MPGL/ENV/2024 -25/21

November 27, 2024

குழல் பொறியாளர்

DIE BLAULTE

To

The Director
Ministry of Environment, Forest & Climate Change,
Paryavaran Bhavan,
CGO Complex, Lodhi Road,
New Delhi – 110 003.

### Dear Sir,

**Sub:** Submission of Half yearly MoEF & CC Clearances Compliance Report for the period April 2024 to September 2024 – Reg.

Ref: 1.Environment Clearance No.J-13011/41/2008-IA.II(T) dated 05.05.2009

2. Coastal Regulation Zone Clearance No. 11/32/2009-IA.III dated 10.08.2009

3.MoEF office memorandum No.F.No.J-13012 /8/2009-IA.II(T) dated 11.11.2020

This has reference to the captioned subject and cited references; we are herewith enclosing the Compliance Report of Environmental Clearance, Coastal Regulation Zone Clearance and MoEF office memorandum for the period April 2024 to September 2024 of Moxie Power Generation Ltd (formerly Coastal Energen Pvt ltd), 2 x 600 MW Thermal Power Plant, Tuticorin.

This is for your kind information and records.

Thanking You

For MOXIE POWER GENERATION LIMITED

MK Paramesware W \* 03

Station Head

Copy to: 1. Director (S), MoEF &CC, Regional Office (South Eastern Zone), Chennai – 600 003.

- 2. Central Pollution Control Board, Chennai 600 058.
- 3. District Environmental Engineer, TNPCB, Tuticorin 628002.

Moxie Power Generation Limited "Adani Corporate House" Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad-382421, Gujarat India CIN: U35100TN2024PLC167065 Tel +91 79 2656 7555 Fax +91 79 2555 7177

Registered Office: "Ramcon Fortuna Towers 4th, Kodambakkam High Road, Nungambakkam High Road, Chennai – 600034

### SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL & CRZ CLEARANCES

### 2X600 MW COAL BASED THERMAL POWER PLANT

at

Melamarudur Village, Ottapidaram Taluk, Tuticorin - 628 105 Tamil Nadu

### Submitted to:







Submitted By:

Moxie Power Generation Limited

PERIOD: APRIL 2024 -SEPTEMBER 2024

# Ministry of Environment Forest & Climate Change Clearance Compliance

### COMPLIANCE TO THE CONDITIONS LAID BY MOEF VIDE ENVIRONMENTAL CLEARANCE No.J-13011/41/2008-IA.II (T) dated 10.12.2008

Period: April 2024 to September 2024

| SI.No. | CONDITIONS STIPULATED BY MOEF   | COMPLIENCE  |
|--------|---|---|
| 1      | Environment clearance is subject to obtaining clearance under the wildlife (protection) Act, 1972 from the competent authority.   | No Objection Certificate is obtained from principal Chief Conservator of Forests and chief wild life warden, Chennai vide Ref. No.WL5/74098/2007 dated 03.03.2009.  As communicated by Principal Chief Conservator of Forest & Chief Wild Life Warden vide their Lr. No. Ref. No. WL5/7774/2013 dated 16.04.2016, we have applied online in the MOEF & CC web portal on 17th Oct 2017 for obtaining Wild Life Clearance from National Board for Wildlife and we are following. Awaiting Response from NBWL. |
| 2      | Environment clearance is subject to final order of the hon'ble court of India in the matter of Goa foundation vs union of India in writ petition (civil) no.460 of 2004 as may be applicable to this project.                       | Noted for Compliance.   |
| 3      | The total land acquired shall not be more than 875 acres for all the activities / facilities of the power project put together.   | Complied. The total land acquired is 875 acre.  |
| 4      | Prior CRZ clearance for the activities / facilities to be located in the CRZ area shall be obtained before start of the project.  | Complied.<br>CRZ clearance received from MoEF vide No.11-32/2009-IA-III dated 10.08.2009.   |
| 5      | Ash and sulphur content in the imported coal to be used in the project shall not exceed 12% and 1.5 % respectively.   | Complied. Ash and Sulphur content in the imported coal has not exceed 12% and 1.5 % respectively.   |
| 6      | A multi-flue stack of 275m height shall be provided with continuous online monitoring equipments for Sox, NOx and particulate (heavy metals like Hg, Cr, As, Pb periodically). Exit velocity of atleast 22 m/s shall be maintained. | Complied.  Multi Flue Stack is provided with Continuous online monitoring analyzers for measuring SO <sub>x</sub> , NO <sub>x</sub> and SPM and heavy metals like Hg, Cr, As, Pb are being monitored periodically   |
| 7      | High efficiency Electro static precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50mg/Nm3.  | Complied.  High efficiency ESPs has been installed and the particulate emission does not exceed 50mg/Nm3.   |
| 8      | CFBC technology with lime injection having efficiency of SO2 removal atleast 90% shall be installed.  | Not applicable MoEF clearance obtained for Sub Critical Pulverized fuel Boilers vide clearance No.J- 13011/41/2008-IA.II(T) dated 05.05.2009  |
| 9      | Space provision shall be made for flue gas desulphurisation (FGD) unit, if required ata later stage.  | Complied. Necessary space provision made for FGD Unit.  |
| 10     | Adequate dust extraction system such as cyclone /bag filters and water spray system in dusty area such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.              | Complied.  Automatic water sprinklers provided in the coal storage yard.  Closed conveyors provided for coal conveying  Bag filters/ dust extraction system provided at all transfer points in the junction towers  Ventilation system provided in all coal bunkers  Bag filters provided in the ash silos  Closed conveyors provided for bottom ash conveying  |

| 11 | Fly ash shall be collected in dry form and storage facility (silos) shall be provided 100% utilization of fly ash shall be achieved from day one. Unutilized fly ash in emergency and bottom ash shall be disposed of in the ash pond. Supernatant effluent from ash pond and leachates collected will be monitored for heavy metals  | Complied.  Fly Ash is collected in dry form and 100% utilization is being complied.  There is no supernatant effluent generated from the ash pond as of now due to 100% ash  |
|----|---|--|
| 12 | (Hg, Cr, As, Pb etc.).  Ash pond shall be lined with HDPE lining. Adequate safety measure shall also be implemented to protect the ash dyke from getting breached.  | utilization.  Complied. Ash pond is lined with HDPE lining and Adequate safety measures are being taken to protect the ash dyke from getting breached.   |
| 13 | Closed cycle cooling system with cooling towers as per<br>the recommendations of chief wildlife warden shall be<br>ensured.   | Complied.  Closed cycle cooling system with cooling towers is installed.   |
| 14 | Continuous monitoring of coastal waters as per the recommendations of chief wildlife warden shall be ensured.   | Complied. Continuous monitoring of coastal waters as per the recommendations of chief wildlife warden is being done.   |
| 15 | Rain water harvesting shall be practiced. A detailed scheme for rain water harvesting to recharge the ground water aquifer shall be prepared in consultation with central ground water authority / state ground water and a copy of the same shall be submitted within three months to the ministry.  | Storm water drains are already in place. Since, the existing ground water is more saline and not potable; recharging the storm water will not improve the existing ground water quality. Hence, the collected storm water is routed to nearby village pond for their domestic usage.   |
| 16 | The treated effluents conforming to the prescribed standards only shall be discharged from cold water side in the sea. The temperature of the discharged effluents shall not exceed 5°C over and above the ambient water temperature of sea and it will be reduced to 0.5°C within 50m of the discharge point. The temperature of the discharge water shall be monitored continuously and records maintained. | <ul> <li>Cooling water blow down discharged from the cold water side of the induced draft cooling system.</li> <li>Dilution of discharge, using fresh sea water to reduce the temperature to 0.5° C within 50 m of the discharge point is being carried out.</li> <li>Temperature of the discharge water is being monitored continuously.</li> </ul> |
| 17 | A sewage treatment plant shall be provided and the treated sewage conforming to the standards prescribed by SPCB shall be used for raising green belt/plantation.   | Complied.  Sewage Treatment Plant is provided and functional at site premises.  Treated water from STP is being used for gardening and Green belt development only.  |
| 18 | Regular monitoring of ground water in and around the ash pond area shall be carried out, records maintained and 6 monthly reports shall be submitted to the regional office of this ministry.   | Complied.  Regular monitoring of ground water in and around the ash bund area is being carried out.  Copy of the report is enclosed as Annexure - 3.   |
| 19 | Greenbelt of adequate width shall be developed all around the plant area, other utilities and ash pond covering 270acres of area preferably with local species.   | Complied. Greenbelt (Approximately 79,819 trees) of adequate width is developed all around the plant area, other utilities and ash bund covering 270 acres of land with local species. Latest Photos of the developed greenbelt is enclosed as Annexure - 4.   |
| 20 | First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.   | Complied First aid and sanitation arrangements were made for the drivers and other contract workers during construction phase.   |
| 21 | Noise levels emanating from turbines, air compressors, steam leakage and other moving parts of the machine should be controlled in such a way that the ambient noise levels in the working environment do not exceed 75dBA. For people working in high noise area especially during maintenance phase or due to leakage of steam etc., if it is not possible to control noise by adopting                     | <ul> <li>Complied.</li> <li>Turbine &amp; air compressors are provided with acoustic enclosures.</li> <li>Provided silencer in safety valve</li> <li>Provided earplugs and ear muffs to workers</li> <li>Workers engaged in noisy areas are being periodically examined and their audiometric</li> </ul>   |

|    | engineering methods including acoustical treatment, noise barriers etc., requisite personal protective equipment like ear plugs/ ear muffs etc., shall be provided. Workers engaged in noisy areas such turbines, air compressors etc shall be periodically examined and their audiometric records maintained and should be treated for any hearing loss including shifting to non-noisy/less noisy areas.  | records are being maintained and also shifted in rotational basis.  |
|----|---|---|
| 22 | Regular monitoring of ground level concentration of SO2, NOx, SPM, RSPM and mercury 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.  6 monthly reports shall be submitted to the regional office of this ministry at Bangalore.   | Complied.  The monitoring of ground level concentration data for the period from April 2024 to September 2024 is enclosed as Annexure - 1.  The Six months report on Environment monitoring is being submitted to Regional office of MoEF& CC on regular basis. |
| 23 | Adequate funds shall be ear marked for the activities under CSR and details of these activities shall also be submitted to the regional office of the ministry, SPCB and the ministry.  | Complied.  Separate funds earmarked for implementation of CSR activities.  Details of CSR activities carried out during April 2024 to September 2024 are enclosed as Annexure - 5.  |
| 24 | Storage facilities for this liquid fuel such as LDO and HFO/LSHS shall be made in the plant area where risk is minimum to the storage facilities. Disaster management plan shall be prepared to meet any eventuality in case of an accident taking place. Mock drills shall be conducted regularly and based on the same, modification required, if any, shall be incorporated in the DMP.  | Complied.  LDO/HFO storage tanks are provided with dyke wall, automatic foam and water sprinkler system.  Disaster Management plan is available and regular mock drills are being carried out.  |
| 25 | 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 of the ministry at Bangalore.   | Complied.  Automatic water sprinkler system provided in the coal stock yard   |
| 26 | 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/ municipal area/gram panchayat concerned and on the company's website within seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the state pollution control board / committee and may also be seen at website of the ministry of environment and forest at http://envfor.nic.in. | Complied  |
| 27 | Provision shall be made for the housing of construction labour 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 during construction phase.   |

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| 28 | A separate environment monitoring cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.  | Complied. Environment Cell with qualified staffs are in place for the Environmental monitoring, Marine monitoring, Green belt development activities, etc.   |
|----|---|--|
| 29 | Half yearly report on the status of implementation of<br>the stipulated conditions and environmental safeguards<br>shall be submitted to this ministry, its regional office<br>at Bangalore, CPCB and SPCB.   | Complied. Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards is being submitted to this ministry, its regional office at Bangalore, CPCB and SPCB.                       |
| 30 | Regional office of the ministry of environment & forests located at Bangalore will monitor the implementation of the stipulated conditions. A complete set of documents plan along with the additional information submitted from time to time shall be forwarded to the regional office for their use during monitoring.                             | Complied. Compliance status of the all the stipulated conditions in the environment clearance letter is being communicated from time to time to the Regional office of the ministry of environment & forests located at Bangalore. |
| 31 | Adequate funds shall be allocated for implementation of environmental protection measures along with itemwise breakup. 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. | Complied during construction phase.  |
| 32 | Full cooperation shall be extended to the scientists/officer from the ministry / regional office of ministry at Bangalore/ the CPCB the SPCB who would be monitoring the compliance of environmental status.  | Full Co-operation is being extended to the scientists/officer from the ministry / regional office of ministry at Bangalore/ the CPCB the SPCB who visits the plant for monitoring.   |
| 33 | The project authorities shall inform the regional 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.  | Complied.  UNIT-01 - Date of Commissioning - 02/12/2014 UNIT-02 - Date of Commissioning - 02/01/2016   |
| 34 | Compliance status of the stipulated conditions shall be displayed in website of the industry/company.   | The Compliance status of stipulated conditions is uploaded in the company website. Screen shot of company website is attached as Annexure - 2.   |

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### COMPLIANCE TO THE CONDITIONS LAID BY MOEF VIDE ENVIRONMENTAL CLEARANCE No.J-13011/41/2008-IA.II(T) dated 05.05.2009

Period: April 2024 to September 2024

| Sl.No. | CONDITIONS STIPULATED BY MOEF  | COMPLIENCE   |
|--------|--|--|
| 1      | Regular monitoring of ground water in and around the ash pond area including heavy metals (Hg,Cr,As,Pb) shall be carried out, records maintained and six monthly reports shall be furnished to the Regional 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.  | Complied.  Regular monitoring of ground water in and around the ash bund area is being carried out regularly. Analysis report for the period of April 2024 to September 2024 i attached as Annexure -3.  |
| 2      | Regular monitoring of ground level concentration of SO2, NOx, 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 so monitored shall also be put on the website of the company. | The monitoring of ground leve concentration data for the period Apri 2024 to September 2024 is enclosed as Annexure - 1 and the same is uploaded in the company website.  Screen shot of company website is attached as Annexure - 2.  |
| 3      | Space for FGD shall be provided at planning stage for the units.   | Complied.  Necessary space provision made for FGD Unit.  |
| 4      | A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the Local NGO, is any from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.  | Complied   |
| 5      | 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, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the man gate     | Complied. The Six months report on Ambient Air Quality monitoring are being submitted to Regional office of MoEF / TNPCB on regular basis and the same is uploaded in the company website. Print Screen of company website is attached as Annexure - 2.  Online scrolling Display System provided at the main gate of the company. |
| 6      | of the company in the public domain.  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.   | Complied.  The Six monthly Compliance report are being submitted to Regional office of MoEF& CC / CPCB / TNPCB on regular basis.   |

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### COMPLIANCE TO THE ADDITIONAL CONDITIONS LAID BY MoEF VIDE OFFICE MEMORANDUM No.J-11013/41/2006-IA.II(I) dated 06.04.2011

Period: April 2024 to September 2023

| SI.No. | CONDITIONS STIPULATED BY MOEF  | COMPLIENCE   |
|--------|--|--|
| 1      | Continuous monitoring of stack emissions as well as ambient air quality (as per notified standards) shall be carried out and continuous records maintained. Based on the monitored data, necessary corrective measures as may be required from time to time shall be taken to ensure that the levels are within permissible limits. The results of monitoring shall also be submitted to the respective Regional Office of MoEF regularly. Besides, the results of monitoring will also be put on the website of the company in the public domain. | Continuous Stack emission and ambient air quality monitoring are being carried out and records are being maintained.  The monitored data for the period of April 2024 to September 2024 is enclosed as Annexure - 1. The results are well within the prescribed norms.  The Six months report on Ambient Air Quality monitoring are being submitted to Regional office of MoEF& CC on regular basis and the same is uploaded in the company website. Screen Shot of company website is attached as Annexure - 2. |
| 2      | The six monthly monitoring report as well as the monitored data on various parameters as stipulated in the environment clearance conditions shall be put on the website of the company and also regularly updated. The monitored data shall also be submitted to respective State Pollution Control Board / UTPCCs and the Regional office of MoEF.  | The Six months report on Ambient Air Quality monitoring are being submitted to Regional office of MoEF& CC / TNPCB on regular basis and the same is uploaded in the company website.  Screen Shot of company website is attached as Annexure - 2.  |
| 3      | The ambient air quality data as well as the stack emission data will also be displayed in public domain at some prominent place near the main gate of the company and updated in real time.  | Complied.  Online scrolling Display System provided at the main gate of the company.   |



## Coastal Regulation Zone Clearance Compliance

### COMPLIANCE TO THE CONDITIONS LAID BY MoEF VIDE CRZ CLEARANCE No.11/32/2009-IA.III dated 10.08.2009

Period: April 2024 to September 2024

Melamarudur Tuticorin

| Sl.No.   | CONDITIONS STIPULATED BY MOEF  | COMPLIENCE  |
|----------|--|---|
| Specific | Conditions:  |   |
| 1.       | All the Conditions stipulated by Tamilnadu Coastal Zone<br>Management Authority vide letter dated 03.04.2009<br>shall be strictly complied with.   | All the Conditions stipulated by Tamilnadu<br>Coastal Zone Management Authority vide<br>letter dated 03.04.2009 is Complied.<br>Compliance Status enclosed as Annexure - 6  |
| 2.       | Sufficient dilution shall be carried out to meet the ambient parameters within 50m distance.   | Complied. Sufficient dilution is being carried out to meet the ambient parameters within 50 m distance.   |
| 3.       | Independent monitoring shall be undertaken through a authorized agency.  | Complied. Comprehensive Marine Environmental Monitoring is being carried out through M/s.Suganthi Devadasan Marine Research Institute, Thoothukudi, one of the identified institutions for coastal baseline studies and monitoring by the Tamil Nadu State Coastal Zone Management Authority. |
| 4.       | Filters in the way of extruders shall be provided at the intake point to prevent fishes entering in to the system. Fish culture shall be developed at the outfall point.   | Complied. Fish Cage culture installed and monitoring is in progress. Report on Fish Cage culture monitoring is covered in Annexure -7.  |
| 5.       | Regular monitoring especially for temperature and salinity shall be carried out at disposal site and six monthly reports shall be submitted to the ministry.   | Complied.  Monitoring data for the period April 2024 to September 2024 is enclosed as Annexure - 7.   |
| 6.       | All the recommendations of EIA and DMP shall be strictly complied with   | All the recommendations of EIA and DMP is complied  |
| 7.       | There shall be no reclamation in Coastal Regulation Zone area.   | Complied.  No Reclamation done at CRZ area.   |
| 8.       | The pipeline shall be buried at least 2m depth in the onshore area and 4 mts in the offshore area. Necessary permission with regard to the pipeline burial and laying shall be obtained from concerned authorities to ensure that the pipeline route does not fall in the navigation channel.  | Complied. All the requirements has been fulfilled and necessary permission has been obtained with regard to the pipeline burial.  |
| 9.       | The Project shall be implemented in such a manner that there is no damage whatsoever to the mangroves/other sensitive coastal ecosystems. If any damage to mangroves is anticipated / envisaged as a result of project activities then the clearance shall stand cancelled and the proponents shall seek fresh approval from the Ministry. | Not applicable.  No mangroves are found in the project site.  |
| 10.      | Consent shall be obtained from the Tamilnadu Pollution Control Board for the disposal of effluent into sea. The effluent shall meet the standards prescribed by Tamil Nadu Pollution Control Board before disposal.  | Complied. Consents are obtained from TNPCB and being ensured that the effluent meet the standards prescribed by TNPCB before disposal.  |
| 11.      | A continuous and comprehensive post - project marine<br>quality monitoring programme shall be taken up. This<br>shall include monitoring of water quality, sediment<br>quality and biological characteristics and report   | Complied.  Monitoring data for the period April 2024 to September 2024 is enclosed as Annexure - 7.   |

| 1           | people, houses or fishing activity as a result of the  | No displacement of people, houses or fishing   |
|-------------|--|--|
| 13. i       | There shall be display boards at critical locations along the pipeline viz. road/rail/river crossings giving emergency instructions. This will ensure prompt information regarding location of accident during any emergency. Emergency information board shall contain emergency instructions in addition to contact details. Proper lighting shall be provided all along the road. | Complied.  |
| 14.         | There shall be no withdrawal of ground water in CRZ, area, for this project.   | Complied.  No Withdrawal of Ground water is being done for the project.  |
| r           | Necessary provisions shall also be made to develop a nursery for mangroves and the area should be demarcated specifically for the development of mangroves within the complex.   | <ul> <li>The project site is not suitable for the development of mangroves as mangrove requires special environmental factor including fresh water sources along with marine (i.e) Esturain conditions.</li> <li>Hence, this condition is not applicable to us.</li> </ul> |
| r           | Arrangement for treatment of liquid effluents shall be made so as to ensure that the untreated effluents are not allowed to be discharged into the sea/marine water.   | Complied. Effluent Treatment Plant is provided in the Main plant and is in operation.  |
| 17. A       | Appropriate safety devices such as masks shall be provided for use by the workers at the site and their usage by them shall be ensured.  | Complied and the same is being ensured continuously.   |
| 6           | Necessary provisions shall be made for emergency evacuation during natural and man-made disasters like loods, cyclone, tsunami and earthquake etc.   | Complied.  Adequate Provisions made for emergence evacuation during Natural and manmade disasters.   |
| l<br>r<br>c | Provision shall be made for the housing of construction abour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health case, crèche etc. The house may be in the form of temporary structures to be removed after the completion of the project.                                   | Complied.  Necessary Infrastructure were provided during Project Phase.  |
| 20.         | A First Aid Room will be provided in the project both during construction and operation of the project.  | Complied. First Aid Center with ambulance facilitie available at site on 24 x 7 basis.   |
| S           | All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.   | Complied.  |
| 22. 5       | soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.  | Complied.  |
| F           | Any Hazardous Waste Generated During Construction Phase, Should Be Disposed Off As Per Applicable Rules and Norms With Necessary Approvals Of The Andhara Pradesh Pollution Control Board.   | No Hazardous waste generated during Construction Phase.  |
| 0           | The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment (protection) Rules  | Complied during Construction phase.  |

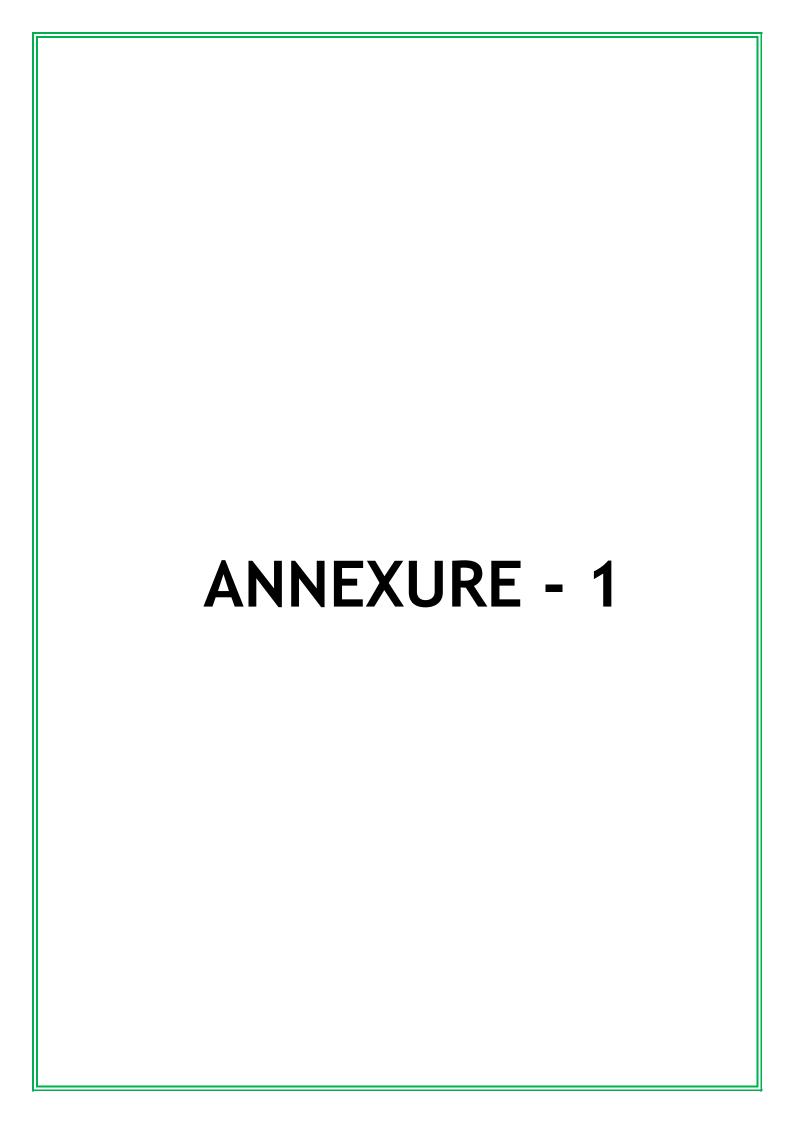
| 25. | prescribed for air and noise emission standards.  The Diesel required for operating DG sets shall be  |   |
|-----|---|---|
| 23. | stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.  | Complied during Construction phase.                             |
| 26. | Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.  | Complied during Construction Phase.                             |
| 27. | Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ TNPCB.   | Complied during Construction Phase.                             |
| 28. | Storm water control and its-re-use as per CGWB and BIS standards for various applications.  | Not applicable.   |
| 29. | Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.   | Complied during Construction Phase.                             |
|     | Conditions:   |   |
| 1.  | The construction of the structures should be undertaken as per the plans approved by the concerned local authorities/local administration, meticulously conforming to the existing local and central rules and regulations including the provisions of Coastal Regulation Zone Notification dated 19.02.1991 and the approved Coastal Zone Management Plan of Tamil Nadu. | Complied during Construction Phase.                             |
| 2.  | In the event of any change in the project profile a fresh<br>reference shall be made to the Ministry of Environment<br>and Forests.   | No Change in Project Profile                                    |
| 3.  | This Ministry reserves the right to revoke this clearance, if any, of the conditions stipulated are not complied with to the satisfaction of this Ministry.   | Agreed for Compliance.  |
| 4.  | This Ministry or any other competent authority may<br>stipulate any additional conditions subsequently, if<br>deemed necessary, for environmental protection, which<br>shall be complied with.  | Agreed for Compliance.  |
| 5.  | Noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.  | Complied.  Noise Levels are within the Permissible Limits       |
| 6.  | The green belt of the adequate width and density preferably with local species along the periphery of the plot shall be raised so as to provide protection against particulates and noise.  | Complied. Landscape developed in front of Sea water Pump house. |
| 7.  | The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.   | Not applicable.   |
| 8.  | The sand dune, if any, on the site should not be disturbed in any way.  | No sand dune exists.  |
| 9.  | The mangroves, if any, on the site should not be disturbed in any way.  | No mangroves exists.  |
| 10. | The environment safeguards contained in the EIA   | Complied. The environment safeguard                             |

|     |  | implemented.  |
|-----|--|---|
| 11. | A separate Environment Management Cell with suitably qualified staff to carry out various environment related Executive who will report directly to the Chief Executive of the Company.  | Complied. Environment Cell with qualified staffs are in place for the Environmenta monitoring, Marine monitoring, Green beli development activities, etc. |
| 12. | The funds earmarked for environment protection measures shall be maintained in a separate account and there shall be no diversion of these funds for any other purpose. A year-wise expenditure on environmental safeguards shall be reported to this Ministry's Regional Office to Bangalore.   | Fund for environmental protection measures is being allotted and no diversification of funds being done.  |
| 13. | In case of deviation or alteration in the project including the implementing agency, a fresh reference shall be made to this Ministry for modification in the clearance conditions or imposition of new one for ensuring environmental projection. The project proponents shall be responsible for implementing the suggested safeguard measures.  | No Deviation/Alteration in the Project.   |
| 14. | This Ministry reserves the right to revoke this clearance, if any of the conditions stipulated are not complied with to the satisfaction of this Ministry.   | Agreed.   |
| 15. | Full support should be extended to the officers of this Ministry's Regional Office at Bangalore and the offices of the Central and State Pollution Control Board by the project proponents during their inspection for monitoring purposes, by furnishing full details and action plans including the action taken reports in respect of mitigative measures and other environmental protection activities.  | Agreed and being Complied.  |
| 16. | These Stipulations Would Be Enforced Among Others Under The Provisions Of Water (Prevention And Control Of Pollution) Act, 1974 The Air (Prevention And Control Of Pollution) Act 1981, The Environment Municipal Solid Wastes (Management and Handling) Rules, 2000 including the amendments and rules made thereafter.   | Agreed.   |
| 7.  | All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives,  | Complied.   |
|     | Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) act, 1972 etc, shall be obtained, as applicable by project proponents from the respective competent authorities.   | All other applicable statutory clearances has been Obtained.  |
| 18. | The project proponent should advertise in at least two local Newspapers widely circulated in the regions, one of which shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letter are available with the Tamil Nadu State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> . The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bangalore. | Complied.   |
| 19. | Any appeal against this Environmental Clearance shall lie with the national Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Act, 1997.  | Noted.  |

| 20. | A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZillaParisad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.   | Complied.   |
|-----|--|---|
| 21. | 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, So2, Nox (ambient levels as well as stack emissions) or critical sectoral parameters, indicated ror the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain. | The Compliance status of stipulated conditions is uploaded in the company website. Screen Shot of company website is attached as Annexure - 2.  |
| 22. | The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored date (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.  | Complied. Submitting the six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored date to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. |
| 23. | The environmental 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 MoEF by e-mail.  | Complied.   |

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Melamarudur Tuticorin



Date: 27th November 2024

MPGL/ENV/TNPCB/2024-25/22

To

The Director
Ministry of Environment, Forest & Climate Change,
Paryavaran Bhavan,
CGO Complex, Lodhi Road,
New Delhi – 110 003.

Dear Sir,

**SUB:** Change of Control of Coastal Energen Private Limited under CIRP Process after NCLT Order – Reg.

**REF:** Order dated August 30, 2024 in respect of application vide IA(IBC)/2431(CHE)/2023 in IBA/757/2019 pronounced by the Hon'ble NCLT, Division Bench-1, Chennai

### Dear Sir,

This is in reference to the Hon'ble National Company Law Tribunal, Division Bench-1, Chennai ("NCLT"), order dated August 30, 2024, sanctioning the Resolution Plan for acquisition of Coastal Energen Private Limited ("CEPL"), as submitted by the successful resolution applicant, being consortium of Dickey Alternative Investment Trust ("Dickey") and Adani Power Limited ("APL") through Moxie Power Generation Limited ("MPGL" or the "SPV", in which Dickey holds 51% and APL holds 49% of the total equity of the SPV) under the Insolvency and Bankruptcy Code, 2016, as part of the Corporate Insolvency Resolution Process ("CIRP") for CEPL;

Pursuant to aforesaid Resolution Plan, as sanctioned by the NCLT contains inter alia about amalgamation of CEPL with MPGL under the Scheme of Amalgamation (the "Scheme") between Coastal Energen Private Limited ("CEPL" or the "Transferor Company"), and Moxie Power Generation Limited ("MPGL" or the "Transferee Company"), being a part of the Resolution Plan;

In view of above the Scheme has become effective as on August 31, 2024, resulting in the amalgamation of the Transferor Company, with the Transferee Company, and the dissolution of CEPL without winding up and without any further act or deed, with effect from August 31, 2024;

In view of the above, we request you to kindly note the above changes for all future communications. All future communication may be addressed in the name of Moxie Power Generation Limited in place of Coastal Energen Pvt. Limited.

Thanking You, Yours faithfully,

For MOXIE POWER GENERATION LIMITED

HUICOUR

MK Parameswara Station Head

Moxie Power Generation Limited "Adani Corporate House" Shantigram, Near Vaishno Devi Circle, S. G. Highway, Khodiyar, Ahmedabad-382421, Gujarat India CIN: U35100TN2024PLC167065 Tel +91 79 2656 7555 Fax +91 79 2555 7177



### IN THE NATIONAL COMPANY LAW TRIBUNAL DIVISION BENCH (COURT- I) CHENNAI

ATTENDANCE CUM ORDER SHEET OF THE HEARING HELD ON 30.08.2024 THROUGH VIDEO CONFERENCING

PRESENT: HON'BLE SHRI. SANJIV JAIN, MEMBER (JUDICIAL)

HON'BLE SHRI. VENKATARAMAN SUBRAMANIAM, MEMBER (TECHNICAL)

IN THE MATTER OF

: State Bank of India

Ve

Coastal Energen Pvt Ltd

MAIN PETITION NUMBER

: IBA/757/2019

(IA/MA) APPLICATION NUMBERS

IA/2431(CHE)/2023

### <u>ORDER</u>

### IA(IBC)/2431(CHE)/2023

Present: Ld. Counsel Shri. T. Ravichandran for the RP.

Ld. Counsel Shri. Sandeep Singhi along with Counsel Shri. P.

Giridharan for the SRA.

Ld. Counsel Shri. Rangasayee for the Objectors.

Ld. Counsel Ms. Srideepa Bhattacharyaa for the CoC.

Vide separate order pronounced in Open Court, the resolution plan is approved.

IA/2431(CHE)/2023 is disposed of.

The Registry is directed to send e-mail copy of the order forthwith to all the parties and their Learned Counsel for information and for taking necessary steps.

Sd/-

Sd/-

(VENKATARAMAN SUBRAMANIAM)
MEMBER (TECHNICAL)

(SANJIV JAIN) MEMBER (JUDICIAL)

MC

2 X 600 MW THERMAL POWER PLANT

CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT

Daily Average from 01.04.2024 to 30.04.2024

|           |                   |                    |                              |            |                   |       |       | Dally Aver          | age rrom | y Average from 01.04.2024 to 30.04.2024 | 74 to 30.0 | 4.2024                    |           |                   |                   |       |           |                                  |         |       |
|-----------|-------------------|--------------------|------------------------------|------------|-------------------|-------|-------|---------------------|----------|---|------------|---------------------------|-----------|-------------------|-------------------|-------|-----------|----------------------------------|---------|-------|
|           |                   | STATION            | STATION-1 (Near Main Office) | ain Office | (                 |       | STATI | STATION-2 (Near CHP | ar CHP)  |   | 1          | STATION-3 (Near Ash Pond) | 3 (Near A | sh Pond)          |                   | STAT  | TION-4 (S | STATION-4 (Sea Water Pump House) | Pump Ho | nse)  |
| Date      | 802               | XON                | PM10                         | PM2.5      | 00                | 202   | NOX   | PM10                | PM2.5    | 00                                      | 802        | NOX                       | PM10      | PM2.5             | 00                | 202   | XON       | PM10                             | PM2.5   | 00    |
|           | 80                | 80                 | 100                          | 09         | 05                | 80    | 08    | 100                 | 09       | 02                                      | 80         | 80                        | 100       | 09                | 02                | 80    | 80        | 100                              | 09      | 02    |
|           | mg/m <sup>3</sup> | <sub>e</sub> m/gri | ug/m³                        | µg/m³      | mg/m <sup>3</sup> | mg/m³ | mβ/m³ | ng/m³               | µg/m³    | mg/m <sub>3</sub>                       | pg/m³      | ng/m³                     | ng/m3     | hg/m <sub>3</sub> | mg/m <sup>3</sup> | m/6rl | pg/m³     | µg/m³                            | pg/m³   | mg/m³ |
| 1-Apr-24  | 0.9               | 10.0               | 90.0                         | 36.0       | 0.7               | 7.0   | 13.0  | 36.0                | 6.0      | 8.0                                     | 10.0       | 11.0                      | 24.0      | 8.0               | 0.4               | 10.0  | 10.0      | 53.0                             | 32.0    | 0.7   |
| 2-Apr-24  | 0.9               | 11.0               | 75.0                         | 24.0       | 2.0               | 8.0   | 14.0  | 61.0                | 9.0      | 8.0                                     | 10.0       | 11.0                      | 41.0      | 10.0              | 0.4               | 10.0  | 10.0      | 61.0                             | 35.0    | 9.0   |
| 3-Apr-24  | 0.9               | 10.0               | 88.0                         | 26.0       | 0.7               | 8.0   | 14.0  | 55.0                | 0.6      | 9.0                                     | 10.0       | 11.0                      | 29.0      | 0.6               | 6.0               | 10.0  | 10.0      | 61.0                             | 36.0    | 0.7   |
| 4-Apr-24  | 0.9               | 10.0               | 84.0                         | 21.0       | 0.7               | 8.0   | 14.0  | 46.0                | 7.0      | 2.0                                     | 10.0       | 10.0                      | 36.0      | 0.6               | 4.0               | 10.0  | 10.0      | 58.0                             | 35.0    | 0.5   |
| 5-Apr-24  | 5.0               | 11.0               | 79.0                         | 33.0       | 8.0               | 8.0   | 13.0  | 62.0                | 8.0      | 9.0                                     | 10.0       | 8.0                       | 29.0      | 9.0               | 4.0               | 10.0  | 10.0      | 53.0                             | 31.0    | 8.0   |
| 6-Apr-24  | 5.0               | 10.0               | 85.0                         | 31.0       | 0.7               | 11.0  | 12.0  | 0.09                | 7.0      | 9.0                                     | 10.0       | 8.0                       | 29.0      | 10.0              | 4.0               | 10.0  | 10.0      | 0.99                             | 35.0    | 0.7   |
| 7-Apr-24  | 0.9               | 11.0               | 109.3                        | 16.0       | 0.8               | 11.0  | 13.0  | 56.0                | 8.0      | 2.0                                     | 10.0       | 8.0                       | 36.0      | 13.0              | 0.5               | 10.0  | 10.0      | 77.0                             | 35.0    | 0.7   |
| 8-Apr-24  | 0.9               | 0.6                | 98.0                         | 28.0       | 8.0               | 13.0  | 13.0  | 74.0                | 9.0      | 0.8                                     | 11.0       | 8.0                       | 39.0      | 12.0              | 0.4               | 10.0  | 10.0      | 76.0                             | 41.0    | 8.0   |
| 9-Apr-24  | 0.9               | 7.0                | 87.0                         | 19.0       | 0.8               | 12.0  | 11.0  | 52.0                | 7.0      | 0.8                                     | 10.0       | 8.0                       | 41.0      | 9.0               | 6.0               | 9.0   | 10.0      | 56.0                             | 37.0    | 0.7   |
| 10-Apr-24 | 0.9               | 7.0                | 95.0                         | 25.0       | 0.7               | 10.0  | 11.0  | 43.0                | 11.0     | 0.2                                     | 10.0       | 8.0                       | 31.0      | 13.0              | 6.0               | 9.0   | 10.0      | 67.0                             | 53.0    | 7.0   |
| 11-Apr-24 | 5.0               | 8.0                | 67.0                         | 13.0       | 8.0               | 8.0   | 9.0   | 44.0                | 5.0      | 9.0                                     | 8.0        | 7.0                       | 19.0      | 0.9               | 6.0               | 8.0   | 9.0       | 46.0                             | 37.0    | 0.3   |
| 12-Apr-24 | 0.9               | 9.0                | 56.0                         | 21.0       | 0.7               | 0.6   | 10.0  | 31.0                | 7.0      | 0.4                                     | 9.0        | 9.0                       | 24.0      | 9.0               | 6.0               | 9.0   | 10.0      | 43.0                             | 32.0    | 9.0   |
| 13-Apr-24 | 0.9               | 7.0                | 94.0                         | 26.0       | 0.8               | 9.0   | 12.0  | 34.0                | 4.0      | 0.4                                     | 11.0       | 8.0                       | 16.0      | 5.0               | 0.3               | 10.0  | 10.0      | 39.0                             | 25.0    | 0.2   |
| 14-Apr-24 | 7.0               | 7.0                | 94.0                         | 34.0       | 6.0               | 9.0   | 12.0  | 49.0                | 8.0      | 0.3                                     | 11.0       | 8.0                       | 20.0      | 8.0               | 0.3               | 10.0  | 10.0      | 50.0                             | 38.0    | 0.4   |
| 15-Apr-24 | 0.9               | 7.0                | 64.0                         | 26.0       | 6.0               | 8.0   | 12.0  | 36.0                | 0.9      | 0.4                                     | 10.0       | 11.0                      | 16.0      | 7.0               | 0.3               | 10.0  | 10.0      | 40.0                             | 36.0    | 0.3   |
| 16-Apr-24 | 0.9               | 8.0                | 53.0                         | 22.0       | 8.0               | 8.0   | 13.0  | 30.0                | 5.0      | 0.3                                     | 11.0       | 20.0                      | 19.0      | 5.0               | 4.0               | 10.0  | 10.0      | 41.0                             | 86.0    | 4.0   |
| 17-Apr-24 | 0.9               | 7.0                | 86.0                         | 21.0       | 9.0               | 9.0   | 14.0  | 49.0                | 4.0      | 4.0                                     | 11.0       | 24.0                      | 21.0      | 7.0               | 0.3               | 10.0  | 10.0      | 50.0                             | 22.0    | 0.3   |
| 18-Apr-24 | 4.0               | 0.9                | 74.0                         | 30.0       | 0.5               | 10.0  | 13.0  | 61.0                | 6.0      | 0.2                                     | 11.0       | 20.0                      | 31.0      | 9.0               | 0.3               | 10.0  | 10.0      | 59.0                             | 30.0    | 0.3   |
| 19-Apr-24 | 0.9               | 5.0                | 72.0                         | 32.0       | 4.0               | 9.0   | 14.0  | 71.0                | 11.0     | 0.2                                     | 11.0       | 21.0                      | 34.0      | 11.0              | 0.4               | 10.0  | 10.0      | 62.0                             | 47.0    | 4.0   |
| 20-Apr-24 | 0.9               | 5.0                | 53.0                         | 34.0       | 0.5               | 9.0   | 15.0  | 0.99                | 12.0     | 0.2                                     | 11.0       | 19.0                      | 33.0      | 12.0              | 4.0               | 10.0  | 10.0      | 67.0                             | 48.0    | 8.0   |
| 21-Apr-24 | 0.9               | 2.0                | 52.0                         | 43.0       | 0.5               | 9.0   | 15.0  | 64.0                | 12.0     | 0.2                                     | 11.0       | 19.0                      | 34.0      | 13.0              | 0.4               | 10.0  | 10.0      | 75.0                             | 47.0    | 4.0   |
| 22-Apr-24 | 4.0               | 5.0                | 61.0                         | 45.0       | 9.0               | 9.0   | 16.0  | 81.0                | 11.0     | 0.2                                     | 11.0       | 18.0                      | 35.0      | 14.0              | 0.3               | 11.0  | 10.0      | 76.0                             | 0.69    | 0.3   |
| 23-Apr-24 | 5.0               | 5.0                | 58.0                         | 41.0       | 0.5               | 9.0   | 14.0  | 0.09                | 11.0     | 0.2                                     | 11.0       | 16.0                      | 25.0      | 10.0              | 9.0               | 11.0  | 10.0      | 61.0                             | 42.0    | 0.4   |
| 24-Apr-24 | 0.9               | 5.0                | 63.0                         | 12.0       | 0.5               | 9.0   | 14.0  | 41.0                | 12.0     | 0.1                                     | 11.0       | 16.0                      | 34.0      | 10.0              | 4.0               | 11.0  | 10.0      | 76.0                             | 47.0    | 0.4   |
| 25-Apr-24 | 0.9               | 5.0                | 29.0                         | 38.0       | 0.5               | 8.0   | 14.0  | 62.0                | 9.0      | 0.4                                     | 8.0        | 12.0                      | 32.0      | 12.0              | 0.4               | 11.0  | 10.0      | 68.0                             | 43.0    | 4.0   |
| 26-Apr-24 | 5.0               | 6.0                | 44.0                         | 26.0       | 0.4               | 8.0   | 15.0  | 0.69                | 10.0     | 0.4                                     | 5.0        | 11.0                      | 51.0      | 16.0              | 9.4               | 10.0  | 10.0      | 75.0                             | 44.0    | 9.0   |
| 27-Apr-24 | 7.0               | 8.0                | 0.76                         | 32.0       | 0.5               | 7.0   | 14.0  | 54.0                | 9.0      | 0.4                                     | 5.0        | 8.0                       | 51.0      | 15.0              | 0.5               | 9.0   | 10.0      | 63.0                             | 23.0    | 9.0   |
| 28-Apr-24 | 7.0               | 8.0                | 73.0                         | 30.0       | 0.5               | 6.0   | 14.0  | 55.0                | 8.0      | 0.3                                     | 5.0        | 0.6                       | 27.0      | 8.0               | 0.3               | 0.9   | 10.0      | 50.0                             | 32.0    | 8.0   |
| 29-Apr-24 | 7.0               | 8.0                | 88.0                         | 26.0       | 0.5               | 7.0   | 13.0  | 48.0                | 7.0      | 0.2                                     | 5.0        | 0.6                       | 28.0      | 8.0               | 0.3               | 0.9   | 10.0      | 62.0                             | 37.0    | 8.0   |
| 30-Apr-24 | 7.0               | 8.0                | 85.0                         | 28.0       | 0.4               | 0.9   | 17.0  | 37.0                | 7.0      | 0.2                                     | 5.0        | 0.6                       | 26.0      | 7.0               | 4.0               | 0.9   | 10.0      | 50.0                             | 29.0    | 8.0   |
| Remarks:  | IN                |                    |                              |            |                   |       |       |                     |          |   |            |                           |           |                   |                   |       |           | 1                                |         |       |

Melamarudur O Melamarudur Tuticorin MK Parameswaran Station Head

For Moxie Power Generation Lim

2 X 600 MW THERMAL POWER PLANT

CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT Daily Average from 01.05.2024 to 31.05.2024

| ear CHP)         STATION-3           for 50         SO2         NOX           for 50         SO2         NOX           for 50         SO2         NOX           for 50         SO3         Hog/m³           for 50         O.3         4.7         7.8           for 50         O.4         4.9         10.8           for 60         O.4         4.9         10.8           for 60         O.6         4.7         7.9           for 60         O.6         4.7         4.9         9.3           for 7         O.6         4.4         12.4         10.6           for 7         0.6         4.7         4.9         9.3           for 7         0.6         4.4         12.4         12.4           for 7         0.6         4.4         12.4         13.0           for 7         0.6         4.4         12.4         14.0           for 8         0.7         4.4         12.4         14.0           for 9         0.6         4.4         12.4         14.0           for 9         0.6         4.4         12.4         14.0           for 9         0.6  | Marie   Mari | Company of the last of the las | 100                   |                   | 3   |      |               | ٥      | aily Avera | Daily Average from 01.05.2024 to 31.05.2024 | 01.05.202         | 24 to 31.0 | 5.2024   |           |          |       |       |                   |           |         |                   |
|---|--|--|-----------------------|-------------------|-----|------|---------------|--------|------------|---|-------------------|------------|----------|-----------|----------|-------|-------|-------------------|-----------|---------|-------------------|
| PMM 0         PM 25         CO         SO2         NOX         PMM 0         PM 25         CO         SO2         NOX         PM 0         END         GO         SO2         NOX         PM 0         PM 0         GO         SO2         NOX         PM 0         GO         BO         HOD         PM 0  | PMM10         PMM25         CO         SO2         NOX         PMM10         PMM25         CO         SO2         NOX         PMM10         PMM25         CO         SO2         NOX         PMM20         GEO         SO2         NOX         PMM10         PMM20         PMM   | STATION-1 (Near Main Office)   | -1 (Near Main Office) | lain Office)      | (a  |      |               | STATIC | N-2 (Near  | CHP)  |                   | U)         | STATION- | 3 (Near A | sh Pond) |       | STA   | TION-4 (S         | sea Water | Pump Ho | (asn)             |
| 100         60         80         100         60         80         100         60         80         100         60         80         100         60         80         100         100         90         80         100         100         90         90   | 100         60         02         80         100         6   | NOX PM10 PM2.5 CO SO2  | PM2.5 CO              | 00                |     | SO   | 2             | NOX    | PM10       | PM2.5                                       | 00                | 802        | XON      | PM10      | PM2.5    | 00    | 802   | NOX               | PM10      | PM2.5   | 00                |
| Pagental         Lightural         Loginal  | pg/m³         pg/m³ <th< td=""><td>80 100 60 02 80</td><td>60 02</td><td>02</td><td></td><td>80</td><td></td><td>80</td><td>100</td><td>09</td><td>02</td><td>80</td><td>80</td><td>100</td><td>09</td><td>02</td><td>80</td><td>80</td><td>100</td><td>09</td><td>02</td></th<>   | 80 100 60 02 80  | 60 02                 | 02                |     | 80   |               | 80     | 100        | 09  | 02                | 80         | 80       | 100       | 09       | 02    | 80    | 80                | 100       | 09      | 02                |
| 703         65         0.3         4.7         7.8         28.3         7.8         0.2         5.7         9.7         60.3         26.4           83.4         6.5         0.4         4.5         9.3         36.1         13.4         0.3         6.5         9.7         77.7         50.0           81.0         0.4         4.5         10.0         36.1         14.2         0.3         4.3         9.7         77.7         50.0           91.0         10.6         0.4         4.9         10.0         32.7         13.2         0.3         4.3         9.7         74.3         50.0           93.7         7.5         0.3         4.7         1.0         42.9         13.2         0.3         4.3         9.7         74.3         35.6           93.7         7.5         0.3         4.7         1.0         1.2         1.2         0.3         4.3         1.4         1.2         1.2         0.3         4.3         1.4         1.4         1.4         1.4         0.2         4.2         0.2         4.3         0.4         1.4         0.2         4.3         0.2         4.3         0.4         0.2         4.3         0.2   | 70.3         6.5         0.3         4.7         7.8         28.3         7.8         0.2         6.7         9.7         60.3         5.6           83.4         6.5         0.4         4.5         9.3         36.1         13.4         0.3         65.5         9.7         9.0         5.0           83.4         6.5         0.4         4.5         10.8         4.26         10.2         4.9         9.7   | 3 µg/m <sup>3</sup>  | µg/m³ mg/m³           | mg/m <sub>3</sub> |     | ш/бп |               | ma/m³  | ng/m3      | pg/m³                                       | mg/m <sub>3</sub> | ng/m3      | ng/m3    | ng/m³     | ng/m3    | mg/m3 | ug/m³ | hg/m <sup>3</sup> | µg/m³     | µg/m³   | mg/m <sup>3</sup> |
| 834         65         0.4         45         93         361         134         03         55         97         777         620           870         944         0.4         4.5         100         36.7         136         0.2         4.9         9.7         74.8         19.6           870         944         0.4         4.9         10.8         4.7         14.2         0.3         4.9         9.7         94.8         19.6           93.0         7.5         0.3         4.7         10.8         4.1         11.8         0.2         4.9         9.7         74.3         36.8           90.7         5.6         0.8         4.6         10.6         4.1         11.8         0.2         4.0         9.7         74.3         36.8           85.0         6.8         0.7         4.9         9.9         60.4         16.8         0.2         4.2         9.7         76.8         36.8           85.0         8.8         0.7         4.4         12.4         13.4         13.4         13.4         13.4         13.4         13.4         13.4         13.4         13.4         13.4         13.4         13.4         13.4  | 834         65         0.4         45         9.3         36.1         134         0.3         55         9.7         777         62.0           877         0.4         65         10.0         36.7         13.0         0.2         4.9         9.7         77.7         62.0           877         10.6         10.6         36.7         14.2         0.2         4.9         9.7         94.8         19.5           93.7         7.5         0.3         4.7         7.9         52.7         14.2         0.2         4.9         9.7         74.3         35.6           90.7         7.5         0.6         4.6         10.6         41.7         11.8         0.2         4.0         9.7         74.3         35.8           85.0         6.8         4.7         8.6         51.8         14.8         0.2         4.0         9.7         74.9         15.8         9.7         4.0         9.7         4.0         9.0         4.0         9.0         4.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0   | 81.0 28.0 0.5  | 28.0 0.5              | 0.5               |     | 6.1  | $\neg$        | 16.7   | 70.3       | 6.5   | 0.3               | 4.7        | 7.8      | 28.3      | 7.8      | 0.2   | 5.7   | 9.7               | 60.3      | 26.4    | 8.0               |
| 870         944         044         552         100         367         12.0         02         49         97         94.8         19.5           910         10.6         0.4         4.9         10.8         4.2         12.0         0.3         65         9.7         94.0         90.7           937         7.5         0.6         4.4         10.8         4.7         11.8         0.2         4.2         9.7         76.3         50.8           907         5.6         0.8         4.7         8.6         51.8         14.8         0.2         4.2         9.7         76.3         50.8           850         8.6         0.8         4.7         8.6         60.4         16.8         0.2         4.2         9.7         76.3         56.9           850         8.6         0.7         4.8         10.4         10.4         10.8         0.7         4.2         9.7         40.8           850         8.6         0.7         4.4         10.4         10.4         10.8         0.7         4.2         9.7         9.7         31.3           850         8.6         1.8         51.8         1.4         10.2   | 87.0         944         0.4         52         10.0         36.7         12.0         0.2         4.9         9.7         94.8         19.5           91.0         10.6         10.4         4.9         10.8         4.29         14.2         0.3         4.5         9.7         94.8         19.5           93.7         7.5         0.6         4.6         10.8         4.7         11.8         0.3         4.2         9.7         74.3         50.8           90.7         5.6         0.8         4.7         18.6         51.8         14.8         0.2         4.2         9.7         74.3         53.8           90.7         5.6         0.8         4.7         18.6         51.8         14.8         0.2         4.2         9.7         74.3         13.3           42.3         10.3         6.8         0.7         4.4         12.4         13.4         0.3         3.1         9.7         4.2         9.8         9.0         4.9         4.0         9.7         4.2         9.7         4.2         9.7         4.2         9.7         4.2         9.7         4.2         9.8         9.0         4.2         9.0         4.2         9.0<   | 79.0 43.0 0.5  | 43.0 0.5              | 9.0               |     | 6.1  | $\neg$        | 15.8   | 83.4       | 6.5   | 0.4               | 4.5        | 9.3      | 36.1      | 13.4     | 0.3   | 5.5   | 9.7               | 77.7      | 52.0    | 6.0               |
| 91.0         10.6         0.4         4.9         10.8         42.9         14.2         0.3         5.5         9.7         91.0         50.4           93.7         7.5         0.3         4.7         7.9         52.7         13.5         0.3         4.3         9.7         74.3         33.6           793.7         5.5         0.8         4.7         1.0         6.6         4.6         10.8         4.7         1.1.8         0.2         4.2         9.7         74.3         33.6           90.7         5.6         0.8         4.7         1.6         6.6         4.1         11.8         0.2         4.2         9.7         97.0         86.9         36.0           42.3         10.3         0.7         4.4         9.3         44.1         13.4         0.3         3.1         9.7         42.9         9.7         86.0         9.7         9.7         9.8         9.7         86.0         9.7         9.8         9.7         9.7         9.8         9.7         9.7         9.8         9.8         9.7         86.0         9.8         9.7         86.0         9.8         9.7         86.0         9.8         9.0         9.7         9.  | 91.0         10.6         0.4         4.9         10.8         42.9         14.2         0.3         5.5         9.7         91.0         50.4           93.7         7.5         0.3         4.7         7.9         10.8         4.7         7.9         62.7         13.5         9.7         74.3         35.6           93.7         5.3         0.3         4.7         7.9         6.0         4.7         7.9         8.0         9.7         74.3         35.6           90.7         5.6         0.8         4.7         8.6         51.8         10.3         3.9         9.7         74.3         35.6           42.3         10.3         6.0         4.4         12.4         12.4         13.4         0.3         3.1         9.7         86.2         38.1           42.3         10.3         6.0         4.4         12.4         12.4         13.4         0.3         3.1         9.7         86.3         38.1           44.4         12.4         12.4         12.4         12.4         12.4         13.4         0.3         3.1         9.7         48.3         38.1           54.4         1.4         12.4         12.4   | 69.0 33.0 0.5  | 33.0 0.5              | 0.5               |     | 7.0  | $\rightarrow$ | 17.5   | 87.0       | 4.6   | 4.0               | 5.2        | 10.0     | 36.7      | 12.0     | 0.2   | 4.9   | 9.7               | 94.8      | 19.5    | 6.0               |
| 937         7.5         0.3         4.7         7.9         62.7         13.6         0.3         4.7         7.9         62.7         13.6         0.3         4.7         7.9         93.7         4.8         0.2         4.0         9.7         7.6         9.7         7.8         9.8         9.8         9.8         9.7         7.6         9.7         7.6         9.8         9.8         9.1         9.7         7.6         9.7         7.8         9.8         9.8         9.8         9.7         9.7         7.6         9.8         9.8         9.9         9.7         9.7         7.6         9.8         9.8         9.7         9.7         7.6         9.9         9.7         9.7         9.7         9.8         9.8         9.7         9.7         9.8         9.8         9.8         9.7         9.7         9.9         9.9         9.9         9.7         9.7         9.7         9.8         9.9         9.7         9.7         9.8         9.9         9.9         9.7         9.7         9.7         9.8         9.9         9.7         9.7         9.7         9.7         9.8         9.9         9.9         9.9         9.9         9.9         9.9         9.   | 937         7.5         0.3         4.7         7.9         52.7         13.5         0.3         4.3         7.7         7.9         52.7         13.5         0.3         4.3         9.7         74.3         33.6           79.3         5.5         0.6         4.6         10.6         4.1         11.8         0.2         4.0         9.7         75.8         26.8           85.0         8.2         0.8         4.4         10.6         60.4         14.8         0.2         4.2         9.7         75.0         26.3           42.3         10.3         0.7         4.4         12.4         28.9         9.1         0.2         4.2         9.7         50.0         9.7         40.8           44.2         1.2         9.3         44.1         13.4         0.2         4.2         9.7         50.0         20.3         3.1         9.7         42.9         9.7         40.8         10.8         6.0         4.2         10.8         9.7         40.8         10.8         6.0         4.2         10.9         9.7         40.8         10.8         6.0         10.8         9.7         40.8         10.8         10.8         10.8         10.8   | 7.9 84.0 32.0 0.5 8.6  | 32.0 0.5              | 9.0               |     | 9.8  |               | 17.5   | 91.0       | 10.6  | 4.0               | 4.9        | 10.8     | 42.9      | 14.2     | 0.3   | 5.5   | 9.7               | 91.0      | 50.4    | 6.0               |
| 793         5.3         0.6         4.6         10.6         41.7         11.8         0.2         4.0         9.7         75.8         26.8           90.7         5.6         0.8         4.7         8.6         51.8         14.8         0.2         4.2         9.7         75.8         26.8           85.0         0.8         4.7         8.6         51.8         14.8         0.2         4.2         9.7         51.7         31.3           42.3         10.3         0.7         4.4         12.4         28.9         9.1         0.2         4.9         9.7         65.0         40.8           44.2         7.8         0.6         4.4         12.4         28.9         9.1         0.2         4.9         4.2         3.7         48.0         6.0         9.7         46.8         4.0         9.7         46.8         4.0         9.7         46.8         4.0         9.2         4.9         4.0         9.0         4.0         9.7         4.0         9.7         48.3         9.7         48.3         9.7         48.8         9.7         48.8         9.7         48.9         9.0         4.0         9.0         9.0         9.0         9.0  | 793         5.3         0.6         4.6         41.7         11.8         0.2         4.0         9.7         75.8         2.6           99.7         5.6         0.8         4.7         8.6         51.8         14.8         0.2         4.2         9.7         75.8         26.8           85.0         5.6         0.8         4.7         8.6         51.8         14.8         0.2         4.2         9.7         56.0         3.3         3.3         3.9         9.7         56.0         3.8         3.1         3.7         58.0         3.8         3.1         9.7         58.0         3.8         3.1         9.7         58.0         3.8         3.1         9.7         4.8         3.8         3.8         3.8         3.8         3.2         4.9         9.7         4.9         3.8         3.2         4.9         4.2         4.9  | 7.9 87.4 23.0 0.5 12.8   | 23.0 0.5              | 0.5               |     | 12.8 |               | 14.6   | 93.7       | 7.5   | 0.3               | 4.7        | 7.9      | 52.7      | 13.5     | 0.3   | 4.3   | 5.7               | 74.3      | 33.6    | 6.0               |
| 90.7         5.6         0.8         4.7         8.6         51.8         4.2         4.2         9.7         91.7         31.3         31.3         31.9         91.7         51.3         31.3         31.3         31.4         31.3         31.3         31.4         31.3         31.3         31.4         31.3         31.3         31.4         32.0         31.4         32.1         41.2         41.4         13.4         0.3         31.1         97.7         65.0         40.8         40.8         41.2         65.0         40.8         40.8         41.2         65.0         40.8         40.8         41.2         97.7         65.0         40.8         40.8         40.9         40.8         40.9         40.8         40.9         40.8         40.9 <td>907         5.6         0.8         4.7         8.6         61.8         14.8         0.2         4.2         9.7         91.7         31.3         92.1         91.0<td>7.7 74.1 18.0 0.5 10.8</td><td>18.0 0.5</td><td>0.5</td><td></td><td>10.8</td><td>_</td><td>13.8</td><td>79.3</td><td>5.3</td><td>9.0</td><td>4.6</td><td>10.6</td><td>41.7</td><td>11.8</td><td>0.2</td><td>4.0</td><td>5.6</td><td>75.8</td><td>26.8</td><td>1.0</td></td> | 907         5.6         0.8         4.7         8.6         61.8         14.8         0.2         4.2         9.7         91.7         31.3         92.1         91.0 <td>7.7 74.1 18.0 0.5 10.8</td> <td>18.0 0.5</td> <td>0.5</td> <td></td> <td>10.8</td> <td>_</td> <td>13.8</td> <td>79.3</td> <td>5.3</td> <td>9.0</td> <td>4.6</td> <td>10.6</td> <td>41.7</td> <td>11.8</td> <td>0.2</td> <td>4.0</td> <td>5.6</td> <td>75.8</td> <td>26.8</td> <td>1.0</td>  | 7.7 74.1 18.0 0.5 10.8   | 18.0 0.5              | 0.5               |     | 10.8 | _             | 13.8   | 79.3       | 5.3   | 9.0               | 4.6        | 10.6     | 41.7      | 11.8     | 0.2   | 4.0   | 5.6               | 75.8      | 26.8    | 1.0               |
| 85.0         8.8         0.7         4.9         9.9         60.4         15.8         0.3         3.9         9.7         86.2         35.1           42.3         10.3         0.7         4.4         9.3         44.1         13.4         0.3         3.1         9.7         65.0         40.8           54.4         7.8         0.6         4.4         12.4         28.9         9.1         0.2         4.9         9.7         65.0         40.8           14.1         6.0         0.6         4.7         13.0         29.3         7.6         0.3         4.2         9.7         65.0         40.8           44.2         4.2         0.6         4.8         11.8         38.0         8.2         0.4         3.8         9.7         42.3         22.0           27.2         4.2         0.6         6.3         13.1         10.0         0.2         6.4         4.4         11.0         10.0         9.7         49.7         11.0         10.0         10.0         6.2         40.7         11.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0   | 850         88         0.7         4.9         9.9         60.4         16.8         0.3         3.9         9.7         86.2         35.1           42.3         10.3         0.7         4.4         9.3         44.1         13.4         0.3         3.1         9.7         65.0         40.8           54.4         7.8         0.6         4.4         12.4         28.9         9.1         0.2         4.9         9.7         65.0         40.8           14.1         6.0         0.6         4.7         13.0         28.3         7.6         0.3         4.2         9.7         65.0         40.8           44.2         4.2         0.6         4.8         11.8         38.0         0.2         4.9         9.7         42.0         10.0           27.4         4.2         0.6         4.9         11.8         38.0         0.2         4.9         9.7         44.7         11.6         11.0         0.2         6.0         9.7         44.7         11.6         11.0         0.2         6.0         9.7         44.7         11.6         11.0         0.2         6.3         9.7         44.7         11.6         11.0         0.2 <td< td=""><td>7.7 63.5 13.0 0.5 11.0</td><td>13.0 0.5</td><td>0.5</td><td></td><td>11.0</td><td></td><td>14.6</td><td>2.06</td><td>5.6</td><td>8.0</td><td>4.7</td><td>8.6</td><td>51.8</td><td>14.8</td><td>0.2</td><td>4.2</td><td>9.7</td><td>91.7</td><td>31.3</td><td>1.0</td></td<>  | 7.7 63.5 13.0 0.5 11.0   | 13.0 0.5              | 0.5               |     | 11.0 |               | 14.6   | 2.06       | 5.6   | 8.0               | 4.7        | 8.6      | 51.8      | 14.8     | 0.2   | 4.2   | 9.7               | 91.7      | 31.3    | 1.0               |
| 42.3         10.3         0.7         4.4         9.3         44.1         13.4         0.3         3.1         9.7         65.0         40.8           54.4         7.8         0.6         4.4         12.4         28.9         9.1         0.2         4.9         9.7         65.0         40.8           14.1         6.0         0.6         4.4         12.4         28.3         7.6         0.3         4.2         9.7         42.3         25.0           44.2         4.3         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         42.3         25.0           27.4         4.2         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         42.3         25.0           27.4         4.2         0.6         4.8         11.8         16.0         10.0         2.2         4.7         16.0           29.3         4.8         1.7         1.2         11.2         11.0         0.2         6.3         9.7         4.7         16.0           29.3         4.8         0.7         4.9         11.2         1.2         11.0         0.2<  | 42.3         10.3         0.7         4.4         9.3         44.1         13.4         0.3         3.1         9.7         65.0         40.8           54.4         7.8         0.6         4.4         12.4         28.9         9.1         0.2         4.9         9.7         65.0         40.8           14.1         6.0         0.6         4.4         12.4         28.9         9.1         0.2         4.9         9.7         65.0         60.9           14.1         6.0         0.6         4.8         11.8         38.0         8.2         0.4         3.8         9.7         42.3         22.0           27.2         4.2         0.6         6.8         11.6         15.2         11.0         0.2         6.0         6.4         11.0         11.0         0.2         6.0         6.4         11.0         13.1         10.0         0.2         6.0         6.0         44.7         16.0         10.0         0.2         6.0         6.0         11.0         0.2         6.0         6.0         11.0         0.2         6.0         6.0         11.0         0.2         6.0         6.0         11.0         0.0         6.0         6.0 <td< td=""><td>91.4</td><td>25.0 0.5</td><td>0.5</td><td></td><td>11.6</td><td></td><td>15.8</td><td>85.0</td><td>8.8</td><td>0.7</td><td>4.9</td><td>6.6</td><td>60.4</td><td>15.8</td><td>0.3</td><td>3.9</td><td>9.7</td><td>86.2</td><td>35.1</td><td>1.0</td></td<>  | 91.4   | 25.0 0.5              | 0.5               |     | 11.6 |               | 15.8   | 85.0       | 8.8   | 0.7               | 4.9        | 6.6      | 60.4      | 15.8     | 0.3   | 3.9   | 9.7               | 86.2      | 35.1    | 1.0               |
| 54.4         7.8         0.6         4.4         12.4         28.9         9.1         0.2         4.9         9.7         63.0         29.3           14.1         6.0         0.6         4.7         13.0         29.3         7.6         0.3         4.2         9.7         42.3         25.0           44.2         4.3         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         42.3         25.0           27.4         4.2         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         42.3         25.0           27.4         4.2         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         49.1         25.0           27.2         0.6         4.8         11.2         15.0         13.1         8.0         0.2         4.4         9.7         4.0         13.0           29.3         4.8         0.7         4.9         11.2         16.0         0.2         6.2         8.0         14.7         16.0           29.3         4.8         0.7         4.9         13.1         18.2<  | 54.4         7.8         0.6         4.4         12.4         28.9         9.1         0.2         4.9         9.7         53.0         29.3           14.1         6.0         0.6         4.7         13.0         29.3         7.6         0.3         4.2         9.7         53.0         29.3           44.2         4.3         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         42.3         22.0           27.4         4.2         0.6         6.3         11.8         10.0         0.2         6.4         9.7         43.1         22.0           27.4         4.2         0.6         6.3         14.0         15.2         11.0         0.2         6.4         9.7         43.1         22.0           27.2         2.7         0.8         4.7         12.9         13.1         80         0.2         6.4         9.7         43.7         16.6           29.3         4.8         0.7         4.9         13.2         13.1         80         0.2         6.3         80.7         81.2         60         13.2         13.2         13.2         13.2         13.2         13.2         1   | 7.3 82.0 31.0 0.5 10.5   | 31.0 0.5              | 0.5               |     | 10.5 |               | 13.5   | 42.3       | 10.3  | 0.7               | 4.4        | 9.3      | 44.1      | 13.4     | 0.3   | 3.1   | 9.7               | 65.0      | 40.8    | 6.0               |
| 14.1         6.0         0.6         4.7         13.0         29.3         7.6         0.3         4.2         9.7         4.2         20.0           44.2         4.3         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         43.1         23.0           27.4         4.2         0.6         4.8         11.8         36.0         11.0         0.2         5.0         9.7         43.1         16.0           27.2         2.7         0.8         4.7         12.9         13.1         8.0         0.2         4.4         9.7         41.7         16.0           29.3         4.8         0.7         4.9         11.2         16.0         10.0         0.2         6.4         9.7         18.0         18.0         18.0         9.2         6.3         4.7         18.0         18.0         9.2         6.3         9.7         48.0         18.0         9.0 </td <td>14.1         6.0         0.6         4.7         13.0         29.3         7.6         0.3         4.2         9.7         42.3         22.0           44.2         4.3         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         43.1         23.1           27.4         4.2         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         43.1         23.1           27.2         4.2         0.6         5.3         14.0         15.2         11.0         0.2         6.0         9.5         44.7         16.0           29.3         4.8         0.7         4.9         17.2         16.0         10.0         0.2         6.5         8.7         18.0</td> <td>7.1 69.3 22.0 0.5 11.1</td> <td>22.0 0.5</td> <td>0.5</td> <td></td> <td>11.1</td> <td></td> <td>12.1</td> <td>54.4</td> <td>7.8</td> <td>9.0</td> <td>4.4</td> <td>12.4</td> <td>28.9</td> <td>9.1</td> <td>0.2</td> <td>4.9</td> <td>9.7</td> <td>53.0</td> <td>29.3</td> <td>6.0</td>  | 14.1         6.0         0.6         4.7         13.0         29.3         7.6         0.3         4.2         9.7         42.3         22.0           44.2         4.3         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         43.1         23.1           27.4         4.2         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         43.1         23.1           27.2         4.2         0.6         5.3         14.0         15.2         11.0         0.2         6.0         9.5         44.7         16.0           29.3         4.8         0.7         4.9         17.2         16.0         10.0         0.2         6.5         8.7         18.0   | 7.1 69.3 22.0 0.5 11.1   | 22.0 0.5              | 0.5               |     | 11.1 |               | 12.1   | 54.4       | 7.8   | 9.0               | 4.4        | 12.4     | 28.9      | 9.1      | 0.2   | 4.9   | 9.7               | 53.0      | 29.3    | 6.0               |
| 44.2         4.3         0.6         4.8         11.8         36.0         8.2         0.4         3.8         9.7         43.1         23.1           27.4         4.2         0.6         5.3         14.0         15.2         11.0         0.2         5.0         9.5         44.7         16.6           27.2         2.7         0.8         4.7         12.9         13.1         8.0         0.2         4.4         9.7         43.7         16.6           29.3         4.8         0.7         4.8         11.2         16.6         10.0         0.2         4.4         9.7         44.7         16.0           41.2         9.3         4.8         0.7         6.7         0.2         6.7         6.3         11.3         11.3           41.2         9.0         0.6         4.9         11.2         16.7         0.2         6.3         9.7         48.0         18.1           43.1         9.0         0.5         6.2         13.1         18.1         6.9         0.3         5.9         9.7         48.0         18.1           43.1         8.0         0.5         6.2         13.2         18.2         18.2         18.  | 44.2         4.3         0.0         4.8         11.8         36.0         8.2         0.4         3.8         9.7         43.1         23.1           27.4         4.2         0.6         5.3         14.0         15.2         11.0         0.2         5.0         9.5         4.7         16.6           27.2         2.7         0.8         4.7         12.9         13.1         8.0         0.2         4.4         9.7         31.2         18.0           29.3         4.8         0.7         4.9         11.2         16.6         10.0         0.2         6.5         8.5         26.3         11.3         18.0           41.2         9.3         4.8         0.7         6.7         0.2         6.5         8.6         18.0         11.3         18.0         18.0         0.2         6.3         8.6         4.7         18.0         18.0         0.2         6.3         8.6         4.7         18.0         18.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0         9.0 </td <td>7.0 84.4 16.0 0.5 8.1</td> <td>16.0 0.5</td> <td>0.5</td> <td></td> <td>8.1</td> <td></td> <td>13.1</td> <td>14.1</td> <td>0.9</td> <td>9.0</td> <td>4.7</td> <td>13.0</td> <td>29.3</td> <td>9.7</td> <td>0.3</td> <td>4.2</td> <td>9.7</td> <td>42.3</td> <td>22.0</td> <td>6.0</td>   | 7.0 84.4 16.0 0.5 8.1  | 16.0 0.5              | 0.5               |     | 8.1  |               | 13.1   | 14.1       | 0.9   | 9.0               | 4.7        | 13.0     | 29.3      | 9.7      | 0.3   | 4.2   | 9.7               | 42.3      | 22.0    | 6.0               |
| 27.4         4.2         0.6         5.3         14.0         15.2         11.0         0.2         5.0         9.5         44.7         16.6           27.2         2.7         0.8         4.7         12.9         13.1         8.0         0.2         4.4         9.7         31.2         18.0           29.3         4.8         0.7         4.9         11.2         16.6         10.0         0.2         5.5         8.5         26.3         11.3         11.3           41.2         9.3         4.8         17.2         16.6         10.0         0.2         6.3         9.7         49.4         42.0           39.5         7.5         0.5         6.2         13.0         18.1         6.7         0.2         6.3         9.7         49.4         42.0           52.1         9.0         0.5         6.2         13.0         18.1         6.3         6.3         9.7         48.5         18.6           37.3         7.9         0.5         5.4         16.2         19.8         6.9         0.3         5.8         9.7         48.7         18.6           37.3         7.9         0.5         5.4         16.2         1  | 27.4         4.2         0.6         5.3         14.0         15.2         11.0         0.2         5.0         9.5         4.7         16.6         17.0         17.0         0.2         4.4         9.7         31.2         18.0           29.3         4.8         0.7         4.9         11.2         16.6         10.0         0.2         5.5         8.5         26.3         11.3           41.2         9.3         4.8         1.7         16.6         10.0         0.2         6.5         8.5         26.3         11.3         18.0           41.2         9.3         4.8         1.2         18.1         6.0         0.2         6.3         9.7         49.4         11.3         11.3           39.5         7.5         0.5         6.2         13.0         18.1         6.9         0.3         5.8         9.7         48.6         18.6           31.0         8.0         0.5         6.2         13.1         18.9         5.8         0.3         5.8         9.7         48.7         18.7           31.0         8.0         0.6         6.2         13.1         18.9         5.8         0.3         5.9         9.7         4   | 7.7 91.8 16.0 0.5 5.8  | 16.0 0.5              | 0.5               |     | 5.8  |               | 14.4   | 44.2       | 4.3   | 9.0               | 4.8        | 11.8     | 36.0      | 8.2      | 0.4   | 3.8   | 9.7               | 43.1      | 23.1    | 6.0               |
| 27.2         2.7         0.8         4.7         12.9         13.1         8.0         0.2         4.4         9.7         31.2         18.0           29.3         4.8         0.7         4.9         11.2         16.6         10.0         0.2         5.5         8.5         26.3         11.3           41.2         9.3         0.6         4.9         11.2         16.6         10.0         0.2         5.5         8.5         26.3         11.3         11.3           41.2         9.3         0.6         4.9         13.4         19.2         6.7         0.2         6.3         9.7         49.4         42.0           52.1         9.0         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         48.6         18.6           37.3         7.9         0.7         5.4         16.2         19.8         5.9         0.3         5.8         9.7         48.7         18.6           37.3         7.9         0.5         5.4         18.7         18.9         0.3         5.8         5.9         48.7         18.7           37.3         8.9         0.5         5.8         13.  | 27.2         2.7         0.8         4.7         12.9         13.1         8.0         0.2         4.4         9.7         31.2         18.0           29.3         4.8         0.7         4.9         11.2         16.6         10.0         0.2         5.5         8.5         26.3         11.3           41.2         9.3         4.8         1.2         16.6         10.0         0.2         6.3         9.7         49.4         42.0           39.5         7.5         0.5         4.8         1.2         6.7         0.2         6.3         9.7         48.6         18.0           52.1         9.0         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         48.6         18.6           37.3         7.9         0.7         5.4         16.2         19.8         5.9         0.3         5.8         9.7         48.3         40.7           31.0         8.0         0.5         5.8         13.4         32.5         9.0         0.3         5.8         9.7         48.8         10.7           31.0         8.0         0.5         5.5         13.1         18.9         5.8 </td <td>0.5 5.8</td> <td>15.0 0.5 5.8</td> <td>0.5 5.8</td> <td>5.8</td> <td></td> <td></td> <td>15.7</td> <td>27.4</td> <td>4.2</td> <td>9.0</td> <td>5.3</td> <td>14.0</td> <td>15.2</td> <td>11.0</td> <td>0.2</td> <td>5.0</td> <td>9.5</td> <td>44.7</td> <td>16.6</td> <td>6.0</td>  | 0.5 5.8  | 15.0 0.5 5.8          | 0.5 5.8           | 5.8 |      |               | 15.7   | 27.4       | 4.2   | 9.0               | 5.3        | 14.0     | 15.2      | 11.0     | 0.2   | 5.0   | 9.5               | 44.7      | 16.6    | 6.0               |
| 29.3         4.8         0.7         4.9         11.2         16.6         10.0         0.2         6.5         8.5         26.3         11.3           41.2         9.3         0.6         4.9         13.4         19.2         6.7         0.2         6.3         9.7         49.4         42.0           39.5         7.5         0.5         4.8         13.4         19.2         6.7         0.2         6.3         9.7         49.4         42.0           52.1         9.0         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         48.6         18.6           37.3         7.9         0.5         6.9         0.3         5.8         0.7         48.6         18.6           31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.8         9.7         48.8         40.7           34.7         4.9         0.5         5.6         12.6         15.3         7.0         0.3         5.8         9.7         48.8         18.7           29.8         8.0         0.4         5.7         14.1         14.0         9.0         0.3 </td <td>29.3         4.8         0.7         4.9         11.2         16.6         10.0         0.2         5.5         8.5         26.3         11.3           41.2         9.3         0.6         4.9         11.4         19.2         6.7         0.2         6.3         9.7         49.4         42.0           39.5         7.5         0.5         6.2         13.0         18.1         6.9         0.3         5.8         9.7         49.4         42.0           52.1         9.0         0.5         6.2         13.0         18.1         6.9         0.3         5.8         9.7         48.6         18.6           52.1         9.0         0.5         6.8         12.5         22.8         7.8         0.3         5.8         9.7         48.6         18.6           31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.8         9.7         48.9         18.7         18.5           31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.8         9.7         48.9         18.7           29.8         8.0         0.7         4.8&lt;</td> <td>0.5 6.1</td> <td>11.0 0.5 6.1</td> <td>0.5 6.1</td> <td>6.1</td> <td></td> <td>2</td> <td>18.1</td> <td>27.2</td> <td>2.7</td> <td>8.0</td> <td>4.7</td> <td>12.9</td> <td>13.1</td> <td>8.0</td> <td>0.2</td> <td>4.4</td> <td>9.7</td> <td>31.2</td> <td>18.0</td> <td>9.0</td>  | 29.3         4.8         0.7         4.9         11.2         16.6         10.0         0.2         5.5         8.5         26.3         11.3           41.2         9.3         0.6         4.9         11.4         19.2         6.7         0.2         6.3         9.7         49.4         42.0           39.5         7.5         0.5         6.2         13.0         18.1         6.9         0.3         5.8         9.7         49.4         42.0           52.1         9.0         0.5         6.2         13.0         18.1         6.9         0.3         5.8         9.7         48.6         18.6           52.1         9.0         0.5         6.8         12.5         22.8         7.8         0.3         5.8         9.7         48.6         18.6           31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.8         9.7         48.9         18.7         18.5           31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.8         9.7         48.9         18.7           29.8         8.0         0.7         4.8<   | 0.5 6.1  | 11.0 0.5 6.1          | 0.5 6.1           | 6.1 |      | 2             | 18.1   | 27.2       | 2.7   | 8.0               | 4.7        | 12.9     | 13.1      | 8.0      | 0.2   | 4.4   | 9.7               | 31.2      | 18.0    | 9.0               |
| 41.2         9.3         0.6         4.9         13.4         19.2         6.7         0.2         6.3         9.7         49.4         42.0           39.5         7.5         0.5         5.2         13.0         18.1         6.9         0.3         3.9         9.7         48.6         42.0           52.1         9.0         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         48.6         18.6         18.6           37.3         7.9         0.5         6.8         12.5         22.8         7.8         0.3         5.8         9.7         48.6         18.6  | 41.2         9.3         0.6         4.9         13.4         19.2         6.7         0.2         6.3         9.7         49.4         42.0           39.5         7.5         0.5         5.2         13.0         18.1         6.9         0.3         9.9         9.3         48.6         18.6           52.1         9.0         0.5         6.8         12.5         22.8         7.8         0.3         5.8         9.7         51.7         36.4           37.3         7.9         0.7         5.4         16.2         19.8         5.9         0.3         5.8         9.7         51.7         36.4           31.0         8.0         0.5         5.8         13.4         32.5         9.0         0.3         5.8         9.7         48.7         40.7           34.7         4.9         0.5         5.5         13.1         18.9         5.8         0.3         5.8         9.7         48.8         28.4           29.8         8.0         0.5         5.5         14.3         16.4         8.0         0.3         5.3         9.7         48.8         58.7           28.6         9.5         0.4         14.9         14.0<   | 7.0 64.0 20.0 0.5 6.2  | 20.0 0.5 6.2          | 0.5 6.2           | 6.2 |      |               | 8.4    | 29.3       | 4.8   | 0.7               | 4.9        | 11.2     | 16.6      | 10.0     | 0.2   | 5.5   | 8.5               | 26.3      | 11.3    | 6.0               |
| 39.5         7.5         0.5         6.2         18.1         6.9         0.3         3.9         9.3         48.6         18.6           52.1         9.0         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         51.7         36.4           37.3         7.9         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         48.3         40.7         36.4           31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.6         9.7         48.3         40.7         36.4           34.7         4.9         0.6         5.8         13.4         32.5         9.0         0.3         5.6         9.7         48.3         40.7         16.5           29.8         8.0         0.5         13.1         18.9         5.8         0.3         5.8         9.7         48.3         28.4         9.7         48.3         28.4         9.7         48.3         28.4         9.7         48.3         28.4         9.7         48.3         28.4         9.7         48.3         28.4         9.7         48.4  | 39.5         7.5         0.6         6.2         0.3         9.3         9.3         48.6         18.0           52.1         9.0         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         54.7         18.0           37.3         7.9         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         51.7         36.4           31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.6         9.7         48.0         16.5           34.7         4.9         0.6         5.8         13.4         18.9         5.8         0.3         5.8         9.7         48.0         16.5           29.8         8.0         0.5         5.6         13.1         18.9         5.8         9.7         48.8         28.4           29.8         8.0         0.4         5.7         14.3         16.4         8.0         0.3         5.3         9.7         48.7         10.8           28.6         3.5         0.4         16.4         17.1         9.0         0.3         5.7         9.7         45.7 </td <td>73.6 28.0 0.6 6.1</td> <td>28.0 0.6 6.1</td> <td>0.6 6.1</td> <td>6.1</td> <td></td> <td>-</td> <td>7.8</td> <td>41.2</td> <td>9.3</td> <td>9.0</td> <td>4.9</td> <td>13.4</td> <td>19.2</td> <td>6.7</td> <td>0.2</td> <td>6.3</td> <td>9.7</td> <td>49.4</td> <td>42.0</td> <td>9.0</td>   | 73.6 28.0 0.6 6.1  | 28.0 0.6 6.1          | 0.6 6.1           | 6.1 |      | -             | 7.8    | 41.2       | 9.3   | 9.0               | 4.9        | 13.4     | 19.2      | 6.7      | 0.2   | 6.3   | 9.7               | 49.4      | 42.0    | 9.0               |
| 52.1         9.0         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         51.7         36.4           37.3         7.9         0.7         54         16.2         19.8         5.9         0.3         5.8         9.7         48.3         40.7         7           31.0         8.0         0.5         5.8         13.4         32.5         9.0         0.3         5.6         9.0         44.0         16.5         40.7         16.5 <td>52.1         9.0         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         51.7         36.4           37.3         7.9         0.7         5.4         16.2         19.8         5.9         0.3         5.8         9.7         48.3         40.7           31.0         8.0         0.5         5.8         13.4         32.5         9.0         0.3         5.6         9.6         44.0         16.5           34.7         4.9         0.5         5.6         13.4         18.9         5.8         0.3         5.8         9.7         48.0         16.5           29.8         8.0         0.5         5.6         13.1         18.9         5.8         0.3         5.8         9.7         48.0         16.5           29.8         8.0         0.4         5.7         14.3         16.4         8.0         0.3         5.2         9.7         46.7         10.8           28.6         3.5         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           38.8         8.0         0.4         6.9<td>6.7 49.3 21.0 0.6 6.3 7</td><td>21.0 0.6 6.3</td><td>0.6 6.3</td><td>6.3</td><td></td><td>-</td><td>8.0</td><td>39.5</td><td>7.5</td><td>0.5</td><td>5.2</td><td>13.0</td><td>18.1</td><td>6.9</td><td>0.3</td><td>3.9</td><td>9.3</td><td>48.6</td><td>18.6</td><td>0.7</td></td>  | 52.1         9.0         0.5         4.8         12.5         22.8         7.8         0.3         5.8         9.7         51.7         36.4           37.3         7.9         0.7         5.4         16.2         19.8         5.9         0.3         5.8         9.7         48.3         40.7           31.0         8.0         0.5         5.8         13.4         32.5         9.0         0.3         5.6         9.6         44.0         16.5           34.7         4.9         0.5         5.6         13.4         18.9         5.8         0.3         5.8         9.7         48.0         16.5           29.8         8.0         0.5         5.6         13.1         18.9         5.8         0.3         5.8         9.7         48.0         16.5           29.8         8.0         0.4         5.7         14.3         16.4         8.0         0.3         5.2         9.7         46.7         10.8           28.6         3.5         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           38.8         8.0         0.4         6.9 <td>6.7 49.3 21.0 0.6 6.3 7</td> <td>21.0 0.6 6.3</td> <td>0.6 6.3</td> <td>6.3</td> <td></td> <td>-</td> <td>8.0</td> <td>39.5</td> <td>7.5</td> <td>0.5</td> <td>5.2</td> <td>13.0</td> <td>18.1</td> <td>6.9</td> <td>0.3</td> <td>3.9</td> <td>9.3</td> <td>48.6</td> <td>18.6</td> <td>0.7</td>   | 6.7 49.3 21.0 0.6 6.3 7  | 21.0 0.6 6.3          | 0.6 6.3           | 6.3 |      | -             | 8.0    | 39.5       | 7.5   | 0.5               | 5.2        | 13.0     | 18.1      | 6.9      | 0.3   | 3.9   | 9.3               | 48.6      | 18.6    | 0.7               |
| 37.3         7.9         0.7         5.4         16.2         19.8         5.9         0.3         3.3         9.7         48.3         40.7           31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.6         9.6         44.0         16.5         16.5           34.7         4.9         0.5         5.6         13.1         18.9         5.8         0.3         5.8         9.7         46.0         16.5           29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         5.8         9.7         46.8         28.4         9.7         46.8         28.4         9.7         46.8         18.5         18.5         18.8         9.7         46.8         18.8         18.8         18.8         18.8         9.7         46.8         18.8         18.8         18.8         18.9         18.9         18.8         18.9         18.8         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9         18.9  | 37.3         7.9         0.7         5.4         16.2         19.8         5.9         0.3         3.3         9.7         48.3         40.7           31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.6         9.6         44.0         16.5           34.7         4.9         0.5         5.6         13.1         18.9         5.8         0.3         5.8         9.7         48.8         28.4           29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         5.8         9.7         48.8         28.4           29.8         8.0         0.4         5.7         13.5         14.0         9.0         0.3         6.1         9.7         41.4         23.1           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.2         9.7         46.7         10.8           38.0         3.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.0         9.7         46.6         10.7           38.8         8.0         0.4         4.9 <td>59.9 26.0 0.6 6.4</td> <td>26.0 0.6 6.4</td> <td>0.6 6.4</td> <td>6.4</td> <td></td> <td></td> <td>18.1</td> <td>52.1</td> <td>9.0</td> <td>0.5</td> <td>4.8</td> <td>12.5</td> <td>22.8</td> <td>7.8</td> <td>0.3</td> <td>5.8</td> <td>9.7</td> <td>51.7</td> <td>36.4</td> <td>2.0</td>   | 59.9 26.0 0.6 6.4  | 26.0 0.6 6.4          | 0.6 6.4           | 6.4 |      |               | 18.1   | 52.1       | 9.0   | 0.5               | 4.8        | 12.5     | 22.8      | 7.8      | 0.3   | 5.8   | 9.7               | 51.7      | 36.4    | 2.0               |
| 31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.6         9.6         44.0         16.5           34.7         4.9         0.5         5.5         13.1         18.9         5.8         0.3         5.8         9.7         46.8         28.4           29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         5.8         9.7         46.8         28.4           29.8         8.0         0.4         5.7         14.5         14.0         9.0         0.3         6.1         9.7         41.4         23.1           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.2         9.7         45.7         10.8           38.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           38.8         4.0         0.5         5.4         13.4         26.2         5.6         0.3         5.9         9.1         46.6         10.7           28.8         8.0         0.4         4.0         0.3 <td>31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.6         9.6         44.0         16.5           34.7         4.9         0.5         5.5         13.1         18.9         5.8         0.3         5.8         9.7         46.8         28.4           29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         5.8         9.7         46.8         28.4           21.9         8.0         0.4         5.7         13.5         14.0         9.0         0.3         6.1         9.7         41.4         23.1           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.2         9.7         41.4         28.0           38.7         6.0         0.4         5.7         14.4         17.1         9.0         0.3         5.2         9.7         47.6         10.8           38.8         4.0         0.5         5.4         13.4         26.2         5.6         0.3         5.7         9.7         47.6         10.7           28.8         8.0         0.4         4.0         0.3<td>6.9 49.6 19.0 0.6 6.5</td><td>19.0 0.6 6.5</td><td>0.6 6.5</td><td>6.5</td><td></td><td></td><td>18.5</td><td>37.3</td><td>7.9</td><td>0.7</td><td>5.4</td><td>16.2</td><td>19.8</td><td>5.9</td><td>0.3</td><td>3.3</td><td>9.7</td><td>48.3</td><td>40.7</td><td>8.0</td></td>   | 31.0         8.0         0.6         5.8         13.4         32.5         9.0         0.3         5.6         9.6         44.0         16.5           34.7         4.9         0.5         5.5         13.1         18.9         5.8         0.3         5.8         9.7         46.8         28.4           29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         5.8         9.7         46.8         28.4           21.9         8.0         0.4         5.7         13.5         14.0         9.0         0.3         6.1         9.7         41.4         23.1           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.2         9.7         41.4         28.0           38.7         6.0         0.4         5.7         14.4         17.1         9.0         0.3         5.2         9.7         47.6         10.8           38.8         4.0         0.5         5.4         13.4         26.2         5.6         0.3         5.7         9.7         47.6         10.7           28.8         8.0         0.4         4.0         0.3 <td>6.9 49.6 19.0 0.6 6.5</td> <td>19.0 0.6 6.5</td> <td>0.6 6.5</td> <td>6.5</td> <td></td> <td></td> <td>18.5</td> <td>37.3</td> <td>7.9</td> <td>0.7</td> <td>5.4</td> <td>16.2</td> <td>19.8</td> <td>5.9</td> <td>0.3</td> <td>3.3</td> <td>9.7</td> <td>48.3</td> <td>40.7</td> <td>8.0</td>   | 6.9 49.6 19.0 0.6 6.5  | 19.0 0.6 6.5          | 0.6 6.5           | 6.5 |      |               | 18.5   | 37.3       | 7.9   | 0.7               | 5.4        | 16.2     | 19.8      | 5.9      | 0.3   | 3.3   | 9.7               | 48.3      | 40.7    | 8.0               |
| 34.7         4.9         0.5         5.5         13.1         18.9         5.8         0.3         5.8         9.7         48.8         28.4           29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         6.1         9.7         44.8         23.1           21.9         6.0         0.4         5.7         13.5         14.0         9.0         0.3         6.1         9.7         41.4         23.1           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.2         9.7         41.4         28.8           38.0         3.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           38.0         3.7         6.0         0.4         5.4         13.4         26.2         5.6         0.3         5.0         9.7         46.6         10.7           36.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         46.6         10.7         9.0           28.8         8.0         0.4 <td>34.7         4.9         0.5         5.5         13.1         18.9         5.8         0.3         5.8         9.7         48.8         28.4           29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         6.1         9.7         41.4         23.1           21.9         6.0         0.4         5.7         13.5         14.0         9.0         0.3         6.1         9.7         41.4         23.1           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         6.3         9.7         41.4         28.8           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           38.0         3.7         6.0         0.4         4.7         13.4         26.2         5.6         0.3         5.0         9.7         47.6         10.8           38.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.7         9.7         45.6         10.7           21.2         4.0         0.5         5.7<td>22.0 0.4 6.4</td><td>22.0 0.4 6.4</td><td>0.4 6.4</td><td>6.4</td><td></td><td></td><td>16.2</td><td>31.0</td><td>8.0</td><td>9.0</td><td>5.8</td><td>13.4</td><td>32.5</td><td>9.0</td><td>0.3</td><td>5.6</td><td>9.6</td><td>44.0</td><td>16.5</td><td>9.0</td></td>  | 34.7         4.9         0.5         5.5         13.1         18.9         5.8         0.3         5.8         9.7         48.8         28.4           29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         6.1         9.7         41.4         23.1           21.9         6.0         0.4         5.7         13.5         14.0         9.0         0.3         6.1         9.7         41.4         23.1           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         6.3         9.7         41.4         28.8           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           38.0         3.7         6.0         0.4         4.7         13.4         26.2         5.6         0.3         5.0         9.7         47.6         10.8           38.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.7         9.7         45.6         10.7           21.2         4.0         0.5         5.7 <td>22.0 0.4 6.4</td> <td>22.0 0.4 6.4</td> <td>0.4 6.4</td> <td>6.4</td> <td></td> <td></td> <td>16.2</td> <td>31.0</td> <td>8.0</td> <td>9.0</td> <td>5.8</td> <td>13.4</td> <td>32.5</td> <td>9.0</td> <td>0.3</td> <td>5.6</td> <td>9.6</td> <td>44.0</td> <td>16.5</td> <td>9.0</td>  | 22.0 0.4 6.4   | 22.0 0.4 6.4          | 0.4 6.4           | 6.4 |      |               | 16.2   | 31.0       | 8.0   | 9.0               | 5.8        | 13.4     | 32.5      | 9.0      | 0.3   | 5.6   | 9.6               | 44.0      | 16.5    | 9.0               |
| 29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         6.1         9.7         41.4         23.1           21.9         6.0         0.4         5.7         13.5         14.0         9.0         0.3         6.1         9.7         41.4         28.8           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.3         9.7         47.8         28.8           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           36.8         4.0         0.5         5.4         13.4         26.2         5.6         0.3         5.0         9.7         47.6         20.0           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         9.7         46.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         9.7         46.6         10.7           21.2         4.0         0.5         5.5         14.8 </td <td>29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         6.1         9.7         41.4         23.1           21.9         6.0         0.4         5.7         13.5         14.0         9.0         0.3         4.8         9.7         33.8         28.8           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.3         9.7         47.5         28.8           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           39.0         3.7         6.0         0.4         13.4         26.2         5.6         0.3         5.0         9.7         45.7         10.8           39.0         3.7         6.0         12.6         22.0         6.9         0.3         3.1         9.7         45.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0&lt;</td> <td>49.7 16.0 0.5 6.3</td> <td>16.0 0.5 6.3</td> <td>0.5 6.3</td> <td>6.3</td> <td></td> <td></td> <td>14.7</td> <td>34.7</td> <td>4.9</td> <td>0.5</td> <td>5.5</td> <td>13.1</td> <td>18.9</td> <td>5.8</td> <td>0.3</td> <td>5.8</td> <td>9.7</td> <td>48.8</td> <td>28.4</td> <td>7.0</td>   | 29.8         8.0         0.5         5.6         12.6         15.3         7.0         0.3         6.1         9.7         41.4         23.1           21.9         6.0         0.4         5.7         13.5         14.0         9.0         0.3         4.8         9.7         33.8         28.8           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.3         9.7         47.5         28.8           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           39.0         3.7         6.0         0.4         13.4         26.2         5.6         0.3         5.0         9.7         45.7         10.8           39.0         3.7         6.0         12.6         22.0         6.9         0.3         3.1         9.7         45.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0<   | 49.7 16.0 0.5 6.3  | 16.0 0.5 6.3          | 0.5 6.3           | 6.3 |      |               | 14.7   | 34.7       | 4.9   | 0.5               | 5.5        | 13.1     | 18.9      | 5.8      | 0.3   | 5.8   | 9.7               | 48.8      | 28.4    | 7.0               |
| 21.9         6.0         0.4         5.7         13.5         14.0         9.0         0.3         4.8         9.7         33.8         28.8           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.3         9.7         37.5         36.0           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           36.0         3.7         6.0         0.4         5.4         13.4         26.2         5.6         0.3         5.0         9.7         47.6         20.0           36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         5.0         9.7         46.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.7         9.7         27.1         9.0           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         43.3         8.9           27.0         11.0         0.7         5.4 <td>21.9         6.0         0.4         5.7         13.5         14.0         9.0         0.3         4.8         9.7         33.8         28.8           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.3         9.7         37.5         36.0           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           39.0         3.7         6.0         0.3         5.0         0.3         5.0         9.7         45.7         10.8           36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         5.0         9.7         45.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         4.6         9.7         43.3         8.9           27.0         11.0         0.7         5.6         15.9         22.0         11.0<!--</td--><td>32.1 13.0</td><td>13.0 0.4</td><td>0.4</td><td></td><td>9.9</td><td></td><td>17.7</td><td>29.8</td><td>8.0</td><td>0.5</td><td>5.6</td><td>12.6</td><td>15.3</td><td>7.0</td><td>0.3</td><td>6.1</td><td>9.7</td><td>41.4</td><td>23.1</td><td>0.7</td></td>   | 21.9         6.0         0.4         5.7         13.5         14.0         9.0         0.3         4.8         9.7         33.8         28.8           28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.3         9.7         37.5         36.0           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           39.0         3.7         6.0         0.3         5.0         0.3         5.0         9.7         45.7         10.8           36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         5.0         9.7         45.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         4.6         9.7         43.3         8.9           27.0         11.0         0.7         5.6         15.9         22.0         11.0 </td <td>32.1 13.0</td> <td>13.0 0.4</td> <td>0.4</td> <td></td> <td>9.9</td> <td></td> <td>17.7</td> <td>29.8</td> <td>8.0</td> <td>0.5</td> <td>5.6</td> <td>12.6</td> <td>15.3</td> <td>7.0</td> <td>0.3</td> <td>6.1</td> <td>9.7</td> <td>41.4</td> <td>23.1</td> <td>0.7</td>   | 32.1 13.0  | 13.0 0.4              | 0.4               |     | 9.9  |               | 17.7   | 29.8       | 8.0   | 0.5               | 5.6        | 12.6     | 15.3      | 7.0      | 0.3   | 6.1   | 9.7               | 41.4      | 23.1    | 0.7               |
| 28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.3         9.7         37.5         36.0           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           39.0         3.7         6.0         0.3         5.0         0.3         5.0         9.7         47.6         20.0         10.8           36.8         4.0         0.5         5.0         12.6         6.9         0.3         5.0         9.7         47.6         20.0         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.7         9.7         45.8         7.6           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.0         24.0         8.0         0.4         3.6         9.7         43.3         8.9  | 28.6         3.5         0.4         5.7         14.3         16.4         8.0         0.3         5.3         9.7         37.5         36.0           33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           39.0         3.7         6.0         0.4         13.4         26.2         5.6         0.3         5.0         9.7         47.6         20.0           36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         5.1         47.6         10.7         9.0           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.7         9.7         27.1         9.0           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9           56.3         9.0         0.7         5.6         15.9         22.6         11.0         0.4         4.6         9.7         43.3         8.9  | 43.8   | 9.0 0.4               | 0.4               |     | 6.9  |               | 18.6   | 21.9       | 0.9   | 0.4               | 5.7        | 13.5     | 14.0      | 9.0      | 0.3   | 4.8   | 9.7               | 33.8      | 28.8    | 0.8               |
| 33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           39.0         3.7         0.5         5.4         13.4         26.2         5.6         0.3         5.0         9.7         47.6         20.0           36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         3.9         9.1         46.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         9.7         27.1         9.0           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         27.1         9.0           27.0         11.0         0.7         5.4         16.0         24.0         8.0         0.4         3.6         9.7         43.3         8.9  | 33.7         6.0         0.4         5.4         16.4         17.1         9.0         0.3         5.2         9.7         45.7         10.8           39.0         3.7         0.5         5.4         13.4         26.2         5.6         0.3         5.0         9.7         47.6         20.0           36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         5.9         9.1         46.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         5.1         9.7         27.1         9.0           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9           56.3         9.0         0.7         5.6         15.9         22.6         11.0         0.4         4.6         9.7         45.3         8.9  | 43.7 11.0 0.3  | 11.0 0.3              | 0.3               |     | 8.1  |               | 18.7   | 28.6       | 3.5   | 0.4               | 5.7        | 14.3     | 16.4      | 8.0      | 0.3   | 5.3   | 9.7               | 37.5      | 36.0    | 0.7               |
| 39.0         3.7         0.5         5.4         13.4         26.2         5.6         0.3         5.0         9.7         47.6         20.0           36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         3.9         9.1         46.6         10.7         7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         9.7         27.1         9.0           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9   | 39.0         3.7         0.5         5.4         13.4         26.2         5.6         0.3         5.0         9.7         47.6         20.0           36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         3.9         9.1         46.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         9.7         27.1         9.0           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9           56.3         9.0         0.7         5.6         15.9         22.6         11.0         0.4         4.6         9.7         57.9         16.6  | 11.8 26.5 11.4 0.5 8.0   | 11.4 0.5              | 0.5               |     | 8.0  |               | 12.3   | 33.7       | 0.9   | 0.4               | 5.4        | 16.4     | 17.1      | 9.0      | 0.3   | 5.2   | 9.7               | 45.7      | 10.8    | 6.0               |
| 36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         3.9         9.1         46.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         9.7         27.1         9.0           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9  | 36.8         4.0         0.5         5.0         12.6         22.0         6.9         0.3         3.9         9.1         46.6         10.7           28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         9.7         27.1         9.0           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9           56.3         9.0         0.7         5.6         15.9         22.6         11.0         0.4         4.6         9.7         57.9         16.6   | 10.4 30.1 14.4 0.4 7.9   | 14.4 0.4              | 0.4               |     | 7.9  |               | 12.9   | 39.0       | 3.7   | 0.5               | 5.4        | 13.4     | 26.2      | 5.6      | 0.3   | 5.0   | 9.7               | 47.6      | 20.0    | 2.0               |
| 28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         9.7         27.1         9.0           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9   | 28.8         8.0         0.4         4.9         13.2         18.5         4.0         0.3         3.1         9.7         27.1         9.0           21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9           56.3         9.0         0.7         5.6         15.9         22.6         11.0         0.4         4.6         9.7         57.9         16.6  | 11.7 35.1 14.6 0.4 7.6   | 14.6 0.4              | 0.4               |     | 7.6  |               | 15.2   | 36.8       | 4.0   | 0.5               | 5.0        | 12.6     | 22.0      | 6.9      | 0.3   | 3.9   | 9.1               | 46.6      | 10.7    | 0.8               |
| 21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9   | 21.2         4.0         0.5         5.5         14.8         14.2         10.0         0.3         5.7         9.7         36.8         7.6           27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9           56.3         9.0         0.7         5.6         15.9         22.6         11.0         0.4         4.6         9.7         57.9         16.6  | 10.7 25.1 8.5 0.4 7.4  | 8.5 0.4 7             | 0.4 7             | 7   | 7.4  |               | 11.2   | 28.8       | 8.0   | 0.4               | 4.9        | 13.2     | 18.5      | 4.0      | 0.3   | 3.1   | 9.7               | 27.1      | 9.0     | 0.4               |
| 27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9  | 27.0         11.0         0.7         5.4         16.6         24.0         8.0         0.4         3.6         9.7         43.3         8.9           56.3         9.0         0.7         5.6         15.9         22.6         11.0         0.4         4.6         9.7         57.9         16.6   | 10.7 11.3 12.0 0.3 7.0   | 12.0 0.3              | 0.3               |     | 7.0  | _             | 10.4   | 21.2       | 4.0   | 0.5               | 5.5        | 14.8     | 14.2      | 10.0     | 0.3   | 5.7   | 9.7               | 36.8      | 7.6     | 2.0               |
|   | 56.3 9.0 0.7 5.6 15.9 22.6 11.0 0.4 4.6 9.7 57.9 16.6  | 9.1 23.5 8.0 0.4 7.2   | 8.0 0.4               | 0.4               |     | 7.2  |               | 12.3   | 27.0       | 11.0  | 0.7               | 5.4        | 16.6     | 24.0      | 8.0      | 0.4   | 3.6   | 9.7               | 43.3      | 8.9     | 7.0               |

For Moxie Power Generation Limited

Melamarudur

Tuttorin

MK Parameswaran

2 X 600 MW THERMAL POWER PLANT

CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT Daily Average from 01.06.2024 to 30.06.2024

| STATIONA   Miles   M |          | 9     |         | 200    |            | -                 |       | -     |                   |       |                   |       | THE PERSON NAMED IN |           |          |                   | CTATO | JON A IC. |          | The same of |       |
|--|----------|-------|---------|--------|------------|-------------------|-------|-------|-------------------|-------|-------------------|-------|---------------------|-----------|----------|-------------------|-------|-----------|----------|-------------|-------|
| No.  | 1        | S     | TATION- | Near M | ain Office | (e)               |       | SIAIR | JN-Z (Nea         | (CHP) |                   |       | STATION             | 3 (Near A | sh Pond) |                   | 210   | 2 4 10    | ea water | Hump Ho     | (esr  |
| 30         30         30         60<   | Date     | S02   | NOX     | PM10   | PM2.5      |                   | 802   | NOX   | PM10              | PM2.5 | 00                | S02   | NOX                 | PM10      | PM2.5    | 00                | S02   | NOX       | PM10     | PM2.5       | 00    |
| upmage         appmage         uppmage         uppmage <th< th=""><th></th><th>80</th><th>80</th><th>100</th><th>09</th><th>02</th><th>80</th><th>80</th><th>100</th><th>09</th><th>02</th><th>80</th><th>80</th><th>100</th><th>09</th><th>02</th><th>80</th><th>80</th><th>100</th><th>09</th><th>02</th></th<>  |          | 80    | 80      | 100    | 09         | 02                | 80    | 80    | 100               | 09    | 02                | 80    | 80                  | 100       | 09       | 02                | 80    | 80        | 100      | 09          | 02    |
| 4         6.3         9.1         9.1         9.2         4.0         0.0         5.0         9.0         9.0         9.0         4.0         9.0         4.0         9.0         4.0         9.0         4.0         9.0         4.0         9.0         4.0         9.0         4.0         9.0         9.0         4.0         9.0         4.0         9.0         4.0         9.0         4.0         9.0  | +        | m/brl | m/bri   | m/6rl  | mg/m3      | mg/m <sub>3</sub> | pg/m³ | µg/m³ | mg/m <sup>3</sup> | ng/m3 | mg/m <sub>3</sub> | pg/m3 | ng/m³               | Hg/m3     | m/bd     | mg/m <sup>3</sup> | mg/m3 | ng/m3     | m/bn     | pg/m³       | mg/m³ |
| 4         6.3         8.1         8.0         0.0         1.0         9.2         4.6         0.0  | -Jun-24  | 6.3   | 9.1     | 57.0   | 16.0       | 4.0               | 7.0   | 9.3   | 45.0              | 4.0   | 9.0               | 5.8   | 16.5                | 29.0      | 8.0      | 0.4               | 6.2   | 9.7       | 45.0     | 19.0        | 8.0   |
| 4         6.3         9.1         9.7         2.1         0.5         7.2         15.3         48.0         8.0         6.3         16.5         9.0         0.4         6.0         9.0 <td>-Jun-24</td> <td>6.3</td> <td>9.1</td> <td>0.09</td> <td>20.0</td> <td>0.5</td> <td>7.0</td> <td>9.2</td> <td>46.0</td> <td>5.0</td> <td>9.0</td> <td>5.7</td> <td>16.5</td> <td>24.0</td> <td>8.0</td> <td>6.0</td> <td>6.2</td> <td>7.6</td> <td>51.0</td> <td>36.0</td> <td>6.0</td>   | -Jun-24  | 6.3   | 9.1     | 0.09   | 20.0       | 0.5               | 7.0   | 9.2   | 46.0              | 5.0   | 9.0               | 5.7   | 16.5                | 24.0      | 8.0      | 6.0               | 6.2   | 7.6       | 51.0     | 36.0        | 6.0   |
| 4         64         90         80         24.0         90         24.0         60         69         165         36.0         10.0         64         90         64.0         90         24.0         60         69         165         36.0         10.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         60.0         10.0         60.0         10.0         60.0         10.0         60.0         10.0         60.0         10.0         60.0         10.0         60.0         10.0         60.0         60.0         10.0         60.0         60.0         10.0         60.0   | -Jun-24  | 6.3   | 9.1     | 87.0   | 21.0       | 0.5               | 7.2   | 15.3  | 48.0              | 8.0   | 0.5               | 5.3   | 16.6                | 23.0      | 7.0      | 0.4               | 9.9   | 9.6       | 51.0     | 32.0        | 6.0   |
| 4         64         81         98         32         0.5         78         112         660         50         64         61         61         81         98         32         0.5         78         112         60         60         60         60         60         60         60         80         4         72         97         75         75         40           6         31         91         960         150         0.5         187         187         50         60         90         4         72         97         97         97         97         97         97         97         98         97         4         97         98         99 <td< td=""><td>-Jun-24</td><td>6.4</td><td>9.0</td><td>89.0</td><td>24.0</td><td>0.5</td><td>7.5</td><td>16.2</td><td>70.0</td><td>4.0</td><td>9.0</td><td>5.9</td><td>16.5</td><td>35.0</td><td>10.0</td><td>0.4</td><td>6.9</td><td>9.6</td><td>68.0</td><td>32.0</td><td>6.0</td></td<>  | -Jun-24  | 6.4   | 9.0     | 89.0   | 24.0       | 0.5               | 7.5   | 16.2  | 70.0              | 4.0   | 9.0               | 5.9   | 16.5                | 35.0      | 10.0     | 0.4               | 6.9   | 9.6       | 68.0     | 32.0        | 6.0   |
| 4         63         91         90         25         80         179         80         179         80         25         80         179         80         25         80         179         80         25         80         170         80         80         170         80         80         180         80         180         80         180         80         180         210         80         180         180         210         80         180         180         30         20         20         180         180         180         20         20         180         180         20         20         180         180         180         20         20         180         180         180         20         20         180         180         180         20         20         20         180         180         20         20         20         180         180         20         20         20  | -Jun-24  | 6.4   | 9.1     | 98.0   | 32.0       | 0.5               | 7.8   | 17.2  | 66.0              | 5.0   | 0.4               | 0.9   | 16.6                | 28.0      | 8.0      | 0.4               | 7.4   | 9.7       | 75.0     | 40.0        | 6.0   |
| 4         57         91         680         150         05         83         81         83         81         83         81         83         81         83         81         83         81         85         165         150         40         40         72         97         850         230         81           6.0         91         41         430         130         60         30         44         72         97         470         810         80         80         91         470         91         92         450         60         91         470         91         92         470         810         80         91         470         91         92         470         91         91         91         470         91         92         470         91         92         470         91         92         91         470         91         92         91         92         91         92         91<  | -Jun-24  | 6.3   | 9.1     | 90.0   | 25.0       | 0.5               | 8.0   | 17.9  | 47.0              | 5.0   | 9.0               | 5.7   | 16.6                | 18.0      | 5.0      | 0.4               | 7.4   | 7.6       | 88.0     | 31.0        | 1.0   |
| 4         57         81         890         150         650         150         650         17         150         330         40         63         166         160         40         72         97         470         710         810         81         430         150         150         17.1         150         330         640         165         160         40         72         97         470         710 <th< td=""><td>-Jun-24</td><td>5.7</td><td>9.1</td><td>0.99</td><td>15.0</td><td>0.5</td><td>8.3</td><td>18.7</td><td>33.0</td><td>2.0</td><td>9.0</td><td>5.5</td><td>16.6</td><td>13.0</td><td>3.0</td><td>0.4</td><td>7.2</td><td>9.7</td><td>56.0</td><td>23.0</td><td>1.0</td></th<>   | -Jun-24  | 5.7   | 9.1     | 0.99   | 15.0       | 0.5               | 8.3   | 18.7  | 33.0              | 2.0   | 9.0               | 5.5   | 16.6                | 13.0      | 3.0      | 0.4               | 7.2   | 9.7       | 56.0     | 23.0        | 1.0   |
| 4         60         81         430         130         0.5         7.1         8.8         340         3.0         0.3         6.2         166         21.0         6.0         0.4         7.2         8.7         6.0         9.1         4.0         130         0.3         6.0         16.6         22.0         6.0         0.4         7.4         9.7         6.0         2.0         8.0         8.0         8.0         6.0         7.2         4.0         0.3         4.0         16.6         22.0         6.0         0.4         7.4         9.7         6.0         9.0         9.0         9.0         9.0         7.2         5.2         22.0         4.0         16.6         22.0         6.0         0.4         7.4         9.0         0.5         7.2         5.2         22.0         4.0         4.0         4.0         9.0         9.0         7.2         5.2         2.0         4.0         1.0         9.  | -Jun-24  | 5.7   | 9.1     | 0.69   | 15.0       | 0.5               | 7.7   | 15.0  | 33.0              | 4.0   | 4.0               | 5.3   | 16.6                | 15.0      | 4.0      | 0.4               | 7.2   | 9.7       | 47.0     | 21.0        | 1.0   |
| 4         5         9         1         47         13         0         7         4         10         30         60         10         60         0         4         7         50         7         4         10         30         60         10         4         7         30         0         4         20         0         4         10         0         4         7         30         0         4         7         30         0         4         0         0         4         7         9         7         6         0         0         4         7         9         0         4         7         9         0         4         7         3         6         7         4         7         4         7         4         7         4         6         7   | -Jun-24  | 0.9   | 9.1     | 43.0   | 13.0       | 0.5               | 7.1   | 8.8   | 34.0              | 3.0   | 0.3               | 5.2   | 16.6                | 21.0      | 6.0      | 0.4               | 7.2   | 9.7       | 55.0     | 21.0        | 1.0   |
| 4         6         8         7         2         2         4         9         16         6         7         2         2         4         6         6         7         2         2         4         6         6         6         7         2         2         2         4         6         6         7         6         6         7         6         7         6         7         6         7   | )-Jun-24 | 5.9   | 9.1     | 47.0   | 13.0       | 0.5               | 7.0   | 7.4   | 41.0              | 3.0   | 0.3               | 5.0   | 16.6                | 26.0      | 0.9      | 0.4               | 7.4   | 9.7       | 58.0     | 20.0        | 1.0   |
| 46         5.8         8.2         37.0         10.0         0.5         7.2         5.5         4.0         0.3         4.7         16.6         20.0         4.0         0.4         7.3         9.6         10.0         10.0         10.5         7.3         5.8         37.0         3.0         0.3         4.8         14.5         8.0         6.0         0.4         7.3         9.6         10.0         1   | I-Jun-24 | 6.0   | 8.8     | 31.0   | 8.0        | 0.5               | 6.9   | 7.2   | 32.0              | 2.0   | 0.2               | 4.9   | 16.6                | 22.0      | 5.0      | 0.4               | 7.3   | 9.7       | 43.0     | 14.0        | 1.0   |
| 4         5.7         8.2         4.70         11.0         0.5         7.3         5.8         37.0         0.3         4.8         14.5         8.0         6.0         0.4         7.3         9.7         64.0         19.0           4.5         5.6         8.2         47.0         0.0         0.5         7.0         5.3         360         0.3         54         12.8         23.0         6.0         7.0         7.2         9.7         7.10         6.0           4.5         5.5         4.5         14.0         0.5         6.9         7.0         53.0         0.3         54         12.8         20.0         7.2         9.7         7.1         6.0         7.0         7.2         9.0         0.3         6.0         7.0         7.2         9.0         9.0         6.0         9  | 2-Jun-24 | 5.8   | 8.2     | 37.0   | 10.0       | 0.5               | 7.2   | 5.5   | 22.0              | 4.0   | 0.3               | 4.7   | 16.6                | 20.0      | 4.0      | 4.0               | 7.3   | 9.6       | 38.0     | 12.0        | 1.1   |
| 4         5.6         8.2         4.7         9.0         0.5         7.0         6.3         9.0         0.3         6.4         1.2         2.3         6.0         0.4         7.2         9.7         7.0         7.0         6.0         7.0         7.0         7.0         0.4         7.2         9.7         7.0         6.0         7.0  | 3-Jun-24 | 5.7   | 8.2     | 47.0   | 11.0       | 0.5               | 7.3   | 5.8   | 37.0              | 3.0   | 0.3               | 4.8   | 14.5                | 8.0       | 6.0      | 0.4               | 7.3   | 9.7       | 64.0     | 19.0        | 1.1   |
| 4         5.5         4.5         4.5         4.5         4.5         5.4         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         4.5         5.5         4.5  | -Jun-24  | 5.6   | 8.2     | 47.0   | 9.0        | 0.5               | 7.0   | 5.3   | 36.0              | 3.0   | 0.3               | 5.4   | 12.8                | 23.0      | 0.9      | 0.4               | 7.2   | 9.7       | 71.0     | 0.9         | 1.1   |
| 4         5.7         8.2         44.0         14.0         0.5         6.9         8.0         64.0         3.0         6.4         12.8         31.0         8.0         0.5         7.2         9.0         6.0         12.8         31.0         8.0         0.5         7.7         71.0         50.0         0.3         5.4         12.8         40.0         8.0         0.5         7.7         9.0         6.0         9.0         7.0         9.0         6.0         9.0 <t< td=""><td>5-Jun-24</td><td>5.5</td><td>5.5</td><td>45.0</td><td>14.0</td><td>0.5</td><td>6.9</td><td>9.7</td><td>49.0</td><td>3.0</td><td>0.3</td><td>5.1</td><td>12.8</td><td>26.0</td><td>7.0</td><td>4.0</td><td>7.2</td><td>9.7</td><td>0.69</td><td>16.0</td><td>9.0</td></t<>   | 5-Jun-24 | 5.5   | 5.5     | 45.0   | 14.0       | 0.5               | 6.9   | 9.7   | 49.0              | 3.0   | 0.3               | 5.1   | 12.8                | 26.0      | 7.0      | 4.0               | 7.2   | 9.7       | 0.69     | 16.0        | 9.0   |
| 4         6.0         8.2         8.7         7.1         71.0         5.0         0.3         5.4         12.8         40.0         8.0         0.5         7.7         9.0         22.0         9.0 </td <td>-Jun-24</td> <td>5.7</td> <td>8.2</td> <td>44.0</td> <td>14.0</td> <td>0.5</td> <td>6.9</td> <td>8.0</td> <td>54.0</td> <td>3.0</td> <td>0.3</td> <td>5.4</td> <td>12.8</td> <td>31.0</td> <td>8.0</td> <td>0.5</td> <td>7.2</td> <td>9.7</td> <td>67.0</td> <td>18.0</td> <td>8.0</td>   | -Jun-24  | 5.7   | 8.2     | 44.0   | 14.0       | 0.5               | 6.9   | 8.0   | 54.0              | 3.0   | 0.3               | 5.4   | 12.8                | 31.0      | 8.0      | 0.5               | 7.2   | 9.7       | 67.0     | 18.0        | 8.0   |
| 44         6.0         7.7         63.0         16.0         6.0         1.14         79.0         3.0         0.3         5.0         12.8         30.0         7.0         0.5         7.4         9.6         80.0         7.0         9.8         12.8         30.0         7.0         0.3         5.0         12.8         12.8         13.0         7.0         0.5         7.4         9.6         9.6         9.0   | -Jun-24  | 0.9   | 8.2     | 87.0   | 22.0       | 0.5               | 6.9   | 7.7   | 71.0              | 5.0   | 0.3               | 5.4   | 12.8                | 40.0      | 8.0      | 0.5               | 7.2   | 9.6       | 0.69     | 22.0        | 8.0   |
| 4         6.3         8.2         6.1         4.0         6.2         7.1         4.6         4.80         3.0         6.3         6.2         1.2         4.0         6.5         7.4         6.0         7.1         4.0         6.0         7.1         4.0         6.0         7.1         6.0         6.0         7.1         4.0         6.0         7.1         6.0         6.0         7.1         4.0         6.0         7.1         6.0         6.0         7.1         4.0         6.0         7.1         6.0         7.1         6.0         6.0         7.1         6.0   | -Jun-24  | 6.0   | 7.7     | 53.0   | 16.0       | 0.5               | 7.1   | 11.4  | 79.0              | 3.0   | 0.3               | 5.6   | 12.8                | 30.0      | 7.0      | 0.5               |       | 9.6       | 66.0     | 20.0        | 8.0   |
| 4         6.4         8.2         36.0         12.0         0.6         7.1         13.3         34.0         2.0         0.3         5.6         12.8         24.0         4.0         0.4         7.1         9.6         56.0         12.8         24.0         4.0         0.4         7.1         9.6         56.0         15.0   | -Jun-24  | 6.3   | 8.2     | 61.0   | 14.0       | 9.0               | 7.1   | 14.6  | 48.0              | 3.0   | 0.3               | 5.8   | 12.8                | 18.0      | 4.0      | 9.0               | 7.4   | 9.6       | 72.0     | 20.0        | 6.0   |
| 4         6.4         8.1         37.0         12.0         0.5         7.2         9.2         35.0         0.3         5.4         12.8         27.0         4.0         0.4         7.3         9.6         73.0         16.0           44         6.3         8.1         23.0         8.0         0.5         7.4         5.5         39.0         2.0         0.3         5.4         12.8         27.0         4.0         0.4         7.3         9.6         58.0         14.0           44         6.2         8.0         16.0         6.0         16.0         6.0         16.0         6.0         16.0         6.0         17.0         27.0         27.0         4.0         0.4         7.1         27.0         27.0         6.0         9.7         4.0         7.2         27.0         7.0         4.0         7.0         4.0         0.4         4.3         10.7         27.0         27.0         27.0         4.0   | -Jun-24  | 6.4   | 8.2     | 36.0   | 12.0       | 9.0               | 7.1   | 13.3  | 34.0              | 2.0   | 0.3               | 5.6   | 12.8                | 24.0      | 4.0      | 0.4               | 7.1   | 9.6       | 56.0     | 15.0        | 6.0   |
| 4         6.3         8.1         23.0         8.0         6.3         5.4         12.8         5.4         12.8         27.0         4.0         0.4         7.2         9.6         58.0         14.0         14.0         12.8         27.0         6.0         6.4         6.5         39.0         2.0         6.0 <th< td=""><td>-Jun-24</td><td>4.9</td><td>6.1</td><td>37.0</td><td>12.0</td><td>0.5</td><td>7.2</td><td>9.2</td><td>35.0</td><td>2.0</td><td>0.3</td><td>5.4</td><td>12.8</td><td>27.0</td><td>4.0</td><td>4.0</td><td>7.3</td><td>9.6</td><td>73.0</td><td>16.0</td><td>6.0</td></th<>   | -Jun-24  | 4.9   | 6.1     | 37.0   | 12.0       | 0.5               | 7.2   | 9.2   | 35.0              | 2.0   | 0.3               | 5.4   | 12.8                | 27.0      | 4.0      | 4.0               | 7.3   | 9.6       | 73.0     | 16.0        | 6.0   |
| 4         6.2         8.0         16.0         6.0         10.5         7.6         29.0         4.0         6.1         12.8         22.0         0.0         0.4         7.5         9.0<  | -Jun-24  | 6.3   | 8.1     | 23.0   | 8.0        | 0.5               | 7.4   | 5.5   | 39.0              | 2.0   | 0.3               | 5.4   | 12.8                | 27.0      | 4.0      | 4.0               | 7.3   | 9.6       | 58.0     | 14.0        | 6.0   |
| 44         6.3         7.9         26.0         8.0         6.0         0.4         3.6         1.7         27.0         5.0         0.4         8.0         0.4         3.6         1.7         27.0         6.0         0.4         4.3         1.7         27.0         6.0         0.4         4.3         1.7         27.0         6.0         0.5         1.0         1.0         0.5         1.0         0.5         1.0         0.6         0.7         1.0         0.7         1.0         0.5         0.5         0.6         0.7         2.0         0.4         6.2         1.0         1.0         0.5         0.5         0.6         0.7         1.0         0.7         1.0         0.5         0.6         0.7         0.7         1.0         0.7         0.7         0.7         1.0         0.7  | -Jun-24  | 6.2   | 8.0     | 16.0   | 6.0        | 0.5               | 10.5  | 9.7   | 29.0              | 4.0   | 0.4               | 5.1   | 12.8                | 22.0      | 2.0      | 4.0               | 7.5   | 9.6       | 39.0     | 7.0         | 1.0   |
| 44         6.3         8.1         21.0         8.0         0.5         10.3         6.8         29.0         4.0         0.4         4.3         10.7         21.0         4.0         0.5         7.9         9.6         61.0         12.0   | -Jun-24  | 6.3   | 6.7     | 26.0   | 8.0        | 0.5               | 10.3  | 7.0   | 32.0              | 0.9   | 0.4               | 3.6   | 11.7                | 27.0      | 5.0      | 9.0               | 8.0   | 9.7       | 40.0     | 11.0        | 1.0   |
| 44         6.6         8.0         18.0         0.0         0.5         10.4         6.7         22.0         0.4         6.2         10.7         11.0         5.0         0.5         7.8         9.6         40.0         9.0           44         6.3         8.0         22.0         6.0         10.5         10.6         6.7         25.0         2.0         0.4         6.1         10.7         10.0         4.0         0.4         7.7         7.3         6.0         12.0         12.0         12.0         12.0         10.8         8.8         33.0         6.0         0.4         6.1         10.7         18.0         4.0         0.5         6.1         8.8         82.0         12.0         12.0         12.0         10.2         16.4         10.7         6.4         10.7         5.0         6.0         0.5         6.0         6.0         13.0         13.0         13.0         13.0         10.7         24.0         8.0         0.5         5.7         9.6         6.1         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0         10.0<  | -Jun-24  | 6.3   | 8.1     | 21.0   | 8.0        | 0.5               | 10.3  | 6.8   | 29.0              | 4.0   | 0.4               | 4.3   | 10.7                | 21.0      | 4.0      | 0.5               | 7.9   | 9.6       | 61.0     | 12.0        | 1.0   |
| 44         6.3         8.0         22.0         6.0         0.5         10.6         6.7         25.0         2.0         0.4         3.9         10.7         10.0         4.0         0.4         7.7         7.3         6.0         12.0         12.0         12.0         10.8         8.8         33.0         6.0         0.4         6.1         10.7         18.0         4.0         0.5         6.1         8.8         82.0         19.0  | -Jun-24  | 9.9   | 8.0     | 18.0   | 0.0        | 0.5               | 10.4  | 6.7   | 22.0              | 2.0   | 6.4               | 6.2   | 10.7                | 11.0      | 5.0      | 0.5               | 7.8   | 9.6       | 40.0     | 9.0         | 6.0   |
| 44         6.4         8.0         39.0         12.0         0.5         10.8         8.8         33.0         6.0         0.4         6.1         10.7         18.0         4.0         0.5         6.1         10.2         16.4         38.0         3.0         0.4         6.4         10.7         5.0         6.0         0.5         5.6         6.9         6.9         6.0         9.0         5.0         6.0         6.0         0.5         5.6         6.9         6.0         7.0         6.0         6.0         0.5         5.0         6.0         6.0         0.5         6.0         7.0         6.0         7.0         6.0         7.0         6.0         7.0         6.0         7.0         6.0         7.0 <t< td=""><td>-Jun-24</td><td>6.3</td><td>8.0</td><td>22.0</td><td>6.0</td><td>0.5</td><td>10.6</td><td>6.7</td><td>25.0</td><td>2.0</td><td>0.4</td><td>3.9</td><td>10.7</td><td>10.0</td><td>4.0</td><td>0.4</td><td>7.7</td><td>7.3</td><td>62.0</td><td>12.0</td><td>0.8</td></t<>  | -Jun-24  | 6.3   | 8.0     | 22.0   | 6.0        | 0.5               | 10.6  | 6.7   | 25.0              | 2.0   | 0.4               | 3.9   | 10.7                | 10.0      | 4.0      | 0.4               | 7.7   | 7.3       | 62.0     | 12.0        | 0.8   |
| 44         6.2         6.3         36.0         8.0         0.5         10.2         16.4         38.0         3.0         0.4         6.4         10.7         5.0         6.0         6.5         6.9         69.0         20.0           44         6.4         8.2         5.4         15.0         0.6         10.2         19.1         61.0         3.0         0.4         6.3         10.7         24.0         8.0         0.5         5.7         9.6         61.0         16.0   | -Jun-24  | 6.4   | 8.0     | 39.0   | 12.0       | 0.5               | 10.8  | 8.8   | 33.0              | 0.9   | 0.4               | 6.1   | 10.7                | 18.0      | 4.0      | 0.5               | 6.1   | 8.8       | 82.0     | 19.0        | 1.3   |
| 4         6.4         8.2         54.0         15.0         0.6         10.2         19.1         61.0         3.0         0.4         6.3         10.7         24.0         8.0         0.5         5.7         9.6         61.0         16.0   | -Jun-24  | 4.2   | 6.3     | 36.0   | 8.0        | 9.0               | 10.2  | 16.4  | 38.0              | 3.0   | 0.4               | 6.4   | 10.7                | 5.0       | 0.9      |                   |       | 6.9       | 0.69     | 20.0        | 1.3   |
|  | 4        | 6.4   | 8.2     | 54.0   | 15.0       | 9.0               | 10.2  | 19.1  | 61.0              | 3.0   | 0.4               | 6.3   | 10.7                | 24.0      | 8.0      | 0.5               | 5.7   | 9.6       | 61.0     | 16.0        | 1.2   |

For Moxie Power Generation Limited ENERS MK Parameswaran

Station Head

2 X 600 MW THERMAL POWER PLANT

CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT

Daily Average from 01.07.2024 to 31.07.2024

For Moxie Power Generation Limited Melamarudur

MK Parameswaran

2 X 600 MW THERMAL POWER PLANT

CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT

Daily Average from 01.08.2024 to 31.08.2024

| 4 4 4 4 4 4 4 4 4 7 7 7 7 7 7 7 7 7 7 7   | STATION-1 (Near Main Office)   STATION-2 (Near CHP)   STATION-2 (Near ChP)   STATION-2 (Near ChP)   STATION-2 (Near ChP)   State   S | ĺ        |                   |         |                   |             |                   |                   |        |       | )      |       |       |          |           |                   |                   |       |           |           |         |                   |
|---|--|----------|-------------------|---------|-------------------|-------------|-------------------|-------------------|--------|-------|--------|-------|-------|----------|-----------|-------------------|-------------------|-------|-----------|-----------|---------|-------------------|
| 80.0         100.0  | 802         NOX         PMINATION         CO         SO2         NOX         PMINATION         CO         SO2         NOX         PMINATION         PMINATION         CO         SO2         NOX         PMINATION         PMINATION         CO         SO2         NOX         PMINATION         PMINATION         CO         SO2         SO2         NOX         PMINATION         PMI   |          |                   | STATION | -1 (Near M        | lain Office | (e                |                   | STATIC |       | r CHP) |       |       | STATION- | 3 (Near A | sh Pond)          |                   | STA   | TION-4 (S | Sea Water | Pump Ho | (asno             |
| 4         5         7         8         8         8         9         8         9         8         9         8         9         8         9   | 10, 10, 10, 10, 10, 10, 10, 10, 10, 10,  | 9        | 802               | NOX     | PM10              | PM2.5       | 00                | S02               | NOX    | PM10  | PM2.5  | 00    | 202   | XON      | PM10      | PM2.5             | CO                | 202   | XON       | PM10      | PM2.5   | 8                 |
| 4 50         5 50         5 60         5 60         5 60         6 60         1 60 <th< td=""><td>  1955    1955</td><td></td><td>80</td><td>80</td><td>100</td><td>09</td><td>02</td><td>80</td><td>80</td><td>100</td><td>09</td><td>02</td><td>80</td><td>80</td><td>100</td><td>09</td><td>02</td><td>80</td><td>80</td><td>100</td><td>09</td><td>02</td></th<> | 1955    1955 |          | 80                | 80      | 100               | 09          | 02                | 80                | 80     | 100   | 09     | 02    | 80    | 80       | 100       | 09                | 02                | 80    | 80        | 100       | 09      | 02                |
| 4           5.3           7.8           2.9           7.9           5.9           1.0           4.0           7.0           4.0           7.0           4.0           7.0           4.0           7.0           4.0           7.0           4.0           7.0           4.0           7.0           4.0           7.0           4.0           7.0           4.0           7.0           4.0           7.0           4.0           1.0           4.0           7.0           4.0 <th< td=""><td>4           5.3           7.8           2.9           1.3           3.3           0.0           0.7           5.6           16.8           17.0           •           0.4           17.6             4           5.3           7.8           2.70           14.0           0.4           7.5           12.1           3.0           0.7           5.6           16.9           19.0           0.4           17.6             4           5.4           7.9           3.10           18.0           0.4           7.8           12.8           3.0           0.7           5.7           16.0           1.0           0.0             4           5.4           7.9           4.0           7.0           1.2           1.2           3.0           0.7           5.7           16.0           0.0           0.0           0.7           5.7           16.0           0.</td><td></td><td>ng/m<sup>3</sup></td><td>ng/m3</td><td>ng/m<sub>3</sub></td><td>m/6ri</td><td>mg/m<sup>3</sup></td><td>ug/m<sup>3</sup></td><td>ng/m³</td><td>ng/m³</td><td>pg/m3</td><td>mg/m³</td><td>ра/шз</td><td>ng/m3</td><td>на/ш3</td><td>ug/m<sup>3</sup></td><td>mg/m<sup>3</sup></td><td>mg/m3</td><td>ng/m³</td><td>µg/m³</td><td>ра/ш</td><td>mg/m<sup>3</sup></td></th<>  | 4           5.3           7.8           2.9           1.3           3.3           0.0           0.7           5.6           16.8           17.0           •           0.4           17.6             4           5.3           7.8           2.70           14.0           0.4           7.5           12.1           3.0           0.7           5.6           16.9           19.0           0.4           17.6             4           5.4           7.9           3.10           18.0           0.4           7.8           12.8           3.0           0.7           5.7           16.0           1.0           0.0             4           5.4           7.9           4.0           7.0           1.2           1.2           3.0           0.7           5.7           16.0           0.0           0.0           0.7           5.7           16.0           0.  |          | ng/m <sup>3</sup> | ng/m3   | ng/m <sub>3</sub> | m/6ri       | mg/m <sup>3</sup> | ug/m <sup>3</sup> | ng/m³  | ng/m³ | pg/m3  | mg/m³ | ра/шз | ng/m3    | на/ш3     | ug/m <sup>3</sup> | mg/m <sup>3</sup> | mg/m3 | ng/m³     | µg/m³     | ра/ш    | mg/m <sup>3</sup> |
| 4         5         1         4         1         4         0         4         0         4         0         4         0         4         0         4         0         4         0         4         0         4         0         4         0         4         0         0         4         0         0         4         0         0         4         0   | 4         53         7.8         2.70         14.0         0.4         7.5         12.1         300         2.0         0.7         51.7         15.9         19.0          0.4         7.9         13.0         20.0         0.7         5.7         15.9         19.0          0.5         13.0         13.0         20.0         0.7         5.7         15.0         10.0         7.0         15.0         0.4         7.9         13.8         6.0         0.0         0.7         5.7         16.0         0.0         0.0         0.7         5.7         16.0         0.0         0.0         0.7         5.8         16.1         2.0         0.0   | 1-Aug-24 | 5.3               | 7.8     | 29.0              | 13.0        | 0.4               | 7.5               | 11.8   | 33.0  | 2.0    | 0.7   | 5.6   | 16.8     | 17.0      | *                 | 0.4               | 10.6  | 11.3      | 51.0      | 11.0    | 0.9               |
| 4         5         7         3         10         18.0         0.4         7         8         13         18.0         0.4         7         8         13         18.0         0.4         7         8         13         18.0         0.4         7         18         4         3         0         0         7         18         3         0         0         7         18         3         0         0         0         7         18  | 4         55         7.9         31.0         18.0         0.4         7.8         18.6         38.0         20         0.7         56.7         18.0         7.9         31.0         18.0         0.4         7.8         13.8         43.0         20         0.0         6.0         18.0         18.0         7.9         40.0         6.0         4         5.9         40.0         7.0         18.0         3.0         18.0         7.0         18.0         7.0         18.0         7.0         18.0         7.0         18.0         7.0         18.0         7.0         18.0         7.0         18.0         7.0         18.0         18.0         7.0         18.0         7.0         18.0  | 2-Aug-24 | 5.3               | 7.8     | 27.0              | 14.0        | 4.0               | 7.5               | 12.1   | 30.0  | 2.0    | 0.7   | 5.7   | 15.8     | 18.0      |                   | 0.4               | 10.1  | 12.4      | 50.0      | 10.0    | 6.0               |
| 4         5         4         7         4         7         9         4         9         0         7         9         4         9         0         7         1         2         0         0         7         1         2         0         0         4         7         9         4         0         0         0         4         7         0   | 4         54         79         430         230         04         79         480         30         07         58         161         230         •         50         178         480         30         07         58         161         230         •         50         178         480         180         30         07         50         162         30         50         180         57         162         300         •         50         103         57         162         300         •         50         110         400         100         50         50         160         0.0         100         100         50         160         0.0         100         100         50         160         0.0         100 <th< td=""><td>3-Aug-24</td><td>5.5</td><td>7.9</td><td>31.0</td><td>18.0</td><td>0.4</td><td>7.8</td><td>13.6</td><td>38.0</td><td>2.0</td><td>0.7</td><td>5.7</td><td>15.9</td><td>19.0</td><td>*</td><td>0.5</td><td>9.8</td><td>16.4</td><td>62.0</td><td>13.0</td><td>6.0</td></th<>   | 3-Aug-24 | 5.5               | 7.9     | 31.0              | 18.0        | 0.4               | 7.8               | 13.6   | 38.0  | 2.0    | 0.7   | 5.7   | 15.9     | 19.0      | *                 | 0.5               | 9.8   | 16.4      | 62.0      | 13.0    | 6.0               |
| 4         59         80         80         70         69         67         162         380         **         0.5         103         124         680         70         162         380         **         0.5         110         164         970         110         164         970         110         164         970         110         164         970         110         164         970         110         164         970         110         164         970         110         164         970         170         160         180         170         160         180         170         160         180         <  | 4         5.9         8.0         7.8         4.4         8.0         3.0         0.8         5.7         16.2         38.0         .0         5.7         16.2         9.0         .0         5.0         16.0         .0         4.0         7.8         4.8         6.0         0.0         5.0         17  | 4-Aug-24 | 5.4               | 7.9     | 43.0              | 23.0        | 0.4               | 7.9               | 13.8   | 43.0  | 3.0    | 7.0   | 5.8   | 16.1     | 23.0      | *                 | 0.5               | 12.3  | 13.4      | 78.0      | 17.0    | 1.0               |
| 4         59         79         460         160         60         60         60         60         60         60         60         70         60         70         60         70         60         70         60         70         60         70         60         70         60         70  | 4         5.9         7.9         44.0         16.0         0.4         8.2         15.2         6.0 </td <td>5-Aug-24</td> <td>5.9</td> <td>8.0</td> <td>78.0</td> <td>24.0</td> <td>0.4</td> <td>7.8</td> <td>14.8</td> <td>58.0</td> <td>3.0</td> <td>0.8</td> <td>5.7</td> <td>16.2</td> <td>38.0</td> <td></td> <td>6.0</td> <td>10.3</td> <td>12.4</td> <td>59.0</td> <td>12.0</td> <td>1.0</td>   | 5-Aug-24 | 5.9               | 8.0     | 78.0              | 24.0        | 0.4               | 7.8               | 14.8   | 58.0  | 3.0    | 0.8   | 5.7   | 16.2     | 38.0      |                   | 6.0               | 10.3  | 12.4      | 59.0      | 12.0    | 1.0               |
| 4         54         73         70         150         0.4         80         127         370         40         80         66         66         180         ***         0.5         10.2         14.1         67.0         20.0         4         6.0         11.2         11.0         14.0         15.0         14.1         67.0         20.0         4         60         7.9         44.0         14.0         0.0         8.2         14.4         37.0         20.0         8.0         15.0         7.0         11.4         11.5         18.0         20.0         20.0         20.0         7.0         10.0         7.0         11.4         13.0         14.1         37.0         20.0         <   | 4         5.4         7.8         37.0         15.0         0.4         0.0         12.7         37.0         4.0         0.8         5.6         16.0         18.0         ∞         0.7         10.2           4         5.6         7.8         47.0         14.0         0.2         18.2         14.1         37.0         3.0         0.8         5.7         16.5         20.0         ∞         0.7         10.2           4         5.6         7.9         44.0         14.0         0.5         8.2         14.4         39.0         5.0         0.8         5.0         16.5         20.0         ∞         0.7         10.2           4         5.6         7.9         4.0         0.8         5.0         0.8         5.0         14.0         0.7         0.8         16.0         0.4         0.7         11.4   | g-24     | 5.9               | 7.9     | 46.0              | 16.0        | 0.4               | 8.2               | 15.2   | 0.09  | 5.0    | 8.0   | 5.7   | 15.7     | 29.0      | *                 | 0.5               | 11.0  | 16.4      | 74.0      | 29.0    | 1.0               |
| 4         56         73         470         140         0.2         82         141         370         3.0         0.8         57         450         *         0.7         102         135         660         180           56         7.5         4.40         14.0         0.2         82         164         300         2.0         16.5         200         *         0.7         10.2         13.0         13.0         10.0 <th< td=""><td>4         56         7.9         47.0         14.0         0.2         8.2         14.1         37.0         3.0         0.8         5.7         15.0         0.0&lt;</td><td>7-Aug-24</td><td>5.4</td><td>7.8</td><td>37.0</td><td>15.0</td><td>0.4</td><td>8.0</td><td>12.7</td><td>37.0</td><td>4.0</td><td>8.0</td><td>5.6</td><td>16.0</td><td>18.0</td><td>*</td><td>0.5</td><td>10.2</td><td>14.1</td><td>67.0</td><td>25.0</td><td>1.0</td></th<>  | 4         56         7.9         47.0         14.0         0.2         8.2         14.1         37.0         3.0         0.8         5.7         15.0         0.0<   | 7-Aug-24 | 5.4               | 7.8     | 37.0              | 15.0        | 0.4               | 8.0               | 12.7   | 37.0  | 4.0    | 8.0   | 5.6   | 16.0     | 18.0      | *                 | 0.5               | 10.2  | 14.1      | 67.0      | 25.0    | 1.0               |
| 4         56         7.9         4.4         0.9         8.2         16.4         390         2.0         6.9         16.5         7.0         1.1         1.3  | 4         5.6         7.9         440         14.0         0.5         8.2         16.4         390         2.0         0.8         6.9         16.5         2.0         1.0         0.8         6.9         16.0         34.0         **         0.5         11.4           4         5.6         7.9         13.0         14.0         0.5         8.6         16.2         38.0         6.0         0.7         5.8         16.0         34.0         **         0.4         1.2         38.0         16.0         0.7         5.0         0.8         5.8         16.0         **         0.4         11.5           4         5.4         7.0         4.0         0.2         1.0         0.4         16.0         34.0         4.0         0.8         5.8         16.0         **         0.4         11.5           4         5.4         6.8         6.2         1.2         34.0         6.0         0.9         15.0         0.9         6.0         18.0         0.9         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2         11.2 <td>8-Aug-24</td> <td>5.6</td> <td>7.9</td> <td>47.0</td> <td>14.0</td> <td>0.2</td> <td>8.2</td> <td>14.1</td> <td>37.0</td> <td>3.0</td> <td>8.0</td> <td>5.7</td> <td>15.9</td> <td>20.0</td> <td>*</td> <td>0.7</td> <td>10.2</td> <td>13.5</td> <td>0.99</td> <td>18.0</td> <td>1.0</td>  | 8-Aug-24 | 5.6               | 7.9     | 47.0              | 14.0        | 0.2               | 8.2               | 14.1   | 37.0  | 3.0    | 8.0   | 5.7   | 15.9     | 20.0      | *                 | 0.7               | 10.2  | 13.5      | 0.99      | 18.0    | 1.0               |
| 4         56         7.9         130         120         0.5         86         130         6.0         6.0         6.0         160         9.0         7.0         7.0         7.0         130         120         0.5         86         160         9.0         6.0         160         9.0         160         9.0         160         9.0         1.0         1.0         1.0         9.0         1.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         1.0         9.0         1.0         9.0         1.0         1.0         9.0         1.0         9.0         1.0         1.0         9.0         1.0         9.0         1.0         9.0         9.0         1.0         9.0         9.0         1.0         9.0         9.0         9.0         1.0         9.0  | 56         7.9         13.0         12.0         0.5         8.6         13.2         39.0         5.0         6.0   | 9-Aug-24 | 5.6               | 7.9     | 44.0              | 14.0        | 0.5               | 8.2               | 16.4   | 39.0  | 2.0    | 8.0   | 5.9   | 16.5     | 25.0      |                   | 0.5               | 11.4  | 13.5      | 83.0      | 20.0    | 1.0               |
| 4         54         78         430         160         03         66         165         360         60         07         56         143         200         7         04         110         200         60         103         60         103         60         103         60         103         60         103  | 4         5.4         7.8         430         16.0         0.3         8.6         6.0         0.7         5.6         14.3         29.0         **         0.4         11.6           44         5.6         7.9         67.0         21.0         0.4         9.9         13.0         34.0         6.0         0.8         5.9         15.4         19.0         **         0.4         11.6           45.4         6.4         7.0         21.0         0.4         13.0         34.0         4.0         0.8         5.9         15.4         19.0         **         0.6         11.2         12.0         10.0         10.0         0.8         6.0         15.0         10.0         0.9         6.0         15.0         10.0         0.8         11.2         11.0  | ug-24    | 5.6               | 7.9     | 13.0              | 12.0        | 0.5               | 8.6               | 13.2   | 39.0  | 5.0    | 8.0   | 5.8   | 16.0     | 34.0      | *                 | 4.0               | 12.5  | 14.9      | 54.0      | 16.0    | 1.0               |
| 4         5         7         6         7         9         9         130         40         0.8         5         150         6         120         120         0.4         99         130         40         0.8         58         150         90         112         160         6         0         400         100         150         100         100         150         150         150         150         150         150         150         150         150         150         150         150         150         150  | 4         5.6         7.3         67.0         21.0         0.4         9.9         13.0         34.0         0.8         5.9         15.4         19.0         **         15.0         1.2         10.0   | ug-24    | 5.4               | 7.8     | 43.0              | 16.0        | 0.3               | 8.6               | 16.5   | 36.0  | 0.9    | 2.0   | 5.6   | 14.3     | 29.0      | *                 | 0.4               | 11.6  | 0.0       | 56.0      | 26.0    | 1.0               |
| 4         5.4         7.0         2.0         0.0         0.0         6.0         15.0         1.0  | 44         5.4         7.0         6.0 <td>Jg-24</td> <td>5.6</td> <td>7.9</td> <td>0.78</td> <td>21.0</td> <td>0.4</td> <td>6.6</td> <td>13.0</td> <td>34.0</td> <td>4.0</td> <td>8.0</td> <td>5.9</td> <td>15.4</td> <td>19.0</td> <td></td> <td>0.5</td> <td>12.9</td> <td>16.6</td> <td>64.0</td> <td>43.0</td> <td>1.0</td>   | Jg-24    | 5.6               | 7.9     | 0.78              | 21.0        | 0.4               | 6.6               | 13.0   | 34.0  | 4.0    | 8.0   | 5.9   | 15.4     | 19.0      |                   | 0.5               | 12.9  | 16.6      | 64.0      | 43.0    | 1.0               |
| 4         5.4         6.8         6.2         6.2         6.0         1.0         6.0         6.0         1.0         6.0         1.0   | 4         5.4         6.8         62.0         6.5         0.9         6.0         6.0         6.0         15.1         9.0         1.0         0.9         6.0         15.1         9.0         1.0         0.9         6.0         15.1         9.0         1.0         0.9         6.1         15.0         15.0         10.3         10.5 <t< td=""><td>Jg-24</td><td>5.4</td><td>7.0</td><td></td><td>26.0</td><td>0.3</td><td>10.4</td><td>16.0</td><td>57.0</td><td>9.0</td><td>8.0</td><td>5.8</td><td>15.8</td><td>21.0</td><td>*</td><td>9.0</td><td>11.2</td><td>16.7</td><td>90.0</td><td>40.0</td><td>1.0</td></t<>  | Jg-24    | 5.4               | 7.0     |                   | 26.0        | 0.3               | 10.4              | 16.0   | 57.0  | 9.0    | 8.0   | 5.8   | 15.8     | 21.0      | *                 | 9.0               | 11.2  | 16.7      | 90.0      | 40.0    | 1.0               |
| 4         5.5         8.0         6.0         6.0         1.0         9.0         6.0         17.0         *         0.5         9.0         4.0         9.0         6.0         17.0         *         0.5         9.0         9.0         6.0         17.0         *         0.5         9.0         17.0         18.0         9.0         17.0         18.0 <td>4         5.5         8.0         66.0         15.0         10.3         19.5         47.0         3.0         6.0         6.1         15.0         10.0         10.3         10.3         10.3         47.0         3.0         6.0         6.1         17.0         17.0         19.0         0.3         10.0         19.5         53.0         5.0         0.9         6.1         17.3         15.0         0.9         5.0         16.0         17.3         10.0         10.3         10.2         19.3         20.0         0.9         5.9         16.0         17.3         16.0         2.0         0.0         17.3         15.0         10.0         10.3         10.2         10.3         22.0         0.0         0.0         17.3         15.0         10.0         10.3         10.0         22.1         4.0         0.0         17.3         15.0         10.0         10.3         24.5         5.0         0.0         17.3         15.0         10.0         10.3         22.1         22.1         20.0         10.0         10.3         22.2         4.0         0.0         10.0         10.3         22.2         4.0         0.0         10.0         0.0         22.0         10.0         0.0</td> <td>Jg-24</td> <td>5.4</td> <td>6.8</td> <td>62.0</td> <td>25.0</td> <td>0.3</td> <td>9.6</td> <td>17.6</td> <td>37.0</td> <td>0.9</td> <td>6.0</td> <td>6.0</td> <td>15.1</td> <td>9.0</td> <td>*</td> <td>9.0</td> <td>9.1</td> <td>16.4</td> <td>90.0</td> <td>45.0</td> <td>1.0</td>   | 4         5.5         8.0         66.0         15.0         10.3         19.5         47.0         3.0         6.0         6.1         15.0         10.0         10.3         10.3         10.3         47.0         3.0         6.0         6.1         17.0         17.0         19.0         0.3         10.0         19.5         53.0         5.0         0.9         6.1         17.3         15.0         0.9         5.0         16.0         17.3         10.0         10.3         10.2         19.3         20.0         0.9         5.9         16.0         17.3         16.0         2.0         0.0         17.3         15.0         10.0         10.3         10.2         10.3         22.0         0.0         0.0         17.3         15.0         10.0         10.3         10.0         22.1         4.0         0.0         17.3         15.0         10.0         10.3         24.5         5.0         0.0         17.3         15.0         10.0         10.3         22.1         22.1         20.0         10.0         10.3         22.2         4.0         0.0         10.0         10.3         22.2         4.0         0.0         10.0         0.0         22.0         10.0         0.0   | Jg-24    | 5.4               | 6.8     | 62.0              | 25.0        | 0.3               | 9.6               | 17.6   | 37.0  | 0.9    | 6.0   | 6.0   | 15.1     | 9.0       | *                 | 9.0               | 9.1   | 16.4      | 90.0      | 45.0    | 1.0               |
| 4         5.6         8.1         7.2         19.0         19.3         5.0         0.9         5.9         16.0         **         0.4         9.2         17.1         6.0         17.0         20.0           4         5.6         7.9         36.0         15.0         19.3         28.0         2.0         0.8         6.0         17.3         16.0         **         0.4         9.2         17.1         60.0         11.0           4         6.4         7.9         36.0         10.3         10.2         19.3         28.0         2.0         0.8         6.0         17.3         16.0         **         0.4         9.2         17.1         60.0         11.0         9.2         17.0         40.0         0.8         6.0         17.3         16.0         **         0.2         10.0         17.0         10.0         17.0         10.0         17.0         10.0         17.0         10.0         17.0         10.0<   | 46         5.6         8.1         72.0         19.0         0.3         10.0         19.5         53.0         5.0         0.9         5.9         16.0         2.0         7.0         6.0         17.3         16.0         **         0.4         9.2           4         5.6         7.9         36.0         15.0         0.3         10.2         19.3         29.0         2.0         0.8         6.0         17.3         16.0         **         0.4         9.3           4         6.4         7.9         66.0         18.0         0.3         10.1         22.1         57.0         0.8         6.0         17.3         16.0         **         0.4         9.3           4         6.1         7.9         66.0         18.0         0.3         10.1         22.1         57.0         0.9         56.0         16.0         7*         0.2         9.0  | Jg-24    | 5.5               | 8.0     | 0.99              | 15.0        | 0.3               | 10.3              | 19.5   | 47.0  | 3.0    | 6.0   | 6.1   | 16.0     | 17.0      | *                 | 0.5               | 9.1   | 14.6      | 85.0      | 31.0    | 1.0               |
| 4         5.6         7.9         36.0         7.9         4.0         17.3         15.0         **         0.4         9.3         17.1         60.0         11.0           4         6.4         7.9         66.0         18.0         0.3         10.1         22.1         57.0         4.0         0.8         6.0         16.0         7.0         10.1         22.1         57.0         4.0         0.8         5.0         16.0         2.0         16.0<  | 4         5.6         7.9         86.0         15.0         0.3         29.0         2.0         0.0         6.0         17.3         15.0         **         0.4         9.8           44         6.4         7.9         66.0         18.0         0.3         10.1         22.1         57.0         4.0         0.8         5.0         16.0         5.0         **         0.4         9.0           44         6.1         7.9         66.0         18.0         0.3         10.9         24.5         50.0         3.0         5.0         16.0         27.0         **         0.2         9.0           44         6.1         7.9         54.0         10.0         0.3         10.9         24.2         41.0         3.0         0.7         5.5         16.0         2.0         0.3         9.0  | 1g-24    | 5.6               | 8.1     | 72.0              | 19.0        | 0.3               | 10.0              | 19.5   | 53.0  | 5.0    | 6.0   | 5.9   | 16.6     | 23.0      | *                 | 4.0               | 9.2   | 12.5      | 74.0      | 28.0    | 9.0               |
| 4         6.4         7.9         66.0         18.0         0.3         10.1         22.1         4.0         0.8         5.6         16.6         25.0         **         0.2         9.0         15.0         9.0         9.0         9.0         9.0         16.0         9.0         16.0         9.0         16.0   | 46         6.4         7.9         66.0         18.0         0.3         10.1         22.1         57.0         4.0         0.8         5.6         16.0         2.0         18.0         5.6         16.0         2.0         4.0         6.8         5.6         16.0         2.0         4.0         5.0         5.0         5.0         16.0         5.0         4.0         5.0         5.0         5.0         6.0         5.0         6.0         5.0         6.0         5.0         6.0         5.0         6.0         5.0         6.0         5.0         6.0         5.0         6.0         5.0         6.0         <   | 1g-24    | 5.6               | 7.9     | 36.0              | 15.0        | 0.3               | 10.2              | 19.3   | 29.0  | 2.0    | 8.0   | 0.9   | 17.3     | 15.0      |                   | 4.0               | 9.3   | 17.1      | 0.09      | 11.0    | 0.7               |
| 4         6.1         7.9         48.0         15.0         6.0         5.0         6.0         5.0         6.0         5.0         6.0         5.0         6.0         7.0         6.0         7.0 <td>4         6.1         7.9         48.0         16.0         0.9         5.6         16.0         5.6         16.0         3.0         0.9         5.6         16.0         27.0         *         0.3         9.3         9.3         9.3         9.3         9.3         9.3         9.3         9.3         9.3         9.4         9.0         0.0         0.7         5.5         16.0         2.0         *         0.9         5.0         7.0         6.0         9.0<!--</td--><td>1g-24</td><td>6.4</td><td>7.9</td><td>0.99</td><td>18.0</td><td>0.3</td><td>10.1</td><td>22.1</td><td>57.0</td><td>4.0</td><td>8.0</td><td>5.6</td><td>16.6</td><td>25.0</td><td>*</td><td>0.2</td><td>9.0</td><td>15.3</td><td>79.0</td><td>20.0</td><td>0.8</td></td>  | 4         6.1         7.9         48.0         16.0         0.9         5.6         16.0         5.6         16.0         3.0         0.9         5.6         16.0         27.0         *         0.3         9.3         9.3         9.3         9.3         9.3         9.3         9.3         9.3         9.3         9.4         9.0         0.0         0.7         5.5         16.0         2.0         *         0.9         5.0         7.0         6.0         9.0 </td <td>1g-24</td> <td>6.4</td> <td>7.9</td> <td>0.99</td> <td>18.0</td> <td>0.3</td> <td>10.1</td> <td>22.1</td> <td>57.0</td> <td>4.0</td> <td>8.0</td> <td>5.6</td> <td>16.6</td> <td>25.0</td> <td>*</td> <td>0.2</td> <td>9.0</td> <td>15.3</td> <td>79.0</td> <td>20.0</td> <td>0.8</td>   | 1g-24    | 6.4               | 7.9     | 0.99              | 18.0        | 0.3               | 10.1              | 22.1   | 57.0  | 4.0    | 8.0   | 5.6   | 16.6     | 25.0      | *                 | 0.2               | 9.0   | 15.3      | 79.0      | 20.0    | 0.8               |
| 4         6.1         7.9         64.0         7.0         6.1         6.0         6.0         4.0         6.0         6.0         6.0         4.0         6.0  | 24         6.1         7.9         54.0         10.0         0.3         41.0         3.0         0.7         5.5         16.6         20.0         *         0.0         9.7         5.5         16.6         20.0         *         0.0         9.7         17.0         28.0         0.0         0.0         0.0         6.0         16.0         16.0         10.0         0.3         9.2         17.0         28.0         2.0         0.0         0.0         16.0  | 1g-24    | 6.1               | 7.9     | 48.0              | 15.0        | 0.3               | 10.9              | 24.5   | 90.09 | 3.0    | 6.0   | 5.6   | 16.6     | 27.0      | *                 | 0.3               | 9.3   | 16.3      | 68.0      | 27.0    | 0.8               |
| 4. 6. 2. 7.7         5.0. 18. 0.3         9.2 17. 0.28. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.8. 0.3         9.2 17. 0.3         9.  | 24         6.2         7.7         34.0         18.0         0.3         9.2         17.0         28.0         2.0         0.8         6.6         16.6         16.0         *         0.5         16.6         16.0         *         0.5         16.0         9.4         9.7         9.4         9.7         16.0         6.0         16.0         17.0         16.0         17.0         0.4         9.7         9.7         16.0         2.0         10.0         0.4         9.7         9.7         16.0         2.0         10.0         0.9         5.7         16.0         2.0         10.0         9.0   | 1g-24    | 6.1               | 7.9     | 54.0              | 10.0        | 0.3               | 10.9              | 23.2   | 41.0  | 3.0    | 2.0   | 5.5   | 16.6     | 20.0      |                   | 0.2               | 9.1   | 16.4      | 90.0      | 19.0    | 0.8               |
| 6.3         7.7         66.0         25.0         0.3         8.4         9.6         65.0         6.0<   | 44         6.3         7.7         66.0         25.0         0.3         8.4         9.6         65.0         6.0         6.0         6.7         16.6         22.0         10.0         0.4         9.7           24         6.0         7.8         82.0         40.0         0.3         8.6         9.6         47.0         3.0         0.9         5.7         16.6         15.0         15.0         0.4         9.7           44         6.5         7.7         63.0         23.0         0.3         8.1         8.6         25.0         3.0         0.7         16.6         15.0         15.0         0.4         9.7           44         6.1         7.7         16.0         9.0         0.3         7.8         13.4         28.0         2.0         0.7         16.6         18.0         18.0         0.3         9.3           44         6.1         7.7         32.0         9.0         0.3         7.2         11.0         27.0         4.0         0.8         6.1         16.6         17.0         4.0         0.3         9.3         9.3           44         6.1         7.7         22.0         7.0         0.3         7.1  | 1g-24    | 6.2               | 7.7     | 34.0              | 18.0        | 0.3               | 9.2               | 17.0   | 28.0  | 2.0    | 8:0   | 5.6   | 16.6     | 16.0      |                   | 0.5               | 4.6   | 16.5      | 64.0      | 19.0    | 0.8               |
| 24         6.0         7.8         82.0         40.0         0.3         6.6         1.0 <td>24         6.0         7.8         82.0         40.0         0.3         8.6         47.0         3.0         0.9         5.6         16.6         15.0         6.0         6.0         6.0         9.7         47.0         9.0         6.0         6.0         15.0</td> <td>Jg-24</td> <td>6.3</td> <td>7.7</td> <td>0.99</td> <td>25.0</td> <td>0.3</td> <td>8.4</td> <td>9.6</td> <td>65.0</td> <td>6.0</td> <td>6.0</td> <td>5.7</td> <td>16.6</td> <td>22.0</td> <td>10.0</td> <td>0.4</td> <td>9.7</td> <td>16.4</td> <td>74.0</td> <td>34.0</td> <td>8.0</td>  | 24         6.0         7.8         82.0         40.0         0.3         8.6         47.0         3.0         0.9         5.6         16.6         15.0         6.0         6.0         6.0         9.7         47.0         9.0         6.0         6.0         15.0   | Jg-24    | 6.3               | 7.7     | 0.99              | 25.0        | 0.3               | 8.4               | 9.6    | 65.0  | 6.0    | 6.0   | 5.7   | 16.6     | 22.0      | 10.0              | 0.4               | 9.7   | 16.4      | 74.0      | 34.0    | 8.0               |
| 4         6.5         7.7         63.0         63.0         6.7         16.6         23.0         7.0         0.3         9.5         16.0         17.0         18.0         17.0         18.0         17.0         18.0 <td>24         6.5         7.7         63.0         0.3         8.1         8.6         25.0         3.0         0.7         5.7         16.6         23.0         7.0         0.3         9.5           24         6.1         7.7         16.0         9.0         0.3         7.8         8.9         31.0         2.0         0.7         6.0         16.6         25.0         6.0         0.3         9.3         9.3           24         6.2         7.7         17.0         8.0         0.3         7.8         13.4         28.0         2.0         0.7         6.0         16.6         28.0         6.0         0.3         6.0         0.3         9.3         9.3           24         6.1         7.7         32.0         9.0         0.3         7.2         11.0         27.0         4.0         0.7         6.1         16.6         11.0         6.0         0.3         9.3         9.3           24         6.1         7.7         21.0         0.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         19.0         4.0         0.3         9.3           24         6.1         7.7         <th< td=""><td>Jg-24</td><td>0.9</td><td>7.8</td><td>82.0</td><td>40.0</td><td>0.3</td><td>8.6</td><td>9.6</td><td>47.0</td><td>3.0</td><td>6.0</td><td>5.6</td><td>16.6</td><td>15.0</td><td>5.0</td><td>4.0</td><td>9.7</td><td>14.3</td><td>88.0</td><td>45.0</td><td>1.0</td></th<></td>   | 24         6.5         7.7         63.0         0.3         8.1         8.6         25.0         3.0         0.7         5.7         16.6         23.0         7.0         0.3         9.5           24         6.1         7.7         16.0         9.0         0.3         7.8         8.9         31.0         2.0         0.7         6.0         16.6         25.0         6.0         0.3         9.3         9.3           24         6.2         7.7         17.0         8.0         0.3         7.8         13.4         28.0         2.0         0.7         6.0         16.6         28.0         6.0         0.3         6.0         0.3         9.3         9.3           24         6.1         7.7         32.0         9.0         0.3         7.2         11.0         27.0         4.0         0.7         6.1         16.6         11.0         6.0         0.3         9.3         9.3           24         6.1         7.7         21.0         0.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         19.0         4.0         0.3         9.3           24         6.1         7.7 <th< td=""><td>Jg-24</td><td>0.9</td><td>7.8</td><td>82.0</td><td>40.0</td><td>0.3</td><td>8.6</td><td>9.6</td><td>47.0</td><td>3.0</td><td>6.0</td><td>5.6</td><td>16.6</td><td>15.0</td><td>5.0</td><td>4.0</td><td>9.7</td><td>14.3</td><td>88.0</td><td>45.0</td><td>1.0</td></th<>   | Jg-24    | 0.9               | 7.8     | 82.0              | 40.0        | 0.3               | 8.6               | 9.6    | 47.0  | 3.0    | 6.0   | 5.6   | 16.6     | 15.0      | 5.0               | 4.0               | 9.7   | 14.3      | 88.0      | 45.0    | 1.0               |
| 44         6.1         7.7         16.0         9.0         0.3         6.0         0.7         6.0         16.6         6.0         0.3         9.3         11.9         58.0         12.0           44         6.2         7.7         17.0         8.0         0.3         7.8         18.0         2.0         0.7         6.0         16.6         18.0         6.0         0.3         9.3         11.3         58.0         25.0           44         6.1         7.7         35.0         0.3         7.2         11.0         27.0         0.0         6.1         16.6         22.0         6.0         0.3         9.3         11.3         56.0         26.0         27.0         27.0         0.8         6.2         16.6         27.0         0.3         9.3         11.3         56.0         27.0         27.0         27.0         0.8         6.1         16.6         21.0         0.3         9.3         13.4         32.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0         12.0<   | 24         6.1         7.7         16.0         9.0         0.3         7.9         8.9         31.0         2.0         0.7         5.7         16.6         26.0         6.0         6.3         6.3         9.3         9.3           24         6.2         7.7         17.0         8.0         0.3         7.8         13.4         28.0         2.0         0.7         6.0         16.6         18.0         5.0         0.3         9.3         9.3           24         6.1         7.7         32.0         9.0         0.3         7.2         11.0         27.0         4.0         0.7         6.1         16.6         22.0         5.0         0.3         9.3         9.3           24         6.1         7.7         36.0         0.3         7.1         10.9         27.0         4.0         0.8         6.1         16.6         21.0         6.0         0.3         9.3         9.3           24         6.1         7.7         22.0         7.0         0.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         19.0         4.0         0.3         9.4         9.2           24 <th< td=""><td>Jg-24</td><td>6.5</td><td>7.7</td><td>63.0</td><td>23.0</td><td>0.3</td><td>8.1</td><td>8.6</td><td></td><td>3.0</td><td>0.7</td><td>5.7</td><td>16.6</td><td>23.0</td><td>7.0</td><td>0.3</td><td>9.5</td><td>16.4</td><td>34.0</td><td>14.0</td><td>0.7</td></th<>  | Jg-24    | 6.5               | 7.7     | 63.0              | 23.0        | 0.3               | 8.1               | 8.6    |       | 3.0    | 0.7   | 5.7   | 16.6     | 23.0      | 7.0               | 0.3               | 9.5   | 16.4      | 34.0      | 14.0    | 0.7               |
| 24         6.2         7.7         17.0         8.0         0.3         7.8         6.0         0.7         6.0         16.6         18.0         6.0         0.3         9.3         12.9         57.0         26.0           24         6.1         7.7         32.0         9.0         0.3         7.8         8.9         27.0         4.0         0.7         6.1         16.6         22.0         5.0         0.3         9.3         11.3         56.0         21.0         21.0         22.0         22.0         16.6         17.0         6.0         0.3         13.4         32.0         12.0         21.0         22.0         12.0         0.3         22.0         12.0         0.3         6.1         16.6         21.0         4.0         0.3         6.1         16.6         21.0         4.0         0.3         12.0   | 24         6.2         7.7         17.0         8.0         0.3         7.8         2.0         0.7         6.0         16.6         18.0         5.0         0.3         9.3         9.3           24         6.1         7.7         32.0         9.0         0.3         7.8         8.9         27.0         4.0         0.7         6.1         16.6         22.0         5.0         0.3         9.3         9.3           24         6.1         7.7         36.0         12.0         0.3         7.1         10.9         27.0         2.0         0.8         6.1         16.6         11.0         6.0         0.3         9.3         9.3           24         6.2         7.7         21.0         0.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         11.0         4.0         0.3         9.3           24         6.1         7.7         22.0         7.0         0.3         7.1         12.0         28.0         2.0         0.8         6.1         16.6         19.0         4.0         0.3         9.4           24         6.2         7.7         22.0         7.0         0.3 <th< td=""><td>1g-24</td><td>6.1</td><td>7.7</td><td>16.0</td><td>9.0</td><td>0.3</td><td>7.9</td><td>8.9</td><td></td><td>2.0</td><td>0.7</td><td>5.7</td><td>16.6</td><td>26.0</td><td>6.0</td><td>0.3</td><td>9.3</td><td>11.9</td><td>58.0</td><td>12.0</td><td>0.8</td></th<>   | 1g-24    | 6.1               | 7.7     | 16.0              | 9.0         | 0.3               | 7.9               | 8.9    |       | 2.0    | 0.7   | 5.7   | 16.6     | 26.0      | 6.0               | 0.3               | 9.3   | 11.9      | 58.0      | 12.0    | 0.8               |
| 24         6.1         7.7         32.0         9.0         0.3         7.8         8.9         27.0         4.0         0.7         6.1         16.6         22.0         6.0         6.2         16.6         11.0         6.0         0.3         9.3         11.3         56.0         21.0         7.0           24         6.1         7.7         36.0         12.0         0.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         11.0         4.0         0.3         9.3         13.4         32.0         12.0         12.0           24         6.2         7.7         21.0         4.0         0.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         19.0         4.0         0.3         8.5         32.0         19.0           24         6.1         7.7         22.0         7.0         0.3         7.0         12.4         24.0         3.0         0.8         6.1         16.6         18.0         4.0         0.3         9.4         21.1         58.0         19.0   | 24         6.1         7.7         32.0         9.0         0.3         7.8         8.9         27.0         4.0         0.7         6.1         16.6         22.0         5.0         0.3         9.3         9.3           24         6.1         7.7         36.0         12.0         0.3         7.1         10.9         27.0         2.0         0.8         6.2         16.6         11.0         6.0         0.3         9.3         9.3           24         6.2         7.7         21.0         6.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         11.0         4.0         0.3         9.3           24         6.1         7.7         22.0         7.0         0.3         7.1         12.0         28.0         2.0         0.8         6.1         16.6         19.0         4.0         0.4         9.2           24         6.2         7.7         22.0         7.0         0.3         7.0         12.4         24.0         3.0         0.8         6.1         16.6         18.0         4.0         0.3         9.4           24         6.2         7.7         22.0         7.0         <  | 1g-24    | 6.2               | 7.7     | 17.0              | 8.0         | 0.3               | 7.8               | 13.4   | 28.0  | 2.0    | 7.0   | 0.9   | 16.6     | 18.0      | 5.0               | 0.3               | 9.3   | 12.9      | 57.0      | 26.0    | 0.8               |
| 24         6.1         7.7         36.0         12.0         0.3         7.2         11.0         27.0         2.0         0.8         6.2         16.6         11.0         6.0         0.3         9.3         13.4         32.0         12.0           24         6.2         7.7         21.0         7.7         21.0         6.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         19.0         4.0         0.3         8.5         32.0         19.0         19.0           24         6.1         7.7         22.0         7.0         0.3         7.1         12.0         28.0         2.0         0.8         6.1         16.6         19.0         4.0         0.4         9.2         8.5         27.0         14.0           24         6.2         7.7         22.0         7.0         0.3         7.0         12.4         24.0         3.0         0.8         6.1         16.6         18.0         4.0         0.3         9.4         21.1         58.0         15.0  | 24         6.1         7.7         36.0         12.0         0.3         7.2         11.0         27.0         2.0         0.8         6.2         16.6         11.0         6.0         0.3         9.3         9.3           24         6.2         7.7         21.0         6.0         0.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         21.0         4.0         0.3         9.3           24         6.1         7.7         22.0         7.0         0.3         7.1         12.0         28.0         2.0         0.8         6.1         16.6         19.0         4.0         0.4         9.2           24         6.2         7.7         22.0         7.0         0.3         7.0         12.4         24.0         3.0         0.8         6.1         16.6         18.0         4.0         0.3         9.4           A but to a mailyser issue, Data not available   | 1g-24    | 6.1               | 7.7     | 32.0              | 9.0         | 0.3               | 7.8               | 8.9    |       | 4.0    | 2.0   | 6.1   | 16.6     | 22.0      | 5.0               | 0.3               | 9.3   | 11.3      | 56.0      | 21.0    | 0.8               |
| 24         6.2         7.7         21.0         5.0         0.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         21.0         4.0         0.3         9.3         8.5         32.0         19.0           24         6.1         7.7         22.0         7.0         0.3         7.1         12.0         28.0         2.0         0.8         6.1         16.6         19.0         4.0         0.4         9.2         8.5         27.0         14.0           24         6.2         7.7         22.0         7.0         0.3         7.0         12.4         24.0         3.0         0.8         6.1         16.6         18.0         4.0         0.3         9.4         21.1         58.0         15.0  | 24         6.2         7.7         21.0         5.0         0.3         7.1         10.9         25.0         4.0         0.8         6.1         16.6         21.0         4.0         0.3         9.3           24         6.1         7.7         22.0         7.0         0.3         7.1         12.0         28.0         2.0         0.8         6.1         16.6         19.0         4.0         0.4         9.2           24         6.2         7.7         22.0         7.0         0.3         7.0         12.4         24.0         3.0         0.8         6.1         16.6         18.0         4.0         0.3         9.4           ** Due to analyser issue, Data not available   | 1g-24    | 6.1               | 7.7     | 36.0              | 12.0        | 0.3               | 7.2               | 11.0   |       | 2.0    | 8.0   | 6.2   | 16.6     | 11.0      | 6.0               | 0.3               | 9.3   | 13.4      | 32.0      | 12.0    | 0.8               |
| 24     6.1     7.7     22.0     7.0     0.3     7.1     12.0     28.0     2.0     0.8     6.1     16.6     19.0     4.0     0.4     9.2     8.5     27.0     14.0       24     6.2     7.7     22.0     7.0     0.3     12.4     24.0     3.0     0.8     6.1     16.6     18.0     4.0     0.3     9.4     21.1     58.0     15.0  | 24         6.1         7.7         22.0         7.0         0.3         7.1         12.0         28.0         2.0         0.8         6.1         16.6         19.0         4.0         0.4         9.2           24         6.2         7.7         22.0         7.0         0.3         7.0         12.4         24.0         3.0         0.8         6.1         16.6         18.0         4.0         0.3         9.4           ** Due to analyser issue, Data not available   | 1g-24    | 6.2               | 7.7     | 21.0              | 5.0         | 0.3               | 7.1               | 10.9   |       | 4.0    | 8:0   | 6.1   | 16.6     | 21.0      | 4.0               | 0.3               | 9.3   | 8.5       | 32.0      | 19.0    | 0.8               |
| 24 6.2 7.7 22.0 7.0 0.3 7.0 12.4 24.0 3.0 0.8 6.1 16.6 18.0 4.0 0.3 9.4 21.1 58.0 15.0  | 24         6.2         7.7         22.0         7.0         0.3         7.0         12.4         24.0         3.0         0.8         6.1         16.6         18.0         4.0         0.3         9.4           * Due to analyser issue, Data not available  | 1g-24    | 6.1               | 7.7     | 22.0              | 7.0         | 0.3               | 7.1               | 12.0   |       | 2.0    | 8.0   | 6.1   | 16.6     | 19.0      | 4.0               | 4.0               | 9.2   | 8.5       | 27.0      | 14.0    | 6.0               |
|   | * Due to analyser issue, Data not available  | 1g-24    | 6.2               | 7.7     | 22.0              | 7.0         | 0.3               | 7.0               | 12.4   | 24.0  | 3.0    | 8.0   | 6.1   | 16.6     | 18.0      | 4.0               | 0.3               | 9.4   | 21.1      | 58.0      | 15.0    | 1.0               |

For Moxie Power Generation Limited

MK Parameswaran

2 X 600 MW THERMAL POWER PLANT

CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT

Daily Average from 01.09.2024 to 30.09.2024

|           |       |                              |                   |            |                   |       |         | aily Aver      | age from | 01.09.202         | Daily Average from 01.09.2024 to 30.09.2024 | 9.2024            |                           |          |                   |       |           |          |                                  |       |
|-----------|-------|------------------------------|-------------------|------------|-------------------|-------|---------|----------------|----------|-------------------|---|-------------------|---------------------------|----------|-------------------|-------|-----------|----------|----------------------------------|-------|
|           |       | STATION-1 (Near Main Office) | 1 (Near I         | Nain Offic | (ac               |       | STATION | ON-2 (Near CHP | r CHP)   |                   | J)  | STATION           | STATION-3 (Near Ash Pond) | sh Pond) |                   | STAT  | TON-4 (St | ea Water | STATION-4 (Sea Water Pump House) | (esn  |
| Date      | 202   | NOX                          | PM10              | PM2.5      |                   | 802   | NOX     | 01Wd           | PM2.5    | 00                | SO2   | NOX               | PM10                      | PM2.5    | 9                 | 202   | XON       | PM10     | PM2.5                            | 00    |
|           | 80    | 80                           | 100               | 09         | 0.5               | 80    | 80      | 100            | 09       | 0.2               | 80  | 80                | 100                       | 09       | 02                | 80    | 80        | 100      | 09                               | 02    |
|           | ng/m³ | mg/m3                        | ng/m <sup>3</sup> | ng/m3      | mg/m <sup>3</sup> | µg/m³ | ug/m²   | m/bri          | µg/m³    | mg/m <sup>3</sup> | ng/m <sup>3</sup>                           | ng/m <sup>3</sup> | ug/m³                     | ng/m³    | mg/m <sup>3</sup> | ug/m³ | µg/m³     | m/bri    | µg/m³                            | mg/m³ |
| 1-Sep-24  | 6.2   | 7.7                          | 17.0              | 2.0        | 0.3               | 6.9   | 12.2    | 21.0           | 1.0      | 8.0               | 6.2   | 16.6              | 17.0                      | 3.0      | 0.3               | 9.5   | 21.0      | 42.0     | 10.0                             | 1.0   |
| 2-Sep-24  | 6.3   | 9.7                          | 24.0              | 13.0       | 0.3               | 6.9   | 12.0    | 24.0           | 2.0      | 0.8               | 6.2   | 16.6              | 17.0                      | 4.0      | 0.3               | 9.2   | 18.0      | 44.0     | 13.0                             | 6.0   |
| 3-Sep-24  | 9.9   | 7.6                          | 24.0              | 7.0        | 0.3               | 6.8   | 12.1    | 23.0           | 1.0      | 8.0               | 6.2   | 16.6              | 15.0                      | 3.0      | 0.3               | 9.1   | 16.2      | 32.0     | 11.0                             | 6.0   |
| 4-Sep-24  | 7.2   | 7.6                          | 48.0              | 9.0        | 0.3               | 6.8   | 12.6    | 32.0           | 2.0      | 8.0               | 6.3   | 16.6              | 20.0                      | 5.0      | 0.3               | 9.1   | 12.1      | 47.0     | 28.0                             | 1.0   |
| 5-Sep-24  | 6.7   | 7.4                          | 62.0              | 13.0       | 0.2               | 6.5   | 13.1    | 42.0           | 2.0      | 0.7               | 5.8   | 16.2              | 0.09                      | 7.0      | 0.2               | 8.7   | 21.4      | 0.79     | 14.0                             | 6.0   |
| 6-Sep-24  | 7.1   | 7.7                          | 39.0              | 13.0       | 0.3               | 8.9   | 12.9    | 36.0           | 3.0      | 8.0               | 6.3   | 16.5              | 22.0                      | 6.0      | 0.4               | 9.5   | 14.7      | 54.0     | 16.0                             | 1.3   |
| 7-Sep-24  | 7.2   | 7.7                          | 44.0              | 13.0       | 0.3               | 6.7   | 13.7    | 40.0           | 3.0      | 6.0               | 6.4   | 16.3              | 26.0                      | 7.0      | 9.0               | 9.4   | 22.7      | 90.09    | 15.0                             | 1.8   |
| 8-Sep-24  | 7.2   | 9.7                          | 32.0              | 9.0        | 0.3               | 6.7   | 13.2    | 30.0           | 2.0      | 6.0               | 6.3   | 16.2              | 18.0                      | 4.0      | 0.4               | 10.3  | 16.2      | 44.0     | 13.0                             | 1.9   |
| 9-Sep-24  | 7.2   | 7.6                          | 25.0              | 7.0        | 0.3               | 6.7   | 13.0    | 27.0           | 2.0      | 6.0               | 6.1   | 16.3              | 16.0                      | 4.0      | 0.4               | 10.0  | 18.3      | 37.0     | 11.0                             | 1.6   |
| 10-Sep-24 | 7.0   | 7.7                          | 36.0              | 11.0       | 0.3               | 6.8   | 13.8    | 36.0           | 2.0      | 6.0               | 6.1   | 16.1              | 20.0                      | 5.0      | 0.4               | 9.0   | 21.3      | 43.0     | 5.0                              | 1.2   |
| 11-Sep-24 | 6.9   | 7.4                          | 18.0              | 4.0        | 0.4               | 6.9   | 13.9    | 30.0           | 2.0      | 6.0               | 6.1   | 16.2              | 25.0                      | 6.0      | 0.4               | 9.3   | 23.6      | 52.0     | 14.0                             | 1.3   |
| 12-Sep-24 | 9.6   | 7.6                          | 37.0              | 9.0        | 9.0               | 7.5   | 13.5    | 26.0           | 3.0      | 0.7               | 6.1   | 16.1              | 19.0                      | 4.0      | 0.4               | 9.4   | 22.8      | 52.0     | 15.0                             | 1.5   |
| 13-Sep-24 | 9.0   | 9.7                          | 47.0              | 12.0       | 9.0               | 10.4  | 10.7    | 44.0           | 4.0      | 8.0               | 6.4   | 16.1              | 0.9                       | 4.0      | 0.5               | 9.6   | 19.5      | 64.0     | 70.0                             | 0.7   |
| 14-Sep-24 | 8.7   | 9.7                          | 28.0              | 10.0       | 9.0               | 9.6   | 10.3    | 33.0           | 3.0      | 0.5               | 6.7   | 16.1              | 23.0                      | 6.0      | 0.5               | 6.3   | 21.3      | 38.0     | 11.0                             | 7.0   |
| 15-Sep-24 | 8.6   | 7.6                          | 30.0              | 11.0       | 9.0               | 9.3   | 10.4    | 33.0           | 3.0      | 0.5               | 9.9   | 15.9              | 20.0                      | 2.0      | 0.5               | 9.2   | 25.2      | 61.0     | 15.0                             | 7.0   |
| 16-Sep-24 | 8.5   | 7.7                          | 36.0              | 13.0       | 9.0               | 9.5   | 9.6     | 40.0           | 3.0      | 9.0               | 9.9   | 16.4              | 23.0                      | 6.0      | 0.5               | 9.3   | 23.3      | 50.0     | 13.0                             | 7.0   |
| 17-Sep-24 | 8.7   | 7.8                          | 33.0              | 12.0       | 0.7               | 9.2   | 9.2     | 42.0           | 2.0      | 0.5               | 6.7   | 15.8              | 28.0                      | 7.0      | 0.5               | 9.1   | 23.4      | 55.0     | 14.0                             | 1.2   |
| 18-Sep-24 | 8.6   | 5.8                          | 36.0              | 19.0       | 0.7               | 9.1   | 9.4     | 44.0           | 3.0      | 0.5               | 6.7   | 16.0              | 32.0                      | 0.7      | 0.5               | 9.2   | 23.9      | 63.0     | 19.0                             | 1.2   |
| 19-Sep-24 | 8.1   | 8.3                          | 40.0              | 15.0       | 9.0               | 9.2   | 9.7     | 40.0           | 3.0      | 0.5               | 6.7   | 16.1              | 32.0                      | 7.0      | 9.0               | 9.5   | 32.8      | 73.0     | 15.0                             | 1.1   |
| 20-Sep-24 | 8.5   | 9.8                          | 41.0              | 16.0       | 9.0               | 9.1   | 10.2    | 44.0           | 3.0      | 0.5               | 6.8   | 16.2              | 25.0                      | 7.0      | 0.5               | 9.1   | 32.1      | 85.0     | 18.0                             | 6.0   |
| 21-Sep-24 | 8.4   | 8.6                          | 40.0              | 14.0       | 9.0               | 10.0  | 12.6    | 43.0           | 2.0      | 9.0               | 6.7   | 16.1              | 25.0                      | 6.0      | 0.5               | 9.4   | 6.7       | 68.0     | 14.0                             | 6.0   |
| 22-Sep-24 | 8.4   | 8.6                          | 27.0              | 10.0       | 9.0               | 9.7   | 8.1     | 32.0           | 3.0      | 1.1               | 6.7   | 16.1              | 29.0                      | 6.0      | 0.5               | 9.5   | 10.2      | 34.0     | 10.0                             | 1.1   |
| 23-Sep-24 | 8.3   | 8.5                          | 13.0              | 4.0        | 0.7               | 9.5   | 9.8     | 26.0           | 2.0      | 1.4               | 6.9   | 16.0              | 19.0                      | 4.0      | 9.0               | 9.5   | 9.3       | 35.0     | 8.0                              | 1.2   |
| 24-Sep-24 | 8.3   | 8.5                          | 21.0              | 2.0        | 6.0               | 9.5   | 11.7    | 28.0           | 2.0      | 1.2               | 7.0   | 15.7              | 23.0                      | 5.0      | 9.0               | 6.6   | 9.3       | 41.0     | 11.0                             | 1.2   |
| 25-Sep-24 | 8.3   | 8.6                          | 22.0              | 2.0        | 6.0               | 9.9   | 10.4    | 22.0           | 2.0      | 1.1               | 7.0   | 15.8              | 17.0                      | 3.0      | 9.0               | 10.0  | 3.3       | 35.0     | 7.0                              | 1.2   |
| 26-Sep-24 | 8.3   | 8.6                          | 47.0              | 11.0       | 6.0               | 10.2  | 10.1    | 25.0           | 3.0      | 6.0               | 7.0   | 15.9              | 20.0                      | 4.0      | 9.0               | 10.2  | 8.0       | 0.99     | 18.0                             | 1.3   |
| 27-Sep-24 | 8.3   | 8.6                          | 40.0              | 13.0       | 6.0               | 6.6   | 9.4     | 45.0           | 4.0      | 9.0               | 7.0   | 16.1              | 15.0                      | 6.0      | 0.7               | 10.2  | 7.9       | 98.0     | 17.0                             | 4.1   |
| 28-Sep-24 | 8.4   | 8.6                          | 52.0              | 17.0       | 6.0               | 9.8   | 6.6     | 45.0           | 4.0      | 0.7               | 7.2   | 17.1              | 31.0                      | 8.0      | 8.0               | 10.3  | 7.9       | 52.0     | 9.0                              | 0.0   |
| 29-Sep-24 | 8.5   | 8.6                          | 61.0              | 9.0        | 6.0               | 10.1  | 9.2     | 29.0           | 2.0      | 0.7               | 7.3   | 17.0              | 18.0                      | 5.0      | 8.0               | 10.7  | 16.4      | 0.69     | 15.0                             | 1.0   |
| 30-Sep-24 | 8.6   | 8.6                          | 55.0              | 11.0       | 6.0               | 10.9  | 8.6     | 22.0           | 4.0      | 0.7               | 7.4   | 16.9              | 11.0                      | 3.0      | 0.7               | 11.1  | 10.8      | 50.0     | 2.0                              | 1.0   |
| Remarks:  | Ē     |                              |                   |            |                   |       |         |                |          |                   |   |                   |                           |          |                   |       |           |          |                                  |       |

For Moxie Power Generation Limited GENERA
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|   | I   |        | NOX   | 450 mg/Nm <sup>2</sup>                    | 139      | 26                    |          |          |          |          |          |          | ion                   |           |           |           |           |           |           | 38        | 102       | 108       | 110       | 139       | 40        | 114       | 76        | 137       | 92        | 130       | 125       | 139       | 122       | 84        |           | ,       |
|---|---|--------|-------|---|----------|-----------------------|----------|----------|----------|----------|----------|----------|-----------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------|
|   |   | 24     | SO2   | E L                                       | 156      | 64                    |          |          |          |          |          |          | Unit not in operation |           |           |           |           |           |           | 123       | 143       | 173       | 179       | 62        | 111       | 78        | 97        | 147       | 171       | 163       | 156       | 118       | 103       | 104       |           |         |
|   |   | San-24 | SPM   | , E                                       | 45       | 44                    |          |          |          |          |          |          | Unitn                 |           |           |           |           |           |           | 33        | 35        | 32        | 36        | 47        | 41        | 32        | 31        | 30        | 37        | 45        | 44        | 32        | 31        | 35        |           | 1       |
|   | 1   |        | Date  | -   | 1-Sep-24 | 2-Sep-24              | 3-Sep-24 | 4-Sep-24 | 5-Sep-24 | 6-Sep-24 | 7-Sep-24 | 8-Sep-24 | 9-Sep-24              | 10-Sep-24 | 11-Sep-24 | 12-Sep-24 | 13-Sep-24 | 14-Sep-24 | 15-Sep-24 | 16-Sep-24 | 17-Sep-24 | 18-Sep-24 | 19-Sep-24 | 20-Sep-24 | 21-Sep-24 | 22-Sep-24 | 23-Sep-24 | 24-Sep-24 | 25-Sep-24 | 26-Sep-24 | 27-Sep-24 | 28-Sep-24 | 29-Sep-24 | 30-Sep-24 |           | Remarks |
|   |   |        | XON   | 450 mg/Nm <sup>2</sup>                    | 173      | 158                   | 145      | 147      | 150      | 150      | 156      | 113      | 144                   | 136       | 152       | 100       | 111       | 122       | 126       | 121       | 149       | 151       | 166       | 178       | 172       |           | 147       | 136       | 144       | 141       | 136       | 133       | 119       |           | 119       |         |
|   |   |        | 202   | E   | 163      | 146                   | 159      | 164      | 173      | 210      | 184      | 170      | 167                   | 167       | 156       | 190       | 195       | 206       | 165       | 152       | 173       | 111       | 175       | 173       | 163       | 171       | 154       | 171       | 148       | 159       | 168       | 174       | 174       | 165       | 159       | 36      |
|   |   | Aug-24 | SPM   | E   | 46       | 35                    | 35       | 38       | 37       | 42       | 44       | 42       | 47                    | 47        | 43        | 48        | 48        | 49        | 84        | 47        | 84        | 47        | 48        | 41        | 42        | 42        | 42        | 42        | 4         | 45        | 45        | 45        | 45        | 45        | 45        |         |
|   |   |        | Date  | +   | 1-Aug-24 | 2-Aug-24              | 3-Aug-24 | 4-Aug-24 | 5-Aug-24 | 6-Aug-24 | 7-Aug-24 | 8-Aug-24 | 9-Aug-24              | 10-Aug-24 | 11-Aug-24 | 12-Aug-24 | 13-Aug-24 | 14-Aug-24 | 15-Aug-24 | 15-Aug-24 | 17-Aug-24 | 18-Aug-24 | 19-Aug-24 | 20-Aug-24 | 21-Aug-24 | 22-Aug-24 | 23-Aug-24 | 24-Aug-24 | 25-Aug-24 | 26-Aug-24 | 27-Aug-24 | 28-Aug-24 | 29-Aug-24 | 30-Aug-24 | 31-Aug-24 | Remarks |
|   |   | -      | NOX   | in in                                     |          | 146 2-                | 161 3-   | 156 4    | 153 5-   | 129 6-   | 108 7-   | 109 8-   | 108                   | 113 10    | 100 11    | 132 12    | 102 13    | 99 14     | 157 15    | 149 15    | 172 17    | 141 18    | 151 19    | 146 20    | 115 21    |           | 126 23    |           | 150 25    | 140 26    | 125 27    | 106 28    | 111 29    | 126 30    | 133 31    | ě.      |
| ITED  |   |        | -     | lun.                                      | 183      | 184                   | 179      | 185      | 195      | 187      | 164      | 175      | 168                   | 187       | 151       | 142       | 160       | 193       | 167       | 151       | 182       | 211       | 189       | 169       | 178       | 201       | 206       | 198       | 204       | 208       | 132       | 150       | 188       | 215       | 178       |         |
| ON LIM  | 30.03.202                                     | Jul-24 | _     | E   | 40       | 41                    | 43       | 43       | 44       | 43       | 45       | 44       | 45                    | 46        | 45        | 47        | 49        | 48        | 48        | 45        | 48        | 48        | 47        | 48        | 48        | 46        | 49        | 48        | 47        | 48        | 49        | 39        | 43        | 48        | 46        |         |
| MOXIE POWER GENERATION LIMITED 2 X 500 MW THERMAL POWER PLANT CONTINUOUS STACK EMISSION MONITORING REPORT | Dally Avelage If Oll 01.04.2024 to 30.03.2024 |        | Date  | 1   | 1-Jul-24 | 2-Jul-24              | 3-Jul-24 | 4-Jul-24 | 5-Jul-24 | 6-Jul-24 | 7-Jul-24 | 8-Jul-24 | 9-Jul-24              | 10-Jul-24 | 11-Jul-24 | 12-Jul-24 | 13-Jul-24 | 14-Jul-24 | 15-Jul-24 | 16-Jul-24 | 17-Jul-24 | 18-Jul-24 | 19-Jul-24 | 20-Jul-24 | 21-Jul-24 | 22-Jul-24 | 23-Jul-24 | 24-Jul-24 | 25-Jul-24 | 26-Jul-24 | 27-Jul-24 | 28-Jul-24 | 29-Jul-24 | 30-Jul-24 | 31-Jul-24 | Remarks |
| Y THERMA  | UNIT-2  | -      |       | run <sub>2</sub>                          | 1        | 140 2-                | 168 3-   | 152 4-   | 100 5-   | 191 6-   | 196 7-   | 142 8-   | 149 9-                | 103 10    | 158 11    |           | 151 13    | 148 14    | 138 15    | 145 16    | 113 17    | 138 18    | 102 19    | 117 20    | 136 21    |           | 139 23    |           | 127 25    | 119 26    | 115 27    | 101 28    | 107 - 29  | 111 30    | 31        | R       |
| 2 X 600 MV  | Average                                       |        | _     | E   | -        |                       | 180      | 134      | 149      | 135      | 150      | 161      | 157                   | 175       | 163       | 188       | 178       | 180       | 166       | 183       | 182       | 180       | 165       | 172       | 156       |           | 184       |           | 179       | 154       | 178       | 179       | 196       | 146       |           |         |
| IOXIE   | Dally   | Jun-24 |       | , un                                      | -        | 34                    | 36       | 42       | 46       | 48       | 47       | 48       | 47                    | 47        | 46        | 48        | 47        | 48        | 45        | 46        | 42        | 46        | 42        | 46        | 47        | 46        | 48        | 39        | 44        | 45        | 47        | 42        | 40        | 39        |           |         |
| 2 8   |   |        | Date  | 47  | 1-Jun-24 | 2-Jun-24              | 3-Jun-24 | 4-Jun-24 | 5-Jun-24 | 6-Jun-24 | 7-Jun-24 | 8-Jun-24 | 9-Jun-24              | 10-Jun-24 | 11-Jun-24 | 12-Jun-24 | 13-Jun-24 | 14-Jun-24 | 15-Jun-24 | 16-Jun-24 | 17-Jun-24 | 18-Jun-24 | 19-Jun-24 | 20-Jun-24 | 21-Jun-24 | 22-Jun-24 | 23-Jun-24 | 24-Jun-24 | 25-Jun-24 | 26-Jun-24 | 27-Jun-24 | 28-Jun-24 | 29-Jun-24 | 30-Jun-24 |           | Remarks |
|   |   | -      |       |   |          |                       | e é      | 152 4    | 179 5-   | 136 6-   | 115 7-   | 192 8-   | 204 9                 | 136 10    | 139 11    | 148 12    | 120 13    | 111 14    | 179 15    | 193 16    | 201 17    | 125 18    | 148 19    | 149 20    | 150 21    |           | 112 23    |           | 101 25    | 142 26    | 139 27-   | 126 28    | 123 29    | 179 30    | 148       | Re      |
|   |   |        | S02 P | mal/mu1450                                | -        | Unit not in operation |          | 186      | 178      | 147      | 179      | 194      | 202                   | 162       | 157       | 163       | 181       | 186       | 224       | 207       | 177       | 175       | 201       | 179       | 207       |           | 197       | -         |           | 177       | 174       | 161       | 179       | 204       | 199       |         |
|   |   | May-24 | SPM   | 50 ma/Nm <sup>3</sup> 200 ma/Nm 450 ma/Nm |          | Unit not              |          | 31       | 39       | 28       | 58       | 44       | 43                    | 43        | 36        | 44        | 45        | 44        | 45        | 45        | 45        | 45        | 45        | 44        | 45        | 45        | 45        | 43        | 43        | 43        | 43        | 43        | 77        | 45        | 46        |         |
|   |   |        | Date  |   | 1-May-24 | 2-May-24              | 3-May-24 | 4-May-24 | 5-May-24 | 6-May-24 | 7-May-24 | 8-May-24 | 9-May-24              | 10-May-24 | 11-May-24 | 12-May-24 | 13-May-24 | 14-May-24 | 15-May-24 | 16-May-24 | 17-May-24 | 18-May-24 | 19-May-24 | 20-May-24 | 21-May-24 | 22-May-24 | 23-May-24 | 24-May-24 | 25-May-24 | 26-May-24 | 27-May-24 | 28-May-24 | 29-May-24 | 30-May-24 | 31-May-24 | Remarks |
|   |   |        | XON   | E   |          |                       | 214 3    | 201 4    |          | 208 6    | 169 7    | 182 8    | 188 8                 | 173 11    | 171       | 170       | 179       | 145 1     | 179 1     | 162 1     | 133       | 132 11    | 107       | 124 2     |           |           | 141 2     |           |           | 163 2     | 156 2     | 197   21  | 182   28  |           | 63        | -       |
|   |   | 1      |       | Ę   | 181      | 198                   | 159      | 150      | 183      | 187      | 155      | 192      | 189                   | 202       | 191       | 178       | 191       | 172       | 187       | 193       | 202       | 169       | 108       | 147       | 155       | 177       | 179       | 203       | 211       | 172       | 188       | 187       | 193       | 198       |           |         |
|   |   | Apr-24 | _     | 5   | × :      | 14                    | 04       | 34       | 35       | 40       | 40       | 39       | 38                    | 38        | 38        | 41        | 38        | 38        | 36        | 42        | 44        | 42        | 41        | 43        | 39        | 34        | 4.1       | 41        | 45        | 36        | 37        | 40        | 42        | 43        |           |         |
|   |   |        | Date  | +   | 1-Apr-24 | 2-Apr-24              | 3-Apr-24 | 4-Apr-24 | 5-Apr-24 | 6-Apr-24 | 7-Apr-24 | 8-Apr-24 | 9-Apr-24              | 10-Apr-24 | 11-Apr-24 | 12-Apr-24 | 13-Apr-24 | 14-Apr-24 | 15-Apr-24 | 18-Apr-24 | 17-Apr-24 | 18-Apr-24 | 19-Apr-24 | 20-Apr-24 | 21-Apr-24 | 22-Apr-24 | 23-Apr-24 | 24-Apr-24 | 25-Apr-24 | 26-Apr-24 | 27-Apr-24 | 28-Apr-24 | 29-Apr-24 | 30-Apr-24 |           | Remarks |

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For Moxie Power Generation Limited

|           |       | 100                      |            |        |                             | 2000    | TOTAL STREET, COLUMN TO THE PARTY AND THE PA |      | 1                  | The same of the sa |      |                       |      |                |
|-----------|-------|--------------------------|------------|--------|-----------------------------|---------|--|------|--------------------|--|------|-----------------------|------|----------------|
| Date      | Ambie | Ambient Temperature (°C) | ature (°C) | Barome | Barometric Pressure (m.bar) | (m.bar) | Predominant Wind direction   | Wir  | Wind Speed (Km/Hr) | /Hr)   | Rela | Relative Humidity (%) | (%)  | Rain Fall (mm) |
|           | Min   | Max                      | Avg        | Min    | Max                         | Avg     | IIIOII BIIIMOIG  | Min  | Max                | Avg  | Min  | Max                   | Avg  |                |
| 1-Apr-24  | 24.8  | 35.8                     | 29.7       | 1037   | 1041                        | 1039    | South East & West  | 1.21 | 21.15              | 7.18   | 54.2 | 92.2                  | 76.6 | 0              |
| 2-Apr-24  | 25,3  | 36.7                     | 30.7       | 1036   | 1040                        | 1038    | South East & South West  | 1.22 | 25.88              | 8.3  | 51.8 | 83                    | 74.1 | 0              |
| 3-Apr-24  | 25.6  | 36.2                     | 29.7       | 1038   | 1040                        | 1039    | South & South East   | 1.22 | 21.17              | 6.07   | 59.6 | 93.2                  | 79.8 | o              |
| 4-Apr-24  | 24.6  | 35.7                     | 30.1       | 1037.1 | 1040.3                      | 1038.8  | South East & North West  | 1.2  | 23.9               | 7.9  | 58.8 | 95.8                  | 78.5 | 0              |
| 5-Apr-24  | 24.7  | 37.1                     | 30.8       | 1036.6 | 1040                        | 1038.3  | South East & North West  | 1.2  | 23                 | 7.8  | 48.2 | 94.6                  | 73.9 | 0              |
| 6-Apr-24  | 24.7  | 36.2                     | 30.4       | 1036.2 | 1039.4                      | 1037.8  | South East & North   | 1.20 | 23.1               | 7.6  | 51.1 | 95.9                  | 75.1 | 0              |
| 7-Apr-24  | 24.5  | 36.9                     | 28.4       | 1036.1 | 1039.2                      | 1038    | North West & South East  | 1.2  | 16.4               | 4.3  | 9.09 | 95.4                  | 81.8 | o              |
| 8-Apr-24  | 28    | 36.1                     | 32.5       | 1037   | 1039.5                      | 1038.3  | South East & East  | 1.2  | 27.2               | 12.6   | 51.5 | 98                    | 68.3 | 0              |
| 9-Apr-24  | 25.6  | 34,4                     | 30.1       | 1037   | 1040.1                      | 1038.6  | East & North East  | 1.2  | 23.9               | 8.4  | 54.4 | 91.2                  | 74.7 | 0              |
| 10-Apr-24 | 25.8  | 34.9                     | 30.3       | 1037.2 | 1040                        | 1038.4  | East & North West  | 1.2  | 24.7               | 8.9  | 55.2 | 87.2                  | 72.6 | 0              |
| 11-Apr-24 | 26    | 35.1                     | 30.6       | 1036.9 | 1040.5                      | 1038.9  | East & North West  | 1.2  | 22.6               | 9.5  | 51.9 | 85                    | 72.7 | 0              |
| 12-Apr-24 | 24.2  | 33.7                     | 29.1       | 1037,4 | 1040,4                      | 1039.1  | East & North East  | 1.2  | 27.7               | 8.4  | 64.9 | 76                    | 1.08 | 0              |
| 13-Apr-24 | 25.3  | 35.2                     | 29.8       | 1037.5 | 1040.6                      | 1039.1  | North West & East  | 1.2  | 20.1               | 7.1  | 53,2 | 97.3                  | 77.3 | 1              |
| 14-Apr-24 | 25.9  | 35.6                     | 30.3       | 1037.2 | 1040.6                      | 1039    | East & North West  | 1.5  | 24.2               | 9.8  | 55.5 | 92.5                  | 75.4 | 0              |
| 15-Apr-24 | 26.0  | 35.2                     | 29.4       | 1037.9 | 1040.6                      | 1039.4  | East & North East  | 1.2  | 24.5               | 7.6  | 57.8 | 91.3                  | 79.7 | 0              |
| 16-Apr-24 | 25.5  | 35.3                     | 29.4       | 1037.8 | 1040.4                      | 1039.3  | East & North West  | 1.2  | 20.3               | 5.2  | 56.4 | 98.3                  | 81.8 | 1.5            |
| 17-Apr-24 | 25.2  | 35.9                     | 30.6       | 1037,1 | 1040,6                      | 1039.1  | South East & South   | 1.2  | 22.5               | 8.9  | 54.1 | 8.76                  | 76.3 | 0              |
| 18-Apr-24 | 24.9  | 36.2                     | 30.8       | 1036.2 | 1039.4                      | 1038    | South East & South   | 1.2  | 24.7               | 9.1  | 55.9 | 95.8                  | 76.8 | 0              |
| 19-Apr-24 | 25.8  | 37.5                     | 31.5       | 1034.9 | 1038.5                      | 1036.8  | South East & South   | 1.2  | 27.1               | 7.5  | 55.1 | 95.7                  | 75.6 | 0              |
| 20-Apr-24 | 25.8  | 38.5                     | 31.5       | 1035   | 1038                        | 1036.6  | West & South East  | 1.2  | 27.1               | 7.7  | 44.5 | 94.7                  | 75.8 | 0              |
| 21-Apr-24 | 25.7  | 35.8                     | 30.5       | 1035.7 | 1038.6                      | 1037.1  | North West & South East  | 1.2  | 22.9               | 7  | 58.2 | 96.1                  | 90.8 | 0              |
| 22-Apr-24 | 25    | 36.7                     | 30.9       | 1035.9 | 1039.1                      | 1037.7  | South East & North West  | 1.2  | 23.2               | 7.4  | 49.7 | 96.9                  | 75.8 | 0              |
| 23-Apr-24 | 26.3  | 36.4                     | 30.7       | 1035.5 | 1038.5                      | 1037.2  | South East & East  | 1.2  | 22.5               | 7.7  | 51.4 | 94.1                  | 77.6 | 0              |
| 24-Apr-24 | 25.4  | 37                       | 31.1       | 1035.7 | 1038.3                      | 1037.1  | South East & East  | 1.2  | 22.2               | 6.9  | 46.7 | 96                    | 73.4 | 0              |
| 25-Apr-24 | 24.6  | 36.7                     | 30.5       | 1036.1 | 1038.5                      | 1037.2  | South East & North West  | 1.2  | 20.6               | 6.4  | 50.6 | 94.4                  | 75.5 | 0              |
| 26-Apr-24 | 25.1  | 37.5                     | 30.9       | 1035.6 | 1038.7                      | 1037.1  | South East & East  | 1.2  | 20.5               | 6.3  | 49.3 | 93.8                  | 73.4 | 0              |
| 27-Apr-24 | 24.9  | 36.4                     | 30.8       | 1035.5 | 1038.6                      | 1037.2  | East & South East  | 1.2  | 21.4               | 6.5  | 51.1 | 93.9                  | 73.3 | 0              |
| 28-Apr-24 | 26.4  | 37                       | 31.8       | 1036   | 1039                        | 1037.4  | South East & West  | 1.2  | 21.1               | 6.9  | 54   | 87.8                  | 73.5 | 0              |
| 29-Apr-24 | 27.4  | 38                       | 32.4       | 1035.7 | 1039.9                      | 1038.2  | South East & East  | 1.2  | 24.7               | 7.4  | 48.5 | 89.9                  | 71.0 | 0              |
| 20 4-10   |       |                          |            |        |                             |         |  |      |                    | The second secon | -    |                       |      |                |

Manuel Tutionin Transmera For Moxie Power Generation Limited

| Date      | Ambie         | Ambient Temperature (°C)              | ture (°C) | Barom  | Barometric Pressure (m.bar) | (m.bar)       | Predominant Wind direction W                       | Wil  | Wind Speed (Km/Hr) | (JHI) | Relat | Relative Humidity (%) | (%)  | Rain Fall (mm)   |
|-----------|---------------|---------------------------------------|-----------|--------|-----------------------------|---------------|--|------|--------------------|-------|-------|-----------------------|------|------------------|
|           | Min           | Max                                   | Avg       | Min    | Max                         | Avg           | Blowing from                                       | Min  | Max                | Avg   | Min   | Max                   | Avg  |                  |
| 1-May-24  | 26.1          | 37.3                                  | 32.1      | 1034.1 | 1038.1                      | 1036.2        | South East & South                                 | 1.2  | 29.4               | 9.5   | 49.8  | 93                    | 71.2 | 0                |
| 2-May-24  | 26.1          | 38.1                                  | 31.9      | 1034.6 | 1037.7                      | 1036.4        | South & South East                                 | 1.2  | 26                 | 8.7   | 49.5  | 8'06                  | 73.6 | 0                |
| 3-May-24  | 28.5          | 39.3                                  | 32.6      | 1035.3 | 1038.5                      | 1036.9        | South & South West                                 | 1.2  | 28.9               | 10.7  | 47.2  | 88.3                  | 71.8 | 0                |
| 4-May-24  | 27.1          | 38.5                                  | 32.7      | 1035.2 | 1039                        | 1037.1        | South East & South West                            | 1.2  | 28.8               | 8.5   | 41.1  | 87.6                  | 9.79 | 0                |
| 5-May-24  | 27.5          | 39                                    | 33        | 1034.7 | 1037.6                      | 1036.4        | South East & West                                  | 1.2  | 30.6               | 8.4   | 46.9  | 82.9                  | 65.4 | 0                |
| 6-May-24  | 28            | 40.1                                  | 32.7      | 1035.3 | 1037.9                      | 1036.7        | South East & West                                  | 1.20 | 28.7               | 8.6   | 36.6  | 78.8                  | 63.8 | 0                |
| 7-May-24  | 27.2          | 39.2                                  | 32.7      | 1035.8 | 1038.9                      | 1037.5        | South East & West                                  | 1.2  | 24.9               | 8.5   | 43.1  | 75.9                  | 60.3 | o                |
| 8-May-24  | 25.6          | 37.1                                  | 31.6      | 1036   | 1039.3                      | 1037.8        | South East & East                                  | 1.2  | 23.5               | 7.6   | 47.9  | 78.7                  | 65.2 | 0                |
| 9-May-24  | 25.9          | 36.6                                  | 31.1      | 1036   | 1039                        | 1037.6        | South East & North West                            | 1.2  | 23.4               | 7.4   | 52.7  | 84.6                  | 71.7 | 0                |
| 10-May-24 | 26.7          | 36.5                                  | 30.5      | 1036.1 | 1039.7                      | 1038.3        | North West & South East                            | 1.2  | 26.6               | 6.5   | 56.9  | 87.5                  | 73.7 | 0                |
| 11-May-24 | 25.8          | 34.8                                  | 29.7      | 1037.3 | 1040.5                      | 1039          | South East & North West                            | 1.2  | 20.3               | 9,9   | 61.7  | 93.3                  | 0.77 | 0                |
| 12-May-24 | 25.5          | 35.1                                  | 30.4      | 1036.9 | 1040.4                      | 1038.9        | South East & North West                            | 1.2  | 23.8               | 7.5   | 57.5  | 93.1                  | 77.5 | 0                |
| 13-May-24 | 24.9          | 36                                    | 29.2      | 1036.7 | 1039.7                      | 1038.4        | North West & North                                 | 1.2  | 18.3               | 4.2   | 67.9  | 97                    | 2.08 | 0                |
| 14-May-24 | 23.9          | 35.8                                  | 28.6      | 1036.7 | 1039.9                      | 1038.5        | North West & South East                            | 1.2  | 17.4               | 4.7   | 51.7  | 58.7                  | 81.4 | 20               |
| 15-May-24 | 25.4          | 35.5                                  | 29.1      | 1037.1 | 1040.2                      | 1038.6        | North West & South East                            | 1.2  | 17.8               | 5.6   | 58    | 6.3                   | 81.2 | 0                |
| 16-May-24 | 25.3          | 34.5                                  | 28.4      | 1036.9 | 1040.4                      | 1038.7        | North West & South East                            | 1.2  | 21                 | 5.3   | 62.4  | 96.2                  | 83.5 | 17               |
| 17-May-24 | 25.7          | 30                                    | 27.9      | 1036.5 | 1039.2                      | 1038.1        | East & North West                                  | 1.2  | 18                 | 69    | 78.9  | 98.4                  | 88.8 | 2                |
| 18-May-24 | 24.9          | 34.6                                  | 28        | 1024.1 | 1038                        | 1036.8        | North West & South East                            | 1.2  | 19.1               | 4.3   | 63.3  | 99.3                  | 86.2 | 0                |
| 19-May-24 | 24.8          | 33.9                                  | 28.1      | 1033.9 | 1037.6                      | 1035.8        | North West & East                                  | 1.2  | 17.1               | 3.9   | 63.9  | 98.4                  | 36.7 | 8                |
| 20-May-24 | 25.4          | 33.1                                  | 28.7      | 1034.3 | 1037.2                      | 1035.6        | East & North West                                  | 1.2  | 26.7               | 5.9   | 59.6  | 66                    | 79.2 | 2                |
| 21-May-24 | 24.8          | 37.2                                  | 29.8      | 1034.2 | 1036.1                      | 1034.5        | South West & West                                  | 1.2  | 19.6               | 5.3   | 47    | 93.3                  | 72.2 | 0                |
| 22-May-24 | 25.8          | 35.7                                  | 29.3      | 1032.7 | 1035.6                      | 1034.5        | South West & West                                  | 1.2  | 22.5               | 5.6   | 56.5  | 94.1                  | 80.3 | 0                |
| 23-May-24 | 24.9          | 35.5                                  | 28.4      | 1034.6 | 1035.2                      | 1034.1        | South West & West                                  | 1.2  | 21.6               | 6,4   | 54.1  | 98.9                  | 83.5 | 35               |
| 24-May-24 | 25.7          | 34.7                                  | 28.5      | 1032.8 | 1035.7                      | 1034.2        | South West & West                                  | 1.2  | 20.7               | 7.1   | 22    | 98.5                  | 84.8 | 0                |
| 25-May-24 | 25.5          | 34.6                                  | 29.5      | 1033.5 | 1036                        | 1034.4        | South West & West                                  | 1.2  | 22.5               | 8.7   | 56.4  | 94.5                  | 73.1 | 0                |
| 26-May-24 | 27.7          | 34.7                                  | 30.6      | 1033.6 | 1036.2                      | 1035.1        | West & South West                                  | 1.5  | 28.4               | 10.1  | 52.2  | 76.8                  | 65.2 | 0                |
| 27-May-24 | 27.4          | 36                                    | 31.1      | 1033.8 | 1036,4                      | 1035.2        | West & South West                                  | 1.7  | 27.8               | 10.9  | 46.0  | 77.6                  | 64.3 | 0                |
| 28-May-24 | 28            | 34.3                                  | 31        | 1034.2 | 1036.6                      | 1035.5        | West & South West                                  | 2.7  | 35.3               | 11.6  | 20    | 74.7                  | 63.2 | 0                |
| 29-May-24 | 27.2          | 37.9                                  | 32.0      | 1033,4 | 1036.6                      | 1035.3        | West & South West                                  | 2.9  | 28.4               | 10.8  | 45.5  | 79.6                  | 64.3 | 0                |
| 30-May-24 | 27.2          | 37.9                                  | 32        | 1033.4 | 1036.6                      | 1035.3        | West & South West                                  | 1.2  | 20                 | 89    | 45.5  | 9.62                  | 64.3 | O                |
| 31-May-24 | 25.8          | 38.3                                  | 31.8      | 1033.8 | 1036.9                      | 1035.4        | West & South East                                  | 1.2  | 23                 | 6.7   | 42.8  | 87.5                  | 67.0 | 0                |
|           | Pater Dainfal | Remarks: Total Rainfall for the month | 16654     | 84.0   | contro.                     | Painfall Roco | Rainfall Recorded on 14, 16, 17, 19, 20 & 23rd May | 7    |                    |       |       |                       |      | TIME TO THE TIME |

### MOXIE POWER GENERATION LIMITED 2 x 600 mw THERMAL POWER PLANT METROLOGICAL STATION REPORT Daily Average from 01 07 2024 to 31 07 2024

| Date      | Ambie                       | Ambient Temperature (°C) | ture (°C) | Barome | Barometric Pressure (m.bar) | (m.bar)       | Predominant Wind direction                             | Win        | Wind Speed (Km/Hr) | (JH/c | Rela   | Relative Humidity (%) | (%)  | Dain Ball (mm) |
|-----------|-----------------------------|--------------------------|-----------|--------|-----------------------------|---------------|--|------------|--------------------|-------|--------|-----------------------|------|----------------|
|           | Min                         | Max                      | Avg       | Min    | Max                         | Avg           | Blowing from   | Min        | Max                | Avg   | Min    | Max                   | Avg  | Kain Fail (mm) |
| 1-Jul-24  | 27.8                        | 37.1                     | 32.1      | 1035.6 | 1038.9                      | 1037.6        | East & North East                                      | 1.2        | 27.9               | 8.6   | 40.2   | 75.5                  | 58.5 | 0              |
| 2-Jul-24  | 25.2                        | 36.9                     | 30.7      | 1035.2 | 1038                        | 1036.8        | North West & South East                                | 1.2        | 27.1               | 6.4   | 1.44.1 | 85                    | 9.69 | 0              |
| 3-Jul-24  | 27.5                        | 37.4                     | 32.3      | 1034.5 | 1038.5                      | 1037          | South East & South                                     | 1.2        | 20.3               | 8.5   | 41     | 76.9                  | 60.3 | 0              |
| 4-Jul-24  | 26.2                        | 36.7                     | 31.1      | 1036   | 1038.8                      | 1037.5        | South & North West                                     | 1.2        | 26.7               | 7.5   | 42.8   | 89.2                  | 66.5 | 0              |
| 5-Jul-24  | 25.9                        | 38.7                     | 31.2      | 1035   | 1038.1                      | 1036.8        | South & North West                                     | 1.2        | 28.0               | 9.2   | 39.7   | 84.5                  | 64.3 | 0              |
| 6-Jul-24  | 27.3                        | 37.3                     | 31.6      | 1034.8 | 1037.9                      | 1036.6        | South & North East                                     | 2.0        | 22.2               | 9.7   | 97.9   | 8.69                  | 56.4 | 0              |
| 7-Jul-24  | 28.3                        | 37.8                     | 32.5      | 1034.4 | 1037.7                      | 1036.3        | East & South   | 2.3        | 26.4               | 11.0  | 39.2   | 7:07                  | 55.8 | o              |
| 8-Jul-24  | 28                          | 38                       | 31.5      | 1034.8 | 1.7501                      | 1036.1        | East & South East                                      | 1.6        | 26.9               | 12.3  | 34.9   | 68.1                  | 55.4 | 0              |
| 9-Jul-24  | 27.1                        | 37.5                     | 31.6      | 1035.8 | 1038.4                      | 1036.9        | East & South East                                      | 1.2        | 28.5               | 11.2  | 38.3   | 72.5                  | 57.2 | 0              |
| 10-Jul-24 | 27.9                        | 39.9                     | 32.4      | 1013.4 | 1039.5                      | 1038.1        | East & South East                                      | 1.7        | 25.3               | 11.3  | 33.1   | 75.5                  | 55.8 | 0              |
| 11-Jul-24 | 28.2                        | 37.1                     | 30.5      | 1013,4 | 1039.2                      | 1037.5        | South & East   | 1.2        | 26.3               | 8.2   | 37.8   | 5.19                  | 69.0 | 0              |
| 12-Jul-24 | 27.3                        | 38.3                     | 30.4      | 1014.2 | 1038.1                      | 1037,1        | East & South East                                      | 1.2        | 34.8               | 9.5   | 39.4   | 80.3                  | 64.0 | 0              |
| 13-Jul-24 |                             | *                        |           |        |                             |               | ٠  |            |                    |       |        |                       |      | 0              |
| 14-Jul-24 |                             |                          |           |        |                             |               |  |            |                    |       |        |                       | *    | 0              |
| 15-Jul-24 | 1.0                         |                          | •         | *      |                             |               | •  |            |                    |       |        | •                     |      | 0              |
| 16-Jul-24 |                             | *                        |           |        | •                           |               |  |            |                    |       |        |                       |      | 0              |
| 17-Jul-24 | 0.0                         |                          |           |        |                             | •             |  | . (*)      | *                  | •     |        |                       |      | 0              |
| 18-Jul-24 |                             | •                        | •         |        | •                           | *             |  | 100        |                    |       |        |                       |      | 0              |
| 19-Jul-24 | 29.3                        | 36.4                     | 31.2      | 1034.7 | 1037.4                      | 1036.1        | South & South East                                     | 1.4        | 39.9               | 19.1  | 40.3   | . 63.2                | 51.8 | 0              |
| 20-Jul-24 | 28.9                        | 35.4                     | 31.3      | 1035.2 | 1037.5                      | 1036.3        | East & South East                                      | 5.5        | 30.0               | 14.5  | 44.2   | 64.9                  | 56.9 | 0              |
| 21-Jul-24 | 28.8                        | 36.7                     | 32.4      | 1035.6 | 1038.2                      | 1037.0        | South East & South                                     | 4.9        | 25,3               | 14.3  | 39.1   | 8.99                  | 51.9 | 0              |
| 22-Jul-24 | 28.1                        | 35.4                     | 31.2      | 1036.8 | 1039.4                      | 1038          | South & South East                                     | 1.6        | 23.4               | 11.8  | 43.5   | 89                    | 58.6 | 0              |
| 23-Jul-24 | 28.1                        | 38.7                     | 32.7      | 1036.2 | 1039.2                      | 1038.1        | South & South East                                     | 1.2        | 25.3               | 11.7  | 37.6   | 73.2                  | 56.0 | 0              |
| 24-Jul-24 | 28.4                        | 40.1                     | 30.5      | 1034.6 | 1038.6                      | 1036.9        | South & South East                                     | 1.4        | 26.6               | 11.2  | 31     | 70.1                  | 52.8 | 0              |
| 25-Jul-24 | 27.6                        | 36.8                     | 29.6      | 6393.9 | 1037.8                      | 989.5         | South & South East                                     | 1.2        | 37.1               | 10.1  | 36.4   | 66.4                  | 37.5 | 0              |
| 26-Jul-24 | 28.6                        | 38.1                     | 32.2      | 1034.4 | 1037.9                      | 1036.4        | South & South East                                     | 5.2        | 30.7               | 14.9  | 39.5   | 70                    | 56.9 | 0              |
| 27-Jul-24 | 28.8                        | 39                       | 32.6      | 1034.6 | 1037.8                      | 1036,4        | South & South West                                     | 2.0        | 25.2               | 10.6  | 35.5   | 67.5                  | 55.5 | 0              |
| 28-Jul-24 | 28.7                        | 36.3                     | 31.4      | 1034.1 | 1037.4                      | 1035.9        | South & South West                                     | 4.8        | 29.0               | 13.8  | 41.7   | 69.2                  | 59.2 | 0              |
| 29-Jul-24 | 28.7                        | 34.9                     | 31.1      | 1034   | 1037.5                      | 1035.5        | South & South West                                     | 5.9        | 39.8               | 18.1  | 9.74   | 70.8                  | 60.3 | 0              |
| 30-Jul-24 | 28.4                        | 36.1                     | 31        | 1035.6 | 1038.3                      | 1036.9        | South & South West                                     | 2.5        | 38.9               | 13.7  | 42     | 71.3                  | 59.6 | 0              |
| 31-Jul-24 | 28.6                        | 38.1                     | 31.9      | 1036.3 | 1038.9                      | 1037.8        | South & South East                                     | 2.4        | 33.6               | 13.2  | 38.3   | 67.6                  | 6.99 | 0              |
| Damade    | Training Defendant Security | Secondary and            | and the   |        | -                           | . Due to main | behavior for the case alone some legisles animose niem | The second |                    |       |        |                       |      |                |

Melamarudur Melama For Moxie Power Generation Limited GENERS

| Min         Max         Avg         South West         South West         30         28.8         12.6         38.7         17.9         17.9           28.2         38.8         31.9         1035.5         1037.5         Vivest & South West         1.2         24.4         17.5         42.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         77.1         36.4         37.1         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2         37.2  |
|--|
| 27.3         37.8         31.7         10056 7         10286 9         10276 10375         West & South West 1         30.4         11.1         36.4         71.1           2.2.2         38.8         31.9         10385 10392         10377         West & South West 1         1.8         24.4         11.1         36.4         71.1           2.2         2.8         98.9         2.8         98.9         2.7         7.5         4.21         7.1           2.6         38.1         28.9         10384         7.8         2.7         2.7         7.5         4.21         7.1           2.6         38.1         28.9         10384         10384         West & South Resouth West         1.2         2.7         7.1         2.9         4.7         7.1         2.7         4.2         7.1         2.7         4.2         7.1         2.7         4.2         7.1         2.7         4.2         7.1         2.7         4.2         7.1         7.2         2.7         4.2         7.1         2.7         2.7         2.7         2.7         2.7         2.7         2.7         2.7         2.7         2.7         2.2         2.2         2.2         2.2         2.2         2.2   |
| 28.6         31.9         1036.5         1037.5         Week & South Week         1.8         24.4         11.1         36.4         77.1           25.2         38         28.6         696.9         1039.6         1033.7         Week & South Week         1.2         27.7         7.5         42.1         77.1           25.6         38.1         36.2         1036.9         1038.8         1037.4         Wiest & South Week         1.2         27.7         7.5         42.1         72.1           25.6         38.1         30.4         1036.9         1036.9         1037.4         Wiest & South Week         1.2         27.5         8.3         46.7         64.1           25.9         35.5         28.3         1036.9         1038.4         1037.8         Wiest & South Week         1.2         27.5         8.4         71.1         27.8         64.9         8.2           24.3         35.5         28.3         1056.1         1036.4         1036.3         South & South East         1.2         27.5         8.4         7.1         38.9         38.9           25.1         36.2         30.1         1036.4         1036.7         1036.3         South East & South Weet         1.2         27.   |
| 25.2         3.9         28.8         1039.6         1039.6         1039.7         West & South West         1.2         27.7         7.5         42.1         72.1           2.6         3.4         -  |
| 2.6         3.6         4.0  |
| 2.6         36.1         30.4         1035.5         1037.4         Wheat & South West         1.2         27.5         8.3         46.7         84.1           2.6.9         35.5         2.9.7         1035.6         1039.9         1037.0         Wheat & South West         1.2         27.6         7.5         54.8         86.2           2.4.3         35.3         2.8.9         1035.9         1039.9         1038.1         Wheat & South West         1.2         27.2         7.1         57.9         83.9           2.4.3         35.3         2.8.9         1038.0         1038.1         West & South West         1.2         27.2         7.1         52.9         98.2           2.5.5         36.3         30.6         1036.0         1038.1         West & South South West         1.2         27.2         7.1         52.9         98.1           2.5.3         36.3         30.1         1034.4         1038.6         1038.1         West & South West         1.2         27.2         7.1         52.9         98.1           2.5.1         36.4         1036.5         1036.3         South & South East & North West         1.2         27.2         7.4         52.9         98.1           2.5.3   |
| 256         36.1         30.4         1038.5         1038.8         1037.4         West & South West         12         27.5         8.3         46.7         84.1           25.9         35.5         29.7         1036.3         1039.4         1037.8         West & South West         12         25.4         7.5         54.8         86.2           24.3         35.3         28.9         1039.9         1039.4         1038.4         88.5         88  |
| 25.9         35.5         29.7         1036.8         1039.1         1037.8         West & South West & South West         1.2         25.4         7.5         54.8         86.2           24.3         35.3         28.9         1036.9         1038.4         South & South East Mest         1.2         22.8         6.4         51.9         93.9           23.9         35.6         29.3         1037         1038.4         1038.1         West & South West         1.2         27.2         7.1         52.3         96.3           25.5         36.3         30.6         1036.4         1038.1         West & South West         1.2         27.2         7.1         52.3         96.3           25.5         36.3         30.6         1036.4         1038.1         West & South East Mest West         1.2         27.2         7.1         52.3         96.3           26.1         36.3         1034.2         1036.3         Notest & South East North West         1.2         27.2         7.6         6.6         59.9         98.1           26.1         36.4         1036.5         South East & North West         1.2         20.2         7.4         52.6         98.1           26.1         36.8   |
| 24.3         35.3         28.9         1036.9         1038.4         South & South & South Rest         12         22.8         6.4         51.9         93.9           23.9         35.6         28.3         1037         1038.6         1038.3         South & South West         12         27.2         7.1         52.3         96.3           25.5         36.3         30.6         1006.4         1038.6         1038.1         West & South West         12         27.2         7.1         52.3         96.3           25.5         36.8         30.7         1038.6         1038.1         West & South & South Rest         12         27.7         7.8         89.4         89.2           26.1         35.4         1034.4         1035.6         1036.5         South & South & South Rest         12         25.7         7.4         56.8         98.1           26.1         35.4         1037.6         1036.5         South & South Rest         12         20.0         6.5         54.9         98.1           26.1         35.8         1038.6         1036.5         South & South Rest         12         20.0         6.6         49.1         98.1           26.1         36.8         30.1 <td< td=""></td<>   |
| 23.9         35.6         28.3         1037         1038.6         1038.1         South & South West         1.2         27.2         7.1         52.3         96.3           25.5         36.3         30.6         1036.4         1038.1         West & South West         1.2         27.3         8.6         49.4         84.2           25.6         34.8         29.7         1034.7         1038.3         1037         West & South West         1.2         25.7         7.8         8.6         49.4         84.2           25.3         36.3         30.1         1034.4         1037.6         1036.3         South East & North West         1.2         25.7         7.8         55.8         89.1           26.1         35.4         29.9         1035.1         1036.2         South East & North West         1.2         25.7         7.8         56.9         98.1           26.5         36.5         30.2         1036.5         South East & North West         1.2         20.0         6.6         59         98.1           25.1         35.5         30.2         1034.5         1036.5         South East & North West         1.2         20.0         6.6         59         98.1           25.1<   |
| 25.5         36.3         30.6         1036.4         1038.6         1038.1         West & South West         1.2         27.3         8.6         49.4         84.2           25.6         34.8         29.7         1024.7         1038.3         1037         West & South R South West         1.2         25.7         7.8         55.8         88.5           25.3         36.3         30.1         1034.4         1037.6         1036.3         South R South Rest & North West         1.2         25.7         7.8         55.8         88.5           26.1         35.4         29.9         1034.6         1037.5         1036.2         South R South Rest & North West         1.2         20.0         6.6         59         98.1           26.1         35.6         30.2         1034.5         1036.5         South R South Rest & North West         1.2         20.0         6.6         59         98.1           26.1         35.6         30.1         1036.2         South R South Rest & North West         1.2         20.0         6.6         59         98.1           26.1         37.6         37.6         37.6         37.6         43.7         38.9         38.9           26.1         38.6   |
| 26.6         34.8         29.7         1034.7         1038.3         1037.         West & South & South Rest         1.2         25.7         7.8         55.8         88.5           25.3         36.3         30.1         1034.4         1037.6         1036.3         South East & North West         1.2         29.5         50         49.1         86.9           26.1         35.4         29.9         1035.1         1036.2         South East & North West         1.2         23.0         6.5         59         98.1           24.5         34.4         29         1034.6         1036.2         South East & North West         1.2         20.0         6.6         59         98.1           25.1         35.8         30.1         1034.2         1036.2         South East & North West         1.2         20.0         6.6         59         98.1           25.1         35.8         30.1         1038.2         1036.2         South East & North West         1.2         20.0         6.6         59         98.1           25.1         28.3         37.6         48.7         38.9         38.9         38.9         38.3         38.9         38.9         38.3         38.9         38.9         38.9  |
| 26.3         36.3         36.1         1034.4         1037.6         1036.3         South & South & South Rest & North West         1.2         29.5         9.0         49.1         86.9           26.1         35.4         29.9         1035.1         1036.6         South East & North West         1.2         23.0         6.5         6.9         49.1         86.9           24.5         34.4         29         1036.2         South & South & South & South Rest         1.2         20.0         6.6         59         99.1           25.5         35.6         30.2         1036.2         South & Sou   |
| 26.1         35.4         29.9         1035.1         1036.6         South East & North West         1.2         23.0         6.5         54.9         98.1           24.5         34.4         29         1034.6         1037.5         1036.2         South East & North West         1.2         20.0         6.6         59         99.1           25.5         35.5         30.2         1036.2         South East & North West         1.2         20.0         6.6         59         99.1           25.1         35.8         30.1         1038.9         1036.2         South East & North West         1.2         20.0         6.6         59         99.1           25.1         35.8         30.1         1038.2         1037.7         1036.2         South East & North West         1.2         23.0         7.0         45.7         96.2           25.1         28.3         30.1         1037.2         943.3         West & South West         1.2         23.0         7.0         45.7         96.2           25.4         34.8         30.1         1038.5         97.8         South & South & South West         1.2         29.3         7.1         44.3         89.6           25.4         35.8   |
| 24.5         34.4         29         1034.6         1036.2         South & South & South & Sauth &   |
| 25.5         35.5         30.2         1035.6         1035.5         South East & North West         1.2         20.2         7.4         52.6         98           25.1         35.8         30.1         1033.4         1036.2         South East & North West         1.2         21.6         5.3         56.3         98.9           25.1         28.3         37.6         1037.7         1036.9         South & South West         1.2         23.0         7.0         46.7         96.2           25.4         34.8         30.1         989.9         1037.2         943.3         West & South West         1.2         29.3         7.1         44.3         93.6           25.4         34.8         30.1         989.9         1038.5         978.7         South & South West         1.7         29.3         7.1         44.3         83.6           25.4         35.8         1037.3         1038.4         1038.4         South & South West         1.7         29.4         9.0         46         89.5   |
| 25.1         35.8         30.1         1033.4         1036.2         South East & North West         1.2         21.6         5.3         56.3         88.9           25.3         37.6         29.2         1037.2         1035.9         South & South & South West         1.2         23.0         7.0         46.7         96.2           25.4         34.8         39.9         1037.2         943.3         West & South West         1.2         6.8         6.4         45.7         96.2           25.4         34.8         30.1         899.9         1037.3         1038.5         978.7         South & South West         1.2         29.3         7.1         44.3         83.6           26.1         32.9         1037.3         1038.8         1038.4         South & South West         1.7         24.4         9.0         46         89.5   |
| 26.3         37.6         29.2         1034.2         1037.2         943.3         South & South & South West & South & South & South & South & South & South West & South West & South & South & South & South West & L.Z         7.0         46.7         96.2         98.2           25.4         34.8         39.1         1037.3         1038.5         978.7         South & South & South West & L.Z         29.3         7.1         44.3         83.6           26.1         32.9         27.8         1037.3         1038.8         1038.4         South & South West & L.Z         24.4         9.0         46         89.5           26.4         35.8         28.7         1037.4         1040         1038.8         South & South West & L.Z         24.4         9.0         46         89.5  |
| 25.1         28.3         29.3         West & South West         1.2         6.8         6.4         43.2         93           25.4         34.8         30.1         899.9         1038.5         978.7         South & South & South West         1.2         29.3         7.1         44.3         83.6           26.1         32.9         27.8         1037.3         1038.8         1038.4         South & South & South West         1.7         30.9         9.9         50.2         87.6           25.4         35.8         28.7         1037.4         1040         1038.8         South & South West         1.2         24.4         9.0         46         89.5   |
| 25.4 35.8 28.7 1037.4 1040 1038.8 South & South West 1.2 24.4 9.0 46 89.5  |
| 25.4         34.8         30.1         898.9         1038.5         978.7         South East & North West         1.2         29.3         7.1         44.3         83.6           26.1         32.9         27.8         1037.3         1038.8         1038.4         South & South West         1.7         30.9         9.9         50.2         87.6           25.4         35.8         28.7         1037.4         1040         1038.8         South & South West         1.2         24.4         9.0         46         89.5   |
| 26.1         32.9         27.8         1037.3         1038.4         South & South & South West         1.7         30.9         9.9         50.2         87.6           25.4         35.8         28.7         1037.4         1040         1038.8         South & South West         1.2         24.4         9.0         46         89.5   |
| 25.4 35.8 28.7 1037.4 1040 1038.8 South & South West 1.2 24.4 9.0 46 89.5  |
| the same of the sa |
| Z5-Aug-24 Z5.7 35.3 30.5 1037.3 1040.2 1036.8 West & South West   1,8 Z8.7 14.2 49.9 92.3 74.6   |
| 25.3 37.5 29.9 899.9 1041.1 1038.1 South & South West 1.2 22.1 9.7 47.5 86.9 63.9 63.7   |
| 31.5 1037.5 1040.7 1039.5 South & South West 1.2   |
| 25.7 37.6  |
| 1040.5 1039 South East & North West 3.4 27.7 11.3  |
| 28-Aug-24 25.8 35.8 31.2 1037.3 1040.2 1039 South & South West 2.0 25.7 10.1 42.5 70.2 58.5  |
| 36.9 30.6 1035.8 1039.3 1038.0 South & South West 1.2 26.4 12.1 40.6   |
| 36.1 30.5 1036.6   |
| 31-Aug-24 28.6 38.1 31.9 1036.3 1038.9 1037.8 South & South West 2.4 33.6 13.2 38.3 67.6 56.9  |
| Total Rainfall for the month 0.0 mm.   **Due to Instrument power supply Issue data not available.  |

|           |               |                              |          |        |                             |                 | Dally Average from 01.09.2024 to 30.09.2024  | 0 30.03.2024    |                    |            |               |                       |         |                |
|-----------|---------------|------------------------------|----------|--------|-----------------------------|-----------------|--|-----------------|--------------------|------------|---------------|-----------------------|---------|----------------|
| Date      | Ambie         | Ambient Temperature (°C)     | ure (°C) | Barome | Barometric Pressure (m.bar) | (m.bar)         | Predominant Wind direction   | Win             | Wind Speed (Km/Hr) | (Hr)       | Rela          | Relative Humidity (%) | (%)     | Rain Fall (mm) |
|           | Min           | Max                          | Avg      | Min    | Max                         | Avg             | Blowing from   | Min             | Max                | Avg        | Min           | Max                   | Avg     |                |
| 1-Sep-24  | 24.1          | 37.8                         | 30.1     | 1035.8 | 1037.9                      | 1037.2          | West & South West  | 1.2             | 8.7                | 6.9        | 41.2          | 68.9                  | 56.7    | 0.0            |
| 2-Sep-24  | 25.3          | 38.9                         | 29.9     | 1036.6 | 1038.4                      | 1037.1          | South East & North West  | 1.2             | 23.9               | 8.2        | 26.9          | 68.2                  | 59.3    | 0.0            |
| 3-Sep-24  | 25.6          | 36.6                         | 29.7     | 1036.3 | 1039.6                      | 1038.1          | West & South West  | 1.4             | 32.2               | 13.2       | 41.8          | 72.8                  | 80.8    | 0.0            |
| 4-Sep-24  | 26.1          | 39.2                         | 30.6     | 1035.5 | 1039.4                      | 1037.8          | West & South West  | 3.1             | 26.8               | 10.4       | 37.1          | 70.3                  | 57.8    | 0.0            |
| 5-Sep-24  | 25.4          | 38.1                         | 30,4     | 1034.5 | 1038.5                      | 1036.9          | West & South West  | 1.2             | 26.1               | 9.2        | 38.8          | 78.8                  | 9.09    | 0.0            |
| 6-Sep-24  | 26.1          | 39.2                         | 30.1     | 1034.3 | 1038.7                      | 1036.8          | South & South East   | 1.2             | 23.9               | 8.7        | 36.4          | 73.5                  | 51.3    | 0.0            |
| 7-Sep-24  |               | *                            |          |        |                             | •               | •  |                 |                    |            | ٠             |                       |         | 0.0            |
| B-Sep-24  |               | *                            |          |        |                             | •               |  | *               |                    |            | *             | •                     |         | 0.0            |
| 9-Sep-24  |               | •                            |          |        |                             |                 | •  | •               | *                  | *          |               |                       |         | 0.0            |
| 10-Sep-24 | 28.7          | 37.2                         | 29.7     | 1035.2 | 1039.1                      | 1037.5          | #  | 1.2             | 29.6               | 12.7       | 40.8          | 8.77                  | 58.5    | 0.0            |
| 11-Sep-24 | 26.3          | 37.1                         | 29.6     | 1036.7 | 1039.7                      | 1038.2          | #  | 1.3             | 28.4               | 11.4       | 41.3          | 80.5                  | 60.4    | 0.0            |
| 12-Sep-24 | 26.1          | 38.8                         | 30.1     | 1035.9 | 1040.1                      | 1038.3          | #  | 1.2             | 28.2               | 10.9       | 35.6          | 9.77                  | 57.1    | 0.0            |
| 13-Sep-24 | 25.9          | 38.1                         | 30.7     | 1034.7 | 1039.5                      | 1037.8          | #  | 1,9             | 27.2               | 10.6       | 33.1          | 77.2                  | 62.5    | 0.0            |
| 14-Sep-24 | 26.4          | 38.8                         | 29.6     | 1035.4 | 1039.1                      | 1037.6          | #  | 1.2             | 28.0               | 11.8       | 35.8          | 68.2                  | 55.4    | 0.0            |
| 15-Sep-24 | 25.7          | 38.9                         | 30.4     | 1035.4 | 1039                        | 1037.4          | #  | 1.2             | 33.1               | 10.8       | 30.4          | 76.5                  | 57.6    | 0.0            |
| 16-Sep-24 |               |                              |          | ٠      |                             | •               | #  |                 |                    |            |               |                       |         | 0.0            |
| 17-Sep-24 |               | ٠                            |          |        |                             | *               | #  |                 |                    |            |               |                       | •       | 0.0            |
| 18-Sep-24 | 25.3          | 38.3                         | 30.4     | 1034.6 | 1037.5                      | 1037.4          | #  | 1.2             | 34.6               | 8.5        | 32.4          | 85.5                  | 51.5    | 0.0            |
| 19-Sep-24 | 25.2          | 39.8                         | 30.4     | 1034.7 | 1038.4                      | 1036.8          | #  | 1.2             | 26.2               | 10.1       | 30.5          | 71.3                  | 53.5    | 0.0            |
| 20-Sep-24 | 26.4          | 38.1                         | 30.1     | 1035.4 | 1038.1                      | 1037            | #  | 1.7             | 27.7               | 10.7       | 32.8          | 2.79                  | 56.1    | 0.0            |
| 21-Sep-24 | 26.3          | 37.9                         | 29.4     | 1035.1 | 1038.6                      | 1036.8          | #  | 1.2             | 26.8               | 11.1       | 35.8          | 71.5                  | 58.4    | 0.0            |
| 22-Sep-24 | 25.8          | 38.5                         | 28.7     | 1034.7 | 1037.8                      | 1037.3          | #  | 1.2             | 27.8               | 11.7       | 34.5          | 70                    | 51.8    | 0.0            |
| 23-Sep-24 | 26.4          | 38.6                         | 30.2     | 1034.6 | 1037.5                      | 1038.1          | *  | 1.2             | 28.8               | 7.9        | 32.9          | 9.59                  | 28.7    | 0.0            |
| 24-Sep-24 | 25.3          | 38.4                         | 30.1     | 1034.2 | 1037.5                      | 1036.1          | #  | 1.2             | 26.4               | 12.9       | 36            | 66.3                  | 52.7    | 0.0            |
| 25-Sep-24 | 26.4          | 38.7                         | 29.4     | 1034.3 | 1037.6                      | 1036.1          | #  | 1.3             | 30.2               | 12.2       | 35.8          | 68.8                  | 55.9    | 0.0            |
| 26-Sep-24 | 25.6          | 37.6                         | 30.6     | 1035.2 | 1037.9                      | 1036.5          | #  | 1.2             | 28.1               | 8.2        | 38.1          | 87.2                  | 64.0    | 0.0            |
| 27-Sep-24 | 25.7          | 37.4                         | 30.8     | 1036   | 1039.3                      | 1037.8          | #  | 1.2             | 32.3               | 7.8        | 42.8          | 79                    | 65.1    | 0.0            |
| 28-Sep-24 | 26.3          | 35.3                         | 30.6     | 1036.5 | 1040.2                      | 1038.5          | #  | 1.2             | 21.3               | 6.9        | 54.3          | 87.2                  | 70.0    | 0.0            |
| 29-Sep-24 | 26.2          | 35.4                         | 30.1     | 1036.4 | 1040.7                      | 1037.6          | #  | 1.2             | 16.6               | 8.2        | 42.5          | 82.9                  | 37.9    | 12.5           |
| 30-Sep-24 | 25.9          | 35.7                         | 29.4     | 1035.2 | 1041.1                      | 1037.3          | #  | 1.2             | 21.7               | 8.4        | 44.1          | 90.4                  | 43.7    | 4:0            |
| Damande.  | Total Rainfal | Total Rainfall for the month | th       | 13.5   | mm.                         | * Due to Instru | * Due to Instrument power supply failure, data not available. # Due to problem in Wind Direction sensor, data not available. | ot available. # | Due to proble      | in Wind Di | rection senso | r. data not ava       | ilable. | CENFO          |



### **Interstellar Testing Centre Private Limited**

: ICE-2409300907 (1) Test Report No.

NABL ULR No.

: TC695224000015931F

Received On

Commenced On

Completed On

Date of Report



: 25-09-2024

: 25-09-2024

; 30-09-2024

: 30-09-2024

Page 1 of 2

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Registration No. : E02-2409250907

Sample Name

: Ambient Air Quality

Sample Condition

: Good

Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep Sampling Location

: Near Main Office

**Environment Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

Test Report as per

: NAAQ Norms

. No. Sampling Information:

(a) Date of Monitoring, -

: 23.09.24-24.09.24

(b) Duration of Monitoring, minutes

: 1440

Avg. Ambient Temperature, °C (c)

: 31 : 66

(d) Relative Humidity, %(Avg.) (e) Sky Appearance . -

: Clear sky

| (e) : | Parameter                                 | Measuring Unit | Method                    | Result         | Specification |
|-------|---|----------------|---------------------------|----------------|---------------|
|       | Discipline : Chemical                     |                |                           |                |               |
|       | Group : Atmospheric Pollution             |                |                           |                |               |
| (I)   | Ambient Air Quality Parameters            |                |                           |                |               |
| 1     | Sulphur Dioxide (SO2)                     | μg/m3          | IS 5182(Part-2):<br>2001  | 7.73           | 80 Max        |
| 2     | Nitrogen Dioxide (NO2)                    | μg/m3          | IS 5182(Part -6):<br>2006 | 19.43          | 80 Max        |
| 3     | Particulate Matter (PM 10)                | µg/m3          | IS 5182(Part-23):<br>2006 | 63.52          | 100 Max       |
| 4     | Particulate Matter (PM 2.5)               | μg/m3          | IS 5182(Part-24):<br>2019 | 28.69          | 60 Max        |
| 5     | Ozone (O3)                                | μg/m3          | IS 5182(Part-9):<br>1974  | 15.70          | 180 Max*      |
| 6     | Lead (pb)                                 | µg/m3          | IS 5182(Part-22):<br>2004 | BDL (DL: 0.02) | 1.0 Max       |
| 7     | Ammonia (NH3)                             | µg/m3          | IS 5182(Part-25):<br>2018 | 8.14           | 400 Max       |
| 8     | Benzene (C6H6)                            | µg/m3          | IS 5182(Part-11):<br>2006 | BDL (DL: 1.0)  | 5 Max**       |
| 9     | Benzo (a) Pyrene (Particulate Phase only) | ng/m3          | IS 5182(Part-12):<br>2004 | BDL (DL: 1.0)  | 1 Max**       |
| 10    | Arsenic (As)                              | ng/m3          | USEPA Method              | BDL (DL: 2.0)  | 6 Max**       |

30/09/2024 Chinnaraja Verified by

1253 30/09/2024 Salthivel Authorised by

### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

- > The test result related only to the items tested
- The test report shall not be reproduced in full or part without the written approval of ITC Labs. Chennai
- The test items shall not be retained more than 15 days from the date of issue of test report except in the case as required by the regulatory bodies and Customers



### **Interstellar Testing Centre Private Limited**



Test Report No.

: ICE-2409300907 (1)

NABL ULR No.

: TC695224000015931F

ORIGINAL Page 2 of 2

| EI WALLEY ALL    |       |                        |                 |          |
|------------------|-------|------------------------|-----------------|----------|
|                  | - 1   | IO 3.4                 |                 |          |
| 11 Nickel (Ni)   | ng/m3 | USEPA Method<br>IO 3.4 | BDL (DL: 2.0)   | 20 Max** |
| 12 Mercury as Hg | µg/m3 | USEPA Method<br>IO 3.5 | BDL (DL: 0.002) | NA       |

NOTE: NAAQ: National Ambient Air Quality, Instrument used: Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit, \* As per NAAQ Norms 1 hour Limit, \*\* As per NAAQ

Norms Annual Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

Wa-do

30/09/2024 Chinnaraja

Verified by

30/09/2024 Sakthivel Authorised by

### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website ; www.itclabs.com

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ORIGINAL Page 1 of 1

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

Received On

Commenced On

Completed On

Date of Report

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk;

Tuticorin, 628105 Tamil Nadu, India

Sample Registration No. : E02-2409250907

: Ambient Air Quality

Sample Name

: Good

Sample Condition Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep : Near Main Office Sampling Location

**Environment Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

Test Report as per

: NAAQ Norms

3. No. Sampling Information:

(a) Date of Monitoring, -

: 23.09.24-24.09.24

Duration of Monitoring, minutes

: 1440

Avg. Ambient Temperature, °C (c)

: 31

(d) Relative Humidity, %(Avg.)

: 66

Sky Annearance

: Clear sky

| (e) S  | Sky Appearance, -              | . Clear on     |                           |               | n in it       |
|--------|--------------------------------|----------------|---------------------------|---------------|---------------|
| S. No. | Parameter                      | Measuring Unit | Method                    | Result        | Specification |
|        | Discipline : Chemical          |                |                           |               |               |
|        | Group : Atmospheric Pollution  |                |                           |               |               |
| (I)    | Ambient Air Quality Parameters |                | T                         |               |               |
|        | Carbon Monoxide (CO)           | mg/m3          | IS 5182(Part-10):<br>1999 | BDL (DL: 1.0) | 2 Max*        |

NOTE: NAAQ: National Ambient Air Quality, Instrument used: Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit. \* As per NAAQ Norms 8 hours Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

30/09/2024 Chinnaraja

Verified by

30/09/2024 Sakthivel

Authorised by

### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: ltclabs.chennai@itclabs.com

Website: www.itclabs.com

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### **Interstellar Testing Centre Private Limited**

Test Report No.

: ICE-2409300908 (1)

NABL ULR No.

: TC695224000015927F

Received On

Commenced On

Completed On

Date of Report

ORIGINAL Page 1 of 2

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105

Tamil Nadu, India

Sample Registration No. : E02-2409250908

Sample Name

: Ambient Air Quality : Good

Sample Condition Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep

Sampling Location

: Near Salt Gate : Good

**Environment Condition** 

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

Test Report as per

: NAAQ Norms

|        |          | ALCOHOL: NAME OF STREET |
|--------|----------|-------------------------|
| 5. No. | Sampling | Information:            |

(a) Date of Monitoring, -

: 23.09.24-24.09.24

(b) Duration of Monitoring, minutes

: 1440 : 31

Avg. Ambient Temperature, °C (d) Relative Humidity, %(Avg.)

: 66

· Clear sky

| J -6. | Sky Appearance , - Parameter              | Measuring Unit | Method                    | Result         | Specification |
|-------|---|----------------|---------------------------|----------------|---------------|
| . No. | 7/202/07/07/07                            | Treasuring one | - CA-PA-100-10            |                |               |
|       | Discipline : Chemical                     |                |                           |                |               |
|       | Group : Atmospheric Pollution             |                |                           |                |               |
| (1)   | Ambient Air Quality Parameters            |                |                           |                |               |
| 1     | Sulphur Dioxide (SO2)                     | µg/m3          | IS 5182(Part-2):<br>2001  | 8.05           | 80 Max        |
| 2     | Nitrogen Dioxide (NO2)                    | μg/m3          | IS 5182(Part -6):<br>2006 | 20.48          | 80 Max        |
| 3     | Particulate Matter (PM 10)                | μg/m3          | IS 5182(Part-23):<br>2006 | 65.03          | 100 Max       |
| 4     | Particulate Matter (PM 2.5)               | μg/m3          | IS 5182(Part-24):<br>2019 | 30.35          | 60 Max        |
| 5     | Ozone (O3)                                | µg/m3          | IS 5182(Part-9):<br>1974  | 16.02          | 180 Max*      |
| 6     | Lead (pb)                                 | µg/m3          | IS 5182(Part-22):<br>2004 | BDL (DL: 0.02) | 1.0 Max       |
| 7     | Ammonia (NH3)                             | μg/m3          | IS 5182(Part-25):<br>2018 | 8.58           | 400 Max       |
| 8     | Benzene (C6H6)                            | μg/m3          | IS 5182(Part-11):<br>2006 | BDL (DL: 1.0)  | 5 Max**       |
| 9     | Benzo (a) Pyrene (Particulate Phase only) | ng/m3          | IS 5182(Part-12):<br>2004 | BDL (DL: 1,0)  | 1 Max**       |
| 10    | Arsenic (As)                              | ng/m3          | USEPA Method              | BDL (DL: 2.0)  | 6 Max**       |

30/09/2024

Chinnaraja

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185%

30/09/2024 Sakthivel Authorised by

### Interstellar Testing Centre Private Limited

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Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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TEST REPORT
Report No. : ICE-2409300908 (1)

Test Report No. : IC NABL ULR No. : T

: TC695224000015927F



ORIGINAL Page 2 of 2



| CIKINICA         |       |                        |                 |          |
|------------------|-------|------------------------|-----------------|----------|
|                  |       | IO 3.4                 |                 |          |
| 11 Nickel (Ni)   | ng/m3 | USEPA Method<br>IO 3,4 | · BDL (DL: 2.0) | 20 Max** |
| 12 Mercury as Hg | µg/m3 | USEPA Method<br>IO 3,5 | BDL (DL: 0.002) | NA       |

NOTE: NAAQ: National Ambient Air Quality, Instrument used: Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit. \* As per NAAQ Norms 1 hour Limit, \*\* As per NAAQ

Norms Annual Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

to-A

30/09/2024 Chinnaraja

Verified by

30/09/2024

Sakthivel Authorised by

## Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

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TEST REPORT
Test Report No. : ICE-2409300908 (2)

Received On

Commenced On

Completed On

Date of Report

ORIGINAL Page 1 of 1

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

#### Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105

Tamil Nadu, India

Sample Registration No. : E02-2409250908

: Ambient Air Quality

Sample Name Sample Condition

: Good

Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep

Sampling Location : Near Salt Gate : Good

**Environment Condition** 

Sampling Procedure

Customer Reference

Test Report as per

: Test Request Form/24/09/2024

: NAAQ Norms

: ITC/CHN/GSOP/001

S. No. Sampling Information:

(a) Date of Monitoring, -

: 23,09.24-24.09,24

(b) Duration of Monitoring, minutes

: 1440 : 31 (c) Avg. Ambient Temperature, °C : 66 (d) Relative Humidity, %(Avg.)

(e) Sky Appearance . -

: Clear sky

| (c) Dky reponunce, |                                |                |                           |               |               |
|--------------------|--------------------------------|----------------|---------------------------|---------------|---------------|
| S. No.             | Parameter                      | Measuring Unit | Method                    | Result        | Specification |
|                    | Discipline : Chemical          |                |                           |               |               |
| == (               | Group : Atmospheric Pollution  |                |                           |               |               |
| (I)                | Ambient Air Quality Parameters |                |                           |               |               |
| 1                  | Carbon Monoxide (CO)           | mg/m3          | IS 5182(Part-10):<br>1999 | BDL (DL: 1.0) | 2 Max*        |

NOTE: NAAQ: National Ambient Air Quality, Instrument used: Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit. \* As per NAAQ Norms 8 hours Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

Janes,

30/09/2024 Chinnaraja Verified by 18.8 30/09/2024 Sakthivel

Authorised by

#### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

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: ICE-2409300909 (1) Test Report No.

: TC695224000015928F NABL ULR No.

Received On

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ORIGINAL Page 1 of 2

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

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Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Registration No. ; E02-2409250909

Sample Name

: Ambient Air Quality

Sample Condition Sample Details (if any)

Sample Submission Type : Sampled by Lab Rep : Near Crusher House Sampling Location

**Environment Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

Test Report as per

: NAAQ Norms

S. No. Sampling Information:

(a) Date of Monitoring,

: 23.09.24-24.09.24

(b) Duration of Monitoring, minutes

: 1440 : 31

(c) Avg. Ambient Temperature, °C (d) Relative Humidity, %(Avg.)

: 66

(e) Sky Appearance . -

: Clear sky

| (e)<br>S. No. | Parameter                           | Measuring Unit | Method                    | Result         | Specification |
|---------------|-------------------------------------|----------------|---------------------------|----------------|---------------|
| . 140.        | Discipline : Chemical               |                |                           |                |               |
|               | Group : Atmospheric Pollution       |                |                           |                |               |
| (I)           | Ambient Air Quality Parameters      |                |                           |                |               |
| 1             | Sulphur Dioxide (SO2)               | µg/m3          | IS 5182(Part-2):<br>2001  | 9.15           | 80 Max        |
| 2             | Nitrogen Dioxide (NO2)              | µg/m3          | 1S 5182(Part -6):<br>2006 | 22.30          | 80 Max        |
| 3             | Particulate Matter (PM 10)          | µg/m3          | IS 5182(Part-23):<br>2006 | 70.53          | 100 Max       |
| 4             | Particulate Matter (PM 2.5)         | μg/m3          | IS 5182(Part-24):<br>2019 | 33.26          | 60 Max        |
| 5             | Ozone (O3)                          | µg/m3          | IS 5182(Part-9):<br>1974  | 17.30          | 180 Max*      |
| 6             | Lead (pb)                           | µg/m3          | IS 5182(Part-22):<br>2004 | BDL (DL: 0.02) | 1,0 Max       |
| 7             | Ammonia (NH3)                       | µg/m3          | IS 5182(Part-25):<br>2018 | 9.07           | 400 Max       |
| 8             | Benzene (C6H6)                      | μg/m3          | IS 5182(Part-11):<br>2006 | BDL (DL: 1.0)  | 5 Max**       |
| 9             | Benzo (a) Pyrene (Particulate Phase | ng/m3          | IS 5182(Part-12):<br>2004 | BDL (DL: 1.0)  | 1 Max**       |
| 10            | only)<br>Arsenic (As)               | ng/m3          | USEPA Method              | BDL (DL; 2.0)  | 6 Max**       |

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## Interstellar Testing Centre Private Limited

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Test Report No.

Private Limited

: ICE-2409300909 (1) TC-41

NABL ULR No. : TC695224000015928F

ORIGINAL Page 2 of 2

|    | E-1574-211-2-F |       |                        |                 |          |
|----|----------------|-------|------------------------|-----------------|----------|
|    |                |       | IO 3.4                 |                 |          |
| 11 | Nickel (Ni)    | ng/m3 | USEPA Method<br>IO 3.4 | BDL (DL: 2.0)   | 20 Max** |
| 12 | Mercury as Hg  | μg/m3 | USEPA Method<br>IO 3.5 | BDL (DL: 0.002) | NA       |

NOTE: NAAQ: National Ambient Air Quality, Instrument used: Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit. \* As per NAAQ Norms 1 hour Limit, \*\* As per NAAQ

Norms Annual Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

10-A

30/09/2024 Chinnaraja

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Test Report No. : ICE-2409300909 (2)

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Date of Report

ORIGINAL Page 1 of 1

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105

Tamil Nadu, India

Sample Registration No. : E02-2409250909

: Ambient Air Quality

Sample Name Sample Condition

: Good

Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep : Near Crusher House Sampling Location

**Environment Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

l'est Report as per

: NAAQ Norms

S. No. Sampling Information:

(a) Date of Monitoring, -

: 23.09.24-24.09.24

Duration of Monitoring, minutes

: 1440

(c) Avg. Ambient Temperature, °C

: 31

(d) Relative Humidity, %(Avg.)

: 66

Sky Annearance . -

: Clear sky

| Measuring Unit | Method                    | Result                                  | Specification                   |
|----------------|---------------------------|---|---------------------------------|
|                | 21230100                  | *************************************** | -1-3-00-01-00-1                 |
|                |                           |   |                                 |
|                |                           |   |                                 |
|                | 1 100 D 100               |   | - KANA                          |
| mg/m3          | IS 5182(Part-10):<br>1999 | BDL (DL: 1.0)                           | 2 Max*                          |
|                |                           | IS 5182(Part-10):                       | IS 5182(Part-10): BDL (DL: 1.0) |

NOTE: NAAQ: National Ambient Air Quality, Instrument used: Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit. \* As per NAAQ Norms 8 hours Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

30/09/2024 Chinnaraja

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Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

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Test Report No.

: ICE-2409300910 (1)

NABL ULR No.

: TC695224000015929F

Received On

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ORIGINAL Page 1 of 2

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Registration No. : E02-2409250910

Sample Name Sample Condition : Ambient Air Quality : Good

Sample Details (if any)

Sample Submission Type ; Sampled by Lab Rep. : Near Batching Plant Sampling Location

**Environment Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

est Report as per

: NAAQ Norms

S. No. Sampling Information:

(a) Date of Monitoring, -

: 23.09.24-24.09.24

(b) Duration of Monitoring, minutes

: 1440 : 31

Avg. Ambient Temperature, °C

: 66

Relative Humidity, %(Avg.)

: Clear sky

|     | Sky Appearance , -                  | Measuring Unit | Method                    | Result         | Specification |
|-----|-------------------------------------|----------------|---------------------------|----------------|---------------|
| No. |                                     | Measuring One  | T/ZUMM.                   |                |               |
|     | Discipline : Chemical               |                |                           |                |               |
|     | Group : Atmospheric Pollution       |                |                           |                |               |
| (I) | Ambient Air Quality Parameters      |                |                           |                | Posts         |
| 1   | Sulphur Dioxide (SO2)               | µg/m3          | IS 5182(Part-2):<br>2001  | 8.50           | 80 Max        |
| 2   | Nitrogen Dioxide (NO2)              | µg/m3          | IS 5182(Part -6):<br>2006 | 21.13          | 80 Max        |
| 3   | Particulate Matter (PM 10)          | µg/m3          | IS 5182(Part-23):<br>2006 | 68.23          | 100 Max       |
| 4   | Particulate Matter (PM 2.5)         | µg/m3          | IS 5182(Part-24):<br>2019 | 32.02          | 60 Max        |
| 5   | Ozone (O3)                          | µg/m3          | IS 5182(Part-9):<br>1974  | . 16.51        | 180 Max*      |
| 6   | Lead (pb)                           | µg/m3          | IS 5182(Part-22):<br>2004 | BDL (DL: 0.02) | 1.0 Max       |
| 7   | Ammonia (NH3)                       | µg/m3          | IS 5182(Part-25);<br>2018 | 8.75           | 400 Max       |
| 8   | Benzene (C6H6)                      | µg/m3          | IS 5182(Part-11):<br>2006 | BDL (DL: 1.0)  | 5 Max**       |
| 9   | Benzo (a) Pyrene (Particulate Phase | ng/m3          | IS 5182(Part-12):<br>2004 | BDL (DL: 1.0)  | 1 Max**       |
| 10  | only)<br>Arsenic (As)               | ng/m3          | USEPA Method              | BDL (DL; 2.0)  | 6 Max**       |

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30/09/2024

Chinnaraja

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Vision. 30/09/2024

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### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

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Test Report No.

: ICE-2409300910 (1)

NABL ULR No.

: TC695224000015929F

ORIGINAL Page 2 of 2

|                 |       | IO 3.4                 |                 |          |
|-----------------|-------|------------------------|-----------------|----------|
| 1 Nickel (Ni)   | ng/m3 | USEPA Method<br>IO 3.4 | BDL (DL: 2.0)   | 20 Max** |
| 2 Mercury as Hg | µg/m3 | USEPA Method<br>10 3.5 | BDL (DL: 0.002) | NA       |

NOTE: NAAQ: National Ambient Air Quality, Instrument used: Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit. \* As per NAAQ Norms 1 hour Limit, \*\* As per NAAQ

Norms Annual Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

30/09/2024

Chinnaraja

Verified by

(Response

30/09/2024 Sakthivel Authorised by

## Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

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Test Report No. : ICE-2409300910 (2)

Received On

Commenced On

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Date of Report

ORIGINAL Page 1 of 1

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105

Tamil Nadu, India

Sample Registration No. : E02-2409250910

: Ambient Air Quality

Sample Name Sample Condition

: Good

Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep : Near Batching Plant Sampling Location

Environment Condition

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference est Report as per

: Test Request Form/24/09/2024

: NAAQ Norms

S. No. Sampling Information:

(a) Date of Monitoring, -

: 23.09.24-24.09.24

(b) Duration of Monitoring, minutes

: 1440

(c) Avg. Ambient Temperature, °C

: 31

(d) Relative Humidity, %(Avg.)

: 66

: Clear sky

| (e) Sky Appearance, - |                                | , Cicui say           |                           |               | W 7 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 |  |  |
|-----------------------|--------------------------------|-----------------------|---------------------------|---------------|---|--|--|
| S. No.                | Parameter                      | Measuring Unit        | Method                    | Result        | Specification                             |  |  |
|                       | Discipline : Chemical          |                       |                           |               |   |  |  |
| -                     | Group : Atmospheric Pollution  |                       |                           |               |   |  |  |
| (I)                   | Ambient Air Quality Parameters | ir Quality Parameters |                           |               |   |  |  |
|                       | Carbon Monoxide (CO)           | mg/m3                 | IS 5182(Part-10):<br>1999 | BDL (DL: 1.0) | 2 Max*                                    |  |  |

NOTE: NAAQ: National Ambient Air Quality, Instrument used: Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit. \* As per NAAQ Norms 8 hours Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

WEA.

30/09/2024 Chinnaraja

Verified by

30/09/2024 Sakthivel Authorised by

### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

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Test Report No.

: ICE-2409300911 (1)

Received On

Commenced On

Completed On

Date of Report

: TC695224000015930F NABL ULR No.



ORIGINAL Page 1 of 2

: 25-09-2024

; 25-09-2024

: 30-09-2024

; 30-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tamil Nadu, India

Sample Registration No. : E02-2409250911

: Ambient Air Quality

Sample Name Sample Condition

: Good Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep

: Near Watch Tower-8 Sampling Location

**Environment Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

est Report as per

: NAAQ Norms

#### S. No. Sampling Information:

(a) Date of Monitoring, -

: 23.09,24-24.09.24

(b) Duration of Monitoring, minutes

: 1440 :31

(c) Avg. Ambient Temperature, °C (d) Relative Humidity, %(Avg.)

: 66

Sky Appearance . -

: Clear sky

| . No.  | Parameter                                 | Measuring Unit | Method                    | Result         | Specification |
|--------|---|----------------|---------------------------|----------------|---------------|
| . 1101 | Discipline : Chemical                     |                |                           |                |               |
|        | Group : Atmospheric Pollution             |                |                           |                |               |
| (I)    | Ambient Air Quality Parameters            |                |                           |                |               |
| 1      | Sulphur Dioxide (SO2)                     | μg/m3          | IS 5182(Part-2):<br>2001  | 7.41           | 80 Max        |
| 2      | Nitrogen Dioxide (NO2)                    | µg/m3          | IS 5182(Part -6):<br>2006 | 18.91          | 80 Max        |
| 3      | Particulate Matter (PM 10)                | μg/m3          | IS 5182(Part-23):<br>2006 | 61.26          | 100 Max       |
| 4      | Particulate Matter (PM 2.5)               | µg/m3          | IS 5182(Part-24):<br>2019 | 27,44          | 60 Max        |
| 5      | Ozone (O3)                                | µg/m3          | IS 5182(Part-9):<br>1974  | 15.43          | 180 Max*      |
| 6      | Lead (pb)                                 | μg/m3          | IS 5182(Part-22):<br>2004 | BDL (DL: 0.02) | 1.0 Max       |
| 7      | Ammonia (NH3)                             | µg/m3          | IS 5182(Part-25):<br>2018 | 7.90           | 400 Max       |
| 8      | Benzene (C6H6)                            | μg/m3          | IS 5182(Part-11):<br>2006 | BDL (DL: 1.0)  | 5 Max**       |
| 9      | Benzo (a) Pyrene (Particulate Phase only) | ng/m3          | IS 5182(Part-12):<br>2004 | BDL (DL: 1.0)  | 1 Max**       |
| 10     | Arsenic (As)                              | ng/m3          | USEPA Method              | BDL (DL: 2.0)  | 6 Max**       |

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30/09/2024

Chinnaraja

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(P. 55)

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Test Report No. : ICE-2409300911 (1)

: TC695224000015930F

ORIGINAL Page 2 of 2

| _  |               |       | IO 3.4                 |                 |          |
|----|---------------|-------|------------------------|-----------------|----------|
| 11 | Nickel (Ni)   | ng/m3 | USEPA Method<br>IO 3.4 | BDL (DL: 2.0)   | 20 Max** |
| 12 | Mercury as Hg | μg/m3 | USEPA Method<br>IO 3.5 | BDL (DL: 0.002) | NA       |

NABL ULR No.

NOTE: NAAQ: National Ambient Air Quality, Instrument used: Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit. \* As per NAAQ Norms 1 hour Limit, \*\* As per NAAQ

Norms Annual Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

Sp. S.

30/09/2024 Chinnaraja

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30/09/2024 Sakthivel

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Test Report No. : ICE-2409300911 (2)

Received On

Commenced On

Completed On

Date of Report

ORIGINAL Page 1 of 1

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant, 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105

Tamil Nadu, India

Sample Registration No. : E02-2409250911

: Ambient Air Quality

Sample Name Sample Condition

: Good

Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep : Near Watch Tower-8 Sampling Location

**Environment Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

Test Report as per

: NAAQ Norms

S. No. Sampling Information:

(a) Date of Monitoring, -

: 23,09.24-24.09.24

(b) Duration of Monitoring, minutes

: 1440

(c) Avg. Ambient Temperature, °C

: 31

(d) Relative Humidity, %(Avg.)

: 66

Clarrety

| (e) Sky Appearance, - |                                | ; Clear sky    |                           |               |               |  |  |
|-----------------------|--------------------------------|----------------|---------------------------|---------------|---------------|--|--|
| S. No.                | Parameter                      | Measuring Unit | Method                    | Result        | Specification |  |  |
| 36.1                  | Discipline : Chemical          |                |                           |               |               |  |  |
|                       | Group : Atmospheric Pollution  |                |                           |               |               |  |  |
| (I)                   | Ambient Air Quality Parameters | ters           |                           |               |               |  |  |
|                       | Carbon Monoxide (CO)           | mg/m3          | IS 5182(Part-10):<br>1999 | BDL (DL; 1.0) | 2 Max*        |  |  |

NOTE: NAAQ: National Ambient Air Quality, Instrument used; Respirable Dust Sampler(RDS), Fine Dust Sampler(FDS), Multigas Analyser, Low Flow Air Sampler, BDL: Below Detection Limit, DL: Detection Limit. \* As per NAAQ Norms 8 hours Limit

REMARKS: The above sample complies with NAAQ Norms respect to the above tests.

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

30/09/2024 Chinnaraja

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### **TEST REPORT**

Test Report No.

: ICE-2407051175

NABL ULR No.

: TC695224000010092F



Page 1 of 1



Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant

4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Name

Sample Condition

Sample Registration No. : E02-2406291175

: Stack Emission

: Good

Received On Commenced On : 29-06-2024

Completed On

: 29-06-2024

: 04-07-2024

Date of Report

: 05-07-2024

Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep Sampling Location

Sampling Procedure

: Boiler Unit-1 (600 MW) : ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/29/06/2024

Test Report as per

: TNPCB Norms

| S. | No. | Sampling | In | formation: |  |
|----|-----|----------|----|------------|--|
|----|-----|----------|----|------------|--|

(a) Date of Monitoring

27-06-2024

| S. No. | Parameter                     | Measuring Unit | Method               | Result         | Specification |  |  |  |  |
|--------|-------------------------------|----------------|----------------------|----------------|---------------|--|--|--|--|
| 27.70  | Discipline : Chemical         |                |                      |                |               |  |  |  |  |
|        | Group : Atmospheric Pollution |                |                      |                |               |  |  |  |  |
| (I)    | Stack Emission                |                |                      |                |               |  |  |  |  |
| 1      | Oxides of Nitrogen as NOx     | mg/Nm3         | IS 11255: (Part-7)   | 99.6           | 450 Max       |  |  |  |  |
| 2      | Carbon Monoxide as CO         | %              | IS 13270             | BDL(DL:0.2)    | 1 Max         |  |  |  |  |
| 3      | Particulate Matter as PM      | mg/Nm3         | IS 11255: (Part-1)   | 24.8           | 50 Max        |  |  |  |  |
| 4      | Stack Temperature             | °C             | IS 11255: (Part-3)   | 117            | Not Available |  |  |  |  |
| 5      | Velocity                      | m/s            | IS 11255; (Part-3) ° | 26.2           | Not Available |  |  |  |  |
| 6      | Flow Rate                     | Nm3/hr.        | IS 11255; (Part-3)   | 3183010        | Not Available |  |  |  |  |
| 7      | Sulphur Dioxide as SO2        | mg/Nm3         | IS 11255: (Part-2)   | 145            | 200 Max       |  |  |  |  |
| 8      | Carbon Dioxide as CO2         | %              | IS 13270             | 12.8           | Not Available |  |  |  |  |
| 9      | Oxygen as O2                  | %              | IS 13270             | 6.5            | Not Available |  |  |  |  |
| 10     | Moisture                      | %              | IS 11255: (Part-3)   | 6.06           | Not Available |  |  |  |  |
| 11     | Lead as Pb                    | mg/Nm3         | USEPA Method 29      | BDL (DL: 0.1)  | Not Available |  |  |  |  |
| 12     | Arsenic as As                 | mg/Nm3         | USEPA Method 29      | BDL (DL: 0.1)  | Not Available |  |  |  |  |
| 13     | Mercury as Hg                 | ° mg/Nm3       | USEPA Method 29      | BDL (DL: 0.01) | 0.03 Max      |  |  |  |  |
| 14     | Chromium as Cr                | mg/Nm3         | USEPA Method 29      | BDL (DL; 0.1)  | Not Available |  |  |  |  |

NOTE: TNPCB: Tamilnadu Pollution Control Board, Instrument used: Fluegas Analyser, Stack Sampler, BDL: Below Detection Limit, DL: Detection Limit

REMARKS: The above sample complies with TNPCB Norms respect to the above tests.

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

Interstellar Testing Centre Private Limited

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Ph: 044 - 24962512

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## **TEST REPORT**

Test Report No.

: ICE-2407051176

NABL ULR No.

: TC695224000010091F

Received On

Commenced On

Completed On

Date of Report



Page 1 of 1

: 29-06-2024

: 29-06-2024

: 04-07-2024

: 05-07-2024



Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant

4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Name

Sample Registration No. : E02-2406291176

: Stack Emission

Sample Condition

: Good

Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep

Sampling Location

: Boiler Unit-2 (600 MW) : ITC/CHN/GSOP/001 Sampling Procedure

Customer Reference

: Test Request Form/29/06/2024

Test Report as per

: TNPCB Norms

| S, | No. | Sampling | Information: |
|----|-----|----------|--------------|

(a) Date of Monitoring

: 27-06-2024

| (b) /  | Ambient Temperature (C)       | : 33.0         | Taxana a T         |                | 0 10 1        |  |  |  |  |  |
|--------|-------------------------------|----------------|--------------------|----------------|---------------|--|--|--|--|--|
| S. No. | Parameter                     | Measuring Unit | Method             | Result         | Specification |  |  |  |  |  |
|        | Discipline : Chemical         |                |                    |                |               |  |  |  |  |  |
|        | Group : Atmospheric Pollution |                |                    |                |               |  |  |  |  |  |
| (I)    | Stack Emission                |                |                    |                |               |  |  |  |  |  |
| 1      | Oxides of Nitrogen as NOx     | mg/Nm3         | IS 11255: (Part-7) | 114.70         | 450 Max       |  |  |  |  |  |
| 2      | Carbon Monoxide as CO         | %              | IS 13270           | BDL(DL:0.2)    | 1 Max         |  |  |  |  |  |
| 3      | Particulate Matter as PM      | mg/Nm3         | 1S 11255: (Part-1) | 26.45          | 50 Max        |  |  |  |  |  |
| 4      | Stack Temperature             | °C             | IS 11255: (Part-3) | 120            | Not Available |  |  |  |  |  |
| 5      | Velocity                      | m/s            | IS 11255: (Part-3) | 26.5           | Not Available |  |  |  |  |  |
| 6      | Flow Rate                     | Nm3/hr.        | IS 11255; (Part-3) | 3222134        | Not Available |  |  |  |  |  |
| 7      | Sulphur Dioxide as SO2        | mg/Nm3         | IS 11255 (Part-2)  | 172.0          | 200 Max       |  |  |  |  |  |
| 8      | Carbon Dioxide as CO2         | %              | IS 13270           | 12.7           | Not Available |  |  |  |  |  |
| 9      | Oxygen as O2                  | %              | IS 13270           | 6.6            | Not Available |  |  |  |  |  |
| 10     | Moisture                      | %              | IS 11255: (Part-3) | 5,86           | Not Available |  |  |  |  |  |
| 11     | Lead as Pb                    | mg/Nm3         | USEPA Method 29    | BDL (DL: 0.1)  | Not Available |  |  |  |  |  |
| 12     | Arsenic as AS                 | mg/Nm3         | USEPA Method 29    | BDL (DL: 0.1)  | Not Available |  |  |  |  |  |
| 13     | Mercury as Hg                 | mg/Nm3         | USEPA Method 29    | BDL (DL: 0.01) | 0.03 Max      |  |  |  |  |  |
| 14     | Chromium(as Cr)               | mg/Nm3         | USEPA Method 29    | BDL (DL: 0,1)  | Not Available |  |  |  |  |  |

NOTE: TNPCB: Tamilnadu Pollution Control Board, Instrument used: Fluegas Analyser, Stack Sampler, BDL: Below Detection Limit, DL: **Detection Limit** 

REMARKS: The above sample complies with TNPCB Norms respect to the above tests.

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

## Interstellar Testing Centre Private Limited

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05/07/2024 Sakthivel

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: ICE-2409301015 Test Report No.

: TC695224000016109F NABL ULR No.

Received On

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Date of Report

ORIGINAL Page 1 of 1

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Registration No. : E02-2409251015

: Stack Emission

Sample Condition

Sample Name

: Good Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep

: Boiler Unit - 1 (600MW) Sampling Location

Environment Condition ; Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

Test Report as per

: TNPCB Norms

S. No. Sampling Information:

(a) Date of Monitoring

: 23.09.24

| S. No.  | Parameter                      | Measuring Unit | Method  | Result   | Specification  |
|---------|--------------------------------|----------------|---|--|----------------|
| ,,,,,,, | Discipline : Chemical          |                |   |  |                |
|         | Group : Atmospheric Pollutio   | n              |   |  |                |
| (I)     | Stack Emission                 |                |   |  | 450 Max        |
| 1       | Oxides of Nitrogen as NOx      | mg/Nm3         | IS 11255: (Part-7)  | 117.4  |                |
| 2       | Carbon Monoxide as CO          | %              | IS 13270  | BDL(DL:0.2)  | 1 Max          |
| 3       | Particulate Matter as PM       | mg/Nm3         | IS 11255: (Part-1)  | 22.17  | 50 Max         |
| 4       | Stack Temperature              | °C             | IS 11255: (Part-3)  | 109  | Not Available  |
| 5       | Velocity                       | m/s            | IS 11255: (Part-3)  | 24.8   | Not Available  |
|         | Flow Rate                      | Nm3/hr.        | IS 11255: (Part-3)  | 3050516  | Not Available  |
| 6       | Sulphur Dioxide as SO2         | mg/Nm3         | IS 11255 (Part-2)   | 134.6  | 200 Max        |
| 0       | Carbon Dioxide as CO2          | %              | IS 13270  | 13.4   | Not Available  |
| 8       | Children Children Children Co. | 9/6            | IS 13270  | 6.2  | Not Available  |
| 9       | Oxygen as O2                   | %              | IS 11255: (Part-3)  | 0.87   | Not Available  |
| 10      | Moisture                       | mg/Nm3         | USEPA Method 29   | BDL (DL: 0.1)  | Not Available  |
| 11      | Lead as Pb                     |                | USEPA Method 29   | BDL (DL: 0.1)  | Not Available  |
| 12      | Arsenic as As                  | mg/Nm3         | DE LA CONTRACTOR DE LA | BDL (DL: 0.01)   | 0.03 Max       |
| 13      | Mercury as Hg                  | mg/Nm3         | USEPA Method 29   | The second secon | Not Available  |
| 14      | Chromium as Cr                 | mg/Nm3         | USEPA Method 29   | BDL (DL: 0.1)  | TAGE AVAILABLE |

NOTE: TNPCB: Tamilnadu Pollution Control Board, Instrument used: Fluegas Analyser, Stack Sampler, BDL: Below Detection Limit, DL:

REMARKS: The above sample complies with TNPCB Norms respect to the above tests. \*\*\*\*\*End of Report\*\*\*\*

in the

30/09/2024 Chinnaraja

Verified by

30/09/2024 Sakthivel

12.20

Authorised by

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: ICE-2409301016 Test Report No.

: TC695224000016108F NABL ULR No.

Received On

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Date of Report

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: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

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Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

: 23.09.24

Tuticorin, 628105 Tamil Nadu, India

Sample Registration No. : E02-2409251016

Sample Name

: Stack Emission : Good

Sample Condition

Sample Details (if any)

Sample Submission Type : Sampled by Lab Rep

: Boiler Unit - 2 (600MW) Sampling Location : Good **Environment Condition** 

Sampling Procedure

Customer Reference

est Report as per

: Test Request Form/24/09/2024 : TNPCB Norms

: ITC/CHN/GSOP/001

S. No. Sampling Information:

(a) Date of Monitoring

| S. No.   | Parameter  | Measuring Unit                         | Method             | Result         | Specification   |  |  |  |  |
|----------|--|--|--------------------|----------------|-----------------|--|--|--|--|
| 3, 1,14, | Discipline : Chemical  |  |                    |                |                 |  |  |  |  |
|          | Group : Atmospheric Pollution  | n                                      |                    |                |                 |  |  |  |  |
| (I)      | Stack Emission 450 May   |  |                    |                |                 |  |  |  |  |
| 1        | Oxides of Nitrogen as NOx  | mg/Nm3                                 | IS 11255: (Part-7) | 129.8          | 450 Max         |  |  |  |  |
| 2        | Carbon Monoxide as CO  | %                                      | IS 13270           | BDL(DL:0.2)    | 1 Max           |  |  |  |  |
| 3        | Particulate Matter as PM   | mg/Nm3                                 | IS 11255: (Part-1) | 25.14          | 50 Max          |  |  |  |  |
|          | - Books Petrol - Control - | °C                                     | IS 11255: (Part-3) | 114            | Not Available   |  |  |  |  |
| 4        | Stack Temperature  | m/s                                    | IS 11255: (Part-3) | 25.2           | Not Available   |  |  |  |  |
| 5        | Velocity   | Nm3/hr.                                | IS 11255: (Part-3) | 3054995        | Not Available   |  |  |  |  |
| 6        | Flow Rate  | mg/Nm3                                 | IS 11255 (Part-2)  | 156.4          | 200 Max         |  |  |  |  |
| 7        | Sulphur Dioxide as SO2   | // // // // // // // // // // // // // | IS 13270           | 13.1           | Not Available   |  |  |  |  |
| 8        | Carbon Dioxide as CO2  |  |                    | 6.4            | Not Available   |  |  |  |  |
| 9        | Oxygen as O2   | %                                      | IS 13270           |                | Not Available   |  |  |  |  |
| 10       | Moisture   | %                                      | IS 11255: (Part-3) | 0.98           | 074 5 1010 0711 |  |  |  |  |
| 11       | Lead as Pb   | mg/Nm3                                 | USEPA Method 29    | BDL (DL: 0.1)  | Not Available   |  |  |  |  |
| 12       | Arsenic as As  | mg/Nm3                                 | USEPA Method 29    | BDL (DL: 0.1)  | Not Available   |  |  |  |  |
| 13       | Mercury as Hg  | mg/Nm3                                 | USEPA Method 29    | BDL (DL: 0.01) | 0.03 Max        |  |  |  |  |
| 14       | Chromium as Cr   | mg/Nm3                                 | USEPA Method 29    | BDL (DL: 0.1)  | Not Available   |  |  |  |  |

NOTE: TNPCB: Tamilnadu Pollution Control Board, Instrument used: Fluegas Analyser, Stack Sampler, BDL: Below Detection Limit, DL: Detection Limit

REMARKS: The above sample complies with TNPCB Norms respect to the above tests. \*\*\*\*\*End of Report\*\*\*\*

40.50

30/09/2024 Chinnaraja Verified by

30/09/2024 Sakthivel Authorised by

12.53

### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

- > The test result related only to the items tested
- The test report shall not be reproduced in full or part without the written approval of ITC Labs. Chennai
- The test items shall not be retained more than 15 days from the date of issue of test report except in the case as required by the regulatory bodies and Customers





Welcome to Coastal Energen Pvt. Ltd.

Mining, Shipping, Logistics and Power Generation.

district of Tuticorin in the State of Tamil Nadu , India.

advantage as a low cost Power Producer.

cost of power generated.

# COASTAL ENERGEN PVT LTD

Home About Us Key Strengths Core Team Careers Contact Us

- Environment Clearance Compliance Status

Tenders



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- CIRP

CSR

List of Directors

- Notice of Annual General Meeting

- Annual Return

Our Projects

Tuticorin has been identified by both the Central Government of India and State Government of Tamilnadu as a power generating centre for southern Tamilnadu lying as it does in the middle of the power corridor.

Situated only 13 kms from Tuticorin town, our project enjoys the following advantages:

- Close proximity to a major town (13 kms)
- · Within 21 kms of a major port
- Excellent road, Rail & Air connectivity
- Excellent grid connectivity

The project has achieved fast progress since its inception.

- · Land fully acquired
- PPA Agreement Signed
- · MOEF Clearance issued
- · Funding fully tied up and secured
- BTG order finalized
- Discussion with PGCIL for power evacuation
- · Engineering Consultants appointed
- Manpower in place
- · Site preparation completed
- · Geo-technical investigations completed
- · Construction water and power in place
- Water allocated by TWAD Board for process
  recomemos

Home | About Us | Key Strengths | Core Team | Careers | Contact Us | Tenders © 2009. All Rights Reserved.

Coal and Oil Group is a Rs. 2400 crores (US\$ 550 million) Integrated Energy Company involved in various aspects of Energy supplies including Coal trading,

Coastal Energen Pvt Ltd (ENERGEN), the Power Generating Flagship Company of the

Coal and Oil Group, is setting up a 1200 MW coal fired thermal power plant in the

Our maiden power project in Tuticorin, Tamil Nadu, South India is a logical extension of our multi disciplinary capabilities building on our diverse strengths and leveraging

our varied experiences in "Fuel Management" which gives Coastal Energen a distinct

Approximately 60% of the cost of power comprises of fuel cost. Our group is one of

the top suppliers of imported coal to some of the leading private and public power

producers in India like Tata, Reliance, Torrent Power, Gujarat Electricity Board, Maharashtra State Electricity Board, Calcutta Electric and others. With such experience under our belt and a top notch management team guiding the project, we

are in a comfortable position to effectively manage the cost of fuel and finally the

Terms & Conditions | Privacy Policy fueled by ideasonic





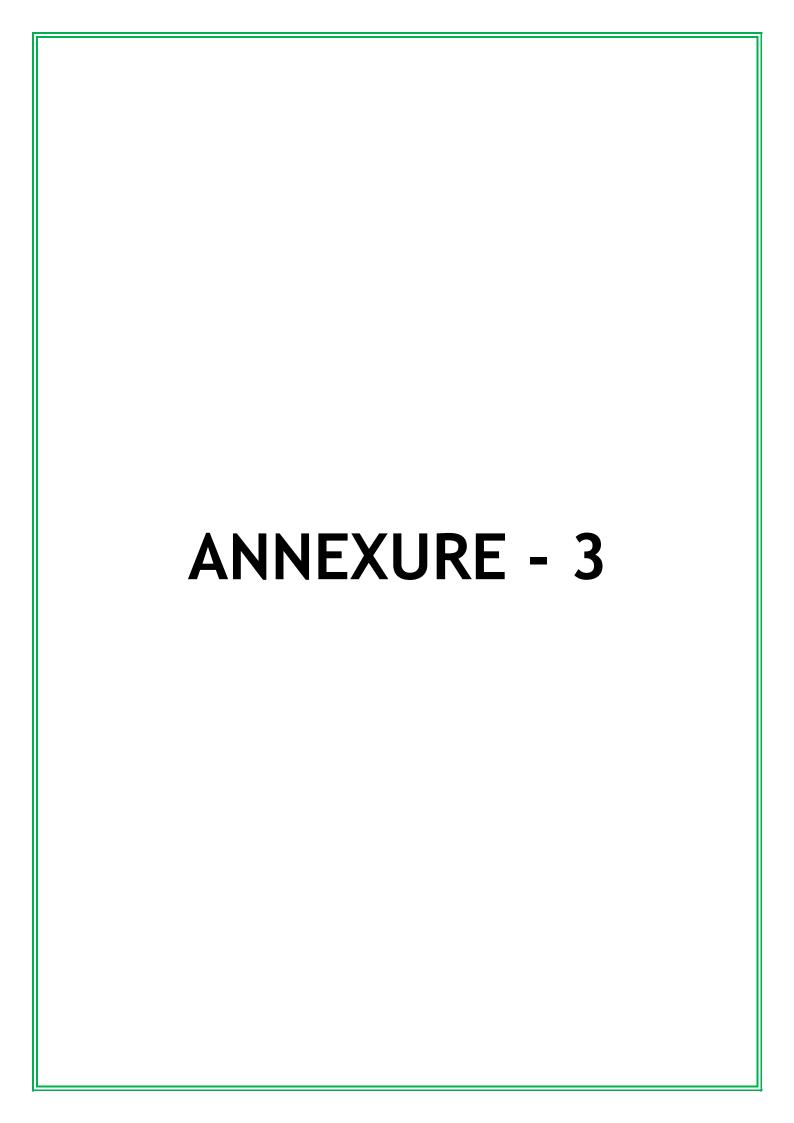












2 X 600 MW THERMAL POWER PLANT

#### **BOREWELL WATER ANALYSIS REPORT - APRIL'24**

Sample Collected on 09.04.2024

| S. No | PARAMETERS              | UNIT    | SAMPLE 1 | SAMPLE 2 | SAMPLE 3 | SAMPLE 4 |
|-------|-------------------------|---------|----------|----------|----------|----------|
| 1     | рН                      | -       | 7.03     | 7.54     | 7.45     | 7.17     |
| 2     | Electrical conductivity | (µs/cm) | 7140     | 18640    | 10740    | 6004     |
| 3     | Total Suspended Solids  | ppm     | 9        | 12       | 40       | 9        |
| 4     | Total Dissolved Solids  | ppm     | 4641     | 12116    | 6981     | 3903     |
| 5     | Total Hardness          | ppm     | 794      | 1548     | 1198     | 648      |
| 6     | Calcium Hardness        | ppm     | 548      | 940      | 790      | 452      |
| 7     | Magnesium Hardness      | ppm     | 246      | 608      | 408      | 196      |
| 8     | Total Chloride          | ppm     | 1580     | 2980     | 2420     | 1360     |
| 9     | Sodium                  | ppm     | 710      | 1170     | 1050     | 610      |
| 10    | Potassium               | ppm     | 28       | 56       | 48       | 36       |
| 11    | Lead                    | ppm     | BDL      | BDL      | BDL      | BDL      |
| 12    | Boron                   | ppm     | 0.08     | 0.06     | 0.09     | 0.07     |
| 13    | BOD                     | mg/l    | 1.9      | 1.6      | 2.1      | 2.0      |
| 14    | DO                      | mg/l    | 5.6      | 5.0      | 5.2      | 5.1      |
| 15    | COD                     | mg/l    | 34       | 52       | 46       | 42       |
| 16    | Sulphate                | ppm     | 352      | 616      | 482      | 260      |
| 17    | Oil & Grease            | mg/l    | BDL      | BDL      | BDL      | BDL      |
| 18    | Mercury                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 19    | Arsenic                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 20    | Chromium                | ppm     | BDL      | BDL      | BDL      | BDL      |
|       | Remarks                 | Nil     |          |          |          |          |

#### **Borewell Locations:**

| SI.No. Sample Identification |          | Borewell Location                    |  |  |
|------------------------------|----------|--------------------------------------|--|--|
| 1                            | SAMPLE 1 | South West of Ash Bund (Near CAAQMS- |  |  |
| 2                            | SAMPLE 2 | South of Ash Bund                    |  |  |
| 3                            | SAMPLE 3 | South East of Ash Bund               |  |  |
| 4                            | SAMPLE 4 | North East of Ash Bund               |  |  |

SAMPLE COLLECTED BY

LAB CHEMIST

(VSIVAPAUL)

2 X 600 MW THERMAL POWER PLANT

#### **BOREWELL WATER ANALYSIS REPORT - MAY'24**

Sample Collected on 08.05.2024

| S. No | PARAMETERS              | UNIT    | SAMPLE 1 | SAMPLE 2 | SAMPLE 3 | SAMPLE 4 |
|-------|-------------------------|---------|----------|----------|----------|----------|
| 1     | рН                      | -       | 7.24     | 7.88     | 6.95     | 7.36     |
| 2     | Electrical conductivity | (µs/cm) | 6540     | 16550    | 9630     | 5870     |
| 3     | Total Suspended Solids  | ppm     | 6        | 10       | 21       | 14       |
| 4     | Total Dissolved Solids  | ppm     | 4251     | 10758    | 6260     | 3816     |
| 5     | Total Hardness          | ppm     | 794      | 1548     | 1198     | 648      |
| 6     | Calcium Hardness        | ppm     | 548      | 940      | 790      | 452      |
| 7     | Magnesium Hardness      | ppm     | 230      | 510      | 436      | 214      |
| 8     | Total Chloride          | ppm     | 2116     | 3348     | 2820     | 1787     |
| 9     | Sodium                  | ppm     | 456      | 920      | 822      | 545      |
| 10    | Potassium               | ppm     | 30       | 62       | 54       | 40       |
| 11    | Lead                    | ppm     | BDL      | BDL      | BDL      | BDL      |
| 12    | Boron                   | ppm     | 0.06     | 0.09     | 0.1      | 0.05     |
| 13    | BOD                     | mg/l    | 2.9      | 3.6      | 4.2      | 3.4      |
| 14    | DO                      | mg/l    | 5.2      | 6.1      | 4.9      | 5.5      |
| 15    | COD                     | mg/l    | 45       | 57       | 50       | 42       |
| 16    | Sulphate                | ppm     | 375      | 540      | 420      | 334      |
| 17    | Oil & Grease            | mg/l    | BDL      | BDL      | BDL      | BDL      |
| 18    | Mercury                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 19    | Arsenic                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 20    | Chromium                | ppm     | BDL      | BDL      | BDL      | BDL      |
|       | Remarks                 | Nil     |          |          |          |          |

#### **Borewell Locations:**

| SI.No. | Sample Identification | Borewell Location                      |
|--------|-----------------------|--|
| 1      | SAMPLE 1              | South West of Ash Bund (Near CAAQMS-3) |
| 2      | SAMPLE 2              | South of Ash Bund                      |
| 3      | SAMPLE 3              | South East of Ash Bund                 |
| 4      | SAMPLE 4              | North East of Ash Bund                 |

SAMPLE COLLECTED BY

LAB CHEMIST

(V.SIVAPPOL)

2 X 600 MW THERMAL POWER PLANT

#### **BOREWELL WATER ANALYSIS REPORT - JUNE'24**

Sample Collected on 15.06.2024

| S. No | PARAMETERS              | UNIT    | SAMPLE 1 | SAMPLE 2 | SAMPLE 3 | SAMPLE 4 |
|-------|-------------------------|---------|----------|----------|----------|----------|
| 1     | рН                      | -       | 7.38     | 6.92     | 7.49     | 7.83     |
| 2     | Electrical conductivity | (μs/cm) | 7440     | 18800    | 18240    | 12380    |
| 3     | Total Suspended Solids  | ppm     | 15       | 19       | 28       | 23       |
| 4     | Total Dissolved Solids  | ppm     | 4836     | 12220    | 11856    | 8047     |
| 5     | Total Hardness          | ppm     | 636      | 2700     | 2560     | 1420     |
| 6     | Calcium Hardness        | ppm     | 480      | 1380     | 1280     | 740      |
| 7     | Magnesium Hardness      | ppm     | 156      | 1320     | 1280     | 680      |
| 8     | Total Chloride          | ppm     | 1612     | 6488     | 3284     | 1790     |
| 9     | Sodium                  | ppm     | 722      | 1210     | 1340     | 725      |
| 10    | Potassium               | ppm     | 26       | 55       | 66       | 48       |
| 11    | Lead                    | ppm     | BDL      | BDL      | BDL      | BDL      |
| 12    | Boron                   | ppm     | 0.12     | 0.05     | 0.08     | 0.06     |
| 13    | BOD                     | mg/l    | 2.1      | 2.4      | 2        | 1.8      |
| 14    | DO                      | mg/l    | 5.7      | 5.5      | 5.5      | 5.1      |
| 15    | COD                     | mg/l    | 30       | 45       | 38       | 46       |
| 16    | Sulphate                | ppm     | 378      | 714      | 510      | 334      |
| 17    | Oil & Grease            | mg/l    | BDL      | BDL      | BDL      | BDL      |
| 18    | Mercury                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 19    | Arsenic                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 20    | Chromium                | ppm     | BDL      | BDL      | BDL      | BDL      |
|       | Remarks                 | Nil     |          |          |          |          |

#### **Borewell Locations:**

| SI.No. | Sample Identification | Borewell Location                      |
|--------|-----------------------|--|
| 1      | SAMPLE 1              | South West of Ash Bund (Near CAAQMS-3) |
| 2      | SAMPLE 2              | South of Ash Bund                      |
| 3      | SAMPLE 3              | South East of Ash Bund                 |
| 4      | SAMPLE 4              | North East of Ash Bund                 |

SAMPLE COLLECTED BY

LAB CHEMIST

2 X 600 MW THERMAL POWER PLANT

#### **BOREWELL WATER ANALYSIS REPORT - JULY'24**

Sample Collected on 15.07.2024

| S. No | PARAMETERS              | UNIT    | SAMPLE 1 | SAMPLE 2 | SAMPLE 3 | SAMPLE 4 |
|-------|-------------------------|---------|----------|----------|----------|----------|
| 1     | рН                      | -       | 7.62     | 7.01     | 7.6      | 8.09     |
| 2     | Electrical conductivity | (µs/cm) | 8340     | 17330    | 21640    | 7020     |
| 3     | Total Suspended Solids  | ppm     | 7        | 47       | 18       | 11       |
| 4     | Total Dissolved Solids  | ppm     | 5421     | 11265    | 14066    | 4563     |
| 5     | Total Hardness          | ppm     | 724      | 2660     | 2810     | 764      |
| 6     | Calcium Hardness        | ppm     | 440      | 1580     | 1670     | 460      |
| 7     | Magnesium Hardness      | ppm     | 284      | 1080     | 1140     | 304      |
| 8     | Total Chloride          | ppm     | 1670     | 6210     | 4160     | 698      |
| 9     | Sodium                  | ppm     | 785      | 1102     | 1245     | 694      |
| 10    | Potassium               | ppm     | 36       | 62       | 78       | 28       |
| 11    | Lead                    | ppm     | BDL      | BDL      | BDL      | BDL      |
| 12    | Boron                   | ppm     | 0.08     | 0.12     | 0.14     | 0.06     |
| 13    | BOD                     | mg/l    | 2.6      | 3.6      | 4        | 2.1      |
| 14    | DO                      | mg/l    | 4.3      | 4.5      | 4.8      | 4.0      |
| 15    | COD                     | mg/l    | 38       | 54       | 66       | 34       |
| 16    | Sulphate                | ppm     | 498      | 895      | 1045     | 411      |
| 17    | Oil & Grease            | mg/l    | BDL      | BDL      | BDL      | BDL      |
| 18    | Mercury                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 19    | Arsenic                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 20    | Chromium                | ppm     | BDL      | BDL      | BDL      | BDL      |
|       | Remarks                 | Nil     |          |          |          |          |

#### **Borewell Locations:**

| SI.No. | Sample Identification | Borewell Location                      |  |  |
|--------|-----------------------|--|--|--|
| 1      | SAMPLE 1              | South West of Ash Bund (Near CAAQMS-3) |  |  |
| 2      | SAMPLE 2              | South of Ash Bund                      |  |  |
| 3      | SAMPLE 3              | South East of Ash Bund                 |  |  |
| 4      | SAMPLE 4              | North East of Ash Bund                 |  |  |

SAMPLE COLLECTED BY

LAB CHEMIST

( Whenthore)

2 X 600 MW THERMAL POWER PLANT

#### **BOREWELL WATER ANALYSIS REPORT - AUGUST'24**

Sample Collected on 10.08.2024

| S. No | PARAMETERS              | UNIT    | SAMPLE 1 | SAMPLE 2 | SAMPLE 3 | SAMPLE 4 |
|-------|-------------------------|---------|----------|----------|----------|----------|
| 1     | рН                      | ,       | 7.87     | 6,88     | 7.48     | 7.40     |
| 2     | Electrical conductivity | (μs/cm) | 7690     | 18640    | 22000    | 6985     |
| 3     | Total Suspended Solids  | ppm     | 4        | 32       | 44       | 7        |
| 4     | Total Dissolved Solids  | ppm     | 4999     | 12116    | 14300    | 4540     |
| 5     | Total Hardness          | ppm     | 685      | 2750     | 2860     | 790      |
| 6     | Calcium Hardness        | ppm     | 400      | 1640     | 1700     | 480      |
| 7     | Magnesium Hardness      | ppm     | 285      | 1110     | 1160     | 310      |
| 8     | Total Chloride          | ppm     | 1654     | 4652     | 6854     | 1204     |
| 9     | Sodium                  | ppm     | 754      | 1149     | 1284     | 625      |
| 10    | Potassium               | ppm     | 34       | 66       | 76       | 26       |
| 11    | Lead                    | ppm     | BDL      | BDL      | BDL      | BDL      |
| 12    | Boron                   | ppm     | 0.09     | 0.11     | 0.15     | 0.07     |
| 13    | BOD                     | mg/l    | 2.6      | 3.8      | 4.9      | 2.2      |
| 14    | DO                      | mg/l    | 4.1      | 4.5      | 5.0      | 4.0      |
| 15    | COD                     | mg/l    | 36       | 58       | 69       | 32       |
| 16    | Sulphate                | ppm     | 482      | 935      | 1094     | 424      |
| 17    | Oil & Grease            | mg/l    | BDL      | BDL      | BDL      | BDL      |
| 18    | Mercury                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 19    | Arsenic                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 20    | Chromium                | ppm     | BDL      | BDL      | BDL      | BDL      |
|       | Remarks                 | NII     |          |          |          |          |

#### **Borewell Locations:**

| SI.No. | Sample Identification | Borewell Location                      |  |  |
|--------|-----------------------|--|--|--|
| 1      | SAMPLE 1              | South West of Ash Bund (Near CAAQMS-3) |  |  |
| 2      | SAMPLE 2              | South of Ash Bund                      |  |  |
| 3      | SAMPLE 3              | South East of Ash Bund                 |  |  |
| 4      | SAMPLE 4              | North East of Ash Bund                 |  |  |

SAMPLE COLLECTED BY

LAB CHEMIST

2 X 600 MW THERMAL POWER PLANT

#### **BOREWELL WATER ANALYSIS REPORT -SEPTEMBER'24**

Sample Collected on 12.09.2024

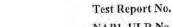
| S. No | PARAMETERS              | UNIT    | SAMPLE 1 | SAMPLE 2 | SAMPLE 3 | SAMPLE 4 |
|-------|-------------------------|---------|----------|----------|----------|----------|
| 1     | рН                      | -       | 7.90     | 7.54     | 7.65     | 7.68     |
| 2     | Electrical conductivity | (µs/cm) | 7942     | 12540    | 14245    | 7120     |
| 3     | Total Suspended Solids  | ppm     | 4        | 5        | 7        | 3        |
| 4     | Total Dissolved Solids  | ppm     | 5162     | 8151     | 9259     | 4628     |
| 5     | Total Hardness          | ppm     | 765      | 1150     | 1245     | 690      |
| 6     | Calcium Hardness        | ppm     | 460      | 690      | 750      | 415      |
| 7     | Magnesium Hardness      | ppm     | 305      | 460      | 495      | 275      |
| 8     | Total Chloride          | ppm     | 1720     | 2254     | 2946     | 1615     |
| 9     | Sodium                  | ppm     | 765      | 1032     | 1142     | 712      |
| 10    | Potassium               | ppm     | 36       | 46       | 50       | 32       |
| 11    | Lead                    | ppm     | BDL      | BDL      | BDL      | BDL      |
| 12    | Boron                   | ppm     | 0.08     | 0.1      | 0.12     | 0.06     |
| 13    | BOD                     | mg/l    | 2.6      | 3.9      | 4.3      | 2.0      |
| 14    | DO                      | mg/l    | 4.1      | 4.6      | 4.8      | 4.0      |
| 15    | COD                     | mg/l    | 34       | 54       | 62       | 30       |
| 16    | Sulphate                | ppm     | 488      | 785      | 954      | 432      |
| 17    | Oil & Grease            | mg/l    | BDL      | BDL      | BDL      | BDL      |
| 18    | Mercury                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 19    | Arsenic                 | ppm     | BDL      | BDL      | BDL      | BDL      |
| 20    | Chromium                | ppm     | BDL      | BDL      | BDL      | BDL      |
|       | Remarks                 | Nil     |          |          |          |          |

#### **Borewell Locations:**

| SI.No. | Sample Identification | Borewell Location                      |  |  |
|--------|-----------------------|--|--|--|
| 1      | SAMPLE 1              | South West of Ash Bund (Near CAAQMS-3) |  |  |
| 2      | SAMPLE 2              | South of Ash Bund                      |  |  |
| 3      | SAMPLE 3              | South East of Ash Bund                 |  |  |
| 4      | SAMPLE 4              | North East of Ash Bund                 |  |  |



### **TEST REPORT**



: ICE-2409160002

Received On

Commenced On

Completed On

Date of Report

: TC695224000014662F NABL ULR No.



ORIGINAL Page 1 of 3

: 02-09-2024

: 02-09-2024

: 12-09-2024

: 16-09-2024



Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Name

Sample Registration No. : E02-2409020002

: Ground Water

: Good Sample Condition

Sample Details (if any)

: 2.5 Lit x 1 No Sample Quantity Packaging Mode : Canned

Sample Submission Type : Sampled by Lab Rep

Date of Sampling

: 31.08.2024

Sampling Location

: Borewell Water - 01 - South West of Ash Pond

**Environent Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/31/08/2024

Test Report as per

| S. No.     | tion: Slightly turbid liquid Parameter | Measuring Unit          | Instrument                  | Method                             | Result        |  |  |  |
|------------|--|-------------------------|-----------------------------|------------------------------------|---------------|--|--|--|
| 2. 230.    | Discipline : Chemical                  |                         |                             |                                    |               |  |  |  |
|            | Group : Water                          |                         |                             |                                    |               |  |  |  |
| <b>(I)</b> | Organoleptic & Physical Parameter      |                         |                             |                                    |               |  |  |  |
| 1          | Colour                                 | Hazen Unit              | Visual                      | IS 3025(Part-4): 2021              | 20.0          |  |  |  |
| 2          | Odour                                  | NA                      | Organoleptic                | IS 3025(Part-5): 2017              | Agreeable     |  |  |  |
| 3          | pH Value                               | NA                      | pH Meter                    | IS 3025(Part-11): 2022             | 6.50          |  |  |  |
| 4          | Taste                                  | NA                      | Organoleptic                | IS 3025(Part-8): 2023              | Disagreeable  |  |  |  |
| 5          | Turbidity                              | NTU                     | Turbidity Meter             | IS 3025(Part-10): 2023             | 12.5          |  |  |  |
| 6          | Total Dissolved Solids                 | mg/L                    | Balance, Oven,<br>Waterbath | IS 3025(Part-16): 2023             | 4830          |  |  |  |
| (11)       | Parameters Concerning Undesirable      | Substances in excess am | iount                       |                                    |               |  |  |  |
| 1          | Ammonia(as total ammonia-N)            | mg/L                    | UV-<br>Spectrophotometer    | IS 3025(Part-34/Sec 4):<br>2022    | BLQ(LOQ:0.1)  |  |  |  |
| 2          | Anionic detergent(as MBAS)             | mg/L                    | UV-<br>Spectrophotometer    | IS 13428: 2005(RA<br>2018)-Annex K | BLQ(LOQ:0.05) |  |  |  |
| 3          | Sulphate(as SO4)                       | mg/L                    | UV-<br>Spectrophotometer    | IS 3025(Part-24): 2022             | 1078          |  |  |  |
| 4          | Calcium(as Ca)                         | mg/L                    | Titration                   | IS 3025(Part-40): 2019             | 141           |  |  |  |
| 5          | Chloramines(as C12)                    | mg/L                    | UV-<br>Spectrophotometer    | IS 3025 (Part 26): 2021            | BLQ(LOQ:0.1)  |  |  |  |
| 6          | Fluoride(as F)                         | mg/L                    | Visual                      | IS 3025 (Part - 60):<br>2019       | 2.3           |  |  |  |
| 7          | Free Residual Chlorine                 | mg/L                    | UV-                         | IS 3025 (Part 26); 2021            | BLQ(LOQ:0.1)  |  |  |  |

16/09/2024

Authorized Signatory(Microbiology)

Grand -

16/09/2024 Chinnaraja Verified by

16/09/2024

Vijay Anand Authorised by

### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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- The test items shall not be retained more than 15 days from the date of issue of test report except in the case as required by the regulatory bodies and Customers



### **TEST REPORT**





Test Report No.

: ICE-2409160002

NABL ULR No.

: TC695224000014662F

ORIGINAL Page 2 of 3

|       |                                     | 1    | In a transfer            |   |                |
|-------|-------------------------------------|------|--------------------------|---|----------------|
|       |                                     |      | Spectrophotometer        | IS 3025(Part-46): 2023  | 80.5           |
| 8     | Magnesium(as Mg)                    | mg/L |                          | TC/CHN/FD/STP/020;  | 60,3           |
| 9     | Manganese(as Mn)                    | mg/L | ICPMS                    | Issue No: 3.0; Issue<br>Date: 11.09.2021                        | BLQ(LOQ:0.005) |
| 10    | Nitrate(as NO3)                     | mg/L | UV-<br>Spectrophotometer | IS 3025(Part-34/Sec 4):<br>2022                                 | 21             |
| 11    | Phenolic compounds(as C6H5OH)       | mg/L | UV-<br>Spectrophotometer | IS 3025 (Part-43/Sec<br>1): 2022                                | BLQ(LOQ:0.001) |
| 12    | Selenium(as Se)                     | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11,09.2021 | 0.014          |
| 13    | Silver(as Ag)                       | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09,2021 | BLQ(LOQ:0,005) |
| 14    | Iron(as Fe)                         | mg/L | UV-<br>Spectrophotometer | IS 3025 (Part-53): 2019   | 0.48           |
| 15    | Sulphide(as H2S)                    | mg/L | UV-<br>Spectrophotometer | IS 3025(Part-29): 2022  | BLQ(LOQ:0.04)  |
| 16    | Total Alkalinity(as CaCO3)          | mg/L | Titration                | IS 3025(Part-23): 2023  | 291            |
| 17    | Total Hardness(as CaCO3)            | mg/L | Titration                | IS 3025 (Part-21): 2019   | 690            |
| 18    | Zinc(as Zn)                         | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 3,2            |
| 19    | Aluminium(as Al)                    | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.32           |
| 40    | GL 11/2-CD                          | mg/L | Titration                | IS 3025(Part-32): 2019  | 939            |
| 20    | Chloride(as Cl) Copper(as Cu)       | mg/L | ICPMS                    | ITC/CHN/FD/STP/020:<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005) |
| 22    | Barium(as Ba)                       | mg/L | ICPOES                   | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.05)  |
| 23    | Boron(as B)                         | mg/L | ICPOES                   | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 1.2            |
| (111) | Parameters Concerning Toxic Substan | ces  |                          |   |                |
| 1     | Cadmium(as Cd)                      | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.001) |
| 2     | Cyanide(asCN)                       | mg/L | UV-<br>Spectrophotometer | IS 3025 (Part-27/Sec<br>1): 2021                                | BLQ(LOQ:0,01)  |
| 3     | Lead(as Pb)                         | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005) |

8) Topas

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Plot No. 2, S.No. 12/2A, Industrial Estate, Perungudi, Sholinganallur Taluk, Chennal - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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### **TEST REPORT**





Test Report No.

: ICE-2409160002

NABL ULR No.

: TC695224000014662F

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|------|---------------------------------------|-----------|-----------------|--|-----------------|--|--|--|
| 4    | Mercury(as Hg)                        | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021  | BLQ(LOQ:0,0005) |  |  |  |
| 5    | Molybdenum(as Mo)                     | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021  | BLQ(LOQ:0.005)  |  |  |  |
| 6    | Nickel(as Ni)                         | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021  | BLQ(LOQ:0.005)  |  |  |  |
| 7    | Total Arsenic( as As)                 | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021  | BLQ(LOQ:0.005)  |  |  |  |
| 8    | Total Chromium(as Cr)                 | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021  | BLQ(LOQ:0.005)  |  |  |  |
| (IV) | General Parameters                    |           |                 |  |                 |  |  |  |
| 1    | Phenolphthalcin Alkalinity (as CaCO3) | mg/L      | Titration       | IS 3025(Part-23); 2023   | BLQ(LOQ:1.0)    |  |  |  |
|      | Discipline : Biological               |           |                 |  |                 |  |  |  |
|      | Group : Water                         |           |                 |  |                 |  |  |  |
| (V)  | Microbiological Tests                 |           |                 | T Sultation was a  | -0              |  |  |  |
| 1    | E.coli                                | MPN/100ml | Microbiological | IS 1622: 1981  | <2              |  |  |  |
| 2    | Total Coliform                        | MPN/100ml | Microbiological | IS 1622: 1981  | <2              |  |  |  |

NOTE: BLQ - Below Limit of Quantification, LOQ - Limit Of Quantification, MPN - Most Probable Number.

REMARKS: NA

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

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Plot No. 2, S.No. 12/2A, Industrial Estate, Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennal@itclabs.com

Website: www.itclabs.com

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## **TEST REPORT**



: ICE-2409160003

NABL ULR No.

: TC695224000014663F

Received On

Commenced On

Completed On

Date of Report



ORIGINAL Page 1 of 3

: 02-09-2024

: 02-09-2024

: 12-09-2024

: 16-09-2024



Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant, 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Registration No. : E02-2409020003

Sample Name

: Ground Water

Sample Condition

: Good

Sample Details (if any)

Sample Quantity Packaging Mode : 2.5 Lit x 1 No : Canned

Sample Submission Type: Sampled by Lab Rep

Date of Sampling

: 31.08.2024

Sampling Location

: Borewell Water - 02 - South of Ash Pond

**Environent Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/31/08/2024

Test Report as per

|        | tion: Brown coloured turbid liquid Parameter | Measuring Unit          | Instrument                  | Method                             | Result         |
|--------|--|-------------------------|-----------------------------|------------------------------------|----------------|
| S. No. | • 313 (1001) 1 - 410                         | Tricks and Sun          |                             |                                    |                |
|        | Discipline : Chemical                        |                         |                             |                                    |                |
|        | Group : Water                                |                         |                             |                                    |                |
| (1)    | Organoleptic &Physical Parameter             | Hazen Unit              | Visual                      | IS 3025(Part-4); 2021              | 40 True colour |
| 1      | Colour                                       | NA NA                   | Organoleptic                | IS 3025(Part-5): 2017              | Disagreeable   |
| 2      | Odour  | 1.00                    | pH Meter                    | IS 3025(Part-11): 2022             | 8.44           |
| 3      | pH Value                                     | NA                      | Organoleptic                | IS 3025(Part-8): 2023              | Disagreeable   |
| 4      | Taste  | NA                      |                             | IS 3025(Part-10): 2023             | 42.3           |
| 5      | Turbidity                                    | NTU                     | Turbidity Meter             |                                    |                |
| 6      | Total Dissolved Solids                       | mg/L                    | Balance, Oven,<br>Waterbath | IS 3025(Part-16): 2023             | 9620           |
| (II)   | Parameters Concerning Undesirable            | Substances in excess an | ount                        |                                    |                |
| 1      | Ammonia(as total ammonia-N)                  | mg/L                    | UV-<br>Spectrophotometer    | IS 3025(Part-34/Sec 4):<br>2022    | BLQ(LOQ:0.1)   |
| 2      | Anionic detergent(as MBAS)                   | mg/L                    | UV-<br>Spectrophotometer    | 1S 13428: 2005(RA<br>2018)-Annex K | BLQ(LOQ:0.05)  |
| 3      | Sulphate(as SO4)                             | mg/L                    | UV-<br>Spectrophotometer    | IS 3025(Part-24): 2022             | 1540           |
| 4      | Calcium(as Ca)                               | mg/L                    | Titration                   | IS 3025(Part-40): 2019             | 458            |
| 5      | Chloramines(as Cl2)                          | mg/L                    | UV-<br>Spectrophotometer    | IS 3025 (Part 26): 2021            | BLQ(LOQ:0.1)   |
| 6      | Fluoride(as F)                               | mg/L                    | Visual                      | IS 3025 (Part - 60):<br>2019       | 7.2            |
| 7      | Free Residual Chlorine                       | mg/L                    | UV-                         | IS 3025 (Part 26): 2021            | BLQ(LOQ:0.1)   |

16/09/2024

Prabakaran

Authorized Signatory(Microbiology)

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16/09/2024

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Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

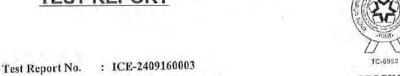
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### **TEST REPORT**





NABL ULR No.

: TC695224000014663F

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| _     |                                     |      | Spectrophotometer        |   |                |
|-------|-------------------------------------|------|--------------------------|---|----------------|
| 0     | Magnesium(as Mg)                    | mg/L |                          | IS 3025(Part-46): 2023  | 99.3           |
| 9     | Manganese(as Mn)                    | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.052          |
| 10    | Nitrate(as NO3)                     | mg/L | UV-<br>Spectrophotometer | IS 3025(Part-34/Sec 4):<br>2022                                 | 6.5            |
| 11    | Phenolic compounds(as C6H5OH)       | mg/L | UV-<br>Spectrophotometer | IS 3025 (Part-43/Sec<br>1): 2022                                | BLQ(LOQ:0.001) |
| 12    | Selenium(as Se)                     | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No; 3.0; Issue<br>Date: 11.09.2021 | 0.088          |
| 13    | Silver(as Ag)                       | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.008          |
| 14    | Iron(as Fe)                         | mg/L | UV-<br>Spectrophotometer | IS 3025 (Part-53): 2019   | 1.18           |
| 15    | Sulphide(as H2S)                    | mg/L | UV-<br>Spectrophotometer | IS 3025(Part-29); 2022  | BLQ(LOQ:0.04)  |
| 16    | Total Alkalinity(as CaCO3)          | mg/L | Titration                | IS 3025(Part-23): 2023  | 207            |
| 17    | Total Hardness(as CaCO3)            | mg/L | Titration                | IS 3025 (Part-21): 2019   | 1550           |
| 18    | Zinc(as Zn)                         | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 22.4           |
| 19    | Aluminium(as Al)                    | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.15           |
| 20    | Chloride(as CI)                     | mg/L | Titration                | IS 3025(Part-32): 2019  | 3327           |
| 21    | Copper(as Cu)                       | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005) |
| 22    | Barium(as Bā)                       | mg/L | ICPOES                   | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.05)  |
| 23    | Boron(as B)                         | mg/L | ICPOES                   | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.08           |
| (111) | Parameters Concerning Toxic Substan | ces  |                          |   |                |
| 1     | Cadmium(as Cd)                      | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.001) |
| 2     | Cyanide(asCN)                       | mg/L | UV-<br>Spectrophotometer |   | BLQ(LOQ:0.01)  |
| 3     | Lead(as Pb)                         | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005) |

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16/09/2024 Prabakaran

Authorized Signatory(Microbiology)

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website ; www.itclabs.com

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### TEST REPORT



Test Report No.

: ICE-2409160003

NABL ULR No.

: TC695224000014663F

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|      |                                       |           |                 | Total Company   |                 |  |  |  |  |
|------|---------------------------------------|-----------|-----------------|---|-----------------|--|--|--|--|
| 4    | Mercury(as Hg)                        | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.0005) |  |  |  |  |
| 5    | Molybdenum(as Mo)                     | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005)  |  |  |  |  |
| 6    | Nickel(as Ni)                         | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005)  |  |  |  |  |
| 7    | Total Arsenic( as As)                 | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005)  |  |  |  |  |
| 8    | Total Chromium(as Cr)                 | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005)  |  |  |  |  |
| (IV) | General Parameters                    |           |                 |   |                 |  |  |  |  |
| 1    | Phenolphthalein Alkalinity (as CaCO3) | mg/L      | Titration       | IS 3025(Part-23): 2023  | 103             |  |  |  |  |
|      | Discipline : Biological               |           |                 |   |                 |  |  |  |  |
|      | Group : Water                         |           |                 |   |                 |  |  |  |  |
| (V)  | Microbiological Tests                 |           |                 | 1   |                 |  |  |  |  |
| 1    | E.coli                                | MPN/100ml | Microbiological | IS 1622: 1981   | <2              |  |  |  |  |
| 2    | Total Coliform                        | MPN/100ml | Microbiological | IS 1622: 1981   | <2              |  |  |  |  |

NOTE: BLQ - Below Limit of Quantification, LOQ - Limit Of Quantification, MPN - Most Probable Number.

REMARKS: NA

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

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## Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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### **TEST REPORT**





Test Report No.

: ICE-2409160005

NABL ULR No.

: TC695224000014665F

Received On

Commenced On

Completed On

Date of Report

ORIGINAL Page 1 of 3

: 02-09-2024

: 02-09-2024

: 12-09-2024

: 16-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105

Tamil Nadu, India

Sample Registration No. : E02-2409020005

: Ground Water

Sample Name

Sample Condition : Good

Sample Details (if any)

Sample Quantity

: 2.5 Lit x 1 No

Packaging Mode Sample Submission Type: Sampled by Lab Rep

: Canned

Date of Sampling

Sampling Location

: 31.08.2024 : Borewell Water 03 - South East of Ash Pond

**Environment Condition** 

: Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/31/08/2024

Test Report as per

| escri     | iption: Slightly turbid liquid |                   |                             |                                    |               |                         |
|-----------|--------------------------------|-------------------|-----------------------------|------------------------------------|---------------|-------------------------|
| S.<br>No. | Parameter                      | Measuring<br>Unit | Instrument                  | Method                             | Result        | Specification           |
|           | Discipline : Chemical          |                   |                             |                                    |               |                         |
|           | Group : Water                  |                   |                             |                                    |               |                         |
| (1)       | Organoleptic &Physical Parame  | eter              |                             |                                    | 15.0          | Max 5 - Max 15          |
| 1         | Colour                         | Hazen Unit        | Visual                      | IS 3025(Part-4): 2021              | 2.72          |                         |
| 2         | Odour                          | NA                | Organoleptic                | IS 3025(Part-5): 2017              | Agreeable     | Agreeable               |
| 3         | pH Value                       | NA                | pH Meter                    | IS 3025(Part-11): 2022             | 7.21          | 6.5-8.5 - No Relaxation |
| -         | Taste                          | NA                | Organoleptic                | IS 3025(Part-8): 2023              | Disagreeable  | Agreeable               |
| 5         | Turbidity                      | NTU               | Turbidity Meter             | IS 3025(Part-10): 2023             | 17.3          | Max 1.0 - Max 5.0       |
| 6         | Total Dissolved Solids         | mg/L              | Balance, Oven,<br>Waterbath | IS 3025(Part-16): 2023             | 8740          | Max 500 - Max 2000      |
| (II)      | Parameters Concerning Undesi   | rable Substanc    | es in excess amount         |                                    |               |                         |
| 1         | Ammonia(as total ammonia-N)    | mg/L              | UV-<br>Spectrophotometer    | IS 3025(Part-34/Sec 4): 2022       | BLQ(LOQ:0.1)  | Max 0.5 - No Relaxatio  |
| 2         | Anionic detergent(as MBAS)     | mg/L              | UV-<br>Spectrophotometer    | IS 13428: 2005(RA<br>2018)-Annex K | BLQ(LOQ:0.05) | Max 0.2 - Max 1.0       |
| 3         | Sulphate(as SO4)               | mg/L              | UV-<br>Spectrophotometer    | IS 3025(Part-24): 2022             | 1343          | Max 200 - Max 400       |
| 4         | Calcium(as Ca)                 | mg/L              | Titration                   | IS 3025(Part-40): 2019             | 458           | Max 75 - Max 200        |
| 5         | Chloramines(as Cl2)            | mg/L              | UV-<br>Spectrophotometer    | IS 3025 (Part 26): 2021            | BLQ(LOQ:0.1)  | Max 4 - No Relaxation   |
| 6         | Fluoride(as F)                 | mg/L              | Visual                      | IS 3025 (Part - 60);<br>2019       | 4.2           | Max 1 - Max 1.5         |

16/09/2024

Prabakaran

Authorized Signatory(Microbiology)

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Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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## **TEST REPORT**





Test Report No.

: ICE-2409160005

NABL ULR No.

: TC695224000014665F

ORIGINAL Page 2 of 3

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|-------|--------------------------------------|--------------|--------------------------|---|----------------|--|
| 7 F   | Free Residual Chlorine               | mg/L         | UV-<br>Spectrophotometer | IS 3025 (Part 26): 2021   | BLQ(LOQ:0.1)   | Min 0.2 - Max 1.0  |
|       |                                      | mg/L         | By Calculation           | IS 3025(Part-46): 2023  | 149            | Max 30 - Max 100   |
|       | Magnesium(as Mg)  Manganese(as Mn)   | mg/L         | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.04           | Max 0.1 - Max 0.3  |
| 10    | Nitrate(as NO3)                      | mg/L         | UV-<br>Spectrophotometer | IS 3025(Part-34/Sec 4):<br>2022                                 | 3.5            | Max 45 - No Relaxation   |
|       | Phenolic compounds(as C6H5OH)        | mg/L         | UV-<br>Spectrophotometer | 1): 2022  | BLQ(LOQ:0.001) | 0.001 - 0.002  |
|       | Selenium(as Se)                      | mg/L         | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.078          | Max 0.01 - No<br>Relaxation  |
| 13    | Silver(as Ag)                        | mg/L         | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09,2021 | 0.011          | Max 0.1 - No Relaxation  |
| 14    | Iron(as Fe)                          | mg/L         | UV-<br>Spectrophotometer | IS 3025 (Part-53): 2019   | 0.38           | Max 1.0 - No Relaxation  |
| 15    | Sulphide(as H2S)                     | mg/L         | UV-<br>Spectrophotometer | TS 3025(Part-29): 2022  | BLQ(LOQ:0.04)  | Max 0.05 - No<br>Relaxation  |
|       |                                      | mg/L         | Titration                | IS 3025(Part-23): 2023  | 151            | Max 200 - Max 600  |
| 16    | Total Alkalinity(as CaCO3)           | mg/L         | Titration                | IS 3025 (Part-21): 2019   | 1754           | Max 200 - Max 600  |
| 17    | Total Hardness(as CaCO3) Zinc(as Zn) | mg/L         | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 7.4            | Max 5 - Max 15   |
| 19    | Aluminium(as Al)                     | mg/L         | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.02           | Max 0.03 - Max 0.2   |
|       | CILL STATE CIN                       | mg/L         | Titration                | IS 3025(Part-32): 2019  | 3718           | Max 250 - Max 1000   |
| 20    | Chloride(as Cl) Copper(as Cu)        | mg/L         | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date; 11.09.2021 | BLQ(LOQ:0.005) | Max 0.05 - Max 1.5   |
| 22    | Barium(as Ba)                        | mg/L         | ICPOES                   | ITC/CHN/FD/STP/020<br>Issue No: 3.0; Issue<br>Date: 11.09.2021  | BLQ(LOQ:0.05)  | Max 0.7 - No Relaxatio   |
| 23    | Boron(as B)                          | mg/L         | ICPOES                   | ITC/CHN/FD/STP/020<br>Issue No: 3.0; Issue<br>Date: 11.09,2021  | 2.8            | Max 0.5 - Max 2.4  |
| (111) | Parameters Concerning Toxi           | c Substances |                          |   |                |  |
| 1     | Cadmium(as Cd)                       | mg/L         | ICPMS                    | ITC/CHN/FD/STP/020<br>Issue No: 3.0; Issue<br>Date: 11.09.2021  | BLQ(LOQ:0,001  | Kelakation   |
| 2     | Cyanide(asCN)                        | mg/L         | UV-<br>Spectrophotomet   |   | BLQ(LOQ:0.01)  | Kelakation   |
| 3     | Lead(as Pb)                          | mg/L         | ICPMS                    | ITC/CHN/FD/STP/020<br>Issue No: 3.0; Issue                      | BLQ(LOQ:0.005  | ) Max 0.01 - No<br>Relaxation  |

16/09/2024

Prabakaran

Authorized Signatory (Microbiology)

## Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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### TEST REPORT





Test Report No.

: ICE-2409160005

NABL ULR No.

: TC695224000014665F

ORIGINAL Page 3 of 3

|     | ERPAID:                               |           |                 | Date: 11.09.2021  |                 |   |
|-----|---------------------------------------|-----------|-----------------|---|-----------------|---|
| 4   | Mercury(as Hg)                        | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;   | BLQ(LOQ:0.0005) | Max 0.001 - No<br>Relaxation                                      |
| 5   | Molybdenum(as Mo)                     | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.009           | Max 0.07 - No<br>Relaxation                                       |
| 6   | Nickel(as Ni)                         | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005)  | Max 0.02 - No<br>Relaxation                                       |
| 7   | Total Arsenic( as As)                 | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.027           | Max 0.01 - No<br>Relaxation                                       |
| 8   | Total Chromium(as Cr)                 | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.017           | Max 0.05 - No<br>Relaxation                                       |
| IV) | General Parameters                    |           |                 |   |                 |   |
| 1   | Phenolphthalein Alkalinity (as CaCO3) | mg/L      | Titration       | IS 3025(Part-23): 2023  | BLQ(LOQ:1.0)    | Not Specified   |
|     | Discipline : Biological               |           |                 |   |                 |   |
|     | Group : Water                         |           |                 |   |                 |   |
| (V) | Microbiological Tests                 |           |                 |   |                 | Shall not be detectable in  |
| 1   | E.coli                                | MPN/100ml | Microbiological | IS 1622: 1981   | <2              | any 100 ml sample - Not<br>Specified                              |
| 2   | Total Coliform                        | MPN/100ml | Microbiological | IS 1622: 1981   | <2              | Shall not be detectable in<br>any 100 ml sample - No<br>Specified |

NOTE: BLQ - Below Limit of Quantification, LOQ - Limit Of Quantification, MPN - Most Probable Number.

REMARKS: NA

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

- grand

16/09/2024

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## Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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### **TEST REPORT**



Test Report No.

: ICE-2409160004

NABL ULR No.

: TC695224000014664F

Received On

Commenced On

Completed On

Date of Report

ORIGINAL Page 1 of 3

: 02-09-2024

: 02-09-2024

: 12-09-2024

: 16-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Registration No. : E02-2409020004

: Ground Water

Sample Name Sample Condition

: Good

Sample Details (if any)

Sample Quantity

: 2.5 Lit x 1 No : Canned

Packaging Mode Sample Submission Type: Sampled by Lab Rep

Date of Sampling

: 31.08.2024

Sampling Location

: Borewell Water 04 - North East of Ash Pond

**Environment Condition** 

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/31/08/2024

Test Report as per

: NA

| •      | otion: Slightly turbid liquid Parameter                       | Measuring Unit | Instrument                  | Method                             | Result        |  |  |  |
|--------|---|----------------|-----------------------------|------------------------------------|---------------|--|--|--|
| S. No. | P-110-1903-1-6  | Measuring Citi | Thisti unicut               | 171911174                          |               |  |  |  |
|        | Discipline : Chemical   |                |                             |                                    |               |  |  |  |
|        | Group : Water   |                |                             |                                    |               |  |  |  |
| (1)    | Organoleptic & Physical Parameter                             |                |                             |                                    |               |  |  |  |
| 1      | Colour  | Hazen Unit     | Visual                      | IS 3025(Part-4): 2021              | 10.0          |  |  |  |
| 2      | Odour   | NA             | Organoleptic                | IS 3025(Part-5): 2017              | Agreeable     |  |  |  |
| 3      | pH Value  | NA             | pH Meter                    | IS 3025(Part-11): 2022             | 6.96          |  |  |  |
| 4      | Taste   | NA             | Organoleptic                | IS 3025(Part-8): 2023              | Disagreeable  |  |  |  |
| 5      | Turbidity   | NTU            | Turbidity Meter             | IS 3025(Part-10): 2023             | 1.2           |  |  |  |
| 6      | Total Dissolved Solids  | mg/L           | Balance, Oven,<br>Waterbath | IS 3025(Part-16): 2023             | 3345          |  |  |  |
| (II)   | Parameters Concerning Undesirable Substances in excess amount |                |                             |                                    |               |  |  |  |
| 1      | Ammonia(as total ammonia-N)                                   | mg/L           | UV-<br>Spectrophotometer    | IS 3025(Part-34/Sec 4):<br>2022    | BLQ(LOQ:0.1)  |  |  |  |
| 2      | Anionic detergent(as MBAS)                                    | mg/L           | UV-<br>Spectrophotometer    | 1S 13428: 2005(RA<br>2018)-Annex K | BLQ(LOQ:0.05) |  |  |  |
| 3      | Sulphate(as SO4)  | mg/L           | UV-<br>Spectrophotometer    | IS 3025(Part-24): 2022             | 392           |  |  |  |
| 4      | Calcium(as Ca)  | mg/L           | Titration                   | IS 3025(Part-40): 2019             | 164           |  |  |  |
| 5      | Chloramines(as Cl2)   | mg/L           | UV-<br>Spectrophotometer    | IS 3025 (Part 26): 2021            | BLQ(LOQ:0.1)  |  |  |  |
| 6      | Fluoride(as F)  | mg/L           | Visual                      | IS 3025 (Part - 60):<br>2019       | 0.71          |  |  |  |
| 7      | Free Residual Chlorine  | mg/L           | UV-                         | IS 3025 (Part 26): 2021            | BLQ(LOQ:0.1)  |  |  |  |

16/09/2024

Prabakaran

Authorized Signatory(Microbiology)

Interstellar Testing Centre Private Limited

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Plot No. 2, S.No. 12/2A, Industrial Estate,

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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### **TEST REPORT**



Test Report No.

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NABL ULR No.

: TC695224000014664F

ORIGINAL Page 2 of 3

| 8 1   | 7 7 19 19 1                         |      |                          |   |                |
|-------|-------------------------------------|------|--------------------------|---|----------------|
| 0 11  | Magnagium(ac Ma)                    | mg/L | By Calculation           | IS 3025(Part-46): 2023  | 29.8           |
|       | Magnesium(as Mg)  Manganese(as Mn)  | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.038          |
| 10    | Nitrate(as NO3)                     | mg/L | UV-<br>Spectrophotometer | IS 3025(Part-34/Sec 4):<br>2022                                 | 2.9            |
| 11    | Phenolic compounds(as C6H5OH)       | mg/L | UV-<br>Spectrophotometer | IS 3025 (Part-43/Sec<br>1): 2022                                | BLQ(LOQ:0.001) |
| 12    | Selenium(as Se)                     | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.02           |
| 13    | Silver(as Ag)                       | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.015          |
| 14    | Iron(as Fe)                         | mg/L | UV-<br>Spectrophotometer | IS 3025 (Part-53): 2019   | 0.22           |
| 15    | Sulphide(as H2S)                    | mg/L | UV-<br>Spectrophotometer | IS 3025(Part-29): 2022  | BLQ(LOQ:0.04)  |
| 16    | Total Alkalinity(as CaCO3)          | mg/L | Titration                | IS 3025(Part-23): 2023  | 299            |
| 17    | Total Hardness(as CaCO3)            | mg/L | Titration                | IS 3025 (Part-21): 2019   | 530            |
| 18    | Zinc(as Zn)                         | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 6.2            |
| 19    | Aluminium(as Al)                    | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005) |
| 20    | Chl-side(ee Cl)                     | mg/L | Titration                | IS 3025(Part-32): 2019  | 1233           |
| 20    | Chloride(as Cl) Copper(as Cu)       | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005  |
| 22    | Barium(as Ba)                       | mg/L | ICPOES                   | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.05)  |
| 23    | Boron(as B)                         | mg/L | ICPOES                   | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 1.68           |
| (111) | Parameters Concerning Toxic Substan | ces  |                          |   |                |
| 1     | Cadmium(as Cd)                      | mg/L | ICPMS                    | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.001  |
| 2     | Cyanide(asCN)                       | mg/L | UV-<br>Spectrophotomete  | IS 3025 (Part-27/Sec<br>1): 2021                                | BLQ(LOQ:0.01   |

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Dist.

mg/L

16/09/2024 Chinnaraja

**ICPMS** 

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BLQ(LOQ:0.005)

### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate, Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Lead(as Pb)

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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ITC/CHN/FD/STP/020;

Issue No: 3.0; Issue

Date: 11.09.2021



### **TEST REPORT**



: ICE-2409160004

NABL ULR No.

: TC695224000014664F



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| 4    | Mercury(as Hg)                        | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.0005) |  |  |  |
|------|---------------------------------------|-----------|-----------------|---|-----------------|--|--|--|
| 5    | Molybdenum(as Mo)                     | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3,0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005)  |  |  |  |
| 6    | Nickel(as Ni)                         | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005)  |  |  |  |
| 7    | Total Arsenic( as As)                 | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | 0.056           |  |  |  |
| 8    | Total Chromium(as Cr)                 | mg/L      | ICPMS           | ITC/CHN/FD/STP/020;<br>Issue No: 3.0; Issue<br>Date: 11.09.2021 | BLQ(LOQ:0.005)  |  |  |  |
| (IV) | General Parameters                    |           |                 |   | B1 04 00 1 M    |  |  |  |
| 1    | Phenolphthalein Alkalinity (as CaCO3) | mg/L      | Titration       | IS 3025(Part-23): 2023  | BLQ(LOQ:1.0)    |  |  |  |
|      | Discipline: Biological                |           |                 |   |                 |  |  |  |
|      | Group : Water                         |           |                 |   |                 |  |  |  |
| (V)  | Microbiological Tests                 |           | 1               | T 10 1622, 1001   | <2              |  |  |  |
| 1    | E.coli                                | MPN/100ml | Microbiological | IS 1622: 1981   | <2              |  |  |  |
| 2    | Total Coliform                        | MPN/100ml | Microbiological | IS 1622: 1981   |                 |  |  |  |

NOTE: BLQ - Below Limit of Quantification, LOQ - Limit Of Quantification, MPN - Most Probable Number.

REMARKS: NA

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

16/09/2024

Prabakaran Authorized Signatory(Microbiology)

Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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### **Interstellar Testing Centre Private Limited**

: ICE-2409301015 Test Report No.

: TC695224000016109F

Received On

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: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

NABL ULR No.

Tuticorin, 628105 Tamil Nadu, India

Sample Name

Sample Registration No. : E02-2409251015

: Stack Emission

: Good Sample Condition

Sample Details (if any)

Sample Submission Type: Sampled by Lab Rep : Boiler Unit - 1 (600MW) Sampling Location

Environment Condition ; Good

Sampling Procedure

: ITC/CHN/GSOP/001

Customer Reference

: Test Request Form/24/09/2024

Test Report as per

: TNPCB Norms

S. No. Sampling Information:

(a) Date of Monitoring

: 23.09.24

| S. No.                        | Parameter  | Measuring Unit | Method   | Result   | Specification  |  |
|-------------------------------|--|----------------|--|--|----------------|--|
| 7,130                         | Discipline : Chemical  |                |  |  |                |  |
| Group : Atmospheric Pollution |  |                |  |  |                |  |
| (1)                           | Stack Emission 450 Max   |                |  |  |                |  |
| 1                             | Oxides of Nitrogen as NOx  | mg/Nm3         | IS 11255: (Part-7)   | 117.4  |                |  |
| 2                             | Carbon Monoxide as CO  | %              | IS 13270   | BDL(DL:0.2)  | 1 Max          |  |
| 3                             | Particulate Matter as PM   | mg/Nm3         | IS 11255: (Part-1)   | 22.17  | 50 Max         |  |
| 4                             | Stack Temperature  | °C             | IS 11255: (Part-3)   | 109  | Not Available  |  |
| 5                             | Velocity   | m/s            | IS 11255: (Part-3)   | 24.8   | Not Available  |  |
|                               | Flow Rate  | Nm3/hr.        | IS 11255: (Part-3)   | 3050516  | Not Available  |  |
| 6                             | Sulphur Dioxide as SO2   | mg/Nm3         | IS 11255 (Part-2)  | 134.6  | 200 Max        |  |
| 8                             | Carbon Dioxide as CO2  | %              | IS 13270   | 13.4   | Not Available  |  |
| -                             | Children and the state of the s | %              | IS 13270   | 6.2  | Not Available  |  |
| 9                             | Oxygen as O2   | 9/6            | IS 11255: (Part-3)   | 0.87   | Not Available  |  |
| 10                            | Moisture   | mg/Nm3         | USEPA Method 29  | BDL (DL: 0.1)  | Not Available  |  |
| 11                            | Lead as Pb   |                | USEPA Method 29  | BDL (DL: 0.1)  | Not Available  |  |
| 12                            | Arsenic as As  | mg/Nm3         | USEPA Method 29  | BDL (DL: 0.01)   | 0.03 Max       |  |
| 13                            | Mercury as Hg  | mg/Nm3         | The state of the s | The state of the s | Not Available  |  |
| 14                            | Chromium as Cr   | mg/Nm3         | USEPA Method 29  | BDL (DL: 0.1)  | TVOE AVAILABLE |  |

NOTE: TNPCB: Tamilnadu Pollution Control Board, Instrument used: Fluegas Analyser, Stack Sampler, BDL: Below Detection Limit, DL:

REMARKS: The above sample complies with TNPCB Norms respect to the above tests. \*\*\*\*\*End of Report\*\*\*\*

in the

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12.20 30/09/2024

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### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

Website: www.itclabs.com

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### **Interstellar Testing Centre Private Limited**

: ICE-2409301016 Test Report No.

: TC695224000016108F NABL ULR No.

Received On

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Date of Report

ORIGINAL Page 1 of 1

: 25-09-2024

: 25-09-2024

: 30-09-2024

: 30-09-2024

Issued To:

Coastal Energen Private Limited

2X600 MW Mutiara Thermal Power Plant , 4/36D, Melamaruthur (village), Duraisamypuram(Post), Ottapidaram Taluk,

Tuticorin, 628105 Tamil Nadu, India

Sample Registration No. : E02-2409251016

Sample Name

: Stack Emission : Good

Sample Condition Sample Details (if any)

Sample Submission Type : Sampled by Lab Rep

: Boiler Unit - 2 (600MW) Sampling Location

**Environment Condition** 

Sampling Procedure

Customer Reference

Test Report as per

: Good : ITC/CHN/GSOP/001

: Test Request Form/24/09/2024 : TNPCB Norms

S. No. Sampling Information:

: 23.09.24 (a) Date of Monitoring

| S. No.  | Parameter                           | Measuring Unit | Method   | Result                                  | Specification  |
|---------|-------------------------------------|----------------|--|---|----------------|
| 5. 110. | Discipline : Chemical               |                |  |   |                |
|         | Group : Atmospheric Pollution       | n              |  |   |                |
| (I)     | Stack Emission                      |                |  |   |                |
| 1       | Oxides of Nitrogen as NOx           | mg/Nm3         | IS 11255: (Part-7)   | 129.8                                   | 450 Max        |
| 2       | Carbon Monoxide as CO               | %              | IS 13270   | BDL(DL:0,2)                             | 1 Max          |
| 3       | Particulate Matter as PM            | mg/Nm3         | IS 11255: (Part-1)   | 25.14                                   | 50 Max         |
| ~       | Stack Temperature                   | °C             | IS 11255: (Part-3)   | 114                                     | Not Available  |
| 4       |                                     | m/s            | IS 11255: (Part-3)   | 25.2                                    | Not Available  |
| 5       | Velocity                            | Nm3/hr.        | IS 11255: (Part-3)   | 3054995                                 | Not Available  |
| 7       | Flow Rate<br>Sulphur Dioxide as SO2 | mg/Nm3         | IS 11255 (Part-2)  | 156.4                                   | 200 Max        |
|         | Carbon Dioxide as CO2               | %              | IS 13270   | 13.1                                    | Not Available  |
| 8       |                                     | %              | IS 13270   | 6.4                                     | Not Available  |
| 9       | Oxygen as O2                        | %              | IS 11255: (Part-3)   | 0.98                                    | Not Available  |
| 10      | Moisture                            | mg/Nm3         | USEPA Method 29  | BDL (DL: 0.1)                           | Not Available  |
| 11      | Lead as Pb                          |                | USEPA Method 29  | BDL (DL: 0.1)                           | Not Available  |
| 12      | Arsenic as As                       | mg/Nm3         | A CANADA CONTRACTOR OF THE CANADA CONTRACTOR O | BDL (DL: 0.01)                          | 0.03 Max       |
| 13      | Mercury as Hg                       | mg/Nm3         | USEPA Method 29  | 111111111111111111111111111111111111111 | Not Available  |
| 14      | Chromium as Cr                      | mg/Nm3         | USEPA Method 29  | BDL (DL: 0.1)                           | TYOU AVAILABLE |

NOTE: TNPCB: Tamilnadu Pollution Control Board, Instrument used: Fluegas Analyser, Stack Sampler, BDL: Below Detection Limit, DL: Detection Limit

REMARKS: The above sample complies with TNPCB Norms respect to the above tests. \*\*\*\*\*End of Report\*\*\*\*

如此為

30/09/2024 Chinnaraja Verified by

12.53 30/09/2024

Sakthivel Authorised by

### Interstellar Testing Centre Private Limited

Plot No. 2, S.No. 12/2A, Industrial Estate,

Perungudi, Sholinganallur Taluk, Chennai - 600 096.

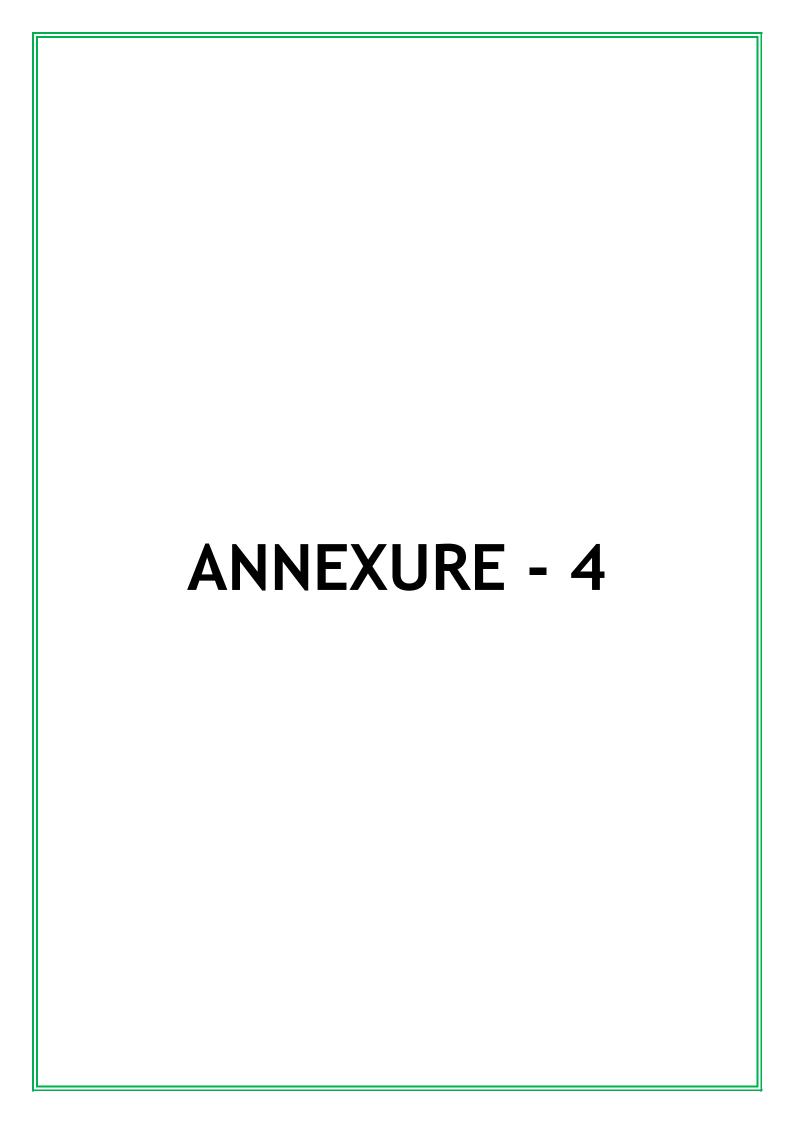
Ph: 044 - 24962512

Email: itclabs.chennai@itclabs.com

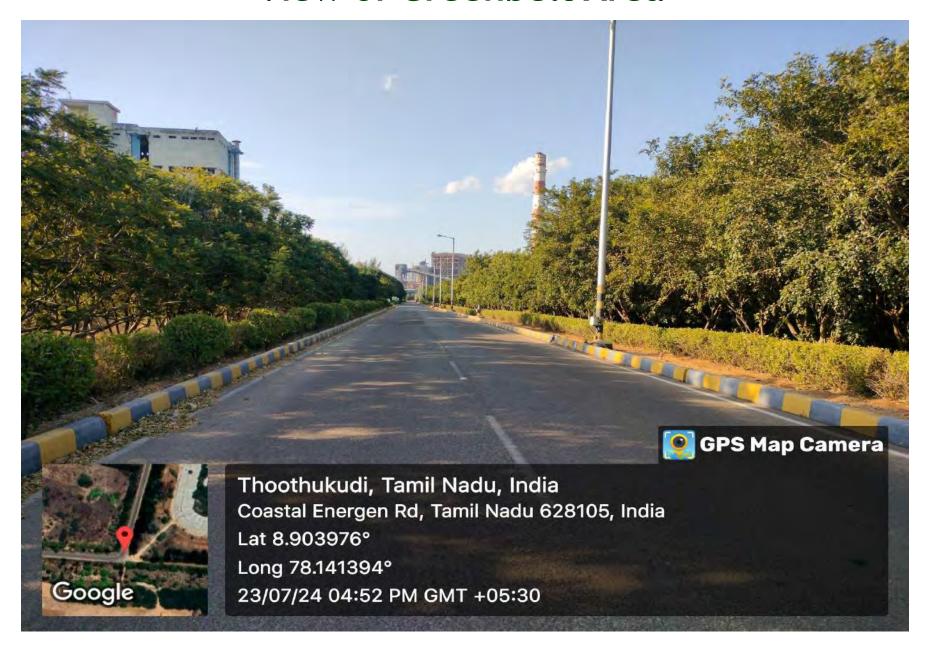
Website: www.itclabs.com

#### Disclaimer:

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- The test report shall not be reproduced in full or part without the written approval of ITC Labs. Chennai
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# Greenbelt Maintenance Photos (April 2024 to September 2024)

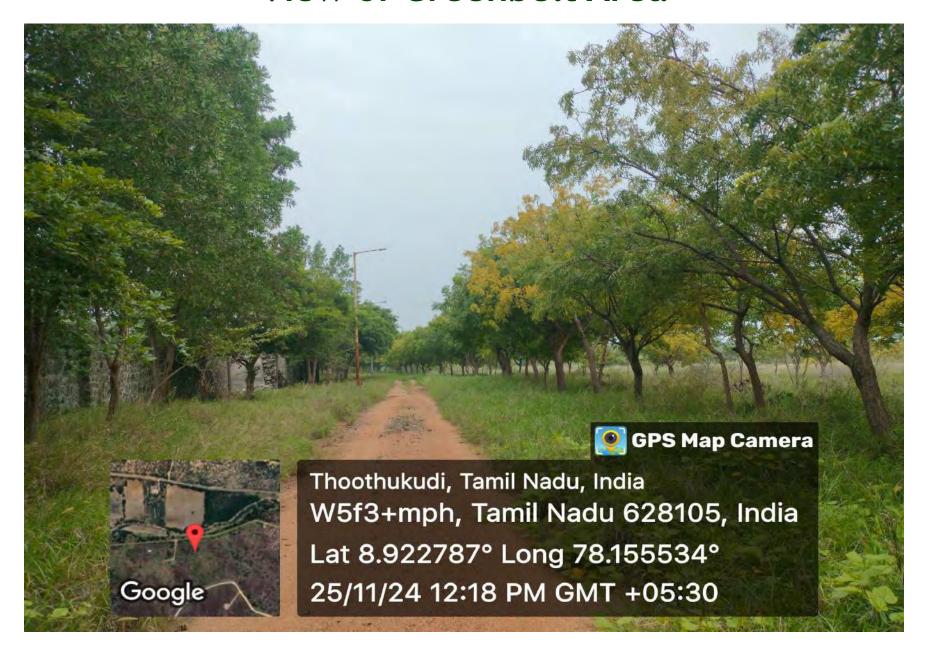




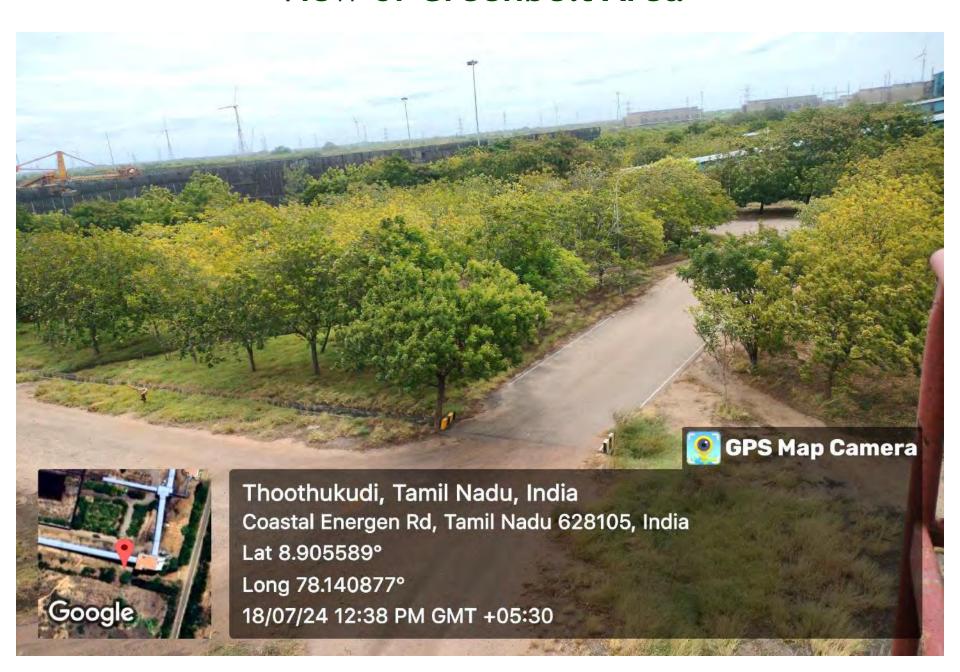


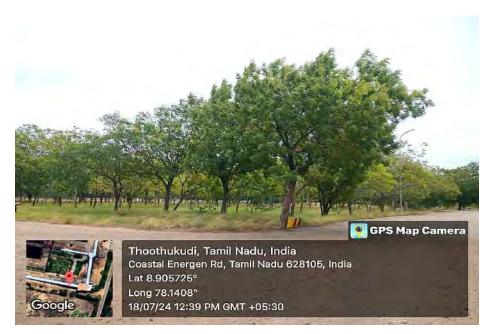








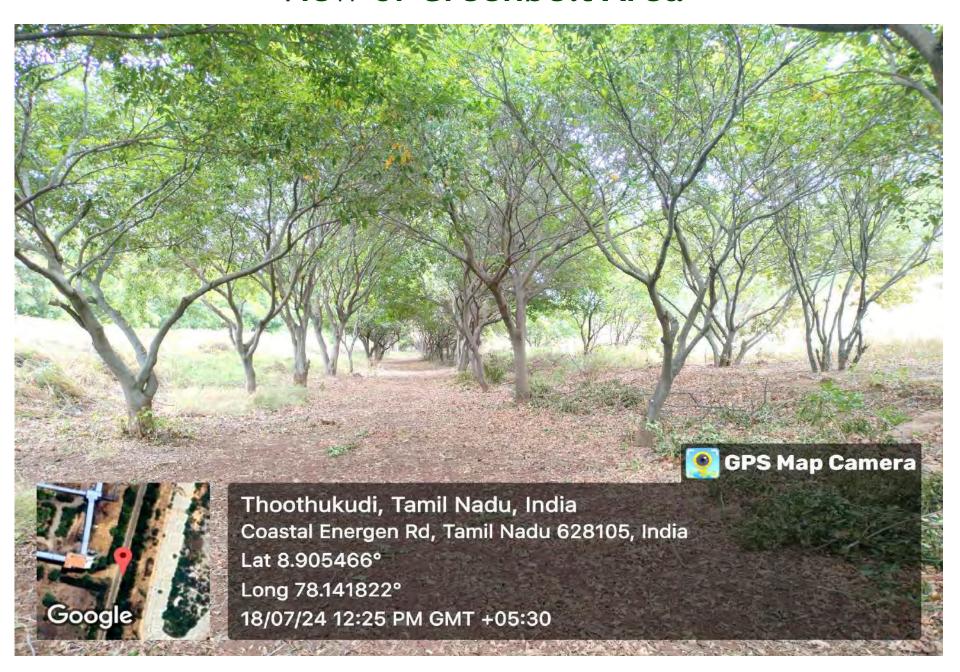
























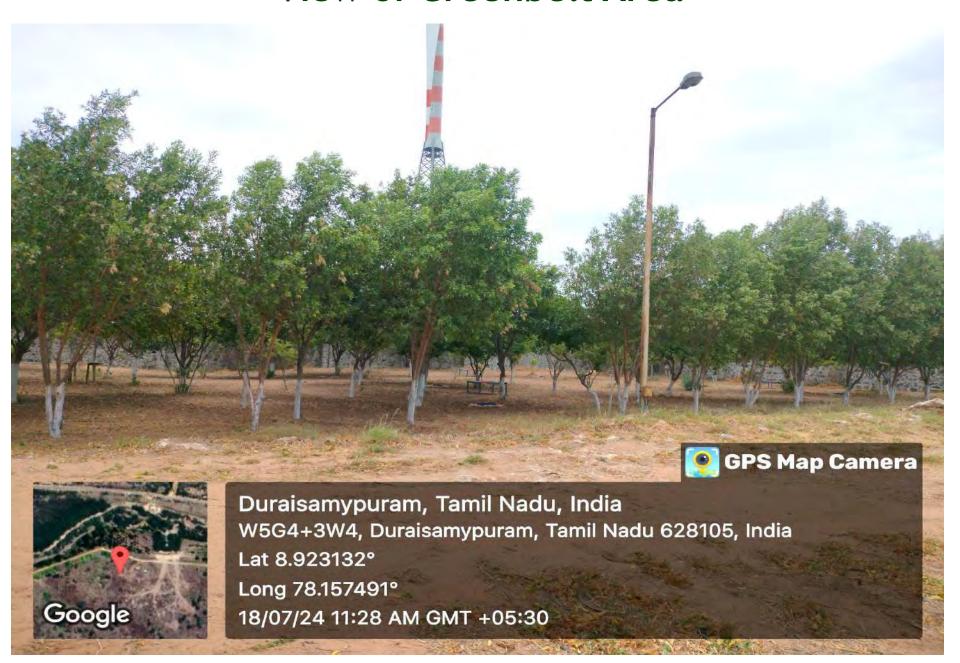














# CSR Activities (April 2024 to September 2024)

# Strengthening of Tharuvaikulam (Near by Village) New Tank Bund during Flood



# Temporary breach closing work done in Tharuvaikulam (Near by Village) New tank



# Desilt of Puliamarathu Arasadi (Near by Village) Tank 1



# Desilt of Puliamarathu Arasadi (Near by Village) Tank-2



# Desilt of Puliamarathu Arasadi (Near by Village) Tank 3



# DD distribution to Puliyamarathu Arasadi Villagers (Near by Village) by Station Director



# Distribution of DD to AM Patti village temple festival 2024

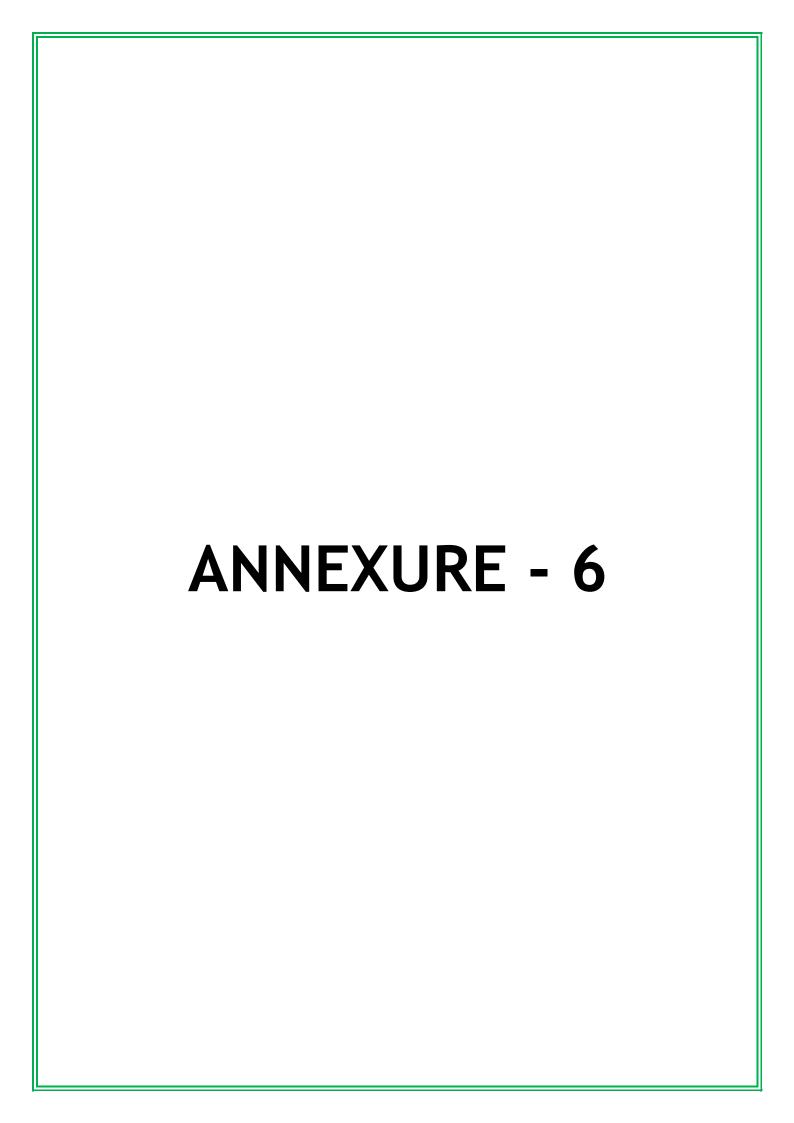


# Distribution of DD to Melaarasadi village Panchayat President to Desilt of Puliamarathu Arasadi village tank



# Distribution of DD to Melamathur Villagers for temple festival





# COMPLIANCE TO THE CONDITIONS STIPULATED BY TAMILNADU COASTAL ZONE MANAGEMENT AUTHORITY VIDE LETTER DATED 03.04.2009

Period: April 2024 to September 2024

| Sl.No. | CONDITIONS STIPULATED BY TNCZM AUTHORITY  | COMPLIENCE   |  |
|--------|---|--|--|
| a)     | The unit should adhere to the norms prescribed<br>by Ministry of Environment and Forests,<br>Government of India and State Pollution Control<br>Board in respect of discharging of cooling water<br>/ treated effluent in to sea. | Complied. In respect of discharging of cooling water / treated effluent in to sea, All the norms prescribed by MoEF & CC/SPCB is being followed. |  |
| b)     | The unit shall consider adopting the latest technologies such as providing cooling towers to reduce the temperature of the condenser cooling water, so as to safe guard the marine eco-system                                     | Complied. Cooling towers to reduce the temperature of the condenser cooling water is Installed, commissioned and in operation.                   |  |
| c)     | Marking the intake and outfall pipelines adequately such that fishing vessels and fishermen are made aware of its presence.   | Complied. Marker Buoys Provided.   |  |
| d)     | It may be ensured that mercury concentration is not present in the end product.   | Being ensured  |  |
| e)     | The activities such as intake pipeline and outfall line and intake arrangement in sea and the pipeline should not cause hindrance to fishing activities and to boat movement.   | Complied. No hindrance for fishing or  |  |
| f)     | The proposed activities should not cause coastal erosion and alter the beach configuration  | Complied. No Such activities are being carried out which can cause coastal erosion or beach configuration.                                       |  |
| g)     | No blasting activities in Coastal Regulation Zone is permissible  | Complied. No Such activities are being carried out.  |  |
| h)     | The proponent should not prevent public from easy access to the beach.  | Complied. Access is not prevented from Public.   |  |
| i)     | Untreated chemical waste generated due to membrane protection activity and the sewage generated should not be discharged into the sea.  | Complied. No Untreated chemical waste is being discharged into sea.  |  |
| j)     | The proponent should ensure that the saline water shall not gain access into ground while conveying or processing the sea water   | Being Ensured that the saline water is not gaining access into ground while conveying or processing the sea water.                               |  |
| k)     | The project activity should not affect the coastal ecosystem including marine flora and fauna.  | The project activity does not affect the coastal ecosystem including marine flora and fauna.   |  |
| l)     | There should not be any extraction of ground water in Coastal Regulation Zone.  | Complied. Ground Water not extracted in the Coastal Regulation Zone.   |  |
| m)     | The proponent shall not undertake any activity, which is violative of the provisions of Coastal Regulation zone Notification 1991 and the subsequent amendments.  | Complied. No Such activities are being carried out.  |  |
| n)     | The Coastal Regulation Zone clearance will be revoked if any of the condition stipulated is not complied with   | Agreed.  |  |



# Comprehensive Environmental Monitoring for 2 X 600 MW Thermal Power Plant of Moxie Power Generation Limited at Pattinamaruthoor, Tuticorin

### **Monitoring Report**

(April 2024 - September 2024)

### **Executive Summary**





Submitted to

### M/s. Moxie Power Generation Limited

Melamaruthur Village, Ottapidaram Thaluk, Tuticorin District - 628 105



### **Suganthi Devadason Marine Research Institute (SDMRI)**

(Recognized by Manonmaniam Sundaranar University and U.G.C. & Recognized by Scientific and Industrial Research Organization of the DSIR, GOI)

44 - Beach Road, Tuticorin - 628 001, Tamil Nadu
Tel: 0461 - 2336488, 2323007; E.mail: director@sdmri.in
Web: http://www.sdmri.in

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27 November 2024

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# Comprehensive Environmental Monitoring for 2 X 600 MW Thermal Power Plant of Moxie Power Generation Limited at Pattinamaruthoor, Tuticorin

### 1. Background

The Plant has started production of its first unit of 2 x 600 MW coal based thermal power plant near Pattinamaruthur village of Tuticorin District, Tamilnadu from October 2013.

The comprehensive baseline data collection on physical, chemical and biological, covering all marine flora & fauna covering four seasons in each year was conducted for 3 years from 2010 to 2013 and comprehensive data on fish landings and catch details in was collected for one year from 10 coastal villages located within 10 km radius of the project site.

While granting No Objection Certificate to establish the Thermal Power Plant, the Tamil Nadu Forest Department made it compulsory to implement the following Coastal Environmental Management Plan and Monitoring Protocol.

- 1. Marine Water Quality
- 2. Marine Sediment Quality
- 3. Coral Reef Monitoring
- 4. Seagrass Monitoring
- 5. Fish Production Monitoring

The details of parameters, monitoring locations and monitoring frequency provided by the Tamil Nadu Forest Department are followed and the present half yearly report provides the results of the monitoring from April 2024 to September 2024.

### 2. Methodology

#### 2.1. Fixing Permanent Monitoring Locations

Permanent monitoring locations were fixed to study the marine water and sediment quality and to monitor seagrasses and coral reefs. Totally 4 locations were fixed for the analysis of marine water and sediment quality at intake site. Location 1 is on the intake point and locations 2 and 3 are 100 m away in each side of the intake point while location 4 is 200 m away from the intake point into the sea. Totally 12 stations were fixed at discharge point. Locations 2 and 3 occur near the discharge point and locations 1 and 4 are 100 m away from locations 2 and 3 respectively. Locations 5 and 6 occur 25 m away from Location 2 and 3 and locations 7 and 8 fixed at 50m away from location 5 and 6 respectively. Locations 9 and 10 were fixed at 200m away from discharge point and Locations 11 and 12 were located 400m away from discharge point towards marine side. Parameters monitored in water samples were physical parameters such as pH, salinity, temperature, turbidity and total suspended solids; chemical parameters such as dissolved oxygen, nutrients, BOD and COD; heavy metals were Copper, Lead, Nickel, Cadmium, Chromium and Mercury; bacterial parameter coliform count; marine biological parameters such as phytoplankton and zooplankton. Parameters monitored in sediment samples were pH, organic matter and nutrients.

For coral monitoring, totally 13 sites were selected. Three locations were selected around each of the Tuticorin islands Vaan, Koswari, Kariyachalli and Vilanguchalli and one location at Vilanguchalli patch reef. Physical parameters such as temperature, turbidity, total suspended solids and sedimentation were analysed in these locations and biological parameters such as coral status, growth, recruitment, diseases and bleaching were monitored. Temperature loggers will be deployed in these locations also. For seagrass monitoring, totally 13 sites were selected randomly within 3 km radius from the discharge point. Physical parameters such as temperature, turbidity, total suspended solids and sedimentation were assessed. Biological properties such as seagrass status, growth, shoot density, diseases, productivity and biomass were monitored. Fish diversity and abundance were also monitored in all the seagrass monitoring locations.

The details of monitoring locations and GPS coordinates are given in Figs. 1 to 3 and Tables 1 to 3.

The fish landing data and catch details will be collected from 10 landing centres / villages (Thirespuram, Mottaigopuram, Siluvaipatti, Vellapatti, Tharuvaikulam, Pattinamaruthoor, Sippikulam, Vaipar, Periyasamipuram and Vembar) located in and around Pattinamaruthur coast, covering 10 km radius from the project site (Fig.4)



Fig.1: Monitoring Locations Marine Water and Sediment Quality Monitoring

Table 1: GPS Mark for locations for Marine water and sediment quality monitoring

| Intake point    | GPS Mark             |  |
|-----------------|----------------------|--|
| Location- 1     | N8 55.084 E78 11.229 |  |
| Location- 2     | N8 55.143 E78 11.252 |  |
| Location- 3     | N8 55.046 E78 11.357 |  |
| Location- 4     | N8 55.007 E78 11.198 |  |
| Discharge point |                      |  |
| Location- 1     | N8 55.125 E78 11.252 |  |
| Location- 2     | N8 55.189 E78 11.285 |  |
| Location- 3     | N8 55.266 E78 11.333 |  |
| Location- 4     | N8 55.336 E78 11.374 |  |
| Location- 5     | N8 55.086 E78 11.654 |  |
| Location- 6     | N8 55.067 E78 11.624 |  |
| Location- 7     | N8 55.070 E78 11.666 |  |
| Location- 8     | N8 55.059 E78 11.657 |  |
| Location- 9     | N8 55.112 E78 11.409 |  |
| Location- 10    | N8 55.186 E78 11.461 |  |
| Location- 11    | N8 55.071 E78 11.540 |  |
| Location- 12    | N8 55.168 E78 11.610 |  |

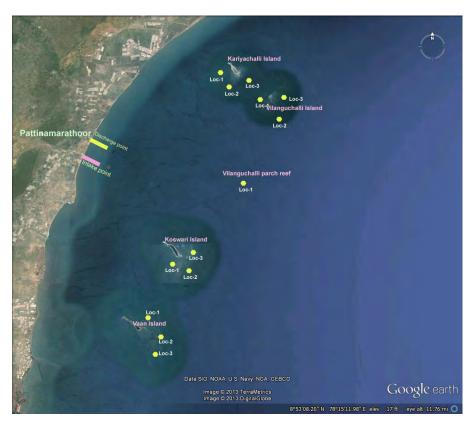


Fig.2: Locations for coral reef monitoring

**Table 2: Coral reef monitoring locations** 

| Location         | GPS Mark             |
|------------------|----------------------|
| Vaan Island      |                      |
| Location 1       | N8 50.487 E78 12.759 |
| Location 2       | N8 50.099 E78 12.974 |
| Location 3       | N8 49.729 E78 12.881 |
| Koswari Island   |                      |
| Location 1       | N8 51.829 E78 13.376 |
| Location 2       | N8 51.791 E78 13.793 |
| Location 3       | N8 52.193 E78 13.909 |
| Vilanguchalli p  | atch reef            |
| Location 1       | N8 54.127 E78 15.391 |
| Vilanguchalli Is | sland                |
| Location 1       | N8 56.606 E78 16.423 |
| Location 2       | N8 56.109 E78 16.245 |
| Location 3       | N8 56.369 E78 15.936 |
| Kariyachalli Isl | and                  |
| Location 1       | N8 57.185 E78 14.921 |
| Location 2       | N8 56.950 E78 15.202 |
| Location 3       | N8 57.198 E78 15.584 |



Fig.3: Seagrass and fish population monitoring locations

**Table 3: GPS Mark for Seagrass and Fish Population monitoring locations** 

| Location    | GPS Mark             |
|-------------|----------------------|
| Location 1  | N8 54.919 E78 11.338 |
| Location 2  | N8 55.043 E78 11.244 |
| Location 3  | N8 54.589 E78 11.177 |
| Location 4  | N8 54.128 E78 11.209 |
| Location 5  | N8 54.342 E78 11.921 |
| Location 6  | N8 54.652 E78 12.110 |
| Location 7  | N8 55.019 E78 11.971 |
| Location 8  | N8 55.351 E78 11.618 |
| Location 9  | N8 55.701 E78 11.940 |
| Location 10 | N8 55.224 E78 12.588 |
| Location 11 | N8 54.526 E78 12.508 |
| Location 12 | N8 53.885 E78 12.203 |
| Location 13 | N8 53.799 E78 11.357 |

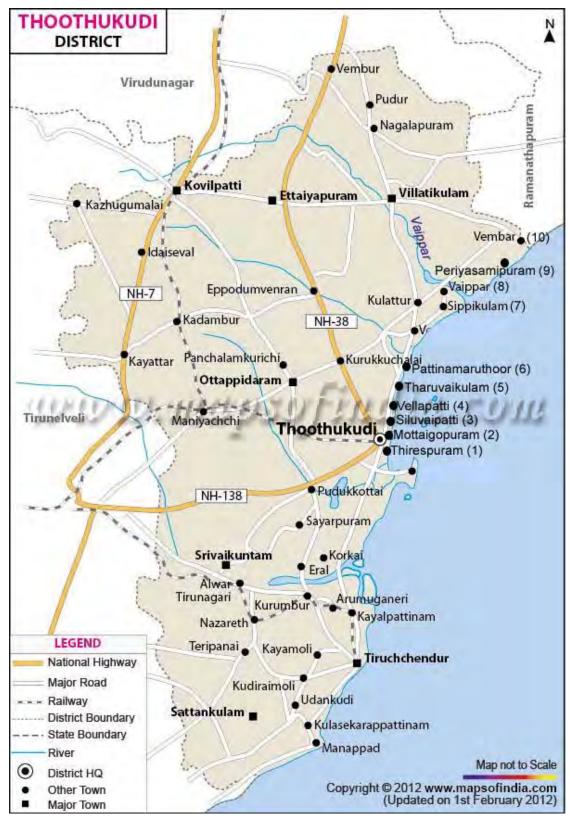


Fig.4: Map showing the 10 coastal villages / fish landing centres for fish landing data and catch details monitoring

### 2.2. Parameters are being monitored

### Marine Water Quality

Physical properties: pH, Salinity, Temperature, Turbidity, Total Suspended Solids

Chemical Properties: Dissolved Oxygen, Nutrients, BOD, COD

Heavy metals: Cu, Pb, Ni, Cd, Cr, Hg

Bacteriological parameters: Coliform Count Marine Biology: Phytoplankton, Zooplankton Monitoring frequency - Fortnight Sampling

### Marine Sediment Quality

Physical & Chemical properties: pH, Organic Matter, Nutrients

Heavy metals: Cu, Pb, Ni, Cd, Cr, Hg Bacteriological parameters: Coliform Count

Marine Biology: Macro and meio benthic fauna and Macro flora

Monitoring frequency - Fortnight Sampling

### **Coral Reef Monitoring**

Physical properties: Temperature, Turbidity, Total Suspended Solids, Sedimentation

Biological properties: Status, Coral growth, recruits, disease, bleaching

Monitoring frequency - Fortnight Sampling

### Seagrass Monitoring

Physical properties: Temperature, Turbidity, Total Suspended Solids, Sedimentation Biological properties: Status, Growth, shoot density, disease, Productivity, Biomass

Monitoring frequency - Fortnight Sampling

### Fish Population Monitoring

Diversity and Abundance Monitoring frequency - Fortnight Sampling

Fish Landing and Catch Monitoring

Common fish landed Seasonal landing pattern

Total fish landing - quantity, species wise, landing as per craft and gear

Monitoring frequency - Daily

### 2.3. Analysis and monitoring methods

### Physico-chemical parameters

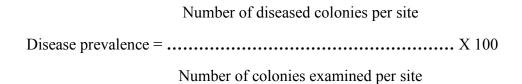
Seawater temperature was measured using a standard digital thermometer. Salinity was determined using refracto meter. Seawater pH was measured soon after collection by using pre-calibrated digital pH-meter. Turbidity was measured using Elico water quality analyzer. Total Suspended Solids (TSS) was measured by filtering a known volume of sample through a pre-weighed 0.45µ Whatman glass fibre filter paper (GF/C) using a Millipore filtering system. Dissolved oxygen (DO), Biological Oxygen Demand (BOD) and Chemical Oxygen Demand (COD) were analyzed by following Strickland and Parsons

method (1972). Analyses of calcium (Ca), magnesium (Mg) and chlorides will be done titrimetrically. Nitrates (NO<sub>3</sub>) and nitrites (NO<sub>2</sub>) were measured spectrophotometrically by following the method of Strickland and Parson (1972). Total coliform bacteria were measured using MPN method.

Sediment samples were collected from all the sites by using Van Veen Grab sampler. Sediment pH was measured using pH meter. Oil and grease in sediment was analysed using separating funnel method. Organic matter in sediment was estimated by the method described by El Wakeel and Riley (1957). Phytoplankton and zoo plankton samples were collected from the surface water at all the stations. For the quantitative estimation, a Sedgewick Rafter Counting Cell was used. The sediment samples pre stained with Rose Bengal was sieved through 1 mm and 63µ mesh sieves by adding copious amount of water for separating macro and meio benthic fauna respectively. The organisms retained in the sieves were preserved in 5% formalin and were identified using standard manuals. Heavy metals such as lead, nickel, cadmium, chromium and mercury in the water samples and heavy metals such as manganese, lead, nickel, cadmium, chromium and mercury in the sediment samples were analysed using Atomic Absorption Spectrophotometer (AAS). Sedimentation rate was measured by deploying sediment traps (English et al, 1997) under the water.

### Coral monitoring

The percentage cover of corals and other sessile benthic categories were assessed by Line Intercept Transect (LIT) method following English *et al.*, (1997). The survey was started with mapping of Island reef areas, using manta tow technique (Done *et al.*, 1982). The assessment involved SCUBA diving. Depending on the size of the reefs, 15 to 25 transects were laid on each Island. The percentage cover of each life form category, percentage of bleaching and disease prevalence were calculated following the method of English *et al.*, (1997). Coral recruitment was recorded using haphazardly placed permanent 1 m<sup>2</sup> quadrats. The permanent quadrats, used for long term monitoring of recruits, were placed on substrates suitable for coral settlement, in particular dead reefs (Tamelander, 2002). Linear growth coral of coral colonies were measured by tagging the colony and measuring the distance from the baseline to the end of the branch with flexible plastic ruler (Gladfelter, *et al.*, 1978). Coral diseases were identified by following the coral disease handbook of Raymundo and Harvell, (2008). Disease prevalence in a study location were calculated by a simple formula; percentage of diseases is the proportion of diseased colonies to the total measured population of colonies.



# Life form Categories and codes

| CATEGORIES               | CODE | NOTES / REMARKS   |
|--------------------------|------|---|
| Dead Coral               | DC   | recently dead, white to dirty white                               |
| Dead Coral with Algae    | DCA  | this coral is standing, skeletal structure can still              |
| _                        |      | be seen   |
| Acropora Branching       | ACB  | at least 2° branching, e.g. Acropora palmate,                     |
|                          |      | A.formosa   |
| Encrusting               | ACE  | usually the base-plate of immature Acropora                       |
| _                        |      | forms, e.g. A. palifera and A. cuneata                            |
| Sub massive              | ACS  | robust with knob or wedge-like form e.g. A.                       |
|                          |      | palifera  |
| Digitate                 | ACD  | no least 2° branching, typically includes A.                      |
|                          |      | humilis, A. digitifera and A. gemmifera                           |
| Tabular                  | ACT  | horizontal flattened plates e.g. A. hyacinthus                    |
| Non – Acropora Branching | CB   | at least 2° branching e.g. Seriatopora hystrix                    |
| Encrusting               | CE   | major portion attached to substratum as a laminar                 |
|                          |      | plate e.g. Porites vaughani, Montipora undata                     |
| Foliose                  | CF   | Coral attached at one or more points, leaf-like, or               |
|                          |      | plate-like appearance e.g. Merulina ampliata,                     |
|                          |      | Montipora aequituberculata  |
| Massive                  | CM   | Soild boulder or mound e.g. Platygyra daedalea                    |
| Submassive               | CS   | tends to form small columns, knobs, or wedges                     |
|                          |      | e.g. Porites lichen, <i>Psammocora digitata</i>                   |
| Mushroom                 | CMR  | solitary, free-living corals of the Fungia                        |
| Heliopora                | CHL  | blue coral  |
| Millepora                | CME  | fire coral  |
| Tubipora                 | CTU  | organ-pipe coral, Tubipora musica                                 |
| Other Fauna:             |      |   |
| Soft Coral               | SC   | soft bodied coral   |
| Sponge                   | SP   |   |
| Zoanthids                | ZO   | examples are Platythoa, Protopalythoa                             |
| Others                   | OT   | Ascidians, anemones, gorgonians, giant clams etc.                 |
| Algae Algal Assemblage   | AA   | consists of more than one species                                 |
| Coralline Algae          | CA   |   |
| Halimeda                 | HA   |   |
| Macroalgae               | MA   | weedy/fleshy browns, reds, etc.                                   |
| Turf Algae               | TA   | lush filamentous algae, often found inside damselfish territories |
| Abiotic Sand             | S    |   |
| Rubble                   | R    | unconsolidated coral fragments                                    |
| Silt                     | SI   | j   |
| Water                    | WA   | fissures deeper than 50 cm  |
| Rock                     | RCK  | •   |
| Other                    | DDD  | Missing data  |

### Seagrass monitoring

Quadrates (50 cm $\times$ 50 cm) divided into 25 squares (10 cm  $\times$  10 cm) were used to study the percentage cover of seagrass species through visual estimation (Saito and Atobe,

1970). 100 m transects were made on the seagrass meadows and transects were separated from each other by a reasonable distance (50 -100 m) and were parallel to each other and perpendicular to the shore. Quadrates were laid at regular intervals (5 m) along each transect. Minimum 2-4 replicates of quadrates were laid depending on the abundance of the seagrass. Individual shoots were also counted randomly at every transect. Each seagrass species was collected and sorted by taxnomical order for further identification (English *et al.*, 1997). Biomass was estimated using the method of Mellors (1991). The biomass or standing crop is expressed in dry weight m<sup>2</sup>.

### Fish population monitoring

Fish density and diversity was assessed by visual census applying Belt Transect method (English et al., 1997).

### Fish Landing Data

Fish landing data was collected by following the method of Srinath *et al.*, (2005). The following are the steps:

- i. Enquiring of the total number of fishing days in the particular village (Sampling will be done normally for 16-18 days per month in each selected village).
- ii. Enquiring of the total number of fishing crafts on the particular fishing day.
- iii. 1: 6 boats will be surveyed in case of large numbers of boats (Random). A minimum total of 15 boats at least will be surveyed in which 100% of the catch has to be checked.
- iv. The different fishing gears will be surveyed. Fish catch by different gears will be noted down if necessary.
- v. Species composition of the fish landed will be checked out.
- vi. Weight of a group (eg: carangids, groupers) / genus (*Scomberoides*, *Tylosurus* etc.) / species (*Sardinella longiceps*, *Rastrelliger kanagurta*) per the fishing crafts surveyed to be calculated. For this the weight of a standard basket will be enquired and the total number of standard baskets in that boat has to be enquired (Eg:- Weight of one standard basket of Grouper in Tuticorin landing center = 10 kg. Total number of standard baskets in the boat 'A' = 5. Groupers landed in boat 'A' =  $10 \times 5 = 50$ ).
- vii. Similarly the weight of groupers in all the boats surveyed is calculated. The resultant data gives the total groupers landed in the given day in the surveyed boats. This data is then made up to the total number of boats gone for fishing in the particular fishing day. The resultant data is further calculated up to one month by multiplying the total number of fishing days during that month.

# 3. Results - Executive Summary (April 2024 to September 2024 - Half Yearly Report)

### 3.1. Marine water and sediment quality

The water temperature was recorded between 28.0 and 32.25°C; Salinity value was recorded between 34.80 and 36.20 ppt; pH level was recorded between 8.03 and 8.52; turbidity level ranged from 5.48 to 8.14 NTU; the TSS level ranged from 110 to 155 mg/l; dissolved oxygen level was recorded between 4.60 and 5.54 mg/l; BOD level ranged from 1.49 to 2.55 mg/l; COD level ranged from 0.95 to 1.51 mg/l; calcium values ranged from 390 to 660 mg/l; magnesium value was recorded between 1253 and 1375 mg/l; nitrate level ranged from 1.22 to 1.48 μg at/l; nitrite level ranged from 0.24 to 0.62 μg at/l; chloride level ranged from 16.85 to 17.69 g/l; and oil and grease level ranges from 0.21 to 0.44 mg/l.

In sediment samples, the pH value varied from 8.01 to 8.58; oil and grease level ranged from 0.28 to 0.64 mg/kg; organic matter value ranged from 2.328 to 3.678%; and heavy metal level in water and sediment samples was within the acceptable limits.

No coliform bacteria were recorded in water and sediment samples. The phytoplankton density was recorded between 281.53 and 418.97 cells/l. The zooplankton density was between 195642 and 331525 no/m<sup>3</sup>. Among the benthic macro fauna, gastropods and bivalves were the dominant categories.

In coral reef area, the water temperature was recorded between 28.05 and 31.85°C; turbidity level ranged from 4.40 to 6.45 NTU; TSS level ranged from 85.5 to 157.6 mg/l and sedimentation rate was recorded between 59.65 and 82.45 mg/cm²/day during the study period of all the island during the study period in surface and bottom water of seagrass area.

### 3.2. Coral monitoring

The live coral cover in Vaan Island was 22.68, 32.19 and 34.99% respectively in sites 1, 2 and 3 during April 2024; it was 21.56, 31.47 and 32.53 respectively during May 2024; it was 21.52, 31.45 and 32.42% respectively during June 2024; it was 21.53, 31.44 and 32.45% respectively during July 2024; it was 21.55, 31.45 and 32.47% respectively during August 2024; it was 21.48, 31.35 and 32.4% respectively in September 2024. In April 2024, the soft coral cover was 7.73, 2.02 and 2.32% respectively in sites 1, 2 and 3; it was 7.75, 2.01 and 2.31% respectively during May 2024; it was 7.74, 2.02 and 2.33% respectively during June 2024; during July 2024, it was 7.75, 2.02 and 2.35% respectively; during August 2024, it was 7.74, 2.03 and 2.34% respectively and it was 7.69, 1.98 and 2.28% respectively during September 2024. ACB and CF were the dominant coral life form categories during April to September 2024. Coral recruitment was highest for the genera Acropora, Porites and Montipora and most common coral species were Acropora muricata, A. cytherea, A. intermedia, A. robusta, Montipora foliosa, Pocillopora damicornis and Porites sp. In Vaan Island, nine types of coral health issues were recorded which include bleaching, BBD, BSD, PSD, WBD, WPD, WSD, YBD, YSD and B. Among disease type, B was the most dominant category with 3.05% followed by BBD with 2.53% respectively during April to September 2024 mainly in genus Montipora. Totally six coral genera were affected by them which are Goniastrea, Dipsastrea, Favites, Porites, Turbinaria and Acropora.

The live coral cover in Koswari Island was 21.6, 21.23 and 19.45% respectively in sites 1, 2 and 3 during April 2024; it was 21.17, 20.36 and 19.21% respectively during May

2024; it was 21.13, 20.33 and 19.22% respectively during June 2024; during July 2024, it was 21.15, 20.31 and 19.24% respectively; during August 2024, it was 21.17, 20.33 and 19.22% respectively and during September 2024, it was 21.15, 20.25 and 19.11% respectively. In April 2024, the soft coral cover was 1.85, 3.6 and 2.67% respectively; it was 1.84, 3.62 and 2.65% respectively during May 2024; it was, 1.85, 3.61 and 2.67% respectively during June 2024; during July 2024, it was 1.85, 3.59 and 2.65% respectively; during August 2024, it was 1.83, 3.58 and 2.64% respectively and it was 1.78, 3.48 and 2.61% respectively during September 2024. CM, CF and ACB were the dominant coral life form categories during April to September 2024. Coral recruitment was highest for the genera Acropora, Turbinaria and Porites and most common coral species were Acropora muricata, A.cytherea, A. intermedia, A. robusta, Montipora foliosa, Pocillopora damicornis and Porites sp. In Koswari Island, ten types of coral health issues were recorded which are BBD, BSD, PSD, WBD, WPD, WSD, YBD, YSD, T and B. Among disease type, B was the most dominant category with 2.24% followed by BBD with 1.92% respectively during April to September 2024 mainly in genus Acropora. Totally six coral genera were affected which are Goniastrea, Dipsastrea, Favites, Porites, Turbinaria and Acropora.

The live coral cover in Kariyachalli Island was 34.15, 34.5 and 33.96% respectively in sites 1, 2 and 3 during April 2024; it was 33.24, 32.36 and 32.58% respectively during May 2024; it was 33.18, 32.34 and 32.6% respectively during June 2024; during July 2024, it was 33.2, 32.33 and 32.61% respectively; during August 2024, it was 33.21, 32.34 and 32.59% respectively and during September 2024 it was 32.16, 32.29 and 32.53% respectively. The soft coral cover in April 2024 was 4.89, 4.45 and 7.42% respectively; it was 4.85, 4.42 and 7.41% respectively during May 2024; it was 4.83, 4.4 and 7.4% respectively during June 2024; it was 4.85, 4.41nd 7.42% respectively during July 2024; it was 4.84, 4.42 and 7.43% respectively during August 2024; and it was 4.81, 4.36 and 7.41% respectively during September 2024. The CM, CF and ACB were the dominant coral life form categories during April to September 2024. Coral recruitment was highest for the genera Acropora, Montipora and Porites and most common coral species were Acropora muricata, A.cytherea, A. intermedia, A. robusta, Montipora foliosa, Pocillopora damicornis and Porites sp. Totally ten types of coral health issues were recorded which include bleaching, BBD, BSD, PSD, WBD, WPD, WSD, YBD, YSD, T and B. Among disease type, B was the most dominant category with 3.32% followed by BBD with 1.8% respectively during April to September 2024 mainly in genus Acropora. Totally seven coral genera were affected by them which are *Montipora*, *Goniastrea*, *Dipsastrea*, *Favites*, *Porites*, *Turbinaria* and *Acropora*.

The live coral cover in Vilanguchalli Island was 19.66, 20.22 and 26.64% respectively in sites 1, 2 and 3 during April 2024; it was 16.86, 18.12 and 23.86% respectively during May 2024; it was 16.84, 18.1 and 23.84% respectively during June 2024; it was 16.85, 18.12 and 23.87% respectively during July 2024; it was 16.84, 18.14 and 23.87% respectively during August 2024; and during September 2024 it was 16.78, 18.11 and 23.81% respectively. In April 2024, the soft coral cover was 1.85, 1.78 and 1.84% respectively; it was 1.86, 1.78 and 1.85% during May 2024; it was 1.86, 1.77 and 1.85% respectively during June 2024; it was 1.84, 1.78 and 1.86% respectively during July 2024; 1.85, 1.79 and 1.88% respectively during August 2024; and during September 2024, it was 1.81, 1.76 and 1.83% respectively. The CF, CE and CM were the dominant coral life form categories during the period April to September 2024. Coral recruitment was highest for the genera *Acropora*, *Turbinaria and Pocillopora* while most common coral species were *Acropora muricata*, *A. cytherea*, *A. intermedia*, *A. robusta*, *Pocillopora damicornis* and *Porites* sp. In Vilanguchalli Island, ten types of coral health issues were recorded which are BBD, BSD, PSD, WBD,

WPD, WSD, YBD, YSD, T and B. Among disease type, B was the most dominant category with 4.3% followed by BBD with 1.89% respectively during April to September 2024 mainly in genus Acropora. Five coral genera were affected by them which are *Goniastrea*, *Porites*, *Montipora*, *Turbinaria* and *Acropora*.

The live coral cover in Villanguchalli Patch reef was 43.45, 42.71, 42.68, 42.7, 42.7 and 42.63% respectively during April, May, June, July, August and September 2024. Soft coral cover was 3.35, 3.31, 3.29, 3.26, 3.26 and 3.22% respectively. The ACB, CF and ACT were the dominant coral life form categories during the period between April to September2024. Coral recruitment was highest for the genera *Acropora*, *Pocillopora*, *Turbinaria* and *Favites* while most common coral species were *Acropora muricata*, *A. cytherea*, *A. intermedia*, *A. robusta*, *Montipora foliosa*, *Pocillopora damicornis* and *Porites* sp. Totally ten types of coral health issues were recorded which are BBD, BSD, PSD, WBD, WPD, WSD, YBD, YSD, T and B. Among disease type, B was the most dominant category with 4.54 % respectively during April to September 2024 mainly in genus *Acropora* followed by BBD with 1.12%. Five coral genera were affected by them *Goniastrea*, *Porites*, *Montipora*, *Turbinaria* and *Acropora*.

Moderate to severe coral bleaching was witnessed during April and May due to the prolonged elevated sea surface temperature. *Porites*, *Acropora*, *Dipsastrea* and *Montipora* genera were the most affected in the monitoring sites. However, in June, most of the affected colonies got recovered from bleaching due to the reduction in water temperature level mainly because of rainfall and changing weather condition.

### 3.3. Seagrass and fish population monitoring

The overall seagrass percentage cover was observed as 62.69% in April 2024 at station 13 followed by 62.07% in May 2024 at station 13. No diseases were observed. In total, seven seagrass species were recorded and they are *Thalassia hemprichii*, *Halophila stipulacea*, *Halophila ovalis*, *Cymodocea serrulata*, *Halodule pinifolia*, *Halodule uninervis* and *Syringodium isoetifolium*. Among the seven seagrass species, the dominant shoot density was recorded in *Cymodocea serrulata* as 161.6 nos.m<sup>-2</sup> in April 2024 at station-8 followed by *Thalassia hemprichii* as 158.66 nos.m<sup>-2</sup> in April 2024 at station 2. The maximum productivity was recorded in *Cymodocea serrulata*as 69.54 cm<sup>-2</sup>day<sup>-1</sup> in April 2024 at station-9. The maximum seagrass biomass was recorded in *Cymodocea serrulata* as 145.66 g dry weight m<sup>-2</sup> in April 2024 at station-8 followed by *Thalassia hemprichii* as 117.77 g dry weight m<sup>-2</sup> in April 2024 at station-2.

A total of 19 fish species were recorded and among them, *Lutjanus* sp. was the dominant followed by *Sardinella s*p. during the entire survey period. Maximum number of fish density was observed at Station-13 during April 2024 with 215 / 50 m $^{-2}$  followed by Station-13 in May 2024 with 210 / 50 m $^{-2}$ .

### 3.4. Cage culture of fishes near outfall in Pattinamaruthoor coast

In Pattinamaruthoor fish cage, a total of 11 fish species were recorded during April 2024 to September 2024. Among them, *Lutjanus* sp. was dominant followed by *Siganus* sp. Maximum number of fish density was observed during June 2024 with 243 Nos. followed by April 2024 with 240 nos.

### 3.5. Fish Landing Data

**Study area**: Landing areas of ten fishing villages - Thirespuram, Mottaigopuram, Siluvaipatti, Vellapatti, Tharuvaikulam, Pattinamaruthoor, Sippikulam, Vaipar, Periyasamipuram, Vembar.

The major fishery resources of Tuticorin coast are Tuna, Seer fishes, Groupers, Ribbon fishes, Penaeid shrimps, Crabs, lobster and so on. The fish stocks from the coast tend to concentrate along the continental shelf and the biodiversity is substantially higher than in temperate waters. Tuticorin is one of the major fish landing center along the Gulf of Mannar coast by both mechanized as well as traditional crafts. Tuticorin coast has 21 fishing villages which include 2 major landing and 20 minor landing areas. Among the 22 fish landing areas of Tuticorin coast, 10 major and minor landing areas have been randomly surveyed for the fish species and weight of fishes landed from April 2024 to September 2024. Major fishing gears operated in Tuticorin fishing area is Trawl net, Long line fishing, Gill net, Drift net, Purse seine, Trammel net, Stake net, traps and Hand line nets. Fishing activity in Tuticorin region was carried out by Deep Sea, Traditional and mechanized fishing vessels like Trawlers, Kattumaram, Fiber boats and Vallams. Commercial fish species and total catch landed at each village during this period was recorded and illustrated as follows.

The survey recorded maximum landing in Thirespuram with about 860297 kg followed by Vaipar with about 439146 kg during April 2024 to September 2024. The catch yield obtained in all ten landing areas has been illustrated in the table 4 and Fig. 5. During the study, 106 species of fishery resources have been identified under the commercial fishery resource and are illustrated in the following table 5.

Table 4: Total catch in major landing centres during April 2024 to September 2024 in Tuticorin coast

| Landing areas    | Catch landed / 6 months |
|------------------|-------------------------|
| Thirespuram      | 860297                  |
| Mottaigopuram    | 50943                   |
| Siluvaipatti     | 28619                   |
| Vellapatti       | 175239                  |
| Tharuvaikulam    | 407658                  |
| Pattinamaruthoor | 18049                   |
| Vaipar           | 439146                  |
| Sippikulam       | 394101                  |
| Periyasamipuram  | 37198                   |
| Vembar           | 227634                  |
| Total catch      | 2638884                 |

|    | Table 5: 5              | Speci | es recorded in landing areas | s - Tuti | icorin coast                |
|----|-------------------------|-------|------------------------------|----------|-----------------------------|
| 1  | Ablennes hians          | 40    | Himantura uarnak             | 79       | Saurida tumbil              |
| 2  | Acanthocybium solandri  | 41    | Irundichthys sp.             | 80       | Chlorurus ghibbus           |
| 3  | Acanthurus sp.          | 42    | Istiophorus sp.              | 81       | Scarus ghobban              |
| 4  | Aetoplatea sp.          | 43    | Isurus oxyrinchus            | 82       | Scolopsis vosmeri           |
| 5  | Alectis indica          | 44    | Katsuwonus pelamis           | 83       | Scomberoides commersonianus |
| 6  | Aluterus monoceros      | 45    | Lates calcarifer             | 84       | Scomberoides tol            |
| 7  | Alopias sp.             | 46    | Leiognathussp.               | 85       | Scomberoides lysan          |
| 8  | Arius sp.               | 47    | Leiognathus equulus          | 86       | Scomberomorous commerson    |
| 9  | Atule mate              | 48    | Lethrinus sp.                | 87       | Scylla serrata              |
| 10 | Auxis thazard           | 49    | Liza tade                    | 88       | Scylla tranquebarica        |
| 11 | Carangoides armatus     | 50    | Lobotes surinamensis         | 89       | Sepia pharonis              |
| 12 | Carangoides sp.         | 51    | Loligo sp.                   | 90       | Sepiella sp.                |
| 13 | Caranx sp.              | 52    | Uroteuthis duvauceli         | 91       | Sepioteuthis sp.            |
| 14 | Cardisoma canarium      | 53    | Lutjanus sp.                 | 92       | Siganus javus               |
| 15 | Cephalopholis boenack   | 54    | Mene maculata                | 93       | Sphyraena putnamae          |
| 16 | Cephalopholis formosa   | 55    | Metapenaeus sp.              | 94       | Sphyraena barracuda         |
| 17 | Cephalopholis sonnerati | 56    | Mobula japanica              | 95       | Stolephorus commersonnii    |
| 18 | Charybdis cruciata      | 57    | Mugil Cephalus               | 96       | Strongylura leiura          |
| 19 | Chichoreus ramosus      | 58    | Mycteroperca acutirostris    | 97       | Synatpura sp.               |
| 20 | Chirocentrussp.         | 59    | Nemipterus japonicus         | 98       | Thunnus albacares           |
| 21 | Chiloscyllium griseum   | 60    | Nemipteryx caelata           | 99       | Thunnus thynnus             |
| 22 | Coryphaena hippurus     | 61    | Octopus aegina               | 100      | Trachurus japonicus         |
| 23 | Cynoglossus sp.         | 62    | Octopus cyaneus              | 101      | Lepturacanthus savala       |
| 24 | Neotrygon kuhlii        | 63    | Octopus dolfusii             | 102      | Turbinella pyrum            |
| 25 | Dasyatis sp.            | 64    | Pampus pampus                | 103      | Tylosurus sp.               |
| 26 | Dasyatis uarnak         | 65    | Panulirus homarus            | 104      | Upeneus vittatus            |
| 27 | Decapterus russelli     | 66    | Panulirus ornatus            | 105      | Carcharhinus limbatus       |
| 28 | Psettodes erumi         | 67    | Parupeneus indicus           | 106      | Glaucostegus granulatus     |
| 29 | Diagramma pictum        | 68    | Penaeus sp.                  |          |                             |
| 30 | Dorytheuthis sp.        | 69    | Plectrohinchus sp.           |          |                             |
| 31 | Drepane punctata        | 70    | Portunus pelagicus           |          |                             |
| 32 | Epinephelus areolatus   | 71    | Portunus sanguinolentus      |          |                             |
| 33 | Epinephelus malabaricus | 72    | Psettodus sp.                |          |                             |
| 34 | Epinephelus merra       | 73    | Rachycentron canadum         |          |                             |
| 35 | Euthynnus affinis       | 74    | Rastrelliger kanagurta       |          |                             |
| 36 | Gerres sp.              | 75    | Rhizoprionodon sp.           |          |                             |
| 37 | Harpulina sp.           | 76    | Sardinella albella           |          |                             |
| 38 | Hemiramphus far         | 77    | Sardinella sp.               |          |                             |
| 39 | Hilsa keele             | 78    | Sargocentron rubrum          |          |                             |

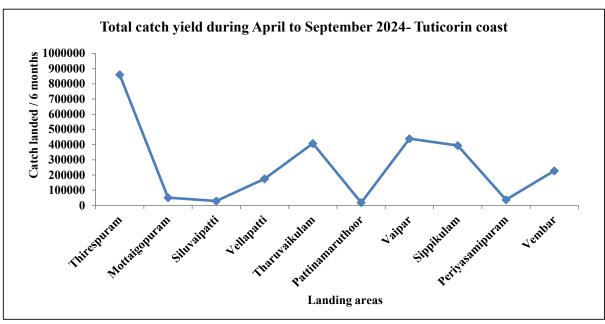


Fig.5: Total catch obtained during April 2024 to September 2024 in Tuticorin coast

### **Thirespuram**

Total landing was recorded as 860297 Kg. Maximum landing was recorded in April 2024 with about 194979 kg and minimum in June 2024 with about 85796 kg. Species dominantly found varied according to the season – Jacks (*Caranx* sp.,) dominantly found in April 2024; Unicorn leatherjacket (*Aluterus monoceros*) dominantly landed in April 2024; and Emperors (*Lethrinus* sp.,) dominantly observed in July 2024. Species commonly observed includes *Auxis thazard*, *Lutjanus* sp., etc.

- Dominant species Caranx sp., Aluterus monoceros, Lethrinus sp., Auxis thazard, Lutjanus sp., Sphyraena barracuda.
- Maximum catch recorded April 2024
- Minimum catch recorded June 2024

### Mottaigopuram

Total landing owas recorded as 50943 Kg. Maximum landing was recorded in September 2024 with about 10925 kg and minimum in June 2024 with about 6254 kg. Species dominantly recorded varied according to the season – Crustaceans - crab (*Portunus* sp.,) dominantly observed in September 2024; and shrimp (*Penaeus* sp.,) dominantly found in April 2024 while shrimp (*Metapenaeus* sp.,) in August 2024. Species commonly found includes *Lethrinus* sp., *Sepiella* sp., *Sepioteuthis* sp., etc.

- Dominant species Portunus sp., Penaeus sp., Metapenaeus sp., Lethrinus sp., Sepiella sp.
- Maximum catch recorded September 2024
- Minimum catch recorded June 2024

### Siluvaipatti

Total landing was recorded as 28619 Kg. Maximum landing was recorded in September 2024 with about 6120 kg and minimum in June 2024with about 3021 kg. Species dominantly observed varied according to the season – Crustaceans - crab (*Portunus* sp.,) found dominantly in September 2024; Emperors (*Lethrinus* sp.,) in September 2024; and Shrimp (*Penaeus* sp.,) in September 2024. Species commonly recorded includes *Metapenaeus* sp., *Parupeneus* sp., *Scarus* sp., etc.

- Dominant species Portunus sp., Lethrinus sp., Penaeus sp., Meytapenaeus sp.,
- Maximum catch recorded September 2024
- Minimum catch recorded June 2024

### Vellapatti

Total landing was recorded as 175239 Kg. Maximum landing was recorded in September 2024 with about 34302 kg and minimum in June 2024 with about 24004 kg. Species dominantly recorded varied according to the season – Crustaceans – crab (*Portunus pelagicus.*, and *Portunus sanguinolentus.*,) dominantly found in September and August 2024; and Emperors (*Lethrinus* sp., and *Lutjanus* sp.,) found in July and April 2024. Species commonly observed includes *Ablennes hians, Sepiella* sp., *Carangoides* sp. etc.

- Dominant species -Portunus pelagicus., Portunus sanguinolentus., Lethrinus sp.
- Maximum catch recorded September 2024
- Minimum catch recorded June 2024

### Tharuvaikulam

Total landing was recorded as 407658 Kg. Maximum landing was recorded in July 2024 with about 78437 kg and minimum in May 2024 with about 52102 kg. Species dominantly observed varied according to the season – Emperors (*Lethrinus* sp.) dominantly observed in July 2024 and Needle fish (*Stronglyura leiura*) in August 2024. Species commonly recorded includes – *Tylosurus* sp., *Thunnus thynnus*, *Sphyraena barracuda*, *Carangoides* sp., etc.

- Dominant species Lethrinus sp., Strongylura leiura, Tylosurus sp., Thunnus thynnus, Sphyraena barracuda etc..
- Maximum catch recorded July 2024
- Minimum catch recorded May 2024

### **Pattinamaruthoor**

Total landing was recorded as 18049 Kg. Maximum landing was recorded in September 2024 with about 4706 kg and minimum in June 2024 with about 1734 kg. Species dominantly recorded varied according to the season – includes Crustaceans - crabs (*Portunus pelagicus.*, and *Portunus sanguinolentus.*,) dominantly recorded in September and August 2024 followed by Emperors (*Lethrinus* sp.,) in May 2024. Species commonly observed includes – *Tylosurus* sp., *Leiognathus* sp., *Sepiella* sp., *Hemiramphus far*, *Carangoides* sp., etc.

- Dominant species Portunus pelagicus., Portunus sanguinolentus, Lethrinus sp., Tylosurus sp.
- Maximum catch recorded September 2024
- Minimum catch recorded June 2024

### Vaipar

Total landing was recorded as 439146 Kg. Maximum landing was recorded in April 2024 with about 82604 kg and minimum in June 2024 with about 63779 kg. Species dominantly observed varied according to the season – fin fishes include Barracuda (*Sphyraena* sp.,) dominantly found in July 2024; Indian mackerel (*Rastrelliger kanagurta*) in September 2024; and Sardine (*Sardinella sp.*) in July 2024. Species commonly found includes – *Lethrinus* sp., *Tylosurus* sp., *Scomberomorus* sp., etc.

- Dominant species Sphyraena sp., Rastrelliger kanagurta., Sardinella sp., etc.
- Maximum catch recorded April 2024
- Minimum catch recorded June 2024

### **Sippikulam**

Total landing was recorded as 394101 Kg. Maximum landing was recorded in September 2024 with about 71940 kg and minimum in June 2024 with about 55210 kg. Species dominantly found varied according to the season – fin fishes (*Sardinella* sp.,) dominantly recorded in August 2024; Indian mackerel (*Rastrelliger kanagurta*) in September 2024; and Trevally (*Carangoides* sp.,) in August 2024. Species commonly observed includes – *Tylosurus* sp., *Strongylura* sp., *Sphyraena* sp., *Scomberomorous* sp., *Lethrinus* sp., etc.

- Dominant species *Sardinella* sp., *Rastrelliger kanagurta, Carangoides* sp., *Tylosurus* sp., etc.
- Maximum catch recorded September 2024
- Minimum catch recorded June 2024

### Periyasamypuram

Total landing was recorded as 37198 Kg. Maximum landing was recorded in September 2024 with about 8925 kg and minimum in June 2024 with about 3721 kg. Species dominantly recorded varied according to the season – Crustaceans (*Portunus* sp.) were dominantly recorded in September 2024; Cephalopods – Squids (*Sepiella* sp.,) in September 2024; and *Uroteuthis sp.* in August 2024. Species commonly observed includes – *Metapenaeus* sp., *Doryteuthis* sp., *Charybdis natator*, etc.

- Dominant species *Portunus* sp., *Sepiella* sp., *Uroteuthis* sp., *Metapenaeus* sp. and *Doryteuthis* sp., etc.
- Maximum catch recorded September 2024
- Minimum catch recorded June 2024

### Vembar

Total landing was recorded as 227634 Kg. Maximum landing was recorded in September 2024 with about 54407 kg and minimum in June 2024 with about 19177 kg. Species dominantly observed varied according to the season – Fin fishes Emperors (*Lethrinus* sp.,), were dominantly found in September 2024; Barracuda (*Sphyraena barracuda*) in September 2024; and Jacks (*Caranx* sp.) also in September 2024. Species commonly observed includes - *Sardinella* sp., *Upeneus* sp., *Rastrelliger kanagurta*, etc.

- Dominant species Lethrinus sp., Caranx sp., Rastrelliger kanagurta sp., Saurida tumbil., etc.
- Maximum catch recorded September 2024
- Minimum catch recorded June 2024

The major dominant fishery resources and the peak landing month in the 10 landing areas are given in Table 6.

. Table 6: Dominant fishery resources and maximum catch month/s in the 10 landing areas of Tuticorin coast during April 2024 - September 2024

| Landing areas    | Dominant fishery resources                      | Peak season / Month |
|------------------|---|---------------------|
|                  | Jacks (Caranx sp.,)                             | April 2024          |
| Thirocouram      | Unicorn leatherjacket (Aluterus monoceros )     | April 2024          |
| Thirespuram      | Emperors (Lethrinus sp.,)                       | July 2024           |
|                  | Frigate mackerel (Auxis thazard)                | April 2024          |
|                  | Crustaceans - crab ( <i>Portunus</i> sp.)       | September 2024      |
| Mottaigonuram    | Shrimp (Penaeus sp.,)                           | April 2024          |
| Mottaigopuram    | Shrimp (Metapenaeus sp.,)                       | August 2024         |
|                  | Emperors (Lethrinus sp.,)                       | September 2024      |
|                  | Crustaceans - crab ( <i>Portunus</i> sp.)       | September 2024      |
| Ciluvainatti     | Emperors (Lethrinus sp.,)                       | September 2024      |
| Siluvaipatti     | Shrimp (Penaeus sp.,)                           | September 2024      |
|                  | Shrimp (Metapenaeus sp.,)                       | April 2024          |
|                  | Crustaceans - crab (Portunus pelagicus)         | September 2024      |
| Vollanatti       | Crustaceans - crab (Portunus sanguinolentus)    | August 2024         |
| Vellapatti       | Emperors (Lethrinus sp.,)                       | July 2024           |
|                  | Emperors (Lutjanus sp.,)                        | April 2024          |
|                  | Emperors (Lethrinus sp.,)                       | July 2024           |
| Tharuvaikulam    | Needlefish (Strongylura leiura)                 | August 2024         |
| IIIaiuvaikuiaiii | Needlefish (Tylosurus sp.,)                     | August 2024         |
|                  | Atlantic bluefin tuna (Thunnus thynnus)         | September 2024      |
|                  | Crustaceans - crabs (Portunus pelagicus.,)      | September 2024      |
| Pattinamaruthoor | Crustaceans - crabs (Portunus sanguinolentus.,) | August 2024         |
|                  | Emperors (Lethrinus sp.,)                       | May 2024            |

|                 | Needlefish (Tylosurus sp.,)              | September 2024 |
|-----------------|--|----------------|
|                 | Barracudas (Sphyraena sp.,)              | July 2024      |
| Mainan          | Indian mackerel (Rastrelliger kanagurta) | September 2024 |
| Vaipar          | Sardine (Sardinella sp.)                 | July 2024      |
|                 | Emperors (Lethrinus sp.,)                | August 2024    |
|                 | Sardine (Sardinella sp.)                 | August 2024    |
| Cinnikulam      | Indian mackerel (Rastrelliger kanagurta) | September 2024 |
| Sippikulam      | Trevally (Carangoides sp.)               | August 2024    |
|                 | Needlefish (Tylosurus sp.)               | September 2024 |
| Dorivacamynuram | Crustaceans (Portunus sp.)               | September 2024 |
| Periyasamypuram | Cephalopods (Sepiella sp.)               | September 2024 |
|                 | Cephalopods ( <i>Uroteuthis</i> sp.)     | August 2024    |
| Vembar          | Crustaceans (Metap <i>enaeus</i> sp.)    | July 2024      |
| Venibai         | Emperors (Lethrinus sp.,)                | September 2024 |

### 4. Remarks

The marine environmental monitoring carried out during the period from April 2024 to September 2024 recorded no impact on the coastal ecology of Pattinamarudur including the coral reefs, seagrasses, associated fish population and other biological resources like macro- and meiobenthos and plankton. Also, there were no notable impacts on the physical and chemical properties and heavy metal concentrations of the marine water and sediment except for the seasonal variations. The water temperature increased during April and May 2024. The elevated prolonged sea surface temperature due to climate change caused moderate to severe coral bleaching, however most of the bleached coral colonies recovered due to fall of temperature level in June mainly due to rainfall and the changing climatic condition. The seawater became turbulent with high turbidity during April to July and so underwater visibility was not good. Fishing activity was almost normal except during strong wind days and deviation in fish landing data from the baseline can be due to fishing effort days, seasonal changes, and fishing pattern. The monitoring of cage culture of fish shows good fish population within and outside the cages, which indicates that the environment is healthy and conducive for marine organisms.

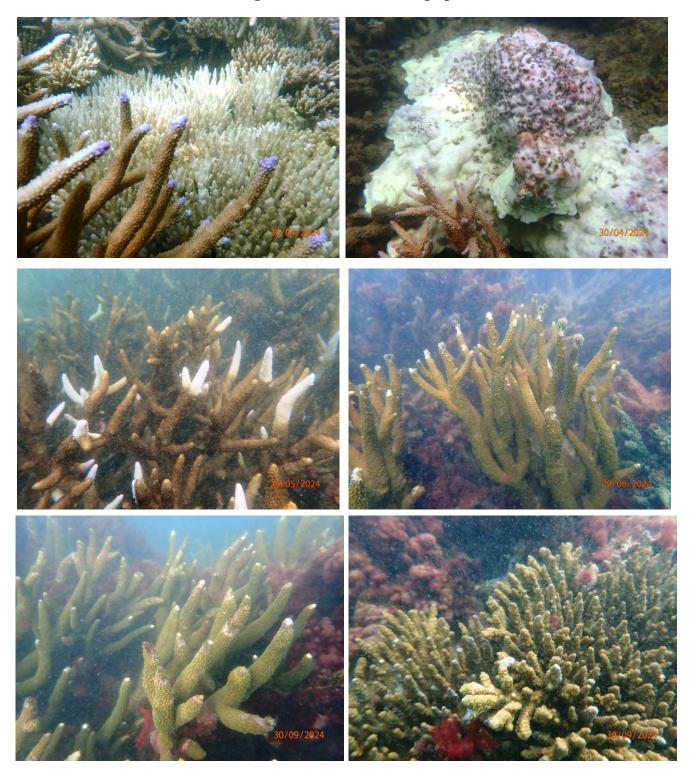
### 5. References

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6. Photos

Status of seagrass, corals and fish population





# Fishing Landing & Catch Monitoring

# Therespuram



# Mottaigopuram



# Siluvaipatti



# Vellapatti



# Tharuvaikulam



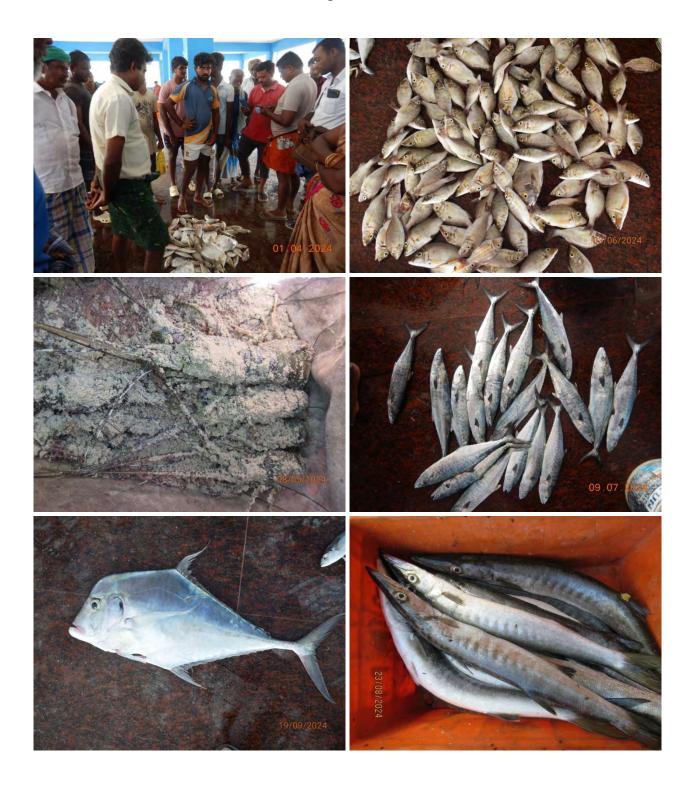
## Pattinamaruthoor



# Sippikulam



# Vaipar



# Periyasamypuram



# Vembar



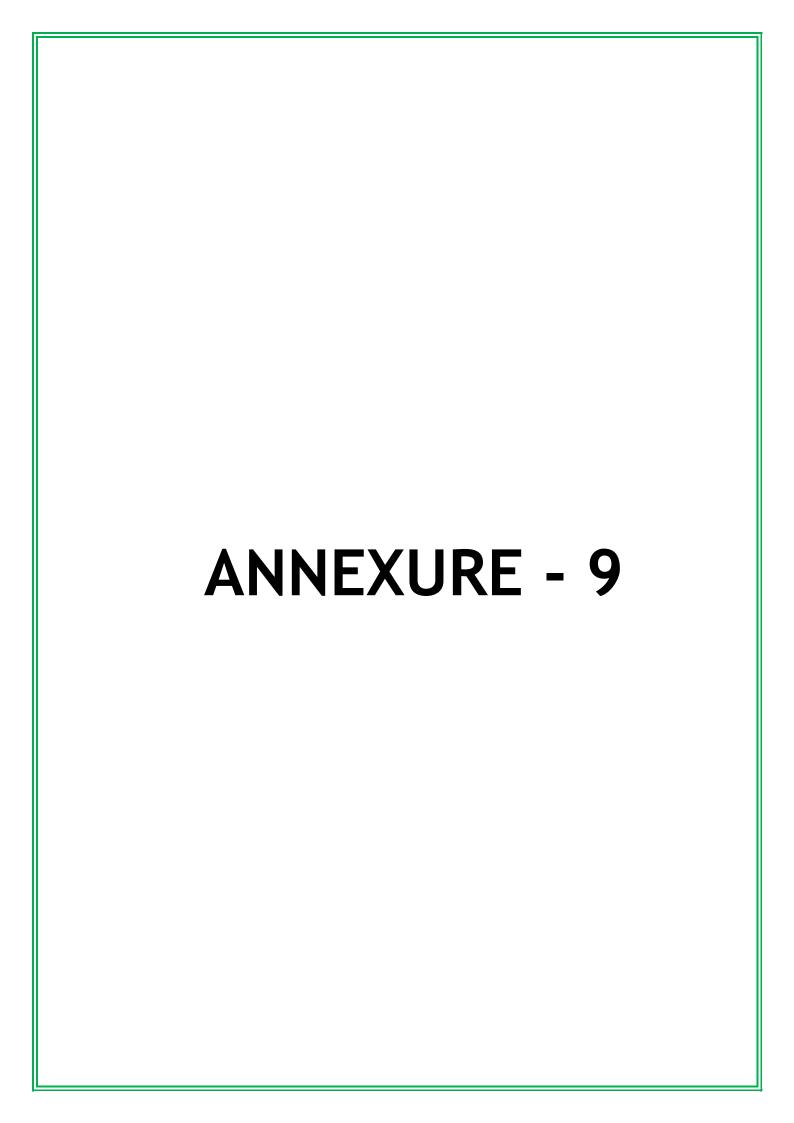




# COMPLIANCE TO THE CONDITIONS LAID BY MoEF VIDE OFFICE MEMORANDUM No.F.No.J-13012 /8/2009-IA.II(T) dated 11.11.2020

Period: April 2024 to September 2024

| CI NI= | CONDITIONS STIDIU ATED BY MORE  | COMPLIANCE   |
|--------|---|--|
| Sl.No. | CONDITIONS STIPULATED BY MoEF   | Our Boiler is Designed with a blend of 50:50   |
| a)     | Details regarding change in source (Location of the source, Proposed Quantity, Distance from the power plant and mode of transportation), Quality (Ash, Sulphur, Moisture Content and Calorific Value) shall be informed to the Ministry and its Concerned Regional Office .The Quantity of coal transported from each source along with the mode of transportation shall be submitted as part of EC Compliance Report.   | imported and Indian Coal. We are using imported coal in our plant from Indonesia and we are transporting the coal from port/Melavittan Station to plant by using trucks.  The quantity of coal transported for the period from April'24 to September'24 is as mentioned below;  Total - 1984203 MT Imported Coal (Indonesia) - 1984203 MT Indian Coal - Nil  |
| b)     | The Applicable flue gas emissions standards for particulate matter, Sulphur Dioxide, Oxides of Nitrogen and Mercury Shall be complied in line with Ministry's Notification Vide S.O 3305 (E) dated 7.12.2015 and subsequent emissions. A Progress of implementation and its compliance shall be submitted as part of Compliance Report.   | Continuous Stack emission and ambient air quality monitoring are being carried out and records are being maintained.  The monitored data for the period of April'24 to September'24 is enclosed as Annexure - 1. The results are well within the prescribed norms. FGD Feasibility Study Completed. We have floated Tenders and awaiting Bids for Appointment of Consulting agency for Tender Preparation, Bid Evaluation, and Engineering Support during Execution. |
| c)     | Ash Content in the coal and coal Transportation is governed by the Ministry's Notification Vide S.O 1561(E) dated 21.5.2020.As far as possible, Coal Transportation shall be done by rail/conveyor or other eco-friendly modes. However, road transportation is allowed with tarpaulin covered trucks till the railway / conveyor belt infrastructure is made available. A Progress (Physical and Financial) of rail connectivity from nearest railway siding or conveyor connectivity to the power plant shall be submitted in the EC Compliance Report. | At present Coal is being transported to our plant through trucks which are fully covered with tarpaulin.  Railway line laying work is under Progress by Southern Railways close to our Plant.  Engineering Scale Plan for "Takeoff line" to ou Plant submitted to Southern Railways fo Approval.   |
| d)     | Additional ash pond is not allowed due to increase in ash content in the raw coal as against the ash pond permitted in the Environment Clearance. The 100% Fly ash utilization is to be achieved within four years in line with fly ash notification dated 14.09.1999, 27.8.2003,03.11.2009 & 25.01.2016 and amended time to time or extant regulation on fly ash utilization.  | 100 % Fly Ash utilization is being achieved.   |
| e)     | In case of exceptional circumstances project proponents may approach the ministry for seeking permission to use an emergency ash pond with cogent reasons if any.   | Noted.   |
| f)     | The Details Regarding monthly generation, utilization and disposal of fly ash (including bottom ash) shall be submitted to the ministry and its regional office   | Complied. Attached as Annexure -09   |



Period: April'2024 to September'2024

# FLY ASH GENERATION & UTTILISATION DETAILS

Name of the Industry: Moxie Power Generation Limited,

2 X 600 MW Coal based Thermal Power Plant,

Thoothukudi District - 628 105.

|                                     | TOTAL ASH                      | TOTAL ASH GENERATION              |                         | USAGE  | USAGE OF FLY ASH             |                               | USAG              | USAGE OF BOTTOM ASH          | SH                        | TOTAL                               | 124 14101            |
|-------------------------------------|--------------------------------|-----------------------------------|-------------------------|--------|------------------------------|-------------------------------|-------------------|------------------------------|---------------------------|-------------------------------------|----------------------|
| FOR THE YEAR                        | FLY ASH<br>GENERATION<br>(LMT) | BOTTOM ASH<br>GENERATION<br>(LMT) | TOTAL ASH<br>GENERATION | CEMENT | BRICK<br>INDUSTRIES<br>(LMT) | TOTAL FLY ASH<br>UTTILISATION | LANDFILL<br>(LMT) | BRICK<br>INDUSTRIES<br>(LMT) | CEMENT<br>PLANTS<br>(LMT) | BOTTOM ASH<br>UTTILISATION<br>(LMT) | UTTLISATION<br>(LMT) |
| APRIL-2024                          | 0.1401226                      | 0.02371075                        | 0.1638334               |        | 0.1401226                    | 0.1401226                     | 0.0237107         |                              |                           | 0.0237107                           | 0.1638333            |
| MAY-2024                            | 0.1364425                      | 0.0232                            | 0.1596425               | ·      | 0.1364425                    | 0.1364425                     | 0.0232            |                              |                           | 0.0232                              | 0.1596425            |
| JUNE-2024                           | 0.1042715                      | 0.0147                            | 0.1189715               | ì      | 0.1042715                    | 0.1042715                     | 0.0147            |                              |                           | 0.0147                              | 0.1189715            |
| JULY-2024                           | 0.0726516                      | 0.01200                           | 0.08465                 | i      | 0.0726516                    | 0.0726516                     | 0.01200           |                              | i                         | 0.01200                             | 0.08465              |
| August-2024                         | 0.1116934                      | 0.0197318                         | 0.1314252               |        | 0.1116934                    | 0.1116934                     | 0.0197318         |                              |                           | 0.0197318                           | 0.1314252            |
| September-2024                      | 0.1033195                      | 0.0232659                         | 0.1265854               | •      | 0.1033195                    | 0.1033195                     | 0.0232659         | ,                            |                           | 0.0232659                           | 0.1265854            |
| * 100% Utilization of Ash achieved. | of Ash achieve                 | ġ.                                |                         |        |                              |                               |                   |                              |                           |                                     |                      |



Station Head