



## **RCCPL Private Limited**

(Formerly Reliance Cement Company Private Limited)

Village, Bharauli, PO. Itahara

NH-7, Katni Road, Maihar

Distt – Satna, 485773

Madhya Pradesh, India

RCC/ENV/ECC(IU)/F-C1/2020 (1)

Date: 4<sup>th</sup> July 2020

To,  
**Ministry of Environment, Forest & Climate Change**  
Regional Office (Western Zone)  
Government of India  
"Kendriya Paryavaran Bhavan"  
Link Road No.3, E-5, Ravishankar Nagar  
Bhopal – 462016 (M.P.)

**Subject:** Integrated Cement Plant (Clinker 3.6MTPA, Cement 5.0MTPA) along with Captive Power Plant (75MW) near village Bharauli & Itahara and Limestone Mines (Sadhera Mine, 3.5MTPA, 539.561ha) near Village Sadhera at Tehsil Maihar, Dist. Satna in Madhya Pradesh by M/s Reliance Cementation Private Limited – Compliance Report

Dear Sir,

This has reference to Environmental Clearance vide letter no. J-11011/700/2008 –IAII (I) Dated 23<sup>rd</sup> March 2011. We are submitting six monthly compliance reports along with this letter for your kind perusal.

We hope this is in order please.

Yours Faithfully,  
For **RCCPL PVT. LTD.**

  
**Uttam Kumar Roy**  
Plant Head

Cc:

**Zonal Officer**

Central Pollution Control Board  
Zonal Office (Central)  
3<sup>rd</sup> Floor, Sahkar Bhawan,  
North T.T. Nagar, Bhopal – 462 003

**Director (Industry)**

Ministry of Environment, Forest & Climate Change  
Vayu Wing, Indira Paryavaran Bhawan,  
Jor Bagh Road, Ali Ganj,  
Delhi-110 003

**Regional Officer** – MP Pollution Control Board  
Maihar - Amarpatan Bypass, Satna  
Satna (MP)

**Member Secretary**

MP Pollution Control Board  
E-5, Arera Colony, Paryavaran Parisar  
Bhopal - 462016

*Registered Office:*

Industry House, 2<sup>nd</sup> Floor, 159 Churchgate Reclamation, Mumbai- 400 020, MH.

CIN: U26940MH2007PTC173458

## Environmental Clearance Compliance (Maihar Project)

As per Environmental Clearance vide letter no. J-11011/700/2008 IAI (I)

Dated 23rd March'11

Date 30.06.2020

Con. No.	Condition	Status of Compliance
<b>Specific Conditions</b>		
i	No Construction work at proposed site shall be started without obtaining Forest Clearance under the Forest (Conservation) Act, 1980 and subsequent amendments and a copy of the approval should be submitted to the Ministry's regional office at Bhopal before initiating any construction work.	Complied, Copy of Forest Clearance submitted vide letter no. RCC/EHS/EC/1 dated 9 <sup>th</sup> Nov, 2011
ii	No construction work at proposed site shall be started without obtaining prior clearance / approvals for the linked mining components from the Indian Bureau of Mines (IBM) and State Govt. of Madhya Pradesh. A copy of the mining lease approval from IBM and State Govt. of Madhya Pradesh should be submitted to Ministry and its Regional office at Bhopal before initiating any construction work at site related to Mining.	Complied. Copy of Mining lease approval from State Govt. of Madhya Pradesh and Mining Plan approval letter from IBM are submitted vide letter no. RCC/ENV/ECC(IU)/F-C1/2012 dated 27th July 2012
iii	Rehabilitation and Resettlement plan for the project affected population including tribal, shall be implemented as per the policy of the state Govt. in consultation with State Govt. of Madhya Pradesh. Compensation at any case shall not be less than the norms prescribed under the National Resettlement and Rehabilitation Policy-2007.	Land is purchased on the basis of mutual negotiation and agreement with due compensation for the assets.
iv	Gaseous and particulate emission from various units shall conform to the standards prescribed by the Madhya Pradesh Pollution Control Board. At no time, particulate emission from cement plant including kiln, coal mill, cement mill, cooler and CPP shall not exceed 50 mg/Nm <sup>3</sup> . Continuous online monitoring for particulate emission shall be installed. Pyrites, fluorides and Hg emission shall be monitored. Interlocking system shall be installed in the pollution control equipment's so that in the event of the pollution control equipment not working, the respective unit (s) is shutdown automatically.	Emission standard prescribed by the MPPCB is 30 Mg/Nm <sup>3</sup> for particulate matter. The emission is monitored continuous through CEMS and periodically by isokinetic.  Report enclose as <b>Annexure – 1</b>  Continuous Online Monitoring for SO <sub>2</sub> , NO <sub>x</sub> and particulate emission are installed. Copy of screen shot of online system is enclose as <b>Annexure - 2</b> Interlocking system for Pollution Control Equipment's is installed.
v	Possibilities shall be explore for proper and full utilization of gas generated from kiln in waste heat recovery boiler(WHRB) and feasibility report shall be prepared and submitted to Ministry and its regional office at Bhopal within 3 months for the date of issue of this letter.	Waste heat recovery system is installed and in operation. Copy of consent to operate submitted with six monthly report December 2019.
vi	Data on ambient air quality (PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> ) shall be submitted to Ministry including regional office located at Bhopal and the state pollution control board / central pollution control board once in six months. The critical	Data on ambient air quality (PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> ) is submitted to Ministry including regional office located at Bhopal and the state pollution control board / central

Con. No.	Condition	Status of Compliance
	parameters such as PM <sub>10</sub> , NO <sub>x</sub> in the ambient air with in impact zone , peak particulate velocity at 300 m distance or within nearest habitation, which ever is closer shall be monitored periodically , Further, quality of discharge water shall also be monitored (TDS, DO< pH) and TSS. The monitored data shall be uploaded on website of the company as well as displayed on the board at the project site at the suitable location near the main gate of the company in the public domain.	pollution control board in Dec 2019. AAQ & water monitoring reports of the current period are enclosed as <b>Annexure- 3 &amp; 4</b> .  PPV at 300m monitored, Report attached as <b>Annexure – 5</b> . The monitored data is uploaded on website of the company as well as displayed on the board at the main gate of the plant and near to mines office.
vii	Company shall installed low NO <sub>x</sub> burner with kiln / calciner for control of NO <sub>x</sub> emission as per the prescribed standards.	Low NO <sub>x</sub> burner Installed at Kiln. Copy of of SO <sub>2</sub> and Nox emission monitoring report is enclosed as <b>Annexure – 6</b>
viii	Secondary fugitive emission shall be control within the prescribed limits and regularly monitored. Guideline / code of practice issued by CPCB in this regard shall be followed.	Guideline and Code of Practice (COP) as per CPCB is incorporated in detailed engineering and design of plant. To control fugitive dust emission nuisance bag filters are installed at transfer points, loading points, silos etc.
ix	Asphalting / concreting of road and water spray all around the critical area prone to air pollution having high level of SPM and RSPM should be ensured.	All main roads have been concreted.  Water tanker with rain gun and sprinkler for spraying water is being used at all dust prone areas.
x	The National Ambient Air Quality Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.	Noted for Compliance
xi	Efforts shall be made to reduce impact of the transport of the raw material and end product on the surrounding environment including agriculture land. All the raw material including fly ash shall be transported in the closed container only and shall not be overloaded Vehicular emission shall be regularly monitored.	The limestone from the mines is transported to plant via overland belt conveyer. Other raw materials including fly ash are being transported in the closed containers. Vehicular emission is being regularly monitored of company owned vehicles. Sample copy of PUC certificate is enclosed as <b>Annexure – 7</b> for reference please.
xii	Fly ash utilization shall be utilized as per the provision of fly ash Notification, 1999, subsequently amended in 2003/ 2009. Fly ash shall be stored in the ash silo and 100% used in the cement manufacturing.	Noted for Compliance, 100% Fly ash stored in silo and used in the cement manufacturing
xiii	The company shall make the efforts to utilize the high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly. Further, efforts shall be made to use low grade lime and more fly ash shall be made. Company shall keep all the record of waste utilization and shall submit the detail to ministry of regional office at Bhopal, CPCB and SPCB.	Feeding system incorporated in detailed engineering and design of plant. Kiln has multi-channel burner system for utilizing high calorific hazardous waste. Trial run conducted in presence of CPCB & SPCB officials for use of chemical gypsum in cement manufacturing. NOC waited from CPCB. Consent to operate obtained from MPPCB At present Carbon black, Plastic waste and Bio mass using as AFR in our kiln.
xiv	Rainwater harvesting measures shall be adopted for the	Detailed hydrology report is prepared

Con. No.	Condition	Status of Compliance
	augmentation of ground water at cement plant, colony including check dam at the mine site. The company must also collect rain water in the mined out pits of captive lime stone mines and used the same after for the various activities of the project to conserve water and reduce fresh water requirement from ground water. An action plan should be submitted to Ministry, regional office at Bhopal within 3 months from the date of issue of this letter. Efforts should be made to make use of rain water harvesting, if needed, capacity of the reservoir should be enhance to meet the maximum water requirement. Only balance water requirement shall be met from other sources.	<p>which includes rainwater-harvesting measures, copy of same submitted vide letter dated 20<sup>th</sup> June 2011.</p> <p>Three ponds (9000m<sup>3</sup>) were deepened around plant area, seven rooftop harvesting structures and one pond constructed in plant premises. Check dam across Tumas River is constructed with storage capacity of 3.0 lakhs m<sup>3</sup>.</p> <p>Additional 6 pond (20709 m<sup>3</sup>) deepening work completed in this year, 4 in mines and 2 in plant area. Photographs submitted with six monthly report December 2019</p>
xv	Permission for the drawl of 9550 KLD ground water from the bore well shall be obtained for the concerned department. The water stored in the artificial reservoir made in the mine pit shall be used maximum to reduce ground water consumption. No effluent shall be discharged from the mine to any water body or nearby river.	<p>Permission from CGWA for ground water drawl was received in 2009 and subsequent renewed on 31.03.2016 to abstract 5650 m<sup>3</sup>/day. Renewal application submitted online application No 21-4/53/MP/IND/2009</p> <p>Phase -1 Mining operation is going on in 1<sup>st</sup> pit. As such, mine pit is not created. Reservoir will be created in mine pit after excavation of limestone.</p> <p>Effluent generated is being treated through O&amp;G trap. Treated effluent is being recycled and reused.</p>
xvi	Detail Hydrogeology study shall be carry out since mining activity are likely to intersect ground water and implementation or recommendation of the detailed hydrogeology study shall be ensured.	Detailed hydrogeology report prepared and submitted vide letter dated 20 <sup>th</sup> June 2011. As recommended in the report, four piezometers are installed 2Nos at plant and 1 Nos in mine. Seven rooftop harvesting structures constructed and also other activates referred in specific cond. No. xiv are being carried out.
xvii	Top soil, if any, shall be stacked with proper slope at earmarked site only with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.	Top soil is stacked and preserved. This will be used for reclamation and rehabilitation as per approved mining plan
xviii	Project proponent shall ensure that no natural water course shall be obstructed due to any mining and plant operation. Company shall prepare the plan for protection of the natural water course passing through the plant and mining area premises and submit to the ministry's regional office at Bhopal.	Natural water course along the periphery of the ML area will not be disturbed Bund constructed along the nalla.
xix	The inter burden and other waste generated shall be stacked at earmarked dump sites only and shall not be kept active for long period. The total height of dump shall not exceed 30 m in the 3 treacle's of 10 m each and the	The inter burden & other waste are stacked at designated places as per the condition.

Con. No.	Condition	Status of Compliance
	over all slope of the dump shall be maintained at 28 deg. The inter burden dumps shall be scientifically vegetated with native species to prevent erosion and surface runoff. Monitoring and management of rehabilitated areas shall be continued until the vegetation becomes self sustaining. Compliance status shall be submitted to MoEF and its regional office, Bhopal on six monthly basis.	
xx	The void left unfilled shall be converted into water body. The higher benches of excavated avoid/ mining pit shall be terraced and plantation to be done to stabilize the slopes. The slope of higher benches shall be made gentle for the easy accessibility by the local people to use the water body. Periphery fencing shall be carried out along the excavated area.	Water body will be created at the end of mine life as per approved mining plan and all safety precautions will be taken as per the norms of DGMS.
xxi	Catch drains and siltation ponds of appropriate size shall be constructed for the working pits, inter burden and mineral dumps to arrest flow of silt and sedimentation. The water so collected shall be utilized for the watering mining area, roads, greenbelt development etc. The drain shall be regularly de silted, particularly after monsoon and maintained properly.	Catch drains & siltation ponds are constructed. These drains are de-silted before & after monsoon and maintained.
xxii	Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter burden dumps and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 yrs data) and the maximum discharged in the area adjoining the mining site. Sump capacity shall be provided adequate retention period to allow proper setting or silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desalted at regular intervals.	Garland drain & sedimentation pit constructed for arresting surface runoff of surrounding area of the mine pit. Mine sump is created with depth of 4m.
xxiii	Dimension of the retaining wall at the toe of the inter burden dumps and inter burden benches within the mine to check run-off and siltation shall be based on the rain fall data.	Retaining wall at the toe of dumps is constructed.
xxiv	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and construction new piezometers at suitable locations by the project proponent in and around project area in the consultation of Regional director, CGWB. The frequency of monitoring shall be four times a year- pre-monsoon (April/May), Monsoon (August), post- monsoon (Nov), and winter (January). Data thus collected shall be sent at regular intervals to MoEF and its regional office at Bhopal, CGWB and CGWA.	Ground water level & quality monitoring is being periodically carried out and reports of existing well & piezometer are enclosed. <b>Annexure – 8</b> Piezometers constructed at plant and mines area as suggested by CGWB North Central Region, Bhopal (M.P.)
xxv	Wet drilling sequential and controlled blasting method and provision for the control air emission during blasting using dust collectors etc. shall be used. The mitigative measures for control of ground vibration and arrest fly rocks and boulders shall be implemented.	Drills with water injection system & dust collection have been procured and used for mining.  No secondary blasting. Hydraulic rock breakers used for breaking of large rocks
xxvi	Bench height, width and slope for individual bench shall	>3m bench height in overburden and > 6m

Con. No.	Condition	Status of Compliance
	be properly assessed and implemented. Adequate measures shall be adopted to stabilize the slope before abandonment. The fencing around the reservoir shall be provided to prevent accident.	bench height in Limestone is being maintained. Noted for Compliance for stabilization of slope before abandonment.
xxvii	Action plan for mining, management of over burden (removal, storage, and disposal) elimination of the mined out area and mine closer should be submitted to the Ministry and its regional office at Bhopal.	Copy of progressive mine closure plan including fund details submitted on 27 <sup>th</sup> July 2012.
xxviii	As proposed, greenbelt shall be developed in 55 ha in plant, township, and 386 ha around the mining area as per CPCB guideline in consultation with DFO.	Greenbelt development plan in plant area is submitted to DFO vide letter No. RCCPL/MYR/FOR/F dated 15.07.2012. Plantation work started as per plan and CPCB guideline Greenbelt at mine area is being developed as per approved mining plan. 12400 saplings planted in mines area.  In plant area, 35.5 ha are completed and balance is under progress.
xxix	All the recommendation of the Corporate Responsibility or Environmental Protection (CREP) for the Cement plant shall be strictly followed.	Complied
xxx	Vehicular emission shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operational and in transportation.	Vehicular emission is being monitored regularly, Sample copy of monitoring report are enclosed as <b>Annexure - 7</b>
xxxi	Risk and disaster management plan along with the mitigation measures should be prepared and a copy submitted to the MoEF, Bhopal, MPPCB and CPCB within 3 months of issue of Env. Clearance letter.	Risk and Disaster Management plan included in EIA report copy of same submitted vide letter dated 20 <sup>th</sup> June 2011
xxxii	All safety norms stipulated by the Director general, Mines & Safety (DGMS) should be implemented.	Complied
xxxiii	Final closer plan along with detail of Corpus Fund shall be submitted to the MoEF 5 years in advance of final mine closer, for approval.	Noted for Compliance
xxxiv	The company shall comply the comments made during public hearing held on 20th Dec'2009 and separate budget for implementation the same shall be allocated and information submitted to the MoEF, Bhopal.	Activities are in progress as per CSR action plan submitted vide letter dated 27 <sup>th</sup> July 2012. Revised action plan for FY 2016-17 was submitted with compliance report July 2016.
xxxv	At least 2% of the total cost of the project should be earmarked towards the corporate social responsibility and item wise detail along with time bound action plan shall be prepared and submitted to the MoEF, Bhopal. Implementation of such program should be ensured accordingly in a time bound manner.	Noted for Compliance, CSR Action plan submitted vide letter no. RCC/ENV/ECC(IU)/F-C1/2012 dated 27 <sup>th</sup> July 2012. Revised action plan for FY 2016-17 was submitted with compliance report July 2016.
xxxvi	Provision shall be made for the housing of construction labours within site with all necessary infrastructure and facility such as fuel for cooking , mobile toilets, mobile STP, safe drinking water, medical health care etc. The housing may be temporary structure to be removed after	Complied, All necessary facilities were given to construction labors at site.

Con. No.	Condition	Status of Compliance
	completion of the project.	
<b>General Condition</b>		
i	The project authority shall adhere to the stipulation made by MPPCB and state Govt.	Being Complied
ii	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry.	Complied
iii	At least four ambient air monitoring stations shall be established in the down wind direction as well as where max. ground level concentration of PM <sub>10</sub> , SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with SPCB. Data on ambient air quality and stack emission shall be regularly submitted to MoEF, regional office and SPCB/ CPCB once in six months.	Being Complied, AAQM location recommendation letter received from MPPCB Satna vide letter No. 197 lab/MPPCB/ Satna/ 2013 dated 27.4.2013. (Copy submitted vide letter RCC/ENV/ECC(IU)/F-C1/2014 dated 26th July 2014). AAQ Monitoring report enclose as <b>Annexure – 3</b>
iv	Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 dated 19th May'1993 and 31st Dec'1993 or as amended time to time. The treated waste water shall be utilized for plantation purpose.	No industrial waste water is generated. Office toilet waste water disposed through septic tank and soak pits.
v	The over all noise level in and around the plant area shall be kept well within the standards (85 dbA) by providing noise control measures including acoustic hoods, silencers, encloses etc. on all sources of noise generation. The ambient noise levels shall conforms to the standards prescribed under Environmental (Protection) Act, 1986, 1986 rules, 1989 viz. 75 dbA (day time) and 70 dbA (night time).	Being Complied  Noise monitoring being done at different locations, Report enclose as <b>Annexure – 9</b>
vi	Company shall undertake eco- development measures including community welfare measures in the project area.	Being Complied
vii	The project proponent shall comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP/ PH reports.	Being Complied
viii	The separate Environmental management cell with full fledged laboratory facility to carry out various management and monitoring functions shall be set up under the control of senior Executives	Separate Environmental Management cell established with full-fledged laboratory.
ix	Adequate fund shall be allocated to implement the conditions stipulated by the MoEF, as well as SPCB. Time bound implementation schedule for implementation all the conditions stipulated herein shall be submitted. The funds do provided shall not be diverted for any other purpose.	Being Complied
x	The regional officer of the Ministry/ CPCB/ SPCB shall monitor the stipulated conditions The project authority shall extend full cooperation to the officers of the regional office by furnishing the required data/ information/ monitoring reports. A six monthly compliance report and the monitoring data along with statistical interpretation shall be submitted to them regularly.	Being Complied Previous six monthly compliance report submitted vide letter RCC/ENV/ECC(IU)/F-C1/2018 (2) Dated 19 <sup>th</sup> Jun, 2019.
xi	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC	Being Complied Previous six monthly compliance report

Con. No.	Condition	Status of Compliance
	conditions including results of monitored data (both in hard and as well as e-mail) to the respective regional office of MoEF, the respective Zonal Office of CPCB and the MPPCB.	submitted vide letter RCC/ENV/ECC(IU)/F-C1/2018 (2) Dated 19 <sup>th</sup> Jun, 2019
xii	The Project proponent shall informed the regional office as well as the ministry, the date of financial closer and the final approval of the project by the concerned authority and the date of commencing the land development work.	The financial closure was achieved in 16.04.2013.  Land development of plant area started and communicated to all concern Vide letter no. RCC/EHS/EC/1 dated 9 <sup>th</sup> Nov, 2011
xiii	No change in mining technology and scope of working shall be made without prior approval of the MoEF. No change in calendar plan including excavation, quantum of lime stone and waste shall be made.	Noted for compliance.
xiv	Measures shall be taken for the control of noise level below 85 dBA in the work environment. Workers engaged in operation of HEMM etc. shall be provided with ear plugs / muffs.	Being complied. Dumpers, Shovels, Drills are provided with AC acoustic cabin for control of noise level. Copy of HEMM Noise monitoring report is attached as <b>Annexure – 10</b> . Personal Protective Equipment provided to all workers.
xv	Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 dated 19th May'1993 and 31st Dec'1993 or as amended time to time. The treated waste water shall be utilized for plantation purpose.	No industrial waste water is generated. Only domestic waste water is being generated and suitable treatment has been provided.
xvi	Personal working in dusty area shall wear protective respiratory device and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers shall be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Being Complied, Pre-employment & periodical health checkup is being carried out. Training facility is set up and dedicated OHS team is imparting training on the identified training need.
xvii	A copy of clearance letter shall be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation. If any, was received while processing the proposal.	Complied
xviii	A copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban Local body and the Local NGO, if any, from whom suggestions / representation, if any, were received while processing the proposal. The clearance letter shall also put on website of the company by the proponent.	Complied.
xix	The project authority shall advertise at least in two local news papers widely circulated, one of which shall be in the vernacular language of the locality concerned, with in 7 days of the issue of the clearance and a copy of the clearance letter available with Madhya Pradesh State Pollution Control Board and also at web site of MoEF at <a href="http://www.envfoe.nic.in">www.envfoe.nic.in</a> and copy of same is shall be	Complied, Advertisement is published in local newspaper (Dainik Bhaskar in English and Nav Swadesh in Hindi on 30/05/2011) and same has been informed to concerned authority vide letter Dated 25 <sup>th</sup> July, 2011



Con. No.	Condition	Status of Compliance
	forwarded to the regional office of the Ministry.	
xx	The environmental Statement for the each financial year ending 31st March in form-V as mandated to be submitted by the project proponent to the concerned SPCB as prescribed under the Env. Protection rules, 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of the EC conditions and shall also be sent to the respective regional office of the MoEF by e mail.	Being Complied Copy of Environmental Statement report 2017-18 for Plant and Mines submitted to SPCB and Regional Office of MoEF&CC Bhopal vide letter dated 26th September 2019.

**Note:** As per the direction of Madhya Pradesh Mineral Resource Department supplementary mining lease agreement was executed reducing the Mining Lease area to 362.440 ha from 539.561 ha. The request for correction in Mining lease area was submitted to MoEF, New Delhi through several letters (First letter dated 23.05.14, & subsequent letters 17.01.15, 15.12.15, 18.02.16 & emails). We would like to draw your kind attention to MoEF circular F.No.11-362/2012-FC dated 1st Feb, 2013 Point no. (iii) (b) “ The EC will be construed to be available for the mining area as per the revised mining lease deed”. Submitted for your information and record.



# ENVIRO ANALYSTS & ENGINEERS PVT. LTD.

NABET Accredited & MoEF (Govt. of India) approved

CIN No. : U28900MH1995PTC093129



H. O. : B-1003, Enviro House, 10th Floor, Western Edge II, Western Express Highway, Borivali (E), Mumbai - 400 066.  
• Tel. : +91 22 2854 1647 / 48 / 49 / 67 / 68 • E-mail : info@eaepl.com • Website : www.eaepl.com

ENV/SE/RCCPL/2020-21/014

Date: 2.07.2020

<b>Name of Industry &amp; Address:</b>	<b>M/s RCCPL PVT. LTD, Village Bharauli and Ithara, Maihar – 485773, Dist.: Satna (M.P.)</b>
--	--

## Stack Emission Monitoring Report

SL. NO.	PARAMETERS	Unit	Raw Mill Stack			
			Port A	Port B	Port C	Port D
1	Date and time of Sampling	-	27.06.2020			
			10.15am	12.30pm	2.15pm	3.30pm
2	Diameter of Stack	meter	5.6			
3	Height of Stack	meter	175			
4	Barometric pressure at site	mmHg	768			
5	Ambient temperature at site	<sup>0</sup> C	33	34	34	35
6	Temp. of exit gas	<sup>0</sup> C	110	117	115	119
7	Velocity of exit gas	m/sec	12.04	12.15	11.94	12.20
8	Moisture Content	%	3.15			
9	Flow of exit gas at stack temp. & Press.	m <sup>3</sup> /hr	1067025.25	1076773.82	1058162.92	1081204.99
10	Flow of exit gas at NTP	Nm <sup>3</sup> /hr	797009.36	789855.01	780204.25	789058.99
11	PM	mg/Nm <sup>3</sup>	19.4	20.8	19.1	18.7
12	SO <sub>2</sub>	mg/Nm <sup>3</sup>	6.45			
13	NO <sub>x</sub>	mg/Nm <sup>3</sup>	567.2			

For Enviro Analysts & Engineers Pvt. Ltd.

  
Authorized Signatory

**Nagpur Branch :**  
Shiv Kunj, Bungalow No. 65,  
Old Verma Layout, Ambazari,  
Nagpur - 440 010.  
Tel. : 0712 - 2241 835,  
Telefax : 0712 - 2241 836

**Pune Branch:**  
Flat No. 11,  
Tarankit Co. Op. Hsg. Soc. Ltd.,  
City S. No. 209, B/1, Sadashiv Peth,  
L. B. S. Road, Nr. Dnyanesh Mangal Hall,  
Pune - 411 030.  
Tel. : 020-2432 4444

**Lab :**  
Row House No. 2, Shalom Garden,  
Opp. Kanakia College,  
100 Feet Kanakia Road,  
Mira Road (East), Thane - 401 107.  
Tel. : 022-2811 6442

**Workshop :**  
Plot No. E - 122,  
MIDC Tarapur,  
Boisar,  
Dist. - Thane - 401 506.





# ENVIRO ANALYSTS & ENGINEERS PVT. LTD.

NABET Accredited & MoEF (Govt. of India) approved

CIN No. : U28900MH1995PTC093129



H. O. : B-1003, Enviro House, 10th Floor, Western Edge II, Western Express Highway, Borivali (E), Mumbai - 400 066.  
• Tel. : +91 22 2854 1647 / 48 / 49 / 67 / 68 • E-mail : info@eaepl.com • Website : www.eaepl.com

ENV/SE/RCCPL/2020-21/014/1

Date: 2.07.2020

Name of Industry & Address: M/s RCCPL PVT. LTD,  
Village Bharauli and Ithara,  
Maihar – 485773, Dist.: Satna (M.P.)

## Stack Emission Monitoring Report

SL. NO.	PARAMETERS	Unit	Coal Mill Stack		
			Port A	Port B	Port C
1	Date and time of Sampling	-	27.06.2020		
			4.25PM	5.40PM	6.50PM
2	Diameter of Stack	meter	2.3		
3	Height of Stack	meter	78		
4	Barometric pressure at site	mmHg	768		
5	Ambient temperature at site	<sup>0</sup> C	34	33	33
6	Temp. of exit gas	<sup>0</sup> C	70	72	68
7	Velocity of exit gas	m/sec	10.07	10.17	9.90
8	Moisture Content	%	15.1		
9	Flow of exit gas at stack temp. & Press.	m <sup>3</sup> /hr	150541.87	152036.82	148000.44
10	Flow of exit gas at NTP	Nm <sup>3</sup> /hr	125559.82	126071.58	124164.13
11	PM	mg/Nm <sup>3</sup>	20.9	19.5	20.1

For Enviro Analysts & Engineers Pvt. Ltd.

Authorized Signatory

### Nagpur Branch :

Shiv Kunj, Bunglow No. 65,  
Old Verma Layout, Ambazari,  
Nagpur - 440 010.  
Tel. : 0712 - 2241 835,  
Telefax : 0712 - 2241 836

### Pune Branch:

Flat No. 11,  
Tarankit Co. Op. Hsg. Soc. Ltd.,  
City S. No. 209, B/1, Sadashiv Peth,  
L. B. S. Road, Nr. Dnyanesh Mangal Hall,  
Pune - 411 030.  
Tel. : 020-2432 4444

### Lab :

Row House No. 2, Shalom Garden,  
Opp. Kanakia College,  
100 Feet Kanakia Road,  
Mira Road (East), Thane - 401 107.  
Tel. : 022-2811 6442

### Workshop :

Plot No. E - 122,  
MIDC Tarapur,  
Boisar,  
Dist. - Thane - 401 506.



SERVING FOR A BETTER ENVIRONMENT



# ENVIRO ANALYSTS & ENGINEERS PVT. LTD.

NABET Accredited & MoEF (Govt. of India) approved

CIN No. : U28900MH1995PTC093129



H. O. : B-1003, Enviro House, 10th Floor, Western Edge II, Western Express Highway, Borivali (E), Mumbai - 400 066.  
• Tel. : +91 22 2854 1647 / 48 / 49 / 67 / 68 • E-mail : info@eaepl.com • Website : www.eaepl.com

ENV/SE/RCCPL/2020-21/ 014/2

Date: 2.07.2020

<b>Name of Industry &amp; Address:</b>	<b>M/s RCCPL PVT. LTD, Village Bharauli and Ithara, Maihar – 485773, Dist.: Satna (M.P.)</b>
--	--

## Stack Emission Monitoring Report

SL. NO.	PARAMETERS	Unit	Clinker Cooler ESP Stack	
			Port A	Port B
1	Date and time of Sampling	-	28.06.2020 10.20AM 12.45PM	
2	Diameter of Stack	meter	5.0	
3	Height of Stack	meter	72	
4	Barometric pressure at site	mmHg	766.7	
5	Ambient temperature at site	<sup>0</sup> C	34	35
6	Temp. of exit gas	<sup>0</sup> C	174	181
7	Velocity of exit gas	m/sec	9.33	9.50
8	Moisture Content	%	0.60	
9	Flow of exit gas at stack temp. & Press.	m <sup>3</sup> /hr	659164.50	671175.00
10	Flow of exit gas at NTP	Nm <sup>3</sup> /hr	421865.28	422928.95
11	PM	mg/Nm <sup>3</sup>	11.7	12.4

For Enviro Analysts & Engineers Pvt. Ltd.

Authorized Signatory

**Nagpur Branch :**  
Shiv Kunj, Bunglow No. 65,  
Old Verma Layout, Ambazari,  
Nagpur - 440 010.  
Tel. : 0712 - 2241 835,  
Telefax : 0712 - 2241 836

**Pune Branch:**  
Flat No. 11,  
Tarankit Co. Op. Hsg. Soc. Ltd.,  
City S. No. 209, B/1, Sadashiv Peth,  
L. B. S. Road, Nr. Dnyanlal Mangal Hall,  
Pune - 411 030.  
Tel. : 020-2432 4444

**Lab :**  
Row House No. 2, Shalom Garden,  
Opp. Kanakia College,  
100 Feet Kanakia Road,  
Mira Road (East), Thane - 401 107.  
Tel. : 022-2811 6442

**Workshop :**  
Plot No. E - 122,  
MIDC Tarapur,  
Boisar,  
Dist. - Thane - 401 506.



SERVING FOR A BETTER ENVIRONMENT



# ENVIRO ANALYSTS & ENGINEERS PVT. LTD.

NABET Accredited & MoEF (Govt. of India) approved

CIN No. : U28900MH1995PTC093129



H. O. : B-1003, Enviro House, 10th Floor, Western Edge II, Western Express Highway, Borivali (E), Mumbai - 400 066.  
• Tel. : +91 22 2854 1647 / 48 / 49 / 67 / 68 • E-mail : info@eaepl.com • Website : www.eaepl.com

ENV/SE/RCCPL/2020-21/014/3

Date: 2.07.2020

Name of Industry & Address: M/s RCCPL PVT. LTD,  
Village Bharauli and Ithara,  
Maihar – 485773, Dist.: Satna (M.P.)

## Stack Emission Monitoring Report

SL. NO.	PARAMETERS	Unit	Cement Mill Stack	
			Port A	Port B
1	Date and time of Sampling	-	28.06.2020	
			15.30PM	16.30PM
2	Diameter of Stack	meter	4.2	
3	Height of Stack	meter	70	
4	Barometric pressure at site	mmHg	768	
5	Ambient temperature at site	<sup>0</sup> C	34	20
6	Temp. of exit gas	<sup>0</sup> C	82	78
7	Velocity of exit gas	m/sec	7.35	7.51
8	Moisture Content	%	0.65	
9	Flow of exit gas at stack temp. & Press.	m <sup>3</sup> /hr	366402.20	374378.31
10	Flow of exit gas at NTP	Nm <sup>3</sup> /hr	287851.43	295268.57
11	PM	mg/Nm <sup>3</sup>	18.8	20.2

For Enviro Analysts & Engineers Pvt. Ltd.

Authorized Signatory

**Nagpur Branch :**  
Shiv Kunj, Bunglow No. 65,  
Old Verma Layout, Ambazari,  
Nagpur - 440 010.  
Tel. : 0712 - 2241 835,  
Telefax : 0712 - 2241 836

**Pune Branch:**  
Flat No. 11,  
Tarankit Co. Op. Hsg. Soc. Ltd.,  
City S. No. 209, B/1, Sadashiv Peth,  
L. B. S. Road, Nr. Dnyanal Mangal Hall,  
Pune - 411 030.  
Tel. : 020-2432 4444

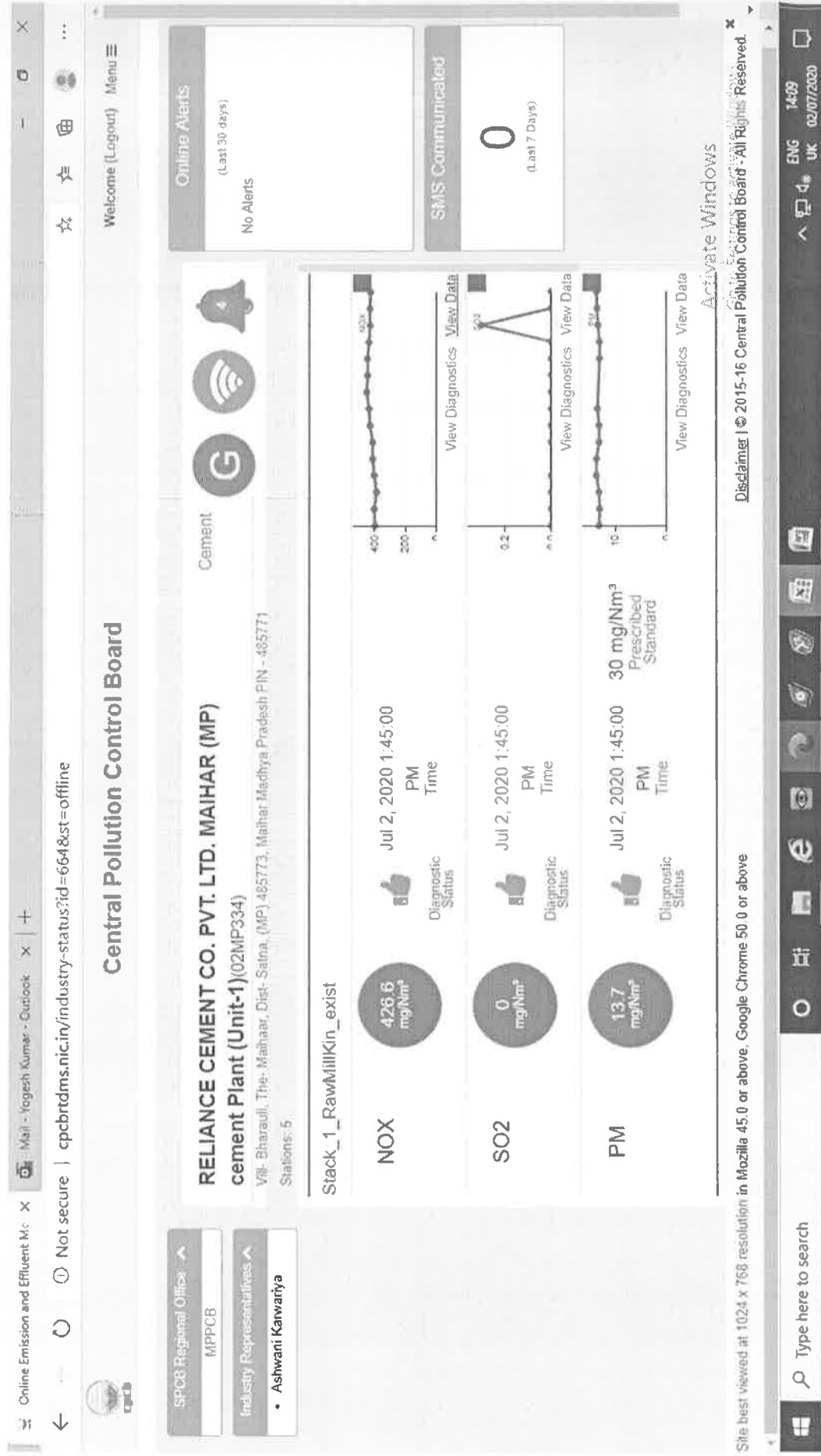
**Lab :**  
Row House No. 2, Shalom Garden,  
Opp. Kanakia College,  
100 Feet Kanakia Road,  
Mira Road (East), Thane - 401 107,  
Tel. : 022-2811 6442

**Workshop :**  
Plot No. E - 122,  
MIDC Tarapur,  
Boisar,  
Dist. - Thane - 401 506.



SERVING FOR A BETTER ENVIRONMENT

## CEMS Data Screenshot



## Annexure-2



# Creative Enviro Services

Accredited Organisation by National Accreditation Board for Testing and Calibration Laboratories (NABL), National Accreditation Board for training And Education (NABET) and ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

## TEST REPORT

AMBIENT AIR QUALITY REPORT			
Name & Address of the Customer To, M/S RCCPL Pvt. Ltd., Maihar (M.P.)		Test Report No.: CES/LAB/19-20/ Issue Date : 21.03.2020 Client Ref: Date :	
Method of test : IS: 5182		<b>Sampling Details</b>	
Test required: As per work order		Sample Monitored	: Ambient Air Quality
Location:- Sadhera Mines		Date of Receipt	: 16.03.2020
Sample Collected By:- CES Representative		Period of testing	: 16.03.2020 to 21.03.2020
Instrument to be used: Eco Tech FDS		Duration of sampling	: 24 hrs
Page 1 of 1		Atmospheric condition	: OK

AMBIENT AIR QUALITY RESULTS							
S. No.	Parameters	NAAQ Standards (industrial area)	Pollutant Concentration				
			Near Crusher	Near Magzine	Sadhera Village	Shrinagar Village Boundary	
1	Date of Sampling		14.03.2020 to 15.03.2020	14.03.2020 to 15.03.2020	14.03.2020 to 15.03.2020	14.03.2020 to 15.03.2020	
2	Wind direction		SW	SW	SW	SW	
3	Wind speed km/h		11.0	11.0	11.0	11.0	
4	Relative Humidity %		50	50	50	50	
5	Ambient Temp. (°C)		26	26	26	26	
	Parameters		Pollutant Concentration				
1	Particulate matter (size less than 10µm) or PM <sub>10</sub> (µg/m <sup>3</sup> )	100	62.10	52.02	62.30	52.36	
2	Particulate matter (size less than 2.5µm) or PM <sub>2.5</sub> (µg/m <sup>3</sup> )	60	24.32	21.08	25.30	20.84	
3	Sulphur Di-Oxide (SO <sub>2</sub> ) (µg/m <sup>3</sup> )	80	<4.00	<4.00	<4.00	<4.00	
4	Oxide of Nitrogen (NO <sub>x</sub> ) (µg/m <sup>3</sup> )	80	6.30	10.30	8.50	9.40	
5	Carbon mono Oxide mg/m <sup>3</sup> (CO)	4	<1.00	<1.00	<1.00	<1.00	

NAAQ- National Ambient Air Quality Standards CPCB Notification 18<sup>th</sup> Nov. 2009

For Creative Enviro Services

*[Signature]*  
Authorised Signatory

#The Results relate only to the sample tested/ sampled.

**Sustainable Development Department**  
[RCCPL PVT LTD]  
(Cement Plant – Unit –I)

**Test Report - AAQM**

**AAQ Monitoring Results for the Month of June - 2020**

Sr. No.	Monitoring Stations	Average PM 10 ( $\mu\text{g}/\text{m}^3$ )	Average PM 2.5 ( $\mu\text{g}/\text{m}^3$ )	Average SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	Average NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )
1.	Near Wagon Tripler (East)	72.85	31.56	19.65	15.63
2.	Near Old security Room (North)	69.63	29.65	15.38	18.88
3	Near CCR (West)	76.65	29.44	15.66	22.24
4.	STP (South)	68.64	27.55	16.95	21.54

**Analysis by :**



Yogesh Kumar

**Checked By:**



Dr. Ashwani Karwariya







# ENVIRO-TECH SERVICES

An Analytical Laboratory

An Environment, Food, Ayush, Ores & Minerals Analytical Laboratory  
(An ISO 9001:2015, 14001:2015 and 45001:2018 Certified Company)

Accredited by ISO/IEC-17025:2017 (NABL) & UPPCB

Plot No. 1/32, South Side G.T. Road Industrial Area, Ghaziabad (U.P.)-201001

email : etslab2012@gmail.com | Website : www.etslab.in | Ph.: 9911516076, 9811736063



ISO 9001/14001/45001

## TEST REPORT

TEST REPORT NO.: ETS/1222-4/02/2020

DATE OF REPORT: 29.02.2020

### WATER SAMPLE ANALYSIS REPORT

Name And Address of Customer : RCCPL PVT LTD  
VILLAGE- BHARAULI, POST-ITAHARA,  
TEHSIL- MAIHAR, DISTRICT SATNA, MP-485773

Date of Sampling : 25.02.2020

Analysis Start Date : 27.02.2020

Analysis End Date : 29.02.2020

Sample ID No : 1222-4

Sampling Done By : ETS STAFF

Sampling Description : GROUND WATER

Sampling Location : PIEZOMETER (SHALLOW)( 24.170302 ,80.699813)

Water Level (mtr) : 15.9

Sampling Method : ETS/STP/WATER-02

Sample Quantity : 2.0 + 0.5 Ltr.

Packing Condition : SEALED

Packed In : P.V.C. AND GLASS BOTTLE

S. No.	Test Parameter	Unit	Result	Specification/Limit (As per IS:10500: 2012 )		Test Method
				Desirable	Permissible	
1	pH	---	7.3	6.5 - 8.5	No Relaxation	APHA 4500-H+
2	Total Dissolved Solids,(TDS)	mg/L	312.0	500	2000	APHA 2540-C
3	Iron,(Fe)	mg/L	0.08	0.3	No Relaxation	APHA-3120B
4	Fluoride,(F)	mg/L	0.11	1	1.5	APHA 4500:(F- )-D
5	Calcium,(Ca)	mg/L	42.0	75	200	APHA 3500:(Ca)-B
6	Chloride,(Cl)	mg/L	65.0	250	1000	APHA 4500:(Cl- )-B
7	Nitrate,(NO <sub>3</sub> )	mg/L	1.15	45	No Relaxation	APHA 4500:(NO <sub>3</sub> )-B
8	Sulphate,(SO <sub>4</sub> )	mg/L	18.0	200	400	APHA 4500:(SO <sub>4</sub> )-E
9	Total Alkalinity,(CaCO <sub>3</sub> )	mg/L	120.0	200	600	APHA 2320-B
10	Total Hardness,(CaCO <sub>3</sub> )	mg/L	165.0	200	600	APHA 2340-C
11	Total Coliform	MPN/100mL	Absent	Shall Not Be Detectable		IS 1622
12	Escherichia coli	MPN/100mL	Absent	Shall Not Be Detectable		IS 1622

REMARKS-PLANT AREA

\*\*\*\*\*End of Test Report\*\*\*\*\*

Page 1 of 1

FOR ENVIRO-TECH SERVICES



For Enviro-Tech Services

Md Humraj  
Quality Manager  
AUTHORIZED SIGNATORY

Format No ETS/LAB/IR-09, Issue No. 05, Date 01.04.2019, Amd. No. 04 Date 01.04.2019

#### Note:-

1. This test report shall not be used in any advertising media or as evidence in the court of Law without prior written permission of the laboratory.
2. The samples received shall be destroyed after 15 days from the date of test report issued.
3. The results indicated only refer to the tested samples and listed applicable parameters.
4. Our liability is limited to invoice value only.



# ENVIRO-TECH SERVICES

An Analytical Laboratory

An Environment, Food, Ayush, Ores & Minerals Analytical Laboratory  
(An ISO 9001:2015, 14001:2015 and 45001:2018 Certified Company)

Accredited by ISO/IEC-17025:2017 (NABL) & UPPCB

Plot No. 1/32, South Side G.T. Road Industrial Area, Ghaziabad (U.P.)-201001  
email : etslab2012@gmail.com | Website : www.etslab.in | Ph.: 9911516076, 9811736063



ISO 9001/14001/45001

## TEST REPORT

TEST REPORT NO.: ETS/1222-5/02/2020

DATE OF REPORT: 29.02.2020

### WATER SAMPLE ANALYSIS REPORT

Name And Address of Customer : RCCPL PVT LTD  
VILLAGE- BHARAULI, POST-ITAHARA,  
TEHSIL- MAIHAR, DISTRICT SATNA, MP-485773

Date of Sampling : 25.02.2020

Analysis Start Date : 27.02.2020

Analysis End Date : 29.02.2020

Sample ID No : 1222-5

Sampling Done By : ETS STAFF

Sampling Description : GROUND WATER

Sampling Location : PIEZOMETER (DEEP)(24.170302, 80.699813)

Water Level (mtr) : 15.3

Sampling Method : ETS/STP/WATER-02

Sample Quantity : 2.0 + 0.5 Ltr.

Packing Condition : SEALED

Packed In : P.V.C. AND GLASS BOTTLE

S. No.	Test Parameter	Unit	Result	Specification/Limit (As per IS:10500: 2012 )		Test Method
				Desirable	Permissible	
1	pH	---	6.8	6.5 - 8.5	No Relaxation	APHA 4500-H+
2	Total Dissolved Solids,(TDS)	mg/L	298.0	500	2000	APHA 2540-C
3	Iron,(Fe)	mg/L	0.07	0.3	No Relaxation	APHA-3120B
4	Fluoride,(F)	mg/L	0.10	1	1.5	APHA 4500:(F-) -D
5	Calcium,(Ca)	mg/L	37.0	75	200	APHA 3500:(Ca)-B
6	Chloride,(Cl)	mg/L	56.0	250	1000	APHA 4500:(Cl-) -B
7	Nitrate,(NO <sub>3</sub> )	mg/L	0.92	45	No Relaxation	APHA 4500:(NO <sub>3</sub> )-B
8	Sulphate,(SO <sub>4</sub> )	mg/L	21.0	200	400	APHA 4500:(SO <sub>4</sub> )-E
9	Total Alkalinity,(CaCO <sub>3</sub> )	mg/L	105.0	200	600	APHA 2320-B
10	Total Hardness,(CaCO <sub>3</sub> )	mg/L	158.0	200	600	APHA 2340-C
11	Total Coliform	MPN/100mL	Absent	Shall Not Be Detectable		IS 1622
12	Escherichia coli	MPN/100mL	Absent	Shall Not Be Detectable		IS 1622

REMARKS-PLANT AREA

\*\*\*\*\*End of Test Report\*\*\*\*\*

Page 1 of 1

FOR ENVIRO-TECH SERVICES

For Enviro-Tech Services

CHECKED BY

MD HUNRAJ

Quality Manager

AUTHORIZED SIGNATORY

Format No ETS/LAB/TR-09, Issue No. 05, Date 01.04.2019, Amd. No. 04 Date 01.04.2019

#### Note:-

1. This test report shall not be used in any advertising media or as evidence in the court of Law without prior written permission of the laboratory.
2. The samples received shall be destroyed after 15 days from the date of test report issued.
3. The results indicated only refer to the tested samples and listed applicable parameters.
4. Our liability is limited to invoice value only.



# ENVIRO-TECH SERVICES

An Analytical Laboratory

An Environment, Food, Ayush, Ores & Minerals Analytical Laboratory  
(An ISO 9001:2015, 14001:2015 and 45001:2018 Certified Company)

Accredited by ISO/IEC-17025:2017 (NABL) & UPPCB

Plot No. 1/32, South Side G.T. Road Industrial Area, Ghaziabad (U.P.)-201001

email : etslab2012@gmail.com | Website : www.etslab.in | Ph.: 9911516076, 9811736063



ISO 9001/14001/45001



## TEST REPORT

TEST REPORT NO : ETS/1222-28/02/2020

DATE OF REPORT: 29.02.2020

### WATER SAMPLE ANALYSIS REPORT

Name And Address of Customer : RCCPL PVT LTD  
VILLAGE- BHARAULI, POST-ITAHARA,  
TEHSIL- MAIHAR, DISTRICT SATNA, MP-485773

Date of Sampling : 24.02.2020

Analysis Start Date : 26.02.2020

Analysis End Date : 29.02.2020

Sample ID No : 1222-28

Sampling Done By : ETS STAFF

Sampling Description : SURFACE WATER

Sampling Location : RAMGHAT DOWN STREAM (24.115303, 80.768862)

Sampling Method : ETS/STP/WATER-02

Sample Quantity : 2.0 + 0.5 Ltr.

Packing Condition : SEALED

Packed In : P.V.C. AND GLASS BOTTLE

S. No.	Test Parameter	Unit	Result	Test Method
1	pH		8.1	APHA 4500-H+
2	Total Dissolved Solids,(TDS)	mg/L	136.0	APHA 2540-C
3	Iron,(Fe)	mg/L	0.16	APHA-3120B
4	Fluoride,(F)	mg/L	0.19	APHA 4500:(F- )-D
5	Calcium,(Ca)	mg/L	37.9	APHA 3500:(Ca)-B
6	Chloride,(Cl)	mg/L	43.5	APHA 4500:(Cl- )-B
7	Nitrate,(NO <sub>3</sub> )	mg/L	0.76	APHA 4500:(NO <sub>3</sub> -)-B
8	Sulphate,(SO <sub>4</sub> )	mg/L	48.3	APHA 4500:(SO <sub>4</sub> )-E
9	Magnesium,(Mg)	mg/L	22.1	APHA 3500:(Mg)-B
10	Total Alkalinity,(CaCO <sub>3</sub> )	mg/L	110.0	APHA 2320-B
11	Total Hardness,(CaCO <sub>3</sub> )	mg/L	187.0	APHA 2340-C
12	Total Coliform	MPN/100mL	225	IS 1622

REMARKS- SALIYA LIMESTONE MINE

\*\*\*\*\*End of Test Report\*\*\*\*\*

FOR ENVIRO-TECH SERVICES

Page 1 of 1

For Enviro-Tech Services

CHECKED BY

Md Humraj  
Quality Manager

AUTHORIZED SIGNATORY

Note:-

Form No ETS/LAB/TR-09, Issue No. 05, Date 01.04.2019, Amd. No. 04 Date 01.04.2019

1. This test report shall not be used in any advertising media or as evidence in the court of Law without prior written permission of the laboratory.
2. The samples received shall be destroyed after 15 days from the date of test report issued.
3. The results indicated only refer to the tested samples and listed applicable parameters.
4. Our liability is limited to invoice value only.



# Creative Enviro Services

Accredited Organisation by National Accreditation Board for Testing and Calibration

Laboratories (NABL), National Accreditation Board for training  
And Education (NABET) and ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

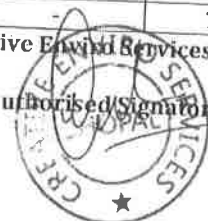
## TEST REPORT

Name & Address of the Customer To, M/s RCCPL Pvt. Ltd. Maihar (M.P.) Salaiya Mines	Test Report No. : CES/Lab/19-20/RCCPL/ Issue Date : 21.03.2020 Client Ref: SERO/MC1/23573470 Date : 04.09.2018
Qty : 1No. x 1 litre	Date of Collection : 14.03.2020
Method of test : APHA 23 <sup>rd</sup> edition	Date of Receipt : 16.03.2020
Packing :- Plastic bottle	Period of testing : 16.03.2020 to 21.03.2020
Sample Condition at receipt: Ok	Method of sampling : BIS/3025
Sample Particulars: : Drinking Water	Sample tested as received : OK
Sample collected by: CES Representative	Page no. 1 of 2

Sr. No	Test Parameters	Unit	Method No.	Requirement as per IS-10500-2012		Mines office
				Desirable Limit	Permissible limit	
1	pH	-	4500 H+B	6.5-8.5	No relaxation	7.08
2	Conductivity	µmhos/cm	2510 B	-	-	650.80
3	Turbidity	NTU	2130 B	1	10	<0.10
4	Total Solid	mg/lit	2540 B	-	-	340.00
5	Total Dissolved Solid	mg/lit	2540 C	500	2000	325.00
6	Total suspended solid	mg/lit	2540 D	100	-	15.00
7	Total Alkalinity	mg/lit	2320 B	200	600	180.00
8	Total Hardness as CaCO <sub>3</sub>	mg/lit	2340 C	200	600	174.00
9	Ca Hardness as CaCO <sub>3</sub>	mg/lit	3500 B	-	-	100.00
10	Mg Hardness as CaCO <sub>3</sub>	mg/lit	3500 B	-	-	74.00
11	Calcium as Ca	mg/lit	3500 B	75	200	40.08
12	Magnesium as Mg	mg/lit	3500 B	30	100	17.98
13	Sulphates as SO <sub>4</sub>	mg/lit	4500- SO <sub>4</sub> E	200	400	14.58
14	Chlorides as Cl	mg/lit	4500-Cl- B	250	1000	17.99
15	Iron as Fe	mg/lit	3500- Fe B	0.30	1	<0.05
16	Nitrate as NO <sub>3</sub>	mg/lit	4500-NO <sub>3</sub> B	45	No relaxation	2.45
17	Nitrite as NO <sub>2</sub> -N	mg/lit	4500- NO <sub>2</sub> B	-	-	<0.01
18	Phosphate as P	mg/lit	4500-PD	-	-	<0.01
19	Fluoride as F	mg/lit	4500- F D	1.0	1.5	0.22
20	Copper as Cu	mg/lit	3500-Cu B	0.05	1.5	<0.03
21	Chromium as Cr <sup>6+</sup>	mg/lit	3500-Cr <sup>6+</sup> B	0.05	No relaxation	<0.01
22	*Coliform	MPN/100ml	IS:15185	-	-	<2.00
23	Manganese as Mn	mg/lit	3500-Mn B	0.2	5.0	<0.20
24	Sodium Na	mg/lit	3500- Na B	-	-	22.14
25	Potassium K	mg/lit	3500- K B	-	-	7.45

For Creative Enviro Services

Authorized Signatory





# Creative Enviro Services

Accredited Organisation by National Accreditation Board for Testing and Calibration Laboratories (NABL), National Accreditation Board for training And Education (NABET) and ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

## TEST REPORT

Name & Address of the Customer To, M/s RCCPL Pvt. Ltd. Maihar (M.P.) Salaiya Mines	Test Report No. : CES/Lab/19-20/RCCPL/ Issue Date :21.03.2020 Client Ref: SERO/MC1/23573470 Date : 04.09.2018
Qty : 1No. x 1 litre	Date of Collection : 14.03.2020
Method of test : APHA 23 <sup>rd</sup> edition	Date of Receipt : 16.03.2020
Packing :- Plastic bottle	Period of testing : 16.03.2020 to 21.03.2020
Sample Condition at receipt: Ok	Method of sampling : BIS/3025
Sample Particulars:- Drinking Water	Sample tested as received : OK
Sample collected by: CES Representative	Page no. 2 of 2

Sr. No	Test Parameters	Unit	Method No.	Requirement as per IS-10500-2012		Mines office
				Desirable Limit		
26	Zinc as Zn	mg/lit	3111-Zn B	5	15	<0.05
27	Total Chromium	mg/lit	3500-Cr <sup>+</sup> B	0.05	No relaxation	<0.05
28	Cadmium as Cd	mg/lit	3111-Cd B	0.003	No relaxation	<0.05
29	Lead as Pb	mg/lit	3111-Pb B	0.01	No relaxation	<0.05
30	Mercury as Hg	mg/lit	3112- Hg B	0.001	No relaxation	<0.01
31	Nickel as Ni	mg/lit	3111-Ni B	0.02	No relaxation	<0.05
32	Arsenic as As	mg/lit	3114-As B	0.01	0.05	<0.05
33	Boron as B	mg/lit	4500-B B	0.5	1.0	<0.10
34	Selenium as Se	mg/lit	3114-Se B	0.01	No relaxation	<0.05
33	*Phenolic compound	mg/lit	5530-D	0.001	0.002	<0.001
34	#Anionic detergent as MBAS	mg/lit	5540-C	0.2	1.0	<0.001
35	Residual Chlorine	mg/lit	4500-Cl B	0.2	1.0	<1.00
36	*Pesticides	mg/lit	USEPA	-	-	ND
37	#Mineral oil	mg/lit	IS 3025 (Part 39)	0.5	No relaxation	ND
38	*Polynuclear aromatic hydrocarbon as PAH	mg/lit	APHA 6440	0.0001	No relaxation	ND

Note: - (1) The Test Parameters are marked with an # are not analysis by us, these parameters are covered under Subcontract

For Creative Enviro Services  
Authorised Signatory





## Event Report

Date/Time Long at 13:49:21 March 16, 2020  
 Trigger Source Geo: 0.700 mm/s, Mic: 2.000 pa.(L)  
 Range Geo: 254.0 mm/s  
 Record Time 3.0 sec at 1024 sps  
 Operator/Setup: Operator/Reliance Cement.mmb

## Notes

Location: Sadhera Lime Stone Mines  
 Client: RCCPL  
 User Name: Gulubash Manik  
 General: Vibration Monitor

Microphone Linear Weighting  
 PSPL 6.160 pa.(L) at 0.854 sec  
 ZC Freq 4.5 Hz  
 Channel Test Passed (Freq = 19.7 Hz Amp = 1192 mv)

	Tran	Vert	Long	
PPV	1.576	1.088	2.341	mm/s
ZC Freq	47	37	47	Hz
Time (Rel. to Trig)	0.166	0.111	0.131	sec
Peak Acceleration	0.049	0.029	0.065	g
Peak Displacement	0.006	0.010	0.008	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.3	Hz
Overswing Ratio	4.0	4.1	4.1	

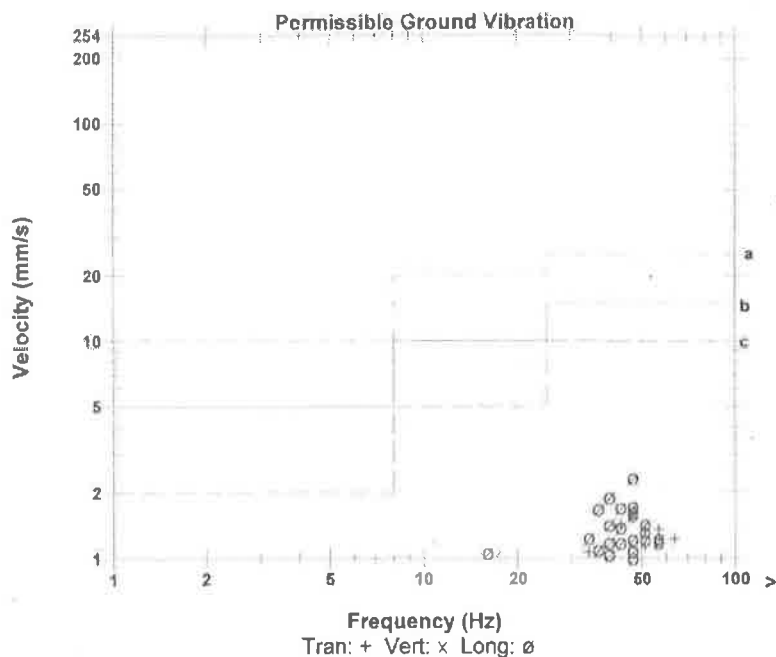
Peak Vector Sum 2.497 mm/s at 0.131 sec

Serial Number UM12753 V 10-88 Micromate ISEE  
 Battery Level 3.5 Volts  
 Unit Calibration June 18, 2019 by UES New Delhi  
 File Name UM12753\_20200316134921.IDFW

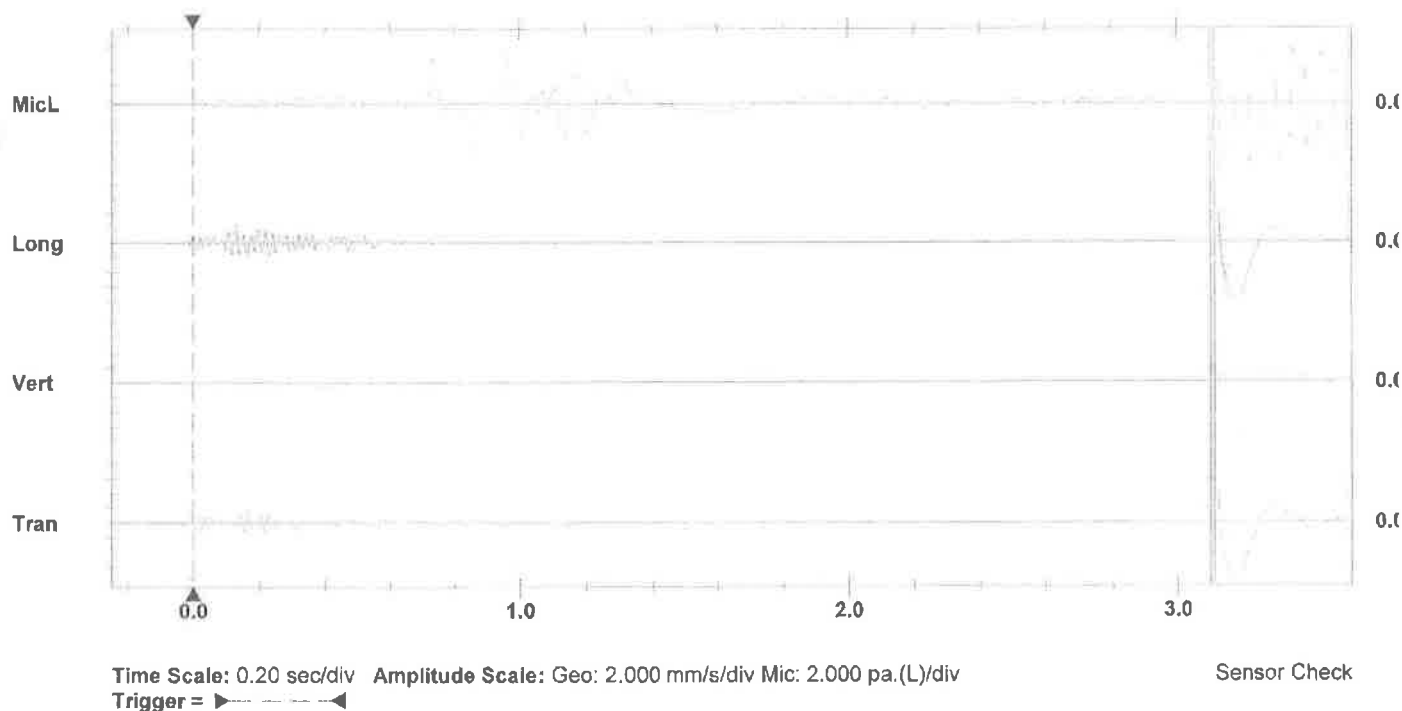
## Post Event Notes

Blasted 44 Holes in 1st Bench with S\*B\*D is 5\*4\*8.0 Mtrs  
 having Avg./Charge/Holes is 33.36 Kgs Micromate is Placed at  
 Distance of 217. Mtrs from the Blasting face near forest side

## DGMS India (A)



- a) Industrial Buildings
- b) Domestic houses/structures
- c) Historic objects, sensitive structures



**Date/Time** Tran at 13:44:50 June 25, 2020  
**Trigger Source** Geo: 1.000 mm/s  
**Range** Geo: 254.0 mm/s  
**Record Time** 3.75 sec (Auto=3Sec) at 1024 sps

## Notes

**Location:** SADHERA LIMESTONE MINES  
**Client:** RCCPL PVT LTD  
**User Name:** GULUBAS MANIK  
**General:** Vibration Monitor

## Extended Notes

**Microphone** Linear Weighting  
**PSPL** 22.25 pa.(L) at 1.062 sec  
**ZC Freq** 3.8 Hz  
**Channel Test** Passed (Freq = 19.7 Hz Amp = 474 mv )

	Tran	Vert	Long	
PPV	4.445	1.270	3.302	mm/s
ZC Freq	64	47	43	Hz
Time (Rel. to Trig)	0.176	0.196	0.200	sec
Peak Acceleration	0.159	0.053	0.119	g
Peak Displacement	0.012	0.005	0.014	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.4	7.5	7.4	Hz
Overswing Ratio	3.6	3.4	3.6	

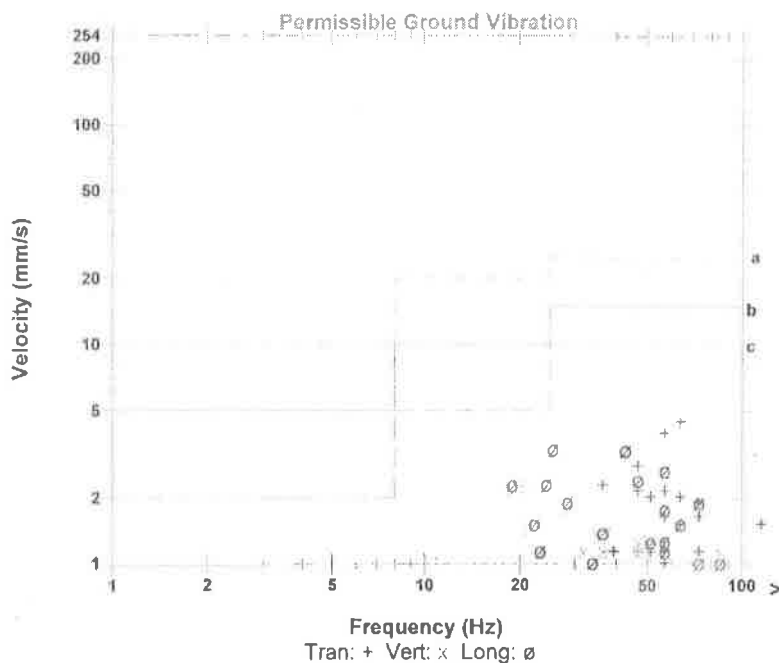
**Peak Vector Sum** 4.623 mm/s at 0.176 sec

**Serial Number** BE19865 V 10.60-1.1 Minimate Blaster  
**Battery Level** 6.0 Volts  
**Unit Calibration** October 4, 2019 by UES New Delhi  
**File Name** U865IIN7.IQ0

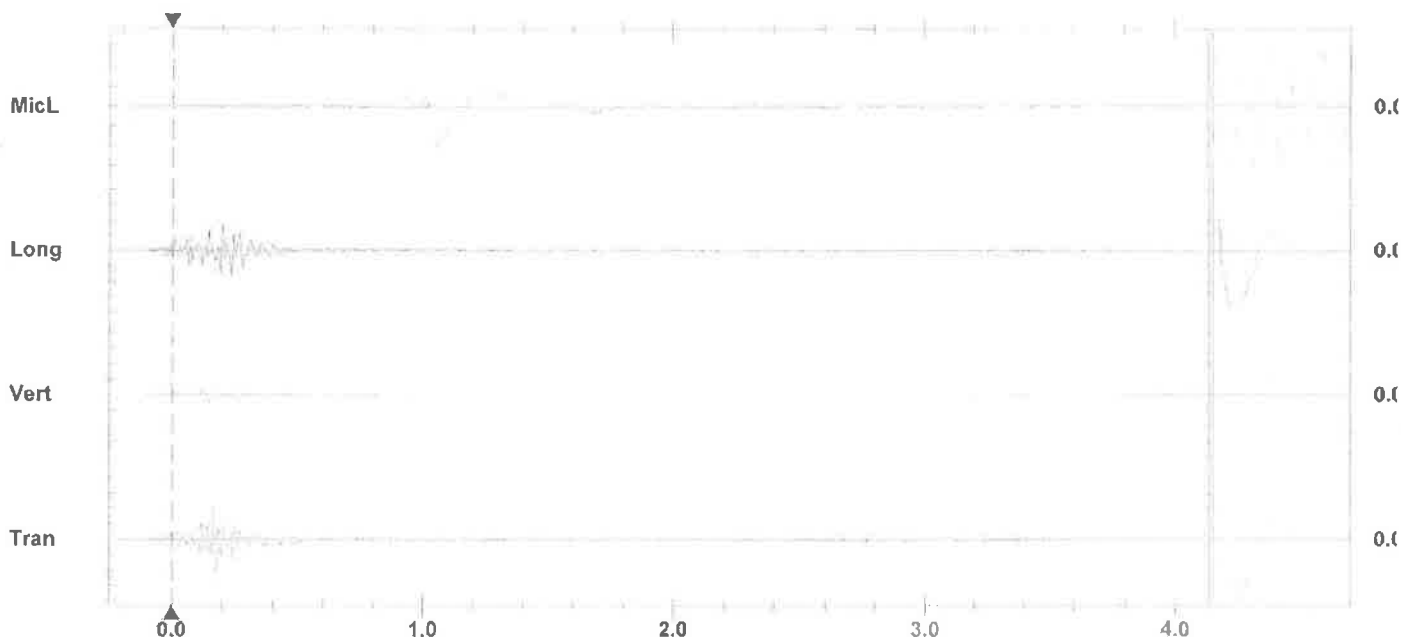
## Post Event Notes

Blasted 28 Holes in 2nd Bench with S\*B\*D is 5\*4\*9.5 Mtrs having Avg./Charge/Holes is 63.94 Kgs Minimate is Placed at Distance of..316.Mtrs from the Blasting face near santipur village side

## DGMS India (A)



a)Industrial Buildings  
b)Domestic houses/structures  
c)Historic objects, sensitive structures



**Time Scale:** 0.20 sec/div **Amplitude Scale:** Geo: 2.000 mm/s/div Mic: 10.000 pa.(L)/div  
**Trigger =** 

Sensor Check



# ENVIRO ANALYSTS & ENGINEERS PVT. LTD.

NABET Accredited & MoEF (Govt. of India) approved

CIN No. : U28900MH1995PTC093129



H. O. : B-1003, Enviro House, 10th Floor, Western Edge II, Western Express Highway, Borivali (E), Mumbai - 400 066.  
• Tel. : +91 22 2854 1647 / 48 / 49 / 67 / 68 • E-mail : info@eaepl.com • Website : www.eaepl.com

ENV/SE/RCCPL/2020-21/014


Date: 2.07.2020

Name of Industry & Address: M/s RCCPL PVT. LTD,  
Village Bharauli and Ithara,  
Maihar – 485773, Dist.: Satna (M.P.)

## Stack Emission Monitoring Report

SL. NO.	PARAMETERS	Unit	Raw Mill Stack			
			Port A	Port B	Port C	Port D
1	Date and time of Sampling	-	27.06.2020			
			10.15am	12.30pm	2.15pm	3.30pm
2	Diameter of Stack	meter	5.6			
3	Height of Stack	meter	175			
4	Barometric pressure at site	mmHg	768			
5	Ambient temperature at site	<sup>0</sup> C	33	34	34	35
6	Temp. of exit gas	<sup>0</sup> C	110	117	115	119
7	Velocity of exit gas	m/sec	12.04	12.15	11.94	12.20
8	Moisture Content	%	3.15			
9	Flow of exit gas at stack temp. & Press.	m <sup>3</sup> /hr	1067025.25	1076773.82	1058162.92	1081204.99
10	Flow of exit gas at NTP	Nm <sup>3</sup> /hr	797009.36	789855.01	780204.25	789058.99
11	PM	mg/Nm <sup>3</sup>	19.4	20.8	19.1	18.7
12	SO <sub>2</sub>	mg/Nm <sup>3</sup>	6.45			
13	NO <sub>x</sub>	mg/Nm <sup>3</sup>	567.2			

For Enviro Analysts & Engineers Pvt. Ltd.

  
Authorized Signatory

### Nagpur Branch :

Shiv Kunj, Bunglow No. 65,  
Old Verma Layout, Ambazari,  
Nagpur - 440 010.  
Tel. : 0712 - 2241 835,  
Telefax : 0712 - 2241 836

### Pune Branch:

Flat No. 11,  
Tarankit Co. Op. Hsg. Soc. Ltd.,  
City S. No. 209, B/1, Sadashiv Peth,  
L. B. S. Road, Nr. Dnyanal Mangal Hall,  
Pune - 411 030.  
Tel. : 020-2432 4444

### Lab :

Row House No. 2, Shalom Garden,  
Opp. Kanakia College,  
100 Feet Kanakia Road,  
Mira Road (East), Thane - 401 107.  
Tel. : 022-2811 6442

### Workshop :

Plot No. E - 122,  
MIDC Tarapur,  
Boisar,  
Dist. - Thane - 401 506.





**POLLUTION UNDER CONTROL CERTIFICATE**  
**TRANSPORT DEPARTMENT, GOVT. OF MADHYA PRADESH**

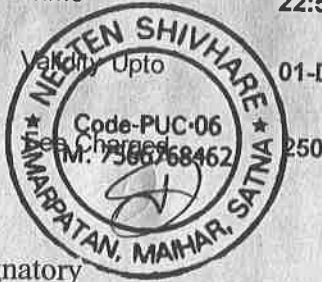


**Vehicle Passed.**

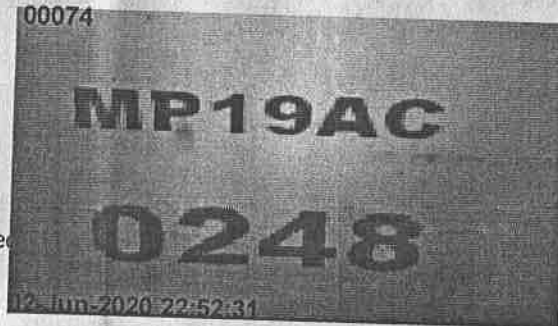
**Licence No : MP19PUC/06/2018/STA**

PUC No. 00074  
 Vehicle No. MP19AC0248  
 Veh. Make Sonalica  
 Veh. Model Tractor  
 Category Tractor  
 Date of Reg. 09 Jun 2015  
 Fuel Type Diesel  
 Date 02-Jun-2020  
 Time 22:50:50

	Flush	Cycle	Mean		
	Min RPM	Max RPM	Oil Temp.		
	0822	2350	069		
S.No.	Min RPM	Max RPM	K /m	HSU %	Temp
1	0820	2350	1.17	39.6	069
2	0820	2310	1.23	41.1	069
3	0820	2360	1.24	41.5	070
4	0820	2390	1.34	43.9	070
Mean		Pass	1.24	41.5	



01-Dec-2020 Checked



NEETEN SHIVHARE

MO. 7566768462

SATNA, M.P. PIN-485001

Authorised Signatory

**POLLUTION UNDER CONTROL CERTIFICATE**  
**TRANSPORT DEPARTMENT, GOVT. OF MADHYA PRADESH**



**Vehicle Passed.**

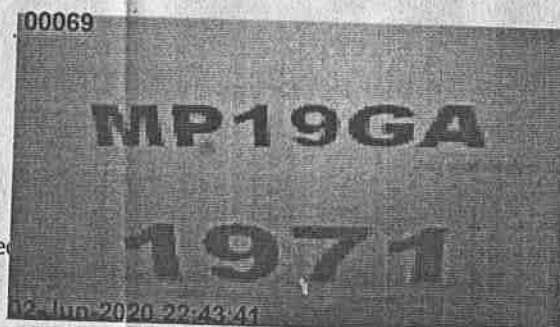
**Licence No : MP19PUC/06/2018/STA**

PUC No. 00069  
 Vehicle No. MP19GA1971  
 Veh. Make Mahindra & Mahindra  
 Veh. Model Ambulance  
 Category Auto  
 Date of Reg. 24 Jun 2013  
 Fuel Type Diesel  
 Date 02-Jun-2020  
 Time 22:41:14

	Flush	Cycle	Mean		
	Min RPM	Max RPM	Oil Temp.		
	0750	2450	080		
S.No.	Min RPM	Max RPM	K /m	HSU %	Temp
dra	0750	2450	1.46	46.6	080
2	0750	2430	1.32	43.5	080
3	0750	2460	1.32	43.5	081
4	0750	2480	1.28	42.3	081
Mean		Pass	1.34	44.0	



01-Dec-2020 Checked



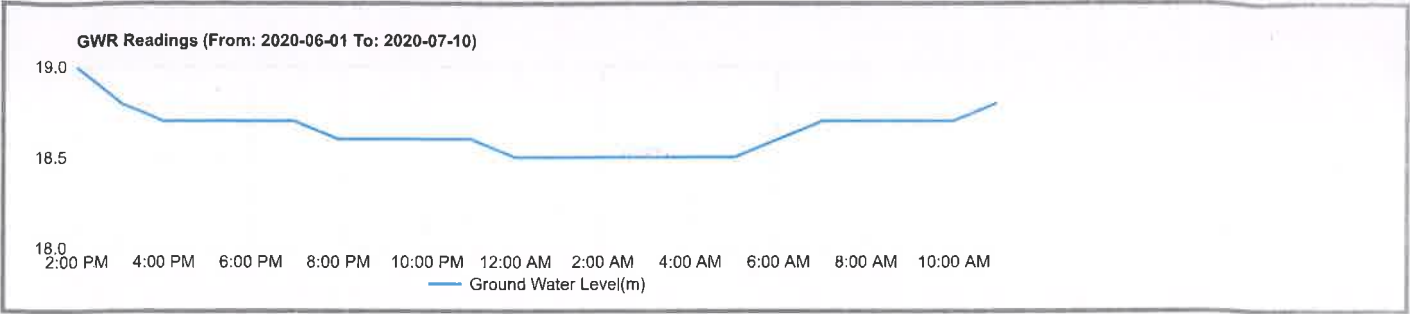
NEETEN SHIVHARE

MO. 7566768462

SATNA M.P. PIN-485001

Authorised Signatory

ad1234



# Ground Water Level

18.8 metres

Last Updated on 2020-07-10 11:29:52

Start Date

01-06-2020

End Date

10-07-2020

Download Data

**Sustainable Development Department**  
(RCCPL PVT LTD)

**NOISE MONITORING REPORT**  
[Plant Village Area]

Sample Particulars: Ambient Noise Level Monitoring

Date of monitoring :20.03.2020

**TEST RESULTS**

S. No.	location	Unit	Result	
			Day	Night
01	Bharauli Village	dB(A)	56.3	44.2
02	Itahara Vilage	dB(A)	56.1	54.7
03	Khervakala Village	dB(A)	57.3	53.8

Sr. Manager – Environnment



**Sustainable Development Department**  
(Reliance Cement Company Pvt. Ltd)

**NOISE MONITORING REPORT**  
[Plant Village Area]

Sample Particulars: Ambient Noise Level Monitoring

Date of monitoring :10.06.2020

**TEST RESULTS**

S. No.	location	Unit	Result	
			Day	Night
01	Bharauli Village	dB(A)	56.1	54.2
02	Itahara Vilage	dB(A)	56.8	55.3
03	Khervakala Village	dB(A)	55.8	54.2

Manager Environment





# Creative Enviro Services

Accredited Organisation by National Accreditation Board for Testing and Calibration Laboratories (NABL), National Accreditation Board for training And Education (NABET) and ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

## TEST REPORT

Name & Address of the Customer To M/S RCCPL Pvt. Ltd. Village- Sadhera Tehsil- Maihar, District Satna, MP-4857	Test Report No.: CES/LAB/19-20/ Issue Date : 21.03.2020 Client Ref: Date :
Sample Particulars: Ambient Noise Level Monitoring	Date of Receipt : 16.03.2020
Test required: As given below	Date of commencement of testing : 16.03.2020
Protocol for testing : IS-9989-2001	Date of completion of testing : 21.03.2020
Sample collected by: CES representative	Page No. : Page 1 of 1

## TEST RESULTS

### Day Time

Sr. No	Location	Monitoring Time	Unit	Noise level	
				Minimum	Maximum
1	Mines Office	09:10 AM	dB(A)	61.00	64.30
2	Crusher Office	09:20 AM	dB(A)	60.90	64.10
3	Crusher Area	09:25 AM	dB(A)	64.10	67.00
4	OLBC Area	09:30 AM	dB(A)	50.00	56.00
5	Magazine Area	09:35 AM	dB(A)	50.10	58.10
6	Working Pit	09:40 AM	dB(A)	61.80	66.00
7	DG set Area	09:45 AM	dB(A)	63.50	64.10
8	Santipur Village	09:55 AM	dB(A)	53.00	56.00
9	Hanuman Nagar Basti	10:10 AM	dB(A)	50.10	58.10
10	Srinagar Village	10:20 AM	dB(A)	50.10	59.10
11	Near School	10:30 AM	dB(A)	51.10	57.10
12	Karaundi Village	10:45 AM	dB(A)	50.30	58.10

### Night Time

Sr. No	Location	Monitoring Time	Unit	Noise level	
				Minimum	Maximum
1	Mines Office	08:00 PM	dB(A)	57.40	59.70
2	Crusher Office	08:10 PM	dB(A)	58.70	65.10
3	Crusher Area	08:20 PM	dB(A)	60.10	64.20
4	OLBC Area	08:30 PM	dB(A)	48.10	52.20
5	Magazine Area	08:40 PM	dB(A)	46.10	49.30
6	Working Pit	08:50 PM	dB(A)	50.10	55.10
7	DG set Area	09:00 PM	dB(A)	60.10	64.20
8	Santipur Village	09:10 PM	dB(A)	50.10	53.80
9	Hanuman Nagar Basti	09:20 PM	dB(A)	51.80	54.00
10	Srinagar Village	09:35 PM	dB(A)	49.10	52.10
11	Near School	09:40 PM	dB(A)	48.10	49.10
12	Karaundi Village	09:55 PM	dB(A)	46.10	47.20

For Creative Enviro Services

Authorised Signatory



42, Doorsanchar Colony, Near Savoy Complex, E-8 Extension, Gulmohar, Bhopal-462 039 (M.P.)  
Telephone : 0755-4299319, Fax : 0755-4243510, Mobile : 9425009319

Email: creative5@rediffmail.com, creative.bpl@gmail.com  
Websearch : www.creativeenviroservices.com



# Creative Enviro Services

Accredited Organisation by National Accreditation Board for Testing and Calibration  
Laboratories (NABL), National Accreditation Board for training  
And Education (NABET) and ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

## TEST REPORT

Name & Address of the Customer To M/S RCCPL Pvt. Ltd. Village- Sadhera Tehsil- Maihar, District Satna, MP-4857		Test Report No.: CES/LAB/19-20/ Issue Date : 21.03.2020 Client Ref: Date :	
Sample Particulars: HEMM Noise Level Monitoring		Date of Receipt	:16.03.2020
Test required: As given below		Date of commencement of testing	:16.03.2020
Protocol for testing : IS-9989-2001		Date of completion of testing	:21.03.2020
Sample collected by: CES representative		Page No.	Page 1 of 2

### TEST RESULTS

Sr. No	Location	Noise level in dB(A)	Total exposure shift of 8 Hr. T. N. Hrs. Min.	Protection level required
Loader				
1	Inside of the cabin	55.40	6 hours	Ear plugs
2	Outside of the cabin			
	1m	58.10	6 hours	Ear plugs
	3m	57.40		
	5m	56.90		
Excavator PC 450				
3	Inside of the cabin	57.70	6 hours	Ear plugs
4	Outside of the cabin			
	1m	60.00	6 hours	Ear plugs
	3m	58.00		
	5m	57.00		
Excavator BE-1000E				
5	Inside of the cabin	59.00	6 hours	Ear plugs
6	Outside of the cabin			
	1m	61.20	6 hours	Ear plugs
	3m	59.50		
	5m	58.00		
Grader				
7	Inside of the cabin	60.00	6 hours	Ear plugs
8	Outside of the cabin			
	1m	61.00	6 hours	Ear plugs
	3m	59.60		
	5m	58.00		

For Creative Enviro Services

Authorised Signatory



42, Doorsanchar Colony, Near Savoy Complex, E-8 Extension, Gulmohar, Bhopal-462 039 (M.P.)  
Telephone : 0755-4299319, Fax : 0755-4243510, Mobile : 9425009319

Email: creative5@rediffmail.com, creative.bpl@gmail.com  
Websearch : www.creativeenviroservices.com





# Creative Enviro Services

Accredited Organisation by National Accreditation Board for Testing and Calibration  
Laboratories (NABL), National Accreditation Board for training  
And Education (NABET) and ISO 9001:2015, ISO 14001:2015, ISO 45001:2018

## TEST REPORT

Name & Address of the Customer To M/S RCCPL Pvt. Ltd. Village- Sadhera Tehsil- Maihar, District Satna, MP-4857	Test Report No.: CES/LAB/19-20/ Issue Date : 21.03.2020 Client Ref: Date :
Sample Particulars: HEMM Noise Level Monitoring	Date of Receipt : 16.03.2020
Test required: As given below	Date of commencement of testing : 16.03.2020
Protocol for testing : IS-9989-2001	Date of completion of testing : 21.03.2020
Sample collected by: CES representative	Page No. : Page 2 of 2

### TEST RESULTS

Sr. No	Location	Noise level in dB(A)	Total exposure shift of 8 Hr. T. N. Hrs. Min.	Protection level required
Drill machine				
9	Inside of the cabin	64.00	6 hours	Ear plugs
10	Outside of the cabin			
	1m	65.30	6 hours	Ear plugs
	3m	64.10		
	5m	63.00		
Dumper				
11	Inside of the cabin	50.10	6 hours	Ear plugs
12	Outside of the cabin			
	1m	51.20	6 hours	Ear plugs
	3m	49.10		
	5m	48.50		
Dozed				
13	Inside of the cabin	54.00	6 hours	Ear plugs
14	Outside of the cabin			
	1m	56.50	6 hours	Ear plugs
	3m	55.20		
	5m	54.50		
Compactor				
15	Inside of the cabin	50.10	6 hours	Ear plugs
16	Outside of the cabin			
	1m	51.20	6 hours	Ear plugs
	3m	50.10		
	5m	49.00		

For Creative Enviro Services

Authorised Signatory



42, Doorsanchar Colony, Near Savoy Complex, E-8 Extension, Gulmohar, Bhopal-462 039 (M.P.)  
Telephone : 0755-4299319, Fax : 0755-4243510, Mobile : 9425009319

Email: creative5@rediffmail.com, creative.bpl@gmail.com  
Websearch : www.creativeenviroservices.com