

Ref: GMR/GWEL/EC/COM/22-23/01
28th Oct. 2022

The APCC F (C.)
Ministry of Environment and Forest & Climate Change,
RO (WCZ) Ground Floor
East Wing, New Secretariat Building
Civil Line, Nagpur – 440001
Maharashtra

Subject: EC Compliance Report of GMR Warora Energy Limited 2 x 300 MW (Phase -I & II)

Ref.: 1. MoEF, Environment Clearance Letter J-13011/2/2008-IA.II (T) DATED 19th MAY, 2008
2. MoEF, Environment Clearance Letter J-13011/2/2008-IA.II (T) DATED 4th JUNE, 2009
3. MoEF, Environment Clearance Letter J-13012/75/2008-IA.II (T) DATED 25th MAY, 2010

Respected Sir,

With reference to the above, we are pleased to submit our half yearly Environment Clearance compliance report for Phase I & II of our unit **GMR Warora Energy Limited** situated at MIDC, Warora, Chandrapur for the period of **April to September 2022**.

Kindly acknowledge the receipt of the same.

Thanking you.

Yours Faithfully,
For **GMR Warora Energy Ltd.**



Dhananjay Deshpande
COO

Encl.: As Above

CC: 1. The RO, MPCB, Chandrapur, Maharashtra
2. The SRO, MPCB, Chandrapur, Maharashtra

COMPLIANCE REPORT



As per conditions stipulated in

ENVIRONMENT CLEARANCE

Phase—I: ISSUED BY MOEF VIDE LETTER No J-13011/2/2008-IA. II (T) DATED 19th MAY, 2008

And LETTER No J-13011/2/2008-IA. II (T) DATED 4th JUNE, 2009

Phase—II: ISSUED BY MOEF VIDE LETTER No J-13012/75/2008-IA. II (T) DATED 25th MAY, 2010

Of

**MINISTRY OF ENVIRONMENT & FOREST & CLIMATE
CHANGE, NEW DELHI**

Compliance Period: APRIL 2022 TO SEPTEMBER 2022

For

2 x 300 MW COAL BASED THERMAL POWER PLANT

Of

GMR Warora Energy Limited,

Plot No B-1 | MIDC Growth Centre | PO – Warora |

Dist – Chandrapur | Maharashtra-442 907

**SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENT CLEARANCE CONDITIONS FOR UNIT-I:
ISSUED BY MOEF VIDE LETTER NO J-13011/2/2008-IA.II (T) DATED 19TH MAY, 2008**

Sl. No	Terms and Conditions	Compliance Status
1	The total land requirement for the project shall be restricted to 114 ha	Wide letter Dt. 07.05.2012 the condition is amended as "Land requirement for both the phases (i.e 2x300 MW) shall be 174 hectare". Total land requirement is restricted to 174 ha only.
2	Sulphur and ash contents in the coal to be used in the project shall not exceed 0.5% and 44% respectively	Sulphur content in coal is 0.35% and ash content is 34% & are well under the prescribed standard.
3	A bi-flue stack of 220 m height with continuous online monitoring Equipment's for SO _x , NO _x and Particulate matter shall be provided. Exit velocity of flue gases shall not be less than 25 m/sec	A bi-flue stack of 275 m height with continuous online monitoring system for SO _x , NO _x & Particulate matter is duly provided. Exit velocity of flue gases is being maintained above 25 m/sec.
4	High efficiency Electrostatic Precipitator (ESPs) shall be installed to ensure that particulate emission does not exceed 100 mg/Nm ³	ESPs has been installed with 99.98% efficiency to ensure that emission of particulate matter are always maintained below 50 mg/Nm ³ . (Annexure-I)
5	Fly ash shall be collected in dry form and its 100% utilization shall be ensured from day one. Bottom ash shall be disposed in conventional slurry mode in the ash pond	Plant have 3 Nos. Fly ash silo with capacity of 1500 MT each for collection of Fly ash in dry form which are then sent to cement/Brick industries for ensuring 100% utilization. Bottom ash is disposed in ash pond in slurry form. (Annexure-II)
6	Ash pond shall be lined with suitable impervious lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached	Bottom of the ash pond compacted at high dry density soil and provided with 600mm impervious clay lining. Sides of the ash pond lined with HDPE lining and tiles. Ash pond provided with garland drains to collect run-off water and seepages if any from the pond. Ash water recovery system i.e. the supernatant is collected and treated in settling tank and routed to ash handling system.
7	Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided	Adequate dust extraction system like bag filters and water spray system are duly provided in dusty areas such as coal handling and ash handling points, transfer areas and other vulnerable dusty areas which are continuously operated to take care of fugitive emission.
8	Water requirement shall not exceed 830 m ³ /hr	Wide letter Dt. 04.06.2009 the requirement is amended as "Water requirement shall not exceed 1010 m ³ /hr Water requirement is well within prescribed limit of 1010 m ³ /hr.
9	Closed cycle cooling system with cooling towers shall be provided. The effluent shall be treated to conform to the prescribed norms	Complied. Induced draft cooling tower (IDCT) is being constructed. Amendment to shift from Natural draft cooling tower (NDCT) to IDCT, MOEF (Gol). Vide letter no. J-13012/75/2008-1A.II (T), dated 30th November, 2010. State of art ETP is in operation in which Effluent are treated to meet the prescribed norms. (Annexure-III)

10	The treated effluents conforming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon for storm water. Arrangements shall be made so that effluents and storm water do not get mixed	The treated effluents conforming to the prescribed standards are completely recirculated and reused within the plant. Arrangement are made to ensure that no discharge will take place outside the plant boundary except during monsoon season.
11	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation	Sewage Treatment Plant with the capacity of 25 KLD has been installed and is in operation to take care of domestic effluents. Treated water from STP is used in green Belt development activities/ plantation. (Annexure-IV)
12	Regular monitoring of ground water in and around the ash pond area shall be carried out, records maintained and six monthly reports shall be furnished to the Regional Office of this Ministry	Regular Monitoring of ground water in and around the ash pond area is being carried out and analysis results of the same are also submitted to MPCB and MoEF & CC regional office on quarterly basis.
13	Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished	Rain Water harvesting system is in place as per the recommendation by ground water board for ground water recharge. Regular monitoring of ground water level is done through piezometers. Water Level Data is also submitted Six Monthly to CGWA. (Annexure-V)
14	A green belt of adequate width and density shall be developed around the plant periphery covering about 42 ha of project area preferably with local species	More than 40% of plant area is under green belt, with more than 95% survival rate in and around the periphery and open land of the plant premises. Additionally, organic farming is also carried out along with fruit bearing plants. (Annexure-VI)
15	LeQ of Noise levels emanating from turbines shall be limited to 75 dB. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as steam & gas turbines, air compressors etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas	Being complied. Noise generating from turbines are well within the prescribed limits. Personal protective Equipment's like earplugs/ear muffs etc. are provided to people working in the high noise area. Periodic medical checkup conducted for workers engaged in noisy areas such as turbine area, air compressors etc. and their audiometric records are also maintained.

16	A plan for conservation of fauna reported in the study area shall be prepared in consultation with state forests and wildlife depart within 3 months and shall be implemented immediately	GIB and other Schedule-1 wildlife conservation plan for EMCO Energy Ltd for Rs. 24.91 Lakhs has been prepared by Divisional Forest officer, Chandrapur via letter No:Desk-5/survey/Land/2128/ 2013-14, dated 19.03.2014 as per guidelines of Ministry of Environment and forest, New Delhi on the basis of plan sanctioned by P.C.C.F.(Wildlife), M.S, Nagpur. Ref No:-Desk-WL/22(6)/CR69/5370/ 13-14, Nagpur Dated 07.03.2014. As per demand letter No: Desk-5/Survey/Land/2268 dated 26/03/2014 received from Divisional Forest officer-Chandrapur, EMCO Energy Ltd. deposited the amount of Rs. 24.91 in Ad-hoc Compensatory Afforestation Fund Management & Planning Agency (CAMPA)Savings Bank A/c No: SB 01025218 Corporation bank, Lodhi Road, New Delhi IFSC Code- CORP0000371 through RTGS on date 08/07/2014. The UTR no. for the payment done is "BRN-RTGS-UTIBH14189021366-AD HOC COMPENS". Lakhs in CAMPA.
17	Regular monitoring of ground level concentration of SO ₂ , NO _x , Hg, SPM and RSPM shall be carried out in the impact zone and records maintained. If at any stage, these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Six monthly reports shall be submitted to the Regional Office of this Ministry at Bhopal.	Regular Monitoring of ground level concentration of SO ₂ , NO _x , PM2.5, PM10 & CO is carried out by MoEF & CC & NABL authorized third party in the impact zone and records are also maintained. Results of the same are well within the prescribed limits. Monitoring reports are also submitted to the state board on monthly basis.
18	Appropriate safeguard measures shall be taken to guard against fire hazards in coal storage area. DMP shall be prepared to handle such situation.	Fire Hydrant system and water monitors installed around coal stack yard to safeguard against fire incident. The system is always in pressurized condition through Fire water pump house for ready use.
19	The Project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the Vernacular language of the locality concerned within seven days from the date of the clearance letter, informing that the project has been accorded EC and copies of clearance letter are available with the state pollution control board/committee and may be also be seen at website of the MoEF at http://envfor.nic.in	Being Complied
20	A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards	Environment Management Cell has been set up with qualified and competent staff for proper implementation of Environment control measures and compliance to condition of EC/CTE and CTO.
21	Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to this Ministry/ Regional Office/CPCB/SPCB	We are regularly submitting six monthly compliance reports to the Board and ministry as per the guidelines. Last report was submitted on 18 th Apr. 2022.

22	Regional Office of the Ministry of Environment & Forests located at Bhopal will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring	Noted
23	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry	We have allocated separate budget for Environment Management for implementation of environmental protection measures from which various environmental works is carried out. The budget is solely dedicated for the purpose of Environment Management only.

**SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENT CLEARANCE CONDITIONS FOR UNIT-I:
ISSUED BY MOEF VIDE LETTER No J-13011/2/2008-IA.II(T) DATED 4th JUNE, 2009**

Sr. No	Terms and Conditions	Action to be Taken
1	An amount of Rs.1.6 Crores as capital and Rs.30 Lakhs as recurring expenditure per annum should be earmarked for taking up activities under CSR.	Being Complied. Wide letter Dt. 28.05.2012 the condition is amended as "An amount of Rs 13.6 Crores as one time investment (for both phases) and Rs 2.72 Crore per annum as recurring expenditure till the life of the plant shall be spent for taking activities under CSR"
2	Copy of conservation plan of fauna in the study area, reported to be prepared, should be submitted to the Ministry within 15 days of the issue of this letter.	GIB and other Schedule-1 wildlife conservation plan for EMCO Energy Ltd for Rs. 24.91 Lakhs has been prepared by Divisional Forest officer, Chandrapur via letter No:Desk-5/survey/Land/2128/ 2013-14, dated 19.03.2014 as per guidelines of Ministry of Environment and forest, New Delhi on the basis of plan sanctioned by P.C.C.F.(Wildlife), M.S, Nagpur. Ref No:-Desk-WL/22(6)/CR69/5370/ 13-14, Nagpur Dated 07.03.2014. As per demand letter No: Desk-5/Survey/Land/2268 dated 26/03/2014 received from Divisional Forest officer- Chandrapur, EMCO Energy Ltd. deposited the amount of Rs. 24.91 in Ad-hoc Compensatory Afforestation Fund Management & Planning Agency (CAMPA)Savings Bank A/c No: SB 01025218 Corporation bank, Lodhi Road, New Delhi IFSC Code- CORP0000371 through RTGS on date 08/07/2014. The UTR no. for the payment done is "BRN-RTGS-UTIBH14189021366-ADHOC COMPENS". Lakhs in CAMPA.
3	First aid and sanitation arrangements shall be made for the drivers and the contract workers during construction phase.	Full-fledged Occupational Health Centre with experienced MBBS & AFIH Doctor and Paramedic Staff is operational in the plant for first aid arrangement. Basic Life Support Ambulance is available round the clock. Well devised schedule is developed for carrying out the sanitization of the plant areas.
4	Regular monitoring of ground level concentration of SO _x , NO _x , Hg, SPM and RSPM shall be carried out in the impact zone and records maintained. If at any stage, these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.	Regular Monitoring of ground level concentration of SO ₂ , NO _x , PM2.5, PM10 & CO is carried out by the third party in the impact zone and records are also maintained. Results of the same are well within the prescribed limits. Monitoring reports are also submitted to the state board on monthly basis.

5	Provision shall be made for the housing of construction labor 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.	Complied
6	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall be sent to the Regional office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels, namely SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Six monthly EC compliance report are regularly submitted to MoEF & CC regional office as well as to regional offices of MPCB. Last EC Compliance was submitted on 18 th April 2022. The pollutant levels, namely SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emissions) are being monitored and displayed at the main gate of the company and also in the public domain through the company website.
7	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by email) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	Six monthly EC Compliance report including results of monitoring data are being submitted to the respective regional office of MoEF & CC and the regional office of SPCB.
8	Project proponent will upload the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants levels (stack and ambient levels of NO _x) will be displayed at the main gate of the power plant.	Six monthly EC compliance report are uploaded in the company website and updated time to time. The criteria pollutant levels, namely SPM, RSPM, SO ₂ , NO _x (ambient levels as well as stack emissions) are being monitored and displayed at the main gate of the company continuously.

**COMPLIANCE REPORT OF ENVIRONMENT CLEARANCE CONDITIONS FOR UNIT-II:
ISSUED BY MOEF VIDE LETTER No J-13012/75/2008-IA.II (T) DATED 25th MAY, 2010**

Sr. No	Terms and Conditions	Compliance Status
A. Specific Conditions.		
1	<p>Environmental clearance is subjected to submission of a time bound implementation of a wildlife conservation plan particularly with respect to protection of great Indian Bustard and other Schedule-1 species, to be prepared in consultation with the office of the Chief Wildlife Warden concerned and the Wildlife Institute of India.</p> <p>The plan shall have an in-built monitoring mechanism and annual audit, report of which shall be submitted to the Regional Office of the Ministry and concerned department in the state government.</p>	<p>GIB and other Schedule-1 wildlife conservation plan for GMR Warora Energy Ltd. of Rs. 24.91 Lakhs has been prepared by Divisional Forest officer, Chandrapur, letter No: Desk-5/survey/Land/2128/2013-14, dated 19.03.2014 as per guidelines of Ministry of Environment and forest, New Delhi on the basis of plan sanctioned by P.C.C.F.(Wildlife), M.S, Nagpur. Ref No:-Desk-WL/22(6)/CR69/5370/13-14, Nagpur Dated 07.03.2014. As per demand letter No: Desk-5/Survey/Land/2268 dated 26/03/2014 received from Divisional Forest officer-Chandrapur, EMCO Energy Ltd. deposited the amount of Rs. 24.91 in Ad-hoc Compensatory Afforestation Fund Management & Planning Agency (CAMPA) Savings Bank A/c No: SB 01025218 Corporation bank, Lodhi Road, New Delhi IFSC Code-CORP0000371 through RTGS on date 08/07/2014. The UTR no. for the payment done is "BRN-RTGS-UTIBH14189021366-AD HOC COMPENS". Lakhs in CAMPA.</p>
2	<p>It shall be ensured that the natural drainage in the region is not disturbed due to activities associated with operation of the plant.</p>	<p>Proper care has been taken to ensure that the natural drainage in the region is not disturbed due to activities with operation of the plant.</p>
3	<p>Provision for installation of FGD shall be provided. High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³. Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.</p>	<p>Provision for installation of FGD have been duly provided. State of art ESPs has been installed with more than 99.98% efficiency to maintain the emission of particulate matter well below 50 mg/Nm³.</p> <p>Adequate dust extraction system installed in coal bunker and dry fog type dust suppression system provided at wagon tippers, coal stock piles, crusher house, and transfer houses to take care of fugitive emissions.</p>
4	<p>The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM (PM_{2.5} & PM₁₀), SO₂, NO_x (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.</p>	<p>Six monthly EC compliance report are uploaded in the company website and updated time to time. The criteria pollutant levels, namely SPM, RSPM (PM_{2.5} & PM₁₀), SO₂, NO_x (ambient levels as well as stack emissions) are being monitored and displayed at the main gate of the company continuously.</p>

5	No irrigation and drinking water requirements out of the Barrage / reservoir shall be diverted for the power plant.	Being Complied.
6	No ground water shall be extracted for use in operation of the power plant even in lean season.	Being Complied. Plant is getting water from MIDC, warora for requirements.
7	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 quantity and quality is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.	Hydrogeological study of the area is being carried out in annual basis and report submitted to Ministry and state board. No adverse impact is observed is ground water quantity and quality. Hydrogeological study report was submitted on 24 th Mar. 2022
8	Minimum required environmental flow suggested by the Competent Authority of the State Govt. shall be maintained in the Channel/ Rivers even in lean season.	Plant is getting water from MIDC, Warora. Minimum required environmental flow suggested by the irrigation department is being well maintained in the channel rivers even in lean season.
9	Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.	Rain Water harvesting system is in place for ground water recharge as per the guidelines of the CGWB.
10	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.	Soil for leveling of the site is generated within the site in order to well protect the natural drainage system of the area.
11	Utilization of 100% Fly Ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.	Effective Utilization of Fly ash is in place and same is being sent to the nearby cement plants for cement manufacturing & also to brick manufacturers. Ash utilization status is convened to state board regularly.
12	Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed of in the ash pond in the form of slurry form. Mercury and other heavy metals {As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed of in low lying area.	We have constructed 3 Nos. of Fly ash silo with the capacity of 1500 MT each for storage of fly ash in dry form which are then sent to cement industries for complete utilization. Unutilized ash is sent to captive ash pond in slurry form. Regular monitoring of heavy metals in ash pond water is carried out and reports are also submitted to board on monthly basis.
13	Ash pond shall be lined with HDP/ LDP lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.	Bottom of the ash pond compacted at high dry density soil and provided with 600mm impervious clay lining. Sides of the ash pond lined with HDPE lining and tiles. Ash pond provided with garland drains to collect run-off water and seepages if any from the pond. Ash water recovery system i.e. the supernatant is collected and treated in settling tank and routed to ash handling system is in place.

14	For disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.	Noted & Being Complied
15	Closed cycle cooling system with natural draft cooling towers shall be provided. The effluents shall be treated as per the prescribed norms.	Induced draft cooling tower (IDCT) is being constructed. Amendment to shift from Natural draft cooling tower (NDCT) to IDCT, MOEF (Gol). Vide letter no. J-13012/75/ 2008-1A.II (T), dated 30th November, 2010. State of art ETP is in operation in which Effluent are treated to meet the prescribed norms.
16	Shelter Belt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 70 %. To meet the expenditure of development of this, Shelter Belt, a Green Endowment Fund shall be created out of EMP budget and status of implementation shall be submitted to the Regional Office of the Ministry from time to time.	Complied
17	A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months from the date of issue of this letter.	Project is in industrial area of MIDC, Warora. Hence not applicable.
18	An amount of Rs 12.0 Crores shall be earmarked as one time capital cost for CSR program. Subsequently a recurring expenditure of Rs 2.5 Crore per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.	Wide letter Dt. 07.05.2012 the condition is amended as "An amount of Rs 13.6 Crores as one-time investment (for both phases) and Rs 2.72 Crore per annum as recurring expenditure till the life of the plant shall be spent for taking activities under CSR. Status of implementation shall be submitted to the regional office of the ministry from time to time"

19	As part of CSR program the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such program. Company shall provide separate budget for community development activities and income generating program. This will be in addition to vocational training for individuals Imparted to take up self-employment and jobs. In addition to above a special scheme for upliftment of SC/ST's and marginalized farmers population in the study area out of CSR program shall be formulated and submitted to the Ministry within six months along with firm commitment of implementation. The scheme shall have an in-built monitoring mechanism.	Activities being taken up for the upliftment of SC/ST's and marginalized farmers and poor section of the society. CSR activities is vigorously carried out by the project proponent through its wing Var Laxmi Foundation. Details of the CSR activities being carried out in last Six Months is attached for reference. Annexure-VII
----	--	--

B. General Conditions:

1	The treated effluents conforming to the prescribed standards only shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not do not get mixed.	The treated effluents conforming to the prescribed standards are recirculated and reused within the plant. Arrangement has been made to ensure zero discharge outside the plant boundary except during monsoon.
2	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.	Sewage Treatment Plant with the capacity of 25 KLD has been installed. Treated water from STP is being use in green Belt development/ plantation. Treated Effluent Analysis Reports of last six months is attached as Annexure-VIII
3	Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details along with location plant layout shall be submitted to the Ministry as well as to the Regional Office.	Adequate Fire Hydrant system and water monitors are installed around coal stack yard to check/minimize spontaneous fires in coal yard. The system is always in pressurized condition through Fire water pump house to deal with any situation.
4	Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed 0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	Storage facilities for auxiliary liquid fuel such as LDO are made in the plant area in consultation with Department of Explosives, Nagpur. Storage license obtained. Sulphur content in the liquid fuel is not exceeding 0.5%. Disaster Management Plan is prepared to meet any eventuality in case of an accident taking place due to storage of oil.
5	Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional	Regular Monitoring of ground water in and around the ash pond area is being done and analysis report of the same are also submitted to state board on regular basis. Heavy metals are being analyzed in the ash pond water and report shared with concerned authorities.

	Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	
6	First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase	Full-fledged medical Centre with experienced MBBS Doctor and Paramedic Staff along with 24x7 Ambulance, are deployed in the plant for First Aid arrangements.
7	Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 db. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc. shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas	Noise levels from turbines are controlled and are well within the limits. Personal protective Equipment's like earplugs/ear muffs etc. are provided for people working in the high noise area. Periodic medical checkup conducted for workers engaged in noisy areas such as turbine area, air compressors etc. Audiometric record maintained. Ambient and Work Zone Noise Monitoring reports attached for reference. (Annexure-IX)
8	Regular monitoring of ground level concentration of SOx, NOx, PM 2.5 & PM10 and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.	Regular Monitoring of ground level concentration of SO ₂ , NOx, PM2.5, PM10 & CO is carried out by the MoEF & CC & NABL approved third party in the impact zone and records are also maintained. Results of the same are well within the prescribed limits. Monitoring reports are also submitted to the state board on monthly basis. (Annexure-X)
9	Provision shall be made for the housing of construction labor 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.	Complied
10	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned 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 .	Complied. Published in Local Newspaper- Hidwada and Lokmat on 30th May, 2010. Copy of the same is already submitted with first half yearly report vide letter no. EMCO/SITE/MoEF/001, 28th August, 2010
11	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad, Municipal Corporation, Urban local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put	Plant is located in notified industrial area (MIDC), Environment Clearance letter is uploaded on the website of the company.

	on the website of the Company by the project proponent	
12	A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Environmental Management cell with competent & qualified persons, has been established for implementation of the stipulated environmental measures & subsequent Environmental management in the plant.
13	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	Being complied. Six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data are being submitted to the respective regional office of MoEF & CC & the state board.
14	The environment statement for each financial year ending 31st March in Form V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of the Ministry by e mail.	Being complied. The environment statement for each financial year is submitted regularly. Last Environment statement submitted on 29 th Sep. 2022. Six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data are being submitted to the respective regional office of MoEF & CC & the state board.
15	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance 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 and Forests.	Being complied. Six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data are being submitted to the respective regional office of MoEF & CC & the state board. Last Six monthly compliance report was submitted on 18 th Apr. 2022.
16	Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring.	Noted
17	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	We have allocated separate budget for Environment Control Measures for implementation of environment control measures. The above budget is dedicated to Environment Management only.

18	The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	Date of Financial closure of the project: October 2009. Final approval by the Concerned authorities: 1) Letter of support from Govt. of Maharashtra dated 1st May 2007 is already submitted with First Compliance report. 2) Environment clearance letter MoEF submitted. 3) Date of start of land development work: June 2010. 4) Unit-I COD- March 2013. 5) Unit-II COD- September 2013.
19	Full cooperation shall be extended to the Scientists/Officers from the Ministry/Regional Office of the Ministry at Bangalore, CPCB/ SPCB who would be monitoring the compliance of environmental status.	Noted
5	The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.	Noted
6	The environmental clearance accorded shall be valid for a period of 5 years to start operations by the power plant.	Noted
7	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986	Noted
8	In case of any deviation or alteration in the project proposed, including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.	Noted
9	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the Public Liability Insurance Act, 1991 and its amendments.	Note
10	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	Noted

ELECTROSTATIC PRECIPITATOR



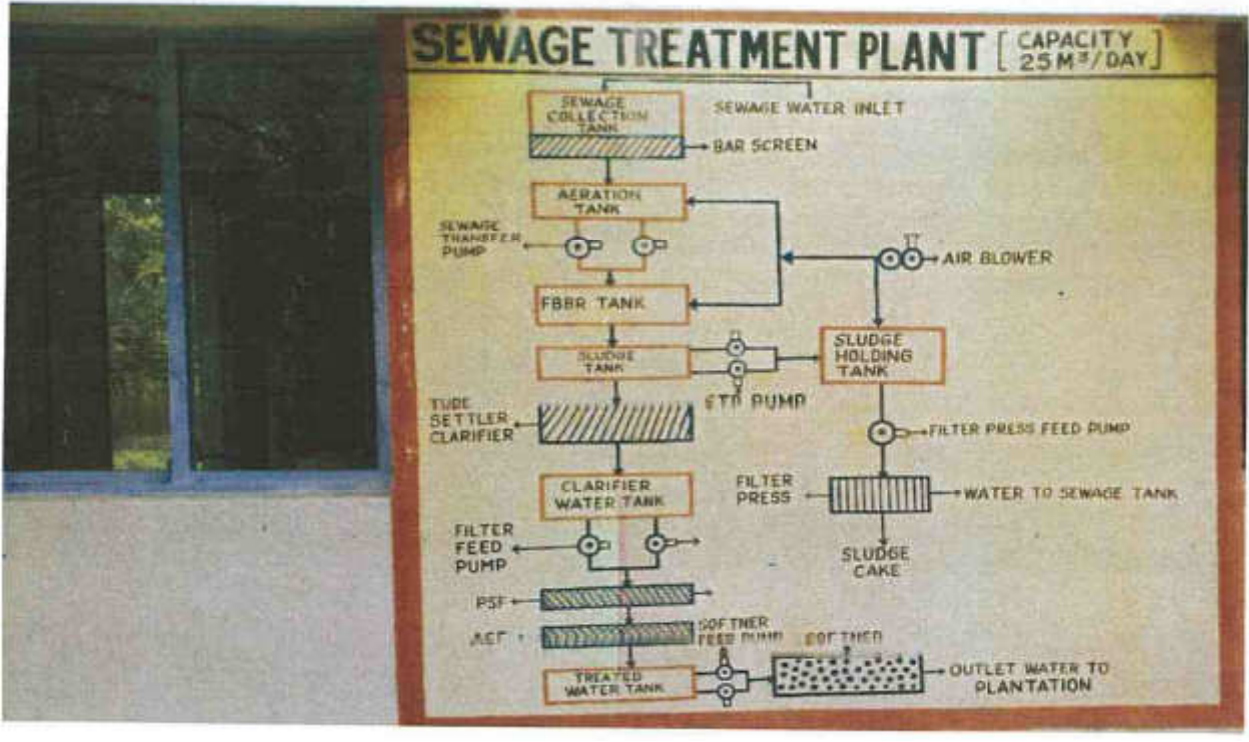
FLY ASH AND BOTTOM ASH SILOS



EFFLUENT TREATMENT PLANT



SEWAGE TREATMENT PLANT



RAIN WATER HARVESTING



ANNEXURE-V



GREEN BELT



ANNEXURE-VI



ANNEXURE-VI



CSR Half Yearly Report

April 2022 to September 2022



Corporate Social Responsibility
GMR Varalakshmi Foundation
&
GMR Warora Energy Ltd.,

DETAILS OF CSR ACTIVITIES

BACKGROUND OF THE PROJECT

GMR Warora Energy limited (GWEL), formerly known as EMCO Energy Limited is a subsidiary of GMR Energy Limited (GEL). GWEL has established a 600 MW Thermal Power Plant at Warora in Chandrapur district of Maharashtra. The GWEL Power Plant has two units each of 300 MWs. Unit I of the project was commissioned in March 2013 and Unit II was commissioned in September 2013. The project is ideally located in terms of the connectivity by rail, road and air. It is also close to critical infrastructure such as housing, education, and medical facilities.

GMR Varalakshmi Foundation (GMRVF), which is the Corporate Social Responsibility (CSR) arm of the GMR Group was tasked by GWEL to fulfil the corporate social commitments. GMRVF launched Education, Health, Hygiene and Sanitation, Empowerment and Livelihoods and Community Development programs to enhance the quality of life of people dwelling in and around GWEL Plant. The GMRVF team in Warora constitutes of 7 staff members headed by a Senior Program Leader.

As per the Companies Act requirement, a CSR committee is in place at GWEL and CSR Policy of the Company has been formulated and adopted. CSR Committee meetings were held during the reporting period and the Committee approved the annual CSR plan of GWEL as per mandatory CSR funds for this financial year. The following CSR activities undertaken as per CSR Policy are illustrated below:

GWEL CSR-PROGRAM COVERAGE AREA

GWEL initiated its CSR activities since April 2010. The CSR operation extended to 10 villages around the power plant covering an approximate population of 21,000. These villages are Naidev, Nimsada, Dahegaon, Dongargaon, Chinora, Marda, Charur Khati, Majra Khurd, Wanoja and Majra Rai. Apart from this, GWEL also covers more than 22 villages that fall under the transmission line reaching out to more than 24,000 people through Mobile Medicare Units (MMU).



DETAILED OF PROGRAM ACTIVITIES

EDUCATION

Digital Education is the focus of GMRVF and GWEL CSR activities in Warora. To enhance the quality of education below interventions undertaken this month:

1. DIGITAL EDUCATION AT VILLAGES

GMRVF and GWEL is conducting different types of digital education activities in villages in order to improve education quality in project affected villages. Progress under each activity during the month is illustrated below.

ANNEXURE-VII

- a. **E-Education and Learning Centre:** GMRVF is operating 8 centres in 8 villages including Dahegaon, Dongargaon, Nimsada, Marda, Charur Khati, Chinora, Majra Rai and Majra Khurd to providing basic computer knowledge to students. The classes in all centres have started from 1st July 2022. Total 578 students from 8 villages given admission in e-centre and



baseline test organized in the centre to gauge the current learning level of each student. Average 560 students have attended the computer classes on regular basis during this period. In addition to this to check the progress fortnight test have been conducted in each EELC. The result of the baseline test and 3rd Fortnightly Test indicated below:

Test	Grade A	Grade B	Grade C	Grade D
Baseline (June 2022)	35	50	119	374
August 2022	71	88	138	282
September 2022	138	131	128	185

- b. **Kid Smart Centre:** GMRVF has established Kid Smart Centre (KSC) in two villages in year 2015. These centres are providing technology based teaching and learning to students of age group 4 to 7 years. In past two years' due to COVID 19 pandemic all Anganwadis were closed and thereby KSC were also closed.



These centre has been reopened from 1st July 2022 in both the villages and classes have started taking place in both the centres using three corner learning method. Average 54 enrolled students attended the classes and learned the subject in KSC during the period.

- c. **Computer based Teaching and Learning:**

GMRVF has installed NEXT Education computer systems with digital boards in four ZP schools (Dahegaon, Dongargaon, Chinora and Charur Khati) and Android TVs at six ZP schools (Dahegaon, Dongargaon, Chinora,



Majra Rai, Majra Khurd and Charur Khati) along with all software / TLM prescribed by State Board in Marathi Language to promote computer based education in schools. Total 344 students are getting benefitted from these facilities and learning subjects.

ANNEXURE-VII

d. **LEARNING NAVIGATOR PROGRAM - GOORU APP:** GMRVF and Gooru India

Foundation (GIF) is implementing Learning Navigator program using GOORU App with 131 students of STD IV – VII from 6 villages. This program is designed to track learning levels of each student at every stages of learning. This helps facilitator and volunteers to plan and provide all necessary input to gain faster learning outputs of individual student.



All students have completed 5923 competencies as of Mar 2022. This month all students were assigned to repeat the competencies so that they can further learn the subject and achieve expertise.

2. AFTER SCHOOL LEARNING CENTER (ASLC) AND NAVODAYA ENTRANCE COACHING

a. **After School Learning Centres:**

GMRVF is operating 6 ASLCs in 6 villages including Dahegaon, Dongargaon, Nimsada, Charur Khati, Chinora, and Majra Rai to enhance education quality among slow learner students. The classes in all centre



have started from 1st July 2022. Total 553 students from 6 villages participated in baseline test organized in the centre to gauge the current learning level of each student. Apart from this to check the progress of learning, fortnightly tests have been organized in the centres. The test results of baseline test and 2nd fortnightly tests are indicated below:

Test	Grade A	Grade B	Grade C	Grade D	Total
Baseline (June 2022)	94	160	<u>116</u>	<u>183</u>	553
August 2022	12	29	80	178	299
September 2022	20	45	98	136	299

GMRVF has given admission to 299 students in ASLC, who has received Grade C & Grade D marks in baseline test.

b. **Navodaya Coaching:** GMRVF is running 3 Navodaya coaching in 3 villages and 27 students selected in three villages and admission taken for



preparation of Navodaya Entrance Test this year. The classes of Navodaya coaching started on regular basis and all 27 students have started attending classes.

ANNEXURE-VII

3. CRASH COURSE AT E- EDUCATION & LEARNING CENTER (EELC):

GMRVF has planned the crash course on MS office programs during the summer holiday of 2022. The crash course was aiming to provide basic knowledge of computer as well as basics of Microsoft programs. Total 207 students from STD VIII to X enrolled in the crash course and learning Microsoft programs such as MS word, MS excel and Power point presentation.



Volunteer meetings conducted and prepared detail session plan for organizing crash course in the villages. The classes conducted from 1st May 2022 to 30th June 2022. All students attended the classes and learned the subject in 6 EELC established in 6 villages.

4. SUMMER CAMP AT AFTER SCHOOL LEARNING CENTER (ASLC):

GMRVF has started After School Learning Centre (ASLC) in year 2013-14 and since then it is trying every year to improve education quality in the villages. During this summer season summer camp started in 6 ASLCs in 6 villages. Total 225 students enrolled in the summer classes and regular classes are being conducted in the centres for 2 hours daily. Yoga Classes, English Speaking Classes, Mehndi classes, Spell than, Speech competition, kabad se jugad, making toys from waste material and envelop making etc. are the major activities conducted in the summer camp. Volunteer meetings also conducted and prepared detail session plan for organizing classes further in each ASLC.



5. PRATIBHA LIBRARY:

The Pratibha library was established in Lokmanya School, Warora town with an objective of providing career counselling services to aspirants for employment opportunities or higher education. The library provides a repository of books and offers services like conducting special classes for subjects, group discussions on current topics, monthly test, mock interview and counselling sessions. Total 614 students registered in Pratibha Library from its inception. During this period, average 65 students attended library regularly. Series of Mock tests, GDs and special classes on Science and English conducted during the period which was attended by more than 100 students every month. A total 6 students got success and selected in security service exams during the reporting period, where as total 38 students got selected from Pratibha Library from its inception till end of Sept 2022.



ANNEXURE-VII

- 6. TRANSPORTATION FACILITY FOR STUDENTS:** The transportation facility was provided to all students of Dahegaon and Dongargaon, who are studying in Warora and Chikni high schools in STD VIII to X. The transportation facility is enabling students to continue study after school till 7th standards. This year total 112 students from Dongargaon and Dahegaon villages have opted to use school bus facility.



- 7. SPECIAL CLASSES FOR STD X STUDENTS:** An educational guidance program was organized for class X students at Chetna Vidyalaya Majra Rai for the students of Majra Rai and Charur Khati villages. The session was focused on how to study math's and science subjects in easy way. The expert has provided the guidance on memorizing the formulas while studying Math subject and simple method of studying Science subject as well as how to prepare for the exam. Ms. Pratiksha Sharma employee of GWEL attended the program. Total 55 students from Karmvir Vidyalaya Charur Khati and Chetna Vidyalaya, Majra Rai benefitted from this programs.



- 8. CAREER GUIDANCE TO RAXA SECURITY GUARDS:** Two hours' session organized on how to prepare for Competitive Exam at Temporary Township GWEL for RAXA Security Staff so that they can prepare effectively and get success in Govt. Security Services. Total 24 RAXA employees attended the program. Mr. Abhay Kumar Chaudhari, O&M Head, GWEL and RAXA Security Head, Warora attended the program and guided the staff.



- 9. CELEBRATION OF YOGA WEEK IN NIMSADA:** Five-day Yoga week celebrated at ZP school Nimsada from 25th May to 1st June 2022. Various Asanas of Yoga were practiced by children from 8-10 AM daily in the school in presence of qualified Yoga trainer Mr. Mahesh Jakotia and Mr. Prakash Ji Sancheti. Total 32 students participated in the program and learned various Yoga skills. The program was inaugurated by President of School Management Committee and requested all students to practice Yoga in day to day life.



10. CAPACITY BUILDING OF VIDYA VOLUNTEER: Twelve training sessions were conducted during the reporting period in FY 2022 and provided training on conducting summer classes. Details of syllabus were discussed with volunteers and a session plan was prepared to be followed during conducting summer classes. Total 15 volunteers attended the training and learned the subject.



11. CELEBRATION OF ENTRANCE DAY IN ZP

SCHOOL: Entrance day program was celebrated with the support of school management committees. The entrance day is celebrated in each school in project village with the aim to welcome new students and create an environment in the school where children can feel joy and a place to come willingly for learning and complete their primary education. The day is celebrated in 10 ZP schools with more than 800 children. Chocolates were distributed to all students and welcome them to schools in a new session. The program took place in a very joyful environment in all villages.



12. CELEBRATION OF INTERNATIONAL YOGA DAY: GMR Varalakshmi Foundation, Warora, organized International Yoga Day on 21 June 2022 at Summer Camp in 6 After School Learning Centres (ASLCs) and Pratibha and Vocational Training Centre Warora. A one-hour session on Yoga was organized by yoga-trained teacher Shri Tulsiram Milmlile, Mr. Mahesh Jakotia and School Teachers. All students, villagers and prominent panchayat leaders of the village have attended the program on this occasion. During the session, experts have demonstrated and involved all in breathing exercises and various Asana. They have also explained the importance of yoga in the development of a person. Yoga gurus informed "when you inhale, you are taking the strength from God, when you exhale, it represents the service you are giving to the world". More than 300 students and school committee members attended and performed Yoga on the occasion of International Yoga Day and benefitted.



HEALTH HYGIENE SANITATION

Sanitation and maintaining hygiene in villages are the key for quality health in villages. Considering this, GMRVF and GWEL has undertaken below activities during this month:

13.RO WATER ATM: Potable water is the major concern in the villages where GWEL and GMRVF operate. The ground water contains high level of fluoride and nitrate which is harmful for human consumption. Considering this, GMRVF and GWEL installed 17 RO Water ATM in 17 villages in Warora Tehsil. The ATM were installed with the technical support from Buldana Urban Credit & Cooperative Society (BUCCB), Buldana The RO Water ATM Installed at Yensa, Dongargaon, Dahegaon, Chikini, Charur Khati, Chinora, Majra Rai, Majra Khurd, Mohbala, Marda, Nimsada, Naidev, Wanoja and Bawane Layout, Wandhli, Kondala and Ekona villages located around GWEL Power Plant. These Water ATM installed in past 4 years and providing clean and fluoride free water in villages. Average total 3000 households (nearly 12,000 people) used the RO Water ATM and took benefit during this reporting period.



14.FOGGING OPERATION: To control mosquitoes and other vector borne diseases, fogging operation initiated in 8 villages of Warora tehsil of Chandrapur district. These villages are Nimsada, Dongargaon, Charur Khati, Chinora, Dahegaon, Majra Rai, Majra Khurd, Naidev, Marda and township campus. The fogging is conducting once in a week in each village. This activity has brought down the cases of vector borne diseases such as dengue and malaria in project villages. Fogging operation is continued this month and benefitted more than 10000 people.



15.HEALTH CLINICS: GMRVF is running ten Primary Health Clinics in 10 villages with the support from Acharya Vinoba Bhave Rural Hospital (AVBRH) and providing basic health services to the people of project affected villages. All necessary precautions of hygiene and cleanliness were followed strictly at the clinics to combat COVID-2019. Doctors visited the clinics twice in a week and provided free check-up and medicines to each patient. Total 12,192 Regular, Chronic and Seasonal patients treated during this period.



ANNEXURE-VII

16.GMRVF DAY CARE HEALTH CENTER: GWEL and GMRVF with the technical support from Acharya Vinoba Bhave Rural Hospital (AVBRH) operating GMR Varalakshmi Foundation Day Care Health Centre at Greenwood Township, Warora. The Day Care Health Centre is operating from 9 AM in the morning to 8 PM in the evening for all days. The team of expert doctors, pharmacist, nurses stayed round the clock at Day Care Health Centre to address health related issues. Total 263 patients visited and consulted day care health centre during this period and get treatment.

17.SPECIAL HEALTH CAMP: 3 Special Health camp organized in April, August and Sept 2022 at Wanoja, Dongargaon and Chinora villages. Specialist doctors of Orthopaedic, Ophthalmic, Dermatology, Gynaecology and Medicine branches attended the camp. The camp was planned to provide proper diagnosis and advise to all critical patients for their bone, eyes and other surgery related ailments. Total 422 people visited the camp from village and received free medicines. Total 65 patients referred to higher hospital for their cataract, bone and liver related problems.



18.MOBILE MEDICARE UNIT : GMRVF recognize that health is integral part to quality of life, GMRVF focus on improving quality of and access to healthcare, and sanitation in its communities. The MMU is treating and providing free medicines to all old aged patients suffering from general ailments and visiting each village once in a week. The MMU is covering 22 project affected villages from Madheli village to Nanduri village close to power station covered by MMU. It has total 2750 registered beneficiaries from 22 villages out of which MMU has provided free treatment & medicines to 11748 patients.



19.NUTRITION CENTER: Nutrition Center are providing its services in 5 villages. These villages are Marda, Dongargaon, Dahegaon, Naidev, and Nimsada villages. Total 58 Pregnant and Lactating Mothers (PLM) registered in Nutrition center and out of this 58 PLM Women received supplementary nutrition at their door steps during this month. During the period 27 institutional delivery taken place 5 villages. Only two deliveries recorded caesarians whereas, 25 deliveries recoded “normal delivery”. Sixteen baby boys and eleven baby girl are healthy



and recorded birth weight more than 2.5kg. Six special health check-up session of PLM conducted in all nutrition centers during this reporting period. Dr. Hemlata Khapne visited the nutrition center and conducted health check-up of 225 women and advised medicines and various precautions one need to take during and after pregnancy.

EMPOWERMENT & LIVELIHOODS

GMRVF and GWEL focus on to channelize youth and women towards entrepreneurship and livelihood development, so that they may participate equitably in economic. Considering this, GMRVF and GWEL has undertaken below activities during this month.

20.VOCATIONAL TRAINING CENTER (GMRVF CEL WARORA): GMRVF CEL is running two self-employment courses at Warora. These are Smartphone Hardware Repairing Technician (SPHRT) and Assistant Beauty Therapist (ABT).

The centre is affiliated with PMKVY Scheme of Govt. of India. One batch of ABT and One batch of SPHRT completed during this period and total 45 students (30 ABT and 15 SPHRT) completed the course. In second batch of ABT and SPHRT in



this year a total 53 students have taken admission and learning the skills. Various programs like, HELP, Free service camp, Special theory and practical classes by specially invited experts and special classes by banker to establish self-business units. Apart from this, tool Kit distribution containing all necessary tools required to running the business were distributed to 52 old batch students of ABT and MPHRT. Mr. Bharat Pinjarkar from Operation Department GWEL, participated and distributed the kit to students and conducted motivational lecture for students. During this reporting period, total 38 students of previous batches of ABT and MPHRT have started their self-business.

21.VEGETABLE CULTIVATION: To promote livelihood through farm based activity, GMRVF has planned this year vegetable cultivation with women farmers. This year, to tap rainy season and enhance income of vulnerable group we have provided the vegetable seeds to 130 SHG women in six villages from 38 SHGs. All women have sown the seeds in either nursery or at farms in the month of June 2022 but due to very heavy rains in the month of July and Aug 22, all women have lost their vegetable seeds as well as other crops too. Considering this and to recover from the losses, we have again planned to promote livelihoods through farm based activity so as to grab winter season. During the second phase of vegetable cultivation, GMRVF has planned with 121 SHG women in six villages



ANNEXURE-VII

who were flood affected. These women were from 38 SHGs and belongs to BPL, SC & ST families. All selected women farmers have experience of vegetable cultivation and started preparing nursery and sowing vegetable seed in the month of Sept 2022.

22.EUCALYPTUS PLANTS DISTRIBUTION & PLANTATION: GMRVF with the support from Ballharshah Paper Mill (BILT) has distributed 14000 plants of Eucalyptus to 22 farmers of Dahegaon, Dongargaon and Nimsada villages in the month of Sept 2022. All the farmers have completed the plantation of this Eucalyptus plants. BILT has signed agreement with all farmers to buy back the plant material when it will be grown after three to four years. For doing this plantation BPM has provided subsidy of Rs 10/- per plant to farmers and farmer has contributed Rs 4/- per plant apart from this BILT has provided transportation of all plant to villages at farmer's field. It is estimated that total Rs 2.48,000/- is invested on this activity by all stakeholders including cost of plantation.



COMMUNITY DEVELOPMENT

23.FLOOD RESPONSE: GWEL and GMRVF has distributed 1000 ration packets to 1000 people in different flood affected people on 23rd July 2022. Smt. Pratibha Tai Dhanorkar, MLA Warora- Wani area visited the villages and distributed dry ration in flood affected villages. It is worth to note that this year Warora including entire Chandrapur district has received exceptional rains and because of this many part of district got affected and submersed in flood. More than 70% crop reported damaged and more than 100 villages affected due to flash flood and many people have left houses and staying in shelters away from their villages.



24.Community Library: All Community Libraries in 08 villages have been opened and restarted its functioning in normal schedule from 1st of Aug 2022. These libraries operate from 09.00 to 11.00 in the morning and 4.00 to 6.00 in the evening. The libraries have variety of books useful from children to elders. Daily newspapers, weekly employment paper and monthly magazines are also available for reading. Total 3139 users visited the library facility during this month and benefitted from the reading of books.



ANNEXURE-VII

25.CANCER SCREENING CAMP: GMRVF, GWEL with the support from TATA trust and ROLE organization, Chandrapur has organized a “Cancer Screening Camp at Dongargaon” on 12 Sept 2022. The purpose of the camp to create awareness among the people regarding health and remove the fear from the people regarding the dreaded disease like cancer. The team has also examined BP, Sugar, Hepatitis B and C, HIV test, Mouth Cancer, Breast cancer and Cervical cancer etc. for 88 people. Mr. Vivek Dhoke, HOD, CHP & AHP and Mr. Azruddin Khan, Manager AHP attended the event and requested villagers to come forward to take benefit of camp.



Mr. Suraj Salunke (DPC), Dr. Vaidhi Lokhande (Dentist), Aparna Chalurkar (Staff Nurse), Dhamjyoti Murmadkar (Staff Nurse), Dr. Sanyuja Vankar (DEO) and Dr. Shinde Madam, Vaishnavi Mahatre (CHO), and Kumbhare Madam from Govt. Hospital, and dignitaries from village attended the camp.

26.MAHARASHTRA CSR AWARDS OF INDIA CSR: India CSR has instituted the Maharashtra CSR Awards to recognize organizations that have made an optimistic impact on society through their social development projects or initiatives in Maharashtra. The maiden edition of Maharashtra Awards 2022 focuses on honouring and celebrating significant contributions towards CSR good practices and benefitting society at a large. A panel of jury /search committee comprises of industry leaders, CSR practitioner, academician. The jury/search committee evaluated entries based on creativity, innovation, sound planning, implementation and outcomes with most importantly conversing and aligning initiative with Sustainable Development Goals (SDGs). GWEL CSR has submitted its case under the award category of “Water & Sanitation (WASH)” initiative out of various listed award categories for prestigious MAHARASHTRA CSR AWARD – 2022 of India CSR. Mr. Vinod Pusadkar, Head Corporate Relation from GWEL has received the Award at Yashwantrao Chavan Pratisthan Auditorium, Nariman Point, Mumbai on 27th July 2022 in presence of various dignitaries including State Govt. Officials. The award is a testimony of GWEL’s CSR approach, planning, implementation and impact on society as well as contribution towards Sustainable Development Goals (SDGs).



27.BLOOD DONATION CAMP: A blood donation camp organized by GMR Warora Energy Ltd, Warora, GMR Varalakshmi Foundation, Warora and RAXA Securities Services Ltd. at GWEL Plant Canteen on 7th April 2022. The blood donation camp organized under the technical supervision of “Dr. Hedgewar Blood Bank, Nagpur”. The camp was inaugurated by Mr. Dhananjay Deshpande, COO, GMR Warora Energy Ltd., Warora and extended his well

ANNEXURE-VII

wishes for the grand success of blood donation camp and requested each department personal to come forward for donation of blood. He also mentioned and appreciated the RAXA Security Services for their enthusiasm and commitment in every blood donation camp.

Mr. Abhay Choudhari, O&M Head, GWEL, Mr. Rajeev Sharma, Head, RAXA Securities, Warora, and GWEL HOD Mr. Bharat Pinjarkar, Mr. Vinod Pusadkar, Mr. Vinayak Pednekar, Mr. Praveen Shetty, Mr. Akash Saxena, Mr. Ibrahim Shaikh, Mr. Rahul Miglani, Mr. Rajeev Sharma and all section in-charge attended the inauguration program. The camp ended with record success of 70 units of blood donation from all GWEL employees including Associate Employees and RAXA team. Each donor was given a certificate of participation and a memento of the event as a return gift after donation of blood.



28.SWADAAN: During this period, thirteen SWADAAN activities conducted at different centers of GMRVF. Total 16 old beneficiaries of GMRVF from 6 villages including Pratibha Library conducted activities in centers and contributed nearly 26 hours which benefitted 227 current beneficiaries.



29.GCS BANK BUSINESS: This year under GCS bank activities, three GCS banks from Dongargaon, Charur Khati and Dahegaon have contributed 13.70 Lakhs to purchase of 343 bags of Soybean seeds and 63 pockets of cotton seeds. In addition to this Dahegaon GCS bank has leveraged 50 bags of soybean seed worth Rs. 1.75 lakhs from Agriculture Department. GCS bank has reached to 301 farmers under soybeans seeds and 21 farmers under cotton seeds using its own recourses whereas another 50 farmers of Dahegaon have received additional seeds from



agriculture department. Thus this year total 351 farmers have received seeds of both crop and covered 456 acres of land under improved agriculture.

30. Celebration of Independence Day - Azadi Ka Amrit Mahotsav:

At ZP Schools: This month we have Celebrated Independence Day on 15th August 2022 as “Azadi Ka Amrit Mahotsav” at 8 ZP schools. On this occasion, we have organized “drawing competition” for STD I-IV and “essay competition” for STD V-VII students before Independence Day celebration so as to facilitate all winner students on 15th Aug. The essay was organized on “Azadi Ka Amrit Mahotsav” topic. Total 563 students from 8 ZP schools were participated in these competition and out of this 106 students won the first and second prizes. GMRVF has felicitated all winner students by providing certificates and distributed chocolates to all students (nearly 1474 students) of schools in 10 villages including Anganwadis.

At GWEL: A grand celebration of Independence Day organized at GWEL by plant management and Shri Dhananjay Deshpande (COO, GWEL) hoisted the flag at plant premise. A cultural program was organized by employee’s families including ZP School students from village. All participants were felicitated by token of memento during the occasion. Shri Dhananjay Deshpande, has also felicitated employees who performed excellence in different areas including who participated in Social Voluntary Projects.

At Center for Empowerment & Livelihoods - Vocational Training Center (CEL Warora): During this month, we have celebrated Azadi Ka Amrit Mahotsav program at VTC on 13th August. We have organized program on sharing thoughts and speech competition on “Azadi Ka Amrit Mahotsav” topic. All the students have actively participated and shared own thoughts and speech on importance of Independence.



Celebration of Independence Day – Azadi Ka Amrit Mahotsav

EMPLOYEE ENGAGEMENT

1. GWEL have developed village guardian model and each employees including their families and senior management participated in community development programs. During this period 256 employees participated in 43 community development programs and contributed 264 voluntary hours which benefitted more than 10,700 people.
2. **Social Voluntary Project (SVP):** This year, 3 Social Voluntary Projects were implemented and 14 SVP prepared and submitted by 140 GWEL employees. These employees contributed total of 152 hours of their time to implement projects.



ANNEXURE- VIII

Effluent Water Analysis (Apr.2022 to Sep.2022)

Condensate Cooling Water		
Month	pH	F - Cl
		mg/L
April	7.7	<0.05
May	8.1	<0.05
June	8.0	<0.05
July	7.5	<0.05
August	8.0	<0.05
September	7.9	<0.05

Cooling Tower Blowdown			
F - Cl	PO ₄	Cr	Zn
mg/L			
<0.05	0.61	N.D.	0.011
<0.05	0.94	<0.01	<0.02
<0.05	0.064	<0.01	<0.02
<0.05	<0.05	<0.01	0.025
<0.05	0.962	<0.01	0.024
<0.05	0.897	<0.01	0.021

Boiler Blowdown			
TSS	O&G	Cu	Fe
mg/L			
<5	N.D.	N.D.	0.189
<5	N.D.	0.011	9.0
<5	N.D.	N.D.	0.051
<5	<1	<0.01	0.235
<5	<1	<0.01	0.052
<5	<1	<0.01	0.067

DM Plant Effluent						
Month	pH	TDS	TSS	BOD	COD	O & G
		mg/L				
April	7.5	669	7	6.0	20	N.D.
May	7.9	955	7.0	3.8	12	N.D.
June	7.8	859	<5	3.9	12	N.D.
July	7.4	738	<5	2.4	8	<1
August	7.8	725	20	10	32	<1
September	7.6	766	15	6.2	20	<1

STP- Inlet						
Month	pH	TDS	TSS	BOD	COD	O & G
		mg/L				
April	7.6	563	6	6.4	20	N.D.
May	8.4	398	13	8.0	24	N.D.
June	7.9	733	17	11.0	32	N.D.
July	7.5	479	<5	25	80	<1
August	7.6	809	<5	10	36	<1
September	7.9	746	16	8.8	32	<1

STP- Outlet						
Month	pH	TDS	TSS	BOD	COD	O & G
		mg/L				
April	7.7	550	<5	3.8	12	N.D.
May	7.7	419	11.0	6.0	20	N.D.
June	8.0	639	<5	5.1	16	N.D.
July	7.5	505	<5	2.3	8	<1
August	7.7	810	11	6.4	20	<1
September	7.8	752	8	4.5	16	<1

ANNEXURE-IX

Ambient Noise Monitoring (Apr.2022 to Sep.2022)

Sl. No.	Month	Near CHP		Near Switch Yard		Near Reservoir	
		Day	Night	Day	Night	Day	Night
		dB(A)					
1	April	66.5	64.4	64.1	63.4	65.7	64.7
2	May	67.1	64.8	62.2	59.5	59.9	56.4
3	June	66.4	64.2	61.7	58.3	60.6	57.1
4	July	65.2	63.5	60.1	57.1	61.4	58.6
5	August	65.2	63.5	60.4	57.3	61.5	58.2
6	September	66.2	64.5	62.4	59.1	64.5	61.4

Work Zone Noise Monitoring (Apr.2022 to Sep.2022)

Sl. No.	Month	Boiler Floor		Turbine Floor		Compressor House Area		Turbine Generation Unit-I		Turbine Generation Unit-II	
		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
		dB(A)									
1	April	-	-	-	-	-	-	-	-	-	-
2	May	-	-	-	-	-	-	-	-	-	-
3	June	80.2	84.5	81.9	85.2	77.2	80.3	82.9	85.7	82.7	85.4
4	July	-	-	-	-	-	-	-	-	-	-
5	August	-	-	-	-	-	-	-	-	-	-
6	September	82.4	86.8	83.2	85.7	75.9	80.5	82.3	84.4	81.5	85.2

ANNEXURE-X

Ambient Air Quality Monitoring (Apr.2022 to Sep.2022)

April					
Parameters	Unit	Standard	Near Switch Yard	Near Reservoir	Near CHP
SO ₂	µg/m ³	80	12.20	9.45	12.80
NO ₂		80	15.73	13.83	16.43
PM ₁₀		100	63.75	67.25	71.00
PM _{2.5}		60	28.50	26.50	24.75

May					
Parameters	Unit	Standard	Near Switch Yard	Near Reservoir	Near CHP
SO ₂	µg/m ³	80	8.95	9.60	10.83
NO ₂		80	13.73	13.03	15.60
PM ₁₀		100	55.25	58.50	62.25
PM _{2.5}		60	21.50	22.00	20.75

June					
Parameters	Unit	Standard	Near Switch Yard	Near Reservoir	Near CHP
SO ₂	µg/m ³	80	9.18	10.60	8.13
NO ₂		80	13.58	13.78	11.90
PM ₁₀		100	62.50	65.00	66.50
PM _{2.5}		60	20.25	22.50	22.75

July					
Parameters	Unit	Standard	Near Switch Yard	Near Reservoir	Near CHP
SO ₂	µg/m ³	80	7.45	6.55	8.05
NO ₂		80	9.13	8.18	9.10
PM ₁₀		100	54.75	54.25	46.00
PM _{2.5}		60	21.25	23.25	19.00

August

ANNEXURE-X

Parameters	Unit	Standard	Near Switch Yard	Near Reservoir	Near CHP
SO ₂	µg/m ³	80	8.60	8.55	7.83
NO ₂		80	9.55	8.85	8.35
PM ₁₀		100	53.75	50.00	51.75
PM _{2.5}		60	21.75	18.50	19.50

September					
Parameters	Unit	Standard	Near Switch Yard	Near Reservoir	Near CHP
SO ₂	µg/m ³	80	9.20	8.48	8.63
NO ₂		80	10.65	9.83	9.70
PM ₁₀		100	50.00	52.25	56.50
PM _{2.5}		60	21.25	18.25	19.50

Stack Emission Monitoring (Apr.2022 to Sep.2022)

Unit -I

Sl. No.	Month	PM	SO ₂	NOx
		mg/Nm ³		
1	April	39.0	1333.0	343.0
2	May	38.5	1117.5	319.5
3	June	39.0	1250.5	325.0
4	July	38.5	1142.5	296.5
5	August	36.0	1182.5	329.5
6	September	39.5	1055.6	288.5

Unit -II

Sl. No.	Month	PM	SO ₂	NOx
		mg/Nm ³		
1	April	41.0	1242.0	332.0
2	May	32.0	1128.5	322.5
3	June	43.5	1213.5	324.0
4	July	40.5	1166.5	332.0
5	August	41.5	1202.0	291.5
6	September	43.0	1187.5	298.0



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13526-220917-SA-GMR-WARORA		Date: 17.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Unit No. 1	Sample Quantity/Packing	Thimble PM: 1 X 1 No. SO ₂ : 30mL X 1 No. PVC Bottle NO _x :25mL X 1 No. PVC Bottle O ₂ : Bladder 2L X 1 No. Hg:200mL X 2 No. PVC Bottle
Date of Sampling	12.09.2022	Date of Receipt of Sample	13.09.2022
Sampling Procedure	As per Method Reference		
Date of Start of Analysis	14.09.2022	Date of Completion of Analysis	15.09.2022

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)

Stack Identity	Unit -1
Stack attached to	ESP Outlet
Material of construction	RCC
Stack height above ground level (Meter)	275
Stack Diameter (Meter)	5.0
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (L/h)	-
Duration of sampling (h)	11:30 to 12:00

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
1	Flue gas Temperature	^o C	129	-	IS 11255 (Part 3):2008; RA 2018
2	Flue gas Velocity	m/s	25.0	-	IS 11255 (Part 3):2008; RA 2018
3	Total gas quantity	Nm ³ /h	1240634	-	IS 11255 (Part 3):2008; RA 2018
4	Particulate Matter (PM)	mg/Nm ³	44	50	IS 11255 (Part 1):1985 RA 2019
5	Sulphur Dioxide (SO ₂)	mg/Nm ³	1123	600	IS 11255 (Part 2):1985 RA 2019
6	Oxides of Nitrogen (NO _x)	mg/Nm ³	323	450	IS 11255 (Part 7): 2005; RA 2017

ULR- TC748722000012585F



Mahabal



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet



Report No.13526 Cont..

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
7	Mercury	mg/Nm ³	0.0013	0.03 max.	CPCB Guidelines on Methodologies for Source Emission Monitoring, Chapter 5&6; Pg.No.54-84
8	Oxygen (O ₂)	%	8.0	-	IS 13270:1992, Reaffirmed 2019

Remarks: #: Limit as per Environmental protection Rule 1986, Amendment Rules 2015 (Schedule-I Sr. No. 25)
Results of SO₂, NO_x & PM are corrected to 6% O₂, on dry basis

ULR- TC748722000012585F

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



Page 2 of 2

QF/SALE/04/Issue No 03 Dt 05.12.2019.Amd 00 Dt 00

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG14283-220930-SA-GMR-WARORA		Date: 30.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Unit No. I	Sample Quantity/Packing	Thimble PM: 1 X 1 No. SO ₂ : 30mL X 1 No. PVC Bottle NO _x :25mL X 1 No. PVC Bottle O ₂ : Bladder 2L X 1 No.
Date of Sampling	23.09.2022	Date of Receipt of Sample	24.09.2022
Sampling Procedure	As per Method Reference		
Date of Start of Analysis	24.09.2022	Date of Completion of Analysis	30.09.2022

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)

Stack Identity	Unit -I
Stack attached to	ESP Outlet
Material of construction	RCC
Stack height above ground level (Meter)	275
Stack Diameter (Meter)	5.0
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (L/h)	-
Duration of sampling (h)	11:00 to 11:30

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
1	Flue gas Temperature	°C	132	-	IS 11255 (Part 3):2008; RA 2018
2	Flue gas Velocity	m/s	25.1	-	IS 11255 (Part 3):2008; RA 2018
3	Total gas quantity	Nm ³ /h	1240295	-	IS 11255 (Part 3):2008; RA 2018
4	Particulate Matter (PM)	mg/Nm ³	45	50	IS 11255 (Part 1):1985 RA 2019
5	Sulphur Dioxide (SO ₂)	mg/Nm ³	1365	600	IS 11255 (Part 2):1985 RA 2019
6	Oxides of Nitrogen (NO _x)	mg/Nm ³	335	450	IS 11255 (Part 7): 2005; RA 2017

ULR- TC748722000013259F



Mahabal



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Continuation Sheet



Report No.14283 Cont..

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
7	Oxygen (O ₂)	%	8.0	-	IS 13270:1992, Reaffirmed 2019

Remarks: #: Limit as per Environmental protection Rule 1986, Amendment Rules 2015 (Schedule-I Sr. No. 25)
Results of SO₂, NO_x & PM are corrected to 6% O₂, on dry basis

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.



Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000013259F



Page 2 of 2

QF/SALE/04/Issue No 03 Dt 05.12.2019,Amd 00 Dt 00



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace, Next to Ashida Electrical, Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG14284-220930-SA-GMR-WARORA		Date: 30.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Unit No. II	Sample Quantity/Packing	Thimble PM: 1 X 1 No. SO ₂ : 30mL X 1 No. PVC Bottle NO _x :25mL X 1 No. PVC Bottle O ₂ : Bladder 2L X 1 No. Hg:200mL X 2 No. PVC Bottle
Date of Sampling	23.09.2022	Date of Receipt of Sample	24.09.2022
Sampling Procedure	As per Method Reference		
Date of Start of Analysis	24.09.2022	Date of Completion of Analysis	29.09.2022

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)

Stack Identity	Unit -II
Stack attached to	ESP Outlet
Material of construction	RCC
Stack height above ground level (Meter)	275
Stack Diameter (Meter)	5.0
Stack shape at top	Round
Type of fuel	Coal
Fuel Consumption (L/h)	-
Duration of sampling (h)	12:00 to 12:30

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
1	Flue gas Temperature	°C	128	-	IS 11255 (Part 3):2008; RA 2018
2	Flue gas Velocity	m/s	25.0	-	IS 11255 (Part 3):2008; RA 2018
3	Total gas quantity	Nm ³ /h	1243230	-	IS 11255 (Part 3):2008; RA 2018
4	Particulate Matter (PM)	mg/Nm ³	46	50	IS 11255 (Part 1):1985 RA 2019
5	Sulphur Dioxide (SO ₂)	mg/Nm ³	1378	600	IS 11255 (Part 2):1985 RA 2019
6	Oxides of Nitrogen (NO _x)	mg/Nm ³	325	450	IS 11255 (Part 7): 2005; RA 2017

ULR- TC748722000013260F



Signature

Page 1 of 2

QF/SALE/04/Issue No 03 Dt 05.12.2019.Amd 00 Dt 00

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Continuation Sheet



Report No.14284 Cont..

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
7	Mercury	mg/Nm ³	0.0012	0.03 max.	CPCB Guidelines on Methodologies for Source Emission Monitoring, Chapter 5&6; Pg.No.54-84
8	Oxygen (O ₂)	%	8.0	-	IS 13270:1992, Reaffirmed 2019

Remarks: #: Limit as per Environmental protection Rule 1986, Amendment Rules 2015 (Schedule-I Sr. No. 25)
Results of SO₂, NO_x & PM are corrected to 6% O₂, on dry basis

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000013260F



Page 2 of 2

QF/SALE/04/Issue No 03 Dt 05.12.2019,Amd 00 Dt 00



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13158-220912-SA-GMR-WARORA		Date: 12.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near CHP	Sample Quantity/Packing	PM ₁₀ : Filter Paper 1 X 3 No. PM _{2.5} : Filter Paper 1 X 1 No. SO ₂ : 30 mL X 6 No. PVC Bottle NO ₂ : 30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	05.09.2022 to 06.09.2022	Date of Receipt of Sample	06.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	07.09.2022	Date of Completion of Analysis	12.09.2022

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near CHP		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	7.6	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	8.2	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	59	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	19	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

ULR- TC748722000012244F



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Continuation Sheet



Report No.13158 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Lead (as Pb)	$\mu\text{g}/\text{m}^3$	BQL (LOQ:0.02)	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
6	Carbon Monoxide (CO)	mg/m^3	0.84	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012244F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13159-220912-SA-GMR-WARORA		Date: 12.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near Reservoir	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	05.09.2022 to 06.09.2022	Date of Receipt of Sample	06.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	07.09.2022	Date of Completion of Analysis	12.09.2022

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near Reservoir		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	8.5	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	9.1	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	71	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	22	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

ULR- TC748722000012245F

Mahabal



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet

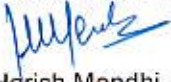


Report No.13159 Cont..

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Lead (as Pb)	$\mu\text{g}/\text{m}^3$	BQL (LOQ:0.02)	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
6	Carbon Monoxide (CO)	mg/m^3	1.08	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.



Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012245F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13160-220912-SA-GMR-WARORA		Date: 12.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)	Order Reference:	
		4800164654 Dt.:21.03.2022	
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near Switch Yard	Sample Quantity/Packing	PM ₁₀ : Filter Paper 1 X 3 No. PM _{2.5} : Filter Paper 1 X 1 No. SO ₂ : 30 mL X 6 No. PVC Bottle NO ₂ : 30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	05.09.2022 to 06.09.2022	Date of Receipt of Sample	06.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	07.09.2022	Date of Completion of Analysis	12.09.2022

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near Switch Yard		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	9.2	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	10.1	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	60	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	27	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

ULR- TC748722000012246F



Mahabal

Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Continuation Sheet



Report No.13160 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Lead (as Pb)	$\mu\text{g}/\text{m}^3$	BQL (LOQ:0.02)	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
6	Carbon Monoxide (CO)	mg/m^3	1.03	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012246F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace, Next to Ashida Electrical, Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13704-220922-SA-GMR-WARORA		Date: 22.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near CHP	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	15.09.2022 to 16.09.2022	Date of Receipt of Sample	16.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	19.09.2022

ULR- TC748722000012745F

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near CHP		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	8.9	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	9.2	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	53	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	20	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

Mahabal



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet



Report No.13704 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	0.91	4.0	CPCB Guidelines, Volume II, (NDR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012745F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13705-220922-SA-GMR-WARORA		Date: 22.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near Reservoir	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	15.09.2022 to 16.09.2022	Date of Receipt of Sample	16.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	19.09.2022

ULR- TC748722000012746F

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near Reservoir		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	8.6	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	9.0	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	44	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	19	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30



Mahabal



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical, Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet



Report No.13705 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	0.86	4.0	CPCB Guidelines, Volume II, (NDR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.



Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012746F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13706-220922-SA-GMR-WARORA		Date: 22.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near Switch Yard	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	15.09.2022 to 16.09.2022	Date of Receipt of Sample	16.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	19.09.2022

ULR- TC748722000012747F

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near Switch Yard		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	9.3	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	10.1	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	56	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) orPM _{2.5}	µg/m ³	21	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020



Mahabal

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet



Report No.13706 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	1.01	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012747F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13924-220928-SA-GMR-WARORA		Date: 28.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near CHP	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	19.09.2022 to 20.09.2022	Date of Receipt of Sample	20.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	21.09.2022	Date of Completion of Analysis	24.09.2022

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near CHP		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	8.8	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	10.0	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	59	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	20	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

ULR- TC748722000012951F

Mahabal



Page 1 of 2

QF/SALF/03 Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet



Report No.13924 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	0.67	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012951F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13925-220928-SA-GMR-WARORA		Date: 28.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near Reservoir	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	19.09.2022 to 20.09.2022	Date of Receipt of Sample	20.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	21.09.2022	Date of Completion of Analysis	24.09.2022

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near Reservoir		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	9.2	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	11.2	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	49	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	15	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

ULR- TC748722000012952F



Mahabal

Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Continuation Sheet



Report No.13925 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	1.08	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



END



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012952F



Page 2 of 2

QF/SAL/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13926-220928-SA-GMR-WARORA		Date: 28.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near Switch Yard	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	19.09.2022 to 20.09.2022	Date of Receipt of Sample	20.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	21.09.2022	Date of Completion of Analysis	24.09.2022

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near Switch Yard		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	10.1	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	12.1	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	37	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	16	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

ULR- TC748722000012953F

Mahabal



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet



Report No.13926 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	0.95	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012953F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG14430-221003-SA-GMR-WARORA		Date: 03.10.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)	Order Reference:	
		4800164654 Dt.:21.03.2022	
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near CHP	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	26.09.2022 to 27.09.2022	Date of Receipt of Sample	27.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	28.09.2022	Date of Completion of Analysis	30.09.2022

ULR- TC748722000013392F

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near CHP		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	9.2	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	11.4	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	55	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	19	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30



Mahabal



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Continuation Sheet



Report No.14430 Cont..

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	0.88	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000013392F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG14431-221003-SA-GMR-WARORA		Date: 03.10.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near Reservoir	Sample Quantity/Packing	PM ₁₀ : Filter Paper 1 X 3 No. PM _{2.5} : Filter Paper 1 X 1 No. SO ₂ : 30 mL X 6 No. PVC Bottle NO ₂ : 30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	26.09.2022 to 27.09.2022	Date of Receipt of Sample	27.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	28.09.2022	Date of Completion of Analysis	30.09.2022

ULR- TC748722000013393F

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near Reservoir		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	7.6	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	10.0	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	45	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	17	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

Signature



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Continuation Sheet



Report No.14431 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	0.97	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000013393F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 500 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG14432-221003-SA-GMR-WARORA		Date: 03.10.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference: 4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Near Switch Yard	Sample Quantity/Packing	PM ₁₀ : Filter Paper 1 X 3 No. PM _{2.5} : Filter Paper 1 X 1 No. SO ₂ : 30 mL X 6 No. PVC Bottle NO ₂ : 30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	26.09.2022 to 27.09.2022	Date of Receipt of Sample	27.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	28.09.2022	Date of Completion of Analysis	30.09.2022

ULR- TC748722000013394F

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Near Switch Yard		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	8.2	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	10.3	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	47	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	21	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30



Mahabal



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax: +91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet



Report No.14432 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	0.83	4.0	CPCB Guidelines, Volume II, (NDIR Method)

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000013394F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13927-220928-SA-GMR-WARORA		Date: 28.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Anandwan Warora	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	19.09.2022 to 20.09.2022	Date of Receipt of Sample	20.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	21.09.2022	Date of Completion of Analysis	24.09.2022

ULR- TC748722000012954F

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Anandwan Warora		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	10.7	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	10.6	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	58	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	22	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

Mahabal



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace, Next to Ashida Electrical, Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet



Report No.13927 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	1.03	4.0	CPCB Guidelines, Volume II, (NDIR Method)
6	Lead (as Pb)	µg/m ³	BQL (LOQ:0.02)	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012954F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13928-220928-SA-GMR-WARORA		Date: 28.09.2022	
Name and address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)	Order Reference:	
		4800164654 Dt.:21.03.2022	
Sample Description/ Type	Ambient Air Quality Monitoring	Sample Collected by	Laboratory
Sampling Location	Temporary Township	Sample Quantity/Packing	PM ₁₀ :Filter Paper 1 X 3 No. PM _{2.5} :Filter Paper 1 X 1 No. SO ₂ :30 mL X 6 No. PVC Bottle NO ₂ :30 mL X 6 No. PVC Bottle CO: 2L X 3 No. Bladder Bag
Date of Sampling	19.09.2022 to 20.09.2022	Date of Receipt of Sample	20.09.2022
Sampling Procedure	As per method reference		
Date of Start of Analysis	21.09.2022	Date of Completion of Analysis	24.09.2022

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)					
Location		Temporary Township		Duration of Survey	
				24 hours	
1	Sulphur Dioxide (SO ₂)	µg/m ³	6.7	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
2	Nitrogen Dioxide (NO ₂)	µg/m ³	7.8	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
3	Particulate Matter (size less than 10µm) or PM ₁₀	µg/m ³	66	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
4	Particulate Matter (size less than 2.5µm) or PM _{2.5}	µg/m ³	25	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30

ULR- TC748722000012955F

Mahabal



Page 1 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet



Report No.13928 Cont...

Sr. No.	Parameter	Unit	Result	#NAAQM Standard	Method Reference
5	Carbon Monoxide (CO)	mg/m ³	0.91	4.0	CPCB Guidelines, Volume II, (NDIR Method)
6	Lead (as Pb)	µg/m ³	BQL (LOQ:0.02)	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55

Remarks: Time Weighted Average for 24 h. monitoring. 1 h. Standard in case of Carbon Monoxide.
BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748722000012955F



Page 2 of 2

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
 Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
 Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111
Phone : 91-712-2612162, 2612212, Cell:9326279040
Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13707-220922-SA-GMR-WARORA		Date: 22.09.2022
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)	Order Reference:
		4800164654 Dt.:21.03.2022
Sample Description/Type	Ambient Noise Level Monitoring	
Date of Sampling	15.09.2022	
Sampling Procedure	IS 9876:1981	

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)

Sr. No.	Location	Time (h)	Sound Level $L_{eq}dB (A)$	
			Fast Response	Slow Response
1	Near CHP	10:00	66.2	64.5
2	Near Switch Yard	10:30	62.4	59.1
3	Near Reservoir	11:00	64.5	61.4

THE NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000

Area Code	Category of Area /Zone	Limit in dB(A) weighted scale	
		Day Time (6.00a.m. to 10.00 p.m.)	Night Time (10.00 p.m. to 6.00 a.m.)
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

Remarks:

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.





Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com

Test Report

Report No.: ME-NG14285-221003-SA-GMR-WARORA		Date: 03.10.2022
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)	Order Reference:
		4800164654 Dt.:21.03.2022
Sample Description/Type	Workplace Noise Level Monitoring	
Date of Sampling	23.09.2022	
Sampling Procedure	IS 9876:1981	

Discipline: Chemical Testing; Product Group: Atmospheric Pollution

Sr. No.	Location	Time	Result dB(A)Leq	
			Min.	Max.
1.	Compressor House Area	13:10	75.9	80.5
2.	Boiler Floor	13:20	82.4	86.8
3.	Turbine Floor	13:30	83.2	85.7
4.	Turbine Generation Unit-1	13:40	82.3	84.4
5.	Turbine Generation Unit-2	13:50	81.5	85.2

Limit as per The Factories Act, 1948, The Maharashtra Factory Rules, 1963, Schedule XXIV

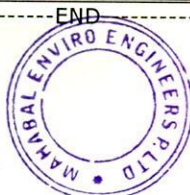
Total time of exposure per day, in	Max.Sound pressure level in dB (A)
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
¾	107
½	110
¼	115

Remark :

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
 Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13773-220922-SA-GMR-WARORA		Date: 22.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)	Order Reference	
		4800164654 Dt.:21.03.2022	
Sample Description/Type	Fugitive Emission	Sample Collected by	Laboratory
Sampling Location	Near Wagon Tippler Area	Sample Quantity/Packing	Filter paper 1 X 1 No. Cyclone Cup: 1 X 1 No.
Date of Sampling	15.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	As per Method Reference	Duration of Survey	8 hours
Date of Start of Analysis	19.09.2022	Date of Completion of Analysis	20.09.2022

ULR- TC748722000012814F

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Fugitive Emission)					
1	Suspended Particular Matter	µg/m ³	659	2000	IS 5182 (Part 4): 1999 RA 2019
Remarks: #: Limit as per MPCB consent					

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13776-220922-SA-GMR-WARORA		Date: 22.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)	Order Reference	
		4800164654 Dt.:21.03.2022	
Sample Description/Type	Fugitive Emission	Sample Collected by	Laboratory
Sampling Location	In between ash Silo & Ash Pond Area	Sample Quantity/Packing	Filter paper 1 X 1 No. Cyclone Cup: 1 X 1 No.
Date of Sampling	15.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	As per Method Reference	Duration of Survey	8 hours
Date of Start of Analysis	19.09.2022	Date of Completion of Analysis	20.09.2022

ULR- TC748722000012817F

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Fugitive Emission)					
1	Suspended Particular Matter	µg/m ³	1798	2000	IS 5182 (Part 4): 1999 RA 2019
Remarks: #: Limit as per MPCB consent					

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13775-220922-SA-GMR-WARORA		Date: 22.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Fugitive Emission	Sample Collected by	Laboratory
Sampling Location	Ash Pond Near Drive House Area	Sample Quantity/Packing	Filter paper 1 X 1 No. Cyclone Cup: 1 X 1 No.
Date of Sampling	15.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	As per Method Reference	Duration of Survey	8 hours
Date of Start of Analysis	19.09.2022	Date of Completion of Analysis	20.09.2022

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Fugitive Emission)					
1	Suspended Particular Matter	µg/m ³	833	2000	IS 5182 (Part 4): 1999 RA 2019
Remarks: #: Limit as per MPCB consent					

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com

ULR- TC748722000012816F



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13774-220922-SA-GMR-WARORA		Date: 22.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Fugitive Emission	Sample Collected by	Laboratory
Sampling Location	Near Crusher House	Sample Quantity/Packing	Filter paper 1 X 1 No. Cyclone Cup: 1 X 1 No.
Date of Sampling	15.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	As per Method Reference	Duration of Survey	8 hours
Date of Start of Analysis	19.09.2022	Date of Completion of Analysis	20.09.2022

ULR- TC748722000012815F

Sr. No.	Parameter	Unit	Result	#Limit	Method Reference
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Fugitive Emission)					
1	Suspended Particular Matter	µg/m ³	1102	2000	IS 5182 (Part 4): 1999 RA 2019
Remarks: #: Limit as per MPCB consent					

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.



Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com

Test Report

Report No.: ME-NG14164-220930-SA-GMR-WARORA		Date: 30.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)	Order Reference	
		4800164654 Dt.:21.03.2022	
Sample Description/Type	Workplace Air	Sample Collected by	Laboratory
Sampling Location	CHP transformer House	Sample Quantity/Packing	Filter paper 1 X 1 No.
Date of Sampling	22.09.2022	Date of Receipt of Sample	23.09.2022
Sampling Procedure	As per Method Reference	Duration of Survey	1 hours
Date of Start of Analysis	24.09.2022	Date of Completion of Analysis	26.09.2022

Parameter	Unit	Result	Method Reference
Total Dust	mg/m ³	3.4	NIOSH 0500
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.


Harish Mendhi
TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/03/Issue No 03 Dt 05.12.2019,Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com

Test Report

Report No.: ME-NG14165-220930-SA-GMR-WARORA		Date: 30.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Workplace Air	Sample Collected by	Laboratory
Sampling Location	CHP Penthouse	Sample Quantity/Packing	Filter paper 1 X 1 No.
Date of Sampling	22.09.2022	Date of Receipt of Sample	23.09.2022
Sampling Procedure	As per Method Reference	Duration of Survey	1 hours
Date of Start of Analysis	24.09.2022	Date of Completion of Analysis	26.09.2022

Parameter	Unit	Result	Method Reference
Total Dust	mg/m ³	2.9	NIOSH 0500
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace, Next to Ashida Electrical, Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com

Test Report

Report No.: ME-NG14166-220930-SA-GMR-WARORA		Date: 30.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Workplace Air	Sample Collected by	Laboratory
Sampling Location	CHP Crusher House	Sample Quantity/Packing	Filter paper 1 X 1 No.
Date of Sampling	22.09.2022	Date of Receipt of Sample	23.09.2022
Sampling Procedure	As per Method Reference	Duration of Survey	1 hours
Date of Start of Analysis	24.09.2022	Date of Completion of Analysis	26.09.2022

Parameter	Unit	Result	Method Reference
Total Dust	mg/m ³	3.9	NIOSH 0500
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.



Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com

Test Report

Report No.: ME-NG14167-220930-SA-GMR-WARORA		Date: 30.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)	Order Reference	
		4800164654 Dt.:21.03.2022	
Sample Description/Type	Workplace Air	Sample Collected by	Laboratory
Sampling Location	CHP/ Bunker Floor	Sample Quantity/Packing	Filter paper 1 X 1 No.
Date of Sampling	22.09.2022	Date of Receipt of Sample	23.09.2022
Sampling Procedure	As per Method Reference	Duration of Survey	1 hours
Date of Start of Analysis	24.09.2022	Date of Completion of Analysis	26.09.2022

Parameter	Unit	Result	Method Reference
Total Dust	mg/m ³	3.7	NIOSH 0500
Remarks:			

END
FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.


Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com

Page 1 of 1

QF/SALE/03/Issue No 03 Dt 05.12.2019, Amd 01 Dt 01.03.2020



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111
Phone : 91-712-2612162, 2612212, Cell:9326279040
Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com

Test Report

Report No.: ME-NG14168-220930-SA-GMR-WARORA		Date: 30.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)	Order Reference	
		4800164654 Dt.:21.03.2022	
Sample Description/Type	Workplace Air	Sample Collected by	Laboratory
Sampling Location	AHP/ Fly Silo Area	Sample Quantity/Packing	Filter paper 1 X 1 No.
Date of Sampling	22.09.2022	Date of Receipt of Sample	23.09.2022
Sampling Procedure	As per Method Reference	Duration of Survey	1 hours
Date of Start of Analysis	24.09.2022	Date of Completion of Analysis	26.09.2022

Parameter	Unit	Result	Method Reference
Total Dust	mg/m ³	7.1	NIOSH 0500
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi
TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com

Page 1 of 1
QF/SALE/03/Issue No 03 Dt 05.12.2019.Amd 01 Dt 01.03.2020



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13748-220926-SA-GMR-WARORA		Date: 26.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala MIDC Growth Center, Post & Tehsil: Warora , Dist: Chandrapur (M.S.)		Order Reference:
			4800164654 Dt.:21.03.2022
Sample Description/Type	Industrial Effluent	Sample Collected by	Laboratory
Sampling Location	Condenser Cooling Water	Sample Quantity/Packing	1 L X 1 No. PVC Can
Date of Sampling	16.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	IS:3025(Part I): 1987 RA2019, APHA 23 rd Ed.2017, 1060-B, 1-40		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	24.09.2022

ULR- TC748722000012789F

Sr. No	Parameter	Unit	Result	Limit as per Consent	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)					
1	Temperature	°C	29	Not to exceed 5°C higher than the intake water	APHA 23 rd Ed. 2017, 2550-B, 2-74
2	pH	-	7.9	6.5 to 8.5	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
3	Total Free Chlorine (Residual)	mg/L	BQL (LOQ:0.05)	0.5 Max.	APHA 23 rd Ed. 2017, 4500-Cl-G, 4-72

Remarks: BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SAL/02/Issue No 03 Dt 05.12.2019.Amd 00 Dt 00



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13749-220926-SA-GMR-WARORA		Date: 26.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Industrial Effluent	Sample Collected by	Laboratory
Sampling Location	Cooling Tower Blow Down	Sample Quantity/Packing	1 L X 1 No. PVC Can 500mL X 1 No. PVC Can
Date of Sampling	16.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	IS:3025(Part I): 1987 RA2019, APHA 23 rd Ed.2017, 1060-B, 1-40		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	24.09.2022

ULR- TC748722000012790F

Sr. No.	Parameter	Unit	Result	Limit as Per Consent	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment(Waste Water)					
1	Free Chlorine (Residual)	mg/L	BQL (LOQ:0.05)	0.5 Max.	APHA 23 rd Ed. 2017, 4500-Cl-G, 4-72
2	Phosphate Total (as P)	mg/L	0.897	5.0 Max.	APHA 23 rd Ed. 2017, 4500-P E, 4-164
Residues in water (Trace metal Element)					
3	Chromium Total (as Cr)	mg/L	BQL (LOQ:0.01)	0.2 Max.	IS 3025 (Part 2) 2019
4	Zinc (as Zn)	mg/L	0.021	1.0 Max.	IS 3025 (Part 2) 2019
Remarks: BQL: Below Quantification Limit; LOQ: Limit of Quantification					

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/02/Issue No 03 Dt 05.12.2019.Amd 00 Dt 00

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13750-220926-SA-GMR-WARORA		Date: 26.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)	Order Reference	
		4800164654 Dt.:21.03.2022	
Sample Description/Type	Industrial Effluent	Sample Collected by	Laboratory
Sampling Location	Boiler Blow Down	Sample Quantity/Packing	1 L X 1 No. PVC Can 500mL X 1 No. PVC Can 1 L X 1 No. Glass Bottle
Date of Sampling	16.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	IS:3025(Part I): 1987 RA2019, APHA 23 rd Ed.2017, 1060-B, 1-40		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	24.09.2022

ULR- TC748722000012791F

Sr. No.	Parameter	Unit	Result	Limit as Per Consent	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)					
1	Total Suspended Solids	mg/L	BQL (LOQ:5)	100 Max.	APHA 23 rd Ed. 2017, 2540-D, 2-70
2	Oil and Grease	mg/L	BQL (LOQ:1)	10 Max.	IS 3025 (Part 39): 1991, Reaffirmed 2021, Amds.1
Residues in water (Trace metal Element)					
3	Copper (as Cu)	mg/L	BQL (LOQ:0.01)	1.0 Max.	IS 3025 (Part 2) 2019
4	Iron (as Fe)	mg/L	0.067	1.0 Max.	IS 3025 (Part 2) 2019
Remarks: BQL: Below Quantification Limit; LOQ: Limit of Quantification					

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/02/Issue No 03 Dt 05.12.2019, Amd 00 Dt 00

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13751-220926-SA-GMR-WARORA		Date: 26.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Industrial Effluent	Sample Collected by	Laboratory
Sampling Location	D.M. Plant Effluent	Sample Quantity/Packing	2 L X 1 No. PVC Can 1 L X 1 No. Glass Bottle 100mL X 1 No. PVC Can
Date of Sampling	16.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	IS:3025(Part I): 1987 RA2019, APHA 23 rd Ed.2017, 1060-B, 1-40		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	24.09.2022

Sr. No.	Parameter	Unit	Result	Limit as Per Consent	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)					
1.	pH	-	7.6	5.5-9.0	APHA 23 rd Ed. 2017, 4500-H ⁺ - B, 4-95
2.	Total Dissolved Solids	mg/L	766	2100 Max.	IS 3025 (Part 16):1984 RA 2017, Ed.2.1(1999-12)
3.	Total Suspended Solids	mg/L	15	100 Max.	APHA 23 rd Ed. 2017, 2540-D, 2-70
4.	Biochemical Oxygen Demand (3 days 27°C)	mg/L	6.2	30 Max.	IS 3025 (Part 44): 1993, Reaffirmed 2009
5.	Chemical Oxygen Demand	mg/L	20	250 Max.	APHA 23 rd Ed. 2017, 5220-B, 5-18
6.	Oil and Grease	mg/L	BQL (LOQ:1)	10 Max.	IS 3025 (Part 39): 1991, Reaffirmed 2021, Amds.1

Remarks: BQL: Below Quantification Limit; LOQ: Limit of Quantification

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.





Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13752-220926-SA-GMR-WARORA		Date: 26.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Industrial Effluent	Sample Collected by	Laboratory
Sampling Location	Ash Pond Effluent	Sample Quantity/Packing	1 L X 1 No. PVC Can 1 L X 1 No. Glass Bottle
Date of Sampling	16.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	IS:3025(Part I): 1987 RA2019, APHA 23 rd Ed.2017, 1060-B, 1-40		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	24.09.2022

Sr. No.	Parameter	Unit	Result	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)				
1.	pH	-	7.8	APHA 23 rd Ed. 2017, 4500-H ⁺ - B, 4-95
2.	Total Suspended Solids	mg/L	22	APHA 23 rd Ed. 2017, 2540-D, 2-70
3.	Oil and Grease	mg/L	BQL (LOQ:1)	IS 3025 (Part 39): 1991, Reaffirmed 2021, Amds.1
Remarks: BQL: Below Quantification Limit; LOQ: Limit of Quantification				

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



Page 1 of 1

QF/SALE/02/Issue No 03 Dt 05.12.2019,Amd 00 Dt 00

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra

(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)

Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13753-220926-SA- GMR-WARORA		Date: 26.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Domestic Effluent	Sample Collected by	Laboratory
Sampling Location	STP Inlet	Sample Quantity/Packing	2 L X 1 No. PVC Can 100mL X 1 No. PVC Can 1 L X 1 No. Glass Bottle
Date of Sampling	16.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	IS:3025(Part I): 1987 RA2019, APHA 23 rd Ed.2017, 1060-B, 1-40		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	24.09.2022

ULR- TC748722000012794F

Sr. No.	Parameter	Unit	Result	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)				
1.	pH	-	7.9	APHA 23 rd Ed. 2017, 4500-H ⁺ - B, 4-95
2.	Total Dissolved Solids	mg/L	746	IS 3025 (Part 16):1984 RA 2017, Ed.2.1(1999-12)
3.	Total Suspended Solids	mg/L	16	APHA 23 rd Ed. 2017, 2540-D, 2-70
4.	Biochemical Oxygen Demand (3 days 27°C)	mg/L	8.8	IS 3025 (Part 44): 1993, Reaffirmed 2019
5.	Chemical Oxygen Demand	mg/L	32	APHA 23 rd Ed. 2017, 5220-B, 5-18
6.	Oil and Grease	mg/L	BQL (LOQ:1)	IS 3025 (Part 39): 1991, Reaffirmed 2021, Amds.1
Remarks: BQL: Below Quantification Limit; LOQ: Limit of Quantification				

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com

Page 1 of 1
QF/SAL/02/Issue No 03 Dt 05.12.2019, Amd 00 Dt 00



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111.

Phone : 91-712-2612162, 2612212, Cell:9326279040

Email: mahabal.nagpur@gmail.com, mahabal.laboratory@gmail.com



Test Report

Report No.: ME-NG13754-220926-SA-GMR-WARORA		Date: 26.09.2022	
Name and Address of Customer	GMR WARORA ENERGY LIMITED. Plot No. B-1, Mohabala, MIDC Growth Center, Post & Tehsil: Warora, Dist: Chandrapur (M.S.)		Order Reference
			4800164654 Dt.:21.03.2022
Sample Description/Type	Domestic Effluent	Sample Collected by	Laboratory
Sampling Location	STP Outlet	Sample Quantity/Packing	2 L X 1 No. PVC Can 100mL X 1 No. PVC Can 1 L X 1 No. Glass Bottle
Date of Sampling	16.09.2022	Date of Receipt of Sample	17.09.2022
Sampling Procedure	IS:3025(Part I): 1987 RA2019, APHA 23 rd Ed.2017, 1060-B, 1-40		
Date of Start of Analysis	17.09.2022	Date of Completion of Analysis	26.09.2022

Sr. No.	Parameter	Unit	Result	# Limit	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)					
1.	pH	-	7.8	-	APHA 23 rd Ed. 2017, 4500-H ⁺ - B, 4-95
2.	Total Dissolved Solids	mg/L	752	-	IS 3025 (Part 16):1984 RA 2017, Ed.2.1(1999-12)
3.	Total Suspended Solids	mg/L	8	50 Max.	APHA 23 rd Ed. 2017, 2540-D, 2-70
4.	Biochemical Oxygen Demand (3 days 27°C)	mg/L	4.5	30 Max.	IS 3025 (Part 44): 1993, RA 2019
5.	Chemical Oxygen Demand	mg/L	16	100 Max.	APHA 23 rd Ed. 2017, 5220-B, 5-18
6.	Oil and Grease	mg/L	BQL (LOQ:1)	-	IS 3025 (Part 39): 1991, RA 2021, Amds.1
7.	Calcium (as Ca)	mg/L	144	-	APHA 23 rd Ed. 2017, 3500-Ca-B, 3-69
8.	Magnesium (as Mg)	mg/L	35.0	-	APHA 23 rd Ed. 2017, 3500-Mg- B, 3-86
9.	Sodium (as Na)	mg/L	48.0	-	APHA 23 rd Ed. 2017, 3500-Na-B, 3-99

Remarks: #: Limit as per consent. BQL: Below Quantification Limit; LOQ: Limit of Quantification

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com

Page 1 of 1
QF/SALE/02/Issue No 03 Dt 05.12.2019, And 00 Dt 00

ULR- TC748722000012795F