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THE RAMCO CEMENTS LIMITED

RCL/MoEF&CC/RBLM-239/277

Dt. 26.11.2024

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

Respected Sir,

Submission of Half-Yearly Compliance Reports for Environmental Clearances for Sub: Ramco Budawada Limestone Mine (RF) of The Ramco Cements Limited for the period from April 2024 to September 2024 - Reg.

1. EC Lr. No. J-11015/443/2014-IA.II(M) dated 09.07.2024. Ref:

2. EC amendment order vide order No. J-11015/150/2008-IA-II(M) dated 07.08.2023.

3. EC Lr. No. J-11015/150/ 2008-IA.II(M) dated 10.12.2009.

We are herewith submitting the Half-Yearly Compliance Reports for the above cited Environmental Clearance orders and amendment order for the period from April 2024 to September 2024 along with relevant enclosures for our Ramco Budawada 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,

(Formerly known as Madras Cements Ltd.,)

ASHISH KUMAR SRIVASTAVA

President (Mfg.)

Encl.: As above.

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

HALF-YEARLY COMPLIANCE REPORT

| Environmental Cl | earance | Order No. J-11015/443/2014-IA.II (M) and dated 09.07.2024 | | |
|-------------------------|---------|--|--|--|
| Letter/s No. and Date | | · | | |
| Name of the Project | | Ramco Budawada Limestone Mine (RF) Of The Ramco Cements Limited – 1.10 Million TPA to 2.50 Million TPA Capacity of Limestone | | |
| Period of Compliance Re | eport | April 2024 to September 2024 | | |

A. Specific Conditions:

| S.No. | Condition | Compliance Status |
|-----------|--|--|
| i. | PP shall obtain CTE /CTO from State Pollution Control Board for 2.5 MTPA production capacities for Limestone mine. | Being complied. CTE & CTO orders are received for this expansion project from AP Pollution Control Board. |
| ii. | The Project Proponent needs to ensure that the machinery requirement / capacity shall match with the proposed expansion production capacity so as to avoid the sudden increase in pollution load. | Being complied. All the required machinery are established to cater the total production capacity of 2.50 Million TPA. |
| iii. | PP shall ensure the compliance of expenditure to be incurred for wildlife conservation plan submitted to the State Govt. and the details expenditure shall be submitted with six monthly EC compliance report to Ministry's Sub-Regional Office. | Noted. Wildlife conservation plan prepared for Schedule - I species and submitted to Chief Wildlife Warden, Govt. of A.P, Forest Department. Accordingly, The Prl. Chief Conservator of Forests & Chief Wild Life Warden, Government of Andhra Pradesh has approved the Wild Life Conservation plan vide letter No. 21024/19/2022/WL-2 dated 11.07.2024. The same is being implemented for conservation of Schedule - I species. |
| iv. | The Project Proponent needs to explore the possibility of using advance / latest mining technologies available so as to minimize the ecological impacts. | Noted. Using the latest mining technologies available i.e Non-el detonators so as to minimize the ecological impacts. |
| v. | PP shall dissipate the noise from the mining operations within the mining lease area. PP shall provide ear muffs to all mine workers to avoid health implications and PP shall limit the exposure time of workers to excessive noise. | Vehicles are being maintained properly for control of noise. Ear plugs / muffs are provided to respective HEMM operators and limiting the exposure time of workers to excessive noise. Various other precautions are also being taken to control the noise. Compiled data of Noise levels measured in the period April 2024 |

| S.No. | Condition | Compliance Status |
|-------|--|---|
| | · | to September 2024 is enclosed as Annexure – I. |
| vi. | The Project Proponent needs to carry out ground vibration study through reputed institute to determine maximum charge per hole and charge to be blasted per delay so that ground vibrations are minimized and kept within permissible safe limits fixed by DGMS. | Being complied. Ground vibration study carried out by NIT, Rourkela and report is awaiting. Controlled blasting is being practiced by using advanced technology viz., Shock tube bottom initiation detonators to reduce ground vibrations, as per DGMS guidelines. |
| vii. | PP shall transport the limestone from the Mine lease to cement plant by the dedicated railway wagon. | Being Complied. |
| viii. | The Continuous Ambient Air Quality Monitoring Stations (CAAQMS) shall be installed and commissioned in consultation with CPCB. The real time data so generated should be digitally at entry and exit gate of mine lease area for public display and shall be linked to server of CPCB / SPCB. | Being complied. Continuous Ambient Air Quality Monitoring Stations (CAAQMS) installed in the mine lease area and data is being transmitted to APPCB server. |
| ix. | The Project Proponent shall monitor the air quality, noise level, water quality, water level and ground vibration during drilling and blasting at the edge of the mine, near the village, and at other sensitive receptors and such collected data shall be submitted quarterly to the Ministry's Regional Office. | Being complied. Groundwater level is being monitored regularly (at 3 locations) and readings are being recorded. Ground water quality is being analysed by MoEF&CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad). No major adverse impact on ground water quality and quantity is observed after opening of the mine. The ground water level data and ground water quality data for the period April 2024 to September 2024 is being submitted to the CGWB and enclosed as Annexure - II. Ambient air quality monitoring is being done in buffer zone of the lease by MoEF&CC approved external environmental monitoring agency for PM₁₀, PM_{2.5}, SO₂, NOx monitoring. As per the data, the ground level concentrations are within the NAAQ norms notified by MoEF&CC, GOI dated 16.11.2009. Compiled data for the period April 2024 to September 2024 is enclosed |

| S.No. | Condition | Compliance Status |
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| | | as Annexure – III. Compiled data on fugitive dust monitoring for the period from April 2024 to September 2024 is enclosed as Annexure – IV. Compiled data of Noise levels measured in the period April 2024 to September 2024 is enclosed as Annexure – I. |
| X. | The Project Proponent needs to complete the entire peripheral plantation under green belt, safety barrier plantation and gap plantation within three years from the start of mining operations. The Project Proponent should plant quality sampling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seeding height to ensure good growth after out planting. Plantation shall be undertaken in consultation with the State Forest Department. The Project Proponent shall make the actual count on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target survival rate shall be submitted to the Ministry's Regional Office. | Being complied. • 12730 Nos. of plants are survived over an area of 4.10 Ha all along the boundary up to September 2024. |
| xi. | The Project Proponent needs to take adequate control measures to arrest the fugitive dust arising from the crusher at the source itself. The dense plantation shall be carried out in the vicinity of the crusher. The air pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at crushers and other areas prone to air pollution. | Fugitive dust generated during mining activities is being controlled by water spraying and implementing wet drilling. 17 Nos. of bag filters are installed to control air pollution from the crushing and transportation activities associated within this mine. Water fogging system is arranged at crusher hopper. Compiled data on fugitive dust monitoring for the period from April 2024 to September 2024 is enclosed as Annexure – IV. |
| xii. | PP shall install 4 Nos. of RO plants for uninterrupted supply of drinking water to the nearby villages DP Thanda, Jayanthipuram, Ravirala & Nawabpet and | Complied. 4 Nos. of RO plants installed for uninterrupted supply of drinking water to the nearby villages DP Thanda, |

| S.No. | Condition | Compliance Status |
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| | submit a report with photographs to Sub-Regional Office, MoEF&CC. | Jayanthipuram, Ravirala & Nawabpet. |
| xiii. | PP shall submit the status of Oxygen plant constructed at Jaggayyapet Community Health Centre as well as the Ambulance facility that has been extended for the near villages to the Sub-Regional Office, MoEF&CC. | Being complied. Oxygen plant constructed at Jaggayyapet Community Health Centre. Ambulance facility is being extended to the near villages, upon the requests. |
| xiv. | The Project Proponent needs to make provision for permanent water sprinklers instead of water tankers. About 10 Nos. of fog canon / mist sprayer of at least 40 m throw shall be installed at various locations in the mine area. Effect dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission. The Project Proponent needs to put effort to reduce water consumption by 30%. | Water fogging system is arranged at crusher hopper. Installation of Permanent Water sprinklers is under progress. Water tankers are being used for wetting the haul roads. |
| xv. | PP shall submit the log-book detail of patient & doctors visited to established medical camps in nearby villages and amount of medicines supply to Sub-Regional Office, MoEF&CC. | Being complied. Log-book is being maintained regarding details of patient & doctors visiting to the medical camps in nearby villages and amount of medicines supply. |
| xvi. | The Project Proponent shall also organize employment-based apprenticeship / internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of local people. The data should be maintained for the training imparted to the persons and the outcome of the training, for the assessment of training program should be analyzed periodically and improved accordingly. The preference shall be given to the local people for the purpose of employment as committed before the EAC. | Being complied. 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. Contributing stipend to the local ITI students who are undergoing GMR Skill Development Programme (post academic), through which they acquire better employment opportunities. |
| xvii. | PP shall implement the activities-wise proposed budget for Public Hearing Budget of Rs. 80 Lakh as proposed before the EAC in time bound manner. The details of annual expenditure incurred shall be part of report to be submitted to Sub-Regional Office, MoEF&CC. PP needs to include the audited figures against the expenditure and activities to be monitored by through dedicated monitoring mechanism. The maintenance of all activities shall be covered | activities for the nearby villages are being carried out as per the need basis of the local people (requirements collected from them), |

| S.No. | Condition | Compliance Status |
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| | through recurring cost of Public Hearing, and continued as a part of CSR budget. | for upliftment of local areas and account is being maintained. These include village-wise, sectorwise (health, skill development and infrastructure requirements such as strengthening of village roads, avenue plantation, etc.). Cost of various socio-economic activities for the surrounding villages in the financial year 2003-2024 is Rs. 1,01,20,449/- against Rs. 1,20,10,872/- in the financial year 2022-2023. |
| xviii. | PP shall create a "Public Grievance Redressal and Monitoring System" for resolving any issues related to the pollution of mines and compliant has to resolve as soon as possible not beyond 30 days. In this regard, adequate awareness to be spread among the public to address their grievance to company with simple and easy manner and for which company needs to devise the mechanism. The same shall be reported to Sub-Regional Office within 3 months. A logbook to be maintained by PP on "Public Grievance Redressal and Monitoring System". | Being complied. Public Grievance Redressal committee is formed and monitoring the grievance received if any. A logbook is maintained on "Public Grievance Redressal and Monitoring System" for resolving any issues related to the pollution. |
| xix. | The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report. | Being complied. Awareness programme conducted from 15.09.24 to 30.09.24 as part of the "Swachhata Hi Seva' under guidance of Govt., of India among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP). |
| XX. | The Project Proponent should establish in house (at project site) environment laboratory for measurement of environment parameter with respect to air quality and water (surface and ground). A dedicated team to oversee environment management shall be setup at site which should comprise of Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis instead of engaging environment monitoring laboratories / consultants. Any non-compliance or infringement should be | The services of MoEF&CC approval external environmental agency are being utilized, presently. In house environmental laboratory will be established comprising Environment Engineers, Laboratory chemist and staff for monitoring of air, water quality parameters on routine basis. |

| S.No. | Condition | Compliance Status |
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| | reported to the concerned authority. | |
| xxi. | The Project Proponent shall explore the possibility of using at least 20% of Electric vehicles / CNG / Solar instead of diesel operation within three years. | Noted. We will explore the possibility of using at least 20% of Electric vehicles / CNG / Solar instead of diesel operation. |
| xxii. | The Project Proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on occupational health shall be carried out every year for mine workers. PP shall also organize medical camp for the benefit of the local people and also the monitor the health impacts due to mining activity. | Monitoring and maintaining the health records of the mine workers prior to mining operations, at the time of operation of mine and post mining operations. Regular surveillance on occupational health is being carried out as per DGMS guidelines. Also organizing medical camps for the benefit of the local people and also monitoring the health impacts due to mining activity. |
| xxiii. | The mining lease holders shall, after ceasing mining operations, undertake regressing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna, etc. The implementation report of the above said condition shall be submitted to the Ministry's Regional Office. | Noted and will be complied at the time of ceasing of mining operations in this lease area. |
| xxiv. | The Project Proponent shall periodically maintain the garland drains, retaining wall and other water management structures in the mine lease area. | Noted. As on date, there are no dumps. Trenches / garland drains will be constructed at foot of dumps, accordingly. 2 Nos. of check dams are constructed within the mining lease area. |

B. Standard Conditions:

I. Statutory compliance:

| S.No. | Condition | Compliance Status | | | |
|-------|--|-------------------|--|--|--|
| 1. | The Environmental Clearance (EC) is subject to orders / judgement of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable. | accordingly. | | | |
| 2. | The Project Proponent complies with all the statutory requirements and judgement of Hon'ble Supreme Court dated 2 nd August, 2017 in Writ | accordingly. | | | |

| S.No. | Condition | Compliance Status |
|---|--|--|
| | Petition (Civil) No. 114 of 2014 in matter of | • |
| | Common Cause versus Union of India & Ors before | |
| | commencing the mining operations. | |
| 3. | The State Government concerned shall ensure that | Not applicable. |
| • | mining operation shall not be commenced till the | As this expansion proposal for |
| | entire compensation levied, if any, for illegal | the operating mine. |
| | mining paid by the Project Proponent through | No illegal mining operations |
| | their respective Department of Mining & Geology | carried out in this mine. |
| | in strict compliance of Judgement of Hon'ble | |
| | Supreme Court dated 2 nd August, 2017 in Writ | |
| | Petition (Civil) No. 114 of 2014 in matter of | |
| | Common Cause versus Union of India & Ors | |
| 4. | The Project Proponent shall follow the mitigation | Not applicable. |
| -7. | measures provided in MoEFCC's Office | The Habitations and villages |
| | Memorandum No. Z-11013/57/204-IA.II (M) dated | are not part of mine lease |
| | 29th October 2014, titled "Impact of mining | area and surrounded by the |
| | activities on Habitations-Issues related to the | mine lease area. |
| | mining Projects wherein Habitations and villages | |
| *** | are the part of mine lease areas or Habitations and | |
| *************************************** | villages are surrounded by the mine lease area". | |
| 5. | A copy of EC letter will be marked to concerned | Complied. |
| | Panchayat / local NGO etc. if any, from whom | Letter submitted. |
| | suggestion / representation has been received | |
| | while processing the proposal. | |
| 6. | State Pollution Control Board / Committee shall be | Noted. |
| | responsible for display of this EC letter at its | Copy submitted to State Pollution |
| | Regional Office, District Industries Centre and | Control Board. |
| | Collector's office / Tehsildar's Office for 30 days. | |
| 7. | The Project Authorities should widely advertise | Complied. |
| | about the grant of this EC letter by printing the | Advertisement made on 2 |
| | same in at least two local newspapers, one of | Nos. of newspapers (The New |
| | which shall be in vernacular language of the | Indian Express – English & |
| | concerned area. The advertisement shall be done | Eenadu- Telugu- vernacular |
| | within 7 days of the issue of the clearance letter | language) on 11.07.2024 |
| | mentioning that the instant project has been | regarding the same. |
| | accorded EC and copy of the EC letter is available | • Copy of the same is |
| | with the State Pollution Control Board / | submitted to IRO, Vijayawada |
| | Committee and web site of the Ministry of | |
| | Environment, Forest and Climate Change | |
| | (<u>www.parivesh.nic.in</u>). A copy of the | dated 11.07.2024. |
| | advertisement may be forwarded to the concerned | |
| | MoEF&CC Regional Office for compliance and | |
| | record. | No. 1 |
| 8. | The Project Proponent shall inform the MoEF&CC | Noted. |
| | for any change in ownership of the mining lease. In | Will inform MoEF&CC for any |
| | case there is any change in ownership or mining | change in ownership of the mining |
| | lease is transferred. PP needs to apply for transfer | lease. In case there is any change |
| | of EC as per provisions of the para 11 of EIA | |
| 1 | Notification, 2006 as amended from time to time. | transferred. |

II. Air Quality Monitoring and Preservation:

| S.No. | Condition | Compliance Status | | |
|-------|--|--|--|--|
| 9. | The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz., PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main gate of mine site. | Installed 5 Nos. of Continuous Ambient Air Quality Monitoring Stations. PM₁₀ & PM_{2.5} in reference to PM emission and SO₂ & NO_x in reference to gas emissions are being monitored at all the stations. Online data is being digitally displayed in the board near main gate. 4 Nos. of ambient air quality monitoring stations are established in core zone and regular (fortnightly) manual monitoring by MoEF&CC approved external environmental monitoring agency (M/s Universal Enviro Associates, Hyderabad) for PM₁₀, PM_{2.5}, SO₂, NOx and CO monitoring. Compiled data for the period April 2024 to September 2024 is enclosed as Annexure – III. | | |
| 10 | Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments / machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF&CC / Central Pollution Control Board. | to control air pollution from the crushing and transportation activities associated within this mine. • Water fogging system is arranged | | |

III. Water Quality Monitoring and Preservation:

| S.No. | o. Condition | | Compliance Status | | | |
|-------|--------------|-------|-------------------|--------|--------|-----------------|
| 11. | In | case, | immediate | mining | scheme | Being complied. |

| S.No. | Condition | | Compliance Status |
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| | envisages intersection of ground water | | Detailed hydro-geological study is |
| | table, then Environmental Clearance shall | | carried out & report submitted to the |
| | become operational only after receiving | | Ministry along with EIA report |
| | formal clearance from CGWA. In case, | | submitted for the project. |
| | mining operation involves intersection of | 9 | Further, State Ground Water |
| | ground water table at a later stage, then | | Department has conducted the hydro- |
| | PP shall ensure that prior approval from | | geological study and forwarded the |
| | CGWA and MoEF&CC is in place before | | report to Department of Panchayat Raj |
| | such mining operations. The permission | | & Rural Development, Government of |
| | for intersection of ground water table | | Andhra Pradesh (agency authorized to |
| | shall essentially be based on detailed | | issue NOC for AP mining projects). |
| | hydro-geological study of the area. | 8 | Presently, the mine workings are not |
| | | | intersected the ground water table. |
| | | | However, Permission obtained from |
| | | | Panchayat Raj & Rural Development |
| | | | Department (nodal agency for Central |
| | | | Ground Water Department) vide Lr. |
| | | | No. PRR05-11028/16/2019-SLNA-GIS- |
| | | | CORD, date: 11.07.2024 to work below water table. This order is valid up to |
| | | | 09.07.2026. |
| | | | Groundwater level is being monitored |
| | | 8 | regularly (at 3 locations) and readings |
| **** | | | are being recorded. No major adverse |
| | | | impact on ground water quality and |
| | | | quantity is observed after opening of |
| | | | the mine. |
| | | | The ground water level data and |
| | | | ground water quality data for the |
| | | | period April 2024 to September 2024 is |
| | | | being submitted to the CGWB and |
| | | | enclosed as Annexure – II. |
| 12. | Project Proponent shall regularly monitor | Ве | ing complied. |
| ! | and maintain records w.r.t. ground water | 8 | Groundwater level is being monitored |
| | level and quality in and around the mine | | regularly (at 3 piezo-meter locations |
| | lease by establishing a network of existing | *************************************** | within mining lease area) and readings |
| | wells as well as new piezo-meter | 1 | are being recorded. |
| | installations during the mining operation | 8 | Ground water quality is being analysed |
| | in consultation with Central Ground Water | | by MoEF&CC approved external |
| | Authority / State Ground Water | | environmental agency (M/s Universal |
| | Department. The Report on changes in | | Enviro Associates, Hyderabad). |
| | Ground water level and quality shall be | 8 | No major adverse impact on ground |
| | submitted on six-monthly basis to the | | water quality and quantity is observed |
| | Regional Office of the Ministry, CGWA and | | after opening of the mine. |
| | State Ground Water Department / State Pollution Control Board. | 8 | The ground water level data and |
| | POHULION CONTROL BOATG. | | ground water quality data for the |
| | | | period April 2024 to September 2024 is |
| | | <u> </u> | being submitted to the CGWB and |

| S.No. | Condition | Compliance Status | |
|-------|---|---|--|
| | | enclosed as Annexure – II. | |
| 13. | The Project Proponent shall undertake regular monitoring of natural water course / water resources / springs and perennial nallahs existing / flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/or alteration be made to water bodies during mining operations without justification and prior approval of MoEF&CC. The monitoring of water course / bodies existing in lease area shall be carried out four times in a year viz., premonsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central | | |
| | Pollution Control Board. Clearly showing the trend analysis on six-monthly basis. | | |
| 14 | Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off, acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TSS), Dissolved Oxygen (DO), pH and Total Dissolved Solids (TDS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard. | Not applicable, as no polluted water is being generated from the mine lease area. | |
| 15 | Project Proponent shall plan, develop and | Being complied. | |

| S.No. | Condition | Compliance Status |
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| | implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board / State Ground Water Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF&CC annually. | 48 Nos. & 4 Nos. of rain water harvesting structures are made to recharge the ground water in the colony & plant respectively by September 2024. |
| 16 | Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and Grease trap. | Being complied. There is no workshop at the project area and no waste water is being generated from the mine. |
| 17 | The water balance / water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board / Committee. | Being complied. Water consumption after this expansion proposal is well within the permitted quantity of 200 kLD. Measures will be taken to further reduce the water consumption. |

IV. Noise and Vibration Monitoring and Prevention:

| S.No. | Condition | Compliance Status |
|-------|--|---|
| 18 | The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines. | Being complied. The nearest habitation is at a distance of 1.5 km. Peak particle velocity at a distance of 500 m is being measured by Minimate for major blasting operations, as per DGMS guidelines. |
| 19 | The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights / masks away from the villagers and keeping the noise levels well within the prescribed | Being complied. The nearest habitation is at distance of 1.5 km. However, illumination is confined to the project area only Noise levels at day & night are being monitored and being maintained well within the limits. Various other precautions are also being taken to control the noise. Compiled data of Noise levels measured in the period April 2024 to September 2024 is enclosed as |

| S.No. | Condition | Compliance Status |
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| | limits for day / night hours. | Annexure – I. |
| 20 | The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers / personals / laborers are working without personal protective equipment. | Compiled data of Noise levels measured in the period April 2024 to September 2024 is enclosed as Annexure – I. |

V. Mining Plan:

| S.No. | Condition | Compliance Status |
|-------|--|---|
| 21 | The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, OB & dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.). | Being complied. The present mining operations viz., total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, OB & dump mining, mineral transportation mode, are being carried out as per IBM approval mining plan vide Lr. No. AP/KSN/MP/LST-30/HYD dated 02.01.2024. Reclamation is not initiated, as mineral is not exhausted, with the present mining operations. |
| 22 | The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per | Being complied. The present mining operations are being carried out as per IBM approval mining plan vide Lr. No. AP/KSN/MP/LST-30/HYD dated 02.01.2024. Backfilling and reclamation |

| S.No. | Condition | Compliance Status |
|-------|---|---|
| | approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF&CC and its concerned Regional Office. | mineral is not exhausted, with the present mining operations. |

VI. Land Reclamation:

| S.No. | Condition | Compliance Status |
|-------|--|---|
| 23 | The Overburden (OB), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines / circulars issued by DGMS. The topsoil shall be used for land reclamation and plantation. | Noted. There is no top soil generation from this mining lease area. As on date there are no dumps. Dumps generated, if any, will be protected accordingly. |
| 24 | The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface runoff. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer / compactors thereby ensuring proper filling / levelling of dump mass. In critical areas, use of geo textiles / geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump. | Noted. There is no top soil generation from this mining lease area. As on date there are no dumps. Dumps generated, if any, will be protected accordingly. |
| 25 | Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil / OB / Waste dumps to prevent runoff of water and flow of sediments directly into the water bodies (Nallah / River / Pond etc.). The collected water should be utilized for watering the mine area, roads, greenbelt development, plantation etc. The drains / sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly. | Noted. As on date, there are no dumps. Trenches / garland drains will be constructed at foot of dumps, accordingly. 2 Nos. of check dams are constructed. There are no seasonal or perennial nallahs / streams flowing in the subject area. |
| 26 | Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into | Noted. • As on date, there are no dumps. |

| S.No. | Condition | | Compliance Status |
|-------|---|---|--|
| | adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments / silt material. The sedimentation pits / sumps shall be constructed at the corners of the garland drains. | 6 | Trenches / garland drains will be constructed at foot of dumps, accordingly. 2 Nos. of check dams are constructed. There are no seasonal or perennial nallahs / streams flowing in the subject area. |

VII. Transportation:

| S.No. | Condition | Compliance Status |
|-------|---|---|
| 27 | No Transportation of the minerals shall be allowed in case of roads passing through villages / habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 m) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village / rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers (if applicable in case of road transport). | Noted. Railway wagon facility is provided to transport the limestone. Writ petition is made to allow mine vehicles to pass through RINL lease area (to avoid the vehicle movement through village), which is under process. Regular water sprinkling is being carried out on the haul roads. It is ensured that vehicular emissions are being regularly monitored by concerned transporter. |
| 28 | The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while | Regular water sprinkling is being carried out on the haul roads. Permanent water sprinkling arrangement for dust suppression is under progress. 17 Nos. of bag filters are installed to control air pollution from the crushing and transportation activities associated within |

| S.No. | Condition | Compliance Status |
|-------|--|--|
| | transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions. | this mine. Water fogging system is arranged at crusher hopper. All belt conveyors are fully covered to avoid dust generation while transportation. Compiled data on fugitive dust monitoring for the period from April 2024 to September 2024 is enclosed as Annexure – IV. |

VIII. Greenbelt:

| S.No. | Condition | Compliance Status |
|-------|--|---|
| 29 | The Project Proponent shall develop greenbelt in 7.5 m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole greenbelt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan. | Being complied. 12730 Nos. of plants are survived over an area of 4.10 Ha all along the boundary up to September 2024, as per the approved mining plan. This is being submitted as part of half-yearly compliance report. |
| 30 | The Project Proponent shall carryout plantation / afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department / Agriculture Department / Rural development department / Tribal Welfare Department / Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees. | Noted. There is no top soil generation from this mining lease area. As on date there are no dumps. Dumps generated, if any, will be protected accordingly. Reclamation is not initiated, as mineral is not exhausted, with the present mining operations. No water body is located nearby. 12730 Nos. of plants are survived over an area of 4.10 Ha all along the boundary up to September 2024. |
| 31 | The Project Proponent shall make necessary alternative arrangements for livestock feed by | 184.1 Ha. of land located at Ragunathapalem (V), |

| S.No. | Condition | Compliance Status |
|-------|---|-------------------------------|
| | developing grazing land with a view to compensate | Matttampally (M), Nalgonda |
| | those areas which are coming within the mine lease. | District, Telangana State was |
| | The development of such grazing land shall be done | handed over to Forest |
| | in consultation with the State Government. In this | department towards |
| | regard, Project Proponent should essentially | compensatory afforestation. |
| | implement the directions of the Hon'ble Supreme | |
| | Court with regard to acquisition of grazing land. The | |
| | sparse trees on such grazing ground, which provide | |
| | mid-day shelter from the scorching sun, should be | *** |
| | scrupulously guarded / protected against felling and | |
| | plantation of such trees should be promoted. | |

IX. Public Hearing and Human Health Issues:

| S.No. | Condition | Compliance Status |
|-------|--|--|
| 32 | Project Proponent shall make provision for the housing for workers / labors or shall construct labor camps within / outside (company owned land) with necessary basic infrastructure / facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water. | Being complied. Separate colony with permanent structures constructed for contract workmen with all necessary infrastructure facilities such as toilets connected with septic tanks, safe drinking water, medical health |

X. Corporate Environment Responsibility (CER):

| S.No. | Condition | Compliance Status |
|-------|--|---|
| 33 | The Project Proponent shall submit the time-bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No. 22-65/2007-IA.III dated 30 September 2020. The action plan shall be implemented within three years of commencement of the project. | Time-bound action plan for undertaking the activities committed during public |

XI. Miscellaneous:

| S.No. | Condition | | Compliance Status | | | tus |
|-------|---|--------------|-------------------|------|----|-----------|
| 34 | The Project Proponent shall prepare digital map | Noted a | and | will | be | submitted |
| | (land use & land cover) of the entire lease area | accordingly. | | | | |
| | once in five years purpose of monitoring land use | | | | | |

| S.No. | Condition | Compliance Status |
|-------|--|--|
| | pattern and submit a report to concerned Regional Office of the MoEF&CC. | |
| 35 | The project authorities shall inform to the Regional Office regarding date of financial closures and final approval of the projects 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. |
| 36 | The project proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MoEF&CC & its concerned Regional office, Bangalore, Central Pollution Control Board and State Pollution Control Board. | Being complied. Being submitted as part of this condition. 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. Hard copy of the same is submitted to Regional Directorate (Chennai) of Central Pollution Control Board, Chennai. The status of this EC compliance reports is being regularly uploaded in APPCB website i.e., https://pcb.ap.gov.in. |
| 37 | A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to the Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC. | Separate environmental management cell is carrying out monitoring functions. The organization chart of environmental cell is enclosed as Annexure - VI. |
| 38 | The Regional Office of the MoEF&CC shall randomly monitor compliances of the stipulated condition. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports. | Full co-operation, facilities and documents / data being given during the inspection of Officials from the Integrated Regional Office of MOEF&CC, Vijayawada. |
| 39 | In pursuant to Ministry's OM No. 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 08.01.2020 in WP (Civil) No. 114/2014 in the matter of Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regressing the mining area and any other area which may have been disturbed due to other | |

| S.No. | Condition | Compliance Status |
|-------|--|-------------------------------|
| | mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. | |
| 40 | The Ministry or any other competent authority may alter / modify the above conditions or stipulate any further condition in the interest of environment protection. | Noted and will be adhered to. |
| 41 | Concealing factual data failure to comply with any or submission of false / fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provision of Environment (Protection) Act, 1986. | Noted and will be adhered to. |

(Signature)

HALF-YEARLY COMPLIANCE REPORT

| Environmental Clearance Letter/s No. and Date | Amendment Order No. J-11015/150/2008-IA.II (M) and dated 07.08.2023 |
|--|---|
| Name of the Project | Ramco Budawada Limestone Mine (RF) of The Ramco Cements Limited – 1.10 Million TPA Capacity of Limestone – Amendment regarding railway siding, Stacker & reclaimer and associated equipment |
| Period of Compliance Report April 2024 to September 2024 | |

C. Additional Specific Conditions:

| S.No. | Condition | Compliance Status |
|-------|--|--|
| | The Project Proponent needs to commission the railway line within the 6 months from the date of issue of this amendment EC. | Complied. Commission activities of railway line completed within stipulated time. |
| ii. | The Project Proponent is allowed to transport limestone through existing transport route by road only for a period of 6 (six) months, thereafter road transportation will not be allowed. | Being Complied. |
| iii. | The Project Proponent shall ensure that the transportation of limestone has to be carried out only through railway wagons after commissioning of railway line. | Being Complied. |
| iv. | The Project Proponent should follow-up the status of implementation of Wildlife Conservation Plan from the Forest Officials and the same shall be submitted to the Ministry's Integrated Regional Office in the six monthly compliance report. | Noted. 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. |
| V. | The project proponent should plant quality sapling of appropriate height of native and fruit bearing species. In case of tall transplants (seedlings) the seedlings should have proper trained root stock with root biomass commensurate with seedling height to ensure good growth after out planting. The project proponent shall make the actual court on the saplings planted and its survival rate and in case of failure of achievement of 95% survival rate, action plan for achieving the target | Being complied. 12730 Nos. of plants are survived over an area of 4.10 Ha all along the boundary up to September 2024. Plantation will be continued further. |

| S.No. | Condition | Compliance Status |
|-------|---|---|
| | survival rate shall be submitted to the Ministry's Integrated Regional Office. | |
| vi. | NOC from the Central Ground Water Authority (CGWA) / Concerned Local authority, as the case may be, shall be obtained before drawing the ground water for the project activities. | Permission obtained from Panchayat Raj & Rural Development Department (nodal agency for Central Ground Water Department) vide Lr. No. PRR05-11028/14/2018-SLNA-GIS-CORD, date: 10.07.2024 issued for Jayanthipuram Limestone Mine (North Band), in which permission for usage for this said mine. This order is valid up to 09.07.2026. |
| Vii. | This amendment in EC is subject to the outcome of the said court case of Writ Appeal No. 424 of 2021, dt. 15.07.2021. | Noted. |
| viii. | All other terms and conditions mentioned in the EC letter dated 10.12.2009 shall remain unchanged. | Compliance report of the same is appended herewith. |

(Signature)

HALF-YEARLY COMPLIANCE REPORT

| Environmental Clearand | re J-11015/150/2008-IA.II (M) and dated 10.12.2009 |
|-----------------------------|--|
| Letter/s No. and Date | |
| Name of the Project | Ramco Budawada Limestone Mine (RF)of The Ramco Cements |
| | Limited – 1.1 Million TPA Capacity Of Limestone |
| Period of Compliance Report | April 2024 to September 2024 |

A. Specific Conditions:

| S.No. | Condition | Compliance Status |
|-------|--|--|
| i. | Environmental Clearance is subject to obtaining Forest Clearance under Forests (Conservation) Act, 1980 from the Competent Authority before start of work at mine. | Being complied. Forest Clearance is obtained from The Ministry of Environment & Forests (FC Division), Government of India, vide letter No. 8-56/2005FC date 22.12.2011. The mine is opened on 01.02.2014 after Tree Growth extraction and started the production. As per the requirement of the cement plant, mining operations are being carried out. |
| ii. | Wild life conservation plan shall be prepared in consultation with the office of the Chief Wild Life Warden and implemented within six months. The plan shall comprise of in-built monitoring mechanism with special emphasis to protection of Schedule- I species. The status of implementation shall be submitted to the Ministry. | Noted. 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. |
| iii. | Hydro-geological study of the area shall be reviewed annually and results submitted to the Ministry and concerned agency in the State Govt. In case adverse impact on ground water quality and quantity is observed, mining shall be immediately stopped and resumed only after mitigating steps to contain any adverse impact on ground water is implemented. | Being complied. Detailed hydro-geological study is carried out & report submitted to the Ministry along with EIA report submitted for the project. Further, State Ground Water Department has conducted the hydro-geological study and forwarded the report to Department of Panchayat Raj & Rural Development, Government of Andhra Pradesh (agency authorized to issue NOC for AP projects). Copy of the report prepared by Ground Water & Water Audit Department, Government of AP is submitted to |

| S.No. | Condition | Compliance Status |
|-------|---|--|
| | | Regional Office, MoEF&CC, Chennai. Presently, the mine workings are not touched the ground water table. Groundwater level is being monitored regularly (at 3 locations) and readings are being recorded. Ground water quality is being analysed by MoEF&CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad). No major adverse impact on ground water quality and quantity is observed after opening of the mine. The ground water level data and ground water quality data for the period April 2024 to September 2024 is being submitted to the CGWB and enclosed as Annexure – II. |
| iv. | A 50 m barrier of no mining zone on the side(s) of the Nallah / streams flowing in or adjacent the lease (if any) shall be demarcated and the barrier shall be thickly vegetated with native species of trees and shrubs. | Not applicable, as no nallah or stream is flowing in or adjacent to the mining lease. |
| V. | The company shall ensure that no silt originating due to mining activity is transported in the surface water course (if any) flowing in the area. | Noted. No silt is being generated due to mining activity as there is no beneficiation of the limestone is taking place and there is no surface water course flowing in the mining lease area also. |
| vi. | Shelter belt i.e., Wind Break consisting of adequate tiers of plantations around lease facing the human habitation, school / agricultural fields etc., (if any in the vicinity) shall be raised. | Noted. The entire mine lease area is forest land. No human habitation / school / agricultural fields exist within the vicinity of subject area. |
| vii. | Occupational Health Cell shall be created at the company under the charge of an officer of adequate seniority who is a qualified person in occupational health. | A full-fledged Occupational Health Centre with a qualified Occupational Health Specialist with supporting staff is established with the following facilities: X-ray ECG Spirometry (lung function test) Audiometry Semi-auto analyser to carryout biochemical tests Clinical lab for micro-biological tests (including sputum test) |

| S.No. | Condition | Compliance Status |
|---|---|---|
| | | Checking colour blindness |
| | | o Dental chair |
| | | o Ambulance |
| | | Occupational health surveillance |
| | | programme is taken up periodically and |
| | | records are being maintained. |
| viii. | Personnel exposure monitoring for dust | Being complied. |
| | shall be carried out for the workers. | Personnel dust sampling is being done by |
| | | MoEF&CC approved external environmental |
| | | monitoring agency. |
| ix. | Land-use pattern of the nearby villages | Noted. |
| 174. | shall be studied, including common | Detailed land use pattern of the nearby |
| | property resources available for | villages is made in EIA / EMP. |
| | conversion into productive land. Action | The Mine is working in full pledged |
| | plan for abatement and compensation | operations for production as per |
| | for damage to agricultural land / | approved mining plan by transporting |
| | common property land (if any) in the | limestone from mines to Cement Plant. |
| | nearby villages, due to mining activity | Hence damage to the agriculture land |
| | shall be submitted to the Ministry within | does not arise. |
| | six months. | does not unser |
| х. | Need based assessment for the nearby | Being complied. |
| Α. | villages shall be conducted to study | Company is organizing various socio- |
| | economic measures with action plan | economic activities for the surrounding |
| | which can help in upliftment of poor | villages. All the CSR activities for the |
| | section of society. Income generating | nearby villages are being carried out as |
| | projects consistent with the traditional | per the need basis of the local people |
| | skills of the people besides development | (requirements collected from them), |
| | of fodder farm, fruit bearing orchards, | subjected to the budget availability. |
| | vocational training etc., can form a part | CSR activities are being carried out for |
| | of such programme. Company shall | upliftment of local areas and account is |
| | provide separate budget for community | being maintained. |
| | development activities and income | These include village-wise, sector-wise |
| | generating programmes. This will be in | (health, skill development and |
| | addition to vocational training for | infrastructure requirements such as |
| | individuals imparted to take up self- | strengthening of village roads, avenue |
| | employment and jobs. | plantation, etc.). |
| | | Children from the surrounding villages are |
| | | studying in the school located in the |
| | | cement plant colony. |
| | | 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. |
| | | Contributing stipend to the local ITI |
| | | students who are undergoing GMR Skill |
| *************************************** | | Development Programme (post |
| | | academic), through which they acquire |
| | | academic), through which they acquire |

| S.No. | Condition | Compliance Status |
|-------|---|--|
| | | better employment opportunities. |
| xi. | 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 Ministry. | Being complied. Fugitive dust generated during mining activities is being controlled by water spraying and implementing wet drilling. 17 Nos. of bag filters are installed to control air pollution from the crushing and transportation activities associated within this mine. Water fogging system is arranged at crusher hopper. There are no human habitations including schools and other public amenities located nearer to the mine. Compiled data on fugitive dust monitoring for the period from April 2024 to September 2024 is enclosed as Annexure – IV. |
| xii. | Cumulative impacts of the proposed mine and other mines including mine of M/s Jaypee Cement on the Ambient Air shall be assessed and data submitted to the Ministry within six months. | Complied. Report on cumulative impacts along with neighboring M/s Jaypee Balaji Cements (now known as Ultratech Cements Limited) is submitted vide our Lr. No. TRCL/MoEF/3323/2013 dated 11.11.2013 to the Ministry. |
| xiii. | Rain water harvesting shall be undertaken to recharge the ground water source. Status of implementation shall be submitted to the Ministry within six months. | 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, as on September 2024. The status of the same will be submitted to the Ministry accordingly. |
| xiv. | Monitoring of ground and surface water quality shall be regularly conducted and records maintained and data submitted to the Ministry regularly. Further, monitoring points shall be located between the mine and drainage in the direction of flow of ground water and records maintained. Monitoring for Arsenic in ground water shall be undertaken. | Being complied. Surface water quality is being analysed by MoEF&CC approved external environmental agency (M/s Universal Enviro Associates, Hyderabad). Compiled data on the surface water quality data for the period April 2024 to September 2024 is enclosed as Annexure – V. |

| S.No. | Condition | Compliance Status |
|---|---|--|
| | , | analysis reports that Arsenic concentration |
| | | is Below Detectable Limit (<0.01 mg/L). |
| xv. | Measures for prevention and control of | Noted. |
| | soil erosion and management of slit shall | There is no top soil generation from this |
| | be undertaken. Protection of dumps | mining lease area. |
| | against erosion shall be carried out with | As on date there are no dumps. |
| | geo textile matting or other suitable | Dumps generated, if any, will be |
| | material and thick plantations of native | protected accordingly. |
| | trees and shrubs shall be carried out at | |
| | the dump slopes. Dumps shall be | |
| | protected by retaining walls. | |
| xvi. | Provision shall be made for the housing | Noted. |
| | the labourers within the site with all | As the project is completed and there is |
| | necessary infrastructure and facilities | no requirement of housing of the labour. |
| | such as fuel for cooking, mobile toilets, | During the project time, the labourers |
| | mobile STP, safe drinking water, medical | were mobilized from the nearby villages. |
| | health care, crèche etc. The housing may | Housing is provided in the colony located |
| | be in the form of temporary structures to | near cement plant, for the regular |
| | be removed after the completion of the | employees. |
| | project. Trenches / garland drains shall be | Noted. |
| xvii. | , 8 | As on date, there are no dumps. |
| | constructed at foot of dumps and coco filters installed at regular intervals to | • Trenches / garland drains will be |
| | arrest silt from being carried to water | constructed at foot of dumps, |
| | bodies. Adequate number of Check Dams | accordingly. |
| | and Gully Plugs shall be constructed | 2 Nos. of check dams are constructed |
| | across seasonal / perennial nallahs (if | which are connected to garland drain. |
| | any) flowing through the ML area and | There are no seasonal or perennial nallahs |
| | silts arrested. De-silting at regular | / streams flowing in the subject area. |
| | intervals shall be carried out. | |
| xviii. | Occupational health and Safety measures | Being complied. |
| Ì | for the workers including identification of | Awareness programme on health & safety |
| | work related health hazards, training on | for workers of work related health |
| | malaria eradication, HIV, and health | hazards, training on malaria eradication, |
| | effects on exposure to mineral dust etc. | HIV and health effects on exposure to |
| | shall be carried out. The company shall | mineral dust etc., and precautionary |
| | engage a full time qualified doctor who is | |
| | trained in occupational health. Periodic | being imparted. |
| | monitoring for exposure to respirable | |
| | mineral dust on the workers shall be conducted and records maintained | |
| *************************************** | | 1 |
| | including health records of the workers. Awareness programme for workers on | |
| | impact of mining on their health and | |
| | precautionary measures like use of | T ' |
| | personal equipments etc. shall be carried | |
| | out periodically. Review of impact of | |
| | various health measures undertaken (at | |
| | interval of five years of less) shall be | · · |

| S.No. | Condition | Compliance Status |
|-------|---|---|
| | conducted followed by follow up action wherever required. | 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. |
| xix. | Greenbelt development and selection of plant species shall be as per CPCB guidelines. Herbs and shrubs shall also form a part of afforestation programme besides tree plantation. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the Ministry within six months. | Ensured that the greenbelt development and selection of plant including herbs and shrubs as per CPCB guidelines. 11798 Nos. of plants are survived over an area of 4.10 Ha all along the boundary up to September 2024. This is being submitted as part of half-yearly compliance report. Mine is opened on 01.02.2014. As on date, no mined out area is available. As and when the mined out is available, the rehabilitation programme will be taken up accordingly. |
| xx. | 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. | Noted. There is no top soil in the subject area. Any solid waste generated during mining will be stacked separately within the angle of repose of material, in the SW corner of mining lease area. The same material is being utilized for formation of internal roads and for backfilling on 1 & II benches to a height of 1 - 1.5 m for plantation purpose. |
| xxi. | 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. Compliances status shall be submitted to the Ministry of Environment & Forests on six monthly basis. | Noted. • At present, there is no OB generated. • Overburden (generated if any) will be stacked in the SW corner of mining lease area and status of the same will be submitted to the ministry on six monthly basis. |
| xxii. | Slope of the mining bench and ultimate pit limit shall be as per the mining | |

| S.No. | Condition | Compliance Status |
|--------|--|---|
| | scheme approved by Indian Bureau of Mines. | maintained at 45° as per approved mining scheme. |
| xxiii. | The waste water from the mine shall be treated to confirm 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 waste water generation from this 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 – VII. There is no generation of tailings from the mining of limestone, hence no proposal for tailing dam. |
| xxiv. | 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. Action plan with respect to suggestions / improvements and recommendations made during public consultation / hearing is submitted along with earlier half yearly compliance reports. |
| xxv. | 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. The final mine closure plan will be submitted as suggested. |
| xxvi. | 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. No overloading of ores for transportation shall be committed. | Vehicles having valid permission as per Central Motor Vehicle Rules, 1989 are being used for transportation of material. To avoid fine particles, escape while transporting, the following measures will be adopted: |
| xxvii. | The Environmental Clearance is subject to the condition, if any, stipulated by the IBM on the mining scheme submitted by the project proponent for its approval. | Noted for compliance. The conditions stipulated by IBM on the Modifications in the approved Mining plan will be followed. The present Review of Mining plan approved by IBM is valid from 2024-2025 |

| S.No. | Condition | | | | | Compliance Status | | | | |
|---------|-------------|-----------|-------|---------|-------|--|--|--|--|--|
| | | | | | | to 2028-2029. | | | | |
| xxviii. | | | | | | Not applicable as the mining lease consists of | | | | |
| | maintained | betweer | n two | consecu | utive | only one limestone mineral bearing deposit. | | | | |
| | mineral bea | ring depo | sits. | | | | | | | |

B. General Conditions:

| S.No. | Condition | Compliance Status |
|-------|---|--|
| 1. | No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests. | For establishing the Railway siding along with stacker and reclaimer for transport of crushed limestone by wagons, EC amendment order is issued vide order No. J-11015/150/2008-IA.II (M) dated 07.08.2023. For the expansion proposal from 1.10 Million TPA to 2.50 Million TPA limestone, EC accorded vide order No. J-11015/443/2014-IA.II (M) dated 09.07.2024. |
| li. | No change in the calendar plan including excavation, quantum of mineral and waste shall be made. | Being complied. There is no change in the calendar plan, excavation, quantum of mineral and waste. A quantity of 10,99,165 tonne limestone extracted in the financial year 2023-2024 as against 11,00,000 tonnes. For the expansion proposal from 1.10 Million TPA to 2.50 Million TPA limestone, EC accorded vide order No. J-11015/443/2014-IA.II (M) dated 09.07.2024. |
| 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 provided and properly maintained. | Being complied. • Fugitive dust generated during mining activities is controlled at the source by water spraying and wet drilling. |
| iv. | Four ambient air quality-monitoring stations shall be established in the core | Being complied. |

| S.No. | Condition | Compliance Status |
|-------|---|--|
| V. | condition zone as well as in the buffer zone for RSPM, PM ₁₀ / PM _{2.5} , SO ₂ , NO _x monitoring. Location of the stations should be decided based on the meteorological data, topographical feature and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board. Data on ambient air quality (RSPM, PM ₁₀ / PM _{2.5} , SO ₂ , NO _x) should be made 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 website and also displayed at project site. | 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 PM10, PM2.5, SO2, NOx and CO monitoring. Being complied. Ambient air quality monitoring is being done in buffer zone of the lease by MoEF&CC approved external environmental monitoring agency for PM10, PM2.5, SO2, NOx monitoring. As per the data, the ground level concentrations are within the NAAQ norms notified by MoEF&CC, GOI dated 16.11.2009. Data of the Ambient Air Quality is being submitted to the Integrated Regional Office, MoEF&CC located at Vijayawada through mail (to eccompliance-ap@gov.in) and to CPCB through hard copy regularly once in six months. The status of this EC compliance reports is being regularly uploaded in APPCB website i.e., https://pcb.ap.gov.in. Compiled data for the period April 2024 to September 2024 is enclosed as Annexure – III. The data is displayed at project site. The half-yearly compliance reports are being uploaded on the company's |
| vi. | Measure 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. | website. Being complied. Vehicles are being maintained properly for control of noise. Ear plugs / muffs are provided to respective HEMM operators. Various other precautions are also being taken to control the noise. Compiled data of Noise levels measured in the period April 2024 to September 2024 is enclosed as Annexure –I. |
| vii. | Industrial waste water (workshop and waste water from the mine) should be properly collected, treated so as to | Noted. • There is no generation of waste water from this mine. |

| S.No. | Condition | Compliance Status |
|-------------|--|--|
| | conform to the standards prescribed under GSR 422 (E) dated 19 th May, 1993 and 31 st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents. | Oil and Grease trap is installed at Workshop to 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 – VII. |
| viii. | Personnel working in dusting areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects. | Personal Protective Equipment are being provided and adequate training and information on safety and health aspects are being provided as part Mines Vocational Training at our Ramco Mines Vocational Center. All areas where dust is being generated is being suppressed at source by water sprinkling, wet drilling etc. |
| 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 the completion of the project. | As the project is completed and there is no requirement of housing of the labour. During the project time, the labourers were mobilized from the nearby villages. The housing is provided in the colony located near cement plant, for the regular employees. |
| 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 Head of the Organization. | Being complied. Environment management cell is established with qualified personnel to look after the environment management related activities and is reporting to Head of the Unit of the company. The organization chart is enclosed as Annexure - VI. |
| 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 projects 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 environment 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. | purposes. |

| S.No. | Condition | Compliance Status |
|-------|--|---|
| | | the next financial year are being submitted to the Ministry along with half-yearly compliance reports regularly. |
| xiv. | The Regional Office of the Ministry located at Bangalore shall monitor compliances of the stipulated condition. 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 & Forests, its Regional office, Bangalore, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status compliances of the environment of 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 Forests, Bangalore. | 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. Soft copies of the compliance reports are being uploaded in the company's website. The status of this EC compliance reports is being regularly uploaded in APPCB website i.e., https://pcb.ap.gov.in. Half-yearly compliance reports for EC orders are also uploaded in our company's website regularly. |
| xvi. | The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one which shall be in the vernacular language of the locality, / office of Municipal Corporation / Gram Panchayat concerned on the company's website within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board / Committee and may also be seen at website of the Ministry of Environment and Forests at http://envfor.nic.in. | Advertisement made on two local newspapers viz., Saakshi (Telugu daily) and Deccan Chronicle (English daily) on 12.12.2009 regarding the same and a copy of the same is forwarded to RO, Bangalore. The clearance letter is uploaded in company's website. |
| xvii. | A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation has been received while | Being complied. The clearance letter is uploaded in company's website. |

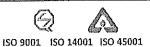
| S.No. | Condition | Compliance Status |
|--------|--|---|
| | processing the proposal. The clearance letter shall be also put on the website of the company. | |
| xviii. | State Pollution Control Board shall display a copy of the clearance letter at the Regional office, District Industries Centre and Collector's Office / Tehsildar's Office for 30 days. | Noted. |
| xix. | The Environmental Statement for each financial year ending 31st 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. | Being complied. Environmental statement for each financial year ending 31st March in Form-V is being submitted to the State Pollution Control Board regularly. The Environment Statement in Form V 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. The same is sent to Regional Office of Ministry through email. |

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

| | | · annual Annual Property of the Control of the Cont | | Noise Value dB(A) | ue dB(A) | |
|--------|-----------------------|--|---------------------------|----------------------------|--|----------------------------|
| S S | Date of monitoring | Machine / Location | Day time (6AM to 10PM) | Permissible Limit dB(A) | Permissible Limit Night time (10PM dB(A) | Permissible Limit dB(A) |
| Н | 28.09.2024 | Drilling area | 73.2 | < 75 | 61.6 | < 70 |
| 2 | 28.09.2024 | Loading area | 70.9 | < 75 | 63.0 | < 70 |
| ٣ | 28.09.2024 | Haul road - 1 | 72.7 | < 75 | 61.4 | < 70 |
| 4 | 28.09.2024 | Haul road - 2 | 70.3 | < 75 | 58.6 | < 70 |
| īC | 28.09.2024 | Rest Shelter | 52.9 | < 75 | 41.6 | < 70 |







Certified Company



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

THE RAMCO CEMENTS LIMITED

RCL/CGWB/RBLM-239/281

Dt. 26.11,2024

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

Dear Sir,

Submission of water level data & ground water quality data for Environmental Sub: Clearances for Ramco Budawada Limestone Mine (RF) for the period from April 2024 to September 2024 - reg.

1. EC Lr. No. J-11015/443/2014-IA.II(M) dated 09.07.2024. Ref:

2. EC amendment order vide order No. J-11015/150/2008-IA-II(M) dated 07.08.2023.

3. EC Lr. No. J-11015/150/ 2008-IA.II(M) dated 10.12.2009.

This has reference to the above cited Environmental Clearance letters and amendment order issued by Ministry of Environment & Forests, New Delhi for Ramco Budawada 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 Clearance for this Mining Lease located at Jaggayyapet Mandal, NTR (previously Krishna) District, Andhra Pradesh for the period from April 2024 to September 2024.

This is for your kind information and perusal please.

Thanking you,

Yours faithfully,

for The Ramco Cements Limited,

(Formexly known as Madras Cements Ltd.)

ASHISH KUMAR SRIVASTAVA

President (Mfg.)

Encl.: As above.

THE RAMCO CEMENTS LIMITED

WATER LEVEL DATA - RAMCO BUDAWADA LIMESTONE MINE (RF) PERIOD - April 2024 to September 2024

1.PIEZOMETER DETAILS: Bore Well

Location: Budawada, North Side of Lease

RL - (+)51.00m

Longitude - E 080° 04' 34.7" Latitude - N 160 51' 48.0"

Depth of well - 45.0 m

| Water Level (m), bgl | 29.78 | 30.65 | 30.12 | 29.96 | 29.83 | 29.45 | 29.30 | 27.12 | 25.42 | 22.34 | 4.15 | 4.68 |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 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 | 30.09.2024 |
| S. No. Date | Ţ | 2 | 3 | 4 | Ŋ | 9 | 7 | 8 | 6 | 10 | 11 | 12 |

2.PIEZOMETER DETAILS: Bore Well

Location: Budawada, South West Side of Lease

RL - (+)51.00m

Longitude - E80" 04' 01.6" Latitude - N16" 51' 17.7"

Depth of well - 45.0 m

| Water Level (m), bgl | 22.98 | 24.47 | 23.56 | 22.79 | 21.52 | 20.87 | 21.05 | 18.15 | 17.05 | 14.12 | 0.47 | 0.75 |
|----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 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 | 30.09.2024 |
| S. No. | H | 7 | 3 | 4 | 5 | 9 | 7 | æ | თ | 10 | 11 | 12 |

3.PIEZOMETER DETAILS: New Bore Well

Location: Budawada, West Side of Lease

RL - (+)51.00m

Longitude - $E 080^0 03' 47.7"$ Latitude - N 16⁰ 51' 30.2"

| 29.72 29.1 28.68 28.02 27.62 27.32 18.62 19.58 |
|---|
| 29.72 29.1 28.05 28.02 27.62 27.52 18.62 |
| 28 28 28 27, 27, 18 |
| 28.62 28.02 27.62 27.32 18.62 |
| 28.02 27.62 27.32 18.62 19.58 |
| 27.62 27.32 18.62 19.58 |
| 27.32 18.62 19.58 |
| 18.62 19.58 |
| 19.58 |
| |

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

| S, No | Parameter | Unit | Dharmavarapadu Thanda Bore Well Water:April-24 to June-24 | Chillakallu Open Well Water: April- 24 to June-24 | K.Agraharam Bore Well Water: April- 24 to June-24 | Pochampalli 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- | Vedadri Bore Well Water: April-24 to June-24 | Budawada Bore Well Water: April- 24 to June-24 | Jaggayyapet Bore Well Water:April-24 to June-24 | Limits |
|----------|--|--------------|--|---|--|---|--|---|---|---|--|-----------|
| - | , | | W1 | WZ | L EW | W4 | W5 | 24 W6 | W7 | WB | W9 | |
| 1 | ρ ^{II} | T . | 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 | S-15 |
| 3 | Temperature | °C | 28.8 | 26.1 | 27.3 | 29,6 | 29.0 | 28.1 | 27.3 | 29.1 | 31.2 | |
| 4 | Turbidity | NTU | 1.2 | 1.4 | 1.3 | 1.8 | 1.6 | 1.9 | 1.3 | 1.1 | 2.0 | 1-5 |
| 5 | Residual Chioride | mg/t. | <1.0 | <1.0 | <1,0 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0,1 | 0.2-1 |
| 6 | Dissolved Oxygen | mg/L | 4.1 | 4.9 | 4,6 | 4.8 | 4.3 | 4.1 | 4.2 | 4.6 | 4.7 | ** |
| 7 | Total Suspended Solids | mg/t | 32.4 | 29,1 | 33.8 | 24,5 | 28,2 | 34.3 | 28,6 | 30.2 | 34,3 | |
| 8 | Electrical Conductivity | µmhos/cm | 812 | 876 | 948 | 792 | 781 | 822 | 802 | 839 | 826 | |
| 9 | Total Dissolved Solids | mg/L | 553 | 559 | 536 | 496 | 448 | 449 | 446 | 453 | 464 | 500-2000 |
| 10 | Total Hardness (as CaCO ₃) | 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 | Magnesium (as Mg) | mg/L | 36.2 | 23.8 | 25,6 | 25.6 | 35,3 | 19.2 | 26,2 | 28.3 | 24.6 | 30-100 |
| 15 | Sodium (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 | t.0 | 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 | Sulphate (as 504) | mg/L | 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 ₂) | mg/L | 145.0 | 148.0 | 121.0 | 130.0 | 139.0 | 142.0 | 112.0 | 106.0 | 103.0 | 200-600 |
| 20 | BOD (for 3 days at 27 °C) | mg/L | <4.0 | <4,0 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 | <4.0 | |
| 21 | Chemical Oxygen Demand | mg/L | 17.2 | 25.3 | 35.2 | 18.3 | 23,6 | 24.8 | 26,9 | 23.8 | 22.7 | |
| 22 | Oli & Grease | mg/L | <1,0 | <1.0 | <1,0 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | |
| 23 | Iron (as Fe) | mg/L | 0.26 | 0.31 | 0,28 | 0.07 | 0.24 | 0.09 | 0,18 | 0.11 | 0.05 | 0,3 |
| 24 | Fluoride (as F) | mg/L | 0.32 | 0.29 | 0.26 | 0.38 | 0.48 | 0,31 | 0.21 | 0.32 | 0.29 | 1.0-1.5 |
| 25 | Nitrate (as NO ₃₎ | 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 ₄₎ | mg/L | <0.01 | <0.01 | 10.0> | <0.01 | <0.01 | <0.01 | <0.01 | < 0.01 | <0.01 | ** |
| 27 | Cyanide (as CN) | mg/L | <0.01 | <0.01 | <0,01 | <0.01 | <0.01 | < 0.01 | <0.01 | < 0.01 | < 0.01 | |
| 28 | Pesticides (as Maiathoin) | mg/L | < 0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | |
| 29 | Phenolic Compounds (as C ₆ H ₅ OH) | mg/L | <0.01 | <0.01 | <0,01 | <0.01 | <0.01 | <0.01 | <0.01 | < 0.01 | <0,01 | |
| 30 | Manganese (as Mn) | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0,01 | ** |
| 31 | Chromium (as Cr ⁺⁶⁾ | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | |
| | Copper (as Cu) | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.81 | <0.01 | <0.01 | 1.5 |
| 33 | Selenkum as Se | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0,01 | <0,01 | <0.01 | <0.01 | <0,01 | |
| 34 | Aluminium (as Al) | mg/L | <0.01 | <0.01 | <0.01 | <0.91 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | |
| | Cadmlum (as Cd) | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | |
| 36 | Arsenic as As | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.05-0.2 |
| 37 | Boron (as B) | mg/L | <0,01 | <0,01 | <0.01 | < 0.01 | <0.01 | <0,01 | <0.01 | <0.01 | <0.01 | 2 |
| 38 | Mercury (as Hg) | mg/L | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | <0.001 | < 0.001 | <0.001 | |
| 39 | Lead (as Pb) | mg/L | <0,01 | < 0.01 | <0.01 | <0.01 | < 0.01 | <0.01 | <0,01 | < 0.01 | <0,01 | 0.1 |
| 40 | 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 | % | 46,8 | 47,9 | 39,1 | 38.6 | 40.6 | 43,9 | 38,6 | 37.8 | 41.2 | • |
| 42 | Total Coliforms | MPN/100 mL | NII | Nit | Nil | NII | Nit | NII | NII | NII | Nil | 50-5000 |
| 43 | | MPN/100 mL | NII | NII | Nil | Nil | NII | NB | Nil | NII | Nil | - |
| | E,Coil | MPN/100 ml | Absent | Absent | Absent | Absent | Absent | Absent | Absent | Absent | Absent | - |
| | L | | | <u> </u> | | I | L | 1 | <u> </u> | L | L | t |

THE RAMCO CEMENTS LIMITED, K5R NAGAR GROUND WATER QUALITY DATA - SURROUNDING VILLAGES PERIOD - April 2024 to September 2024

| S. No | Parameter | Unit | Dharmavarapadu Thanda Bore Well Water: July-2024to Sep-2024 | Water: July- 2024 to Sep- 2024 | K.Agraharam Bore Well Water: July- 2024 to Sep- 2024 | Pochampalli Bore Well Water: July- 2024 to Sep- 2024 | Jayanthipuram Bore Well Water: July- 2024 to Sep- 2024 | Ravirata 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 | MS | W3 | W4 | W5 | W6 | W7 | W8 | W9 | 6,5 - 8.5 |
| i | p ^H | - | 7.78 | 7.53 | 7,59 | 7,46 | 7.61 | 7.98 | 7,67 | 7,68 | 7,83 | 5-15 |
| 2 | Colour | Hazen | <2,0 | <2.0 | <2,0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | <2.0 | 3-13 |
| 3 | Temperature | %€ | 28.9 | 27.6 | 26.8 | 28,3 | 28.5 | 27.3 | 29.6 | 28.8 | 27.6 | |
| 4 | Turbidity | บาน | 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 | 1.0> | <0.1 | <0.1 | <0.1 | <0.1 | ₹0.1 | <0.1 | 0.2-1 |
| 6 | Dissolved Oxygen | rog/L | 4.2 | 4.9 | 4.8 | 1.6 | 5,4 | 4,6 | 5,8 | 4.7 | 4.9 | |
| 7 | Total Suspended Sollds | rng/L | 28.9 | 26.1 | 27,3 | 26.8 | 29.3 | 32,6 | 37.3 | 37.8 | 38.4 | ** |
| В | Electrical Conductivity | pmhos/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 | \$46,0 | 500-2000 |
| 10 | Total Hardness (as CaCO ₃) | rng/L | 252.0 | 203.0 | 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 | 135.0 | ** |
| 12 | Magnesium Hardness | rng/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 | \$5.6 | 65.2 | 63.1 | 55.1 | 56.2 | 53,9 | 53.7 | 58.3 | 47.1 | 75-200 |
| 14 | Magnesium (as Mg) | mg/L | 35.2 | 28.3 | 26,4 | 26.9 | 33.6 | 18,3 | 27.1 | 29,2 | 25.1 | 30-100 |
| 15 | Sodium (as Na) | mg/L | 44.2 | 41.6 | 48,3 | 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 | 0.801 | 179.0 | 142.0 | 150.0 | 151.0 | 139.0 | 250-1000 |
| 18 | Sulphate (as SO ₄₎ | nng/L | 37.2 | 39.3 | 42.6 | 39.1 | 44,6 | 38,9 | 37,1 | 38.3 | 36,1 | 200-400 |
| 19 | Total Alkalimity (as CaCO ₃) | rng/l. | 136,0 | 128.0 | 109.0 | 124.0 | 131.0 | 137,0 | 132.0 | 139,0 | 99.2 | 200-600 |
| 20 | BOD (for 3 days at 27 °C) | mg/l. | <4,0 | <4.0 | <4.0 | <4.0 | <4,0 | <4.0 | <4.0 | <4.0 | <4.0 | |
| 21 | Chemical Oxygen Demand | mg/L | 19.1 | 24.3 | 27.3 | 23.6 | 22.9 | 23.6 | 19.1 | 17.2 | 17.1 | |
| 22 | Oil & Grease | mg/L | 1,0> | 1,0> | <0,1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | <0.1 | |
| 23 | Iron (as Fe) | mg/L | 0.2 | 0,28 | 0.3 | 0.1 | 0,1 | 0,04 | 0.19 | 0.17 | 0.08 | 0.3 |
| 24 | Fluoride (as F) | mg/L | 0.23 | 0,25 | 0.34 | 0.23 | 0.21 | 6.21 | 0.34 | 0.29 | 0,31 | 1.0-1.5 |
| 25 | NRrate (as NO ₃₎ | mg/L | 0.72 | 1,29 | 0.71 | 0.47 | 0.51 | 0,61 | 0.56 | 0.39 | 0.48 | 45 |
| 26 | Phosphates (as PO ₄₎ | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | |
| 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 Malatholn) | mg/l. | <0,01 | <0.01 | <0.01 | 10.0> | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | |
| 29 | Phenolic Compounds (as C ₆ H ₅ OF | mg/L | <0.01 | <0.01 | 10.0> | <0.01 | <0.01 | <0.61 | <0.01 | <0.01 | <0.01 | |
| 30 | Manganese (as Mn) | rng/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | |
| 31 | Chromium (as Cr ⁴⁶⁾ | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <8.01 | <0.01 | <0.01 | <0.01 | < 0.01 | ** |
| 32 | Copper (as Cu) | nig/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.0£ | <0.01 | <0.01 | <0.01 | < 0.01 | 1.5 |
| 33 | Sefenium as Se | mg/L | <0,01 | <0,01 | <0.01 | <0.01 | <0,01 | <0.01 | <0.01 | <0.01 | 10.0> | |
| 34 | Afuminium (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 | *** |
| 36 | Arsenic as As | nıg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0,01 | <0,01 | <0.01 | 0.05-0.2 |
| 37 | Boron (as B) | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.81 | <0.01 | <0.01 | <0.01 | <0,01 | 2 |
| 38 | Mercury (as Hg) | mg/L | <0.001 | <0,001 | <0.001 | 100,0> | <0,001 | <0.001 | 100.0> | <0.001 | <0.001 | |
| 39 | Lead (as Pb) | mg/L | <0.01 | <0.01 | <0.01 | <0,01 | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | 0.1 |
| 40 | Zinc (as Zn) | mg/L | <0.01 | <0.01 | <0.01 | <0.01 | <0.01 | <0,01 | <0.01 | 10.0> | <0.01 | 1.5 - 15 |
| 41 | Percent Sodium | 96 | 48,20 | 43.70 | 38.60 | 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 | MPN/100 mL | Absent | Absent | Absent | Absent | Absent | Absent | Absent | Absent | Absent | - |
| 4A | E,CoII | MPN/100 mL | Absent | Absent | Absent | Absent | Absent | Absent | Absent | Absent | Absent | <u> </u> |

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

| | | | | | | | Month | | *************************************** | | | - | | |
|--------------------------------|-------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|---|-----------------|------------------|-----------------|------------------|----------|
| \$ () | 1000 | April 2024 | 2024 | May 202 | 2024 | June | 2024 | July | 2024 | August 2024 | t 2024 | Septem | September 2024 | <u>*</u> |
| | | I FORT NIGHT | II FORT NIGHT | I FORT NIGHT | II FORT NIGHT | I FORT NIGHT | II FORT NIGHT | |
| | PM 10 | 65.2 | 65.2 | 68.3 | 68.3 | 72.3 | 69.3 | 58.3 | 53.1 | 52.3 | 56.8 | 48.3 | 58.3 | 100 |
| | PM 2.5 | 26.5 | 26.3 | 27.7 | 27.5 | 29.4 | 27.9 | 23.7 | 21.4 | 21.2 | 22.9 | 19.6 | 23.5 | 09 |
| Near Weighbridge | SO ₂ | 13.2 | 14.6 | 15.3 | 15.3 | 16.8 | 16.5 | 14.6 | 13.2 | 16.2 | 16.2 | 14.8 | 14.3 | 80 |
| | NOx | 16.0 | 16.9 | 18.1 | 17.6 | 19.6 | 18.8 | 17.4 | 15.5 | 19.0 | 18.5 | 17.6 | 16.6 | 08 |
| | 00 | 236 | 539 | 542 | 546 | 895 | 268 | 489.0 | 486 | 472 | 498 | 439 | 523 | 2000 |
| | PM 10 | 58.3 | 58.3 | 61.6 | 61.2 | 60.2 | 62.3 | 59.6 | 50.6 | 62.6 | 51.3 | 9.09 | 59.2 | 100 |
| | PM 2.5 | 23.6 | 24.0 | 24.9 | 25.2 | 24.3 | 25.7 | 24.1 | 20.8 | 25.3 | 21.1 | 24.5 | 24.4 | 60 |
| Near Container SO ₂ | . SO ₂ | 15.1 | 17.3 | 13.9 | 16.2 | 15.3 | 17.3 | 13.2 | 10.1 | 14.3 | 13.3 | 15.1 | 12.9 | 80 |
| | NOx | 17.8 | 20.0 | 16.6 | 18.9 | 18.0 | 20.0 | 15.9 | 12.8 | 17.0 | 16.0 | 17.8 | 15.6 | 80 |
| | 8 | 539 | 551 | 549 | 563 | 553 | 592 | 426.0 | 491 | 438 | 484 | 441 | 516 | 2000 |
| | PM 10 | 56.9 | 6.99 | 69.3 | 67.3 | 65.4 | 68.6 | 60.1 | 54.6 | 63.9 | 53.9 | 59.6 | 52.6 | 100 |
| | PM 2.5 | 23.4 | 27.3 | 28.6 | 27.5 | 26.9 | 28.0 | 24.8 | 22.3 | 26.3 | 22.0 | 24.6 | 21.5 | 60 |
| East Side of ML area | - 502 | 14.6 | 16.9 | 15.6 | 15.3 | 16.2 | 15.9 | 12.1 | 12.3 | 15.9 | 13.2 | 14.2 | 14.6 | 80 |
| | NOx | 17.4 | 20.0 | 18.4 | 18.4 | 19.0 | 19.0 | 14.9 | 15.4 | 18.7 | 16.3 | 17.0 | 17.7 | 80 |
| | 0) | 542 | 526 | 263 | 539 | 574 | 551 | 412.0 | 483 | 462 | 492 | 474 | 201 | 2000 |
| | PM 10 | 61.4 | 53.2 | 63.9 | 55.2 | 6.09 | 54.3 | 52.8 | 57.1 | 54.2 | 49.6 | 51.3 | 48.3 | 100 |
| | PM 2.5 | 25.3 | 22.1 | 26.3 | 23.0 | 25.1 | 22.6 | 21.8 | 23.8 | 22.3 | 20.6 | 21.1 | 20.1 | 09 |
| West side of ML area | - SO ₂ | 15.3 | 17.8 | 15.9 | 19.3 | 16.9 | 16.8 | 14.9 | 12.6 | 15.6 | 13.9 | 15.8 | 14.8 | 80 |
| | NO _x | 18.1 | 20.6 | 18.7 | 22.1 | 19.7 | 19.6 | 17.7 | 15.4 | 18.4 | 16.7 | 18.6 | 17.6 | 80 |
| | 00 | 551 | 559 | 568 | 548 | 596 | 553 | 436.0 | 499 | 441 | 512 | 452 | 496 | 2000 |

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

| | | | | | | | 15 | | | | | | | |
|--|-----------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|-----------------|------------------|----------|
| 4 | Danassata | April | 2024 | May | 2024 | June | Mont 2024 | n July : | 2024 | Augus | t 2024 | Septemi | per 2024 | Limit |
| Location | Parameter | I FORT NIGHT | II FORT NIGHT | LIIIIE |
| | 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 | 100 |
| _, | PM 2.5 | 24.2 | 25.6 | 23.7 | 26.4 | 25.4 | 27.5 | 20.8 | 20.0 | 20.0 | 20.6 | 19.6 | 21.4 | 60 |
| Dharmavarapupadu Tanda | SO ₂ | 16.1 | 15.3 | 16.8 | 16.2 | 153 | 17.8 | 10.6 | 9.6 | 12.3 | 10.6 | 10.6 | 11.4 | 80 |
| | NO _x | 18.7 | 18.0 | 19.4 | 18.9 | 17.9 | 20.5 | 13.2 | 12.3 | 14.9 | 13.3 | 13.2 | 14.1 | 80 |
| | 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 | 2000 |
| | 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 | 100 |
| | PM 2.5 | 25.6 | 25.7 | 26.1 | 25.9 | 27.4 | 28.6 | 19.9 | 20.5 | 20.3 | 21.9 | 20.5 | 21.4 | 60 |
| Jayanthipuram | SO ₂ | 16.9 | 16.2 | 17.3 | 16.3 | 18.3 | 18.3 | 12.3 | 12.3 | 13.1 | 12.3 | 12.9 | 13.5 | 80 |
| | NO _X | 19.8 | 19.1 | 20.2 | 19.2 | 21.2 | 21.2 | 15.2 | 15.2 | 16.0 | 15.2 | 15.8 | 16.4 | 80 |
| | 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 | 2000 |
| | 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 | 100 |
| | PM 2.5 | 25.3 | 23.7 | 26.3 | 24.4 | 27.4 | 26.8 | 17.1 | 19.6 | 20.1 | 20.1 | 19.5 | 19.6 | 60 |
| Chillakallu | SO₂ | 14.3 | 20.2 | 15.2 | 21.2 | 19.6 | 17,2 | 11.1 | 11.6 | 12.6 | 11,5 | 11.6 | 11.9 | 80 |
| | NOx | 17.0 | 23.3 | 17.9 | 24.3 | 22.3 | 20.3 | 13.8 | 14.7 | 15.3 | 14.7 | 14.3 | 15.0 | 80 |
| | со | 274.0 | 216.0 | 281.0 | 226.0 | 274.0 | 239.0 | 291 | 239.0 | 310 | 263.0 | 318.0 | 242.0 | 2000 |
| a executive and a second a second and a second a second and a second a second and a | PM 10 | 62.8 | 55.2 | 63.9 | 58.9 | 65.1 | 59.3 | 50.4 | 52.6 | 50.3 | 52.8 | 52.4 | 50.4 | 100 |
| | PM 2.5 | 25.3 | 22.5 | 25.8 | 24.0 | 26.2 | 24.2 | 20.3 | 21.5 | 20.3 | 21.5 | 21.1 | 20.6 | 60 |
| K.Agraharam Village | SO ₂ | 15.4 | 21.4 | 16.3 | 22.3 | 18.4 | 19.1 | 10.9 | 13.1 | 12.9 | 12.9 | 10.8 | 12.4 | 80 |
| | NO _x | 18.5 | 23.8 | 19.4 | 24.7 | 21.5 | 21.5 | 14 | 15.0 | 16 | 15.3 | 13.9 | 14.8 | 80 |
| | со | 261.0 | 244.0 | 269.0 | 245 | 301.0 | 255.0 | 274 | 255.0 | 336 | 149.0 | 326.0 | 151.0 | 2000 |
| | PM 10 | 66.1 | 58.3 | 68.4 | 56.2 | 72.3 | 58.2 | 50.9 | 50.3 | 52.6 | 48.2 | 51.6 | 49.3 | 100 |
| | PM 2.5 | 27.2 | 23.6 | 28.1 | 22.7 | 29.7 | 23.5 | 20.9 | 20.3 | 21.6 | 19.5 | 21.2 | 19.9 | 60 |
| Jaggayyapet | SO ₂ | 16.2 | 19.2 | 15.9 | 21.4 | 17.1 | 22.3 | 10.7 | 10.2 | 13.2 | 10.6 | 12.6 | 11.6 | 80 |
| | NO _x | 18.6 | 22.2 | 18.3 | 24.4 | 19.5 | 25.3 | 13.1 | 13.2 | 15.6 | 13.6 | 15.0 | 14.6 | 80 |
| | CO | 268.0 | 212.0 | 288.0 | 232.0 | 293.0 | 248.0 | 256.0 | 248.0 | 324 | 254.0 | 313.0 | 248.0 | 2000 |
| | PM 10 | 65.2 | 61.4 | 66.3 | 63.1 | 62.9 | 62,1 | 47.3 | 49.8 | 43.8 | 50.6 | 45.9 | 48.4 | 100 |
| | PM 2.5 | 25.8 | 25.2 | 26.2 | 25.9 | 24.8 | 25.5 | 18.7 | 20.5 | 17.3 | 20.8 | 18.1 | 19.9 | 60 |
| Budawada | SO ₂ | 16.6 | 16.3 | 17.2 | 17.3 | 17.9 | 18.4 | 10.1 | 9.8 | 12.6 | 12.8 | 10.3 | 12.3 | 80 |
| | NO _x | 19.4 | 18.9 | 20.0 | 19.9 | 20.7 | 21.0 | 12.9 | 12.4 | 15.4 | 15.4 | 13.1 | 14.9 | 80 |
| | co | 284.0 | 239.0 | 291.0 | 249 | 312.0 | 255.0 | 63.0 | 255.0 | 309 | 216.0 | 302.0 | 218.0 50.6 | 2000 |
| | PM 10 | 63.9 | 67.2 | 64.6 | 69.2 | 69.1 | 68.3 | 45.6 | 51.6 | 46.9 | 51.3 | 44.3 | 20.1 | 100 |
| Marka dui | 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 | 11.9 | 60 |
| Vedadri | SO ₂ | 16.1 | 18.4 | 16.9 | 19.2 | 15.4 | 21.4 | 10.2 | 12.4 | 11.9 | 12.1 | 13.7 | 14.7 | 80 |
| | NO _x | 18.4 | 21.2 | 19.2 | 262 | 17.7 | 24,2 | 12.0 | 15.2 | 14 | 14.9 | 289.0 | 274.0 | 80 |
| | со | 277.0 | 259.0 | 283.0 | 61.2 | 287.0 | 274.0 | 242.0 | 274.0 | 256 | 281.0 | 42,9 | 47.3 | 2000 |
| | PM 10 | 61.6 | 59.1 | 67.2 | 24.8 | 63.2 | 59.6 | 43.8 | 47.3 | 45.2 | 49.2 | 17.5 | 19.2 | 100 |
| Dochamnalli | PM 2.5 | 25.2 | 24.0 | 27.5 | 18.9 | 25.8 16.2 | 24.2 17.3 | 17.9 | 19.2 | 18.5 | 20.0 | 12.9 | 12.6 | 60 |
| Pochampalli | SO ₂ | 16.2 | 17,1 | 17.3 | 21.2 | 19.1 | 19.6 | 12.3 | 10.6 | 16.5 | 12.4 | 15.8 | 14.9 | 80 |
| | NO _X | 19.1 | 19.4 | 20.2 | 259 | 263.0 | 263.0 | 15.2 | 12.9 | 263 | 14.7 | 274.0 | 279.0 | 3000 |
| | СО | 273.0 | 256.0 | 292.0 | 62.3 | 70.6 | 65.2 | 258.0 | 263.0 | 43.6 | 288.0 | 41.7 | 45.6 | 2000 |
| | PM 10 | 62.8 | 58.4 | 66.9 | 25.4 | 28.7 | 26.6 | 42.9 | 45.2 | 17.7 | 47.8 | 17.0 | 18.6 | 100_ |
| Ravirala | PM 2.5 | 25.6 | 23.8 | 27.2 | 17.4 | 16.0 | 18.2 | 17.5 | 18.4 | 12.8 | 19.5 | 13.5 | 11.1 | 60 |
| 1/avii aid | SO ₂ | 16.9 | 16.9 | 17.8 | 20.3 | 19.0 | 21.1 | 11.1 | 12.2 | 15.8 | 16.1 | 16.5 | 14.0 | 80 80 |
| | NO _X | 19.9 | 19.8 | 20.8 | 283 | 274.0 | | 14.1 212.0 | 15.1 | 258 | 299 | 261 | 283.0 | |
| <u> </u> | CO | 312.0 | 274.0 | 333.0 | 203 | 1 4,4,0 | 291.0 | 212.0 | 291.0 | 1 230 | 1 2,5 | | 20010 | 2000 |

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

Annexure- W

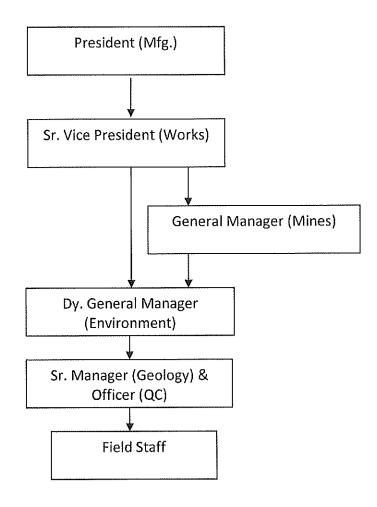
THE RAMCO CEMENTS LIMITED, KSR NAGAR RAMCO BUDAWADA LIMESTONE MINE (RF) FUGITIVE EMISSION DATA - SPM CONCENTRATION

PERIOD - April 2024 to September 2024

| | THE THE PARTY OF T | | Month | nth | | - |
|--|--|----------|-----------|-----------|----------------|-------------------|
| Location | April 2024 | May 2024 | June 2024 | July 2024 | August 2024 | September 2024 |
| Quarry Edge | 139 | 15 | 162 | 112 | 136 | 148 |
| Drilling Arrea | 126 | 139 | 143 | 123 | 140 | 165 |
| Loading Area | 138 | 155 | 150 | 109 | 129 | 180 |
| Haul Road (Near School located at K-Agraharam | 149 | 161 | 172 | 129 | 147 | 161 |

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

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

| | | | | | | Month | | | | |
|---|---|------|------------|----------|-----------|-----------|-------------|--|-----------------------|-----------|
| S | S. No Parameter | 5 | April 2024 | May 2024 | June 2024 | July 2024 | August 2024 | April 2024 May 2024 June 2024 July 2024 August 2024 September 2024 | Range / Average | No.T |
| | 1 pH | | 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 | 905 | 2100 |
| | 3 Total Suspended Solids | mg/L | 70.6 | 73.6 | 75.3 | 70.6 | 73.6 | 70.2 | 72.3 | 100 |
| • | 4 Chemical Oxygen Demand mg/L | mg/L | 123 | 131 | 148 | 139 | 126 | 118 | 131 | 250 |
| | 5 BOD (for 3 days at 27 ^o C) | mg/L | 43.9 | 45.2 | 42.3 | 40.6 | 42.3 | 43.6 | 42.98 | 100 |
| _ | ميريم ازال | ma/l | 2.4 | 28 | 2.2 | | 4 | 1.7 | 1.97 | 10 |