Ramagundam Fertilizers And Chemicals Limited
रामागुंडम फर्टिलाइजर्स एण्ड केमिकल्स लिमिटेड
रामागुंडम फर्टिलाइजर्स एण्ड केमिकल्स लिमिटेड
(A Joint Venture Company)
Site Office : Fertilizers City, Ramagundam - 505 210, Dist. Peddapalli, Telangana.
Website: www.rfcl.co.in, E-mail: rfcl.ramagundam@rfcl.co.in
GSTIN : 36AAHCR2335P1ZY, CIN : U24100DL2015PLC276753

RFCL/TS/EMC/FY 25-26/11/4633 Dated: 26.06.2025

To,
Director,
Regional Office,
Ministry of Environment, Forest and Climate Change,
1st and 2nd Floor, HEPC Building,
No:34, Cathedral Garden Road,
Nungambakkam,
Chennai-600034.

Sub: Submission of Half Yearly Environmental Clearance (EC) Compliance Report for RFCL Ramagundam, Telangana for the period of October'24- March'25.
Ref: F No. - J-11011/371/2013-IA II (I) dated 16th October, 2015.

Respected Sir,

Half-yearly Environmental Clearance Compliance report along with the Environment monitoring data for the period of October'24- March'25 is enclosed herewith.

Trust that you find the above information in order.

Yours Sincerely

26/6/2025
S.N. SAHA
DGM (Production)
Ramagundam Fertilizers And Chemicals Limited
Ramagundam, Dist. Peddapalli (T.S) -505 210,

Enclosure: As above.

Copy to:
- → Joint Chief Environmental Engineer (TSPCB), Hyderabad, Telangana.
- → Zonal Office, CPCB, Bengaluru, Karnataka.
- → Environmental Engineer, Ramagundam, Telangana.
- → Chief Conservator of Forests (C), Regional Office (WZ), Bhopal-462016.
- → Chief Conservator of Forests (C), Regional Office (EZ), Bhubneswar-751023.
- → Sub Office, Ministry of Environment Forest and Climate Change, Hyderabad-500004

RAMAGUNDAM FERTILIZERS AND CHEMICALS LIMITED, RAMAGUNDAM

Ammonia (2200 MTPD) / Urea (3850 MTPD) Fertilizer Complex

Sub: Six monthly compliance report of Environmental Clearance. (Period : October' 2024-March' 2025)

Ref: MoEF&CC letter No: J-11011/371/2013-IA II (I) dated 16th October, 2015.

A. SPECIFIC CONDITIONS		
S.NO	DESCRIPTION	COMPLIANCE STATUS
i)	The gaseous emissions (SO_2, NOx, NH_3, HC and Urea Dust) and Particulate matter from various process units shall conform to the norms prescribed by CPCB/ SPCB from time to time. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency. Stack emissions shall be monitored continuously (24 x 7) as per CPCB guideline.	The Particulate matter and gaseous emissions from various process units conform to the norms prescribed by CPCB/ SPCB from time to time. Process stack emissions are being monitored continuously as per the CPCB guidelines. Details of Process Emissions (Stack Emission) are enclosed. (Doc No.: RFCL-TS-EMC-Report-05)
ii)	Adequate stack height shall be provided to Ammonia Plant Reformer, Heat Recovery Steam Generator (HRSG), NG/RLNG fired Gas Turbine and Prilling Tower. Low NOx burners shall be provided to control NOx emissions.	Stack heights of Ammonia Plant Primary Reformer, Heat Recovery Steam Generator (HRSG), Utility Boiler & NG/RLNG fired Gas Turbine and Prilling Tower are as per the CPCB guidelines. Low NOx burners have been installed in Primary reformer, HRSG & Utility Boiler to mitigate the NOx emission.
iii)	In Urea Plant, particulate emissions shall not exceed 50 mg/Nm^3. Monitoring of Prilling Tower shall be carried out as per CPCB guidelines.	Urea dust from the Prilling tower remains well below the prescribed limit as specified by CPCB (less than 50 mg/Nm^3) .
iv)	As proposed, Fertilizer plant shall be designed for Specific Energy Consumption of 5.0 Gcal/MT of Urea.	Urea Plant has been designed with Specific Energy Consumption of < 5.0 GCal/MT of Urea.
v)	Ambient air quality data shall be collected as per NAAQES standards notified by the Ministry vide G.S.R No. 826(E) dated 16th September, 2009 . The levels of PM_{10} (Urea Dust), SO2, NOx, Ammonia, Ozone and HC shall be monitored in the ambient air and displayed at a convenient location near the main gate of the company and at important public places. The Company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to Regional Office of MoEF, the respective Zonal office of CPCB and the Telangana State Pollution Control Board (TSPCB).	Continuous Ambient Air quality monitoring stations have been provided at three locations within the factory premises. Six Monthly Environmental Compliance report along with results of monitored data has been uploaded in the company website and same will be updated periodically. PM10, PM2.5, Ammonia, SO2, Ozone, HC & NOx readings are being displayed at Factory Main Gate, Material Entry Gate and Technical Building Entrance. It is also connected to the TGPCB website. Environmental reports are being submitted to Regional office, Ramagundam on monthly basis. Details of Ambient Air quality are enclosed. (Doc No.: RFCL-TS-EMC-Report-04)
vi)	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/ materials, multi cyclone separator and water sprinkling system. Fugitive emissions in the work zone environment, product, raw material storage area etc shall be regularly monitored. The emissions should conform to the limits stipulated by the TSPCB.	Ammonia & Urea plants are Natural Gas based plants. For both feed & fuel, Natural gas is used. Urea dust collection and recovery systems (De-dusting System) are inline to control dust emission during product handling. Work place monitoring is carried out at regular interval, which helps to maintain emission level within the prescribed limit. Gas sensors are provided at potential points to monitor and control the fugitive emissions.
vii)	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG set to mitigate the noise pollution.	Stack height of DG set is as per CPCB standards. Acoustic enclosure has been provided to the DG set to mitigate the noise pollution.
viii)	Fresh water requirement from Yellampalli Barrage should not exceed 30500M^3/day. Prior permission shall be obtained from Competent Authority and a copy submitted to the Ministry's Regional office at Bangalore. Efforts shall be made to bring down the water consumption upto 6 m^3/MT urea production or as per CPCB guideline.	Fresh water drawn is below 30500 m^3/day from Yellampalli Barrage. Continuous efforts are being done for water conservation. Process Condensate & Turbine Condensate are reused in Process.

S.NO	DESCRIPTION	COMPLIANCE STATUS
ix)	Industrial wastewater shall be treated in the ETP. As proposed, Urea plant process condensate shall be treated in a deep hydrolyser followed by stripping. Ammonia Plant process condensate(APC) shall be stripped with steam followed by activated carbon and demineralisation. Treated condensate shall be recycled/reused in the process. Utilities waste water shall be treated in the ETP and treated effluent shall be recycled/reused. Treated effluent shall be monitored for Ammonical Nitrogen, Nitrate, Fluoride, pH etc. No process effluent shall be discharged in and around the Project Site. Sewage shall be treated in STP.	• Urea plant process condensate is treated in a deep hydrolyser followed by stripping. • Ammonia Plant process condensate is stripped with steam followed by activated carbon. Total process condensate is converted into DM water and reused in the process. • Utility waste water is treated in ETP and treated water collected in guard ponds (02 Nos). • Online Monitoring system has been provided for the treated effluent parameters Ammoniacal Nitrogen, Flow & pH and same has been connected to the CPCB & TGPCB servers. Apart that BOD,COD &TSS also connected to the TGPCB server as per the directions from Task force. Details of Treated Effluent water Quality are enclosed. (Doc No.: RFCL-TS-EMC-Report 02) • Sewage generated inside the plant premises being treated in Plant STP. • Sewage Treatment Plant (STP) with a capacity of 240 KLD * 2 nos for the township was commissioned in Feb'23 and treated water is being utilized for development of Green belt area. Details of STP outlet Quality are enclosed. (Doc No.: RFCL-TS-EMC-Report-06)
x)	**The treated effluent (not more than 250 M^3/Hr) shall be discharged in to the River Godavari after conforming to the standards prescribed for the effluent discharge and after obtaining permission from the State Pollution Control Board/CPCB.** **Treated effluent shall be passed through guard pond/holding pond before discharging outside the plant premises and Automatic/ online monitoring system (24 x 7 monitoring devices) for flow and relevant pollutants (i.e. pH, Ammonical Nitrogen, nitrate nitrogen etc) shall be provided with high level alarm system.** **The data to be made available to the respective SPCB and in the Company's website.**	The treated effluent conforms to the specified standards before discharging to River Godavari. Consent For Operation received from TSPCB dated 07.06.2021 (Consent Order No: 21053004209). Automatic/ online monitoring system (24 x 7) for flow and relevant pollutants (pH, Ammonical Nitrogen etc) has been provided with high level alarm system and same is connected to TGPCB & CPCB server. Apart that BOD,COD & TSS also connected to the TGPCB server as per the directions from Task force team. Treated effluent discharge to River Godavari always remains less than 250 m^3/hr.
xi)	**Regular monitoring of ground water by installing piezometric wells around the guard ponds and sludge disposal sites shall be periodically monitored and reports shall be submitted to the concerned Regional office of the Ministry, CPCB and SPCB.**	Ground water quality is being monitored at eight different locations around the plant site & near by villages. Analysis reports are being submitted to RO, Ramagundam on monthly basis. Details of Ground water quality are enclosed. (Doc No.: RFCL-TS-EMC-Report-03)
xii)	**The company shall construct the garland drain all around the project site to prevent runoff of any chemical containing waste in to the nearby waterbodies.** **Effluent shall be properly treated and treated effluent shall conform to CPCB standards.**	Garland drains have been provided around project site. Storm water drains, effluent drains & oily water collection pits are constructed separately to avoid mixing of effluent with storm water.
xiii)	**The Company shall obtain Authorisation for Collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-Boundary Movement) Rules,2008 and amended as on date for management of Hazardous wastes.** **Measures shall be taken for fire fighting facilities in case of emergencies.**	Hazardous Waste Authorisation received from TSPCB (HWA No: 210523004209) dated 07.06.2021. Adequate fire-fighting equipment and Fire water network are in place. There is a separate Fire & Safety department with well trained and experienced professionals to handle any such untoward situation.
xiv)	**Spent Catalysts and used oil shall be sold to authorised recyclers/re-processors only.**	Being Complied.
xv)	**The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules 1989 as amended time to time .** **All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA) 1989.**	RFCL strictly complies with the rules and regulations regarding Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules 1989 as amended time to time and transportation of Spent catalyst/ Used oil as per the Motor Vehicle Act (MVA) 1989.

S.NO	DESCRIPTION	COMPLIANCE STATUS
xvi)	Remote Operated valve placed on NH3 line to avoid leakage/ equipment check shall be performed to ensure that remote operated valve (ROV) is all time functional.	Remote Operated valves are placed on NH3 line to avoid leakage. Performance of the remote operated valve (ROV) is checked periodically for its all time functionality.
xvii)	The company shall strictly follow all the recommendations mentioned in the Chapter on Corporate Responsibility for Environment Protection (CREP).	Being Complied.
xviii)	All the commitments made during the Public Hearing / Public Consultation meeting held on 11th March, 2015 shall be satisfactorily implemented and adequate budget provisions shall be made accordingly.	Being Complied, as applicable.
xix)	Sufficient funds shall be earmarked towards the Enterprise Social Commitment (ESC) based on local needs and action plan with financial & physical breakup/ details shall be prepared & submitted to the Ministry's Regional Office at Bhopal. Implementation of such program shall be ensured in a time bound manner.	Noted and complied with.
xx)	Occupational health surveillance of the workers should be done on a regular basis and records maintained as per the Factories Act.	Occupational health surveillance system is in place and records are being maintained as per the Factory Act.
xxi)	As proposed, green belt over 46 Hectares area shall be developed within plant premises with at least 10 meter wide green belt on all sides along the periphery of the Project Area in downward direction and along roadsides etc. Selection of plant species shall be as per CPCB guidelines in consultation with the DFO.	Green Belt Development under progress in a phased manner.
xxii)	Provision shall be made for the housing of the Construction labour within the site with all necessary infrastructure & facilities. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	Complied during, Construction phase.
B. GENERAL CONDITIONS		
(i)	**The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and any other statutory authority**	All the conditions stipulated in CFE & CFO issued by TGPCB as well as conditions imposed by state authorities are complied with.
(ii)	**No further expansion or modification in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to accesses the adequacy of conditions imposed and to add additional environmental protection measures required, if any.**	Noted.
(iii)	**The locations of ambient air quality monitoring stations shall be decided in consultation with the SPCB and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.**	Three Continuous Ambient Air Quality Monitoring Stations (AAQMS) are installed one each in the upwind, downwind and crosswind directions at the following locations. 1. Technical Building 2. Material Gate 3. Fire Water Pump House All these monitoring stations are in operation. Real time data of Ambient air quality being transmitted to TGPCB website.

S.NO	DESCRIPTION	COMPLIANCE STATUS
(iv)	The overall noise level in and around the plant area shall be kept within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise level shall conform to Environmental (Protection) Act , 1986 Rules 1989 viz. 75 dBA (day time) and 70 dBA (night time).	The selection of plant equipment have been done with the specifications of low noise levels. Adequate measure are being followed to control noise levels in the work environment and keep the noise levels below the prescribed limit. Persons working near the noisy machines like Ammonia plant compressor area, Urea Plant compressor area, GT etc. have been provided with well designed ear muffs / plugs. Emergency DG sets are equipped with acoustic enclosure. The ambient noise levels are being monitored at different locations and strictly conforming to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989. Details of Ambient Noise levels are enclosed. (Doc No.: RFCL-TS-EMC-Report-01)
(v)	The company shall harvest rainwater from the roof-tops of buildings and stormwater drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.	RFCL has adopted roof top rain water harvesting measures to harvest the run off water to recharge the ground water.
(vi)	During transfer of materials, Spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic waste water and storm water drains.	Garland drains have been constructed to avoid mixing of accidental spillages with domestic waste and storm drains.
(vii)	Usage of Personnel Protection Equipment by all employees/ workers shall be ensured	Necessary PPEs are made available for the plant personnel and being used.
(viii)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.	Training being provided for employees on safety and health aspects of chemical handling on regular basis. Periodic medical check-up of the working staff is being carried out.
(ix)	The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.	Being Complied, as applicable.
(x)	The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.	Noted.
(xi)	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Being complied.
(xii)	A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be setup to carry out the Environmental Management and Monitoring functions.	Environmental Management Cell equipped with full fledged laboratory facilities to carry out the Environmental Management and Monitoring functions is in place and operational.
(xiii)	The company shall earmark sufficient funds for recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	Noted and complied with. The funds earmarked for the environmental protection measures are not allowed to divert for other purpose. Total Expenditure incurred for Envorinmental management during FY 2024-25 is Rs. 10,38,85,860. (Doc No: RFCL-TS-EMC-Exp-04)

S.NO	DESCRIPTION	COMPLIANCE STATUS
(xiv)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.	Complied.
(xv)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the State Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.	Being complied.
(xvi)	The environmental statement for each financial year ending 31" March in Form-`V' as is mandated shall be submitted to the WB 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 environmental clearance conditions and shall also be sent to the Bhubaneshwar Regional Offices of MoEF by e-mail.	The environmental statement for the financial year ending 31st March 2025 in Form-'V' shall be submitted on or before 30.09.2025.
(xvii)	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	Complied.
xviii)	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project	Commercial Operation of Urea has been started on 22.03.2021 & same as intimated to the Regional Office and the Ministry.
8.0	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
9.0	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner will implement these conditions.	Noted
10.0	The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Wastes (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Air/ Water and HWA Consent order obtained on 07.06.2021 and valid for a period up to 31st March 2026. Public Liability Insurance policy is renewed and valid till 09.02.2026.

Ambient Noise Monitoring Report

Doc No: RFCL-TS-EMC-Report-01

Month : October'2024
Ambient Noise Monitored by : Environmental Monitoring Cell (EMC)

S. No	Location	Noise level- dB (A)			
		03.10.2024	08.10.2024	18.10.2024	21.10.2024
		Morning shift	Afternoon shift	Night shift	Morning shift
1	Technical building	56	59	52	51
2	Cooling Towers	73	70	69	68
3	Main Stores	45	50	50	48
4	UB/HRSG (near Boundary Wall)	69	65	55	57
5	Captive Power Plant (CPP)	70	71	60	58
6	Urea plant	69	68	58	59
7	Bagging building	63	57	50	48
8	IA/PA plant (Near wall side)	68	74	60	60
9	Near DG set	65	58	52	52
10	Raw water pump house	63	68	60	62

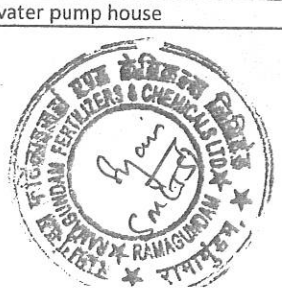
Note: 1. Noise level limits (as per CFO) : Day Time (6AM -10PM) - 75 dB (A)
: Night Time (10PM -6AM) - 70 dB (A)
2. Morning shift Time : 6AM - 2PM
3. Afternoon shift Time : 2PM - 10PM
4. Night shift Time : 10PM - 6AM

Month : November'2024
Ambient Noise Monitored by : Environmental Monitoring Cell (EMC)

S. No	Location	Noise level- dB (A)			
		05.11.2024	14.11.2024	20.11.2024	30.11.2024
		Morning shift	Afternoon shift	Night shift	Morning shift
1	Technical building	59	56	57	56
2	Cooling Towers	70	72	68	74
3	Main Stores	50	48	50	52
4	UB/HRSG (near Boundary Wall)	65	68	66	72
5	Capative Power Plant (CPP)	71	72	69	71
6	Urea plant	57	69	68	69
7	Bagging building	48	53	54	61
8	IA/PA plant (Near wall side)	72	71	69	72
9	Near DG set	58	56	57	58
10	Raw water pump house	62	61	61	61

Month : December'2024
Ambient Noise Monitored by : Environmental Monitoring Cell (EMC)

S. No	Location	Noise level- dB (A)			
		03.12.2024	14.12.2024	20.12.2024	30.12.2024
		Morning shift	Afternoon shift	Night shift	Morning shift
1	Technical building	57	57	50	56
2	Cooling Towers	72	73	69	71
3	Main Stores	48	51	48	52
4	UB/HRSG (near Boundary Wall)	72	73	68	73
5	Capative Power Plant (CPP)	73	72	69	71
6	Urea plant	70	69	67	70
7	Bagging building	62	60	59	62
8	IA/PA plant (Near wall side)	70	70	69	70
9	Near DG set	60	61	59	60
10	Raw water pump house	64	63	63	65



Month : January'2025
Ambient Noise Monitored by : Environmental Monitoring Cell (EMC)

S. No	Location	Noise level- dB (A)			
		04.01.2025	15.01.2025	21.01.2025	29.01.2025
		Morning shift	Afternoon shift	Night shift	Morning shift
1	Technical building	59	60	59	61
2	Cooling Towers	66	67	68	67
3	Main Stores	53	52	51	52
4	UB/HRSG (near Boundary Wall)	72	71	69	72
5	Capative Power Plant (CPP)	73	72	68	71
6	Urea plant	71	72	68	71
7	Bagging building	69	67	65	70
8	IA/PA plant (Near wall side)	72	71	67	70
9	Near DG set	67	68	67	69
10	Raw water pump house	64	65	65	68

Month : February'2025
Ambient Noise Monitored by : Environmental Monitoring Cell (EMC)

S. No	Location	Noise level- dB (A)			
		05.02.2025	11.02.2025	20.02.2025	28.02.2025
		Morning shift	Afternoon shift	Night shift	Morning shift
1	Technical building	61	62	58	59
2	Cooling Towers	66	64	68	70
3	Main Stores	54	54	53	54
4	UB/HRSG (near Boundary Wall)	72	73	67	73
5	Capative Power Plant (CPP)	71	72	69	72
6	Urea plant	70	71	68	71
7	Bagging building	69	67	65	70
8	IA/PA plant (Near wall side)	72	71	67	70
9	Near DG set	67	68	67	69
10	Raw water pump house	64	65	65	68

Month : March'2025
Ambient Noise Monitored by : Environmental Monitoring Cell (EMC)

S. No	Location	Noise level- dB (A)			
		04.03.2025	13.03.2025	22.03.2025	29.03.2025
		Morning shift	Afternoon shift	Night shift	Morning shift
1	Technical building	55	59	56	58
2	Cooling Towers	70	69	68	70
3	Main Stores	50	54	54	55
4	UB/HRSG (near Boundary Wall)	70	73	67	70
5	Capative Power Plant (CPP)	71	72	69	72
6	Urea plant	72	70	68	69
7	Bagging building	67	65	62	68
8	IA/PA plant (Near wall side)	72	73	66	72
9	Near DG set	60	66	67	69
10	Raw water pump house	65	64	63	62

Note: 1. Noise level limits (as per CFO) : Day Time (6AM -10PM) - 75 dB (A)
: Night Time (10PM -6AM) - 70 dB (A)

2. Morning shift Time : 6AM - 2PM
3. Afternoon shift Time : 2PM - 10PM
4. Night shift Time : 10PM - 6AM

Treated Effluent Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-02

Month : October'2024
Nature of Sampling : Treated Effluent Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 07.10.2024

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.56	8.22	8.07	8.03	7.69
2	Ammonical Nitrogen	mg/l as N	< 50	30.01	21.51	22.50	23.66	4.28
3	Free Ammonical Nitrogen	mg/l as N	< 2	0.75	1.83	1.46	1.42	0.13
4	Total kjeldahl Nitrogen	mg/l as N	< 75	45.70	39.01	39.01	49.04	11.14
5	Nitrate nitrogen	mg/l as N	< 10	0.15	0.46	0.46	1.05	2.33
6	Phosphate	mg/l as P	< 5	0.35	0.39	0.32	1.46	0.37
7	Suspended Solids	mg/l	< 100	26.00	30.00	30.00	23.00	30.00
8	BOD	mg/l	< 30	11.50	7.50	7.60	10.80	4.20
9	COD	mg/l	< 250	42.00	32.00	30.00	41.00	18.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 14.10.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.79	7.95	7.76	7.86	7.95
2	Ammonical Nitrogen	mg/l as N	< 50	32.69	23.51	34.12	26.23	5.16
3	Free Ammonical Nitrogen	mg/l as N	< 2	1.14	1.11	1.19	1.05	0.24
4	Total kjeldahl Nitrogen	mg/l as N	< 75	51.27	39.01	51.27	40.12	11.14
5	Nitrate nitrogen	mg/l as N	< 10	0.10	0.30	0.22	0.85	2.47
6	Phosphate	mg/l as P	< 5	0.19	0.38	0.24	1.39	0.76
7	Suspended Solids	mg/l	< 100	34.00	37.00	26.00	17.00	16.00
8	BOD	mg/l	< 30	12.00	8.20	7.10	18.50	3.80
9	COD	mg/l	< 250	43.00	40.00	28.00	81.00	21.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Date of Sample Collection : 21.10.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.94	7.79	7.78	7.86	7.67
2	Ammonical Nitrogen	mg/l as N	< 50	40.28	29.96	28.10	19.28	4.01
3	Free Ammonical Nitrogen	mg/l as N	< 2	1.89	1.05	1.00	0.77	0.12
4	Total kjeldahl Nitrogen	mg/l as N	< 75	53.50	42.35	40.12	31.21	10.03
5	Nitrate nitrogen	mg/l as N	< 10	0.12	0.25	0.24	0.38	1.68
6	Phosphate	mg/l as P	< 5	0.39	0.53	0.20	0.84	0.19
7	Suspended Solids	mg/l	< 100	20.00	30.00	16.00	41.00	2.00
8	BOD	mg/l	< 30	11.30	9.80	9.20	15.20	3.50
9	COD	mg/l	< 250	41.00	30.00	34.00	72.00	18.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 28.10.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.69	7.80	7.60	7.84	7.63
2	Ammonical Nitrogen	mg/l as N	< 50	10.25	30.39	10.17	26.95	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	0.30	1.06	0.25	1.08	<0.01
4	Total kjeldahl Nitrogen	mg/l as N	< 75	20.06	44.58	20.06	41.24	8.92
5	Nitrate nitrogen	mg/l as N	< 10	0.56	0.75	0.56	1.08	2.24
6	Phosphate	mg/l as P	< 5	0.16	0.10	0.19	1.31	<0.10
7	Suspended Solids	mg/l	< 100	12.00	28.00	24.00	35.00	4.00
8	BOD	mg/l	< 30	5.20	6.40	4.50	14.10	4.20
9	COD	mg/l	< 250	22.00	26.00	21.00	65.00	20.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-02

Month : November'2024
Nature of Sampling : Treated Effluent Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 04.11.2024

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	8.02	6.86	6.86	7.96	7.65
2	Ammonical Nitrogen	mg/l as N	< 50	16.30	18.42	22.07	29.24	0.64
3	Free Ammonical Nitrogen	mg/l as N	< 2	0.82	-	-	1.37	0.02
4	Total kjeldahl Nitrogen	mg/l as N	< 75	28.80	29.90	32.10	45.40	4.40
5	Nitrate nitrogen	mg/l as N	< 10	0.18	0.21	0.22	1.01	0.25
6	Phosphate	mg/l as P	< 5	0.16	0.13	0.13	1.64	<0.10
7	Suspended Solids	mg/l	< 100	21.00	20.00	12.00	28.00	5.00
8	BOD	mg/l	< 30	9.10	6.10	4.70	14.50	2.40
9	COD	mg/l	< 250	39.00	24.00	22.00	69.00	12.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 11.11.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.95	7.91	7.77	7.98	7.72
2	Ammonical Nitrogen	mg/l as N	< 50	21.20	16.34	18.20	25.52	1.35
3	Free Ammonical Nitrogen	mg/l as N	< 2	1.00	0.73	0.63	1.28	0.04
4	Total kjeldahl Nitrogen	mg/l as N	< 75	31.00	28.80	29.90	40.00	5.54
5	Nitrate nitrogen	mg/l as N	< 10	0.28	0.28	0.27	1.20	0.46
6	Phosphate	mg/l as P	< 5	0.43	0.20	0.20	1.73	<0.1
7	Suspended Solids	mg/l	< 100	20.00	18.00	16.00	32.00	4.00
8	BOD	mg/l	< 30	7.20	6.50	7.50	13.20	2.10
9	COD	mg/l	< 250	33.00	28.00	38.00	55.00	11.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Date of Sample Collection : 18.11.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.75	8.11	7.90	8.09	7.83
2	Ammonical Nitrogen	mg/l as N	< 50	30.46	30.53	34.26	26.81	<0.1
3	Free Ammonical Nitrogen	mg/l as N	< 2	0.99	1.98	1.54	1.74	<0.01
4	Total kjeldahl Nitrogen	mg/l as N	< 75	43.20	43.20	47.60	38.80	3.30
5	Nitrate nitrogen	mg/l as N	< 10	0.13	0.40	0.38	1.50	0.47
6	Phosphate	mg/l as P	< 5	0.26	0.25	0.24	2.23	0.15
7	Suspended Solids	mg/l	< 100	20.00	30.00	29.00	20.00	3.00
8	BOD	mg/l	< 30	6.80	7.20	8.00	14.20	3.80
9	COD	mg/l	< 250	26.00	30.00	39.00	56.00	21.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 25.11.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	6.82	6.82	7.60	8.08	7.89
2	Ammonical Nitrogen	mg/l as N	< 50	26.38	26.38	19.92	20.64	<0.1
3	Free Ammonical Nitrogen	mg/l as N	< 2	-	-	0.50	1.34	<0.01
4	Total kjeldahl Nitrogen	mg/l as N	< 75	36.60	36.60	34.30	32.10	3.30
5	Nitrate nitrogen	mg/l as N	< 10	0.28	0.34	0.34	0.93	0.51
6	Phosphate	mg/l as P	< 5	0.37	0.37	0.25	1.82	<0.1
7	Suspended Solids	mg/l	< 100	25.00	25.00	28.00	21.00	10.00
8	BOD	mg/l	< 30	6.40	6.40	6.60	21.50	2.50
9	COD	mg/l	< 250	26.00	26.00	29.00	90.00	17.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-02

Month : December'2024
Nature of Sampling : Treated Effluent Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 02.12.2024

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	6.80	8.30	6.90	7.95	7.86
2	Ammonical Nitrogen	mg/l as N	< 50	42.60	11.60	43.00	39.00	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	Nil	1.16	Nil	1.83	Nil
4	Total kjeldahl Nitrogen	mg/l as N	< 75	53.20	21.10	56.50	51.00	6.60
5	Nitrate nitrogen	mg/l as N	< 10	0.44	1.68	0.77	0.73	0.67
6	Phosphate	mg/l as P	< 5	0.25	1.15	0.58	1.70	0.06
7	Suspended Solids	mg/l	< 100	18.00	16.00	20.00	33.00	13.00
8	BOD	mg/l	< 30	6.50	4.60	7.50	4.60	1.40
9	COD	mg/l	< 250	29.00	22.00	33.00	24.00	6.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 09.12.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.80	7.92	7.84	7.90	7.85
2	Ammonical Nitrogen	mg/l as N	< 50	43.60	9.00	5.60	36.00	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	1.52	0.40	0.22	1.62	Nil
4	Total kjeldahl Nitrogen	mg/l as N	< 75	52.30	16.30	14.10	46.80	7.62
5	Nitrate nitrogen	mg/l as N	< 10	0.07	0.09	0.11	0.50	0.59
6	Phosphate	mg/l as P	< 5	0.42	0.47	0.47	1.69	0.28
7	Suspended Solids	mg/l	< 100	28.00	16.00	26.00	14.00	12.00
8	BOD	mg/l	< 30	7.20	6.90	7.00	11.50	1.10
9	COD	mg/l	< 250	39.00	27.00	31.00	63.00	4.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Date of Sample Collection : 16.12.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.15	7.89	7.00	7.69	8.07
2	Ammonical Nitrogen	mg/l as N	< 50	21.90	37.40	23.40	8.00	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	0.22	1.68	Nil	0.24	<0.10
4	Total kjeldahl Nitrogen	mg/l as N	< 75	33.80	44.70	32.70	18.50	6.60
5	Nitrate nitrogen	mg/l as N	< 10	0.23	0.53	0.37	1.96	1.06
6	Phosphate	mg/l as P	< 5	0.15	0.14	0.25	1.73	0.09
7	Suspended Solids	mg/l	< 100	27.00	16.00	12.00	32.00	12.00
8	BOD	mg/l	< 30	5.60	7.10	11.60	15.10	2.40
9	COD	mg/l	< 250	28.00	29.00	50.00	72.00	11.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 23.12.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.25	7.17	6.94	8.16	8.01
2	Ammonical Nitrogen	mg/l as N	< 50	38.50	18.20	25.20	27.20	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	0.39	0.18	Nil	1.97	<0.01
4	Total kjeldahl Nitrogen	mg/l as N	< 75	49.00	27.20	35.90	35.90	6.60
5	Nitrate nitrogen	mg/l as N	< 10	0.35	0.88	1.13	1.26	0.31
6	Phosphate	mg/l as P	< 5	0.20	0.28	0.31	0.90	<0.10
7	Suspended Solids	mg/l	< 100	16.00	14.00	14.00	19.00	14.00
8	BOD	mg/l	< 30	6.40	5.30	6.70	13.20	3.40
9	COD	mg/l	< 250	31.00	22.00	31.00	56.00	16.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Date of Sample Collection : 30.12.2024

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.40	6.60	6.70	7.89	7.51
2	Ammonical Nitrogen	mg/l as N	< 50	37.50	34.80	37.50	12.20	0.20
3	Free Ammonical Nitrogen	mg/l as N	< 2	0.56	Nil	Nil	0.54	Nil
4	Total kjeldahl Nitrogen	mg/l as N	< 75	46.80	46.80	46.80	26.10	8.70
5	Nitrate nitrogen	mg/l as N	< 10	0.10	0.17	0.15	3.71	3.04
6	Phosphate	mg/l as P	< 5	0.49	0.35	0.37	1.09	0.17
7	Suspended Solids	mg/l	< 100	14.00	10.00	11.00	21.00	2.00
8	BOD	mg/l	< 30	7.50	6.50	6.90	18.60	2.30
9	COD	mg/l	< 250	39.00	28.00	30.00	88.00	8.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-02

Month : January'2024
Nature of Sampling : Treated Effluent Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 06.01.2025

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.88	8.15	8.13	7.78	8.08
2	Ammonical Nitrogen	mg/l as N	< 50	30.28	16.92	18.93	14.48	<0.1
3	Free Ammonical Nitrogen	mg/l as N	< 2	1.36	1.23	1.37	0.50	<0.1
4	Total kjeldahl Nitrogen	mg/l as N	< 75	47.00	32.45	32.45	34.69	5.59
5	Nitrate nitrogen	mg/l as N	< 10	1.78	1.40	1.44	3.47	1.38
6	Phosphate	mg/l as P	< 5	0.24	0.88	0.70	0.80	0.13
7	Suspended Solids	mg/l	< 100	18.00	20.00	21.00	16.00	6.00
8	BOD	mg/l	< 30	6.50	6.00	5.80	7.40	1.40
9	COD	mg/l	< 250	35.00	30.00	26.00	36.00	5.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 13.01.2025

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	6.87	7.48	7.55	8.03	8.29
2	Ammonical Nitrogen	mg/l as N	< 50	33.10	18.92	25.23	23.94	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	Nil	0.37	0.63	1.43	<0.10
4	Total kjeldahl Nitrogen	mg/l as N	< 75	48.12	36.93	43.65	42.52	6.71
5	Nitrate nitrogen	mg/l as N	< 10	1.30	1.00	0.99	3.24	1.51
6	Phosphate	mg/l as P	< 5	0.12	0.47	0.53	1.13	1.48
7	Suspended Solids	mg/l	< 100	19.00	22.00	19.00	23.00	16.00
8	BOD	mg/l	< 30	6.80	6.10	6.00	7.00	3.50
9	COD	mg/l	< 250	36.00	26.00	25.00	34.00	20.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Date of Sample Collection : 20.01.2025

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	8.11	7.90	7.86	8.20	8.14
2	Ammonical Nitrogen	mg/l as N	< 50	26.72	23.50	22.50	14.60	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	1.74	1.10	0.90	1.20	<0.10
4	Total kjeldahl Nitrogen	mg/l as N	< 75	43.65	42.52	29.10	36.53	6.71
5	Nitrate nitrogen	mg/l as N	< 10	0.44	0.80	0.90	3.40	1.50
6	Phosphate	mg/l as P	< 5	0.68	0.10	1.00	1.60	0.10
7	Suspended Solids	mg/l	< 100	24.00	32.00	28.00	6.00	10.00
8	BOD	mg/l	< 30	8.80	2.30	8.50	15.00	2.20
9	COD	mg/l	< 250	23.00	21.00	29.00	35.00	21.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 27.01.2025

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	6.75	7.53	7.60	8.03	8.18
2	Ammonical Nitrogen	mg/l as N	< 50	23.22	15.80	14.30	21.68	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	Nil	0.32	0.40	1.30	<0.10
4	Total kjeldahl Nitrogen	mg/l as N	< 75	36.53	32.10	32.10	45.39	6.64
5	Nitrate nitrogen	mg/l as N	< 10	1.85	1.36	1.40	3.70	1.40
6	Phosphate	mg/l as P	< 5	0.53	0.30	0.30	2.70	0.20
7	Suspended Solids	mg/l	< 100	19.00	17.00	14.00	28.00	8.00
8	BOD	mg/l	< 30	11.00	9.00	10.20	16.50	1.80
9	COD	mg/l	< 250	17.00	23.00	30.00	60.00	7.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report 02

Month : February'2025
Nature of Sampling : Treated Effluent Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 03.02.2025

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	8.05	7.54	7.01	7.75	8.25
2	Ammonical Nitrogen	mg/l as N	< 50	23.51	11.60	10.00	6.50	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	1.41	0.10	Nil	0.20	<0.10
4	Total kjeldahl Nitrogen	mg/l as N	< 75	39.00	25.60	24.50	24.50	6.70
5	Nitrate nitrogen	mg/l as N	< 10	1.69	1.40	1.60	3.35	1.10
6	Phosphate	mg/l as P	< 5	0.12	0.50	0.50	1.30	0.10
7	Suspended Solids	mg/l	< 100	8.00	18.00	12.00	22.00	8.00
8	BOD	mg/l	< 30	6.00	5.50	6.00	8.10	1.70
9	COD	mg/l	< 250	31.00	20.00	24.00	31.00	5.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 10.02.2025

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	6.83	6.69	6.83	8.36	8.14
2	Ammonical Nitrogen	mg/l as N	< 50	23.37	10.40	10.80	5.19	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	Nil	Nil	Nil	0.58	<0.10
4	Total kjeldahl Nitrogen	mg/l as N	< 75	41.20	23.40	23.40	21.20	6.70
5	Nitrate nitrogen	mg/l as N	< 10	1.45	1.70	1.20	3.13	0.70
6	Phosphate	mg/l as P	< 5	0.16	0.40	0.30	2.23	0.10
7	Suspended Solids	mg/l	< 100	22.00	24.00	20.00	18.00	12.00
8	BOD	mg/l	< 30	5.00	4.00	4.20	6.80	1.10
9	COD	mg/l	< 250	30.00	24.00	21.00	27.00	5.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Date of Sample Collection : 17.02.2025

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	6.85	8.24	6.93	7.54	7.84
2	Ammonical Nitrogen	mg/l as N	< 50	21.79	11.83	23.94	6.16	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	Nil	1.06	Nil	0.12	<0.10
4	Total kjeldahl Nitrogen	mg/l as N	< 75	37.90	24.50	37.90	21.20	5.60
5	Nitrate nitrogen	mg/l as N	< 10	1.06	1.62	1.13	4.16	1.52
6	Phosphate	mg/l as P	< 5	0.25	0.23	0.23	1.52	0.10
7	Suspended Solids	mg/l	< 100	18.00	21.00	24.00	16.00	8.00
8	BOD	mg/l	< 30	4.10	4.20	3.80	13.00	1.70
9	COD	mg/l	< 250	23.00	28.00	28.00	42.00	16.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 24.02.2025

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.08	7.08	7.11	7.87	8.08
2	Ammonical Nitrogen	mg/l as N	< 50	20.50	8.94	10.00	10.26	<0.10
3	Free Ammonical Nitrogen	mg/l as N	< 2	Nil	0.10	0.10	0.46	<0.01
4	Total kjeldahl Nitrogen	mg/l as N	< 75	25.60	18.90	21.20	26.80	5.60
5	Nitrate nitrogen	mg/l as N	< 10	1.25	1.62	1.69	4.47	1.64
6	Phosphate	mg/l as P	< 5	0.27	0.21	0.28	1.20	0.10
7	Suspended Solids	mg/l	< 100	21.00	22.00	18.00	18.00	10.00
8	BOD	mg/l	< 30	6.00	4.00	4.00	14.60	1.10
9	COD	mg/l	< 250	38.00	37.00	34.00	48.00	17.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-02

Month : March'2025
Nature of Sampling : Treated Effluent Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 03.03.2025

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		*6.5-8.5*	6.70	6.85	6.91	7.75	8.12
2	Ammonical Nitrogen	*mg/l as N*	*< 50*	15.84	7.88	8.17	4.59	<0.1
3	Free Ammonical Nitrogen	*mg/l as N*	*< 2*	Nil	Nil	Nil	0.14	<0.1
4	Total kjeldahl Nitrogen	*mg/l as N*	*< 75*	27.43	21.94	21.94	19.75	5.48
5	Nitrate nitrogen	*mg/l as N*	*< 10*	0.50	0.74	0.55	1.64	0.12
6	Phosphate	*mg/l as P*	*< 5*	0.17	0.20	0.19	1.16	0.10
7	Suspended Solids	*mg/l*	*< 100*	12.00	16.00	18.00	14.00	8.00
8	BOD	*mg/l*	*< 30*	5.60	4.80	5.20	8.30	<2.0
9	COD	*mg/l*	*< 250*	28.00	22.00	24.00	38.00	14.00
10	Oil & Grease	*mg/l*	*< 10*	<10	<10	<10	<10	<10
11	Vanadium	*mg/l as V*	*< 0.2*	ND	ND	ND	ND	ND

Date of Sample Collection : 10.03.2025

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		*6.5-8.5*	6.60	7.67	7.66	8.37	7.84
2	Ammonical Nitrogen	*mg/l as N*	*< 50*	19.49	4.81	4.93	4.51	<0.1
3	Free Ammonical Nitrogen	*mg/l as N*	*< 2*	Nil	0.14	0.12	0.50	<0.1
4	Total kjeldahl Nitrogen	*mg/l as N*	*< 75*	37.31	18.65	17.55	15.36	6.58
5	Nitrate nitrogen	*mg/l as N*	*< 10*	0.42	0.66	0.67	1.30	0.20
6	Phosphate	*mg/l as P*	*< 5*	0.18	0.47	0.48	1.26	0.10
7	Suspended Solids	*mg/l*	*< 100*	22.00	18.00	16.00	27.00	14.00
8	BOD	*mg/l*	*< 30*	5.00	6.40	6.20	7.70	<2.0
9	COD	*mg/l*	*< 250*	30.00	34.00	32.00	36.00	12.00
10	Oil & Grease	*mg/l*	*< 10*	<10	<10	<10	<10	<10
11	Vanadium	*mg/l as V*	*< 0.2*	ND	ND	ND	ND	ND

Treated Effluent Water Quality Monitoring Results

Date of Sample Collection : 17.03.2025

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	6.81	6.78	6.72	8.09	8.18
2	Ammonical Nitrogen	mg/l as N	< 50	30.68	17.35	23.15	27.10	<0.1
3	Free Ammonical Nitrogen	mg/l as N	< 2	Nil	Nil	Nil	1.76	<0.1
4	Total kjeldahl Nitrogen	mg/l as N	< 75	43.07	30.72	34.01	42.79	5.48
5	Nitrate nitrogen	mg/l as N	< 10	0.54	0.57	0.59	1.48	0.24
6	Phosphate	mg/l as P	< 5	0.19	0.19	0.16	1.65	0.10
7	Suspended Solids	mg/l	< 100	14.00	23.00	26.00	18.00	14.00
8	BOD	mg/l	< 30	10.60	12.60	9.80	14.60	<2.0
9	COD	mg/l	< 250	46.00	52.00	45.00	72.00	12.00
10	Oil & Grease	mg/l	< 10	<10	<10	<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND	ND	ND	ND	ND

Date of Sample Collection : 24.03.2025

S.No	Parameters	Unit	Limiting Standards	Guard Pond 1	Guard Pond 2	Treated Effluent Pump Discharge	Strom water Pit	Material Gate Trench
1	pH.		6.5-8.5	7.88	Under Maintenance	7.78	7.73	8.18
2	Ammonical Nitrogen	mg/l as N	< 50	14.77		16.77	35.84	<0.1
3	Free Ammonical Nitrogen	mg/l as N	< 2	0.66		0.58	1.07	<0.1
4	Total kjeldahl Nitrogen	mg/l as N	< 75	26.50		29.82	54.12	6.62
5	Nitrate nitrogen	mg/l as N	< 10	0.58		0.61	2.55	0.28
6	Phosphate	mg/l as P	< 5	0.10		0.10	1.26	0.10
7	Suspended Solids	mg/l	< 100	18.00		22.00	66.00	48.00
8	BOD	mg/l	< 30	12.20		11.00	18.50	2.60
9	COD	mg/l	< 250	58.00		47.00	94.00	19.00
10	Oil & Grease	mg/l	< 10	<10		<10	<10	<10
11	Vanadium	mg/l as V	< 0.2	ND		ND	ND	ND

Ground Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-03

Month : October'2024
Nature of Sampling : Ground Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 07.10.2024

TEST RESULTS

S.No	Parameters	Limiting Standards	Factory Premises					Nearby Villages		
			Central Workshop	Near Guard Pond	Technical Building	Guest House	Inside Township	Veerlapalli	Elkalapalli	Gouthami Nagar
1	Temperature	*30 degC*	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
2	pH	*6.5-8.5*	7.05	7.10	7.64	7.58	6.93	7.34	7.10	7.49
3	Conductivity	*< 2600 uS/cm*	1455.00	1745.00	715.00	725.00	607.00	1594.00	1350.00	1224.00
4	BOD	*< 2.0 mg/L*	<2	<2	<2	<2	<2	<2.0	<2.0	<2.0
5	Nitrate as N	*< 45 mg/L*	0.84	1.45	0.34	0.34	0.94	24.50	13.20	14.85
6	Chloride	*<250 mg/L*	86.40	95.70	54.70	64.50	54.70	95.70	136.70	111.30
7	Dissolved Oxygen	*>6 mg/L*	6.05	6.15	6.10	6.10	6.10	6.15	6.05	6.10
8	Ammonia as N	*<0.5 mg/L*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
9	Total coliform (MNP/100ml)	*< 50*	NT	NT	NT	NT	NT	NT	NT	NT

Ground Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-03

Month : November'2024
Nature of Sampling : Ground Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 05.11.2024

TEST RESULTS

S.No	Parameters	Limiting Standards	Factory Premises					Nearby Villages		
			Central Workshop	Near Guard Pond	Technical Building	Guest House	Inside Township	Veerlapalli	Elkalapalli	Gouthami Nagar
1	Temperature	*30 degC*	28.50	28.00	28.00	28.00	28.50	28.00	28.50	28.00
2	pH	*6.5-8.5*	7.12	7.15	7.55	8.08	7.06	7.22	6.95	7.40
3	Conductivity	*< 2600 uS/cm*	1355.00	1680.00	700.00	460.00	442.00	1512.00	1308.00	1331.00
4	BOD	*< 2.0 mg/L*	<2	<2	<2	<2	<2	<2	<2	<2
5	Nitrate as N	*< 45 mg/L*	0.72	1.38	0.28	0.42	0.37	21.10	11.33	8.15
6	Chloride	*<250 mg/L*	72.00	90.20	52.40	44.60	42.70	108.60	135.80	114.40
7	Dissolved Oxygen	*>6 mg/L*	6.10	6.05	6.15	6.10	6.15	6.10	6.10	6.20
8	Ammonia as N	*<0.5 mg/L*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.14
9	Total coliform (MNP/100ml)	*< 50*	NT	NT	NT	NT	NT	NT	NT	NT

Ground Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-03

Month : December'2024
Nature of Sampling : Ground Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 02.12.2024

TEST RESULTS

S.No	Parameters	Limiting Standards	Factory Premises					Nearby Villages		
			Central Workshop	Near Guard Pond	Technical Building	Guest House	Inside Township	Veerlapalli	Elkalapalli	Gouthami Nagar
1	Temperature	*30 degC*	29.00	28.00	29.00	29.50	29.00	29.50	29.50	29.50
2	pH	*6.5-8.5*	7.15	7.05	7.42	7.39	6.75	7.32	6.95	7.53
3	Conductivity	*< 2600 uS/cm*	1260.00	1720.00	850.00	941.00	876.00	1523.00	1455.00	1128.00
4	BOD	*< 2.0 mg/L*	<2	<2	<2	<2	<2	<2	<2	<2
5	Nitrate as N	*< 45 mg/L*	0.84	1.65	0.54	1.50	1.00	24.56	10.89	6.81
6	Chloride	*<250 mg/L*	76.40	94.50	60.80	62.50	68.40	113.30	144.50	87.90
7	Dissolved Oxygen	*>6 mg/L*	6.05	6.10	6.10	6.05	6.10	6.05	6.05	6.15
8	Ammonia as N	*<0.5 mg/L*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
9	Total coliform (MNP/100ml)	*< 50*	NT	NT	NT	NT	NT	NT	NT	NT

Ground Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-03

Month : January'2025
Nature of Sampling : Ground Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 07.01.2025

TEST RESULTS

S.No	Parameters	Limiting Standards	Factory Premises					Nearby Villages		
			Central Workshop	Near Guard Pond	Technical Building	Guest House	Inside Township	Veerlapalli	Elkalapalli	Gouthami Nagar
1	Temperature	*30 degC*	29.00	29.00	28.50	29.00	29.00	28.50	28.50	29.00
2	pH	*6.5-8.5*	6.79	7.66	8.19	7.21	7.35	6.85	6.85	7.41
3	Conductivity	*< 2600 uS/cm*	1502.00	1265.00	532.00	890.00	649.00	1454.00	1260.00	945.00
4	BOD	*< 2.0 mg/L*	<2	<2	<2	<2	<2	<2	<2	<2
5	Nitrate as N	*< 45 mg/L*	0.33	0.38	0.27	1.18	0.86	26.44	12.17	4.13
6	Chloride	*<250 mg/L*	90.20	98.10	53.00	62.80	60.90	117.80	155.00	70.70
7	Dissolved Oxygen	*>6 mg/L*	6.10	6.05	6.10	6.10	6.20	6.10	6.10	6.10
8	Ammonia as N	*<0.5 mg/L*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
9	Total coliform (MNP/100ml)	*< 50*	NT	NT	NT	NT	NT	NT	NT	NT

Ground Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-03

Month : February'2025
Nature of Sampling : Ground Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 04.02.2025

TEST RESULTS

S.No	Parameters	Limiting Standards	Factory Premises					Nearby Villages		
			Central Workshop	Near Guard Pond	Technical Building	Guest House	Inside Township	Veerlapalli	Elkalapalli	Gouthami Nagar
1	Temperature	*30 degC*	27.50	27.50	27.50	28.00	27.50	28.00	27.50	27.50
2	pH	*6.5-8.5*	7.10	7.40	8.00	8.10	6.80	7.30	7.10	7.70
3	Conductivity	*< 2600 uS/cm*	1415.00	1360.00	550.00	500.00	909.00	1525.00	1405.00	867.00
4	BOD	*< 2.0 mg/L*	<2	<2	<2	<2	<2	<2	<2	<2
5	Nitrate as N	*< 45 mg/L*	0.42	1.10	0.30	1.40	5.80	27.30	11.70	13.60
6	Chloride	*<250 mg/L*	92.00	93.60	55.10	52.50	75.80	122.00	138.00	68.00
7	Dissolved Oxygen	*>6 mg/L*	6.10	6.20	6.20	6.40	6.20	6.10	6.10	6.10
8	Ammonia as N	*<0.5 mg/L*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
9	Total coliform (MNP/100ml)	*< 50*	NT	NT	NT	NT	NT	NT	NT	NT

Ground Water Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-03

Month : March'2025
Nature of Sampling : Ground Water
Sample collected and tested by : In- House Laboratory
Date of Sample Collection : 12.03.2025

TEST RESULTS

S.No	Parameters	Limiting Standards	Factory Premises					Nearby Villages		
			Central Workshop	Near Guard Pond	Technical Building	Guest House	Inside Township	Veerlapalli	Elkalapalli	Gouthami Nagar
1	Temperature	*30 degC*	29.00	29.00	29.00	28.50	29.00	28.50	29.00	29.00
2	pH	*6.5-8.5*	7.18	7.30	7.90	7.90	6.80	7.30	6.90	7.60
3	Conductivity	*< 2600 uS/cm*	1445.00	1375.00	585.00	565.00	1052.00	1640.00	1438.00	1008.00
4	BOD	*< 2.0 mg/L*	<2	<2	<2	<2	<2	<2	<2	<2
5	Nitrate as N	*< 45 mg/L*	0.56	1.70	0.50	1.20	5.20	28.40	12.40	14.10
6	Chloride	*<250 mg/L*	84.00	92.50	61.00	54.50	78.10	127.00	130.00	70.30
7	Dissolved Oxygen	*>6 mg/L*	6.20	6.10	6.10	6.20	6.10	6.10	6.10	6.10
8	Ammonia as N	*<0.5 mg/L*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
9	Total coliform (MNP/100ml)	*< 50*	NT	NT	NT	NT	NT	NT	NT	NT

Ambient Air Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-04

Month : October'2024
Nature of Sampling : Ambient Air
Sample collected and tested by : In- House Laboratory

TEST RESULTS

Location : Technical Building

S.No	Parameters	Unit	Permissible limits (NAAQS)	04.10.2024	11.10.2024	18.10.2024	25.10.2024
1	PM10	$\mu g/m^3$	100	53.00	34.00	34.00	98.00
2	PM2.5	$\mu g/m^3$	60	24.00	15.00	15.00	41.00
3	SOx	$\mu g/m^3$	80	0.50	0.80	1.00	1.20
4	NOx	$\mu g/m^3$	80	17.80	16.40	18.20	8.70
5	NH3	$\mu g/m^3$	400	116.00	96.00	124.00	105.00

Location : Material Gate

S.No.	Parameters	Unit	Permissible limits (NAAQS)	04.10.2024	11.10.2024	18.10.2024	25.10.2024
1	PM10	$\mu g/m^3$	100	91.00	52.00	95.00	115.00
2	PM2.5	$\mu g/m^3$	60	60.00	28.00	70.00	65.00
3	SOx	$\mu g/m^3$	80	0.20	0.90	0.20	0.40
4	NOx	$\mu g/m^3$	80	7.80	6.40	11.80	6.80
5	NH3	$\mu g/m^3$	400	1.00	155.00	67.00	34.00

Location : VIP Guest House

S.No.	Parameters	Unit	Permissible limits (NAAQS)	04.10.2024	11.10.2024	18.10.2024	25.10.2024
1	PM10	$\mu g/m^3$	100	68.00	48.00	56.00	42.00
2	PM2.5	$\mu g/m^3$	60	16.00	12.00	10.00	8.00
3	SOx	$\mu g/m^3$	80	0.40	0.30	2.20	1.10
4	NOx	$\mu g/m^3$	80	12.00	3.80	2.60	4.00
5	NH3	$\mu g/m^3$	400	12.00	2.00	13.00	8.00

Ambient Air Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-04

Month : November'2024
Nature of Sampling : Ambient Air
Sample collected and tested by : In- House Laboratory

TEST RESULTS

Location : Technical Building

S.No	Parameters	Unit	Permissible limits (NAAQS)	01.11.2024	07.11.2024	14.11.2024	21.11.2024	28.11.2024
1	PM10	$\mu g/m^3$	100	85.00	130.00	91.00	156.00	130.00
2	PM2.5	$\mu g/m^3$	60	48.00	65.00	45.00	83.00	74.00
3	SOx	$\mu g/m^3$	80	1.60	0.70	0.80	1.00	1.30
4	NOx	$\mu g/m^3$	80	12.60	12.20	7.70	14.50	11.60
5	NH3	$\mu g/m^3$	400	106.00	135.00	71.00	81.00	95.00

Location : Material Gate

S.No.	Parameters	Unit	Permissible limits (NAAQS)	01.11.2024	07.11.2024	14.11.2024	21.11.2024	28.11.2024
1	PM10	$\mu g/m^3$	100	98.00	136.00	120.00	187.00	169.00
2	PM2.5	$\mu g/m^3$	60	65.00	88.00	68.00	75.00	88.00
3	SOx	$\mu g/m^3$	80	0.70	1.30	0.80	1.20	0.60
4	NOx	$\mu g/m^3$	80	8.50	20.10	23.10	27.20	6.70
5	NH3	$\mu g/m^3$	400	59.00	61.00	51.00	59.00	58.00

Location : VIP Guest House

S.No.	Parameters	Unit	Permissible limits (NAAQS)	01.11.2024	07.11.2024	14.11.2024	21.11.2024	28.11.2024
1	PM10	$\mu g/m^3$	100	65.00	65.00	79.00	49.00	46.00
2	PM2.5	$\mu g/m^3$	60	42.00	35.00	45.00	23.00	32.00
3	SOx	$\mu g/m^3$	80	0.60	1.10	0.80	0.90	0.50
4	NOx	$\mu g/m^3$	80	6.30	7.60	10.90	8.00	7.60
5	NH3	$\mu g/m^3$	400	45.00	33.00	28.00	31.00	34.00

Ambient Air Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-04

Month : December'2024
Nature of Sampling : Ambient Air
Sample collected and tested by : In- House Laboratory

TEST RESULTS

Location : Technical Building

S.No	Parameters	Unit	Permissible limits (NAAQS)	06.12.2024	12.12.2024	19.12.2024	27.12.2024
1	PM10	$\mu g/m^3$	100	95.00	73.00	73.00	92.00
2	PM2.5	$\mu g/m^3$	60	42.00	39.00	49.00	55.00
3	SOx	$\mu g/m^3$	80	0.30	0.30	0.10	0.60
4	NOx	$\mu g/m^3$	80	10.80	12.60	8.70	6.00
5	NH3	$\mu g/m^3$	400	51.00	50.00	29.00	14.00

Location : Material Gate

S.No.	Parameters	Unit	Permissible limits (NAAQS)	06.12.2024	12.12.2024	19.12.2024	27.12.2024
1	PM10	$\mu g/m^3$	100	96.00	86.00	82.00	76.00
2	PM2.5	$\mu g/m^3$	60	49.00	51.00	46.00	28.00
3	SOx	$\mu g/m^3$	80	0.10	0.10	0.60	0.30
4	NOx	$\mu g/m^3$	80	15.10	14.60	12.20	14.10
5	NH3	$\mu g/m^3$	400	173.00	84.00	37.00	27.00

Location : VIP Guest House

S.No.	Parameters	Unit	Permissible limits (NAAQS)	06.12.2024	12.12.2024	19.12.2024	27.12.2024
1	PM10	$\mu g/m^3$	100	88.00	82.00	86.00	65.00
2	PM2.5	$\mu g/m^3$	60	44.00	46.00	50.00	35.00
3	SOx	$\mu g/m^3$	80	0.10	0.40	1.10	0.30
4	NOx	$\mu g/m^3$	80	10.60	12.40	10.60	8.50
5	NH3	$\mu g/m^3$	400	11.00	18.00	30.00	15.00

Ambient Air Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-04

Month : January'2025
Nature of Sampling : Ambient Air
Sample collected and tested by : In- House Laboratory

TEST RESULTS

Location : Technical Building

S.No	Parameters	Unit	Permissible limits (NAAQS)	02.01.2025	09.01.2025	16.01.2025	23.01.2025	30.01.2025
1	PM10	$\mu g/m^3$	100	121.00	183.00	152.00	131.00	96.00
2	PM2.5	$\mu g/m^3$	60	28.00	95.00	54.00	69.00	55.00
3	SOx	$\mu g/m^3$	80	<5	<5	<5	<5	<5
4	NOx	$\mu g/m^3$	80	10.70	7.50	5.90	5.20	4.60
5	NH3	$\mu g/m^3$	400	21.00	27.00	31.00	41.00	33.00

Location : Material Gate

S.No	Parameters	Unit	Permissible limits (NAAQS)	02.01.2025	09.01.2025	16.01.2025	23.01.2025	30.01.2025
1	PM10	$\mu g/m^3$	100	67.00	92.00	134.00	112.00	98.00
2	PM2.5	$\mu g/m^3$	60	23.00	40.00	58.00	43.00	56.00
3	SOx	$\mu g/m^3$	80	<5	<5	<5	<5	<5
4	NOx	$\mu g/m^3$	80	11.60	15.80	19.00	13.40	9.50
5	NH3	$\mu g/m^3$	400	39.00	59.00	28.00	42.00	29.00

Location : VIP Guest House

S.No	Parameters	Unit	Permissible limits (NAAQS)	02.01.2025	09.01.2025	16.01.2025	23.01.2025	30.01.2025
1	PM10	$\mu g/m^3$	100	55.00	86.00	93.00	86.00	92.00
2	PM2.5	$\mu g/m^3$	60	19.00	42.00	28.00	42.00	40.00
3	SOx	$\mu g/m^3$	80	<5	<5	<5	<5	<5
4	NOx	$\mu g/m^3$	80	10.40	8.10	8.40	3.50	7.40
5	NH3	$\mu g/m^3$	400	15.00	12.00	12.00	13.00	19.00

Ambient Air Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-04

Month : February'2025
Nature of Sampling : Ambient Air
Sample collected and tested by : In- House Laboratory

TEST RESULTS

Location : Technical Building

S.No	Parameters	Unit	Permissible limits (NAAQS)	06.02.2025	13.02.2025	20.02.2025	27.02.2025
1	PM10	$\mu g/m^3$	100	95.00	92.00	87.00	82.00
2	PM2.5	$\mu g/m^3$	60	55.00	60.00	52.00	45.00
3	SOx	$\mu g/m^3$	80	0.20	0.30	0.40	0.50
4	NOx	$\mu g/m^3$	80	5.60	6.60	5.30	5.60
5	NH3	$\mu g/m^3$	400	29.00	24.00	27.00	23.00

Location : Material Gate

S.No.	Parameters	Unit	Permissible limits (NAAQS)	06.02.2025	13.02.2025	20.02.2025	27.02.2025
1	PM10	$\mu g/m^3$	100	88.00	75.00	67.00	85.00
2	PM2.5	$\mu g/m^3$	60	45.00	42.00	56.00	48.00
3	SOx	$\mu g/m^3$	80	0.30	0.50	0.20	0.30
4	NOx	$\mu g/m^3$	80	12.10	8.60	6.20	15.86
5	NH3	$\mu g/m^3$	400	26.00	24.00	32.00	52.00

Location : VIP Guest House

S.No.	Parameters	Unit	Permissible limits (NAAQS)	06.02.2025	13.02.2025	20.02.2025	27.02.2025
1	PM10	$\mu g/m^3$	100	87.00	92.00	72.00	76.00
2	PM2.5	$\mu g/m^3$	60	48.00	46.00	51.00	58.00
3	SOx	$\mu g/m^3$	80	0.30	0.10	0.50	0.20
4	NOx	$\mu g/m^3$	80	10.00	9.00	6.70	13.50
5	NH3	$\mu g/m^3$	400	11.00	3.00	3.00	1.60

Ambient Air Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-04

Month : March'2025
Nature of Sampling : Ambient Air
Sample collected and tested by : In- House Laboratory

TEST RESULTS

Location : Technical Building

S.No	Parameters	Unit	Permissible limits (NAAQS)	06.03.2025	13.03.2025	20.03.2025	27.03.2025
1	PM10	$\mu g/m^3$	100	98.00	89.00	45.00	82.00
2	PM2.5	$\mu g/m^3$	60	48.00	52.00	44.00	45.00
3	SOx	$\mu g/m^3$	80	0.50	0.70	0.10	0.50
4	NOx	$\mu g/m^3$	80	3.00	2.50	2.60	3.40
5	NH3	$\mu g/m^3$	400	21.00	22.00	18.00	23.00

Location : Material Gate

S.No.	Parameters	Unit	Permissible limits (NAAQS)	06.03.2025	13.03.2025	20.03.2025	27.03.2025
1	PM10	$\mu g/m^3$	100	94.00	89.00	72.00	82.00
2	PM2.5	$\mu g/m^3$	60	41.00	43.00	49.00	54.00
3	SOx	$\mu g/m^3$	80	0.50	0.50	0.10	0.10
4	NOx	$\mu g/m^3$	80	10.20	9.50	9.90	12.30
5	NH3	$\mu g/m^3$	400	53.00	41.00	22.00	25.00

Location : VIP Guest House

S.No.	Parameters	Unit	Permissible limits (NAAQS)	06.03.2025	13.03.2025	20.03.2025	27.03.2025
1	PM10	$\mu g/m^3$	100	96.00	90.00	38.00	96.00
2	PM2.5	$\mu g/m^3$	60	52.00	54.00	36.00	40.00
3	SOx	$\mu g/m^3$	80	0.20	0.30	0.10	0.10
4	NOx	$\mu g/m^3$	80	7.90	6.30	6.80	7.30
5	NH3	$\mu g/m^3$	400	1.60	2.40	10.00	10.00

Stack Emmision Monitoring Reading

Doc No: RFCL-TS-EMC-Report-05

Month : October'2024
Nature of Sampling : Stack Emission
Sample collected and tested by : In- house Laboratory

TEST RESULTS

Location :- Primary Reformer Stack

S.No	Parameters	Permissible limits	05.10.2024	30.10.2024
1	SPM	*10 mg/Nm3*	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0
3	NOx	*400 mg/Nm3*	38.0	35.0

Location :- Utility Boiler Stack

S.No	Parameters	Permissible limits	05.10.2024	30.10.2024
1	SPM	*10 mg/Nm3*	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0
3	NOx	*400 mg/Nm3*	72.0	70.0

Location :- HRSG Stack

S.No	Parameters	Permissible limits	05.10.2024	30.10.2024
1	SPM	*10 mg/Nm3*	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0
3	NOx	*400 mg/Nm3*	92.0	107.0

Location :- Prilling Tower

S.No	Parameters	Permissible limits	05.10.2024	31.10.20024
1	Particulate Matter	*50 mg/Nm3*	42.0	46.0
2	NH3	*150 mg/Nm3*	86.0	94.0

Stack Emmision Monitoring Reading

Doc No: RFCL-TS-EMC-Report-05

Month : November'2024
Nature of Sampling : Stack Emission
Sample collected and tested by : In- house Laboratory

TEST RESULTS

Location :- Primary Reformer Stack

S.No	Parameters	Permissible limits	04.11.2024	11.11.2024	18.11.2024	27.11.2024
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	117.0	106.0	93.0	103.0

Location :- Utility Boiler Stack

S.No	Parameters	Permissible limits	04.11.2024	11.11.2024	18.11.2024	27.11.2024
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	70.0	90.0	91.0	84.0

Location :- HRSG Stack

S.No	Parameters	Permissible limits	04.11.2024	11.11.2024	18.11.2024	27.11.2024
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	96.0	69.0	101.0	118.0

Location :- Prilling Tower

S.No	Parameters	Permissible limits	05.11.2024	12.11.2024	23.11.2024	30.11.2024
1	Particulate Matter	*50 mg/Nm3*	40.0	38.0	30.0	38.0
2	NH3	*150 mg/Nm3*	55.0	60.0	74.0	77.0

Stack Emmision Monitoring Reading

Doc No: RFCL-TS-EMC-Report-05

Month : December'2024
Nature of Sampling : Stack Emission
Sample collected and tested by : In- house Laboratory

TEST RESULTS

Location :- Primary Reformer Stack

S.No	Parameters	Permissible limits	05.12.2024	11.12.2024	17.12.2024	27.12.2024
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	121.0	116.0	98.0	109.0

Location :- Utility Boiler Stack

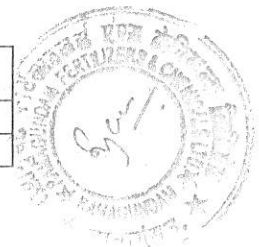
S.No	Parameters	Permissible limits	05.12.2024	11.12.2024	17.12.2024	26.12.2024
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	85.0	98.0	93.0	85.0

Location :- HRSG Stack

S.No	Parameters	Permissible limits	05.12.2024	11.12.2024	17.12.2024	26.12.2024
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	134.0	125.0	52.0	89.0

Location :- Prilling Tower

S.No	Parameters	Permissible limits	05.12.2024	12.12.2024	18.12.2024	28.12.2024
1	Particulate Matter	*50 mg/Nm3*	42.0	43.0	35.0	30.0
2	NH3	*150 mg/Nm3*	102.0	75.0	77.0	85.0



Stack Emmision Monitoring Reading

Doc No: RFCL-TS-EMC-Report-05

Month : January'2025
Nature of Sampling : Stack Emission
Sample collected and tested by : In- house Laboratory

TEST RESULTS

Location :- Primary Reformer Stack

S.No	Parameters	Permissible limits	01.01.2025	08.01.2025	15.01.2025	22.01.2025	29.01.2025
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	81.0	76.0	85.0	79.0	70.0

Location :- Utility Boiler Stack

S.No	Parameters	Permissible limits	01.01.2025	08.01.2025	15.01.2025	22.01.2025	29.01.2025
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	174.0	197.0	184.0	172.0	186.0

Location :- HRSG Stack

S.No	Parameters	Permissible limits	01.01.2025	08.01.2025	15.01.2025	22.01.2025	29.01.2025
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	254.0	255.0	225.0	260.0	240.0

Location :- Prilling Tower

S.No	Parameters	Permissible limits	03.01.2025	10.01.2025	18.01.2025	25.01.2025
1	Particulate Matter	*50 mg/Nm3*	44.0	38.0	38.0	48.0
2	NH3	*150 mg/Nm3*	89.0	75.0	38.0	36.0

Stack Emmision Monitoring Reading

Doc No: RFCL-TS-EMC-Report-05

Month : February'2025
Nature of Sampling : Stack Emission
Sample collected and tested by : In- house Laboratory

TEST RESULTS

Location :- Primary Reformer Stack

S.No	Parameters	Permissible limits	05.02.2025	12.02.2025	18.02.2025	25.02.2025
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	81.0	56.0	49.0	71.0

Location :- Utility Boiler Stack

S.No	Parameters	Permissible limits	05.02.2025	12.02.2025	18.02.2025	25.02.2025
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	171.0	189.0	188.0	179.0

Location :- HRSG Stack

S.No	Parameters	Permissible limits	05.02.2025	12.02.2025	18.02.2025	25.02.2025
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	254.0	250.0	267.0	255.0

Location :- Prilling Tower

S.No	Parameters	Permissible limits	05.02.2025	12.02.2025	18.02.2025	25.02.2025
1	Particulate Matter	*50 mg/Nm3*	41.0	33.0	39.0	48.0
2	NH3	*150 mg/Nm3*	30.0	34.0	42.0	53.0

Stack Emmision Monitoring Reading

Doc No: RFCL-TS-EMC-Report-05

Month : March'2025
Nature of Sampling : Stack Emission
Sample collected and tested by : In- house Laboratory

TEST RESULTS

Location :- Primary Reformer Stack

S.No	Parameters	Permissible limits	04.03.2025	12.03.2025	18.03.2025	26.03.2025
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	62.0	57.0	57.0	70.0

Location :- Utility Boiler Stack

S.No	Parameters	Permissible limits	04.03.2025	12.03.2025	18.03.2025	26.03.2025
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	203.0	178.0	188.0	175.0

Location :- HRSG Stack

S.No	Parameters	Permissible limits	04.03.2025	12.03.2025	18.03.2025	26.03.2025
1	SPM	*10 mg/Nm3*	<5.0	<5.0	<5.0	<5.0
2	SOx	*50 mg/Nm3*	<1.0	<1.0	<1.0	<1.0
3	NOx	*400 mg/Nm3*	242.0	224.0	256.0	226.0

Location :- Prilling Tower

S.No	Parameters	Permissible limits	05.03.2025	12.03.2025	19.03.2025	26.03.2025
1	Particulate Matter	*50 mg/Nm3*	42.0	46.0	34.0	40.0
2	NH3	*150 mg/Nm3*	45.0	42.0	136.0	55.0

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : October'2024
Nature of Sampling : Sewage Treated Plant Analysis (Township)
Sample collected and tested by : In- House Laboratory

TEST RESULTS

Township STP

S.No	Parameters	Unit	Limiting Standards	07.10.2024	14.10.2024	21.10.2024	28.10.2024
1	pH.		*5.5-9.0*	7.90	7.98	7.75	7.78
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	2.00	6.00	4.00	3.00
3	BOD (3 days at 27 ^{o}C)	*mg/l*	*< 30*	1.50	1.10	1.20	1.40
4	COD	*mg/l*	*< 250*	12.00	10.00	10.00	10.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	575.00	524.00	565.00	544.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : November'2024
Nature of Sampling : Sewage Treated Plant Analysis (Township)
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	04.11.2024	11.11.2024	18.11.2024	25.11.2024
1	pH.		*5.5-9.0*	7.77	7.75	7.89	7.84
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	4.00	3.00	4.00	5.00
3	BOD (3 days at 27 ^{O}C)	*mg/l*	*< 30*	1.60	1.80	2.50	1.70
4	COD	*mg/l*	*< 250*	10.00	11.00	23.00	11.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	540.00	540.00	525.00	524.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : December'2024
Nature of Sampling : Sewage Treated Plant Analysis (Township)
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	02.12.2024	09.12.2024	16.12.2024	23.12.2024	31.12.2024
1	pH.		*5.5-9.0*	7.96	7.86	7.78	7.97	7.51
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	4.00	4.00	2.00	5.00	2.00
3	BOD (3 days at 27 ^{O}C)	*mg/l*	*< 30*	1.40	2.20	1.20	1.10	1.90
4	COD	*mg/l*	*< 250*	8.00	10.00	10.00	8.00	8.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10	<10	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	528.00	674.00	642.00	585.00	628.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : January'2025
Nature of Sampling : Sewage Treated Plant Analysis (Township)
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	06.01.2025	13.01.2025	20.01.2025	27.01.2025
1	pH.		*5.5-9.0*	8.00	7.81	7.91	7.68
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	8.00	4.00	12.00	9.00
3	BOD (3 days at 27 ^{o}C)	*mg/l*	*< 30*	1.20	1.40	4.10	1.20
4	COD	*mg/l*	*< 250*	8.00	12.00	22.00	10.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	642.00	604.00	596.00	558.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : February'2025
Nature of Sampling : Sewage Treated Plant Analysis (Township)
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	03.02.2025	10.02.2025	17.02.2025	24.02.2025
1	pH.		*5.5-9.0*	7.73	7.71	7.63	7.79
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	32.00	10.00	18.00	18.00
3	BOD (3 days at 27 ^{O}C)	*mg/l*	*< 30*	1.50	0.20	0.10	0.20
4	COD	*mg/l*	*< 250*	9.00	16.00	9.00	16.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	562.00	690.00	576.00	555.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : March'2025
Nature of Sampling : Sewage Treated Plant Analysis (Township)
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	03.03.2025	10.03.2025	17.03.2025	24.03.2025	31.03.2025
1	pH.		*5.5-9.0*	7.74	7.63	7.53	7.86	7.67
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	10.00	6.00	14.00	10.00	11.00
3	BOD (3 days at 27 ^{O}C)	*mg/l*	*< 30*	<2.0	<2.0	<2.0	<2.0	<2.0
4	COD	*mg/l*	*< 250*	16.00	14.00	12.00	10.00	11.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10	<10	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	595.00	580.00	602.00	595.00	582.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : October'2024
Nature of Sampling : Sewage Treated Plant Outlet
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	07.10.2024	21.10.2024
1	pH.		*5.5-9.0*	7.94	8.05
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	26.00	20.00
3	BOD (3 days at 27 ^{O}C)	*mg/l*	*< 30*	18.50	16.20
4	COD	*mg/l*	*< 250*	76.00	70.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	875.00	860.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : November'2024
Nature of Sampling : Sewage Treated Plant Outlet
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	04.11.2024	18.11.2024
1	pH.		*5.5-9.0*	7.92	8.14
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	26.00	32.00
3	BOD (3 days at 27 ^{O}C)	*mg/l*	*< 30*	9.40	10.60
4	COD	*mg/l*	*< 250*	48.00	60.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	785.00	815.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : December'2024
Nature of Sampling : Sewage Treated Plant Outlet
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	09.12.2024	23.12.2024
1	pH.		*5.5-9.0*	8.03	7.98
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	39.00	26.00
3	BOD (3 days at 27 ^{o}C)	*mg/l*	*< 30*	10.10	9.70
4	COD	*mg/l*	*< 250*	55.00	47.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	801.00	756.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : January'2025
Nature of Sampling : Sewage Treated Plant Outlet
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	06.01.2025	20.01.2025
1	pH.		*5.5-9.0*	7.65	7.78
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	18.00	12.00
3	BOD (3 days at 27 ^{O}C)	*mg/l*	*< 30*	6.50	5.60
4	COD	*mg/l*	*< 250*	42.00	34.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	745.00	705.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : February'2025
Nature of Sampling : Sewage Treated Plant Outlet
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	03.02.2025	17.02.2025
1	pH.		*5.5-9.0*	7.58	7.65
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	17.00	14.00
3	BOD (3 days at 27 ^{o}C)	*mg/l*	*< 30*	6.30	6.00
4	COD	*mg/l*	*< 250*	43.00	35.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	740.00	690.00

Sewage Treated Plant Quality Monitoring Results

Doc No: RFCL-TS-EMC-Report-06

Month : March'2025
Nature of Sampling : Sewage Treated Plant Outlet
Sample collected and tested by : In- House Laboratory

TEST RESULTS

S.No	Parameters	Unit	Limiting Standards	03.03.2025	17.03.2025
1	pH.		*5.5-9.0*	7.84	7.77
2	Total Suspended Solids (TSS)	*mg/l*	*< 100*	21.00	18.00
3	BOD (3 days at 27 ^{O}C)	*mg/l*	*< 30*	7.50	7.10
4	COD	*mg/l*	*< 250*	62.00	54.00
5	Oil & Grease	*mg/l*	*< 10*	<10	<10
6	Total Dissolved Solids (TDS)	*mg/l*	*<2100*	810.00	755.00

Ammonia in Atmosphere at Different Locations in Plant Area

Doc No: RFCL-TS-EMC-Report-07

Month : October'2024
Nature of Sampling : Ammonia Concentration
Sample collected and tested by : In-House Laboratory

TEST RESULTS

S.No	Sample collection date / Location of sample collection	Ammonia Concentration in ppm (Max. 25 ppm)				
		02.10.2024	09.10.2024	16.10.2024	23.10.2024	30.10.2024
1	Near Ammonia Converter -1	5.0	Plant Under Shutdown	Plant Under Shutdown	Plant Under Shutdown	1.0
2	Near Ammonia Converter -2	5.0				1.0
3	Near product hydrogen sample point (CHRU)	<1				<1
4	Near Ammonia Chillers	5.0				2.5
5	Near Ammonia Separator	5.0				2.5
6	Near Ammonia Accumulator	5.0				2.5
7	Near C 551 sample point (Purge gas recovery unit)	5.0				2.5
8	Near Ammonia recovery pump reflux	5.0				2.5
9	Near 551B HP circulation pump	5.0				2.5
10	Near 503 flash vessel	5.0				5.0
11	Near Ammonia Filter	1.0				1.0
12	Near P1 pump	5.0				2.5
13	Near P2 pump	5.0				2.5
14	Near P5 pump	2.5				2.5
15	Near P9 pump	2.5				2.5
16	Near battery limits (Ammonia storage section)	<1				<1
17	Near Ammonia pump	<1				<1
18	Near Ammonia tranfer pump	<1				<1

Ammonia in Atmosphere at Different Locations in Plant Area

Doc No: RFCL-TS-EMC-Report-07

Month : November'2024
Nature of Sampling : Ammonia Concentration
Sample collected and tested by : In-House Laboratory

TEST RESULTS

S.No	Sample collection date	Ammonia Concentration in ppm (Max. 25 ppm)			
	Location of sample collection	06.11.2024	13.11.2024	20.11.2024	27.11.2024
1	Near Ammonia Converter -1	2.0	2.5	2.5	2.0
2	Near Ammonia Converter -2	2.0	2.0	2.0	2.0
3	Near product hydrogen sample point (CHRU)	<1	<1	<1	<1
4	Near Ammonia Chillers	5.0	5.0	5.0	5.0
5	Near Ammonia Separator	5.0	5.0	5.0	5.0
6	Near Ammonia Accumulator	5.0	5.0	5.0	5.0
7	Near C 551 sample point (Purge gas recovery unit)	5.0	5.0	5.0	5.0
8	Near Ammonia recovery pump reflux	5.0	5.0	5.0	5.0
9	Near 551B HP circulation pump	5.0	5.0	5.0	5.0
10	Near 503 flash vessel	5.0	5.0	5.0	5.0
11	Near Ammonia Filter	1.0	2.0	2.0	1.0
12	Near P1 pump	5.0	5.0	5.0	5.0
13	Near P2 pump	5.0	5.0	5.0	5.0
14	Near P5 pump	5.0	5.0	5.0	5.0
15	Near P9 pump	5.0	5.0	5.0	5.0
16	Near battery limits (Ammonia storage section)	<1	<1	<1	<1
17	Near Ammonia pump	<1	<1	<1	<1
18	Near Ammonia tranfer pump	<1	<1	<1	<1

Ammonia in Atmosphere at Different Locations in Plant Area

Doc No: RFCL-TS-EMC-Report-07

Month : December'2024
Nature of Sampling : Ammonia Concentration
Sample collected and tested by : In-House Laboratory

TEST RESULTS

S.No	Sample collection date / Location of sample collection	Ammonia Concentration in ppm (Max. 25 ppm)			
		04.12.2024	11.12.2024	18.12.2024	25.12.2024
1	Near Ammonia Converter -1	2.5	5.0	5.0	5.0
2	Near Ammonia Converter -2	2.5	5.0	5.0	5.0
3	Near product hydrogen sample point (CHRU)	<1	<1	<1	<1
4	Near Ammonia Chillers	5.0	5.0	5.0	5.0
5	Near Ammonia Separator	5.0	5.0	5.0	5.0
6	Near Ammonia Accumulator	5.0	5.0	5.0	5.0
7	Near C 551 sample point (Purge gas recovery unit)	5.0	5.0	2.5	2.5
8	Near Ammonia recovery pump reflux	5.0	5.0	5.0	5.0
9	Near 551B HP circulation pump	5.0	5.0	5.0	5.0
10	Near 503 flash vessel	5.0	5.0	5.0	5.0
11	Near Ammonia Filter	2.5	1.0	2.5	5.0
12	Near P1 pump	2.5	5.0	5.0	5.0
13	Near P2 pump	2.5	5.0	5.0	5.0
14	Near P5 pump	5.0	5.0	5.0	5.0
15	Near P9 pump	5.0	5.0	5.0	5.0
16	Near battery limits (Ammonia storage section)	<1	<1	<1	<1
17	Near Ammonia pump	<1	<1	<1	<1
18	Near Ammonia tranfer pump	2.5	1.0	2.0	5.0

Ammonia in Atmosphere at Different Locations in Plant Area

Doc No: RFCL-TS-EMC-Report-07

Month : January'2025
Nature of Sampling : Ammonia Concentration
Sample collected and tested by : In-House Laboratory

TEST RESULTS

S.No	Sample collection date	Ammonia Concentration in ppm (Max. 25 ppm)				
	Location of sample collection	01.01.2025	08.01.2025	15.01.2025	22.01.2025	29.01.2025
1	Near Ammonia Converter -1	1.0	2.5	1.0	2.5	5.0
2	Near Ammonia Converter -2	1.0	2.5	1.0	2.5	5.0
3	Near product hydrogen sample point (CHRU)	<1	<1	<1	<1	<1
4	Near Ammonia Chillers	5.0	5.0	2.5	5.0	5.0
5	Near Ammonia Separator	5.0	5.0	2.5	5.0	5.0
6	Near Ammonia Accumulator	5.0	5.0	5.0	5.0	5.0
7	Near C 551 sample point (Purge gas recovery unit)	2.5	5.0	5.0	2.5	2.5
8	Near Ammonia recovery pump reflux	5.0	5.0	5.0	5.0	5.0
9	Near 551B HP circulation pump	2.5	5.0	2.5	5.0	5.0
10	Near 503 flash vessel	5.0	5.0	5.0	5.0	5.0
11	Near Ammonia Filter	2.5	<1	<1	2.5	2.5
12	Near P1 pump	2.5	2.5	5.0	2.5	5.0
13	Near P2 pump	2.5	2.5	5.0	2.5	5.0
14	Near P5 pump	5.0	5.0	5.0	5.0	5.0
15	Near P9 pump	5.0	5.0	5.0	5.0	5.0
16	Near battery limits (Ammonia storage section)	<1	<1	<1	<1	<1
17	Near Ammonia pump	<1	<1	<1	<1	<1
18	Near Ammonia tranfer pump	<1	1.0	1.0	2.0	1.0

Ammonia in Atmosphere at Different Locations in Plant Area

Doc No: RFCL-TS-EMC-Report-07

Month : February'2025
Nature of Sampling : Ammonia Concentration
Sample collected and tested by : In-House Laboratory

TEST RESULTS

S.No	Sample collection date	Ammonia Concentration in ppm (Max. 25 ppm)			
	Location of sample collection	05.02.2025	12.02.2025	19.02.2025	26.02.2025
1	Near Ammonia Converter -1	2.5	2.5	2.5	5.0
2	Near Ammonia Converter -2	2.5	2.5	2.5	5.0
3	Near product hydrogen sample point (CHRU)	<1	<1	<1	<1
4	Near Ammonia Chillers	5.0	5.0	5.0	5.0
5	Near Ammonia Separator	5.0	5.0	5.0	5.0
6	Near Ammonia Accumulator	5.0	5.0	5.0	5.0
7	Near C 551 sample point (Purge gas recovery unit)	5.0	5.0	5.0	5.0
8	Near Ammonia recovery pump reflux	5.0	5.0	5.0	5.0
9	Near 551B HP circulation pump	5.0	5.0	5.0	5.0
10	Near 503 flash vessel	5.0	5.0	5.0	5.0
11	Near Ammonia Filter	2.5	<1	2.5	<1
12	Near P1 pump	5.0	5.0	5.0	5.0
13	Near P2 pump	5.0	5.0	5.0	5.0
14	Near P5 pump	5.0	5.0	5.0	5.0
15	Near P9 pump	5.0	5.0	5.0	5.0
16	Near battery limits (Ammonia storage section)	<1	<1	<1	<1
17	Near Ammonia pump	<1	<1	<1	<1
18	Near Ammonia tranfer pump	5.0	2.5	2.5	2.5

Ammonia in Atmosphere at Different Locations in Plant Area

Doc No: RFCL-TS-EMC-Report-07

Month : March'2025
Nature of Sampling : Ammonia Concentration
Sample collected and tested by : In-House Laboratory

TEST RESULTS

S.No	Sample collection date	Ammonia Concentration in ppm (Max. 25 ppm)			
	Location of sample collection	05.03.2025	12.03.2025	19.03.2025	26.03.2025
1	Near Ammonia Converter -1	1.0	2.5	2.5	1.0
2	Near Ammonia Converter -2	1.0	2.5	2.5	1.0
3	Near product hydrogen sample point (CHRU)	<1	<1	<1	<1
4	Near Ammonia Chillers	5.0	5.0	5.0	5.0
5	Near Ammonia Separator	5.0	5.0	5.0	5.0
6	Near Ammonia Accumulator	5.0	5.0	5.0	5.0
7	Near C 551 sample point (Purge gas recovery unit)	5.0	5.0	5.0	5.0
8	Near Ammonia recovery pump reflux	5.0	5.0	5.0	5.0
9	Near 551B HP circulation pump	5.0	5.0	5.0	5.0
10	Near 503 flash vessel	5.0	5.0	5.0	5.0
11	Near Ammonia Filter	1.0	<1	1.0	1.0
12	Near P1 pump	5.0	2.5	2.5	2.5
13	Near P2 pump	5.0	2.5	2.5	2.5
14	Near P5 pump	5.0	5.0	5.0	5.0
15	Near P9 pump	5.0	5.0	5.0	5.0
16	Near battery limits (Ammonia storage section)	<1	<1	<1	<1
17	Near Ammonia pump	<1	<1	<1	<1
18	Near Ammonia tranfer pump	2.5	1.0	2.5	1.0