



Date: 28 May 2026

By E mail Submission

To,
Additional Principal Chief Conservator of Forest
Ministry of Environment, Forests & Climate Change
Regional Office, Western Central Zone,
New Secretariat Building, Civil Lanes,
NAGPUR – 440001, Maharashtra

Respected Sir,

Subject: Half yearly EC Compliance report for the period October 2025 to March 2026.

Reference: EC granted by MOEF vide file no F.No. J-11011/224/2018-IA-II(I) dated 03.12.2020
issued for 'Expansion and Change in Product Mix by way of Debottlenecking and
Modernization by M/s Reliance Industries Limited at Raigad, Maharashtra.

Sir,

Please find enclosed Half yearly EC Compliance report for the period October 2025 to March 2026 for the above Environment Clearance.

This is for your information and records please

Thanking you

Yours faithfully,
For RELIANCE INDUSTRIES LIMITED,

Authorized Signatory

Your (**Half Yearly Compliance Report**) has been **Submitted** with following details

Proposal No	IA/MH/IND2/75750/2018
Compliance ID	1228954166
Compliance Number(For Tracking)	EC/M/COMPLIANCE/1228954166/2026
Reporting Year	2026
Reporting Period	01 Jun(01 Oct - 31 Mar)
Submission Date	01-06-2026
RO/SRO Name	Shri Senthil Kumar Sampath
RO/SRO Email	agmu156@ifs.nic.in
State	MAHARASHTRA
RO/SRO Office Address	Integrated Regional Offices, Nagpur

Note:- SMS and E-Mail has been sent to Shri Senthil Kumar Sampath, MAHARASHTRA with Notification to Project Proponent.

Half Yearly Compliance Report**2026****01 Jun(01 Oct - 31 Mar)****Acknowledgement**

Proposal Name		Expansion and Change in Product Mix by way of Debottlenecking and Modernisation by M/s Reliance Industries Limited at Raigad, Maharashtra	
Name of Entity / Corporate Office		Reliance Industries Ltd.	
Village(s)		Borivali	
District		RAIGAD	
Proposal No.	IA/MH/IND2/75750/2018	Category	Industrial Projects - 2
Plot / Survey / Khasra No.		Sub-District	Khalapur
State	MAHARASHTRA	Entity's PAN	*****5055K
MoEF File No.	File No. J-11011/224/2018-IA II (I)	Entity name as per PAN	RELIANCE INDUSTRIES LIMITED

Compliance Reporting Details

Reporting Year 2026

Remarks (if any)

Reporting Period 01 Jun(01 Oct - 31 Mar)

Details of Production and Project Area

Name of Entity / Corporate Office Reliance Industries Ltd.

	Project Area as per EC Granted	Actual Project Area in Possession
Private	.	.
Revenue Land	0	0
Forest	0	0
Others	N/A	N/A
Total	NaN	NaN

Others Area

Sr. no	Other Name	Area Granted	Area Actual
1	Other	29.7	29.7

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	POWER	MW	N/A	90	4.93	
2	STEAM	Others:Tons per Hour	N/A	475	102.28	
3	PURIFIED TEREPHTHALIC ACID (PTA) OR PURE ISOPHTHALIC ACID (PIA)	Tons per Annum (TPA)	N/A	3,00,000	84,344	
4	PARA-XYLENE (PX) OR META-XYLENE (MX) OR REFORMATE	Tons per Annum (TPA)	N/A	2,50,080	89,602	
5	LIQUEFIED PETROLEUM GAS (SR GRADE)	Tons per Annum (TPA)	N/A	27,000	9,870	
6	PENTANE (N AND ISO)	Tons per Annum (TPA)	N/A	12,504	5,751	
7	IG BENZENE , REMAX-1, RENINE	Tons per Annum (TPA)	N/A	6,06,108	18,015	

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	MISCELLANEOUS	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
PPs Submission: Complied Complied. The recommendations are included in the plant design and are at the implementation stage. Status of project is as follows: Regenerative Thermal Oxidiser installed. Rotary Pressure Filter installation completed. MX and PIA plants are under commissioning.		Date: 24/05/2026
2	WATER QUALITY MONITORING AND PRESERVATION	Total fresh-water requirement shall not exceed 16960 cum/day, proposed to be met from MIDC water supply. Necessary permission in this regard shall be obtained from the concerned regulatory authority. The fresh-water requirement shall be reduced after installation of rainwater harvesting system in the unit/project area.
PPs Submission: Complied Complied. Total freshwater requirement during reporting period did not exceed 16,960 cum / day.		Date: 24/05/2026
3	WATER QUALITY MONITORING AND PRESERVATION	Comprehensive water audit to be conducted on annual basis and report to the concerned Regional Office of MEF&CC. Outcome from the report to be implemented for conservation scheme.

PPs Submission: Complied Complied. Water Audit for the year 2025-26 is carried out in April 2026. Water audit report is attached as Annexure - VI.		Date: 24/05/2026
4	WATER QUALITY MONITORING AND PRESERVATION	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
PPs Submission: Complied Complied. Included in the design. Process effluent is not allowed to mix with storm water.		Date: 24/05/2026
5	MISCELLANEOUS	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent transfer to be done through pumps.
PPs Submission: Complied Complied. Requisite precautions for Hazardous chemical storage are included in the design and maintained as per applicable requirements. Approvals from Petroleum and Explosives Safety Organisation (PESO) obtained for storage tanks in accordance with applicable regulatory requirements.		Date: 25/05/2026
6	WASTE MANAGEMENT	Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF. The ash from boiler shall be sold to brick manufacturers / cement industry.
PPs Submission: Complied Complied. Wastes generated are handled and disposed as per applicable requirements. Wastes from process and ETP are being sent to TSDF for disposal.		Date: 25/05/2026
7	AIR QUALITY MONITORING AND PRESERVATION	Regular VOC monitoring shall be done at vulnerable points.
PPs Submission: Complied LDAR program is being carried out for VOC Monitoring at the identified points and necessary actions are being taken.		Date: 25/05/2026
8	WASTE MANAGEMENT	The oily sludge shall be subjected to melting pit for oil recovery and the residue shall be bio-remediated. The sludge shall be stored in HDPE lined pit with proper leachate collection system.
PPs Submission: Complied Melting pit trials by RIL on oily sludge resulted in poor recovery and further need for sludge disposal. Therefore, the Oil Containing sludge is collected in drums and then disposed through Registered Recyclers as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules 2016.		Date: 25/05/2026
9	WASTE MANAGEMENT	Oil catchers/oil traps shall be provided at all possible locations in rain/ storm water drainage system inside the factory premises.
PPs Submission: Complied Oil catchers/traps are provided in storm water drainage network to prevent/contain oil spills, if any.		Date: 25/05/2026
10	WASTE MANAGEMENT	The company shall undertake waste minimization measures as below: a. Metering and control of quantities of active ingredients to minimize waste. b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. c. Use of

		automated filling to minimize spillage. d. Use of Close Feed system into batch reactors. e. Venting equipment through vapour recovery system . f. Use of high pressure hoses for equipment cleaning etc. to reduce wastewater generation .
PPs Submission: Complied Waste minimization measures are included in plant design and being implemented.		Date: 25/05/2026
11	GREENBELT	The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road-sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
PPs Submission: Complied Green belt development is being implemented in Plant periphery.		Date: 25/05/2026
12	Corporate Environmental Responsibility	As proposed, Rs 5.76 crores shall be allocated for Corporate Environment Responsibility (CER) shall be utilized for meeting the commitment of the social-economic issues and as per the proposed action plan. The CER plan shall be completed within three year of the proposed project.
PPs Submission: Complied Complied. Funds are being allocated.		Date: 25/05/2026
13	MISCELLANEOUS	The project proponent shall ensure 70% of the employment to the local people, as per the applicable law. The project proponent shall set up a skill development centre /provide skill development training to village people.
PPs Submission: Complied Complied. RIL provides training / skill development through Government Apprenticeship Schemes to village people.		Date: 25/05/2026
14	MISCELLANEOUS	A separate Environmental Management Cell (having qualified person with Environmental Science/ Environmental Engineering / specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
PPs Submission: Complied Environmental Management Cell and laboratory facilities are in place.		Date: 25/05/2026
15	MISCELLANEOUS	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.
PPs Submission: Complied RIL PMD has full-fledged firefighting systems in place along with competent staff. 2 full-fledged Fire Stations are established to respond in case of Emergency.		Date: 25/05/2026
16	AIR QUALITY MONITORING AND PRESERVATION	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. In case of the treated effluent to be utilized for irrigation/ gardening, real time monitoring system shall be installed at the ETP outlet.

PPs Submission: Complied OCEMS is already provided for Continuous online monitoring and data is being transmitted to CPCB and MPCB servers.		Date: 01/06/2026
17	Human Health Environment	PP to set up occupational health Centre for surveillance of the worker 's health within and outside the plant on a regular basis. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
PPs Submission: Complied Occupational Health Centre is already in place. Workers and employees are provided with required safety kits/mask for personal protection.		Date: 25/05/2026
18	AIR QUALITY MONITORING AND PRESERVATION	The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012 as amended time to time shall be followed.
PPs Submission: Complied National Emission Standards for Petrochemical (Basic and intermediates) issued by the Ministry vide G.S.R.820 E dated 9th November,2012 as amended time to time is followed. The monitoring reports for ambient air quality, stack emission and treated effluent for the reporting period are attached at Annexure I, II and III respectively.		Date: 25/05/2026
19	Risk Mitigation and Disaster Management	Recommendations of mitigation measures from possible accident shall be implemented based on advanced risk Assessment studies conducted for worst case scenarios using latest techniques.
PPs Submission: Complied Complied. Recommendations are being implemented for the unit.		Date: 25/05/2026
20	ENERGY PRESERVATION MEASURES	The project proponent shall develop at least 1 MW green energy/solar energy
PPs Submission: Complied 1 .5 MW solar power project developed outside PMD complex.		Date: 25/05/2026
General Conditions		
Sr.No.	Condition Type	Condition Details
1	MISCELLANEOUS	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/ SEIAA, as applicable. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry/SEIAA, as applicable, to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
PPs Submission: Complied Noted.		Date: 25/05/2026
2	ENERGY PRESERVATION MEASURES	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.

PPs Submission: Complied Offices, control rooms etc and street-lights are converted into LED.		Date: 25/05/2026
3	Noise Monitoring & Prevention	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under the Environment {Protection} Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
PPs Submission: Complied Ambient Noise levels are well within the prescribed limits. Monthly monitoring conducted through MOEF recognized Laboratory / consultant. Monitoring report of ambient noise level is attached at Annexure-IV.		Date: 25/05/2026
4	Corporate Environmental Responsibility	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
PPs Submission: Complied Complied. CER activities are regularly undertaken at nearby villages.		Date: 25/05/2026
5	Corporate Environmental Responsibility	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change 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.
PPs Submission: Complied Complied. sufficient funds allocated to implement the conditions.		Date: 25/05/2026
6	MISCELLANEOUS	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
PPs Submission: Complied Not applicable as the Manufacturing Unit is in MIDC Industrial Area.		Date: 25/05/2026
7	Statutory compliance	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&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six-monthly compliance status report shall be posted on the website of the company.
PPs Submission: Complied Six-monthly compliance reports are uploaded in PARIVESH portal and copies are mailed to		Date: 25/05/2026

officials of MoEFCC, CPCB and SPCB. Copies are also uploaded on company website. The web link for the same is given below: https://www.ril.com/Sustainability/HealthSafety.aspx		
8	Statutory compliance	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted 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 environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.
PPs Submission: Complied Complied. Environment Statement is submitted to State Pollution Control Board Yearly. Copy of the same is attached at Annexure-V.		Date: 25/05/2026
9	Statutory compliance	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 and at https://parivesh.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.
PPs Submission: Complied Complied. The advertisement was published in the Local language and English Language newspapers within 7 days of receiving the Environment Clearance.		Date: 25/05/2026
10	MISCELLANEOUS	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.
PPs Submission: Complied Noted.		Date: 25/05/2026
11	MISCELLANEOUS	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.
PPs Submission: Complied Noted.		Date: 25/05/2026
Visit Remarks		
Last Site Visit Report Date:		N/A
Additional Remarks:		All the Annexures are attached as Additional Attachment.
Note: This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.		

Annexure I

Six Monthly Ambient Air Monitoring Results				
October 2025 to March 2026				
LAB – L1 Laboratory Terrace				
Parameter	Units	Max	Min	Average
Sulphur dioxide as SO ₂	µg/m ³	22.30	18.50	21.02
Nitrogen dioxide as NO ₂	µg/m ³	30.40	26.50	28.82
PM ₁₀	µg/m ³	76.60	61.40	70.65
PM _{2.5}	µg/m ³	26.30	20.00	24.15
Carbon monoxide as CO	mg/m ³	0.62	0.55	0.59
Ozone as O ₃	µg/m ³	15.50	11.70	13.87
Ammonia as NH ₃	µg/m ³	26.40	22.60	24.92
Benzo(a)pyrene as BaP	ng/m ³	BDL	BDL	BDL
Lead as Pb	µg/m ³	BDL	BDL	BDL
Nickel as Ni	ng/m ³	BDL	BDL	BDL
Arsenic as As	ng/m ³	BDL	BDL	BDL
Benzene[C ₆ H ₆]	µg/m ³	BDL	BDL	BDL
NMHC	ppm	BDL	BDL	BDL
LAB – B1 Tank farm		Max	Min	Average
Sulphur dioxide as SO ₂	µg/m ³	25.20	19.50	22.78
Nitrogen dioxide as NO ₂	µg/m ³	34.50	25.40	31.65
PM ₁₀	µg/m ³	82.30	67.60	76.05
PM _{2.5}	µg/m ³	33.70	21.20	28.10
Carbon monoxide as CO	mg/m ³	0.69	0.52	0.64
Ozone as O ₃	µg/m ³	17.50	11.40	15.25
Ammonia as NH ₃	µg/m ³	28.20	24.30	26.77
Benzo(a)pyrene as BaP	ng/m ³	BDL	BDL	BDL
Lead as Pb	µg/m ³	BDL	BDL	BDL
Nickel as Ni	ng/m ³	BDL	BDL	BDL
Arsenic as As	ng/m ³	BDL	BDL	BDL

Benzene[C ₆ H ₆]	µg/m ³	BDL	BDL	BDL
NMHC	ppm	BDL	BDL	BDL
LAB – A3 Tank farm substation		Max	Min	Average
Sulphur dioxide as SO ₂	µg/m ³	28.10	23.40	26.02
Nitrogen dioxide as NO ₂	µg/m ³	38.80	33.10	36.12
PM ₁₀	µg/m ³	88.10	63.80	79.17
PM _{2.5}	µg/m ³	33.70	23.70	29.98
Carbon monoxide as CO	mg/m ³	0.76	0.58	0.70
Ozone as O ₃	µg/m ³	20.30	14.90	17.87
Ammonia as NH ₃	µg/m ³	30.60	26.40	29.15
Benzo(a)pyrene as BaP	ng/m ³	BDL	BDL	BDL
Lead as Pb	µg/m ³	BDL	BDL	BDL
Nickel as Ni	ng/m ³	BDL	BDL	BDL
Arsenic as As	ng/m ³	BDL	BDL	BDL
Benzene[C ₆ H ₆]	µg/m ³	BDL	BDL	BDL
NMHC	ppm	BDL	BDL	BDL
PTA – Safety Building Terrace		Max	Min	Average
Sulphur dioxide as SO ₂	µg/m ³	24.20	16.60	21.68
Nitrogen dioxide as NO ₂	µg/m ³	36.70	27.20	33.20
PM ₁₀	µg/m ³	75.90	58.50	69.82
PM _{2.5}	µg/m ³	28.70	20.00	24.37
Carbon monoxide as CO	mg/m ³	0.75	0.58	0.68
Ozone as O ₃	µg/m ³	18.90	11.40	16.03
Ammonia as NH ₃	µg/m ³	27.80	24.30	25.43
Benzo(a)pyrene as BaP	ng/m ³	BDL	BDL	BDL
Lead as Pb	µg/m ³	BDL	BDL	BDL
Nickel as Ni	ng/m ³	BDL	BDL	BDL
Arsenic as As	ng/m ³	BDL	BDL	BDL
Benzene[C ₆ H ₆]	µg/m ³	BDL	BDL	BDL
NMHC	ppm	BDL	BDL	BDL

PTA – Energy Centre				
Sulphur dioxide as SO ₂	µg/m ³	24.40	20.30	22.32
Nitrogen dioxide as NO ₂	µg/m ³	36.10	30.10	32.78
PM ₁₀	µg/m ³	79.80	61.40	74.50
PM _{2.5}	µg/m ³	30.50	23.70	27.35
Carbon monoxide as CO	mg/m ³	0.76	0.61	0.67
Ozone as O ₃	µg/m ³	17.50	13.70	16.15
Ammonia as NH ₃	µg/m ³	28.30	23.10	26.58
Benzo(a)pyrene as BaP	ng/m ³	BDL	BDL	BDL
Lead as Pb	µg/m ³	BDL	BDL	BDL
Nickel as Ni	ng/m ³	BDL	BDL	BDL
Arsenic as As	ng/m ³	BDL	BDL	BDL
Benzene[C ₆ H ₆]	µg/m ³	BDL	BDL	BDL
NMHC	ppm	BDL	BDL	BDL
PFY FDY				
Sulphur dioxide as SO ₂	µg/m ³	24.40	21.30	22.67
Nitrogen dioxide as NO ₂	µg/m ³	35.40	32.50	33.97
PM ₁₀	µg/m ³	78.80	62.50	74.10
PM _{2.5}	µg/m ³	27.50	22.50	24.57
Carbon monoxide as CO	mg/m ³	0.69	0.54	0.62
Ozone as O ₃	µg/m ³	16.40	13.20	14.87
Ammonia as NH ₃	µg/m ³	27.80	25.30	26.18
Benzo(a)pyrene as BaP	ng/m ³	BDL	BDL	BDL
Lead as Pb	µg/m ³	BDL	BDL	BDL
Nickel as Ni	ng/m ³	BDL	BDL	BDL
Arsenic as As	ng/m ³	BDL	BDL	BDL
Benzene[C ₆ H ₆]	µg/m ³	BDL	BDL	BDL
NMHC	ppm	BDL	BDL	BDL
PFY Filter Water Tank				
Sulphur dioxide as SO ₂	µg/m ³	26.30	20.50	24.93

Nitrogen dioxide as NO ₂	µg/m ³	39.40	31.60	35.98
PM ₁₀	µg/m ³	83.80	68.60	78.35
PM _{2.5}	µg/m ³	30.00	23.70	26.23
Carbon monoxide as CO	mg/m ³	0.67	0.45	0.60
Ozone as O ₃	µg/m ³	18.10	14.00	16.93
Ammonia as NH ₃	µg/m ³	29.20	23.80	27.63
Benzo(a)pyrene as BaP	ng/m ³	BDL	BDL	BDL
Lead as Pb	µg/m ³	BDL	BDL	BDL
Nickel as Ni	ng/m ³	BDL	BDL	BDL
Arsenic as As	ng/m ³	BDL	BDL	BDL
Benzene[C ₆ H ₆]	µg/m ³	BDL	BDL	BDL
NMHC	ppm	BDL	BDL	BDL

Annexure - II

Six Monthly Stack Monitoring Results

October 2025 to March 2026

Stack details and Parameter				
PTA – Px Heater 1042	Units	Max	Min	Average
Particulate Matter	mg/Nm3	7.3	4.7	6.16
Sulphur dioxide as SO2	Kg/day	2.7	0.8	2.06
Nitrogen dioxide as NO2	PPM	43.4	37.9	40.48
Carbon monoxide as CO	PPM	0.64	0.52	0.58
PTA – Px Heater 2001				
Particulate Matter	mg/Nm3	8.4	5.2	6.60
Sulphur dioxide as SO2	Kg/day	1.2	0.57	0.87
Nitrogen dioxide as NO2	PPM	46.2	39.6	42.42
Carbon monoxide as CO	PPM	0.76	0.57	0.64
PTA – Px Heater 2002				
Particulate Matter	mg/Nm3	9.6	4.6	7.28
Sulphur dioxide as SO2	Kg/day	1.1	0.38	0.88
Nitrogen dioxide as NO2	PPM	45.1	37.9	41.94
Carbon monoxide as CO	PPM	0.71	0.59	0.63
PTA – Px Heater 3001,2,3				
Particulate Matter	mg/Nm3	7.6	5.4	6.42
Sulphur dioxide as SO2	Kg/day	5.8	1.2	3.92
Nitrogen dioxide as NO2	PPM	43	38.8	40.40
Carbon monoxide as CO	PPM	0.7	0.64	0.67
PX Heater 5101				
Particulate Matter	mg/Nm3	9.3	6.3	7.02
Sulphur dioxide as SO2	Kg/day	4.3	2.5	3.26
Nitrogen dioxide as NO2	PPM	46.9	38.4	42.64
Carbon monoxide as CO	PPM	0.77	0.51	0.61
PX Heater 6101				
Particulate Matter	mg/Nm3	7.4	5.2	6.30
Sulphur dioxide as SO2	Kg/day	12.5	4.7	9.00
Nitrogen dioxide as NO2	PPM	47.5	39.7	42.82
Carbon monoxide as CO	PPM	0.72	0.53	0.63
HRS G Heater -1				
Particulate Matter	mg/Nm3	Under shutdown		
Sulphur dioxide as SO2	Kg/day			
Nitrogen dioxide as NO2	PPM			
Carbon monoxide as CO	PPM			

HRSB Heater -2				
Particulate Matter	mg/Nm3	Under shutdown		
Sulphur dioxide as SO2	Kg/day			
Nitrogen dioxide as NO2	PPM			
Carbon monoxide as CO	PPM			
PTA – Boiler A				
Particulate Matter	mg/Nm3	8.6	6.4	7.30
Sulphur dioxide as SO2	Kg/day	21	16.4	17.76
Nitrogen dioxide as NO2	PPM	47.7	43.1	45.10
Carbon monoxide as CO	PPM	0.7	0.64	0.67
PTA – Boiler B				
Particulate Matter	mg/Nm3	9.8	6.4	7.98
Sulphur dioxide as SO2	Kg/day	16.6	11.6	13.78
Nitrogen dioxide as NO2	PPM	47.7	42.6	45.55
Carbon monoxide as CO	PPM	0.84	0.71	0.75
PTA - Boiler C				
Particulate Matter	mg/Nm3	7.6	5.4	6.33
Sulphur dioxide as SO2	Kg/day	90.5	13	28.93
Nitrogen dioxide as NO2	PPM	45.7	40	42.22
Carbon monoxide as CO	PPM	0.72	0.52	0.63

Annexure III

Six Monthly Treated Effluent Analysis

October 2025 to March 2026

[illegible]

Annexure IV

Ambient Noise Level

October 2025- March 2026

Month	Time		P1	P2	P3	Limits
Oct-25	Day Time	Average	60.1	59.8	59.6	75
	Night time	Average	55.5	55.8	55.1	70
Nov-25	Day Time	Average	59.3	59.6	58.8	75
	Night time	Average	59.1	56.4	57.2	70
Dec-25	Day Time	Average	60.2	58.8	59.6	75
	Night time	Average	55.5	54.7	54.9	70
Jan-26	Day Time	Average	59.7	57.9	58.1	75
	Night time	Average	55	55.4	54.4	70
Feb-26	Day Time	Average	58.8	58.2	59.2	75
	Night time	Average	55.1	55.6	55	70
Mar-26	Day Time	Average	62.2	62	62.6	75
	Night time	Average	57.8	58.3	59.3	70

Annexure V



Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2025

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000082349

Submitted Date

03-09-2025

PART A

Company Information

Company Name

Reliance Industries Limited
(PTA,PIA,PX,MX,EC) Division

Application UAN number

Format 1.0/CAC/UAN No.
0000175038/CO2501001059

Address

B-5, MIDC Industrial Area, Patalganga

Plot no

B-5

Taluka

Khalapur

Village

Kaire

Capital Investment (In lakhs)

139932

Scale

LSI

City

Patalganga

Pincode

410220

Person Name

S S Suryawanshi

Designation

Dy. General Manager- Environment

Telephone Number

9284966242

Fax Number

02192356299

Email

sharad.suryawanshi@ril.com

Region

SRO-Raigad I

Industry Category

Red

Industry Type

R57 Petrochemicals Manufacturing (including processing of Emulsions of oil and water)

Last Environmental statement submitted online

yes

Consent Number

Format 1.0/CAC/UAN No.
0000175038/CO2501001059

Consent Issue Date

2025-01-13

Consent Valid Upto

2025-08-31

Establishment Year

1984

Date of last environment statement submitted

Jan 1 1900 12:00:00:000AM

Industry Category Primary (STC Code) & Secondary (STC Code)

Product Information

Product Name

PTA or PIA

Consent Quantity

300000

Actual Quantity

28795

UOM

MT/A

PX or MX or Reformate

250080

120387

MT/A

LPG

27000

11320

MT/A

ISO and N Pentane

12504

8037

MT/A

IG Benzene, Remax, Renine

606108

30332

MT/A

By-product Information

By Product Name	Consent Quantity	Actual Quantity	UOM
NA	0	0	MT/A

Part-B (Water & Raw Material Consumption)**1) Water Consumption in m3/day**

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	3916.00	1401.42
Domestic	12923.00	3269.98
All others	121.00	117.12
Total	0.00	0.00
	16960.00	4788.52

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	5077.4	4019	CMD
Sewage	100.9	100.52	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Paraxylene Front End	1.33	2.57	Ton/Ton

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
NAPHTHA (varies due to Quality of Naphtha)	0.89	1.16	Ton/Ton

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
NA	0	0	MT/A

Part-C**Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)****[A] Water**

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/Lit) Except PH,Temp,Colour Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
COD	4019	106.67	Nil	Nil	NA

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day) Quantity	Concentration of Pollutants discharged(Mg/NM3) Concentration	Percentage of variation from prescribed standards with reasons %variation	Standard	Reason
SO2	0.75	0	Nil	Nil	NA

Part-D

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
1.7 Oil from wastewater treatment	425.25	77.63	MT/A
2.2 Sludge containing oil	3.37	0	MT/A
33.2 Contaminated cotton rags or other cleaning materials	1.17	0.61	MT/A
4.5 Spent clay containing oil	85.98	27.58	MT/A
5.1 Used or spent oil	34.46	23.79	MT/A
35.3 Chemical sludge from waste water treatment	86.36	260.35	MT/A
Other Hazardous Waste	2.67	26.03	MT/A
Other Hazardous Waste	5.72	1.41	MT/A
Other Hazardous Waste	14.89	0	MT/A
3.1 cargo residue, washing water and sludge containing oil	0	4.69	MT/A
1.6 Spent catalyst and molecular sieves	0	16.5108	MT/A
15.2 Discarded asbestos	0	0	MT/A
1.4 Organic residues	0	0	MT/A

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
35.3 Chemical sludge from waste water treatment	86.36	260.35	MT/A

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Rockwool Waste	283.97	112.56	MT/A

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	0	0	MT/A

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	0	0	MT/A

Part-F

Please specify the characteristics(in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
1.7 Oil from wastewater treatment	77.63	MT/A	20 % Oil

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
NA	0	MT/A	NA

Part-G

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment(in Lacs)	Reduction in Maintenance(in Lacs)
NA	0	0	0	0	0	0

Part-H

Additional measures/investment proposal for environmental protection abatement of pollution, prevention of pollution.

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
NA	NA	0

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
NA	NA	0

Part-I

Any other particulars for improving the quality of the environment.

Particulars

Environment Statement for the year April-2024 to March 2025 for PTA/PIA/PX/MX/EC Division.

Name & Designation

S S Suryawanshi Dy. General Manager -Environment

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000082349

Submitted On:

03-09-2025



Water Audit Report

(FY 2025-26)

for

PTA Division

**Reliance Patalganga Manufacturing Division,
Patalganga, Taluka Khalapur, District Raigad,
Maharashtra**

April 2026

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ABBREVIATIONS:

BOD – Biochemical Oxygen Demand

CETP – Common Effluent Treatment Plant

COD – Chemical Oxygen Demand

CPCB – Central Pollution Control Board

CTO – Consent to Operate

DM – Demineralization

EC – Environmental Clearance

FI – Flow Indicator

FT – Flow Transmitter

LAB – Linear Alkyl Benzene

MX – Meta-Xylene

MIDC – Maharashtra Industrial Development Corporation

MOEF&CC – Ministry of Environment, Forests and Climate Change

MPCB – Maharashtra Pollution Control Board

MTPM – Metric Tons Per Month

PMD – Patalganga Manufacturing Division

PTA – Purified Terephthalic Acid

PX – Para-Xylene

RIL – Reliance Industries Limited

RO – Reverse Osmosis

1. EXECUTIVE SUMMARY

RIL has its Patalganga Manufacturing division (PMD) located within notified Industrial area at Patalganga MIDC, Tal. Khalapur, District Raigad, Maharashtra.

Patalganga Manufacturing Division (PMD) is called Mother Plant of RIL as it gave birth to the concepts of Vertical Integration, World Scale Plants to derive economy of scale, Management Systems, Plant Maintenance System, Training and development systems and Emergency preparedness. PMD is recognized for its core strengths in manufacturing excellence. PMD has robust Integrated Management System (Quality, Environment and Safety), which is certified for conformance with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018 standards

The water audit has been conducted for the PTA/PIA/PX/MX/EC Division of Patalganga Manufacturing Division to establish an accurate water balance by tracking and measuring water consumption for various purposes, wastewater generation & its treatment, recycling and final discharge.

The purpose of water audit is to analyze site water and effluent balance, identify areas of improvement and propose measures to minimize water usage & enhance recycling. Methodology includes detailed site water & effluent balance study, observations and identification of opportunities for recycling of water.

This audit identified areas such as water leakages, optimization of water uses in cooling tower and water recycling opportunities.

2. INTRODUCTION

The PTA division produces Purified Terephthalic Acid (PTA)/Pure Isophthalic acid along with its key raw material, p-Xylene/ Meta Xylene. The PTA is used as feedstock for the Polyester Manufacturing Division, which operates within the same integrated complex.

The water demand for PTA Division- PMD complex is met through sanctioned water supply from MIDC, Govt. of Maharashtra.

3. WATER DEMAND

Major water requirements in PTA Division include cooling water make-up, demineralization (DM) water, domestic water and service water. These are essential for maintaining process operations and general utility applications within the plant.

4. OBJECTIVE

To analyze current water & effluent balance, identify areas of improvement and propose measures to minimize water use, increase water recycle and minimize environmental impact.

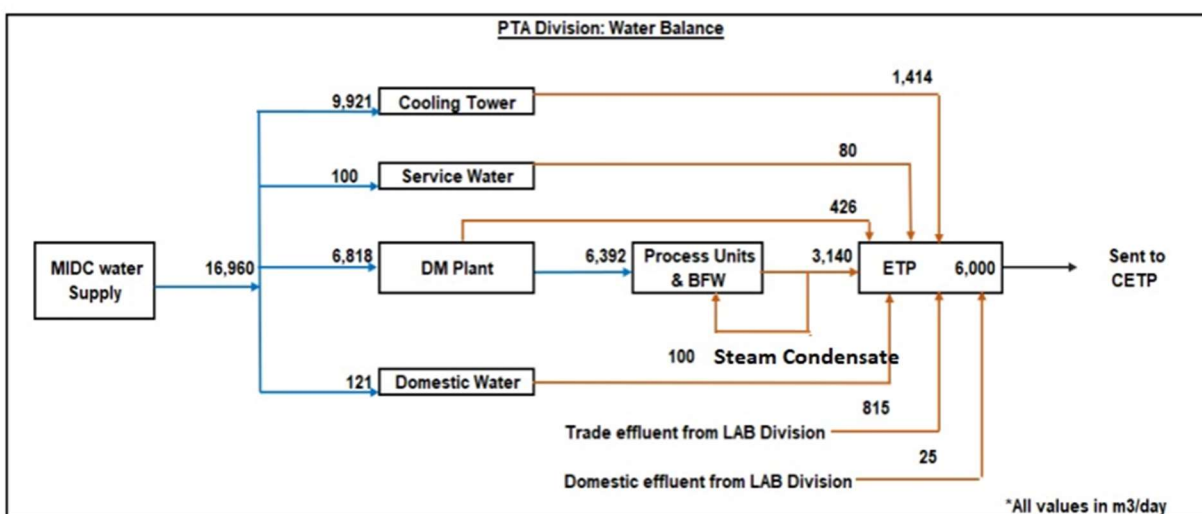
5. METHODOLOGY

The methodology involves a detailed assessment of site water balance, evaluation of incoming water quality, analysis of effluent balance, review of treated effluent quality, and field observations.

a. WATER BALANCE

PTA Division Water Balance Diagram

Water Balance Diagram for PTA Division



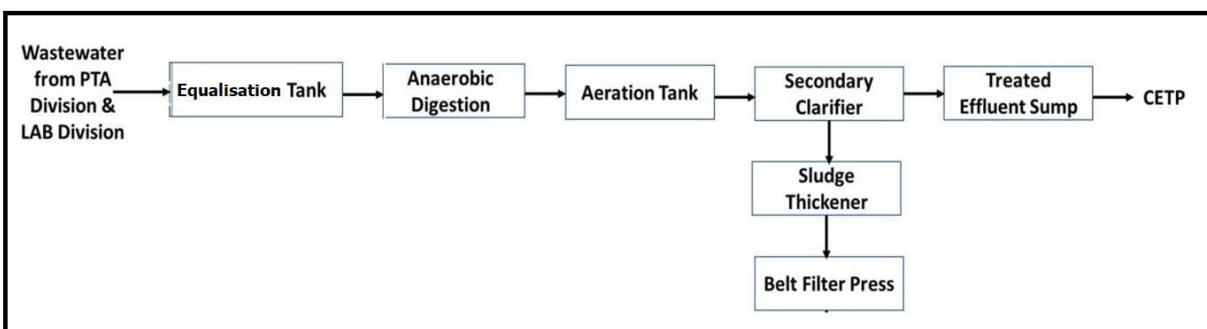
MIDC raw water quality is provided in Annexure 2. Water is utilized for plant washings, utilities (including cooling towers, boilers, and the water treatment plant), as well as for domestic purposes. All these activities result in the generation of effluent.

b. WASTE WATER TREATMENT SCHEME

The PTA Division has a dedicated Effluent Treatment Plant (ETP) where wastewater from both the PTA and LAB divisions is treated. The treatment system comprises primary and secondary processes, with the secondary stage involving anaerobic digestion followed by the activated sludge process.

Treated Effluent quality is given in Annexure 2. The treated effluent from secondary clarifier complies with MPCB stipulated standards. It is collected in a sump and then transferred to the Common Effluent Treatment Plant (CETP) via a dedicated pipeline.

Effluent Treatment Scheme for PTA Division



6. YEAR ON YEAR IMPROVEMENT IN WATER MANAGEMENT

Year-on-year water management practices have significantly improved through increased awareness, stronger monitoring systems, and continuous employee engagement initiatives.

Regular trainings, awareness sessions, and review meetings have enhanced understanding of water conservation across all operational levels. Site teams have become more proactive in identifying and monitoring leakages, ensuring timely corrective actions and minimizing water losses.

Detailed tracking of water consumption patterns and savings has also improved, supported by periodic performance reviews and data-based monitoring. Various water-saving schemes and optimization initiatives have been implemented to enhance efficiency, reduce wastage, and promote sustainable water utilization.

Overall, the organization has developed a stronger culture of water conservation with continuous focus on operational improvements and resource sustainability.

7. CONCLUSION & RECOMMENDATIONS:

Water consumption the PTA Division is attributed to various activities, including domestic use, PTA/PIA/PX/MX process operations, cooling tower blowdown, demineralized (DM) water usage, and DM stream rinsing/backwash.

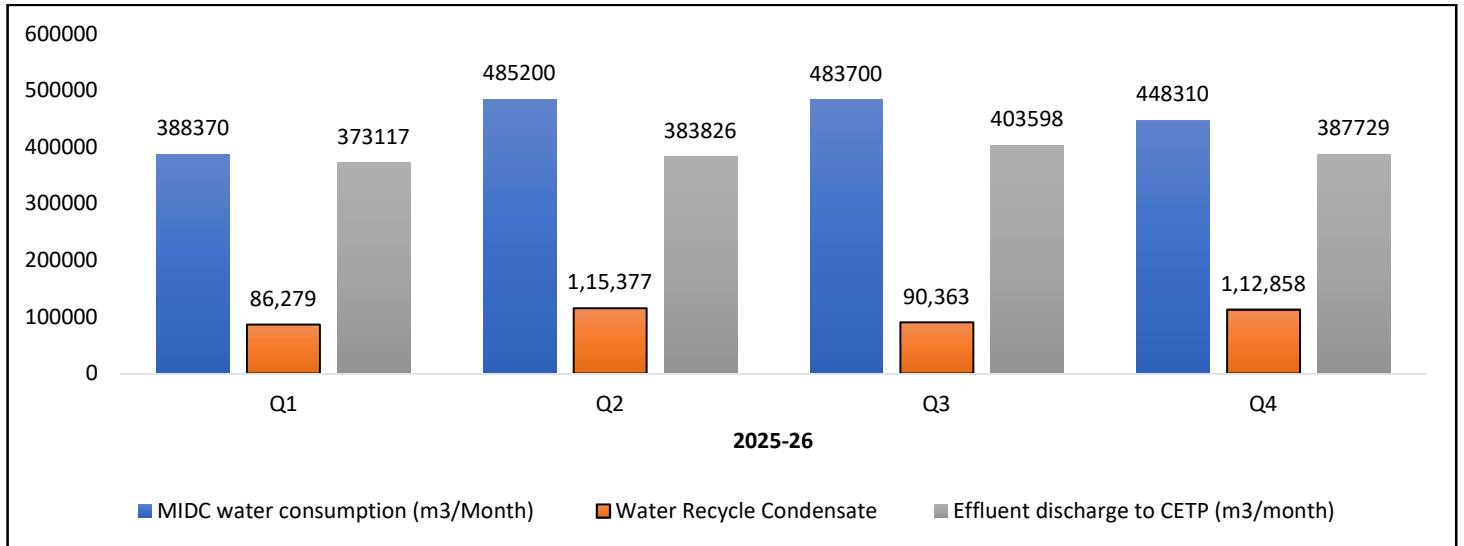
Permissible water consumption limits and effluent discharge quantity, as specified in the CTO issued by MPCB, are provided in Annexure I.

Details of recycled condensate recovery are provided in Annexure I. The recovered condensate is reused within the plant for cooling tower make-up and process applications.

- Overall water consumption is well managed and remains within permissible limits.
- Effluent discharge quantity throughout the year remains within permissible effluent discharge limit given by MPCB. Water management practices are systematic with water flow meters in place and treatment systems are operating satisfactorily.
- No significant water losses or abnormal consumption trends were observed.
- Condensate recycling and reuse practices are in place.
- Good awareness of water conservation is evident among employees and workers at site.

ANNEXURE 1: WATER CONSUMPTION, RECYCLED CONDENSATE & EFFLUENT DISCHARGE DATA

A. Water Consumption, Recycled Condensate & Effluent Discharge Data for FY 2025-26



FY 2025-26	MIDC water consumption (m3/Month)	Water Recycle Condensate (m3/Month)	Effluent discharge to CETP (m3/month)
Apr-25	1,56,570	38,484	1,15,631
May-25	1,06,560	22,998	1,15,847
Jun-25	1,25,240	24,797	1,41,639
Jul-25	1,72,570	39,524	1,30,828
Aug-25	1,51,130	39,696	1,30,271
Sep-25	1,61,500	36,157	1,22,727
Oct-25	1,60,800	30,320	1,40,531
Nov-25	1,52,200	18,960	1,26,051
Dec-25	1,70,700	41,083	1,37,016
Jan-26	1,56,300	38,805	1,36,513
Feb-26	1,37,530	38,759	1,14,248
Mar-26	1,54,480	35,294	1,36,968

B. Permissible Water Consumption as per MPCB Consent to Operate (CTO):

Sr. No.	Purpose for water consumed Water consumption	Quantity (m3/day)
1	Industrial Cooling, spraying in mine pits or boiler feed	12,923
2	Domestic purpose	121
3	Processing whereby water gets polluted & pollutants are easily biodegradable	3,916
	Total:	16,960

C. Permissible Effluent Discharge as per MPCB Consent to Operate (CTO):

Sr No	Description	Permitted (in CMD)	Disposal Path
1	Trade effluent	5,077.4	CETP
2	Domestic effluent	100.9	CETP
Total:		5,178.3	CETP

ANNEXURE 2: QUALITY PARAMETERS**MIDC Raw Water Quality:**

Sr No	Parameter	Unit	Minimum	Maximum
1	pH	N.A.	6.7	7.4
2	Conductivity	ppm	46	161
3	Turbidity	NTU	0.8	69
4	Colour	HU	5	20
5	Odour	N.A.	Not specific	Not specific
6	M Alkalinity as CaCO ₃	ppm	28	68
7	P Alkalinity as CaCO ₃	ppm	NIL	NIL
8	Total Hardness as CaCO ₃	ppm	30	74
9	Calcium Hardness as CaCO ₃	ppm	10	31
10	Sulphate (SO ₄)	ppm	<1.0	3
11	Chloride (Cl ⁻)	ppm	9	27
12	Nitrate (NO ₃)	ppm	<1	2
13	Phosphate (PO ₄)	ppm	<0.1	2
14	Ammonia (free) as N	ppm	0.2	<5.0
15	Carbon Dioxide (CO ₂) free	ppm	Nil	<5.0
16	Total free chlorine	ppm	0.1	1
17	Silica as SiO ₂	ppm	5.9	26.8
18	Dissolved Oxygen	ppm	6	6.5
19	Total Suspended Solids	ppm	8	46
20	Total Dissolved Solids	ppm	22	228
21	Total Solids	ppm	30	250
22	Copper as Cu	ppm	nil	0.1
23	Zinc as Zn	ppm	0.6	2.1
24	Chromium as Cr	ppm	Nil	Nil
25	Manganese as Mn	ppm	Nil	1.4
26	Lead as Pb	ppm	Nil	Nil
27	Iron as Fe	ppm	0.1	2.6
28	Calcium as Ca	ppm	2.1	12.6
29	Magnesium as Mg	ppm	2	6.6
30	Sodium as Na	ppm	5.8	16
31	Potassium as K	ppm	0.34	15

Sr No	Parameter	Unit	Minimum	Maximum
32	COD	ppm	12	33
33	BOD	ppm	ND	ND
34	Oil & Grease	ppm	Ni	<10

ETP Treated Effluent Quality:

Sr. No.	PTA -Treated Effluent	Max	Min	Average	MPCB limits
1	pH @ 25°C	8.8	8.1	8.3	6.0-8.5
2	Suspended Solids @ 103°C, mg/l	14	8	11.7	100
3	Chemical Oxygen Demand, mg/l	220	10	118.3	250
4	Biochemical Oxygen Demand @ 27°C for 3 days, mg/l	75	3.9	37.5	100
5	Chloride as Cl-, mg/l	270	175	210	300
6	Sulphates as SO ₄ ²⁻ , mg/l	170	74	103.3	1,000
7	Oil & Grease, mg/l	< 2	< 2	< 2	10

ANNEXURE 3: WATER AUDIT QUESTIONNAIRES AND OBSERVATIONS

Questions		Observations
Water Management System		
1	Water policy or any policy which commits to water conservation?	PMD site follows an environmental policy to ensure the sustainable, responsible management and water conservation
2	What is the source of raw water for the site?	Total water requirement for RIL-PMD is met through Maharashtra Industrial Development Corporation (MIDC) water supply, which sources water from Patalganga river.
3	Does the site have water distribution network layout?	Yes, RIL-PMD has a water distribution system in place for managing and supplying water throughout the facility.
4	Does the site have a water manager? What are the activities handled?	PMD site has dedicated department responsible for measuring flow, monitoring water consumption and quality of water and optimizing overall water usage at site
5	Does the site have water accounting system in place?	Yes. Water accounting is done on daily basis through dedicated water Transmitters at key water distribution locations points.
6	Does the site have monthly reviews on water consumption?	Yes, monthly water consumption is reviewed to ensure efficient use and compliance.
7	Does the site have leak detection and repair program in place for water management	Yes, a leak detection and repair program is in place to control water losses.
8	What are the training to enhance the awareness on water conservation activities?	Various water conservation and Importance of water efficiency in operations, are conducted.

Questions		Observations
9	How is awareness on water management being carried out?	Water management awareness is promoted through environmental training, awareness campaigns and induction sessions for new employees and discussed in monthly meetings.
10	Is water metering facility available at site?	Yes. PMD site is equipped with water metering systems installed at critical locations, which enables accurate measurement and comprehensive water accounting across all major areas within the facility.
11	What is the frequency of meter calibration? What is the system for calibration check of water meter?	Flow transmitters are calibrated at regular intervals. Yearly
12	Water consumption monitoring records available?	Yes (Annexure1), water consumption records are monitored and records are maintained.
13	Is water consumption monitored at site?	Yes, water consumption monitoring records are maintained. Meter calibration is done as per scheduled frequency and tracked through SAP system.
14	What is the cycle of concentration of cooling tower?	4 (depends on heat load & CT make up quality)
15	Is water quality being monitored? What is the water treatment facility available?	Anaerobic ETP followed by aerobic ETP
16	What is the water consumption trend over the year and its pattern/analysis	EC plant
17	Does site carry out water balance?	Yes
18	What are the projects implemented to achieve the savings?	Rain water harvesting

Questions		Observations
19	Is effluent being reused at site? If yes, provide details	No, After treatment it is sent to CETP
20	Is there any plan to increase effluent reuse/recycle.	No, plan to increase effluent recycle/reuse