Plan with Progressive Mine Closure Plan has been approved by Indian Bureau of Mines. Accordingly, vide Letter No. NIMCO/EC/2013/102 dated May 2, 2013, the copy of the Mining Plan with Progressive Mine Closure Plan approved by Indian Bureau of Mines (IBM) was submitted by PP.

The Committee deliberated at length the information submitted by PP and **recommended** the proposal for Environmental Clearance for limestone mining at capacity 1.0 MTPA of M/s New India Mining Corporation Pvt. Ltd, located at village Chedwai, District Chandrapur in Maharashtra.

AMENDMENT OF ENVIRONMENT CLEARANCE

(2.62) J-11015/377/2006-IA.II(M) Jayanthipuram Limestone Mine (North Bond) Project of M/s Madras Cements Ltd at Village Jayanthipuram, Jaggayopetu Taluka in Krishna District in Andhra Pradesh.

The proposal of M/s Madras Cements Ltd. is for amendment of environmental clearance no. J-11015/377/2006-IAII(M) dated 18.05.2007 w.r.t. plantation area in the Point No. iv. of Specific Conditions of EC as – 'plantation shall be raised in an area Minutes of 39th EAC Meeting (Non-coal mining sector) held during October 26-28, 2015 Page 102 of 118

of 62.39 ha' in place of '195.54 ha'. The PP informed that the plantation area is specified as below, as per EC.

Page No. 1 of EC specifies that:

'Out of 256.64 ha of Mining lease area, area to be excavated is 122.53 ha. About 18.95 ha of area has been earmarked for waste dumps, 4.34 ha for bund, 1.50 ha for infrastructure, 4.06 ha for roads, 62.39 ha for afforestation & green belt development and 42.77 ha area will be reclaimed.'

Point No. iv of specific conditions of EC order specifies that:

'Plantation shall be raised in an area of 195.54 Ha including a greenbelt of adequate width by planting the native species around the ML area, roads, OB dump sites etc., in consultation with the local DFO / Agriculture department. The density of the trees shall be around 2500 plants per Ha. The company shall avoid plantation of mono culture species. Further greenbelt shall be developed in the North to NE direction of mine to protect the temple from dust emission. Fruit bearing species shall be planted by involving local people especially women with the help of self help groups'.

The PP informed that the greenbelt area is specified as 62.39 ha as per Mining Plan for the period 2005-06 to 2009-10 approved by IBM, Bangalore vide letter No. MP/AP/KSN/Lst-111-SZ dated 07.04.2006 (Page No. 70 – Financial Assurance Table). The same is incorporated in REIA / EMP report of the above subject EC. The PP also informed that Page No. 66 (Table 31 – Land Environment) and Page No. 86 (Afforestation Plan) of REIA / EMP report submitted for the subject EC, also specifies that plantation area is 62.39 ha only. The PP informed that the figure of 195.45 ha in the Point No. iv of Specific Conditions of subject EC order may be a typographical error.

The committee deliberated at length the information submitted by PP and **recommended** to amend the Point No. iv of Specific Condition of EC no. J-11015/377/2006-IA.II(M) dated 18.05.2007 in line with Page No. 1 of the EC letter, as 'Plantation shall be raised in an area of 62.39 ha'.

AMENDMENT OF TOR

(2.63). J -11015/133/2012-IA.II(M) Captive Limestone Mining Project of M/s ACC Ltd. Village Gollapalli, Mylavaram Mandalam, District Kadapa (YSR), Andhra Pradesh (997.08 ha).

The proposal is for amendment of TOR of Captive Limestone Mining production for 7.0MTPA (M.L. area 997.08 ha) located at Village Gollapalli, Vaddirala, G. Uppalapadu, Dhannawada, Chinna Venturla, Bestavemula, Mylavaram Mandalam, Minutes of 39th EAC Meeting (Non-coal mining sector) held during October 26-28, 2015 Page 103 of 118

THE RAMCO CEMENTS LIMITED, KSR NAGAR SURFACE WATER QUALITY DATA - JAYANTHIPURAM LIMESTONE MINE (NORTH BAND) PERIOD - April 2024 to September 2024

S. No	Parameter	Unit	Nallah Upstream: April-2024 to June-2024	Nallah Downstream: April-2024 to June-2024	Nallah Upstream: July-2024 to Sep-2024	Nallah Downstream: July-2024 to Sep-2024	Limits
1	p ^H	-	7.27	7.49	7.39	7.52	6.5 - 8.5
2	Colour	Hazen	<2.0	<2.0	<2.0	<2.0	10-30
3	Temperature	⁰С	26.20	29.30	29.8	28.30	
4	Turbidity	NTU	2.60	2.80	2.00	2.50	
5	Residual Chloride	mg/L	<0.1	<0.1	<0.1	<0.1	
6	Dissolved Oxygen	mg/L	4.40	4.70	3.10	3.90	4.02 - 6.0
7	Total Suspended Solids	mg/L	48.40	40.10	48.30	42.60	
8	Electrical Conductivity	µmhos/cm	763.00	881.00	715.00	836.00	
9	Total Dissolved Solids	mg/L	378.00	512.00	401.00	529.00	500-2100
10	Total Hardness (as CaCO ₃)	mg/L	191.00	288.00	178.00	274.00	w-16
11	Calcium Hardness	mg/L	93.20	148.00	94.30	139.00	
12	Magnesium Hardness	mg/L	89.30	136.00	82.90	111.20	
13	Calcium (as Ca)	mg/L	34.30	56.20	36.50	53.80	
14	Magnesium (as Mg)	mg/L	20.10	26.80	186.00	22.90	
15	Sodium (as Na)	mg/L	32.80	53.10	32.90	53.20	
16	Potassium (as K)	mg/L	1.07	1,12	1.09	1.02	
17	Chloride (as Cl)	mg/L	98.30	139.00	94.30	128.00	250 - 600
18	Sulphate (as SO ₄₎	mg/L	30.60	47.20	27.20	43.50	400 - 1000
19	Total Alkalinity (as CaCO ₃)	mg/L	88.20	119.00	85.30	116.00	
20	BOD (for 3 days at 27 ^o C)	mg/L	<1.0	<1.0	<1.0	<1.0	2 - 3
21	Chemical Oxygen Demand	mg/L	29.20	30.20	29.10	28.20	
22	Oil & Grease	mg/L	<0.1	<0.1	<0.1	<0.1	
23	Iron (as Fe)	mg/L	0.28	0.32	0.36	0.20	0.3 - 5.0
24	Fluoride (as F)	mg/L	0.31	0.58	0.41	0.94	1.0-1.5
25	Nitrate (as NO ₃₎	mg/L	0.90	1.60	0.70	1.50	20 - 50
26	Phosphates (as PO ₄₎	mg/L	<0.01	<0.01	<0.01	<0.01	***
27	Cyanide (as CN)	mg/L	<0.01	<0.01	<0.01	<0.01	
28	Pesticides (as Malathoin)	mg/L	<0.01	<0.01	<0.01	<0.01	***
29	Phenolic Compounds (as C ₆ H ₅ OH)	mg/L	<0.01	<0.01	<0.01	<0.01	***
30	Manganese (as Mn)	mg/L	<0.01	<0.01	<0.01	<0.01	
31	Chromium (as Cr ⁺⁶⁾	mg/L	<0.01	<0.01	<0.01	<0.01	
32	Copper (as Cu)	mg/L	<0.01	<0.01	<0.01	<0.01	1.5
33	Selenium as Se	mg/L	<0.01	<0.01	<0.01	<0.01	
34	Aluminium (as Al)	mg/L	<0.01	<0.01	<0.01	<0.01	
35	Cadmium (as Cd)	mg/L	<0.01	<0.01	<0.01	<0.01	
36	Arsenic as As	mg/L	<0.01	<0.01	<0.01	<0.01	0.05 - 0.2
37	Boron (as B)	mg/L	<0.01	<0.01	<0.01	<0.01	2
38	Mercury (as Hg)	mg/L	<0.01	<0.01	<0.01	<0.01	
39	Lead (as Pb)	mg/L	<0.01	<0.01	<0.01	<0.01	0.1
40	Zinc (as Zn)	mg/L	<0.01	<0.01	<0.01	<0.01	1.5 - 15
41	Percent Sodium	%	38.90	42.30	38.90	39.60	
42	Total Coliforms	MPN/100 mL	76.10	88.90	73,90	86.20	50-5000
	Faecal Coliforms E.Coil	MPN/100 mL MPN/100 mL	28,20 26,00	33.70 38.00	29.10 28.00	35.20 32.00	







Certified Company



Kumarasamy Raja Nagar – 521457 Jaggayyapet Mandal, Krishna District, Andhra Pradesh, India Phone: 08654 224400-04 Fax: 08654 222352

E-mail: mclpm@ramcocements.co.in

THE RAMCO CEMENTS LIMITED

RCL/CGWB/JPM NB-239/279

Dt. 26.11.2024

Central Ground Water Board. 3-6-291, GSI Post, Bandlaguda, HYDERABAD - 500 068.

Dear Sir,

Submission of water level data & ground water quality data for Environmental Sub:

Clearance for Jayanthipuram Limestone Mine (North Band) for the period from April

2024 to September 2024 - Reg.

EC Lr. No. J-11015/377/2006-IA.II(M) dated 18.05.2007. Ref:

This has reference to the above cited Environmental Clearance letter issued by Ministry of Environment & Forests, New Delhi for Jayanthipuram Limestone Mine (North Band).

We herewith enclose the water level data measured by piezometers & ground water quality data as part of half-yearly compliance for Environmental Clearance for this Mining Lease located at Jaggayyapet Mandal, NTR (previously Krishna) District, Andhra Pradesh for the period from April 2024 to September 2024.

This is for your kind information and perusal please.

Thanking you,

Yours faithfully, for The Ramco Cements Limited, (Formerly known as Madras Cements Ltd.)

ASHISH KUMAR SRIVASTAVA

President (Mfg.)

Encl.: As above.

THE RAMCO CEMENTS LIMITED, JAYANTHIPURAM WATER LEVEL DATA - JAYANTHIPURAM LIMESTONE MINE (NORTH BAND) PERIOD - April 2024 to September 2024

1.PIEZOMETER DETAILS:

Location: North Band Bore Well Footwall Side

RL - (+)40.013m

Latitude - N16 52' 28.4" Longitude - E80 06' 42.1" Depth of well - 20.1 m

es and a company of the second contract of th	
Date of Monitoring	Water Level (m), bgl
16.04.2024	10.75
30.04.2024	10.89
16.05.2024	10.45
31.05.2024	9.83
16.06.2024	8.02
30.06.2024	7.28
16.07.2024	5.30
31.07.2024	5.16
16.08.2024	5.07
31.08.2024	4.92
16.09.2024	4.67
29.09.2024	4.29
	16.04.2024 30.04.2024 16.05.2024 31.05.2024 16.06.2024 30.06.2024 16.07.2024 31.07.2024 16.08.2024 31.08.2024 16.09.2024

2.PIEZOMETER DETAILS:

Location: North Band Open Well, Near Magazine

RL - (+)40.01m

Latitude - N16 51' 29.4" Longitude - E80 07' 19.3" Depth of well - 20.0 m

Debuilo	I Well - 20,0 III	
S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2024	4.02
2	30.04.2024	4.25
3	16.05.2024	4.12
4	31.05.2024	3.98
5	16.06.2024	3.88
6	30.06.2024	3.76
7	16.07.2024	3.58
8	31.07.2024	3.02
9	16.08.2024	2.89
10	31.08.2024	2.11
11	16.09.2024	2.52
12	29.09.2024	2.78

3.PIEZOMETER DETAILS:

Location: Near Magazine

RL - (+)42m

Latitude - N16 51' 40.10" Longitude - E80 07' 20.00" Depth of well - 50.0 m

Dapar or		
S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2024	10,08
2	30.04.2024	10.11
3	16.05.2024	10.56
4	31.05.2024	10.72
5	16.06.2024	10.74
6	30.06.2024	10.75
7	16.07.2024	10.72
8	31.07.2024	10.45
9	16.08.2024	9.94
10	31.08.2024	5.28
11	16.09.2024	5.59
12	29.09.2024	5.72

4.PIEZOMETER DETAILS:

Location: North Band Pit-2 Area

RL - (+)48m

Latitude - N16 52' 39.0" Longitude - E80 06' 15.5" Depth of well - 50.0 m

DODOL OF	7 7 7 7 7 7 7 7	
S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2024	7.98
2	30.04.2024	8.25
3	16.05.2024	8.46
4	31.05.2024	8.73
5	16.06.2024	8.92
6	30.06.2024	8.99
7	16.07.2024	9.03
8	31.07.2024	8.65
9	16.08.2024	7.58
10	31.08.2024	6.64
11	16.09.2024	6.72
12	29.09.2024	6.79

THE RAMCO CEMENTS LIMITED, KSR NAGAR GROUND WATER QUALITY DATA - SURROUNDING VILLAGES PERIOD - April 2024 to September 2024

S. No	Parameter	Unit	Dharmavarapadu Thanda Bore Well Water:Aprit-24 to June-24	Chillakallu Open Well Water: April- 24 to June-24	K.Agraharam Bore Well Water: April- 24 to June-24	Pochampaili Bore Well Water: April-24 to June-24	Jayanthipuram Bore Well Water:April-24 to June-24	Ravirala Bore Well Water: April- 24 to June- 24	Vedadri Bore Well Water: April-24 to June-24	Bore Well	Jaggayyapet Bore Well Water:April-24 to June-24	Limite
			W1	W2	W3	W4	W5	W6	W7	W8	W9	
į	p ⁱⁱ	•	7.68	7.76	7,49	7.81	7.78	7.61	7.58	756.00	7,81	6,5 - 8
2	Colour	Hazen	<2,0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5-15
3	Temperature	°C	28.8	28.1	27.3	29.6	29.0	28.1	27.3	29.1	31.2	
4	Turbidity	NTU	1.2	1.4	1.3	1.8	1,6	1.9	1.3	1,1	2,0	1-5
5	Residual Chioride	mg/L	<1.0	<1.0	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2-1
6	Dissolved Oxygen	mg/L	4,1	4.9	4.6	4.8	4.3	4.1	4.2	4.6	4.7	
7	Total Suspended Solids	mg/L	32.4	29.1	33.8	24.5	28,2	34.3	28.6	30,2	34.3	
8	Electrical Conductivity	µmhos/cm	812	876	948	792	781	822	802	839	826	
9	Total Dissolved Solids	mg/L	553	559	536	496	448	449	446	453	464	500-20
10	Total Hardness (as CaCO ₃)	mg/L	256	278	321	191	198	239	204	216	248	200-6
11	Calcium Hardness	mg/L	151	158	153	121	161	163	151	164	171	
12	Magnesium Hardness	0	126.0	139.0	141.0	132.0	42.6	64.3	52.6	41.9	73.2	**
13	Calcium (as Ca)	mg/L	55.3	65.9	68,3	49.1	52.0	53.9	56,1	54.6	48.4	75-20
14	Magnesium (as Mg)	mg/L	36,2	23,8	25.6	25.8	35,3	19.2	26.2	28.3	24,6	30-10
15	Sodium (as Na)	mg/L	48.3	47.1	52.3	39.2	57.2	48,3	48.9	42,5	33,6	-
16	Potassium (as K)	mg/L	1.6	4.9	7.1	1.8	3.9	4.1	5.7	3.6	3.1	-
17	Chloride (as CI)	,ng/L	153.0	152.0	159.0	127.0	171.0	153.0	161,0	152,0	131.0	250-10
18	Sulphate (as SO ₄₎	mg/L	38.6	46.9	44.1	38.4	48,6	36.2	35.3	38.9	33.6	200-41
19	Total Alkalinity (as CaCO ₁)	mg/l,	145.0	148.0	121.0	130.0	139.0	142,0	112,0	106.0	103.0	200-61
20	BOD (for 3 days at 27 °C)	mg/L	<4.0	<4.0	<4.0	<4,0	<4.0	<4.0	<4.0	<4.0	<4.0	
l	Chemical Oxygen Demand	mg/L	17.2	25.3	35.2	18.3	23.6	24.8	26,9	23.8	22.7	
	Oil & Grease	mg/L	<1.0	<1,0	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
23	Iron (as Fe)	mg/L	0,26	0.31	0.28	0.07	0.24	0.09	0.18	0.11	0,05	0.3
	Fluoride (as F)	mg/L	0.32	0,29	0,26	0.38	0.48	0.31	0,21	0.32	0.29	1.0-1.
	Nitrate (as NO ₃₎	mg/L	0.87	1.46	0.88	0.46	0.58	0.68	0.61	0.28	0.31	45
-	Phosphates (as PO ₄₎	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Cyanide (as CN)	mg/L	<0.01	<0,01	< 0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	***
	Pesticides (as Malathoin)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	
29	Phenolic Compounds (as	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01			
	C ₆ H ₅ OH)									<0.01	<0.01	
	Manganese (as Mn)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Chromlum (as Cr ⁺⁶⁾	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
\dashv	Copper (as Cu)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	10.0>	<0.01	1.5
	Selenium as Se	mg/L	<0,01	<0.01	10,0>	£0.05	<0.01	<0.01	<0.01	<0.01	<0.01	
	Aluminium (as Al)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<u></u>
	Cadmium (as Cd)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Arsenic as As	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05-0
 -	Boron (as 8)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	2
	Mercury (as Hg)	mg/L	<0.001	<0.001	<0.001	<0,001	<0.001	<0.001	<0.001	<0.001	<0.001	
39	Lead (as Pb)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.1
40	Zinc (as Zn)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.5 - 1
41	Percent Sodium	%	46.8	47.9	39.1	38.6	48.6	43.9	38.6	37,8	41.2	-
42	Total Coliforms	MPN/100 mt	NII	Nil	NII	NII	Mil	Nil	Nü	NIL	Nil	50-50(
43	Faecal Coliforms	MPN/100 mL	NII	Nil	Nil	Nil	NH	Nil	NII	Nil	NII	-
44	E.Coll	MPN/100 mL	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	-

THE RAMCO CEMENTS LIMITED, KSR NAGAR GROUND WATER QUALITY DATA - SURROUNDING VILLAGES PERIOD - April 2024 to September 2024

S. No	Parameter	Unit	Dharmavarapadu Thanda Bore Well Water: July-2024to Sep-2024	Chillakallu Open Well Water: July- 2024 to Sep- 2024	K.Agraharam Bore Well Water: July- 2024 to Sep- 2024	Pochampalli Bore Welf Water: July- 2024 to Sep- 2024	Jayanthipuram Bore Well Water: July- 2024 to Sep- 2024	Ravirala Bore Welf Water: July-2024 to 5ep-2024	Vedadri Bore Well Water: July-2024 to Sep-2024	Budawada Bore Well Water: July- 2024 to Sep- 2024	Jaggayyapet Bore Well Water: July- 2024 to Sep- 2024	Llin
			Wi	W2	W3	W4	W5	W6	W7	W8	W9	
1	p ^{lt}		7,78	7.53	7,59	7.46	7.61	7.98	7.67	7.68	7.83	6.5 -
2	Calour	Hazen	<2,0	<2,0	<2.0	< 2.0	<2.0	<2.0	<2.0	<2.0	<2,0	5-)
3	Temperature	°C.	28.9	27.6	26.8	28.3	28.6	27.3	29.6	28.8	27.6	
4	Turbidity	NTU	1.3	1.5	1.1	1.6	1,9	1.6	1.3	1.1	1.5	1-
5	Residual Chloride	mg/L	<0,1	<0.1	<0.1	<0,1	<0.1	<0.1	<0.1	< 0.1	<0,1	0,2
6	Dissolved Oxygen	mg/L	4,2	4,9	4.8	4.5	5,4	4,6	5.8	4.7	4,9	
7	Total Suspended Solids	mg/L	28.9	26,1	27.3	26.8	29.3	32,6	37.3	37,8	38.4	
8	Electrical Conductivity	µmhos/cm	912.0	889.0	951.0	826,0	942.0	816,0	936.0	938	796,0	
9	Total Dissolved Solids	mg/L	552.0	563.0	571.0	489.0	572,0	581,0	539.0	582.0	546.0	500-2
10	Total Hardness (as CaCO ₃)	mg/L	252.0	283.0	286.0	214.0	321.0	291,0	283.0	246.0	278.0	200-
11	Calcium Hardness	mg/L	148.0	149.0	138.0	126,0	189,0	143.0	168.0	145.0	135.0	
12	Magnesium Hardness	mg/L	107.0	115.0	136.0	151.0	129.0	118.0	136.0	139.0	128.0	
13	Calcium (as Ca)	mg/l,	S5.6	65.2	63.1	55,1	56.2	53,9	53.7	58,3	47.1	75-2
14	Magnesium (as Mg)	rng/L	35,2	28.3	26,4	26.9	33.6	18.3	27.1	29.2	25,1	30-1
15	Sodium (as Na)	mg/L	44.2	41.6	48.3	39,5	57,3	45,2	49.1	48.2	36.8	-
16	Potassium (as K)	mg/L	1.6	4.1	7.9	1.9	2.8	3.1	5,4	3.8	2.7	1 -
17	Chioride (as CI)	mg/L	153.0	174.0	145.0	138.0	179.0	142,0	158,0	151.0	139.0	250-1
18	Sulphate (as SO ₄₎	mg/L	37.2	39.3	42,6	39.1	44.6	38,9	37.1	38.3	36,1	200-
19	Total Alkalinity (as CaCO ₃)	mg/L	0,61	128.0	109.0	124.0	131.0	137.0	132,0	139,0	99.2	200-
20	BOD (for 3 days at 27 °C)	mg/L	<4.0	<4,0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	—
21	Chemical Oxygen Demand	mg/L	19.1	24.3	27.3	23,6	22.9	23,6	19.1	17,2	17.1	
		mg/L	<0,1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0,1	<0.1	
23	Iron (as Fe)	mg/L	0,2	0,28	0.3	0.1	0.1	0.04	0.19	0.17	0.08	- Q.
	Fluoride (as F)	mg/L	0.23	0.25	0.34	0,23	0.21	0.21	0.34	0,29	0,31	1.0-
25	Nitrate (as NO ₃)	mg/L	0,72		0.71	0.47	0.51	0,61	0,66	0.39	0.48	4:
		mg/L	<0.01	1.29 <0.01	<0.01	<0.01	10.0>	<0.01	<0.01	<0.01	<0.01	
		mg/L	<0.01	<0.01	<0.01	<0.01	10,0>	<0.01	<0.01	<0.01	10.02	
	Pesticides (as Malathoin)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0,01	<0.01	<0.01	
	Phenolic Compounds (as C ₆ H ₅ O)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Manganese (as Mn)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Chromium (as Cr ^{>6)}	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	 -
	Copper (as Cu)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.
			<0.01	<0.01	<0.01	<0.01	<0.01		<0.01			
	Selenium as Se Aluminium (as Al)	mg/L	<0.01	<0.01	<0.01			<0.01	 	<0.01	<0.01	
		mg/L				<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Cadmium (as Cd)	mg/L	<0.01	<0.01	<0.01	<0.01	< 0.01	<0.01	<0.01	<0.01	<0.01	2.00
	Arsenic as As	mg/L	<0.01	<0.01	10.05	<0.01	<0.01	< 0.01	<0.01	<0.01	<0.01	0.05
_	Boron (as B)	mg/L	<0.01	<0.01	<0.01	<0.01	< 0.01	<0.01	<0.01	<0.01	<0.01	2
	Mercury (as Hg)	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	
	Lead (as Pb)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	10,0>	<0,01	<0.01	0,
	Zinc (as Zn)	mg/L	<0.01	<0,01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	1.5
_	Percent Sodium	9%	48.20	43.70	38,60	35,10	47.90	43.60	41.80	36,20	39,90	<u> </u>
	Total Collforms	MPN/100 mL	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	50-5
43	Faecal Coliforms	MPN/100 mL	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	
44	E.Coll	MPN/100 mt.	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	<u> </u>

THE RAMCO CEMENTS LIMITED, KSR NAGAR AMBIENT AIR QUALITY MONITORING DATA - BUFFER ZONE VILLAGES PERIOD - April 2024 to September 2024

	ı ı				/ - April 2									
		April	2024	Mav	2024	June	Mont 2024	h July	2024	Augus	t 2024	Septemi	per 2024	:
Location	Parameter	I FORT	II FORT	I FORT	II FORT	I FORT	II FORT	I FORT	II FORT	I FORT	II FORT	I FORT	II FORT	Limi
	511.15	NIGHT	NIGHT	NIGHT	NIGHT	NIGHT	NIGHT	NIGHT	NIGHT	NIGHT 49.2	NIGHT	NIGHT 48.2	NIGHT 53.1	100
	PM 10	59.7	63.6	58.3	65.6	62.6	68.3	51.3	49.6	20.0	51.2	19.6	21.4	100
Dharmavarapupadu	PM 2.5	24.2	25.6	23.7	26.4	25.4	27.5	20.8	20.0	12.3	20.6 10.6	10.6	11.4	60
Tanda	SO ₂	16.1	15.3	16.8	16.2	153	17.8	10.6	9.6	14,9	13.3	13.2	14.1	80
	NO _X	18.7	18.0	19.4	18.9	17.9	20.5	13.2	12.3	301.0		296.0	150.0	80
	CO	292.0	221.0	299.0	232.0	312.0	241.0	296.0	241.0	50.6	162.0	51.2	52.4	2000
	PM 10	63,9	62.9	65.2	63.6	68.3	70.2	49.6 19.9	50.3 20.5	20.3	53.6	20.5	21,4	100
Jayanthipuram	PM 2.5	25.6	25.7	26.1	25.9	27.4	28.6	12.3		13.1	21.9	12.9	13.5	60
зауапипригат	SO₂	16.9	16.2	17.3	16.3	18.3	18.3 21.2	15.2	12.3	16.0	12.3	15.8	16.4	80
	NO _X	19.8	19.1	20.2	19.2	21.2	252.0	13.8	15.2	326.0	15.2	324.0	149.0	80
	co	281.0	241.0	296.0	248.0	286.0	66.1	42.3	252.0	49.8	154.0	48.3	48,3	200()
	PM 10	62.6	58.6	65.1	60.3	67.9	26.8	17.1	48.4	20.1	49.6	19.5	19.6	100
Chillakallu	PM 2.5	25.3	23.7	26.3	24.4	27.4	17.2	11,1	19.6	12.6	20.1	11.6	11.9	60
Cilliakallu	SO₂	14.3	20.2	15.2	21.2	19.6	20.3	13.8	11.6	15.3	11.6	14.3	15.0	80
	NO _X	17.0	23.3	17.9	24,3	22.3			14.7		14.7		 	80
	co	274.0	216.0	281.0	226.0	274.0	239.0	291	239.0	310	263.0	318.0	242.0	2000
	PM 10	62.8	55.2	63.9	58.9	65.1	59.3	50.4	52.6	50.3	52.8	52.4	50.4	100
16. 4 1 1 (111	PM 2.5	25.3	22.5	25.8	24.0	26.2	24.2	20.3	21.5	20.3	21.5	21.1	20.6	60
K.Agraharam Village	SO₂	15.4	21.4	16.3	22.3	18.4	19.1	10.9	13.1	12.9	12.9	10.8	12.4	80
	NO _x	18.5	23.8	19.4	24.7	21.5	21.5	14	15.0	16	15.3	13.9	14.8	80
	со	261.0	244.0	269.0	245	301.0	255.0	274	255.0	336	149.0	326.0	151.0	2000
	PM 10	66.1	58.3	68.4	56.2	72.3	58.2	50.9	50.3	52.6	48.2	51.6	49.3	100
	PM 2.5	27.2	23.6	28.1	22.7	29.7	23.5	20.9	20.3	21.6	19.5	21.2	19.9	60
Jaggayyapet	SO ₂	16.2	19.2	15.9	21,4	17.1	22.3	10.7	10.2	13.2	10.6	12.6	11.6	80
	NO _x	18.6	22.2	18.3	24.4	19.5	25.3	13.1	13.2	15.6	13.6	15.0	14.6	80
	co	268.0	212.0	288.0	232.0	293.0	248.0	256.0	248.0	324	254.0	313.0	248.0	2000
	PM 10	65.2	61,4	66.3	63.1	62.9	62.1	47.3	49.8	43.8	50.6	45.9	48.4	100
	PM 2.5	25.8	25.2	26.2	25.9	24.8	25.5	18.7	20.5	17.3	20.8	18.1	19.9	60
Budawada	SO ₂	16.6	16.3	17.2	17.3	17.9	18.4	10.1	9.8	12.6	12.8	10.3	12.3	80
	NO _x	. 19.4	18.9	20.0	19.9	20.7	21.0	12.9	12.4	15.4	15.4	13.1	14.9	80
	со	284.0	239.0	291.0	249	312.0	255.0	63.0	255.0	309	216.0	302.0	218.0	2000
	PM 10	63.9	67.2	64.6	69.2	69.1	68.3	45.6	51.6	46.9	51.3	44.3	50.6	100
	PM 2.5	26.1	26.7	26.4	27.5	28.2	27.2	18.6	20.5	19.1	20.4	18.1	20.1	60
Vedađri	SO₂	16.1	18.4	16.9	19.2	15.4	21.4	10.2	12.4	11.9	12,1	11.4	11.9	80
	NO _X	18.4	21.2	19.2	22	17.7	24.2	12.0	15.2	14	14.9	13.7	14.7	80
	со	277.0	259.0	283.0	262	287.0	274.0	242.0	274.0	256	281.0	289.0	274.0	2000
	PM 10	61.6	59.1	67.2	61.2	63.2	59.6	43.8	47.3	45.2	49.2	42.9	47.3	100
•	PM 2.5	25.2	24.0	27.5	24.8	25.8	24.2	17.9	19.2	18.5	20.0	17.5	19.2	60
Pochampalli	SO ₂	16.2	17.1	17.3	18.9	16.2	17.3	12.3	10.6	13.6	12.4	12.9	12.6	80
	NO _x	19.1	19.4	20.2	21.2	19.1	19.6	15.2	12.9	16.5	14.7	15.8	14.9	80
	со	273.0	256.0	292.0	259	263.0	263.0	258.0	263.0	263	288.0	274.0	279.0	2000
	PM 10	62.8	58.4	66.9	62.3	70.6	65.2	42.9	45.2	43.6	47.8	41.7	45.6	100
	PM 2.5	25.6	23.8	27.2	25.4	28.7	26.6	17.5	18.4	17.7	19.5	17.0	18.6	60
Ravirala	SO ₂	16.9	16.9	17.8	17.4	16.0	18.2	11.1	12.2	12.8	13.2	13.5	11.1	80
	NOx	19.9	19.8	20.8	20.3	19.0	21.1	14.1	15.1	15.8	16.1	16.5	14.0	80
	со	312.0	274.0	333.0	283	274.0	291.0	212.0	291.0	258	299	261	283.0	2000

Note: All values are mentioned in µg/m³

1					4-0 per per per per		100	60	80	80	2000	100	09	80	80	2000	100	09	80	80	2000	100	09	80	80	2000
ANNEXURE					September 2024	II FORT NIGHT	55.1	22.4	11.6	14.1	498	56.2	23.0	13.9	16.7	474	53.8	21.9	11.8	14.7	496	52.6	21.3	13.2	16.3	487
			:		Septem	I FORT NIGHT	50.2	20.3	14.6	17.2	402	56.1	22.8	12.9	15.8	489	49.6	20.3	13.5	16.2	446	53.8	22.0	13.2	16.2	461
					: 2024	II FORT NIGHT	53.6	21.8	13.2	15.7	521	54.2	22.2	15.3	18.1	501	51.2	20.8	14.2	17.1	526	53.9	21.8	12.4	15.5	542
		当			August 2024	I FORT NIGHT	53.5	21.6	12.4	15.0	441	54.2	22.0	11.3	14.2	472	53.9	22.0	12.6	15.3	439	51.2	20.9	13.9	16.9	448
R	BAND)	CORE ZONE			2024	II FORT NIGHT	51.3	20.8	12.9	15.4	501	50.2	20.6	14.6	17.4	496	53.2	21.7	13.2	16.1	512	52.9	21.4	11.1	14.2	503
KSR NAG	E (NORTH		1ber 2024	عم	July 2	I FORT NIGHT	58.1	23.5	13.5	16.1	426	56.9	23.1	10.2	13.1	481	543.0	22.2	12.9	15.6	428	52.7	21.6	13.1	16.1	452
CEMENTS LIMITED, KSR NAGAR	ONE MIN	WITORING	April 2024 to September 2024	Month	2024	II FORT NIGHT	68.2	27.7	18.6	21.1	651	59.3	24.3	19.1	21.9	612	59.1	24.1	18.4	21.3	648	67.3	27.2	23.2	26.3	999
EMENTS	M LIMEST	LITY MOR	oril 2024		June	I FORT NIGHT	68.4	27.6	20.3	22.9	583	63.2	25.7	19.4	22.3	969	63.9	26.1	19.1	21.8	553	69.2	28.3	17.2	20.2	574
THE RAMCO CI	: LL	AMBIENT AIR QUALITY MONITORING DATA -	PERIOD - A		2024	II FORT NIGHT	65.3	26.5	16.3	18.8	642	58.4	23.9	19.2	22.0	296	59.2	24.1	17.3	20.2	639	8.99	27.0	22.4	25.5	652
	JAYAN	AMBIENT	<u>D</u>		May 2024	I FORT NIGHT	65.1	26.3	19.2	21.8	562	58.2	23.6	18.3	21.2	581	61.4	25.1	19.2	21.9	549	68.3	27.9	18.4	21.4	569
					April 2024	II FORT NIGHT	62.3	25.3	15.6	18.1	639	55.6	22.8	18.4	21.2	558	56.2	22.9	18.3	21.2	623	65.1	26.3	21.2	24.0	634
					April	I FORT NIGHT	63.9	25.8	17.6	20.2	538	59.2	24.0	19.1	22.0	564	58.3	23.8	16.2	18.9	537	65.1	26.6	16.3	19.3	551
					Parameter	<u> </u>	PM 10	PM 2.5	502	NOx	00	PM 10	PM 2.5	SO ₂	NO _x	00	PM 10	PM 2.5	SO ₂	NO _X	00	PM 10	PM 2.5	So ₂	NO _X	00
					Location				Mines office					NB-Weigh Bridge-2					Rest hall	,				Magazine Area		_

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

THE RAMCO CEMENTS LIMITED, KSR NAGAR JAYANTHIPURAM LIMESTONE MINE (NORTH BAND) FUGITIVE EMISSION DATA - SPM CONCENTRATION PERIOD - April 2024 to September 2024

			Month	nth		
Location	April 2024	April 2024 May 2024	June 2024 July 2024	July 2024	August 2024	September 2024
Quarry Edge	162	174	181	136	116	135
Drilling Arrea	141	149	153	112	138	158
Loading Area	168	171	189	129	119	126
Haul Road	129	138	170	104	130	144

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

NOISE LEVEL MONITORING - JAYANTHIPURAM LIMESTONE MINE (NORTH BAND) THE RAMCO CEMENTS LIMITED, KSR NAGAR PERIOD - April 2024 to September 2024

Ī	14 1 1			Noise Va	Noise Value dB(A)	
ก่อ	Date of monitoring	Macnine / Location	Day time (6AM to 10PM)	Permissible Limit dB(A)	Night time (10PM to 6AM)	Permissible Limit dB(A)
	28.09.2024	Drilling area	73.2	< 75	63.9	< 70
2	28.09.2024	Loading area	72.9	< 75	61.6	< 70
3	28.09.2024	Haul road	71.9	< 75	61.8	< 70
4	28.09.2024	Unloading area	70.6	< 75	62.9	< 70
5	28.09.2024	Mines office	53.9	< 75	38.3	< 70
9	28.09.2024	Crusher Hopper	61.4	< 75	51.6	< 70
7	28.09.2024	Sub Station	63.7	< 75	53.7	< 70
8	28.09.2024	Pump House	70.2	< 75	60.6	< 70
6	28.09.2024	Weigh Bridge	62.9	< 75	52.9	< 70
10	28.09.2024	PMC Camp	52.9	< 75	41.6	< 70

THE RAMCO CEMENTS LIMITED, KSR NAGAR AUTO GARAGE OIL & GREASE TRAP OUTLET WATER QUALITY DATA PERIOD - April 2024 to September 2024

						Month				
s. R	S. No Parameter	Unit	April 2024	May 2024	June 2024	July 2024	August 2024	September 2024	Range / Average	Norm
~	1 p ^H		7.88	7.79	7.83	7.98	7.48	7.52	7.52 - 7.98 5.5 - 9.0	5.5 - 9.0
2	2 Total Dissolved Solids	mg/L	823	856	891	978	952	911	902	2100
3	3 Total Suspended Solids	mg/L	70.6	73.6	75.3	70.6	73.6	70.2	72.3	100
4	4 Chemical Oxygen Demand mg/L	mg/L	123	131	148	139	126	118	131	250
5	5 BOD (for 3 days at 27 ^O C)	mg/L	43.9	45.2	42.3	40.6	42.3	43.6	42.98	100
9	6 Oil & Grease	mg/L	2.4	2.8	2.2	1.3	4.	7.7	1.97	10

THE RAMCO CEMENTS LIMITED, KSR NAGAR JAYANTHIPURAM LIMESTONE MINE (NORTH BAND) MINE DISCHARGE WATER QUALITY DATA PERIOD - April 2024 to September 2024

						Month			
S. No	Parameter	Unit	April 2024	May 2024	June 2024	July 2024	August 2024	September 2024	Limits
, [р ^н		7,84	8.03	8.08	8.13	8.29	8.37	5.5 - 9.0
2	Total Suspended Solids	mg/L	76.2	81.6	83.6	85.0	88.3	92.6	100
3	Total Dissolved Solids	mg/L	069	720	789	796	829	831	2100
4	Chlorides (as Cl)	T/6w	274	302	352	348	351	342	1000
S	Sulphates (as SO ₄₎	mg/L	85.1	8'86	95.3	0.96	98.3	92.6	1000
9	BOD (for 3 days at 27 ^o C)	mg/L	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	30
7	Chemical Oxygen Demand	mg/L	26.20	28.60	29.70	28.30	29.60	28.30	250
æ	Oil & Grease	mg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	10
ნ	Iron (as Fe)	mg/L	0.61	0.74	0.88	0.79	0.83	0.81	3.0
10	Fluoride (as F)	mg/L	89'0	0.83	96.0	0.91	0.94	0.91	2.0

THE RAMCO CEMENTS LIMITED, KSR NAGAR ORGANIZATIONAL CHART OF ENVIRONMENTAL CELL

