







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

## THE RAMCO CEMENTS LIMITED

RCL/MoEF&CC/R. RF-239/271

Dt.20.11.2024

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 Reports for Environmental Clearance orders Sub: for Ravirala Limestone Mine (RF) of The Ramco Cements Limited for the period from April 2024 to September 2024 - Reg.

1. EC Lr. No. SEIAA/AP/MIN/KRI/07/2020/1973/174.80 & 171.63 dated 05.03.2022. Ref: 2. EC Lr. No. J-11015/149/2008-IA II (M) dated 26.08.2009.

3. EC Lr. No. J-11015/18/2000-IA.II (M) dated 16.10.2002.

We are herewith submitting the Half-Yearly Compliance Reports for above cited Environmental Clearance orders for the period from April 2024 to September 2024 along with relevant enclosures for our Ravirala Limestone Mine (RF) 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,

ASHISH KUMAR SRIVASTAVA

President (Mfg.)

Encl.: a.a

Cc to: Central Pollution Control Board, No. 77A, 2nd Floor, South Avenue Road, Ambattur Industrial Estate, Chennai - 600 058.

State Level Environment Impact Assessment Authority (SEIAA), AP Markfed Building, APIIC Colony, Jawahar Auto Nagar, Vijayawada.

## HALF-YEARLY COMPLIANCE REPORT

Environmental Clearar Letter/s No. and Date	SEIAA/AP/MIN/KRI/07/2020/1973/174.80 & 171.63 and dated 05.03.2022	
Name of the Project	The Ramco Cements Limited (Formerly Madras Cements Ltd.,), Ravirala Limestone Mine (RF) — 1.20 to 2.75 Million TPA Capacity of Limestone	
Period of Compliance Report	April 2024 to September 2024	

## A. Special Conditions:

S.No.	Condition	Compliance Status
i	The proposal shall not attract the following acts & Rules:	
	a. Forest Act 1980,	a. The entire mining lease area is under Reserve Forest. Hence, a corrigendum request is made for this EC condition to exclude 'Forest Act 1980', from this list, vide our letter No. RCL/SEIAA/74/2021-2022 dated 09.03.2022.
	b. Wild life (Protection) Act,1972;	b. 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.
	<ul> <li>c. CRZ Notification, 2011;</li> <li>d. The Eco sensitive areas as notified under Environment (Protection) Act,1986;</li> </ul>	c. Not applicable d. Not applicable
	e. Critically polluted areas as notified by CPCB and also shall not harm live stocks and human beings and disturb their activities.	e. Not applicable
ii	The total production during a scheme should be limited to the approved quantity as per Mining scheme / plan.	Being complied. Total production in the financial year 2023-2024 is 27,34,000 Tonne as against the approved mining plan production of 27,50,000 Tonne.
• • • • • • • • • • • • • • • • • • • •	The project proponent shall maintain the setback distance 7.5 meters buffer zone all around the mine lease area for greenbelt development and other conditions are to be fulfilled.	Being complied. Greenbelt is being developed in this setback distance of 7.5 m buffer zone all around the mine lease boundary.

S.No.	Condition	Compliance Status
iv	The avenue plantation (tall plants), of at least 1.5 m height, for 1 km length of the approach road on either side of the road is to be developed and maintained. The entire plantation is to be completed in the first year itself.	Being complied.  Avenue plantation of at least 1.5 m height on the approach road on either side of the road is being developed and maintained.
٧	The proponent is advised to ensure safety to animal and public life.	<ul> <li>Being complied.</li> <li>The nearest habitation from this mining lease is 1.9 km from the boundary of this mining lease.</li> <li>All safety precautions are being taken for safety of animal and public life is being ensured.</li> </ul>

## **B. Specific Conditions:**

S.No.	Condition	Compliance Status
1	The proponent shall comply with the mining methodology mentioned in approved mining plan and Form - I.	Being complied.  Mining is being carried out as per approved mining plan & as per Form - I.
ii	Greenbelt shall be developed along the boundary of mining lease area and also in back filled and reclaimed areas with tall growing native species in consultation with the local DFO / Agriculture Department. The proponent of mine shall carry mining operations in such a manner so as to cause least damage to the flora of the mining area and nearby areas. He shall take immediate measures for planting in the same area or any other area selected by authorities not less than twice the number of trees going to be felled by mining operations. He shall also take measures for restoration of other flora / fauna if damaged by mining operations. In case any felling or damage to fauna and flora is involved, prior permission shall be taken from the concerned regulatory authority, by the proponent, without which mining shall not be taken up.	<ul> <li>Greenbelt is being developed along the Lease boundary.</li> <li>Presently there is no backfilling area and greenbelt will be developed on backfilled area in due course of time with native species in consultation with DFO / Agriculture department.</li> <li>All precautions are being taken for not damaging the flora and fauna in the mining area and nearby areas.</li> <li>While obtaining the Forest Clearance towards Compensatory Afforestation Scheme, an area of 61.54 Ha handed over to Forest department as Compensatory Afforestation area (CA) at Azmapuram village of Pedda Adisarpally Mandal in Nalgonda District and paid an amount of Rs. 26.63 lakh, for afforestation scheme.</li> <li>Forest clearance is obtained vide order No. 8-87/99-FC dated 20.03.2001.</li> </ul>
	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shouldbe provided and properly maintained.	<ul> <li>Being complied.</li> <li>Fugitive dust emissions are being controlled regularly.</li> <li>Water spraying being done on haul roads, loading, unloading and transfer</li> </ul>

S.No.	Condition	Compliance Status
		<ul> <li>points and the same will be continued.</li> <li>Compiled data on fugitive dust monitoring for the period from April 2024 to September 2024 is enclosed as Annexure – I.</li> <li>Dedicated concrete road is made for haul road to control fugitive dust emissions.</li> </ul>
iv	The proponent shall take appropriate measures to ensure that the GLC shall comply with the revised NAAQ norms notified by MoE&F, GoI on 16.11.2009.	<ul> <li>Proper measures being taken to ensure the GLC as per revised NAAQ norms.</li> <li>Ambient air quality monitoring is being done in Core and Buffer zones of the lease by MoEF&amp;CC approved external environmental monitoring agency for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NOx monitoring.</li> <li>Data of the Ambient Air Quality is being submitted to the Regional Office, MoEF&amp;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 – II. As per the data, the ground level concentrations are within the NAAQ norms notified by MoEF&amp;CC, GOI dated 16.11.2009.</li> </ul>
V	The following measures are to be implemented to reduce air pollution during transportation of mineral:-	
	<ul> <li>Roads shall be graded to mitigate the dust emission.</li> </ul>	Roads are graded to mitigate the dust emissions. Dedicated concrete road is made for haul road to control fugitive dust emissions.
	<ul> <li>Regulatory Authority prior concurrence shall be taken for this activity.</li> </ul>	Is being followed.
	<ul> <li>Water shall be sprinkled at regular interval on the main haul road and other service roads by water sprinklers to suppress dust.</li> </ul>	Water is being sprinkled at regular intervals on the main haul road and other service roads by mobile water sprinklers to suppress dust.
vi	The following measures are to be implemented to reduce Noise pollution:-	Regular maintenance of vehicles and other
	<ul> <li>Proper and regular maintenance of vehicles and other equipment.</li> </ul>	equipment is being done.
	<ul> <li>The proponent shall ensure that there shall be no excessive noise, while taking up mining activity.</li> </ul>	All precautions are being taken to reduce the noise levels, within the stipulated limits.
	<ul> <li>Limiting time exposure of workers to</li> </ul>	Rotation of workers is being made to limit

S.No.	Condition	Compliance Status
J. T. T.	excessive noise.	the time exposure of workers to excessive
	CACCOUNT HONCE	noise levels.
	• The workers employed shall be	Being complied.
	provided with protection equipment	Necessary personal protective
	and earmuffs etc.	equipments (such as earmuffs,
	and carmans etc.	earplugs, etc.,) are being provided to
		workers exposed to noise levels and
		ensured for wearing of the same.
		Compiled data of Noise levels
· ·		measured in the period April 2024 to
		September 2024 is enclosed as
		Annexure – III.
	Sured of trucks ontoring or leaving the	Speed of the trucks entering or leaving the
	<ul> <li>Speed of trucks entering or leaving the mine is to be limited to moderate</li> </ul>	mine is being limited to moderate speed of
		25 kmph to prevent undue noise from the
	speed of 25 kmph to prevent undue	empty trucks.
	noise from empty trucks.	Being complied.
vii	Measures should be taken to comply with	<ul> <li>Measures are being taken to comply</li> </ul>
	the provisions laid under Noise Pollution	
	(Regulation and Control) (Amendment)	Pollution (Regulation and Control)
	Rules, 2010; dt. 11.01.2010 issued by the	, –
	MoE&F, GOI to control noise to the	
	prescribed levels. Workers engaged in operations of HEMM, etc should be	11.01.2010 issued by the MoEF&CC, GOI to control noise to the prescribed
		1
	provided with ear plugs / muffs. Regulatory	1
	authority instructions be taken if there are	
	any better alternatives.	equipments (such as earmuffs, earplugs, etc.,) are being provided to
		workers exposed to noise levels and
		ensured for wearing of the same.
		<ul> <li>Instructions of the Regulatory authority</li> </ul>
		1 I
	The second shall and tale are printed	are being followed.  Being complied.
viii	The proponent shall not take-up mining	
	activity unless he obtains the safety	
	clearance certificate from the Govt.	under MMR 1961.
	competent authority.	unuel Minik 1901.
2)	Water Pollution	The service of water is Ading Dit Water
i	As per records the source of water is Bore	
	well. Total water requirement is 180 KLD,	· · · · · · · · · · · · · · · · · · ·
	Out of that, 150 KLD is used for Water	. <b>.</b>
	sprinkling on haul roads / dust suppression;	· ·
	20.0 KLD is used for Development of green	
	belt; 10.0 KLD is used for Domestic & others	
	purpose.	• The quantity of water requirement is
		being adhered to 180 kLD, while
		implementing this expansion project.
ii	Garland drain and siltation ponds of	_ ·
	appropriate size should be constructed for	<ul> <li>Garland drain of a cumulative length of</li> </ul>

S.No.	Condition	Compliance Status
	the working pit to arrest flow of silt and sediment. The water so collected should be utilized for watering the mine area, roads, greenbelt development etc. The drains should be regularly desilted, particularly after monsoon, and maintained properly. Prior concurrence of Regulatory Authority concerned shall be taken for this activity before taking up mining.	<ul> <li>2651 m with a size of 2.0m*1.0m has been made towards the Southern lease boundary as well as all along the bottom of the waste dump. Garland drain made all along the Temporary dump with a length of 810 m.</li> <li>The drains follow the natural slope with a gradient about 1 in 100 ultimately leading to the desilting sump.</li> <li>A mine sump is made to settle the suspended solids in the water. The water collected is being utilized for dust suppression in the mine area, haul roads and for greenbelt development, etc. within lease area and for irrigation purposes.</li> <li>The drains are being regularly de-silted and maintained. Desilting is being carried out regularly. During the year 2024-2025, desilting was carried out during the month of May 2024 and a quantity of 26 tonne generated.</li> </ul>
	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells by the project proponent in and around project area in consultation with Regional Director, CGWB, Southern Region, Hyderabad. Data thus collected should be sent at regular interval to MoEF, CGWA and CGWB, Southern, Region, Hyderabad.	<ul> <li>Being complied.</li> <li>4 Nos. of piezometers (3 Nos. are automatic and 1 No. is manual) are used to monitor ground water levels.</li> <li>There is no contamination and depletion has observed due to mining activity.</li> <li>Ground water quality (in the nearby villages) is being analysed by MoEF&amp;CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad).</li> <li>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 – IV.</li> </ul>
iv	Suitable conservation measures to augment groundwater resources in the area shall be planned and implemented in consultation with Regional Director, CGWB, Southern Region, Hyderabad. Suitable measures should be taken for rainwater harvesting in consultation with concerned Regulatory	Being complied.  48 Nos. of rain water harvesting pits are made at colony & 4 Nos. of rain water harvesting pits are made at associated cement plant for roof top collection to recharge ground water table.

S.No.	Condition	Compliance Status
	Authority.	
V	Permission from the competent authority should be obtained for drawl of ground water, if any, required for this project.	Being complied. Obtained NOC from Panchayat Raj & Rural Development department, Government of AP (nodal agency for Central Ground Water Authority) to utilize mine seepage water, vide Lr. No. PRR05-11028/15/2018-SLNA-GIS-CORD dated 02.01.2024, which is valid up to 01.01.2026 for this mining lease to utilize mine seepage at the rate of 180 kLD.
3)	Solid Waste	
i	Topsoil, if any, shall be stacked properly with proper slope with adequate measures and should be used for plantation purpose.	Not applicable as there is no top soil.
ii	<ul> <li>The following measures are to be adopted to control erosion of dumps:         <ul> <li>Retention / toe walls shall be provided at the foot of the dumps.</li> </ul> </li> <li>Worked out slopes are to be stabilized by planting appropriate shrub / grass species on the slopes.</li> <li>Regulatory Authority prior concurrence</li> </ul>	<ul> <li>One in-active dump is available in this mine and retaining bund is provided all along the dump toe.</li> <li>Plantation with native plants is done as part of stabilization on steps made at regular interval and also spreading seeds on these steps to allow natural growth of plant, so to prevent erosion.</li> <li>Vegetation on the top and slopes of</li> </ul>
	shall be taken for this activity.	the dump is under progress, to prevent erosion.
iii	Waste oils, used oils generated from the EM machines, mining operations, if any, shall be disposed as per the Hazardous Wastes (Management, Handling, and transboundary movement) Rules, 2008 and its amendments thereof to the recyclers authorized by APPCB. APPCB shall monitor this aspect at regular intervals to prevent any harm to life and the proponent on his part, shall ensure that this activity shall be taken up regularly under the guidance of Regulatory Authority, as decided by that Authority.	Being complied.  Waste oils and used oils generated from the EM machines, mining operations, is being used in cement plant for kiln light-up or being disposed to APEMC authorized vendors.
iv	The proponent will be squarely responsible for proper implementation of solid waste management plan, prevention of air pollution, water pollution, and any other kind of pollution / health hazard.	Being complied.  Solid waste is only overburden (OB), which is being dumped separately with proper slope & adequate safeguards and will be utilized for reclamation.  Reclamation will be done as per the approved mining plan.

S.No.	Condition	Compliance Status
S.INO.	Condition	<ul> <li>Plantation with native plants is done as part of stabilization on steps made at regular interval and also spreading seeds on these steps to allow natural growth of plant, so to prevent erosion.</li> <li>Vegetation on the top and slopes of the dump is under progress, to prevent erosion.</li> <li>Garland drain of a cumulative length of 2651 m with a size of 2.0m*1.0m has been made towards the Southern lease boundary as well as all along the</li> </ul>
		bottom of the waste dump. Garland drain made all along the Temporary
		dump with a length of 810 m.

## C. General Conditions:

S.No.	Condition	Compliance Status
	This order is valid for a period of 7.87 years or the expiry date of mine lease or land lease period issued by the Government of A.P., whichever is earlier.	<ul> <li>Part of the Mining Lease is covered with overburden dump. After removing this overburden dump for reclamation, detailed exploration will be carried out in this area. Accordingly, the reserves will be updated and the life of the mine will get increased.</li> <li>Corrigendum request is made for this EC condition vide our Lr. No. RCL/SEIAA/74/2021-2022 dated 09.03.2022 (which is under process), to modify this condition as:         <ul> <li>This order is valid for a period as per the life of mine approved by IBM or the expiry date of mine lease or land lease period issued by the Government of AP, whichever is earlier.</li> </ul> </li> </ul>
	While giving CFE / CFO, the APPCB is to kindly ensure compliance of guidelines issued in G.O RT No 239 dt 16.04.2020 and Memo. No/ covid-19/2020/HMFW dt 18.04.2020 issued by Medical, Health and Family welfare department, Government of AP and the Ministry of Home Affairs order No 40-3/2020/DM-DA dt 15.04.2020 scrupulously.	Noted.

S.No.	Condition	Compliance Status
iii	The proponent shall scrupulously follow any conditions stipulated by Revenue department / Panchayat Raj / Municipal administration / local self government bodies (Gram panchayat / Gram secretariat) in ensuring safety to human and animal life. The APPCB to ensure the same while according CFE / CFO. The APPCB to ensure the samewhile according CFE / CFO.	Noted and will be adhered to.
iv	Proponent shall ensure that there is no disturbance to flora and fauna. Serenity of nature must be protected at any cost.	<ul> <li>Being complied.</li> <li>The nearest habitation from this mining lease is 1.9 km from the boundary of this mining lease.</li> <li>All safety precautions are being taken to prevent disturbance to the flora and fauna.</li> <li>Serenity of nature is being protected.</li> </ul>
V	In respect of government land for mining, the responsibility fixed on AD mines to check whether necessary clearances from revenue department are obtained.	Not applicable, as this mining lease is reserve forest.
vi	In case of patta land while granting mine lease ADMG should verify the land lease documents.	Not applicable, as this mining lease is reserve forest.
vii	In respect of forest land given in lease for mining, the proponent shall scrupulously adhere to the mining conditions stipulated by the government of Andhra Pradesh.	Being followed the mining conditions stipulated by the Government of Andhra Pradesh.
viii	Any change in mining plan / production / mining methodology the proponent shall apply afresh EC.	Will be adhered to, for any change in mining plan / production / mining methodology.
ix	While taking up mining activity the proponent shall meticulously follow approved mining plan / Form – I / EMP.	Being meticulously following up the measures mentioned in approved mining plan / Form – I / EMP.
х	Once in an year proponent shall conduct impact analysis on environment by reputed institute recognized by Director General, Mines and Safety.	It is proposed to conduct impact analysis on environment by Institute / organization recognized by MOEF&CC, once in five years.  Corrigendum request is made for this EC condition vide our letter No. RCL/SEIAA/74/2021-2022 dated 09.03.2022, to modify this condition.
χī	"Consent for Establishment" & "Consent for Operation" shall be obtained from Andhra Pradesh Pollution Control Board under Air and Water Act to carry on mining.	<ul> <li>Consent for Establishment for this expansion project is obtained vide order No. 284/APPCB/CFE/ RO-VJA/HO/2009 and dated 19.05.2022.</li> <li>Consent for Operation for this</li> </ul>

S.No.	Condition	Compliance Status
		expansion project is obtained vide order No. APPCB/VJA/VJA/488/ HO/CFO/2021 dated 27.07.2022, which is valid up to 31.01.2024.  • CFO is renewed vide order No. APPCB-11022/134/2021-TEC-CFO-APPCB dated 10.11.2023, which is valid up to 31.01.2028.
xii	No change in mining technology and scope of working should be made without prior approval of the SEIAA, A.P. No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, AP / MOEF&CC, GoI, New Delhi, as applicable.	Will be complied, accordingly.
xiii	The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by email) to the Ministry of Environment & Forests, its Regional Office, Chennai, SEIAA, A.P., Zonal Office of Central Pollution Control Board, Bangalore, District Collector and A.P. Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions including results of monitored data on their websites and shall update the same periodically.	<ul> <li>Being complied.</li> <li>Being submitted as part of this condition.</li> <li>The soft 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 status of compliance of the environmental clearance conditions including results of monitored data being uploaded and updated in our company's website regularly.</li> <li>Hard copy of the same is submitted to SEIAA, A.P. and Regional Directorate (Chennai) of Central Pollution Control Board, Chennai.</li> <li>The status of this EC compliance reports is being uploaded in APPCB website i.e., https://pcb.ap.gov.in.</li> </ul>
xiv	Post Environment Clearance Monitoring: It shall be mandatory for the project manager to submit half yearly compliance reports in respect of the stipulated prior EC terms and conditions in hard and soft copy to SEIAA on 1st June and 1st December of each calendar year. (Refer 10 (i) and 10 (ii) of S.O. 1533 (E) of Ministry of Environment and Forests Notification, New Delhi, dt 14th September, 2006.).	Being complied.  Being submitted as part of this condition, within the stipulated time.  Hard copy of the same is submitted to SEIAA, A.P.  The soft copy of this half-yearly compliance report is mailed to eccompliance-ap@gov.in, vide Notice from MoEF&CC, Chennai dated 13.08.2019.
xv	The APPCB shall monitor the EC conditions stipulated by SEIAA as per GO MS No 120	Being followed. The status of this EC compliance reports is

S.No.	Condition	Compliance Status
	dated 01.11.2018 of EFS&T Dept., and	being regularly uploaded in APPCB website
	ensure the compliance.	i.e., https://pcb.ap.gov.in.
xvi	The proponent shall obtain prior	Being complied.
	permissions and continued guidance from	All necessary prior permissions from
	regulatory authorities for all the above	regulatory authorities for all the above
	conditions wherever it is required.	conditions wherever it is required are being
		taken.
xvii	All safety norms as stipulated in various laws	Being complied.
	and statutes shall be scrupulously followed	<ul> <li>All safety norms as stipulated in</li> </ul>
	by the proponent. PCB shall ensure	various laws and statutes are being
	compliance to the conditions stipulated by	scrupulously followed.
	SEIAA.	• The status of this EC compliance
		reports is being regularly uploaded in
		APPCB website i.e.,
		https://pcb.ap.gov.in.
xviii	The Proponent shall follow G.O. Ms 107	Being complied.
	dated 30.07.2016 of Industries & Commerce	
	(Mines-II) Department wherever applicable.	
xix	Consent for Establishment" shall be	Complied.
	obtained from Andhra Pradesh Pollution	Consent for Establishment for this
	Control Board under Air and Water Act	expansion project is obtained vide order
	before the start of any activity /	No. 284/APPCB/CFE/ RO-VJA/HO/2009 and
	construction work at site.	dated 19.05.2022.
XX	Officials from the Regional Office of	
	MOEF&CC, Chennai / The SEIAA, Andhra	• Full co-operation, facilities and
****	Pradesh through the Regional Offices of Andhra Pradesh Pollution Control Board,	documents / data will be given during the inspections of Officials from the
	who would be monitoring the	Integrated Regional Office of
	implementation of environmental	MOEF&CC, Vijayawada / The SEIAA,
	safeguards should be given full co-	Andhra Pradesh through the Regional
	operation, facilities and documents / data	Offices of Andhra Pradesh Pollution
	by the project proponents during their	Control Board.
	inspection. A complete set of all the	A complete set of all the documents
	documents shall be submitted to the CCF,	submitted to the Regional Office,
	Regional Office to MOEF&CC, Vijayawada.	MoEF&CC, Vijayawada, vide Lr. No.
	negional circo to mean steep, right, and	RCL/MoEF&CC/79/2021-2022 dated
		11.03.2022.
xxi	Four ambient air quality-monitoring stations	Being complied.
^^1	should be established in the core zone as	4 Nos. & 9 Nos. of ambient air quality
	well as in the buffer zone. Location of the	monitoring stations in core zone & buffer
	stations should be decided based on the	zone respectively are established based on
	meteorological data, topographical features	the meteorological data, topographical
	and environmentally and ecologically	features and environmentally and
	sensitive targets and frequency of	ecologically sensitive in consultation with
	monitoring should be undertaken in	State Pollution Control Board and regular
-	consultation with the State Pollution Control	monitoring (fortnightly) is being carried out
	Board.	through MoEF&CC approved external

S.No.	Condition	Compliance Status
		environmental monitoring agency.
xxii	Data on ambient air quality should be regularly submitted to the Ministry including its Regional Office located at Chennai and the State Pollution Control Board / Central Pollution Control Board once in six months.	Being complied.  Compiled data of ambient air quality monitoring collected during half-year period April 2024 to September 2024 by MoEF&CC approved external environmental monitoring agency is enclosed as Annexure – II.
xxiii	Personnel working in dusty areas should wear protective respiratory devices and they should 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.
xxvi	The project proponent shall ensure that no natural watercourse and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.	Not applicable.  No natural watercourse and/or water resources are being obstructed due to mining operations.
xxv	Occupational health surveillance program of the workers should 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.</li> <li>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 biochemical 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>
xxvi	A separate environmental management cell	

S.No.	Condition	Compliance Status
	with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	<ul> <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 - V.</li> </ul>
Xxvii	The funds earmarked for environmental protection measures (Capital cost Rs. 39 Lakhs and Recurring cost Rs. 52 Lakhs /annum) should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry and its Regional Office located at Vijayawada.	<ul> <li>Being followed.</li> <li>The funds earmarked for environment protection are not diverted for other purposes.</li> <li>The details of environmental protection expenditure along with funds allotted for the financial year are being submitted to the Ministry along with half-yearly compliance reports regularly.</li> </ul>
xxviii	At least 2% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared in accordance to the MoEF&CC's office Memorandum No.F.No.22- 65/2017-IA.III, dated.01.05.2018 and submit to the SEIAA, A.P and Ministry's Regional Office, Vijayawada.	As this EC is accorded for expansion proposal, at least 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER). Corrigendum request submitted vide our letter No. RCL/SEIAA/74/2021-2022 dated 09.03.2022, to modify 'this condition requesting for:  • At least 1% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared in accordance to the MoEF&CC office Memorandum No. F.No.22- 65/2017-IA.III, dated.01.05.2018 and submit to the SEIAA, A.P and Ministry's Regional Office, Vijayawada.  Some of the projects are in progress.
xxix	The project proponent shall submit the copies of the environmental clearance to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied. Submitted letters to local Panchayats & Municipality vide Lr. Nos. RCL/GP/75/2021-2022, RCL/GP/76/2021-2022 & RCL/GP/77/2021-2022 dated 09.03.2022.
xxx	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the	_

S.No.	Condition	Compliance Status
	vernacular language of the locality	Sakshi – Telugu – vernacular language) on
	concerned, within 7 days of the issue of the	11.03.2022 regarding the issuance of this
	clearance letter informing that the project	Environmental Clearance order. The same
	has been accorded environmental clearance	is communicated to SEIAA-AP vide Lr. No.
	and a copy of the clearance letter is	RCL/SEIAA/78/2021-2022 dated
	available with the State Pollution Control	11.03.2022.
	Board and SEIAA, A.P.	
xxxi	The SEIAA or any other competent authority	Noted.
	may alter / modify the above conditions or	
	stipulate any further condition in the	
	interest of environment protection.	
xxxii	The proponent shall obtain all other	Being complied.
	mandatory clearances from respective	All necessary prior permissions from
	departments before taking-up the mining	regulatory authorities for all the above
	activity.	conditions wherever it is required are being
		taken.
xxxiii	Any appeal against this Environmental	Noted.
	Clearance shall lie with the National Green	
	Tribunal, if preferred, within a period of 30	
	days as prescribed under Section 16 of the	
	National Green Tribunal Act, 2010.	
xxxiv	Concealing the factual data or failure to comply	Noted.
	with any of the conditions mentioned above	
	may result in withdrawal of this clearance and attract action under the provisions of	
	Environment (Protection) Act, 1986.	
XXXV	The SEIAA may revoke or suspend the order, if	Noted.
AAA	implementation of any of the above conditions	
	is not satisfactory. The SEIAA reserves the right	
	to alter / modify the above conditions or	
	stipulate any further condition in the interest of	
	environment protection.	Ni-t
xxxvi	SEIAA also reserves the right to cancel the	Noted.
	EC issued at any time, if EC has been	
	obtained by the proponent through	
	suppression of any information or furnishing false information.	
<b></b>	The above conditions will be enforced inter-	Being complied for the conditions
xxxvii	alia, under the provisions of the Water	stipulated as per Water (Prevention &
	(Prevention & Control of Pollution) Act,	Control of Pollution) Act, 1974, the Air
	1974, the Air (Prevention & Control of	(Prevention & Control of Pollution) Act,
	Pollution) Act, 1981, the Environment	1981, the Environment (Protection) Act,
	(Protection) Act, 1981, the Environment (Protection) Act, 1986 and the Public	1986. Taken Public Liability Policy No.
	Liability Insurance Act, 1991 along with their	0304008408 02 00 for the financial year
	amendments and rules.	2024-2025.
L	Tamenamenta ana raica.	

(Signature)

## HALF-YEARLY COMPLIANCE REPORT

Environmental Clearance	J-11015/149/2008-IA II (M) and dated 26.08.2009
Letter/s No. and Date	
Name of the Project	The Ramco Cements Limited (Formerly Madras Cements Ltd.,), Ravirala Limestone Mine (RF) – 0.50 to 1.20 Million TPA Capacity of Limestone
Period of Compliance Report	April 2024 to September 2024

## A. Specific Conditions:

S.No.	Condition	Compliance Status
i.	The environmental clearance is subject to	Noted.
	the condition, if any, stipulated by the IBM	No condition is stipulated by IBM during
	on the mining scheme submitted by the	the approval of Modified Mining plan for
	project proponent for its approval.	1.20 million TPA limestone production.
ii.	No new two pits shall be simultaneously	Being complied.
	worked i.e., before the first pit is exhausted	Only one (existing) pit is in operation and
	and reclamation work completed, no	the same pit will be continued for future
	mineral bearing area shall be worked.	also.
iii.	After exhausting the first mine pit and	Being complied.
	before starting mining operations in the	Only one (existing) pit is in operation
	next pit, reclamation and plantation works	and the same pit will be continued
	in the exhausted pit shall be completed so	for future also.
	as to ensure that reclamation, forest cover	The backfilling will be initiated after
	and vegetation are visible during the first	exhaustion of mineral, as per
	year of mining operations in the next pit.	approved mining plan.
	This process will follow till the last pit is exhausted. Adequate rehabilitation of	
	exhausted. Adequate rehabilitation of mined pit shall be completed before any ore	
	bearing area is worked.	
iv.	Adequate buffer zone shall be maintained	Being complied.
10.	between two consecutive mineral bearing	The total mining lease consists of only
	deposits.	one mineral (limestone) bearing deposit.
٧.	Hydro-geological study of the area shall be	Being complied.
	reviewed annually and results submitted to	The Hydro-geological study of the
	the Ministry and concerned agency in the	area reviewed and specific hydro-
	State Govt. In case adverse effect on ground	geological study is conducted and
	water quality and quantity is observed	final copy of the report submitted to
	mining shall be stopped and resumed only	the Integrated Regional Office,
	after mitigating steps to contain any	MoEF&CC vide Lr. No.
	adverse impact on ground water is	MCL/MoEF/1486/2013 dated
	implemented. Specific hydro-geological	}
	studies shall be conducted at the end of	, 3
	mining plan period i.e. at the end of the 5th	levels is being done and there is no
	year of mining, before proceeding to	adverse effect on ground water
	undertake mining in the 6th year. The	quality and quantity from the mining
	report shall be submitted to the Regional	activities and vice versa.

S.No.	Condition	Compliance Status
	Office of the Ministry.	<ul> <li>Further, State Ground Water Department has conducted the hydro-geological study and forwarded the report to Department of Panchayat Raj &amp; Rural Development, Government of Andhra Pradesh (agency authorized to issue NOC for AP projects).</li> </ul>
		Copy of the report (August 2019) prepared by Ground Water & Water Audit Department, Government of AP is submitted to Regional Office, MoEF&CC, Chennai vide our Lr. No. RCL/MoEF&CC/R.RF-239/20 dated 25.05.2020.
vi.	<ul> <li>The following shall be undertaken:</li> <li>i. The ground water observation network in the mining area shall be strengthened by constructing at least 4 piezometers which shall be constructed up to a depth of 50 m below ground level.</li> <li>ii. At least three piezometers may be installed with automatic water level recorders and increase the frequency of monitoring water levels to six hourly per day;</li> </ul>	<ul> <li>Being complied.</li> <li>4 Nos. piezometers are constructed to measure Ground Water level up to the depth of 50 m.</li> <li>3 Nos. of piezometers are installed with Automatic Water Level recorder and 1 No. with portable water level indicator.</li> <li>48 Nos. of rain water harvesting pits are made at colony &amp; 4 Nos. of rain</li> </ul>
A victor and victor an	iii. Water recharging from roof top in the colony (if any within the lease or nearby) shall be undertaken.	water harvesting pits are made at associated cement plant for roof top collection to recharge ground water table, as on September 2024.
vii.	A 50 m barrier of no mining zone all along the side(s) facing the nallahs / streams passing through or adjacent the lease area shall be demarcated and thick vegetation of native species raised. Status of implementation shall be submitted to the Regional Office of the Ministry on half yearly basis. It shall be ensured that no silt originating from mining activity is transported in the nallah / surface water course.	Not applicable as no nallah or stream is passing through or adjacent to the mining lease area.
viii.	Need based assessment for the nearby villages shall be conducted to study economic measures which can help in upliftment of poor section of society. Income generating projects / tools such as development of fodder farm, fruit bearing orchards, vocational training etc. can form a	Being complied.  Company is organizing various socioeconomic activities for the surrounding villages. All the CSR activities for the nearby villages are being carried out as per the need basis of the local people

S.No.	Condition	Compliance Status
	part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals imparted to take up self employment and jobs. Local employable youth shall be trained in skills relevant to the project for eventual employment in the project itself to the extent feasible.	<ul> <li>(requirements collected from them), subjected to the budget availability.</li> <li>CSR activities are being carried out for upliftment of local areas and account is being maintained.</li> <li>These include village-wise, sectorwise (health, skill development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc.).</li> <li>Children from the surrounding villages are studying in the school located in the cement plant colony.</li> <li>Apprentice training with stipend is being given for local people who are studying Industrial Training Institute (ITI) certificate (as part of their academic curriculum), regularly.</li> <li>Contributing stipend to the local ITI students who are undergoing GMR Skill Development Programme (post academic), through which they acquire better employment opportunities.</li> </ul>
ix.	Land-use pattern of the nearby villages shall be studied and action plan for abatement and compensation for damage to agricultural land / common property land (if any) in the nearby villages, due to mining activity shall be submitted to the Regional office of the Ministry within six months. Annual status of implementation of the plan and expenditure thereon shall be reported to the Regional Office of the Ministry from time to time.	<ul> <li>Being complied.</li> <li>The entire mining lease area is in forest land and is surrounded by forest land as well as waste land.</li> <li>There is no agriculture land in the vicinity of the mining lease area. Hence damage of agriculture land does not arise.</li> <li>A study has been made on land-use pattern of the nearby villages and extract of the report is mentioned in EIA report.</li> </ul>
x.	Maintenance of village roads through which transportation of ores are undertaken shall be carried out by the company regularly at its own expenses. The roads shall be black topped.	<ul> <li>Being complied.</li> <li>There is no transportation of ore through any village road.</li> <li>Dedicated concrete road is made for haul road from mining lease to the cement plant for transportation of limestone.</li> </ul>
xi.	Rain water harvesting shall be undertaken to recharge the ground water source. Status of implementation along with detailed plan shall be submitted to the Regional Office of	Being complied.  48 Nos. of rain water harvesting pits are made at colony & 4 Nos. of rain water harvesting pits are made at associated

S.No.	Condition	Compliance Status
	the Ministry within six months and thereafter every year from the next consequent year.	cement plant to recharge ground water table, as on September 2024.
xii.	Measures for prevention and control of soil erosion and management of silt shall be undertaken. Protection of dumps against erosion shall be carried out with geo textile matting or other suitable material and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.	<ul> <li>Being complied.</li> <li>One in-active dump is available in this mine.</li> <li>Plantation with native plants is done as part of stabilization on steps made at regular interval and also spreading seeds on these steps to allow natural growth of plant, so to prevent erosion.</li> <li>Vegetation on the top and slopes of the dump yard is under progress, to prevent erosion.</li> </ul>
xiii.	Trenches / garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest silt from being carried to water bodies. Adequate number of Check Dams and Gully Plugs shall be constructed across seasonal / perennial nallahs (if any) flowing through the ML area and silts arrested. Desilting at regular intervals shall be carried out. Garland drain of appropriate 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 desilted at regular intervals.	Being complied. The following measures are being taken:  Garland drain of a cumulative length of 2651 m with a size of 2.0m*1.0m has been made towards the Southern lease boundary as well as all along the bottom of the waste dump. Garland drain made all along the Temporary dump with a length of 810 m.  The drains follow the natural slope with a gradient about 1 in 100 ultimately leading to the desilting sump.  A mine sump with dimensions of 25m*15*5m is made to settle the suspended solids in the water. The water collected is being utilized for dust suppression in the mine area, haul roads and for greenbelt development, etc. within lease area and for irrigation purposes.  Desilting is being carried out regularly. During the financial year 2024-2025, desilting was carried out in the month of May 2024 and a quantity of 26 tonne.
xiv.	Ground water in the core zone shall be regularly monitored for contamination and depletion due to mining activity and records maintained. The monitoring data shall be submitted to the regional office of the	Being complied.  • 4 Nos. of piezometers (3 Nos. are automatic and 1 No. is manual) are used to monitor ground water levels.

S.No.	Condition	Compliance Status
	Ministry regularly. Further, monitoring points shall be located between the mine and drainage in the direction of flow of ground water shall be set up and records maintained.	depletion has observed due to mining activity and the recorded data is being submitted to the RO, Ministry regularly.  Ground water quality (in the nearby villages) is being analysed by MoEF&CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad).  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 – IV.
xv.	Cultivable waste land (within 5 km of the lease) shall be identified and fodder farming or other suitable productive use of waste land shall be taken up in phased manner. Status of implementation shall be submitted to the Regional office of the Ministry.	Being complied. 30 acres of cultivable waste land is identified within 5 km of lease area and supplying water for irrigation for productive use & also to conserve ground water resources in the vicinity.
xvi.	Shelter Belt i.e., Wind Break of 30 m width and consisting of at least 5 tiers around lease facing the school / agricultural fields / human habitation etc. (if any in the vicinity) shall be raised.	Noted. There is no school / agricultural fields / human habitation, etc., in the vicinity of the mining lease area. The nearest habitation is about 1.9 km from mine, hence not applicable.
xvii.	Fugitive dust generation shall be controlled. Fugitive dust emission shall be regularly monitored at locations of nearest human habitation (including schools and other public amenities located nearest to sources of dust generation as applicable) and records submitted to the Regional Office of the Ministry.	<ul> <li>Being complied.</li> <li>Fugitive dust generation is controlled at the source.</li> <li>Compiled data on fugitive dust monitoring for the period from April 2024 to September 2024 is enclosed as Annexure – VIII.</li> <li>Water is being sprayed on internal roads, muck piles and unloading points by mobile water tankers.</li> <li>The nearest habitation is about 1.9 km from mine.</li> </ul>
xviii.	Monitoring of soil samples for assessment of contamination due to mining activity (as applicable) shall be regularly conducted and records maintained.	Being complied. Soil sample analysis is being carried out by MoEF&CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad) and records being maintained.
xix.	Transportation of ore shall be done by covering the trucks with tarpaulin or other	Being complied. With proper supervision regularly, it is

S.No.	Condition	Compliance Status
	suitable mechanism so that no spillage of	ensuring that the vehicles are not
	ore / dust takes place.	overloaded. While transporting, the
		following measures are being taken:
		Transportation of mineral is being
		done by moderately loading the
		vehicles to avoid the spillage.
		<ul> <li>The body height of the vehicle is raised by 1 foot to avoid the spillage</li> </ul>
		of material.
xx.	Occupational health and safety measures	Being complied.
	for the workers including identification of work related health hazards, training on malaria eradication, HIV and health effects on exposure to mineral dust etc. shall be carried out. The company shall engage a full time qualified doctor who is trained in occupational health. Periodic monitoring for exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of Personal equipments etc. shall be carried out periodically. Review of impact of various health measures undertaken (at interval of five years or less) shall be conducted	<ul> <li>Awareness programme on health &amp; safety for workers of work related health hazards, training on malaria eradication, HIV and health effects on exposure to mineral dust etc., and precautionary measures like the use of PPE are also being imparted.</li> <li>Protective respiratory devices are provided to the personnel working in dusty areas (near drilling and loading 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.</li> <li>A full time qualified doctor who is trained in occupational health</li> </ul>
	followed by follow up action wherever required.	services is appointed. Occupational health checkup is being carried out for all mine workers at the time of joining and is periodically reviewed as per statute for all mine workers.
xxi.	Occupational Health Cell shall be created at	Being complied.
	the mining site office under the charge of an officer of adequate seniority who is a qualified person in occupational health.	<ul> <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</li> </ul> </li> </ul>
		bio-chemical tests  Clinical lab for micro-biological tests (including sputum test)  Checking colour blindness

S.No.	Condition	Compliance Status
xxii.	Personnel exposure monitoring for dust shall be carried out for the workers. This	<ul> <li>Dental chair</li> <li>Ambulance</li> <li>Occupational health surveillance programme is taken up periodically and records are being maintained.</li> <li>Being complied.</li> <li>Personal dust sampling is being</li> </ul>
	shall include monitoring of mercury and hexavalent chromium.	carried out periodically and records are maintained.  There is no generation of any mercury and hexavalent chromium related dust in Limestone Mining Activities, hence this is not applicable.
xxiii.	Top soil / solid waste shall be stacked properly with proper slope and adequate safeguards and shall be utilized for backfilling (wherever applicable) for reclamation and rehabilitation of mined out area. Top soil shall be separately stacked for utilization later for reclamation and shall not be stacked along with over burden.	Not applicable with respect to top soil, as there is no top soil.  Being complied.  Solid waste is only overburden (OB), which is being stacked separately with proper slope & adequate safeguards and will be utilized for reclamation.  Reclamation is not initiated as ultimate pit level is not reached.
xxiv.	Over burden (OB) shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 30 m, each stage shall preferably be of 10 m and overall slope of the dump shall not exceed 28°. The OB dump shall be backfilled. The OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests on six monthly basis.	<ul> <li>Being complied.</li> <li>OB waste is being stacked separately and the total height of dump is 30 m. The height of each stage is about 10 m and slope is maintained as specified. Plantation has started on the inactive slopes on the dump.</li> <li>One more temporary dump is under progress, with a height of 15 m in the SE corner of mining lease.</li> <li>The backfilling will be initiated after exhaustion of mineral, as per approved mining plan.</li> <li>Saplings are planted on dump yard,</li> </ul>

S.No.	Condition	Compliance Status
		13.08.2019
xxv.	Slope of the mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.	Being complied.  Being followed as per IBM approved modified mining plan vide Lr. No. AP/KSN/MP/LST-2/Hyd, dt. 27.09.2023.
xxvi.	Adequate plantation shall be raised in the ML area, haul roads, OB dump sites etc. Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO / Agriculture Department. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. The density of the trees shall not be less than 2500 plants per ha. The company shall involve local people with the help of self help group for plantation programme. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the Regional Office of the Ministry every year.	<ul> <li>Plantation activity has taken up in the ML area, along the road side which is going from mine pit to crusher, OB dump, etc., by planting different species including native species, in consultation with local Forest Department.</li> <li>The plantation work is being carried out by involvement of local people.</li> <li>An area of 10.49 Ha covered under plantation within ML by the end of September 2024.</li> </ul>
xxvii.	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells 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 shall be regularly sent to MoEF, Central Ground Water Authority and Regional Director, Central Ground Water Board.	<ul> <li>Being complied.</li> <li>4 Nos. of piezometers (3 Nos. are automatic and 1 No. is manual) are used to monitor ground water levels and the recorded data is being submitted to the Regional Office, Ministry regularly.</li> <li>Ground water quality (in the nearby villages) is being analysed by MoEF&amp;CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad).</li> <li>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 – IV.</li> <li>Monitoring is being carried out four times in a year – April - June, July - September, October - December and January - March.</li> </ul>
xxviii.	Adequate air monitoring stations shall be established in areas of human habitations near the mine and the results of ambient air quality shall be maintained and regularly	Being complied.  • The nearest habitation from the mine is 1.9 km.

S.No.	Condition	Compliance Status
	submitted to the Regional Office of the Ministry. The monitored data of criteria pollutants shall be regularly uploaded on the company's website and also displayed at project site.	ambient air quality monitoring stations in core zone & buffer zone respectively. Ambient air quality monitoring is being carried out by MoEF&CC approved external environmental agency on fortnightly basis and compiled data for the period April 2024 to September 2024 is enclosed as Annexure – II.  The monitoring results are compiled and maintained.  The half-yearly compliance reports are being uploaded on the company's website regularly.
xxix.	The waste water from the mine shall be treated to conform to the prescribe standards before discharging into the natural stream. The discharged water from the Tailing Dam (if any) shall be regularly monitored and report submitted to the Ministry of Environment & Forests, Central Pollution Control Board and the State Pollution Control Board.	Noted.  There is no generation of waste water from the mine.  Oil and Grease trap is installed at Workshop to treat the wastewater before let out. Outlet water quality analysis carried out by MoEF&CC approved external environmental agency. Compiled data for the period April 2024 to September 2024 is enclosed as Annexure – VI.  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 – VII.  Tailings are not generated from limestone mining activity; hence it is not applicable.
xxx.	Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of ores and others shall have valid permissions as prescribed under Central Motor Vehicle Rules, 1989 and its amendments. Transportation of ore shall be done only during day time. The vehicles transporting ores shall be covered with a tarpaulin or other suitable enclosures so that no dust particles / fine matters escape during the course of transportation.	Being complied.  Dedicated concrete road is made for haul road for transportation of limestone to crusher, which is not passing through any wild life sanctuary.

S.No.	Condition	Compliance Status
	No overloading of ores for transportation shall be committed. The trucks transporting ore shall not pass through wild life sanctuary.	
xxxi.	Prior permission from the Competent Authority shall be obtained for extraction of ground water, if any.	<ul> <li>NOC obtained to work below ground water table through Dept. of Panchayat Raj &amp; Rural Development, Government of Andhra Pradesh (agency authorized to issue NOC for Andhra Pradesh projects) vide their letter No. PRR05-11028/15/2018-SLNA-GIS-CORD, dt. 02.01.2024.</li> <li>This order is valid up to 01.01.2026.</li> </ul>
xxxii.	Action plan with respect to suggestions / improvements and recommendations made during public consultation / hearing shall be submitted to the Ministry and the State Govt. within six months.	Being complied.  Details submitted in EIA report submitted to the Ministry for this proposal.  Improvement activities and recommendations made.
xxxiii.	A final mine closure plan, along with details of Corpus Fund, shall be submitted to the Ministry of Environment & Forests, 5 years in advance of final mine closure for approval.	Noted for compliance. The life of the mine as per the present approved modified Mining plan by IBM is up to year 2030-2031. Limestone reserve to be estimated under the Dump. Accordingly the life of the mine will get increased.

## **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 Ministry of Environment & Forests.	Being complied.  There is no change in the mining technology and 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>There is no change in the excavation of mineral and waste, till now.</li> <li>During the financial year 2023-2024, the limestone production was 2.734 million Tonne.</li> <li>During the financial year 2023-2024, the waste / OB handled was 0.299 million Cu.m.</li> </ul>
iii.	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	Being complied.  Compiled data on fugitive dust monitoring for the period from April 2024 to September 2024 is enclosed

S.No.	Condition	Compliance Status
S.INO.	provided and properly maintained.	as Annexure – I.  Dedicated concrete road is made for haul road to control fugitive dust emissions.  Wet drilling is being practiced.  Water is being sprayed by mobile water tanker on haul road and permanent water sprinkling system is being operated on part of 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.  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.
iv.	Four ambient air quality monitoring stations shall be established in the core zone as well as buffer zone for RPM, SPM, SO <sub>2</sub> , NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	Being complied.  4 and 9 Nos. of ambient air quality monitoring stations are established in core and buffer zones respectively based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the SPCB and regular (fortnightly) manual monitoring by MoEF&CC approved external environmental monitoring agency (M/s Universal Enviro Associates, Hyderabad) for PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NOx and CO monitoring.
V.	Data on ambient air quality (RPM, SPM, SO <sub>2</sub> , NOx) should be regularly submitted to the Ministry including its Regional office located at Bangalore and the State Pollution Control Board / Central Pollution Control Board once in six months. The monitored data of criteria pollutants mentioned above shall be regularly uploaded on the company's	Being complied.  Data of the Ambient Air Quality is being submitted to the Integrated Regional Office, MoEF&CC located at Vijayawada, CPCB Chennai and the SPCB regularly once in six months along with half-yearly compliance reports.

S.No.	Condition	Compliance Status
	website and also displayed at project site.	<ul> <li>Compiled data for the period April 2024 to September 2024 is enclosed vide Annexure – II.</li> <li>The status of compliance of the environmental clearance conditions including results of monitored data being uploaded and updated in our company's website regularly.</li> </ul>
vi.	Measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with ear plugs / muffs.	<ul> <li>Vehicles are being maintained properly for control of noise level and the noise levels are well within the limit.</li> <li>Compiled data of Noise levels measured in the period April 2024 to September 2024 is enclosed as Annexure – III.</li> <li>Ear plugs / muffs are provided to respective HEMM operators.</li> </ul>
vii.	Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	<ul> <li>Oil and Grease trap is installed at Workshop to separate oil &amp; grease before letting waste water out.</li> <li>Oil and Grease trap outlet water quality analysis is carried out by MoEF&amp;CC approved external environmental agency for the period April 2024 to September 2024 is enclosed as Annexure – VI.</li> <li>There is no generation of waste water from the mine.</li> </ul>
viii.	Personnel working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.	Being complied. Personal Protective Equipment are being provided to the personnel working in dusty areas (near drilling and loading 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.
ix.	Provision shall be made for the housing the labourers within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after	Being complied.  Separate colony is constructed for contract workmen with all necessary infrastructure facilities like fuel for cooking, toilets, safe drinking water, medical health care, near cement plant during construction period and

S.No.	Condition	Compliance Status
х.	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	after construction all the structures were removed.  Potability certificates for RO plant inlet and outlet water samples are being maintained.  Being complied.  Environment management cell is established with qualified personnel to look after the environment
	Head of the Organization.	management related activities and is reporting to Head of the Unit of the company. The organization chart is enclosed as Annexure – V.
xi & xiii.	The project authorities shall inform to the Regional Office of the Ministry 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.	Noted.  Date of financial closure for this project is not required as total funding for this project is from own funds.
xii.	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bangalore.	<ul> <li>Being complied.</li> <li>The funds earmarked for environment protection are not diverted for other purposes.</li> <li>The details of environmental protection expenditure along with funds allotted for the financial year are being submitted to the Ministry along with half-yearly compliance reports regularly.</li> </ul>
xiv.	The Regional Office of the Ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	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 project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Bangalore, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of	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.

S.No.	Condition	Compliance Status
	the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests, Bangalore.	reports is being uploaded in APPCB website i.e., <a href="https://pcb.ap.gov.in">https://pcb.ap.gov.in</a> .  Hard copy of the half-yearly compliance reports are being submitted to CPCB, Chennai regularly. Half-yearly compliance reports for EC orders are also uploaded in our company's website.
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. The clearance letter shall also be put on the website of the company.	Noted. The clearance letter is uploaded to the company's website.
xvii.	State Pollution Control Board shall display a copy of the clearance letter at the Regional office, District Industry Centre and Collector's office / Tehsildar's Office for 30 days.	Noted.
xviii.	The environmental statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and shall also be put on the website of the company along with the status of compliance of environmental clearance conditions. The same shall also be sent to the Regional Office of Ministry by e-mail.	<ul> <li>Being complied.</li> <li>The Environment Statement for the financial year 2023-2024 is submitted vide our Lr. No. RCL/PCB-Form-V/238/ 190 dated 16.09.2024 and is uploaded on the website of the company.</li> <li>The same is sent to Regional Office of Ministry through email.</li> </ul>
xix.	The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the 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 State Pollution Control Board and also at web site of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same shall be forwarded to the Regional Office of the Ministry located in Bangalore.	Complied. Advertised in Eenadu Telugu daily and The Hindu English daily on 09.09.2009 and a copy of the same is forwarded to RO, Bangalore vide Lr. No. MCL/MoEF/5041/2009 dt. 09.09.2009.

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## HALF-YEARLY COMPLIANCE REPORT

Environmental Clearance	J-11015/18/2000-IA.II (M) and dated 16.10.2002
Letter/s No. and Date	
Name of the Project	The Ramco Cements Limited (Formerly Madras Cements Ltd.,), Ravirala Limestone Mine (RF) — 0.50 Million TPA Capacity of Limestone
Period of Compliance Report	April 2024 to September 2024

A. Spe	cific Conditions:	
S.No.	Condition	Compliance Status
	APPCB's fresh consent should be obtained for producing 30.25 lakh tonnes / annum of limestone for the first five years prior to increase in already consented annual production capacity of 0.50 million tonnes.	Being complied.  In the financial year 2010-2011; EC, CFE & CFO are obtained for production enhancement from 0.50 million TPA to 1.20 million TPA.  In the financial year 2021-2022; EC, CFE & CFO are obtained for production enhancement from 1.20 million TPA to 2.75 million TPA.  During the financial year 2023-2024, the limestone production was 2.734 million Tonne.  The latest CFO is accorded vide letter No. APPCB/VJA/VJA/488/HO/CFO/ 2021 and dated 07.11.2022 (for 1.20 Million TPA), which is valid up to 31.01.2028.  With respect to expansion project (1.20 million TPA to 2.75 million TPA), CFO is accorded vide letter No. APPCB/VJA/VJA/488/HO/ CFO/2021 dated 27.07.2022 and got renewed vide order No. APPCB-11022/134/2021 -TEC-CFO-APPCB dated 10.11.2023, which is valid up to 31.01.2028.
ii.	Top soil will be properly stacked at earmarked dump site(s) with adequate measures and should be used for reclamation and rehabilitation of mined out area.	Being complied. There is no top soil available in the mining lease area.
iii.	Check dams and siltation ponds of appropriate size should be constructed to arrest silt and sediment flows from soil and mineral dumps. The water so collected should be utilized for watering the mine area, roads, greenbelt development etc., and the drains should be regularly de-silted and	Being complied.  Garland drain of a cumulative length of 2651 m with a size of 2.0m*1.0m has been made towards the Southern lease boundary as well as all along the bottom of the waste dump. Garland drain made all along the Temporary dump with a length of 810 m.

S.No.	Condition	Compliance Status
	maintained. Garland drain (size, gradient and length) and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material.	<ul> <li>The drains follow the natural slope with a gradient about 1 in 100 ultimately leading to the desilting sump.</li> <li>A mine sump with dimensions of 25m*15m*5m is made to settle the suspended solids in the water, by September 2024.</li> <li>The water collected is being utilized for watering the mine area, haul roads, greenbelt development, etc. within lease area.</li> <li>The drains are being regularly de-silted and maintained.</li> <li>Desilting is being carried out regularly. During the year 2024-2025, desilting was carried out in the month of May 2024 and a quantity of 26 tonne.</li> </ul>
iv.	A 30 m wide green belt all around the ML area should be developed by planting the native plant species in consultation with local DFO / Agricultural department. At least 1600 plant species/ha should be planted. Plantation should also be raised along the roads, OB dump sites etc.	<ul> <li>Being complied.</li> <li>Greenbelt of 30 m wide will be developed along the ML boundary in phase wise manner.</li> <li>Total greenbelt area is 10.64 Ha within ML by the end of this half year period.</li> </ul>
V.	Blasting operations should be carried out only during the day time. Controlled blasting should be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	<ul> <li>Being complied.</li> <li>Blasting operations are being carried out in day-time only.</li> <li>Controlled blasting is being practiced by using advanced technology viz., Shock tube bottom initiation detonators to reduce ground vibrations.</li> </ul>
vi.	Backfilling of excavated area should concurrently start from 7 <sup>th</sup> year of operations.	Noted.  Backfilling is not initiated, as per approved mining plan.  The back filling will be initiated after exhaust of mineral.
vii.	A detailed decommissioning plan should be submitted to the MOEF 5 years in advance for approval.	<ul> <li>Noted.</li> <li>This will be submitted accordingly.</li> <li>The life of the mine as per the present approved modified Mining plan by IBM is up to year 2030-2031. Limestone reserve to be estimated under the Dump. Accordingly the life of the mine will get increased.</li> </ul>
viii.	The drills should be attached with dust extraction system.	Being complied. All drills are provided with wet drilling system.

S.No.	Condition	Compliance Status
ix.	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing well and constructing new piezometers. Monitoring should be done four times in a year — Pre-monsoon (April-May), Monsoon (August), Post-Monsoon (November) and Winter (January). Data thus collected should be sent at regular intervals to MoEF and The Central Ground Water Authority.	<ul> <li>Being complied.</li> <li>4 Nos. of piezometers (1 are manual and 3 is automatic) are used to monitor ground water levels.</li> <li>Ground water quality (in the nearby villages) is being analysed by MoEF&amp;CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad).</li> <li>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 – IV.</li> <li>Monitoring is being carried out four times in a year – Pre-monsoon (April-May), Monsoon (August), Post-Monsoon (November) and winter (January).</li> <li>NOC obtained to work below ground water table through Panchayat Raj &amp; Rural Development, Government of Andhra Pradesh (agency authorized to issue NOC on behalf of CGWA, Delhi for Andhra Pradesh projects) vide their letter No. PRR05-11028/15/2018-SLNA-GIS-CORD, dt. 02.01.2024. This order is valid up to 01.01.2026.</li> <li>The conditions stipulated in this NOC are being followed and yearly compliance reports will be submitted to the concerned.</li> </ul>

## **B. General Conditions:**

S.No.	Condition	Compliance Status
i.	No change in mining technology and scope of working should be made without prior approval of the MoEF	Being complied. There is no change in the mining technology and scope of working.
ii.	No change in the calendar plan including excavation, quantum of limestone, waste / OB dump should be made.	<ul> <li>Being complied.</li> <li>In the financial year 2010-2011; EC, CFE &amp; CFO are obtained for production enhancement from 0.50 million TPA to 1.20 million TPA.</li> <li>In the financial year 2021-2022; EC, CFE &amp; CFO are obtained for production enhancement from 1.20 million TPA to 2.75 million TPA.</li> </ul>

S.No.	Condition	Compliance Status
		<ul> <li>During the financial year 2023-2024, the limestone production was 2.734 million Tonne.</li> <li>During the financial year 2023-2024,</li> </ul>
		the waste / OB handled was 0.299 million Cu.m.
		<ul> <li>The latest CFO is accorded vide letter No. APPCB/VJA/VJA/488/HO/CFO/ 2021 and dated 07.11.2022 (for 1.20 Million TPA), which is valid up to 31.01.2028.</li> </ul>
		<ul> <li>With respect to expansion project (1.20 million TPA to 2.75 million TPA), CFO is accorded vide letter No. APPCB/VJA/VJA/488/HO/CFO/2021 dated 27.07.2022 and got renewed vide order No. APPCB-11022/134/2021 -TEC-CFO-APPCB dated 10.11.2023, which is valid up to 31.01.2028.</li> </ul>
iii.	Three ambient air quality monitoring stations should be established in the core zone as well as buffer zone for SPM, RPM, SO <sub>2</sub> , NOx and CO monitoring. Location of the ambient air quality stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the SPCB.	Being complied.  4 and 9 Nos. of ambient air quality monitoring stations are established in core and buffer zones respectively based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the SPCB and regular (fortnightly) manual monitoring by MoEF&CC approved external environmental monitoring agency (M/s Universal Enviro Associates, Hyderabad) for SPM, RPM, SO <sub>2</sub> , NOx and CO monitoring.
iv.	Data on ambient air quality should be regularly submitted to the Ministry including its RO at Bangalore and the SPCB / CPCB once in six months.	<ul> <li>Being complied.</li> <li>Data of the Ambient Air Quality is being submitted to the Integrated Regional Office, MoEF&amp;CC located at Vijayawada and the SPCB regularly once in six months along with half-yearly compliance reports.</li> <li>Compiled data for the period April 2024 to September 2024 is enclosed vide Annexure – II.</li> <li>Half-yearly compliance reports are being submitted to the Regional Office of Ministry located at Chennai on regular basis (up to the period October</li> </ul>

S.No.	Condition	Compliance Status
		<ul> <li>Vide Notice from MoEF&amp;CC, Chennai dated 13.08.2019, this copy of half- yearly compliance report is mailed to eccompliance-ap@gov.in.</li> </ul>
V.	Adequate measures for control of fugitive emissions should be taken during drilling and blasting operations, loading and transportation of minerals etc.	<ul> <li>Compiled data on fugitive dust monitoring for the period from April 2024 to September 2024 is enclosed as Annexure – I.</li> <li>Dedicated concrete road is made for haul road to control fugitive dust emissions.</li> <li>Wet drilling is being practiced.</li> <li>Water is being sprayed by mobile water tanker on haul road and permanent water sprinkling system is being operated on part of 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>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>
vî.	Adequate measures should be taken for control of noise levels below 85 dB(A) in the work environment.	<ul> <li>Being complied.</li> <li>Vehicles are being maintained properly for control of noise level and the noise levels are well within the limit.</li> <li>Ear plugs / muffs are provided to respective HEMM operators.</li> <li>Compiled data on noise levels measured for the period from April 2024 to September 2024 is enclosed as Annexure – III.</li> </ul>
vii.	Vehicular emissions should be kept under control and regularly monitored.	Being complied.  Vehicles are being maintained properly. Emission levels (pollution under control check) are being monitored regularly and kept under control.

S.No.	Condition	Compliance Status
viii.	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	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.  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  (including sputum test)  Checking colour blindness  Dental chair  Ambulance
ix.	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purposes. Year-wise expenditure will be reported to MoEF.	<ul> <li>Being complied.</li> <li>The funds earmarked for environment protection are not diverted for other purposes.</li> <li>The details of environmental protection expenditure along with funds allotted for the next financial year are being submitted to the Ministry along with half-yearly compliance reports regularly.</li> </ul>
Χ.	The RO of this Ministry located at Bangalore will monitor compliance of the stipulated environmental safeguards. The project authorities should send one set of EIA / EMP report and mining plan to them and extend full co-operation to the officer(s) of the RO by furnishing the	Necessary co-operation along with relevant data is being provided.

S.No.	Condition	Compliance Status
	requisite data / information / monitoring	
	reports.	
xi.	The project authorities should inform to the RO located at Bangalore as well as to the MoEF 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 total funding for this project is from own funds.
xii.	SPCB should display a copy of the clearance letter at RO, District Industries Centre and Collector's Office / Tahsildar's office for 30 days.	Noted.
xiii.	The project authorities should advertise at least in two local newspapers widely circulated, one of which will 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 be seen at website of the MoEF at http://envor.nic.in and a copy of the same will be forwarded to the RO of this Ministry located Bangalore.	Complied. Advertised in Eenadu Telugu daily and The Hindu English daily on 16.11.2002 and a copy of the same is forwarded to RO, Bangalore vide Lr. No. MCL/MINES/RF dt. 31.12.2002.

(Signature)

Annexure-

## THE RAMCO CEMENTS LIMITED, KSR NAGAR RAVIRALA LIMESTONE MINE (RF) FUGITIVE EMISSION DATA - SPM CONCENTRATION

PERIOD - April 2024 to September 2024

		•	Month	1. I		
Location	April 2024	May 2024	April 2024   May 2024   June 2024   July 2024	July 2024	August 2024	September 2024
Quarry Edge	163	188	143	128	151	116
Drilling Arrea	148	156	163	101	116	121
Loading Area	166	171	147	134	139	148
Haul Road (Near Chillakallu- Vedadri Road Junction)	141	186	159	122	126	135

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 2024 to September 2024

			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				Mont	 h						
Lagation	Parameter	April	2024	May	2024	June	2024	July :	2024	Augus	t 2024	Septemb	er 2024	Li
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	
	PM 10	59.7	63.6	58.3	65.6	62.6	68.3	51.3	49.6	49.2	51.2	48.2	53.1	1
	PM 2.5	24.2	25,6	23.7	26.4	25.4	27.5	20.8	20.0	20.0	20.6	19.6	21.4	<u> </u>
Dharmavarapupadu Tanda	SO <sub>2</sub>	16.1	15,3	16.8	16.2	153	17.8	10,6	9.6	12.3	10.6	10.6	11.4	
Tanaa	NO <sub>X</sub>	18.7	18.0	19,4	18.9	17.9	20.5	13.2	12.3	14.9	13.3	13.2	14.1	<u> </u>
	СО	292.0	221.0	299.0	232.0	312.0	241.0	296.0	241.0	301.0	162.0	296.0	150.0	2
	PM 10	63.9	62,9	65,2	63.6	68.3	70.2	49,6	50.3	50.6	53.6	51.2	52.4	1
	PM 2.5	25.6	25.7	26.1	25.9	27.4	28.6	19.9	20.5	20.3	21.9	20.5	21.4	ļ
Jayanthipuram	SO <sub>2</sub>	16.9	16.2	17.3	16.3	18.3	18.3	12.3	12.3	13.1	12,3	12.9	13.5	<u> </u>
	NO <sub>X</sub>	19.8	19.1	20.2	19.2	21.2	21,2	15.2	15.2	16.0	15.2	15,8	16.4	<u> </u>
	со	281.0	241.0	296.0	248.0	286.0	252.0	13.8	252.0	326.0	154.0	324.0	149.0	2
	PM 10	62.6	58.6	65.1	60.3	67.9	66.1	42.3	48.4	49.8	49.6	48.3	48.3	1
	PM 2.5	25.3	23.7	26.3	24.4	27.4	26.8	17.1	19.6	20.1	20.1	19.5	19.6	<u> </u>
Chillakallu	SO <sub>2</sub>	14.3	20.2	15.2	21.2	19.6	17.2	11.1	11.6	12.6	11.6	11.6	11.9	<u> </u>
	NO <sub>x</sub>	17.0	23.3	17.9	24.3	22.3	20.3	13.8	14.7	15.3	14.7	14.3	15.0	<u> </u>
****	со	274.0	216.0	281.0	226.0	274.0	239.0	291	239.0	310	263.0	318.0	242.0	2
	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	1
	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	┡
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	↓
	NO <sub>x</sub>	18.5	23.8	19.4	24.7	21.5	21.5	14	15.0	16	15.3	13.9	14.8	ļ
	со	261.0	244.0	269.0	245	301.0	255.0	274	255.0	336	149.0	326.0	151.0	2
	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	
	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	
Jaggayyapet	SO <sub>2</sub>	16.2	19.2	15.9	21.4	17.1	22.3	10.7	10.2	13.2	10.6	12.6	11.6	
	NO <sub>x</sub>	18.6	22.2	18.3	24.4	19.5	25.3	13.1	13.2	15.6	13.6	15.0	14.6	
	со	268.0	212.0	288.0	232.0	293.0	248.0	256.0	248.0	324	254.0	313.0	248.0	2
	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	
	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	ـــــ
Budawada	SO <sub>2</sub>	16.6	16,3	17.2	17.3	17.9	18.4	10.1	9.8	12.6	12.8	10.3	12.3	
	NO <sub>X</sub>	19.4	18.9	20.0	19.9	20.7	21.0	12.9	12.4	15.4	15.4	13.1	14.9	
	со	284.0	239.0	291.0	249	312.0	255.0	63.0	255.0	309	216.0	302.0	218.0	2
	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	-
	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	╄
Vedadri	SO <sub>2</sub>	16.1	18.4	16.9	19.2	15.4	21.4	10.2	12.4	11.9	12.1	11.4	11.9	┼
	NO <sub>X</sub>	18.4	21,2	19.2	22	17.7	24.2	12.0	15.2	14	14.9	13.7	14.7	-
	со	277.0	259.0	283.0	262	287.0	274.0	242.0	274.0	256	281.0	289.0	274.0	_ 2
	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	
	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	╄-
Pochampalli	SO <sub>2</sub>	16.2	17.1	17.3	18.9	16.2	17.3	12.3	10.6	13.6	12.4	12.9	12.6	-
	NOx	19.1	19.4	20.2	21.2	19.1	19.6	15.2	12.9	16.5	14.7	15.8	14.9	┼-
	CO	273.0	256.0	292.0	259	263.0	263.0	258.0	263.0	263	288.0	274.0	279.0	2
	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	
	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	<del> </del>
Ravirala	SO₂	16.9	16.9	17.8	17.4	16.0	18.2	11.1	12.2	12.8	13.2	13.5	11.1	+-
	NO <sub>X</sub>	19.9	19.8	20.8	20.3	19.0	21.1	14.1	15.1	15.8	16.1	16.5	14.0	4-
	со	312.0	274.0	333.0	283	274.0	291.0	212.0	291.0	258	299	261	283.0	2

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

## THE RAMCO CEMENTS LIMITED, KSR NAGAR RAVIRALA LIMESTONE MINE (RF) AMBIENT AIR QUALITY MONITORING DATA - CORE ZONE PERIOD - April 2024 to September 2024

	Limit		100	09	80	80	2000	100	09	80	80	2000	100	90	80	80	2000	100	9	80	80	2000
	September 2024	II FORT NIGHT	49.6	20.0	16.3	18.9	472	50.3	20.6	12.9	15.4	414	45.1	18.5	14.2	17.4	421	46.2	18.8	14.8	18.1	402
	Septem	I FORT NIGHT	48.3	19.6	13.4	16.1	441	50.1	20.1	13.9	17.5	426	49.8	20.0	14.2	17.1	448	52.6	21.0	13.1	15.9	418
- The state of the	2024	II FORT	49.3	19.9	15.6	18.2	491	52.4	21.4	14.3	16.8	434	43.6	17.9	15.9	19.1	432	47.2	19.2	15.6	18.9	426
	August	I FORT NIGHT	52.7	21.3	12.3	15.0	438	53.9	21.6	15.6	19.2	412	50.6	20.3	12.9	15.8	439	53.8	21.5	13.8	16.6	426
	2024	II FORT	52.7	21.2	14.3	16.9	484	50.6	20.7	15.2	17.7	421	53.8	22.1	14.9	18.1	402	52.1	21.2	12.1	15.4	399
	July	I FORT	48.2	19.5	13.8	16.5	472	50.3	20.2	12.6	16.2	483	49.6	19.9	13.9	16.8	463	53.1	21.2	13.3	16.1	429
Month	2024	II FORT	69.2	27.9	19.3	21.9	584	73.5	30.1	18.2	20.7	541	74.6	30.7	19.1	22.3	622	65.3	26.5	17.2	20.5	599
	June	I FORT	9.69	28.2	16.2	18.9	591	67.3	27.0	17.3	20.9	636	58.4	23.4	16.2	19.1	582	59.3	23.7	18.3	21.1	593
	1024	II FORT	67.3	27.1	18.4	21.0	562	72.1	29.5	16.3	18.8	555	70.3	28.9	18.3	21.5	563	68.9	28.0	19.2	22.5	601
Lightweeter	May 2024	I FORT	65.3	26.4	15.9	18.6	582	8.99	26.8	16.8	20.4	623	62.4	25.0	17.2	20.1	571	58.3	23.3	15.3	18.1	588
To the state of th	1024	II FORT	62.4	253.0	16.3	19.0	556	63.3	25,4	14.2	17.8	583	58.2	23.3	16.3	19.2	552	56.2	22.5	13.9	16.7	547
	April 2024	I FORT	63.9	25.8	16.2	18.8	549	62.6	25.6	15.5	18.0	549	63.8	26.2	16.3	19.5	512	61.6	25.0	17.1	20.4	548
	1040		PM 10	PM 2.5	SO <sub>2</sub>	NOX	8	PM 10	PM 2.5	SO <sub>2</sub>	NOx	8	PM 10	PM 2.5	SO <sub>2</sub>	NOx	8	PM 10	PM 2.5	SO <sub>2</sub>	NOX	00
A SAMANANA A SAMANA	100		***************************************	<u> </u>	Mines Office	<u> </u>	<u></u>		1	ML3 Tower					ML4 Tower	3)			1	Tower Light	Area	

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

# THE RAMCO CEMENTS LIMITED, KSR NAGAR NOISE LEVEL MONITORING - RAVIRALA LIMESTONE MINE PERIOD - April 2024 to September 2024

				Noise Value dB(A)	ue dB(A)	
Š.	Date of monitoring	Machine / Location	Day time (6AM to 10PM)	Permissible Limit dB(A)	Night time (10PM to 6AM)	Permissible Limit dB(A)
↔	28.09.2024	Drilling area	72.7	< 75	63.90	< 70
2	28.09.2024	Loading area	72.9	< 75	62.10	< 70
3	28.09.2024	Haul road	70.3	< 75	63.80	< 70
4	28.09.2024	Unloading area	71.8	< 75	63.60	< 70
5	28.09.2024	Mines office	53.6	< 75	38.30	< 70
9	28.09.2024	Dumping area	51.7	< 75	40.60	< 70
7	28.09.2024	Pump house	63.9	< 75	43.90	< 70
8	28.09.2024	Weigh bridge	9.09	< 75	48.20	< 70
6	28.09.2024	Ravirala View point	63.8	< 75	48,10	< 70
10	28.09.2024	Near ML-4 Tower Light	62,7	< 75	43.70	< 70
	Ammuni					









ISO 9001 ISO 14001 ISO 45001 ISO 50001 Certified Company Jaggayyapet Mandal, Krishna District, Andhra Pradesh, India Phone: 08654 224400-04 Fax: 08654 222352

Fax: U8654 222352
E-mail: mcllpm@ramcocements.co.in

Kumarasamy Raja Nagar - 521457

## THE RAMCO CEMENTS LIMITED

RCL/CGWB/R. RF-239/272

Dt. 20.11.2024

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

Dear Sir,

Sub: Submission of water level data & ground water quality data for Environmental Clearances for Ravirala Limestone Mine (RF) for the period from April 2024 to September 2024 – Reg.

Ref: 1. EC Lr. No. SEIAA/AP/MIN/KRI/07/2020/1973/174.80 & 171.63 dated 05.03.2022.

2. EC Lr. No. J-11015/149/2008-IA II (M) dated 26.08.2009.

3. EC Lr. No. J-11015/18/2000-IA.II (M) dated 16.10.2002.

This has reference to the above cited Environmental Clearance orders for Ravirala Limestone Mine (RF).

We herewith enclose the water level data measured by piezometers & ground water quality data as part of half-yearly compliance for Environmental Clearances 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.)

## WATER LEVEL DATA - RAVIRALA LIMESTONE MINE (RF) PERIOD - April 2024 to September 2024 THE RAMCO CEMENTS LIMITED

## 1.PIEZOMETER DETAILS: Bore Well

Location: Ravirala, South Side of Lease

RL - (+)51.00m

Longitude - E80<sup>0</sup> 07' 58.2" Latitude - N 16<sup>0</sup> 50' 27.6"

Depth of well - 45.0 m

,						············						
Water Level (m), bgl	20.01	20.30	20.42	20.18	19.94	19.85	19.71	18.89	18.02	17.25	11.52	11.65
S. No.   Date of Monitoring	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	29.09.2024
S. No.	1	2	3	4	ß	9	7	œ	6	10	11	12

## 2.PIEZOMETER DETAILS: Bore Well

Location: Ravirala, East Side of Mining Lease near

7-2 BH pillar

Longitude - E80° 08' 55.1" RL - (+) 61.00m Latitude - N16" 50' 20.4"

Depth of well - 24.50 m

	Water Level (m), bgl	20.42	20.51	20.72	19.84	19.48	19.17	19.32	19.91	20.89	24.98	25.40	23.83
11 00:45 - 10M 10 10d00	S. No.   Date of Monitoring	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	29.09.2024
ここい	S. No.		2	Ж	4	ľV	9	7	8	o,	10	11	12

## 3.PIEZOMETER DETAILS: New Bore Well

.

Location: Ravirala, West Side of Haul road

RL - (+) 44,00m

Longitude - E80<sup>0</sup> 08' 05.7" Latitude - N16<sup>0</sup> 50' 33.2" Denth of well - 35.0 m

					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
Water Level (m), bgl	23.03	23.13	23.2	23.37	23.05	23.06	22.85	21.54	20.78	15.89	15.54	15.75
Date of Monitoring	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	29.09.2024
S. No.	<b>γ</b> −₹	2	т	Ą	J.	9	7	ထ	6	10	11	12

## 4.PIEZOMETER DETAILS: New Bore Well

Location: Ravirala, South Side Near BH No.3-7A

RL - (+) 55.00m

Longitude - E80° 08' 39.5" Latitude - N16° 50' 11.5" Depth of well - 50.0 m

1		<del></del> -			_								
	Water Level (m), bgl	29.18	29.45	29.74	29.99	28.38	27,43	27.57	27.09	26.87	17.73	22.23	23.16
Jepui oi weil - Julo III	Date of Monitoring	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	700000
	S. No.	¥I	2	8	4	ľΛ	9	7	8	6	10	11	۲,

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

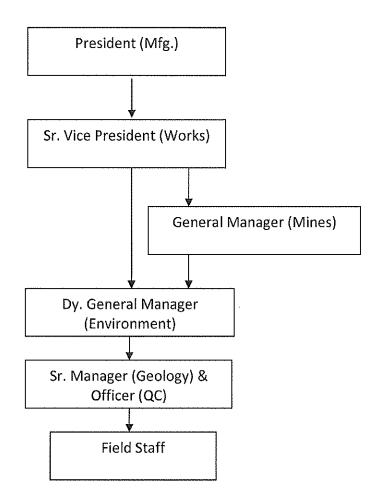
S. Na	Parameter	Unit	Dharmavarapadu Thanda Bore Well Water:April-24 to June-24	Chillakallu Open Well Water: April- 24 to June-24	K,Agraharam Bore Well Water: April- 24 to June-24		Jayanthipuram Bore Well Water:April-24 to June-24	Ravirala Bore Well Water: April- 24 to June- 24	Vedadri Bore Well Water; April-24 to June-24	Bore Well	Jaggayyapet Bore Well Water:April-24 to June-24	Llinits
			WI	W2	W3	W4	W5	W6	W7	8W	W9	
1	ρ <sup>H</sup>	•	7.68	7.76	7,49	7.81	7.78	7.61	7.58	756.00	7.81	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	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 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	nig/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	polios/cot	812	876	948	792	781	822	802	839	826	
9	Total Dissolved Solids	mg/L	553	559	536	496	448	449	446	453	464	500-2000
10	Total Hardness (as CaCO <sub>3</sub> )	mg/L	256	278	321	191	198	239	204	216	248	200-600
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	75-200
14	Magneslum (as Mg)	mg/L	36.2	23.8	25,6	25.8	35.3	19.2	26.2	28.3	24.6	30-100
15	Sodíum (as Na)	mg/L	48.3	47.1	52.3	39.2	57.2	48.3	48.9	42.6	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)	mg/L	153.0	152,0	159.0	127.0	171.0	153.0	161,0	152.0	131.0	250-1000
18	Sulpliate (as SO <sub>4)</sub>	nıg/i.	38.6	46.9	44.1	38.4	48.6	36.2	35,3	38,9	33.6	200-400
19	Total Alkalinity (as CaCO <sub>3</sub> )	mg/i,	145,0	148.0	121.0	130.0	139.0	142.0	112.0	106.0	103.0	200-600
20	8OD (for 3 days at 27 <sup>o</sup> C)	nig/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4,0	<4.0	
21	Chemical Oxygen Demand	mg/t	17.2	25,3	35.2	18.3	23.6	24.8	26,9	23.8	22.7	
22	Oll & 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/t.	0,26	0,31	0.28	0,07	0.24	0.09	0.18	0.11	0.05	0,3
24	Fhioride (as F)	mg/L	0,32	0.29	0.26	0.38	0.48	0.31	0,21	0.32	0.29	1,0-1,5
25	Nitrate (as NO <sub>3)</sub>	mg/L	0.87	1,46	88.0	0.46	0.58	0.68	0,61	0.28	0.31	45
26	Phosphates (as PO <sub>4)</sub>	mg/L	<0.01	<0.01	<0.61	<0.01	<0.01	<0.01	<0.01	<0.91	<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 Maiatholn)	mg/L	<0.01	<0.01	<0.01	<0.31	<0.01	<0.01	<0,01	<0,01	<0.01	
29	Phenolic Compounds (as C <sub>c</sub> H <sub>5</sub> OH)	mg/£	<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	
	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
	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 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	£0,0>	<0.01	<0.01	<0.01	<0.01	
	Arsenic as As	mg/L	<0.01	<0.01	<0.0L	<0.01	<0.01	<0.01	<0,01	<0.01	< 0.01	0.05-0.2
	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	<0.091	<0.001	<0.001	<0.001	<0.001	<0.001	<0.091	
39	Lead (as Pb)	nig/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	%	46.8	47,9	39.1	38.6	48,6	43.9	38.6	37.8	41,2	•
	Total Coliforms	MPN/100 mt	NII	NII.	Nil	Nil	NII	Nil	liff	NH	MII	50-5000
	Faecal Collforms	MPN/100 mt	NII	NII	MII 	NIT	Nil	Nil	1411	N#	NH	<del></del>
	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 Septembe	r 2024
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S. No	Parameter	Unit	Dharmavarapadu Thanda Bore Well Water: July-2024(o Sep-2024	Chillakallu Open Well Water: July- 2024 to Sep- 2024	K,Agreharam Bore Well Water: July- 2024 to Sep- 2024	Pochampalii Bore Well Water: July- 2024 to Sep- 2024	Jayanthipuram Bore Well Water: July- 2024 to Sep- 2024	Ravirala Bore Well Water: July-2024 to Sep-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	Limits
			WI	W2	W3	W4	W5	W6	W7	BW.	W9	
1	ρ <sup>H</sup>	•	7,78	7.53	7.59	7.46	7.61	7,98	7,67	7.68	7.83	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	28.9	27,6	26.8	28,3	28.6	27,3	29.6	28.8	27.6	
4	Turbidity	UTN	1.3	1.5	1.1	1.6	1.9	1,6	1.3	1.1	1,5	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	nsg/L	4.2	4.9	4.8	4.6	5,4	1.5	5,8	4.7	4.9	
7	Total Suspended Solids	nig/L	28.9	26.1	27.3	26.8	29.3	32.6	37.3	37,8	38.4	
8	Electrical Conductivity	pmbos/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	500-2000
10	Total Hardness (as CaCO <sub>3</sub> )	mg/L	252.0	283.0	286.0	214.0	321.0	291,0	283.0	246.0	278.0	200-600
11	Calcium Hardness	mg/L	148.0	149.0	138.0	126.0	189.0	143,0	168.0	145.0	1,35,0	
12	Magnesium Mardness	nig/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	55.6	65,2	63,1	55.1	56.2	53.9	53.7	50.3	47.1	75-200
14	Magnesium (as Mg)	mg/L	35.2	28,3	26.4	25.9	33,6	18.3	27.1	29.2	25.1	30-100
15	Sodíum (as Na)	mg/L	44.2	41.6	4B.3	39,6	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	-
17	Chloride (as Cl)	mg/L	153,0	174.0	145.0	138.0	179,0	142.0	158.0	151.0	139,0	250-1000
18	Suiphate (as SO4)	mg/L	37,2	39.3	42,6	39,1	44,6	30.9	37.1	36,3	36.1	200-400
19	Total Alkalinity (as CaCO <sub>3</sub> )	rig/L	136.0	128.0	109.0	124.0	131.0	137.0	132,0	139.0	99.2	200-600
20	8OD (for 3 days at 27 <sup>O</sup> C)	mg/l.	<4.D	<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	
22	Oif & Grease	mg/L	1,0>	<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	0.00	0.3
24	Fluoride (as F)	mg/L	0.23	0.25	0.34	0.23	0.21	0.21	0.34	0,29	0.31	1.0-1.5
25	Nitrate (as NO <sub>1)</sub>	rng/L	0.72	1,29	0.71	0.47	0.51	0.61	0,66	0,39	0.48	45
26	Phosphates (as PO <sub>4)</sub>	mg/L	<0,01	<0.01	<0.01	< 0.01	< 0.01	<0.01	<0.01	<0,0i	<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	10.0>	<0.01	
29	Phenofic Compounds (as C <sub>6</sub> H <sub>5</sub> OF	mg/i.	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	40.01	<0.01	
30	Manganese (as Mn)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.01	<0.01	10.0>	<0.01	
31	Chromium (as Cr*6)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0,01	₹0.01	<0.01	
32	Copper (as Cu)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0,01	<0,01	40.01	<0.01	1,5
33	Selenium as Se	mg/L	<0.01	<0.01	10,0>	<0.01	<0.01	< 0.01	<0,01	<0.01	<0.01	
34	Aluminium (as Al)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
35	Cadmium (as Cd)	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
ЭG	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	Boton (as B)	mg/L	<0.01	<0.01	40,01	<0.01	<0,01	<0.01	<0.01	<0.01	<0.01	2
38	Hercury (as Hg)	mg/L	< 0.001	<0.001	<0.001	40.001	<0,001	<0.001	<0.001	<0.001	<0,00t	
39	Lead (as Pb)	nıg/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 - 15
41	Percent Sodium	%	48.20	43.70	36,60	35,10	47.90	43.60	41.80	36.20	39.90	-
42	Total Coliforms	MPN/100 mL	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	50-5000
43	Faecal Coliforms	MPR/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 ORGANIZATIONAL CHART OF ENVIRONMENTAL CELL



# THE RAMCO CEMENTS LIMITED, KSR NAGAR AUTO GARAGE OIL & GREASE TRAP OUTLET WATER QUALITY DATA PERIOD - APRIL 2024 TO SEPTEMBER 2024

					Ψ	Month			Range /	
S. No	S. No Parameter	Unit	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Average	Norm
Н	1 p <sup>H</sup>		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	Total Dissolved Solids	mg/L	823	856	891	978	952	911	902	2100
33	3 Total Suspended Solids	mg/L	9.07	73.6	75.3	70.6	73.6	70.2	72.3	100
4	Chemical Oxygen Demand	mg/L	123	131	148	139	126	118	131	250
5	5 BOD (for 3 days at 27 <sup>O</sup> 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	1.4	1.7	1.97	10

## THE RAMCO CEMENTS LIMITED, KSR NAGAR RAVIRALA LIMESTONE MINE (RF) MINE DISCHARGE WATER QUALITY DATA PERIOD - April 2024 to September 2024

					**	i de			
						Month	maj		
S. No	Parameter		April 2024	May 2024	June 2024	July 2024	August 2024	September 2024	Limits
П	H-d		7,63	7.78	7.81	7.92	7.88	7.79	5.5 - 9.0
2	Total Suspended Solids	mg/L	58.90	61.2	65.3	9.69	67.3	62.6	100
8	Total Dissolved Solids	mg/L	812	839	892	923	912	901	2100
4	Chlorides (as CI)	mg/L	283	296	326	341	329	313	1000
5	Sulphates (as SO <sub>4)</sub>	mg/L	54.6	26.3	29.6	62.3	63.5	62.0	1000
9	BOD (for 3 days at 27 <sup>o</sup> C)	mg/L	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0	30
	Chemical Oxygen Demand	mg/L	19.10	20.60	22.80	28.20	29.10	28.20	250
8	Oil & Grease	mg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	10
6	Iron (as Fe)	mg/L	0.74	0.71	0.89	0.93	0.78	0.71	3.0
10	Fluoride (as F)	mg/L	0.81	0.79	0.86	0.91	0.85	0.89	2.0