







Kumarasamy Raja Nagar - 521457 Jaggayyapet Mandal, Krishna District, Andhra Pradesh, India

Phone: 08654 224400-04 Fax: 08654 222352

E-mail: mclipm@ramcocements.co.in

### THE RAMCO CEMENTS LIMITED

RCL/MoEF&CC/JPM NB-239/274

Dt. 28.11.2022

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

Dear Sir,

Sub: Submission of Half-Yearly Compliance Report for

Clearances for Jayanthipuram Limestone Mine (North Band) of The Ramco Cements Limited for the period from April 2022 to September 2022 – Reg.

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

We are herewith submitting the Half-Yearly Compliance for Environmental Clearance for the period from April 2022 to September 2022 along with relevant enclosures for Jayanthipuram Limestone Mine (North Band), Jaggayyapet Mandal, Krishna District, Andhra Pradesh.

Name, designation and contact details of person in-charge of environmental division are:

N. Ravi Shankar Sr. 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.,)

(N. RAVISHANKAR)

Sr. President (Mfg.)

Encl.: a.a

### HALF-YEARLY COMPLIANCE REPORT

Environn	nental	Clearance	J-11015/377/2006-IA.II (M) and dated 18.05.2007
Letter/s No. and Date		d Date	
Name of	the Pro	ject	Jayanthipuram Limestone Mine (North Band) of The Ramco Cements Limited (Formerly Madras Cements Ltd.,) – 1.8 Million TPA Capacity of Limestone
Period Report	of	Compliance	April 2022 to September 2022

### A. Specific Conditions:

S.No.	Condition	Compliance Status
i.	Top soil shall be stacked properly with proper slope with adequate safeguards and shall be backfilled for reclamation and rehabilitation of mined out area.  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	<ul> <li>At present, no topsoil is available in this mining lease.</li> <li>Topsoil extracted from this mining lease was used for greenbelt development as well as for top layer on reclamation area in the mining lease.</li> <li>Being complied.</li> <li>Various measures taken are:</li> <li>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 &amp; Southern side of the ML area.</li> <li>Water collected through this garland drain is connected to the settling tank &amp; water recharge pit over an area of 0.50 ha (South</li> </ul>
	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	<ul> <li>Eastern side of ML area).</li> <li>Drains and settling tank are desilted regularly.</li> <li>Two sumps are made with sizes of 84m*65m*5.0m and 250m*53m*5.0m in pit 1 and one sump with 265m*127m*2.9m in pit 2.</li> </ul>
iii.	regular intervals.  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 195.54 Ha including a greenbelt of adequate width by planting the native species around the ML area, roads, OB dump sites etc., in	Being complied.  • An area of 65.87 ha within ML has been covered under plantation with native plant species up to

S.No.	Condition	Compliance Status
S.No.	Condition  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.	<ul> <li>Saplings have been planted along Lease boundary, OB dump slopes and near ML 15 View point.</li> <li>All saplings including fruit bearing species are planted and regular maintenance is being done by involving local people.</li> <li>Plantation will be continued in phased manner up to conceptual stage.</li> <li>An EC amendment request is submitted to the Ministry on 07.01.2015 for this condition because at the time of obtaining EC, the existing 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 &amp; 86 of Rapid EIA report.</li> <li>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.</li> <li>In this context, an EC amendment request is submitted to the Ministry on 07.01.2015 for amendment of specific condition No. iv to amend the greenbelt area from 195.54 to 62.39 Ha. EAC committee recommended to amend this condition in the meeting held on 28.10.2015 and the EC amendment order is awaited. We have requested to the MoEF&amp;CC regarding the same vide letter No. RCL/MoEF&amp;CC/237/388 dated 02.03.2021. The extract of the EAC minutes and letter dated 02.03.2021 are enclosed</li> </ul>
v.	The company shall develop 50 m	
	wide greenbelt barrier along the mine lease since distance between the last point of the mine and river is 1.0 km.	, = ·

S.No.	Condition	Compliance Status
VÎ.	The company shall prepare Wild life conservation in consultation with CWLW / State Forest Department for implementation.	<ul> <li>Wild life conservation plan is not prepared as there is no wild life and Schedule-1 species are present in the area as per the authenticated list of Flora and fauna by Forest Dept. and no wild life is observed after opening the mine in the subject area.</li> <li>This mining lease area does not fall under forest area. There are some agriculture lands and public roads in between the nearest reserve forest and the subject mining lease area.</li> </ul>
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.	<ul> <li>Being complied.</li> <li>Risk assessment study is carried out and the report is incorporated in EIA / EMP report and submitted</li> </ul>
The state of the s		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 August 2022.
ix.	The company shall develop pisciculture in the water body(s) after mining activity is over. A fisherman co-operative 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.	Noted. • Pisciculture will be taken up at final stage of mining activities.
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.	<ul> <li>Suitable ground water conservative measures are being taken up such as garland drains, check dams, recharge pit and rainwater harvesting pits etc.</li> <li>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.</li> <li>As part of the CSR activities, mine</li> </ul>

S.No.	Condition	Compliance Status
S.No.	Condition	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 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 0.5 ha area) is made at Northside 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 from Dept. of Panchayat Raj & Rural Development, Govt. of Andhra Pradesh (agency authorized to issue NOC for Andhra Pradesh projects) vide their letter Lr. No. PRR05-11028/14/2018-SLNA-GIS-CORD, dated 19.02.2021 to conduct the mining operations below ground water table. 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 18.02.2024.
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	<ul> <li>Being complied.</li> <li>Groundwater levels are being monitored regularly (at 4 locations) and readings are being recorded.</li> <li>The ground water data for the period April 2022 to September 2022 is being submitted to the CGWB, copy is enclosed as Annexure – II.</li> <li>Compiled data on Ground water quality carried out by MoEF&amp;CC</li> </ul>

S.No.	Condition	Compliance Status
	Authority and Regional Director,	approved external environmental
	Central Ground Water Board.	agency (M/s Universal Enviro
		Associates, Hyderabad) for the
		same period 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	
	clearance under the Forest	Total mining lease area is non-forest
	(Conservation) Act, 1980.	area, hence not applicable.
xiii.	, · · · · · · · · · · · · · · · · · · ·	Being complied.
	authority shall be obtained for drawl	Permission obtained from the
	of ground water, if any.	Dept. 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. PRR05-11028/45/ 2018-
		SLNA-GIS-CORD, dt. 13.11.2021
		from the available quantity of
		water from the mine de-watering
		only.
		This clearance is common for our
		cement plant, thermal power
		plant, waste heat power plant,
		township and for four captive
		Mining Lease areas.
		• This order is valid up to
		12.11.2024.
xiv.	Vehicular emissions shall be kept	Being complied.
	under control and regularly	Vehicles are being maintained
	monitored. Measures shall be taken	properly at our workshop located
	for maintenance of vehicles used in	at cement plant.
	mining operation & in transportation	Vehicle emission levels are being
	of mineral. The vehicles shall be	monitored regularly and kept
	covered with a tarpaulin and shall	under control.
	not be overloaded.	With proper supervision regularly,     it is appreciate that the vehicles are
		it is ensuring that the vehicles are not overloaded.
		• To avoid fine particles, escape
}		while transporting, the following
		measures is being in practice:
		o Transportation of mineral is
		being done by moderately
		loading the vehicles to avoid
		the spillage.
		o The body height of the vehicle
		is raised by 1 foot to avoid the

S.No.	Condition	Compliance Status
		spillage of material.
XV.	submitted to the MOEF 5 years in	Being complied.  The life of the mine is estimated

### **B. GENERAL CONDITIONS:**

S.No.	Condition	Compliance Status
	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.
ii.	No change in the calendar plan including excavation, quantum of mineral and waste shall be made.	<ul> <li>Being complied.</li> <li>No change in the calendar plan.</li> <li>In the financial year 2022-2023, the limestone production was 1.007 million tonne (up to September 2022) against production capacity of 1.80 million TPA.</li> <li>Waste of 4,64,183.9 cu.m (up to September-2022) generated during the financial year 2022-2023 against IBM approved quantity of 10,10,127 cu.m.</li> </ul>
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.	<ul> <li>Noted.</li> <li>There is no forest area in the mining lease and no endangered species in the mining lease area.</li> <li>Further submitted letter to Chief Wild Life Warden requesting their suggestions for conservative measures and reply is awaited.</li> </ul>
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 <sub>2</sub> , NO <sub>x</sub> 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.  9 Nos. of ambient air quality monitoring stations are established in buffer zone and 4 Nos. of air quality monitoring stations are established in core zone based on the meteorological data, topographical features and environmentally and ecologically sensitive in consultation with State Pollution Control Board and regular (fortnightly) manual monitoring is being done through MoEF&CC approved external environmental monitoring agency for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NOx monitoring.
٧.	Data on Ambient Air Quality (RPM,	Being complied.

S.No.	Condition	Compliance Status
	SPM, SO <sub>2</sub> , NO <sub>x</sub> ) should be regularly submitted to the Ministry including its RO located at Bangalore and the SPCB / CPCB once in six months.	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-2022 to September-2022 is enclosed as Annexure – IV.
VÍ.	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.	<ul> <li>Fugitive dust emissions are being controlled at the source.</li> <li>Permanent water sprinkling system is being operated on main haul road leading to the limestone crusher.</li> <li>Mobile water spraying tanker is being used to control dust emission on other main haul road leading to the limestone crusher.</li> <li>Water is being sprayed on internal ramp roads, muck piles and unloading points (on dumps) by mobile water tankers.</li> <li>Wet drilling is being practiced.</li> <li>Water fogging system is being operated at limestone crusher dump hopper (limestone unloading point) to suppress the fugitive emissions.</li> <li>To avoid spillage of material while transporting, the following measures are being in practice: <ul> <li>Moderate loading of tippers.</li> <li>The body height of the vehicle is raised by 1 foot.</li> </ul> </li> </ul>
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.	·
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	<ul> <li>Being complied.</li> <li>Oil and Grease trap is installed at Workshop to separate oil &amp; grease before letting wastewater out.</li> <li>Samples of Oil and Grease trap outlet are being regularly analysed by MoEF&amp;CC approved external environmental agency.</li> <li>The data for the period April-2022 to</li> </ul>

S.No.	Condition	Compliance Status
	effluents.	Annexure – VI.  There is no generation of wastewater from the mine.
ix.	Personal working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects.	Being complied. Personal Protective Equipment are being provided to the personnel working in dusty areas and adequate training and information on safety and health aspects are being provided as part of Mines Vocational Training at our Ramco Mines Vocational Center.
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.	<ul> <li>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.</li> <li>A full-fledged Occupational Health Centre with a qualified Occupational Health Specialist with supporting staff is established with the following facilities: <ul> <li>X-ray</li> <li>ECG</li> <li>Spirometry (lung function test)</li> <li>Audiometry</li> <li>Semi-auto analyser to carryout bio-chemical tests</li> <li>Clinical lab for micro-biological tests (including sputum test)</li> <li>Checking colour blindness</li> <li>Dental chair</li> <li>Ambulance</li> </ul> </li> </ul>
×i.	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.	<ul> <li>Being complied.</li> <li>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.</li> <li>The organization chart is enclosed as Annexure- VII.</li> </ul>
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.	<ul> <li>Noted.</li> <li>Date of financial closure for this project is not required as the total funding for this project is from own funds.</li> <li>The same is informed to the Regional Office on 02.06.2007.</li> </ul>
xiii.	The funds earmarked for environmental protection	Being complied.  The funds earmarked for

S.No.	Condition	Compliance Status
	measures shall be kept in separate account and should not be diverted for other purposes. Year-wise expenditure shall be reported to the Ministry and its RO located at Bangalore.	environment protection are not diverted for-other purposes.  The details of environmental protection expenditure for the financial year 2021-2022 and funds allotted for the financial year 2022-2023 are enclosed as Annexure -VIII.
xv.	The RO of this Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full co-operation to the officer(s) of the RO by furnishing the requisite data / information / monitoring reports.	<ul> <li>Being complied.</li> <li>The copy of this half-yearly compliance report is mailed to eccompliance-ap@gov.in, vide Notice from MoEF&amp;CC, Chennai dated 13.08.2019.</li> <li>The same is also uploaded in PARIVESH portal.</li> <li>Necessary co-operation along with relevant data is being provided.</li> </ul>
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.		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.

(Signature)



### 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@rameoconents.co.in

### THE RAMCO CEMENTS LIMITED

RCL/MoEF&CC/237/16

Dt.18.05,2020

The Director (Non-Coal Mining), IA Division, Ministry of Environment, Forests and Climate Change (MoEF&CC), Indira Paryavarn Bhavan, Jor Bagh Road, Jor Bagh, 3<sup>rd</sup> Floor, Vayu Wing, New Delhi - 110 003.

Respected Sir,

Reguest for Environmental Clearance amendment letter for Jayanthipuram Limestone Mine (North Band) - Point No. Iv of Specific Conditions - Reg.

Ref:

- 1. EC Lr. No. J-11015/377/2006-IA-II(M) dated 18.05.2007.
- 2. Proposal No. IA/AP/MIN/19006/1910 dated 07.01.2015.
- 3. File No.J-11015/377/2006.IA.II(M).
- 4. Agenda No. 2.62 of 39th EAC meeting held on 28.10.2015.
- 5. Mail dated 04.11.2015 regarding additional information submission.

This is to submit that we have requested for amendment in Environmental Clearance order (Lr. No. 3-11015/377/2006-IA-II(M) dated 18,05.2007) in respect of our Jayanthipuram Limestone Mine (North Band), Jaggayyapet Mandal, Krishna District, Andhra Pradesh vide second cited proposal.

We request to amend point No. iv of specific conditions of EC as 'Plantation shall be raised in an area of 62.39 Ha' in place of 'Plantation shall be raised in an area of 195.94 Ha', in line with point no.2 in page No. 1 of the EC letter.

The proposal is placed in 39th EAC meeting dated October 26 -28, 2015 and the proposal is approved by the committee and minutes of meeting placed in the web site. The minutes 2.62 states that the committee has recommended to amend point no.iv of Specific Condition of EC No.3-11015/377/2006-IA-II(M) dated 18.05.2007. The copy of the same is enclosed.

In this regard we have requested your good office several times to issue a corrigendum to amend FC for the point no.iv of Specific Condition of EC.

Date	Description	Reference, if any
04.11.2015	Additional information submitted to MoEF&CC, New Delhi as per EAC committee request	Through mail dated 04.11.2015
25.11.2015	EAC meeting minutes placed in MoEF&CC website	
16.09.2016	Request letter for amendment in EC	Lr.No.RCL/MoEF&C/49/2016-17, Dt.16.09.2016
18.03.2017	Request letter for amendment in EC	Lr.No.RCL/MoEF&C/237/458, Dt.18.03.2017
23.10.2017	Request letter for amendment in EC	Lr.No.RCL/MoEF&C/237/458, Dt.23.10.2017

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Kumarasamy Raja Nagar - 521457 laggayyapet Mandai, Krishna District. Andhra Pradesh, India Phone: 08654 224400-04 Fax: 08654 222352

E-mail: mclipm@ramcocements.co.in

### THE RAMCO CEMENTS LIMITED

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02.02.2018	Request letter for amendment in EC	Lr.No.RCL/MoEF&C/237, Dt.02.02.2018
10.01.2019	Request letter for amendment in EC	Lr.No.RCL/MoEF&C/237/372, Dt.10.01.2019
11.03.2019	Request letter for amendment in EC	Lr.No.RCL/MoEF&C/237/457, Dt.11.03.2019
14.10.2019	Request letter for amendment in EC	Lr.No.RCL/MoEF&C/237/290, Dt.14.10.2019
09.02.2020	Request letter for amendment in EC	Lr.No.RCL/MoEF&C/237/400, Dt.09.01.2020

It is once again humbly requested your good office to issue a corrigendum to the granted EC order No.J-11015/377/2006-IA-II(M) dated 18.05.2007 for Point No. iv of Specific Conditions, as 'Plantation shall be raised in an area of 62.39 Ha'.

We shall be very thankful to you if you could kindly issue us the EC corrigendum at the earliest.

Thanking you,

Yours faithfully, For Jayanthipuram Limestone Mine (North Band) Of The Ramco Cements Limited,

Authorized Signatory

(N. RAVI SHANKAR)

President (Manufacturing)

Encl: a/a.



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, 18<sup>th</sup>, 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 39<sup>th</sup> 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'.

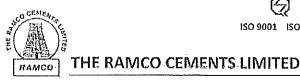
The PP informed that the greenbelt area is specified as 62.39 ha as per Mining Plan for the period 2005-06 to 2009-10 approved by IBM, Bangalore vide letter No. MP/AP/KSN/Lst-111-SZ dated 07.04.2006 (Page No. 70 – Financial Assurance Table). The same is incorporated in REIA / EMP report of the above 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 39<sup>th</sup> EAC Meeting (Non-coal mining sector) held during October 26-28, 2015 Page 103 of 118









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/CGWB/JPM NB-239/279

Dt. 28.11.2022

Central Ground Water Board, 3-6-291, GSI Post, Bandlaguda, Tirumala Residency Colony, R. Krishnaiah Nagar, Hyderabad-500 068.

Dear Sir,

Sub: Submission of Water Level Data for Environmental Clearance for

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

2022 to September 2022 - reg.

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

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 as part of Half-Yearly Compliance for Environmental Clearance for this Mining Lease located at Jaggayyapet Mandal, Krishna District, Andhra Pradesh for the period from April 2022 to September 2022.

This is for your kind information and perusal please.

Thanking you,

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

Sr. President (Mfg.)

Encl.: a.a

### 

### 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

S. No.	Date of Monitoring	Water Level (m), bgl
1.	16.04.2022	4.80
2	30.04.2022	4.78
3	16.05.2022	4.80
4	31.05.2022	4.83
5	16,06.2022	4.86
6	30.06.2022	4.51
7	16.07.2022	3,67
8	31.07.2022	3.29
9	16.08.2022	2,12
10	31.08.2022	2,35
11	16.09.2022	2.41
12	30.09.2022	2.82

### 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

	7. 11CH 2010 HI	
S. No.	Date of Monitoring	Water Level (m), bgl
. 1	16.04.2022	1.28
2	30.04.2022	1.31
3	16.05.2022	1.35
4	31.05.2022	1.36
5	16.06.2022	1.28
6	30.06.2022	1.26
7	16.07.2022	1.22
8	31.07.2022	1.16
9	16.08.2022	1.13
10	31.08.2022	1.06
11	16.09.2022	1.04
12	30.09.2022	1.02

### Location: Near Magazine

RL - (+)42m

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

Debrit of	Mell - 20'0 III	
S. No.	Date of Monitoring	Water Level (m), bgl
1	16.04.2022	9.79
2	30.04.2022	9.65
3	16.05.2022	9.17
4	31.05.2022	9.02
5	16.06.2022	8.90
6	30.06.2022	8.94
7	16.07.2022	9,11
8	31.07.2022	8.86
9	16.08.2022	8.67
10	31.08.2022	8.63
11	16.09.2022	8.45
12	30.09.2022	8.20

### **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

Dapar or		
S. No.	Date of Monitoring	Water Level (m), bgl
· <u>j</u>	16.04.2022	6.10
2	30.04.2022	6.14
3	16.05.2022	6.20
4	31.05.2022	6.93
5	16.06.2022	7.91
6	30.06.2022	6.15
7	16.07.2022	5.52
8	31,07.2022	5.24
9	16.08.2022	4.94
10	31.08.2022	4.65
11	16.09.2022	4.76
12	30.09.2022	5,43

### THE RAMCO CEMENTS LIMITED, KSR NAGAR GROUND WATER QUALITY DATA - SURROUNDING VILLAGES PERIOD - APRIL -2022 to SEPTEMBER-2022

S. No	Parameter	Unit	Dharmavarapadu Thanda Bore Well Water: July-2022 to Sep-2022		K.Agraharam Bore Well Water: July- 2022 to Sep- 2022	Pochampalli Bore Well Water: July- 2022 to Sep- 2022	Jayanthipuram Bore Well Water: July- 2022 to Sep- 2022	Ravirala Bore Well Water: July-2022 to Sep-2022	Vedadri Bore Well Water: July-2022 to Sep-2022	Budawada Bore Well Water: July- 2022 to Sep- 2022	Jaggayyapet Bore Well Water: July- 2022 to Sep- 2022	Limits
<u></u>			Wi	W2	W3	W4	W5	W6	W7	W8	W9	
	p <sup>H</sup>	•	7.6	7.4	7.5	7.2	7.6	7.8	7.5	7.6	7.9	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	5-15
3	Temperature	°C	26,3	27.6	26,5	28,0	28,3	29.1	27,6	28.2	27.4	
4	Turbidity	NTU	1.0	1.2	1.1	1.3	1.7	1.8	1.4	1.6	1.9	1-5
5	Residual Chloride	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2-1
6	Dissolved Oxygen	mg/L	4.9	4.8	4.5	4.3	5.2	4.8	5,4	4,8	4.3	
7	Total Suspended Solids	mg/L	28,9	27.2	29.3	26,8	27.2	31,2	39,3	34,5	35.3	
8	Electrical Conductivity	µmhos/cm	912.0	868.0	939,0	823.0	929.0	861.0	886.0	899.0	736.0	
9	Total Dissolved Solids	mg/L	539.0	537,0	558.0	469.0	553.0	551.0	539.0	558.0	527,0	500-2000
10	Total Hardness (as CaCO <sub>3</sub> )	mg/L	238.0	269.0	288.0	212.0	296,0	231.0	269.0	262,0	251.0	200-600
11	Calcium Hardness	mg/L	135.0	131.0	139.0	102,0	174,0	151,0	163.0	137.0	111.0	
12	Magnesium Hardness	mg/L	102.0	119.0	129.0	135.0	129.0	113.0	138.0	131.0	119.0	
13	Calcium (as Ca)	mg/L	53.5	62.8	63.9	51.2	56.2	53.7	54.1	55.2	47,1	75-200
14	Magnesium (as Mg)	mg/L	32.7	25.1	26.3	25,1	31,2	18,2	25,2	29,1	23.6	30-100
15	Sodium (as Na)	mg/t.	45.1	44.6	48,2	39,1	55.3	42.9	47.1	48.4	36.2	-
16	Potassium (as K)	mg/L	1.7	4,1	7.6	1.9	2.7	3.8	5.8	2.9	2.8	-
17	Chloride (as CI)	mg/L	141.0	137.0	140.0	115.0	172.0	145,0	143,0	142,0	123.0	250-1000
18	Sulphate (as SO <sub>4)</sub>	mg/L	35.2	39,1	43.5	37,2	44.1	35.2	35.8	35.3	33.7	200-400
19	Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	140.0	134.0	109.0	115.0	132.0	129.0	131.0	134.0	99,1	200-600
20	BOD (for 3 days at 27 °C)	mg/L	<4.0	<4.0	<4.0	<4,0	<4,0	<4.0	<4.0	<4.0	<4.0	
21	Chemical Oxygen Demand	mg/L	17,2	25,1	28,4	21.2	. 21.8	21.3	19.9	18.2	17.3	
22	Oil & Grease	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	0.2	0.2	0.1	0.1	. 0,1	0,2	0.2	0.1 .	0.3
24	Fluoride (as F)	mg/L	0,2	0,2	0,3	0.3	0.2	0.2	0.3	0.3	0.3	1.0-1.5
25	Nitrate (as NO <sub>3)</sub>	mg/L	0.8	1.2	0.8	0.3	0.6	0.6	0.6	0,3	0,4	45,
26	Phosphates (as PO <sub>4)</sub>	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	,
27	Cyanide (as CN)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
28	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 C <sub>6</sub> H <sub>5</sub> OF	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
30	Manganese (as Mn)	mg/L	<0,01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
31	Chromium (as Cr <sup>+6)</sup>	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
32	Copper (as Cu)	mg/L	<0.01	<0.01	<0.01	<0,01	<0.01	<0.01	<0.01	<0.01	<0.01	1.5
33	Selenium as Se	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
-	Aluminium (as AI)	mg/L	<0.01	<0.01	<0.01	<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	
	Arsenic as As	mg/L	<0.01	<0,01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05-0.2
37	Boron (as B)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	2
38	Mercury (as Hg)	mg/L	<0.001	<0.001	<0.001	<0,001	<0.001	<0.001	<0.001	<0.001	<0.001	
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		mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0,01	<0,01	1.5 - 15
41	Percent Sodium	%	48.2	46.2	38.7	35,9	45,1	40,3	41,4	36.9	37.3	-
42	Total Coliforms	MPN/100 mL	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	50-5000
43	Faecal Coliforms	MPN/100 mL	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	-
44	E.Coil	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 -2022 to SEPTEMBER-2022

							<del>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</del>	·		· · · · · · · · · · · · · · · · · · ·	,	
S. No	Paramet <del>er</del>	Unit		Chiliakallu Open Well Water: April- 22 to June-22	K.Agraharam Bore Well Water: April- 22 to June-22	Pochampalii Bore Well Water: April-22 to June-22	Jayanthipuram Bore Well Water:April-22 to June-22	Ravirala Bore Well Water: April- 22 to June- 22	Vedadri Bore Well Water: April-22 to June-22	Bore Well	Jaggayyapet Bore Well Water:April-22 to June-22	Limits
			W1	W2	W3	W4	W5	W6	W7	W8	W9	
1	ρ <sup>H</sup>	-	7.6	7.6	7.5	7.6	7.6	7.7	7.5	7.6	7.8	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	5-15
3	Temperature	•℃	29.6	28.7	29.0	29.7	29.6	28.3	28.1	27.6	29.0	
4	Turbidity	NTU	1.5	1,3	1.6	1.8	1.3	1.6	1,3	1.5	1.1	1-5
5	Residual Chloride	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	4.7	3.8	3.6	3.6	4.3	4.5	4.9	4.6	4.8	
7	Total Suspended Solids	mg/L	29.3	28.3	33.8	24.5	25.6	33.8	29.8	30.6	34.2	
8	Electrical Conductivity	µmhos/cm	836.0	876.0	929.0	769.0	769.0	813.0	786.0	799.0	802.0	
9	Total Dissolved Solids	mg/t.	542.0	539.0	553.0	499.0	423.0	429.0	436.0	428.0	444.0	500-2000
10	Totai Hardness (as CaCO₃)	mg/L	241.0	255.0	296.0	181.0	189.0	222.0	196.0	201.0	236.0	200-600
11	Calcium Hardness	mg/L	141.0	139.0	145.0	112.0	149.0	156.0	143.0	158.0	161.0	
12	Magnesium Hardness	mg/L	112.0	122.0	136.0	113.0	40.0	66.0	53.0	43.0	75.0	
	Calcium (as Ca)	mg/L	53.5	62.3	63.9	45.2	52.6	50.2	54.1	52.9	45.6	75-200
	Magnesium (as Mg)	mg/L	33.6	23.6	24.1	23.6	33.9	19.2	24.5	28.9	22.3	30-100
	Sodium (as Na)	mg/L	45.3	44.1	49.6	36.2	55.1	41.2	45.1	43.8	33.6	-
	Potassium (as K)	mg/L	1.4	4.2	7.6	1.5	3.5	4,1	5.6	3.1	2.8	-
	Chloride (as CI)	mg/L	142,0	139.0	145.0	118.0	162.0	141.0	152.0	145.0	123.0	250-1000
	Sulphate (as SO <sub>4)</sub>	mg/L	38.6	43.6	43.9	34.6	43.6	34.8	35.1	36.2	33.9	200-400
$\vdash$	Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	128.0	131.0	111.0	124.0	129.0	122.0	106.0	101.0	95.8	200-600
$\vdash$	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	
$\vdash$	Chemical Oxygen Demand	mg/L	16,2	23.5	33.8	19.6	21.2	23.9	24.8	20.1	19.6	
	Oil & Grease	mg/L	<1.0	<1.0	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
├	Iron (as Fe)	mg/L	0.17	0.15	0.22	0.09	0.17	0.09	0.13	0.18	0.06	0.3
	Fluoride (as F)	mg/L	0.23	0.19	0.25	0.25	0.39	0.31	0.20	0.23	0.25	1.0-1.5
	Nitrate (as NO <sub>31</sub>	mg/L	0.79	1.34	0.88	0.36	0.53	0.65	0.57	0.23	0.20	45
	Phosphates (as PO <sub>4)</sub>	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
27	Cyanide (as CN)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
$\vdash$	Pesticides (as Malathoin)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
<b></b>	Phenolic Compounds (as	<u> </u>		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
29	C <sub>6</sub> H <sub>5</sub> OH)	mg/L	<0.01		<del> </del>				<b></b>	<b> </b>		
	Manganese (as Mn)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
<b></b>	Chromium (as Cr <sup>+6)</sup>	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		1.5
$\vdash$	Copper (as Cu)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	Selenium as Se	mg/L	<0.01	<0.01	<0.01	<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	
⊢	Cadmium (as Cd)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05-0.2
	Arsenic as As	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	2
-	Boron (as 8)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
	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	<0.01	<0.01	<0.01	0.1
	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 - 15
	Percent Sodium	%	48.6	43.5	39.1	39.0	43.7	40.2	36.9	35.1	36.8	-
	Total Coliforms	MPN/100 ml	<del> </del>	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	50-5000
-	Faecal Coliforms	MPN/100 ml	<del> </del>	Nil	Nil	NH	Nil	Nil	NII	Nil	Nil	
44	E.Coll	MPN/100 ml	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	

## THE RAMCO CEMENTS LIMITED, KSR NAGAR JAYANTHIPURAM LIMESTONE MINE (NORTH BAND) SURFACE WATER QUALITY DATA PERIOD - APRIL -2022 to SEPTEMBER-2022

and the second

S. No	Parameter	Unit	Nallah Upstream: April-2022 to June-2022	Nallah Downstream: April-2022 to June-2022	Nallah Upstream: July-2022 to Sep-2022	Nallah Downstream: July-2022 to Sep-2022	Limits
1	p <sup>H</sup>	-	7.37	7.47	7.34	7.41	6.5 - 8.5
2	Colour	Hazen	<2.0	<2.0	<2.0	<2.0	10-30
3	Temperature	°C	28.90	27.90	28.3	29.30	
4	Turbidity	NTU	2.30	2.20	2.00	2.00	
5	Residual Chloride	mg/L	<0.1	<0.1	<0.1	<0.1	
6	Dissolved Oxygen	mg/L	4.00	4.30	3.30	3.50	4.02 - 6.0
7	Total Suspended Solids	mg/L	45.20	38.30	46,80	42.30	<b>~~</b>
8	Electrical Conductivity	µmhos/cm	745.00	823.00	756.00	839.00	
9	Total Dissolved Solids	mg/L	383.00	551.00	4.30	529.00	500-2100
10	Total Hardness (aș CaCO <sub>3</sub> )	mg/L	179.00	282.00	181.00	274.00	
11	Calcium Hardness	mg/L	93.10	145.00	95.10	139.00	
12	Magnesium Hardness	mg/L	85.20	123.00	86.20	119.00	
13	Calcium (as Ca)	mg/L	34.90	57.30	37.30	55.20	
14	Magnesium (as Mg)	mg/L	19.20	25.20	18.40	23.20	
15	Sodium (as Na)	mg/L	34.10	53.90	33.90	54.20	
16	Potassium (as K)	.mg/L	1.02	1.12	1.02	1,06	
17	Chloride (as Cl)	mg/L	95.20	13.40	92.30	129.00	250 - 600
18	Sulphate (as SO <sub>4)</sub>	mg/L	29.10	43.60	28.30	41.60	400 - 1000
19	Total Alkalinity (as CaCO₃)	mg/L .	85.10	119.00	86.20	119.00	
20	BOD (for 3 days at 27 <sup>o</sup> C)	mg/L	<1.0	<1.0	<1.0	<1.0	2 - 3
21	Chemical Oxygen Demand	mg/L	28.20	28.90	27.20	29.10	
22	Oil & Grease	mg/L	<0.1	<0.1	<0.1	<0.1	
23	Iron (as Fe)	mg/L	0.21	0.27	0.20	0.21	0.3 - 5.0
24	Fluoride (as F)	mg/L	0.29	0,61	0.34	0.80	1.0-1.5
25	Nitrate (as NO <sub>3)</sub>	mg/L	0.90	1.30	0.90	1.20	20 - 50
26	Phosphates (as PO <sub>4)</sub>	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 <sub>6</sub> H <sub>5</sub> 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 <sup>+6)</sup>	mg/L	<0.01	<0.01	<0.01	<0.01	bi-st
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	%	36.80	39.20	37.90	39,10	
42	Total Coliforms	MPN/100 mL	74.30	85.20	73.70	87.20	50-5000
43	Faecal Coliforms	MPN/100 mL	28.90	33.60	29.60	34.10	
44	E.Coil	MPN/100 mL	21.00	29.00	23.00	28.00	

# THE RAMCO CEMENTS LIMITED, KSR NAGAR JAYANTHIPURAM LIMESTONE MINE (NORTH BAND) AMBIENT AIR QUALITY MONITORING DATA - CORE ZONE PERIOD - APRIL -2022 to SEPTEMBER-2022

		Limit		100	60	80	80	2000	100	. 60	80	80	2000	100	9	80	80	2000	100	. 60	80	80	2000
		er-2022	II FORT NIGHT	55.9	22.6	16.3	18.9	559	53.6	21.8	16.5	19.4	536	56.8	23.2	15.9	18.6	551	58.1	23.8	16.8	19.8	553
		September-2022	I FORT NIGHT	55.1	22.4	15.9	18.4	536	57.9	23.7	15.8	18.6	548	52.6	21.4	16.3	19.2	536	55.1	22.3	16.2	19.3	529
		-2022	II FORT NIGHT	53.9	21.9	15.6	18.1	526	55.1	22.6	15.3	18.1	531	50.6	20.6	15.9	18.8	529	53.8	21.7	15.8	18.9	542
		August-2022	I FORT NIGHT	53.8	21.7	15.4	18.0	542	52.9	21.5	16.1	19.0	523	54.6	22.3	15.8	18.5	541	56.3	23.0	16.5	19.5	548
		2022	II FORT NIGHT	50.9	20.7	13.9	16.4	502	53.6	22.0	15.1	17.9	537	49.6	20.2	14.2	17.1	512	50.4	20.4	15.4	18.5	501
	_	July-2022	I FORT NIGHT	50.9	20.6	16.2	18.8	501	53.6	21.8	17.3	20.2	489	51.2	20.9	15.9	18.6	486	50.8	20.8	15.6	18.6	511
	Month	2022	II FORT NIGHT	65.2	26.5	17.1	19.6	556	68.2	28.0	15.4	18.2	539	63.9	26.0	16.9	19.8	542	64.6	26.1	14.3	17.4	559
,		June-2022	I FORT NIGHT	62.9	26.6	18.2	20.8	559	63.6	25.8	17.3	20.2	563	67.1	27.4	18.9	21.6	542	60.2	24.6	17.6	20.6	512
-		2022	II FORT NIGHT	72.9	29.6	16.9	19.4	629	74.3	30.5	15.3	18.1	653	70.2	28.6	17.1	20.0	636	71.9	29.0	16.9	20.0	654
		May-2022	I FORT NIGHT	73.4	29.7	19.3	21.9	999	72.9	29.6	18.2	21.1	639	74.3	30.4	19.3	22.0	661	70.2	28.7	18.4	21.4	674
		2022	II FORT NIGHT	65.1	26.4	15.4	17.9	636	66.8	27.4	16.3	19.1	628	62.9	25.6	15.9	18.8	612	67.3	27.2	16.2	19.3	653
		April-2022	I FORT NIGHT	69.3	28.0	16.1	18.7	628	67.1	27.2	15.9	18.8	909	65.2	26.7	16.8	19.5	609	63.8	26.1	16.6	19.6	641
-		Parameter	<b>I</b>	PM 10	PM 2.5	SO <sub>2</sub>	NO <sub>X</sub>	00	PM 10	PM 2.5	SO <sub>2</sub>	NO <sub>x</sub>	00	PM 10	PM 2.5	SO <sub>2</sub>	NO <sub>x</sub>	00	PM 10	PM 2.5	SO <sub>2</sub>	NO <sub>x</sub>	00
		Location		<u>a.</u>	<u> </u>	Mines office S	Z	U	<u>a.</u>		NB-Weigh So		O	<u>a.</u>	<u>a.</u>	Rest hall S	Z	O	Ā		Magazine Si Area	Z	O

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

### THE RAMCO CEMENTS LIMITED, KSR NAGAR AMBIENT AIR QUALITY MONITORING DATA - BUFFER ZONE VILLAGES PERIOD - APRIL -2022 to SEPTEMBER-2022

						-	Month	······		***************************************				
	Dovernotor	April-	2022	May-	2022	June	2022	July-	2022	Augus	t-2022	Septemi	ber-2022	Limit
Location	Parameter .	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	E111112
	PM 10	56.3	53.2	60.6	55.9	53.9	49.6	50.6	42.9	52,3	45.3	53.9	53.6	100
	PM 2.5	22.9	21.4	24.6	22.5	21.9	20.0	20.5	17.3	21.2	18.3	21.9	21.6	60
Dharmavarapupadu Tanda	SO₂	14.5	15.2	15.7	16.8	14.3	14.3	12.1	11.2	13.2	13.9	14.1	14.2	80
	NO <sub>X</sub>	17.1	17.9	18.3	19.5	16.9	17.0	14.7	13.9	15.8	16.6	16.7	16.9	80
	co	221.0	224.0	236.0	236.0	248.0	212.0	213	198.0	231.0	221.0	246.0	232.0	2000
	PM 10	59.1	55.1	62.3	57.3	52,7	52.3	48.3	43,8	50.4	45.2	51.6	55.1	100
	PM 2.5	23.7	22.5	25.0	23.4	21.1	21.3	19.4	17.9	20.2	18.4	20.7	22.5	60
Jayanthipuram	SO₂	13.9	15.3	15.6	16.1	15.2	15.9	13.2	10.9	12.9	11.6	13.5	12.8	80
	NO <sub>x</sub>	16.8	18.2	18.5	19.0	18.1	18.8	16.1	13.8	15.8	14.5	16,4	15.7	80
	CO	252.0	253,0	242.0	269.0	253.0	253.0	221	187.0	238.0	229.0	252.0	241.0	2000
	PM 10	57.6	56.8	61.3	60.2	54.6	58.2	47.6	50.6	49.3	53.1	51.8	54.6	100
	PM 2.5	23.3	23.0	24.8	24.4	22.1	23.6	19.2	20.5	19.9	21.5	20.9	22.1	60
Chillakallu	SO <sub>2</sub>	14.6	15.9	16.3	16.3	16.2	14.6	11.9	11.1	12.4	11.8	12.6	12.9	80
	NO <sub>x</sub>	17.3	19.0	19.0	19.4	18.9	17.7	14.6	14.2	15.1	14.9	15.3	16.0	80
	co	249.0	258.0	281.0	246.0	296.0	241.0	212	201.0	239	234.0	247.0	236.0	2000
	PM 10	54.5	57.3	56.2	61.3	53,5	59.5	41.2	52.7	43.6	54.1	45.9	57.9	100
	PM 2.5	22.0	23,4	22.6	25.0	21.6	24.3	16.6	21.5	17.6	22.1	18.5	23.6	60
K.Agraharam Village	SO <sub>2</sub>	15.8	15.6	16.9	16.9	15.3	17.3	10.6	12.3	11.6	12.5	13.7	13.5	80
village	NO <sub>x</sub>	18.9	18.0	20.0	19.3	18.4	19.7	13.7	14.7	14.7	14.9	16.8	15.9	80
	со	251.0	246.0	274.0	289.0	283.0	276.0	237	212.0	246	238.0	249.0	245.0	2000
	PM 10	56.8	68.2	58.9	70.2	49.6	68.3	43.1	61.9	45.1	63.8	46.2	53.6	100
•	PM 2.5	23.3	27.6	24.2	28.4	20.4	27.6	17.7	25.0	18.5	25.8	19.0	21.7	60
Jaggayyapet	SO <sub>2</sub>	14.9	15.8	16.7	16,4	15.9	15.4	11.2	11.2	12.3	11.9	13.8	12.6	80
•	NO <sub>x</sub>	17.3	18.8	19.1	19.4	18.3	18.4	13.6	14.2	14.7	14.9	16.2	15.6	80
	co	253.0	301.0	263.0	321.0	274.0	302.0	221.0	214.0	229	226.0	239.0	233.0	2000
	PM 10	62.3	57.3	65.3	59.3	50.6	57.6	45.2	55.4	47.2	57,1	48.3	58.3	100
	PM 2.5	24.6	23.6	25.8	24.4	20.0	23.7	17.9	22.8	18.6	23.5	19.1	24.0	60
Budawada	SO <sub>2</sub>	14.7	15.3	15.3	16.7	16.2	14.6	12.3	12,9	12.8	12.6	13.1	12.7	80
	NO <sub>x</sub>	17.5	17.9	18.1	19.3	19.0	17.2	15.1	15.5	15.6	15,2	15.9	15.3	80
	co	265.0	253.0	279.0	263.0	289.0	248.0	245.0	222.0	253	241.0	256.0	248.0	2000
	PM 10	59.5	55.1	63.2	57.1	48,3	53.2	47.3	47.9	48.6	49.6	49.6	52.7	100
	PM 2.5	24.3	21.9	25.8	22.7	19.7	21.2	19.3	19.1	19.8	19.7	20.2	21.0	60
Vedadri	SO <sub>2</sub>	15.8	16.3	16.8	17.1	15.4	15.3	10.6	12.3	11.6	12.8	12.9	13.1	80
	NO <sub>X</sub>	18.1	19.1	19.1	19.9	17.7	18.1	12.9	15.1	13.9	15.6	15.2	15.9	80
	co	263.0	247.0	286.0	258.0	291.0	246.0	214.0	211.0	218	223.0	238.0	247.0	2000
	PM 10	60,2	59.6	62.3	62.3	51.2	59.3	41.8	50.6	44.1	52.1	45.3	55.1	100
	PM 2.5	24.6	24.2	25.5	25.3	20.9	24.1	17.1	20.5	18	21.2	18.5	22.4	60
Pochampalli	SO <sub>2</sub>	16.2	15.8	16.9	16.3	15.3	14.9	11.1	11.6	11.5	12.1	12.6	13.7	80
•	NO <sub>X</sub>	19.1	18.1	19.8	18.6	18.2	17.2	14.0	13.9	14.4	14.4	15.5	16.0	80
	CO	264.0	256.0	274.0	262.0	283.0	236.0	215.0	199.0	221	212.0	241.0	215.0	2000
	PM 10	58.3	57,3	60.9	60.9	52.8	58.2	40.9	48.3	43.9	49.8	44.9	52.9	100
	PM 10	23.7	23.4	24.8	24.8	21.5	23.7	16.6	19.7	17.9	20.3	18.3	21.6	60
Ravirala	SO <sub>2</sub>	15.3	16.8	17.1	17.4	16.2	14.6	12.4	10.9	12.9	11.6	13.7	12.9	80
	NO <sub>x</sub>	18.3	19.7	20.1	20.3	19.2	17.5	15.4	13.8	15.9	14.5	16.7	15.8	80
	IVOX	10.3	13.7	20.1	20,5	<del>                                     </del>	<del></del>	1 17.7	1 20.0	<del> </del>	1 - ,,,,	<b>!</b>	<del> </del>	<del>                                     </del>

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

Annexure: 💯

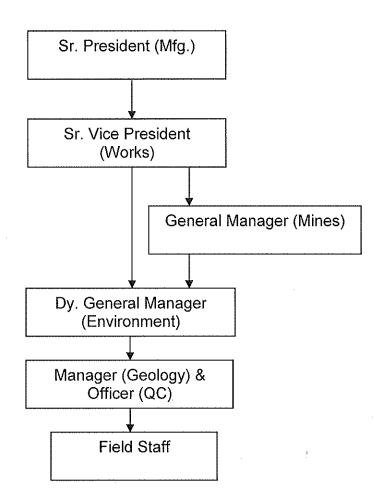
### THE RAMCO CEMENTS LIMITED, KSR NAGAR NOISE LEVEL MONITORING - JAYANTHIPURAM LIMESTONE MINE (NORTH BAND) PERIOD - APRIL -2022 to SEPTEMBER-2022

SI.	Date of	Manchina /		Noise Va	lue dB(A)	
No	monitoring	Machine / Location	Day time (6AM to 10PM)	Permissible Limit dB(A)	Night time (10PM to 6AM)	Permissible Limit dB(A)
1	28.09.2022	Drilling area	71.6	< 75	63.9	< 70
2	28.09.2022	Loading area	73.4	< 75	63.8	< 70
3	28.09.2022	Haul road	72.9	< 75	61.6	< 70
4	28.09.2022	Unloading area	71.6	< 75	63.9	< 70
5	28.09.2022	Mines office	53.9	< 75	37.6	< 70
6	28.09.2022	Crusher Hopper	63.4	< 75	53.6	< 70
7	28.09.2022	Sub Station	61.9	< 75	53.1	< 70
8	28.09.2022	Pump House	70.2	< 75	60.6	< 70
9	28.09.2022	Weigh Bridge	64.1	< 75	52.7	< 70
10	28.09.2022	PMC Camp	54.9	< 75	43.8	< 70

# THE RAMCO CEMENTS LIMITED, KSR NAGAR AUTO GARAGE OIL & GREASE TRAP OUTLET WATER QUALITY DATA Period - April 2022 to September 2022

				A LA DAVINGE PARAMONTAL PROPERTY OF THE PROPER	Month	th			Range /	
S. No	S. No Parameter	Unit	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Average	Norm
<b>,</b>	H.O.		7.79	7.83	7.91	7.99	7.91	7.84	7.79 - 7.99	5.5 - 9.0
, 4	2 Total Dissolved Solids	mg/L	912	923	936	926	938	921	929	2100
.,	3 Total Suspended Solids	mg/L	77.3	78.9	79.6	78.3	76.9	75.4	77.8	100
7	4 Chemical Oxygen Demand mg/L	mg/L	129	136	129	132	129	136	132	250
	5 BOD (for 3 days at 27 °C) mg/L	mg/L	40.6	42.3	41.6	40.3	42.3	43.1	41.9	100
	6 Oil & Grease	mg/L	2.4	2.7	2.5	2.7	2.5	2.7	2.6	10

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



# THE RAMCO CEMENTS LIMITED JAYANTHIPUAM GROUP OF LIMESTONE MINES ENVIRONMENTAL PROTECTION ACCOUNT - CAPITAL & RECURRING EXPENDITURE DETAILS

	-	<sub>G</sub>	2	ရွ	٥	00	000	900
Projected for 2023-24, Lakh Rs.	Total	26.50	50.00	6.300	1.80	26.000	200.000	310.600
	Ramco Budawada Limestone Mine (RF)	0.50	1.00	1.30	0.10	5.00	0.00	7.90
	Ravírala Limestone Mine (Forest)	8.00	20.00	1.60	0.70	4.00	0.00	34.30
	Jayanthipuram Limestone Mine (South Band)	6.00	7.00	1.60	0.40	10.00	0.00	25.00
For the year 2022-23, Lakh Rs.	Jayanthipuram Limestone Mine (North Band)	12.00	22.00	1.80	09:0	7.00	200.00	243.40
	Total	24.070	57.14	6.124	1.22	35.550	410.690	534.79
	Ramco Budawada Limestone Mine (RF)	2.13	4.18	1.29	0.05	8.37	0.00	16.02
	Ravirala Limestone Mine (Forest)	5.96	16.71	1.55	0.37	5.93	0.00	30.52
	layanthipuram Jayanthipuram imestone Mine (North Band) (South Band)	3.75	7.32	1.59	0.2.0	12.45	00.0	25.31
	Jayanthipuram Limestone Mine (North Band)	12.23	28.93	1.71	0.60	8.80	410.69	462.96
Description		Pollution Control - Nonel detonators	Pollution Control - Water Sprinkling	Pollution Monitoring	Wet drilling	Greenbelt	Reclamation	Total
i	Capital / Recurring	Recurring						