Reliance
Industries Limited

CIN: L17110MH1973PLC019786

Dated: 21st November '2024

To,

The Regional Officer,
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office,
A Wing – 407 & 409, Aranya Bhawan,
Near CH - 3 Circle, Sector - 10A,
Gandhinagar, Gujarat – 382 010

Sub: Six Monthly EC Compliance Reports of RIL Refinery cum Petrochemical Complexes, Jamnagar, for the period ending 30th September '2024.

Dear Sir,

Please find herewith the Six-monthly EC / CRZ Clearance compliance status reports of M/s Reliance Industries Ltd, (Refinery cum Petrochemical Complexes), Jamnagar for the period 01st April '2024 to 30th September '2024.

The compliance and monitoring reports are being submitted as per the requirements of EIA Notification 2006 and its amendment thereof.

Thanking you,

Yours truly,
For Reliance Industries Limited

Authorized Signatory

CC : The Regional Officer, Gujarat Pollution Control Board. Sardar Patel Bhawan, Rameshwar Nagar, JAMNAGAR.

Half Yearly Compliance Report
2024
01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	18 MMTPA Refinery Complex at Motikhavdi/Sikka, Jamnagar
Name of Entity / Corporate Office	RELIANCE INDUSTRIES LIMITED
Village(s)	N/A
District	JAMNAGAR

Proposal No.	J-11011/25/94-IA-II (I)
Plot / Survey / Khasra No.	N/A
State	GUJARAT
MoEF File No.	J-11011/25/94-IA-II (I)

Category	Industrial Projects - 2
Sub-District	N/A
Entity's PAN	*****5055K
Entity name as per PAN	RELIANCE INDUSTRIES LIMITED

Compliance Reporting Details

Reporting Year 2024

Remarks (if any)

Reporting Period 01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office RELIANCE INDUSTRIES LIMITED

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	2421	2421
Total	2421	2421

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Crude Oil	Others:MMTPA	N/A	18	18	

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details

1	MISCELLANEOUS	The project Authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board and the State Government.

PPs Submission: Being Complied The summary monitoring report, Annexure II, is based on reports submitted to GPCB on a monthly basis.	Date: 21/11/2024

2	GREENBELT	B. CRUDE OIL TERMINAL (COT): A green belt of adequate width (at least 50 m) and density should be developed all around the crude oil terminal site.

PPs Submission: Complied A green belt of adequate width has been developed and is maintained all around the tank farm.	Date: 21/11/2024

3	MISCELLANEOUS	Any expansion of the Plant or storage facilities either with the existing / proposed products mix or new products or change in the pipeline route / location of SPM site etc. can be taken up only with the prior approval of this Ministry.

PPs Submission: Complied Complied with.	Date: 21/11/2024

4	AIR QUALITY MONITORING AND PRESERVATION	The total emissions of SO2 from the refinery complex should not exceed 24 TPD after the refinery has been fully established.

PPs Submission: Complied Regular monitoring and measurement are carried out for measuring SO2 emission from the refinery complex which is below the limit prescribed. Please refer Annexure I-A showing average daily emission quantity of SO2. The Daily SO2 emission during 1st half of FY2025 varied between 21.55 and 22.73 MT/day.	Date: 21/11/2024

5	AIR QUALITY MONITORING AND PRESERVATION	The gaseous emission from various process units should conform to the standards prescribed by the concerned authorities, from time to time. At no time the emission level should go beyond the stipulated standards. In the event of failure of any pollution control system adopted by the unit the respective unit should be shut down immediately and should not be restarted until the control measures are rectified to achieve the desired efficiency.

PPs Submission: Complied The limits for gaseous emissions are prescribed by Gujarat Pollution Control Board (GPCB). The emission parameters are within the standards prescribed at all times. The recommended procedure for ensuring compliance to emission limits is followed. Please refer the monitoring reports annexed as Annexure 2-A	Date: 21/11/2024

6	AIR QUALITY MONITORING AND PRESERVATION	Sulphur recovery unit having efficiency of not less than 99% should be provided.

PPs Submission: Complied Sulphur recovery unit efficiency is complying. Please refer Annexure 4-A for SRU Efficiency.	Date: 21/11/2024

7	AIR QUALITY MONITORING AND PRESERVATION	Low NOx burners to avoid excessive formation of NOx should be provided.

PPs Submission: Complied Low NOx burners are provided for reduction of NOx.		Date: 21/11/2024
8	AIR QUALITY MONITORING AND PRESERVATION	At least six ambient air quality monitoring stations should be set up in the refinery area in the down wind direction as well as where maximum ground level concentrations of SO2, NOx, HC and SPM are anticipated. The monitoring network should be decided based on the modelling exercise to represent the short term GLCs. A mobile van with adequate facilities to monitor ambient air quality outside the refinery premises should also be planned.
PPs Submission: Complied Stipulated number of AAQM stations have been setup. Please refer Annexure 5-A for AAQMs results. Mobile Ambient Air Quality Van has been established and operated at locations outside the refinery. Please refer Annexure 6.		Date: 21/11/2024
9	AIR QUALITY MONITORING AND PRESERVATION	Fugitive emissions of HC from storage tanks, crude oil tanks etc. should be minimized by adopting necessary measure such as double seal floating roof tanks. The emission should be controlled so as to ensure that the NMHC levels outside the refinery premises does not exceed 160 ug / M3.
PPs Submission: Complied All the storage tanks with emission control measures are provided. They are compliant to the Refinery standards Notified on dtd 18.03.2008. Complied.		Date: 21/11/2024
10	AIR QUALITY MONITORING AND PRESERVATION	Adequate facilities for monitoring the fugitive emission should be provided and data recorded should be submitted every three months to CIF / SPCB and every six months to the Ministry of Environment and Forests.
PPs Submission: Complied Procedure and facilities for Fugitive emission monitoring is established and the results of monitoring are recorded and submitted to GPCB .		Date: 21/11/2024
11	AIR QUALITY MONITORING AND PRESERVATION	The stacks should be of appropriate design and height and should be attached to pollution control systems wherever necessary. Height of Stacks attached to FCCU / HCU, CPP etc. should be decided in consultation with the State Government (SPCB).
PPs Submission: Complied All the stacks are attached to necessary control systems and are of appropriate height as per the guidelines.		Date: 21/11/2024
12	MISCELLANEOUS	Designing of LPG spheres including the exclusion zone should be finalized in consultation and approval of the Chief Inspector of Explosives, Nagpur and the State Pollution Control Board. The impact of fire and explosion should not cross the plant boundaries.
PPs Submission: Complied Designing of the Sphere has been done including the exclusion zone of storage tanks and spheres and are approved by the Chief Inspector of Explosives, Nagpur. The impact of fire and explosion have been quantified in the Risk Assessment carried out and does not cross the plant boundaries.		Date: 21/11/2024
13	WATER QUALITY MONITORING AND PRESERVATION	Ground water should not be tapped for industrial as well as domestic uses including the township. Alternate source has to be finalized keeping in view its impact on other competent users.

		PPs Submission: Complied Groundwater is not tapped for domestic or industrial use. Desalination plants have been installed to meet the total water demand of the refinery complex. Narmada water is received through approval accorded by Gujarat Water Infrastructure Ltd (GWIL). Date: 21/11/2024
14	WATER QUALITY MONITORING AND PRESERVATION	Liquid effluents should be treated to conform to the standards stipulated by State Pollution Control Board / Ministry of Environment and Forests under EPA, 1986. Recycling / reuse of the treated effluent to the maximum extent possible should be planned.
		PPs Submission: Complied State-of-art Effluent Treatment Plant (ETP) is provided with Primary, Secondary and Tertiary facilities to maximize the recycle and reuse of the treated water. The treated water meets all the prescribed standards. Date: 21/11/2024
15	WATER QUALITY MONITORING AND PRESERVATION	Adequate number of influent and effluent quality monitoring stations have to be planned with adequate facilities specially for parameters like phenols, sulphides, oil and grease, suspended solids, BOD, COD, pH and flow. The effluent discharge point should be decided in consultation with NIO and the State Pollution Control Board.
		PPs Submission: Complied All the influent and effluent parameters are monitored in the central laboratory (NABL approved) set up. The effluent parameters are monitored at source of generation and at outlet of effluent treatment plant. Please refer Annexure 7-A. Discharge of effluent from the complex is at a point decided in consultation with NIO and through a well-designed diffuser. The consent from GPCB has been granted for this discharge. Date: 21/11/2024
16	WASTE MANAGEMENT	System to recover oil from the oily sludge and incineration of the residues should be provided.
		PPs Submission: Complied The Oily sludge recovered from ETP is re-processed in Delayed Coker unit. The sludge from the heavy oil storage tanks generated during maintenance is sent to common incineration facility and or Co-processing in Cement Industry. Date: 21/11/2024
17	Statutory compliance	Hazardous substances and solid wastes handling, storage and disposal should be as per the Solid Wastes (Management and Handling) Rules, 1989 of EPA, 1986.
		PPs Submission: Complied Authorisation for Storage, Handling and disposal of HW is obtained from GPCB. Date: 21/11/2024
18	Statutory compliance	A solid waste management plan should be submitted to the Ministry for approval within a period of six months. In case of land-fill the site should be approved by the State Government.
		PPs Submission: Complied The solid waste management plan has been submitted to the Ministry as per the requirement. Date: 21/11/2024
19	MISCELLANEOUS	Cutting of trees from the project sites should be kept to minimum while developing the site and planning the infrastructural facilities.
		PPs Submission: Complied Noted. The project is constructed on barren land where green belt has been established. Date: 21/11/2024
20	MISCELLANEOUS	The industrial township should not be located in the down wind

		direction with respect to the refinery.
PPs Submission: Complied Complied.		Date: 21/11/2024
21	MISCELLANEOUS	Adequate sanitation facilities and cooking fuel should be provided to the labourers to avoid tree cutting and nuisance in the area.
PPs Submission: Complied The project is already completed.		Date: 21/11/2024
22	MISCELLANEOUS	Affected persons due to acquisition of agricultural land or houses should be properly compensated as per the State Government norms.
PPs Submission: Complied The project is already completed.		Date: 21/11/2024
23	MISCELLANEOUS	The labourers or contractor should leave the place after completion of the work at site to avoid creation of slum in the adjoining areas of the projects.
PPs Submission: Complied The project is already completed.		Date: 21/11/2024
24	Noise Monitoring & Prevention	The overall noise levels in and around the plant area should be kept well within the standards (85 DBA) by providing acoustic hoods, silencers etc. around the noise generating sources.
PPs Submission: Complied Appropriate Engineering control measures are provided to identified sources of noise generation including provision of acoustic hoods, silencers, enclosures etc. wherever necessary The overall noise levels in and around the plant area are kept well within the standards. Please refer Annexure 8-A.		Date: 21/11/2024
25	GREENBELT	A green belt plan with adequate width and density all around the Refinery by selecting the native plant species should be developed in consultation with the local DFO. A norm of about 1500 - 2000 plants per ha. may be adopted for raising the Green Belt.
PPs Submission: Complied About 3,168 acres of the total area has been covered by tree plantation. Over 400 species have been planted conforming to the recommended density. Additionally, 875 acres of mangrove plantation has been carried out.		Date: 21/11/2024
26	MISCELLANEOUS	A long term study to assess the impacts due to emission of pollutants from the refinery on the mangroves should be undertaken and report submitted after the refinery becomes operational. The study should be conducted by a reputed institution or body approved by the Department of Environment, Government of Gujarat.
PPs Submission: Complied Periodic monitoring by NIO of entire marine ecology and mangroves is carried out.		Date: 21/11/2024
27	Risk Mitigation and Disaster Management	Necessary approvals from Chief Explosives Directorate, Inspector of Factories, Fire Safety Inspector, etc. should be obtained and copies of the approval letters be made available to this Ministry. On-site and off-site Emergency Preparedness Plans under Rule 13 & 14 of the

		Hazardous Chemical Rule, 1989 should also be prepared and approved by the Nodal Agency.
PPs Submission: Complied Comprehensive On-site Emergency Preparedness Plans have been developed and approved by the nodal agencies. These are updated at regular intervals. Off-site Emergency Preparedness Plans have been developed by District Authorities. Oil Spill Contingency Plans and Marine Disaster Management Plan prepared and approved by Indian Coast Guard.		Date: 21/11/2024
28	MISCELLANEOUS	The project authority should set up laboratory facilities for collection and analysis of samples under the supervision of competent technical personnel, who will directly report to the Chief Executives.
PPs Submission: Complied All monitoring, sampling and analysis of environmental parameters is outsourced to MoEF approved laboratory.		Date: 21/11/2024
29	MISCELLANEOUS	An Environmental Management Cell should be established with suitably qualified people to carry out various functions and should be set up under the control of a senior executive who will report directly to the Head of the organization.
PPs Submission: Complied A full-fledged Environmental Cell headed by Vice President who reports to the Chief Executive and is assisted by suitably qualified engineers is set-up. The environment cell is responsible for all aspects of environmental management in the complex. Refer Departmental Organogram Annexure 14.		Date: 21/11/2024
30	Human Health Environment	Medical surveillance of workers should be done regularly to avoid the possibility of contracting occupational diseases and record maintained.
PPs Submission: Complied Occupational Health Department carries out regular medial surveillance of all employees annually and records are maintained. During last Six Months ending September 24, 100 percent PME scheduled employees have undergone medical examination.		Date: 21/11/2024
31	Statutory compliance	The project authorities should ensure their activities conform to the recent Supreme Court Order dated 12/12/94 with respect to the Writ Petition No. 664/93 and 551/94 filed by the India Council for Enviro Legal Action Vs. Union of India. Provisions of CRZ should be complied with in respect of installations to be provided within 500 m. of HTL.
PPs Submission: Complied Noted and complied.		Date: 21/11/2024
32	MISCELLANEOUS	The funds earmarked for the environmental protection measures should not be diverted for other purposes and year wise expenditure should be reported to this Ministry.
PPs Submission: Complied The total expenditure for the environmental protection measures are provided in Annexure 12.		Date: 21/11/2024
33	Marine/Coastal	A. SPM and Sub-Sea Pipeline: The tank farms should be designed in such a way that the residual flow including floor washings do not percolate the marine areas including the nearby salt pans. Location of SPM / SBM and submarine pipeline should be selected in consultation with NIO, State Pollution Control Board, and

		Government of Gujarat (National Marine Park Authority) in such a way that the corals and mangroves are not affected.
PPs Submission: Complied Appropriate design measures have been considered and implemented so that the marine areas including the nearby salt pans are not affected by the tank farm operations. Complied.		Date: 21/11/2024
34	Marine/Coastal	A. SPM and Sub-Sea Pipeline: Necessary approvals from the Chief Wild Life Warden, Government of Gujarat should be obtained prior to laying of SBM / COT / Sub-Marine / On-shore pipeline and necessary details in this regard should be submitted to the Ministry.
PPs Submission: Complied Complied.		Date: 21/11/2024
35	Marine/Coastal	A. SPM and Sub-Sea Pipeline: The flexible hoses should be periodically tested and in case of deterioration of condition, hoses should be replaced. Safety breakaway couplings should be provided in the system.
PPs Submission: Complied The flexible hoses installed are of Double carcass type with safety breakaway couplings. These hoses are inspected periodically. If any signs of deterioration or damage to the hoses is noticed, immediate measures are taken to replace the hoses.		Date: 21/11/2024
36	Marine/Coastal	A. SPM and Sub-Sea Pipeline: The marine environment should be regularly monitored for the water quality (temperature, petroleum hydrocarbons, phenols, sulphides, total organic carbon); sediment quality (trace elements, petroleum hydrocarbons, TOC and sediment size) and biological parameters (primary productivity, benthos, fish quality and growth, bio-mass, phytoplankton and zooplankton).
PPs Submission: Complied A marine environment study is conducted by NIO regularly. For monitoring all physical, chemical and biological parameters in the marine environment. Regular analysis is carried out of the seawater both upstream and downstream of the diffuser, for monitoring parameters temperature, petroleum hydrocarbons, phenols, sulphides, total organic carbon, salinity etc Please refer Annexure 9.		Date: 21/11/2024
37	Marine/Coastal	A. SPM and Sub-Sea Pipeline: A Disaster Management Plan should be prepared to take care of any oil leakage in the Gulf in consultation with the Coast Guards and the Marine Park Authorities. Oil Spill contingency plan should be drawn and adequate facilities provided for combating the oil spills.
PPs Submission: Complied The Disaster Management Plan and Oil Spill Contingency Plan are prepared. Indian Coast Guard has approved the Oil Spill Contingency Plan. Marine National Park authorities are also a signatory to the Mutual Aid Agreement between Oil Handling Agencies of the Gulf of Kutch region.		Date: 21/11/2024
38	Marine/Coastal	A. SPM and Sub-Sea Pipeline: The project proponents should also formulate a management plan for coral reefs and mangrove afforestation in the inter-tidal region of Vadinar Sikka in consultation with the Marine Park Authorities.
PPs Submission: Complied RIL has already submitted a coral management plan to the MNP Authorities. The same has been acknowledged by them. However, there is no action recommended to RIL against the plan submitted. Mangrove plantation of 875 acres has been carried out along with MNP authorities. Management Plan for mangroves plantation is drawn up by Marine Park Authorities and RIL		Date: 21/11/2024

participates by involvement in its execution.			
39	Marine/Coastal	A. SPM and Sub-Sea Pipeline: No discharge of crude oil washings should be done in the Gulf. In case washing is done, adequate ballasting facilities with proper treatment should be provided.	
PPs Submission: Complied No discharge of crude oil washings is permitted at the marine facilities, as a procedure set up for marine operations.			Date: 21/11/2024
40	Marine/Coastal	A. SPM and Sub-Sea Pipeline: Necessary approval for acquisition of forest land should also be obtained from the concerned authorities.	
PPs Submission: Complied Complied.			Date: 21/11/2024
41	Marine/Coastal	A. SPM and Sub-Sea Pipeline: No dredging in the sea should be undertaken except where unavoidable during construction phase after providing full details and obtaining the approval of Chief Wild Life Warden, Gujarat.	
PPs Submission: Complied Complied.			Date: 21/11/2024
42	Marine/Coastal	B. CRUDE OIL TERMINAL (COT): The location of COT should be decided in consultation with Government of Gujarat (National Marine Park), NIO, ZSI (Madras Office) and SPCB. Submerged filling in all storage facilities should be provided to minimize fugitive emissions.	
PPs Submission: Complied Complied.			Date: 21/11/2024
43	AIR QUALITY MONITORING AND PRESERVATION	B. CRUDE OIL TERMINAL (COT): Hydrocarbon leaks should be detected at regular intervals including the pipelines, at the joints, valves, blinds, caps, plugs and pressure relief devices using portable hydrocarbon monitor and corrective measures should be taken immediately to stop fugitive emissions.	
PPs Submission: Complied LDAR programs for fugitive emissions are followed regularly in accordance with MoEF notifications for minimizing and corrective actions undertaken immediately. Please refer Annexure 13 (LDAR sample report of single unit)			Date: 21/11/2024
44	WATER QUALITY MONITORING AND PRESERVATION	B. CRUDE OIL TERMINAL (COT): Effluent treatment facilities for the oil based effluent should be provided so that the treated water meets the MINAS. Regular monitoring should also be carried out for pH, Oil, Phenol, sulphate and BOD and record maintained.	
PPs Submission: Complied ETP that has been set up to treat oil-based effluent and the treated effluent meets the norms prescribed by GPCB. Regular monitoring of the treated effluent is carried out. The treated effluent parameters are well within the prescribed norms. Please Refer Annexure 10.			Date: 21/11/2024
45	Statutory compliance	B. CRUDE OIL TERMINAL (COT): Hazardous material and wastes should be handled as per the Hazardous Waste (Management and Handling) Rules, 1989.	

PPs Submission: Complied Authorisation for Storage, Handling and disposal of HW is obtained from SPCB. The handling of HW is as per the HW Rules 1989 and its subsequent amendments.		Date: 21/11/2024
46	WASTE MANAGEMENT	B. CRUDE OIL TERMINAL (COT): Melting pits of suitable design should be provided for recovery of oil from oily sludge (crude oil tanks bottom). The possibility of using chemicals/bio-surfactant for oil recovery may be explored and report submitted to this Ministry.
PPs Submission: Complied Operations endeavours to minimise sludge from tank bottom by adopting BAT. Melting pits have thus not been effective due to low oil content of oil in the sludge. The sludge generated is collected, stored and sent for Co-processing in cement kiln/incineration.		Date: 21/11/2024
47	WASTE MANAGEMENT	B. CRUDE OIL TERMINAL (COT): Raw sludge should be stored in lagoons having impervious lining with suitable run off / run on control facilities.
PPs Submission: Complied No lagoons are required as quantity of sludge generation is low and is collected in drums. The drums are sent to Common Incineration facility/ for Co-processing in cement kiln.		Date: 21/11/2024
48	WASTE MANAGEMENT	B. CRUDE OIL TERMINAL (COT): Treated sludge should be either incinerated or used for land fill purposes within the COT premises in consultation with the Gujarat Pollution Control Board.
PPs Submission: Complied The Oily sludge is sent either for Co-processing in Cement Kiln or Common Incineration facility for disposal.		Date: 21/11/2024
49	WATER QUALITY MONITORING AND PRESERVATION	B. CRUDE OIL TERMINAL (COT): The ground water monitoring should be carried out around sludge lagoons and land fill sites.
PPs Submission: Complied Not applicable due to above pt. 5 and.6.		Date: 21/11/2024
50	MISCELLANEOUS	C. CRUDE OIL & PRODUCTS PIPELINE: Necessary approvals for acquiring forest land (ROW) should be obtained from the concerned authorities. The route of the pipelines should be selected so as to avoid the corals, mangroves, forest lands, etc., and ensure that the sensitive areas are not adversely affected.
PPs Submission: Complied Complied.		Date: 21/11/2024
51	MISCELLANEOUS	C. CRUDE OIL & PRODUCTS PIPELINE: The project authorities should ensure minimum cutting of trees, damage to the native vegetation, soil erosion and minimum disturbance to the existing services during laying of pipeline and construction of booster pump stations.
PPs Submission: Complied The refinery complex is established on Barren Land.		Date: 21/11/2024
52	MISCELLANEOUS	C. CRUDE OIL & PRODUCTS PIPELINE: A program of re-vegetation should be undertaken to compensate for loss of vegetation

		cover.
PPs Submission: Complied No re-vegetation required as refinery is established on barren land. However, a robust green has been established.		Date: 21/11/2024
53	GREENBELT	C. CRUDE OIL & PRODUCTS PIPELINE: All around the booster pump site, adequate green belt should be developed.
PPs Submission: Complied Not applicable.		Date: 21/11/2024
54	WASTE MANAGEMENT	C. CRUDE OIL & PRODUCTS PIPELINE: Floor washings and oil spills should be collected and treated properly before disposal.
PPs Submission: Complied Complied.		Date: 21/11/2024
55	Risk Mitigation and Disaster Management	C. CRUDE OIL & PRODUCTS PIPELINE: Risk assessment report along with the on-site and off-site emergency preparedness plans should be submitted to this Ministry within one year for approval.
PPs Submission: Complied Complied.		Date: 21/11/2024

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	All 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.

Half Yearly Compliance Report
2024
01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	Jamnagar Refinery Complex of M/s RPL at Motikhavdi, Jamnagar, Gujarat-Proposed expansion of crude processing capacity from 18 to 27 MMTPA with no additional pollution load-reg.
Name of Entity / Corporate Office	Reliance Industries Ltd.
Village(s)	Jogvad
District	JAMNAGAR

Proposal No.	J-11011/25/93-IA-II (I)
Plot / Survey / Khasra No.	
State	GUJARAT
MoEF File No.	J-11011/25/93-IA-II (I)

Category	Industrial Projects - 2
Sub-District	Lalpur
Entity's PAN	*****5055K
Entity name as per PAN	RELIANCE INDUSTRIES LIMITED

Compliance Reporting Details

Reporting Year 2024

Remarks (if any)

Reporting Period 01 Dec(01 Apr - 30 Sep)

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	0	0
Revenue Land	0	0
Forest	0	0
Others	2421	2421
Total	2421	2421

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Crude oil processing capacity	Others:MMTPA	N/A	27	27	

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	AIR QUALITY MONITORING AND PRESERVATION	The refinery is permitted to operate at the expanded capacity without exceeding the earlier stipulated pollution load of 24 TPD of SO2 emissions. SO2 emission report may be made on a daily basis for all the stacks (fuel burning and process emissions) through the computerized monitoring mechanism as per the format attached. Further, regular monitoring of stacks every fortnight must also be carried out to cross check the data obtained from computerized monitoring by engaging a reputed organization such as NEERI. In addition, a monthly S-balance statement indicating type of crude, its S-content, product S-content, SO2 emission etc. may be made. Daily, fortnightly and monthly reports generated as above should be sent to the GPCB, CPCB & MoEF.

PPs Submission: Complied Regular monitoring and measurement are carried out for measuring total SO2 emission from the refinery complex which is below the limits prescribed. SO2 emission monitoring report is included in Annexure I-A. The refinery now has continuous online emission monitoring system in which the SO2 emissions are captured in real time. Each stack is manually monitored on a monthly basis to cross check the computerised monitoring. A MoEF approved agency has been engaged for the monitoring. Please refer Annexure 2-A. Monthly Sulphur balance statements are prepared as stipulated. Please refer Annexure I-A.	Date: 22/11/2024

2	MISCELLANEOUS	The project authorities should come out with a fresh post-project EIA report within 6 months which should also take into account the impact of 250 MW X 4 petro-coke based power plant for review.

PPs Submission: Complied Post-project EIA was carried out by NEERI The Report has been submitted to MoEF in November 2001. The 4X250 MW coke-based plant has not been established.	Date: 22/11/2024

3	Statutory compliance	All Conditions stipulated by MoEF in the environmental clearance for 18 MMTPA Crude processing vide ministry letter of even number dated 15th September 1995 and NOC granted by GPCB to the 27 MMTPA capacity must be strictly adhered to.

PPs Submission: Complied All conditions are compiled.	Date: 22/11/2024

4	MISCELLANEOUS	The company must give an undertaking to implement the recommendations of the "carrying capacity study for management of gulf of Kutch" being undertaken by the Govt of Gujarat.

PPs Submission: Complied Noted. We have enquired from GoG regarding a report of the study on carrying capacity of Gulf of Kutch or its recommendations. They do not have such study report.	Date: 22/11/2024

5	MISCELLANEOUS	Pressurized storage of LPG should be reduced, and company must shift to either cryogenic/mounded storage within a period of 1 year.

PPs Submission: Complied The pressurised storage of LPG has been reduced as per the condition.	Date: 22/11/2024

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	All 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.

Half Yearly Compliance Report
2024
01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	Environmental clearance for expansion and modernization of petrochemical refinery complex at Village Meghpar/Padana, Tehsil Lalpur Taluka
Name of Entity / Corporate Office	RELIANCE INDUSTRIES LIMITED
Village(s)	N/A
District	JAMNAGAR

Proposal No.	J.11011/232/2005-IA II - (I)
Plot / Survey / Khasra No.	N/A
State	GUJARAT
MoEF File No.	J.11011/232/2005-IA II - (I)

Category	Industrial Projects - 2
Sub-District	N/A
Entity's PAN	*****5055K
Entity name as per PAN	RELIANCE INDUSTRIES LIMITED

Compliance Reporting Details

Reporting Year 2024

Remarks (if any)

Reporting Period 01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office RELIANCE INDUSTRIES LIMITED

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	2864	2864
Total	2864	2864

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Crude Oil Processing Capacity	Others:MMTPA	N/A	59.7	59.7	

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	Statutory compliance	The company shall ensure strict implementation of compliance to the stipulations made by MOEF vide OM no. J-11011/25/1994-IA~1 dated 15th September 1995 and 6th September, 2000.
PPs Submission: Complied Being Complied with.		Date: 22/11/2024
2	AIR QUALITY MONITORING AND PRESERVATION	The gaseous emissions (SO2, NOx, CO, NMHC & Benzene) from the various process units shall conform to the standards prescribed under the Environment (Protection) Rules, 1986 or norms stipulated by the SPCB, whichever is more stringent. At no time, the emission level shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective unit should not be restarted until the control measures are rectified to achieve the desired efficiency.
PPs Submission: Complied The gaseous emissions (SO2, NOx, CO etc) from the various process units comply to the requirement prescribed by GPCB and of Refinery Standards as notified on 18th March 2008.		Date: 22/11/2024
3	AIR QUALITY MONITORING AND PRESERVATION	Ambient air quality monitoring stations, [SPM, SO2, NOx and NMHC, Benzene] shall be set up in the refinery complex in consultation with SPCB, based on occurrence of maximum ground level concentration and downwind direction of wind. The monitoring network must be decided based on modeling exercise to represent short term GLCs. Continuous on-line stack monitoring equipment shall be installed for measurement of SO2 and NOx. Data on VOC shall be monitored and submitted to the SPCB / Ministry.
PPs Submission: Complied AAQM stations have been setup based on the modelling reports of NEERI. The monitoring parameters are as per the NAAQS 18th November 2009. Please Refer Annexure 5-B. Continuous on-line stack monitoring for all the stacks is provided. Ambient HC monitoring at the plant periphery is carried out and submitted. Regular LDAR programs are conducted for fugitive emissions in accordance with the MoEF notification- Refinery Standards as notified on 18th March 2008. Please refer Annexure 13.		Date: 22/11/2024
4	AIR QUALITY MONITORING AND PRESERVATION	The total SO2 emission from the refinery complex shall not exceed 49TPD after fully stabilizing of the expansion and modernization of the refinery complex and upgrading the existing facilities. SO2 emission report may be made on daily basis for all the stacks (fuel burning and process emissions through the computerized mechanism). Further, regular monitoring of stacks every fortnight must also be carried out to cross check the data obtained from computerized monitoring by engaging a reputed organization. In addition a monthly Sulphur balance statement indicating type of fluid, its S content, product s-content. SO2 emission etc. may be made. Daily, fortnightly and monthly reports generated as above shall be sent to the GPCB, SPCB and MoEF.
PPs Submission: Complied Regular monitoring and measurement are carried out for measuring total SO2 emission from the refinery complex which is below the limits prescribed. The total SO2 emission as reported in the annexure is between 44.07 and 46.34 MT/day at the lowest and highest levels. Monitoring is included in Annexure I-A and I-B. The refinery now has continuous online emission monitoring system in which the SO2 emissions are captured. Each stack is monitored monthly by MoEF		Date: 22/11/2024

recognized laboratory/consultant to cross check computerized monitoring. Complied.		
5	AIR QUALITY MONITORING AND PRESERVATION	All the Sulphur Recovery Units shall have tail gas treatment (TGT) facilities and the overall efficiency of the SRU with TGT unit shall be 99.9%.
PPs Submission: Complied Please refer Annexure 4-B for SRU Efficiency.		Date: 22/11/2024
6	AIR QUALITY MONITORING AND PRESERVATION	Ultra Low-NOx burners shall be provided in the new furnaces to avoid excessive formation of NOx. The existing low NOx burners are also to be phased out and replaced with Ultra low-NOx burners.
PPs Submission: Complied The emission levels are well below the prescribed norms of GPCB.		Date: 22/11/2024
7	WATER QUALITY MONITORING AND PRESERVATION	The requisite numbers of effluent quality monitoring stations shall be planned with adequate facilities especially for parameters like phenols, sulphides, oil and grease, suspended solids, BOD, COD, pH and flow. The salinity and temperature of the return seawater shall be monitored periodically and monitored data submitted to the GPCB and Ministry of Environment & Forests on a periodic basis.
PPs Submission: Complied All the effluent parameters are monitored in the central laboratory that is NABL approved. The effluent parameters are monitored at source of generation and at the outlet of the effluent treatment plant. Please refer Annexure 7-A and 7-B. The return seawater before discharge to outfall is monitored for salinity and temperature and submitted to authorities. Please refer Annexure 9 for Sea Water return analysis report.		Date: 22/11/2024
8	WATER QUALITY MONITORING AND PRESERVATION	M/s RIL shall monitor the groundwater quality at the locations as suggested by the Central Ground Water Board. Monitoring results of the same shall be submitted to the GPCB/CPCB and MOEF.
PPs Submission: Complied The groundwater quality is monitored in nearby villages at locations suggested by Central Ground Water Board. The monitoring results are submitted periodically to authorities. Please refer Annexure 11. Ground water quality in nearby locations.		Date: 22/11/2024
9	WATER QUALITY MONITORING AND PRESERVATION	M/s RIL shall undertake rainwater harvesting measures to recharge the ground water in the area in consultation with Central Ground Water Board and Gujarat Pollution Control Board.
PPs Submission: Complied Rainwater Harvesting: A network of storm water ponds is developed having capacity around 1.56 million cum and the rainwater is reused. The storm water run-off is collected in the ponds. Two recharge wells have also been established in the green belt for ground water recharge.		Date: 22/11/2024
10	WASTE MANAGEMENT	M/s RIL shall undertake measures to recover oil from oily sludge and to charge into the feed of Delayed Coker Unit. An incinerator has to be provided for the oily rags as per the guidelines of CPCB.
PPs Submission: Complied The Oily sludge recovered from ETP is re-processed in Delayed Coker unit. Oily rags from SEZ area are incinerated (at the approved Common Hazardous Waste Incinerator (CHWI) facility) or sent for Co-processing in Cement Industry.		Date: 22/11/2024
11	Human Health Environment	Occupational Health Surveillance of the employees and workers

		shall be done on a regular basis and records maintained as per the Factories Act.
PPs Submission: Complied Occupational Health Surveillance of the employees and workers are conducted regularly, and the records are maintained as per the Factories Act. The periodical Medical Surveillance of all employees is carried out annually.		Date: 22/11/2024
12	Marine/Coastal	The extension of the existing tank farm shall be designed in such a way that the residual flow including floor washing do not percolate to the marine areas. The augmentation and expansion of the marine facilities like product berths, Crude and product SPMs, seawater intake channel and outfall shall be done in consultation with the National Institute of Oceanography.
PPs Submission: Complied There is no floor washing at the tank farm area. Appropriate design measures have been considered and implemented so that the marine areas are not affected by the tank farm operations. The augmentation and expansion of the marine facilities has been carried out in consultation with NIO.		Date: 22/11/2024
13	Marine/Coastal	The marine water quality shall be regularly monitored for the water quality (temperature, petroleum hydrocarbons, phenols, sulphides, and total organic carbon), sediment quality (trace elements, petroleum hydrocarbons, TOC and sediment size) and biological parameters (primary productivity, benthos, fish quality and growth, biomass, phytoplankton and zooplankton). The present monitoring program shall be continued and upgraded for the expansion and modernization of the refinery complex.
PPs Submission: Complied A marine environment study is conducted by NIO periodically for monitoring all physical, chemical, ecological and biological parameters in the marine environment. Regular analysis is carried out of the seawater both upstream and downstream of the diffuser, for monitoring parameters temperature, petroleum hydrocarbons, phenols, sulphides, total organic carbon, salinity etc Please refer Annexure 9 for Seawater quality at outfall.		Date: 22/11/2024
14	Marine/Coastal	No discharge of crude oil / products washings shall be done in the Gulf. No dredging in the sea should be undertaken except where unavoidable during construction and operation while augmenting and expansion of the marine facilities. Details of the same shall be provided to the Director, Marine Park & Sanctuary, Jamnagar, and Gujarat Pollution Control Board.
PPs Submission: Complied No crude oil washings are permitted in the Gulf as a part of marine operations.		Date: 22/11/2024
15	AIR QUALITY MONITORING AND PRESERVATION	Fugitive emissions of HC from product storage tank farms etc. must be regularly monitored. Sensors for detecting HC leakage shall be provided at strategic locations. Necessary measures shall be adopted so as to ensure that the NMHC levels outside the refinery complex premises does not exceed 160 µg/m3. Monitored data shall be submitted to the GPCB / CPCB every three months and to Ministry of Environment & Forests every six months.
PPs Submission: Complied More than 46,290 gas detectors and alarms are installed in the Jamnagar complex at strategic locations for detecting toxic gas and HC leakage. Necessary measures like LDAR, gas detectors and monitors etc are in place along with corresponding procedures for ensuring control of HC emissions. Regular monitoring of NMHC levels around the boundary of the plant is conducted. Complied.		Date: 22/11/2024

16	MISCELLANEOUS	The Company shall also comply with all the conditions and safeguards prescribed in the EIA & Risk Assessment Reports prepared by NEERI. Pressurized storage of LPG shall be reduced and company must shift to either cryogenic/mounded storage.

PPs Submission: Complied Pressurized storages of LPG have been reduced	Date: 22/11/2024

17	Risk Mitigation and Disaster Management	The On-site and Off-site Emergency Preparedness Plans, Oil Spill Contingency Plans, Marine Disaster Management Plan shall be updated for the expansion and modernization for the enhanced refinery throughput and submitted to the Ministry before commissioning at the enhanced capacity.

PPs Submission: Complied Comprehensive On-site Emergency Preparedness Plans have been developed. These are updated at regular intervals. Off-site Emergency Preparedness Plans have been developed by District Authorities. Oil Spill Contingency Plans is approved by Indian Coast Guard.	Date: 22/11/2024

18	MISCELLANEOUS	The Environmental Management Cell and laboratory facilities for the collection of the samples shall be augmented with suitable facilities and qualified personnel and directly report to the chief executive of the refinery complex.

PPs Submission: Complied A full-fledged Environmental Cell headed by Vice President who reports to the Chief Executive and is assisted by suitably qualified engineers is set-up.	Date: 22/11/2024

19	AIR QUALITY MONITORING AND PRESERVATION	For control of fugitive emissions, the company shall augment the existing flare system and route all unsaturated hydrocarbons to the flare system in addition to the existing flare system. All the pumps and other equipment where there is a likelihood of HC leakages shall be provided with LEL indicators and also provide for immediate isolation of such equipment, in case of a leakage. The company shall adopt Leak Detection and Repair (LDAR) program for quantification and control of fugitive emissions.

PPs Submission: Complied The safety and emergency discharge of hydrocarbons are routed to adequate flare systems which are provided. Procedures are developed and implemented for LDAR programs and are in accordance with the MoEF notification- Refinery Standards as notified on 18th March 2008. Please refer Annexure 13.	Date: 22/11/2024

20	AIR QUALITY MONITORING AND PRESERVATION	All new stacks shall be of appropriate design and height and shall be attached to pollution control systems, wherever necessary. All stacks in the complex must meet the minimum stack height criteria as prescribed in the Environment Protection Rules.

PPs Submission: Complied All the stacks are provided in accordance to the CPCB guidelines for stack height and as prescribed in the Environmental Protection Rules.	Date: 22/11/2024

21	MISCELLANEOUS	All new standards / norms which are being proposed by CPCB for refinery projects I petrochemical units shall be applicable for the proposed expansion and modernization of the petrochemical refinery complex. These standards shall be incorporated into the detail designs for the proposed expansion and modernization. The existing refinery complex shall also be upgraded to the new above-mentioned emission standards.

PPs Submission: Complied Complied.		Date: 22/11/2024
22	AIR QUALITY MONITORING AND PRESERVATION	The Central Pollution Control Board shall carry out independent monitoring of all the stacks for SO2 and NOx.
PPs Submission: Complied Noted.		Date: 22/11/2024
23	WATER QUALITY MONITORING AND PRESERVATION	Ground water shall not be tapped for construction, industrial or domestic uses including the township. All the water requirements of the refinery complex shall be met by desalination of seawater.
PPs Submission: Complied Desalination plants have been installed to meet the total water demand of the refinery complex.		Date: 22/11/2024
24	WATER QUALITY MONITORING AND PRESERVATION	A new effluent treatment plant with primary, secondary and tertiary treatment facility shall be constructed to cater to the additional effluent load. Liquid effluents shall be treated to conform to the standards stipulated by the GPCB I Ministry of Environment & Forests under EPA 1986 and also the new norms being specified. Treated effluent be recycled and reused to achieve zero discharge of effluent. The domestic effluent after treatment and conforming to the prescribed standards shall be used for greenbelt development.
PPs Submission: Complied State-of-art Effluent Treatment Plant (ETP) is provided with Primary, Secondary and Tertiary facilities to maximize the recycle and reuse of the treated water. The treated water meets all the standards mentioned. Please refer Annexure 7-A and 7-B.		Date: 22/11/2024
25	Marine/Coastal	The return seawater (brine from desalination plant, cooling tower blow down etc.) shall be discharged to the sea through a properly designed diffuser system. The existing diffuser system shall be augmented to cater to the additional discharge volume. The augmentation of the existing diffuser system/any other diffuser system in terms of dispersion in the sea shall meet the standards and certified by M/s National Institute of Oceanography. The company shall take the approval of the GPCB for the discharge of the return sea water.
PPs Submission: Complied The existing diffuser system has been augmented to cater to the additional discharge volume. The augmented diffuser system and the location of discharge has been decided in consultation with M/s National Institute of Oceanography (NIO). GPCB has granted approval for the discharge.		Date: 22/11/2024

General Conditions

Sr.No.	Condition Type	Condition Details
1	Statutory compliance	The Project Proponent should inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the State Pollution Control Board! Committee and may also be seen at Website of the Ministry of Environment and Forests at http://www.envfor.nic.in.This should 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 should be forwarded to the Regional office.
PPs Submission: Complied The advertisement regarding Information to the public that the project has been accorded environmental clearance by the Ministry and Copies of the clearance letter were made available with the State Pollution Control Board, has been published within the stipulated period in two local newspaper that are widely circulated in the region. The copy of the same has been submitted.		Date: 22/11/2024
2	MISCELLANEOUS	The Project Authorities should 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 commencing the land development work.
PPs Submission: Complied Complied.		Date: 22/11/2024
3	MISCELLANEOUS	The project authorities must strictly adhere to the stipulations made by the Gujarat State Pollution Control Board and the State Government.
PPs Submission: Complied Complied.		Date: 22/11/2024
4	MISCELLANEOUS	No further expansion or modernization in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.
PPs Submission: Complied Noted.		Date: 22/11/2024
5	AIR QUALITY MONITORING AND PRESERVATION	At no time, the emissions shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be immediately put out of operation and shall not be restarted until the desired efficiency has been achieved.
PPs Submission: Complied Emissions are within the standards prescribed by the concerned authorities. In case of any likelihood of exceedance corrective actions are laid down.		Date: 22/11/2024
6	Noise Monitoring & Prevention	The overall noise levels in and around the plant area should be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
PPs Submission: Complied Appropriate Engineering control measures are provided to identified sources of noise generation including acoustic hoods, silencers, enclosures etc. The overall noise levels in and around the plant area are kept well within the standards. Regular monitoring of the ambient noise levels is conducted and conforms to the standards prescribed. The monitoring data are submitted to the authorities. Please refer Annexure 8-A and 8-B.		Date: 22/11/2024
7	Statutory compliance	The project authorities must strictly comply with the provisions made in Manufacture, Storage and Import of Hazardous Chemicals

		Rules 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from Chief Controller of Explosives must be obtained before commission of the project.
PPs Submission: Complied Obtained the necessary approvals from Chief Controller of Explosives.		Date: 22/11/2024
8	Statutory compliance	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Wastes (Management and Handling) Rules, 2003. Authorization from the State Pollution Control Board must be obtained for collections/treatment/storage/disposal of hazardous wastes.
PPs Submission: Complied Authorization for collections; treatment; storage and disposal of HW is obtained from SPCB.		Date: 22/11/2024
9	MISCELLANEOUS	The project authorities will provide requisite funds both recurring and non-recurring 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 provided should not be diverted for any other purposes.
PPs Submission: Complied The total expenditure for the environmental protection measures is provided in Annexure 12.		Date: 22/11/2024
10	Statutory compliance	The stipulated conditions will be monitored by the Regional of this Ministry at Bhopal/Central Pollution Control Board/State Pollution Control Board. A six-monthly compliance report and the monitored data should be submitted to them regularly.
PPs Submission: Complied Noted. A six-monthly compliance report and the monitored data are submitted to MoEF regional office on regular basis and Monthly monitoring reports to GPCB.		Date: 22/11/2024

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	All 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.

Half Yearly Compliance Report
2024
01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	Petroleum and Petrochemical Complex in Multi products Special Economic Zone
Name of Entity / Corporate Office	RELIANCE INDUSTRIES LIMITED
Village(s)	N/A
District	JAMNAGAR

Proposal No.	J-11011/149/2007 - IA II (I)
Plot / Survey / Khasra No.	N/A
State	GUJARAT
MoEF File No.	J-11011/149/2007 - IA II (I)

Category	Industrial Projects - 2
Sub-District	N/A
Entity's PAN	*****5055K
Entity name as per PAN	RELIANCE INDUSTRIES LIMITED

Compliance Reporting Details

Reporting Year 2024

Remarks (if any)

Reporting Period 01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office RELIANCE INDUSTRIES LIMITED

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	4545	4545
Total	4545	4545

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Methanol Synthesis	Others:MMTPA	N/A	0.65	0.65	
2	Acetic Acid	Others:MMTPA	N/A	1	1	
3	Vinyl Acetate Monomer (VAM)	Others:MMTPA	N/A	0.7	0.7	
4	Polyvinyl Acetate (PVA)	Others:MMTPA	N/A	0.35	0.35	
5	Polyvinyl Alcohols (PVOH)	Others:MMTPA	N/A	0.125	0.125	
6	Multifeed Cracker Complex-Ethylene	Others:MMTPA	N/A	3.45	3.45	
7	Ethylene Oxide derivatives like MEG, DEG, TEG	Others:MMTPA	N/A	1.25	1.25	
8	Polyethylene polymers like (LDPE / LLDPE / HDPE)	Others:MMTPA	N/A	0.75	0.75	
9	Acrylic Acid & derivatives, SAP	Others:MMTPA	N/A	0.45	0.45	
10	n-Butyl Acrylate, n-butyraldehyde, n-Butanol, 2-EthylHexanol	Others:MMTPA	N/A	0.5	0.5	
11	Jamnagar Export Refinery (JERP) (already under implementation)	Others:Kbsp crude	N/A	580	580	
12	Propylene derivatives like Propylene Oxides, Cumene, Phenol	Others:MMTPA	N/A	0.4	0.4	
13	Propylene Glycols	Others:MMTPA	N/A	0.2	0.2	
14	Hydrogen Peroxide (H2O2)	Others:MMTPA	N/A	0.32	0.32	
15	Fumaric Acid	Others:MMTPA	N/A	0.125	0.125	
16	PET	Others:MMTPA	N/A	1.5	1.5	

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	AIR QUALITY MONITORING AND PRESERVATION	The product loading gantry shall be connected to the product sphere in closed circuit through the vapour arm connected to the tanker. Data on fugitive emissions shall be regularly monitored and records maintained.
PPs Submission: Complied Complied for the complex. The fugitive emissions in the product loading gantry are regularly monitored and records are maintained.		Date: 22/11/2024
2	WATER QUALITY MONITORING AND PRESERVATION	The centralized ETP and standalone ETP shall be designed based on the raw water and wastewater quality. Design details of ETP shall be submitted to the Ministry. The effluent shall be segregated into low TDS and High TDS stream which shall after primary, secondary and tertiary treatment shall be used and recycled for green belt development, cooling tower make up etc. The treated effluent shall comply with the prescribed standards. The return sea water shall be discharged into the sea through a multi-port diffuser at a point identified by NIO.
PPs Submission: Complied For the complex, the process wastewater is treated in the ETP. The wastewater generated are segregated at source based on its stream characteristics and Total Dissolved Solids (TDS) levels. State-of-art Effluent Treatment Plants (ETPs) are provided with Primary, Secondary and Tertiary facilities for the recycle and reuse of the treated water. The effluents are treated to comply with the prescribed standards. Refer Annexure 7C. The return seawater is discharged into the Gulf through the existing multiport diffuser at the location identified by NIO.		Date: 22/11/2024
3	Marine/Coastal	The Company shall provide details of the model used for the diffuser for discharge of saline water into sea and the efficacy of the existing diffuser which is based on the HYDRODYN model and also compare with CORMIX model. The depth of discharge of diffuser shall be determined as per the above model.
PPs Submission: Complied During commencement of implementation of the projects CRZ clearance for augmentation of seawater intake facilities, desalination plants and discharge of return seawater was obtained from MoEF for the projects being implemented in 2015. This included numerical modelling for the discharge by NIO. The numerical modelling was found to be in order and accepted by the Ministry.		Date: 22/11/2024
4	WATER QUALITY MONITORING AND PRESERVATION	The hot water effluent and outfall shall be discharged as per the prescribed standards.
PPs Submission: Complied Complied.		Date: 22/11/2024
5	WATER QUALITY MONITORING AND PRESERVATION	The company shall comply with effluent and emission standards for Petrochemical Plants of CPCB/MoEF.
PPs Submission: Complied The treated effluent quality is well within the prescribed standards for refineries and petrochemical plants.		Date: 22/11/2024

6	AIR QUALITY MONITORING AND PRESERVATION	Ambient air quality data for one season other than monsoon within 10km radius of the complex particularly one station shall be established where maximum GLC is anticipated with respect to SO2, NOx, PM10, Ozone, CO, Benzene and Benzo (a) pyrene and data submitted to MoEF/CPCB/SPCB.

PPs Submission: Complied Additional adequate numbers of AAQMs stations are set up and monitored as per the standards and the data submitted to MoEFCC and GPCB. Pl. Refer Annexure 5-C.	Date: 22/11/2024

7	AIR QUALITY MONITORING AND PRESERVATION	Action plan for reduction of SO2 and NOx emissions from the present level shall be submitted to the Ministry.

PPs Submission: Complied Maximized usage of gaseous fuel and use of syngas as fuel have reduced SO2 and NOx emissions to the extent possible.	Date: 22/11/2024

8	AIR QUALITY MONITORING AND PRESERVATION	The company shall install low NOx burner to mitigate the NOx emission and cyclone, venturi scrubbers, sulphur recovery unit and tail gas treatment for mitigating SO2 emission.

PPs Submission: Complied The best available technology is incorporated in FEED of the project for reduction and control measures for mitigating emissions viz; SO2 , PM, NOx etc.	Date: 22/11/2024

9	AIR QUALITY MONITORING AND PRESERVATION	The company shall install detectors for phosgene and specific steps shall be taken for phosgene management.

PPs Submission: Complied Phosgene plant is not set up and thus Not Applicable.	Date: 22/11/2024

10	AIR QUALITY MONITORING AND PRESERVATION	The gaseous emissions (SO2, PM10, NOx, CO and NMHC) from the various process units shall conform to the standards prescribed under Environment (Protection) Rules, 1986 or norms stipulated by the SPCB, whichever is more stringent. At no time, the emission level shall go beyond the stipulated standards. In the event of failure of pollution control system(s) adopted by the unit, the respective units should not be restarted until the control measures are rectified to achieve the desired efficiency.

PPs Submission: Complied Gaseous emissions in the Refinery complex are within the stricter standards prescribed by the authorities. In case of any likelihood of exceedance corrective actions are laid down to avoid it.	Date: 22/11/2024

11	AIR QUALITY MONITORING AND PRESERVATION	The proponent shall upload the status of compliance of the stipulated EC conditions, including monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal office of CPCB and the SPCB. The criteria pollutant namely; Particulate matter (PM10, SO2, NOx, VOC and HC (Ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at the convenient location near the main gate of the company in the public domain.

PPs Submission: Complied Compliance reports are submitted to authorities regularly. The criteria parameters namely Particulate matter (PM)10, SO2, NOx, VOC and HC (Ambient levels) and critical sectorial parameters,	Date: 22/11/2024

		indicated for the complex are monitored and displayed at the convenient location near the main gate of the company in the public domain. The status of compliance is uploaded on the companys website in a summarized form.
12	AIR QUALITY MONITORING AND PRESERVATION	Process emissions shall be controlled by scrubbers. Flue gas emissions from the various stacks attached to the boilers, furnace/heaters shall conform to the prescribed standards.
	PPs Submission: Complied The best available technology is incorporated and established in FEED for the units to conform to the prescribed standards. Pl. Refer Annexure 2C.	Date: 22/11/2024
13	AIR QUALITY MONITORING AND PRESERVATION	The gaseous emissions from the DG sets shall be dispersed through stack of adequate height as per CPCB/State Pollution Control Board standards. Acoustic enclosures shall be provided to mitigate the noise.
	PPs Submission: Complied Suitable stack height as per the prescribed standards and acoustic enclosures are provided for all the DG sets.	Date: 22/11/2024
14	AIR QUALITY MONITORING AND PRESERVATION	The company shall use low sulphur fuel to minimize SO2 emission. Stacks which are contributing to more SO2 emissions shall be identified and SO2 emissions shall be reduced by changing the fuel or by increasing the height of major stacks to bring GLC within the prescribed limits.
	PPs Submission: Complied The best available technology is incorporated and established in the Front-End Engineering Design (FEED) for the units for reduction and minimization of GLC. All stack heights are in accordance to standards and there is no exceedance on the GLCs monitored.	Date: 22/11/2024
15	AIR QUALITY MONITORING AND PRESERVATION	To control the fugitive emissions, the unit shall have provision for internal floating roof tanks with flexible double seal for MS and intermediate products; mechanical seals in pumps; regular inspection of floating roof seals and proper maintenance of floating roof seals for storage tanks; preventive maintenance of valves and other equipment; regular skimming of oil from separators/equalization basin in ETP. The units shall assess and minimize the fugitive VOC emission wherever possible.
	PPs Submission: Complied The best available technology is incorporated and established in the FEED for reduction and minimization of VOC emissions. The mitigation measures for minimizing the fugitive VOC emission during the operational phase is assessed and wherever actions required to control emissions, measures are taken.	Date: 22/11/2024
16	AIR QUALITY MONITORING AND PRESERVATION	Fugitive emissions of HC from product storage tank yards etc must be regularly monitored. Sensors for detecting HC leakage shall also be provided at strategic locations.
	PPs Submission: Complied Complied.	Date: 22/11/2024
17	AIR QUALITY MONITORING AND PRESERVATION	M/s RIL shall implement Leak Detection and Repair (LDAR) programme using a portable VOC detection instrument shall be done on distribution lines and tanks.

PPs Submission: Complied LDAR programs are conducted in accordance with the MoEF notifications 2008 and 2012 for the complex.		Date: 22/11/2024
18	AIR QUALITY MONITORING AND PRESERVATION	Measures shall be undertaken for odour control and inventory of odours compounds shall be maintained.
PPs Submission: Complied Complied.		Date: 22/11/2024
19	AIR QUALITY MONITORING AND PRESERVATION	The company shall ensure that no halogenated organic is sent to the flares. If any of the halogenated organic are present then the respective streams may be incinerated, if there are no technically feasible or economically viable reduction/recovery options. Any stream containing organic carbon, other than halogenated shall be connected to proper flaring system, if not to a recovery device or an incinerator.
PPs Submission: Complied The safety and emergency discharges of HC are routed to the flare system and the HC is recovered to the extent possible, however, the safety and emergency discharges are routed to the flare. No halogenated organics are routed to the flare.		Date: 22/11/2024
20	WASTE MANAGEMENT	The company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 for management of Hazardous wastes and prior permission from GPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Details of regarding type of catalyst to be used and plan for disposal of spent catalyst shall be submitted. The company shall incinerate the oil cotton rags only. The design of the incinerator and secured landfill facility shall be as per the CPCB guidelines.
PPs Submission: Complied Authorization for collection, storage and disposal of hazardous waste generated from the units is obtained from GPCB.		Date: 22/11/2024
21	MISCELLANEOUS	M/s RIL shall undertake measures for firefighting facilities in case of emergency.
PPs Submission: Complied Firefighting facilities including dedicated fire stations are operational so as to cover all the units.		Date: 22/11/2024
22	MISCELLANEOUS	The company shall submit time bound action plan for brine management. Further, possibility of setting up of salt manufacturing facility for management of huge volume of brine shall be explored or tie up with the salt manufacturing units in the area for brine disposal.
PPs Submission: Complied Noted. This possibility has been explored. However, it is not found feasible.		Date: 22/11/2024
23	Risk Mitigation and Disaster Management	The company shall prepare integrated risk assessment report considering domino effect which shall be done after freezing overall layout of the Petrochemical Complex with precise location of all individual plants as well as all offsite and battery limit storage areas of the Petrochemical Complex and after all storage capacities and tank sizes are decided.

PPs Submission: Complied The integrated risk assessment considering domino effect has been carried out while freezing the layout of the units and storages.		Date: 22/11/2024
24	Risk Mitigation and Disaster Management	The Quantitative Risk Assessment (QRA) shall be done in comprehensive manner by taking into all consideration listed below but not limited to, a) Report to consider two mega size refineries in the same industrial area and shall deal with the risk arising out of major incident (VCE, Flash fire) in either the existing refineries or proposed petrochemical complex and its domino effect on the each other b) Report to consider precise layout of particular units, bulk storages and storage quantities determined, details of safety system, safeguard provided against domino effect.
PPs Submission: Complied The Comprehensive Quantitative Risk Assessment study has been done once the overall layout of the project including the two refineries and the projects was frozen along with the final layout of the particular units and bulk storages. The report includes the safeguards to be provided under domino effect.		Date: 22/11/2024
25	Risk Mitigation and Disaster Management	All pressure vessels shall be of SIL-3 level product at par with existing refineries.
PPs Submission: Complied Complied.		Date: 22/11/2024
26	Risk Mitigation and Disaster Management	Any relief system for major hazardous releases shall have at least double or triple backup system against the possibility of human error.
PPs Submission: Complied Included in the FEED for the project.		Date: 22/11/2024
27	Risk Mitigation and Disaster Management	Risk assessment shall include BLEVE for propane and shall be considered in the lay out plan.
PPs Submission: Complied Complied.		Date: 22/11/2024
28	MISCELLANEOUS	The company shall submit reports of last 2-3 years regarding external safety audit.
PPs Submission: Complied Safety audits are being conducted and the audit reports submitted to concerned authorities.		Date: 22/11/2024
29	MISCELLANEOUS	Since some of the design parameters have not been frozen at this stage of project, once the Front End Engineering Design Document (FEED) is firmed up, necessary details for integrated QRA study are available particularly with respect to lay out including, the bulk storages with storage quantities determined, details of safety system, safeguard provided against domino effect and other details as prescribed in the specific conditions stipulated above regarding catalyst and the mode of their disposal, steps for mitigation of SO2 and NOx releases details of phosgene management and model used for diffuser for discharged of saline water into the sea shall be submitted to the Ministry. The information provided shall be place before the Committee so that the Committee suggests mid-course correction, and if considered necessary additional environmental safeguards are stipulated for compliance by M/s RIL.

PPs Submission: Complied Part of the projects are implemented and operational and the rest in the design phase. The projects implemented are as per the assessed impacts and risks. The execution of the remainder projects is unlikely. Any further expansion will be put up to the Ministry for a fresh approval.		Date: 22/11/2024
30	WATER QUALITY MONITORING AND PRESERVATION	M/s RIL shall undertake rainwater harvesting measures, to recharge the ground water and also to minimize the water drawl from the weir.
PPs Submission: Complied Rainwater harvesting through a network of storm water ponds is developed. The storm water runoffs are collected in the ponds. The water is recycled and reused.		Date: 22/11/2024
31	GREENBELT	Green belt in 33% of the plant area shall be provided to mitigate the effects of fugitive emissions all around the plant as per CPCB guidelines in consultation with local DFO.
PPs Submission: Complied Complied.		Date: 22/11/2024
32	Human Health Environment	Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the medical records of each employees shall be maintained separately.
PPs Submission: Complied Occupation health surveillance is implemented for the personnel working in the complex. The medical records are being maintained. The first aid facilities in the OHC have been strengthened. During the last six months ending 30th September 24 100 percent scheduled employees medical surveillance checkup was conducted.		Date: 22/11/2024
33	MISCELLANEOUS	Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. 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.
PPs Submission: Complied During the project stage, the labour camps had been set up with all necessary infrastructure facilities such as fuel for cooking, toilets, sewage treatment plant, safe drinking water, medical health care etc. The labour camps for projects are being demobilized. The generation of construction waste was kept to the minimum extent possible by proper planning. It has been managed to ensure no impact to the surrounding environment.		Date: 22/11/2024
34	Statutory compliance	The Company shall comply with all the conditions stipulated vide ministry's clearance letter no. J-111011/232/2005-IA.II(I) dated 3rd August,2005 for expansion and modernization of petrochemical refinery complex
PPs Submission: Complied Being complied with.		Date: 22/11/2024

General Conditions

Sr.No.	Condition Type	Condition Details

1	MISCELLANEOUS	The project authorities must strictly adhere to the stipulations made by the Gujarat Pollution Control Board and the State Government.
PPs Submission: Complied The standards stipulated by GPCB for the complex are being complied with.		Date: 22/11/2024
2	MISCELLANEOUS	No further expansion or modernization in the plant should be carried out without prior approval of the ministry of Environment and Forests.
PPs Submission: Complied Noted.		Date: 22/11/2024
3	MISCELLANEOUS	At no time, the emission should go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the units, the respective unit should be immediately put out of operation and should not be restarted until the desired efficiency has been achieved.
PPs Submission: Complied Noted.		Date: 22/11/2024
4	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 should confirm to the standards prescribed under EPA Rules.
PPs Submission: Complied All the units in the complex have been so designed by providing noise abatement and control measures such that the ambient noise levels conform to the standards prescribed.		Date: 22/11/2024
5	Statutory compliance	The project authorities must strictly comply with the provisions made in Manufacture, Storage and import of Hazardous Chemicals Rules 1989 as amended in 2000 for handling of hazardous chemicals etc. Necessary approvals from chief controller of explosives must be obtained before commission of the project.
PPs Submission: Complied Complied.		Date: 22/11/2024
6	MISCELLANEOUS	The project authorities will provide adequate funds both recurring and non-recurring to implement the conditions stipulated by the ministry of Environment and Forest as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so provided should not be diverted for any other purposes.
PPs Submission: Complied The funds (recurring and non-recurring) allocated are used only for the implementation of the environmental conditions and are not diverted for any other purpose. Refer Annexure 12.		Date: 22/11/2024
7	Statutory compliance	The stipulated conditions will be monitored by the Regional of this Ministry at Bhopal/Central Pollution Control Board / State Pollution Control Board. A six monthly compliance report and the monitored data should be submitted to them regularly.

PPs Submission: Complied The six-monthly EC compliance and monitoring report are submitted.		Date: 22/11/2024
8	Statutory compliance	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copy 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.
PPs Submission: Complied The six-monthly EC compliance and monitoring report are being submitted.		Date: 22/11/2024
9	MISCELLANEOUS	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/ Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any were received while processing the proposal.
PPs Submission: Complied Complied with.		Date: 22/11/2024
10	Statutory compliance	The Environmental statement for each financial years 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 by e-mail.
PPs Submission: Complied Form V are submitted for operationalized plants and have been granted Consent to operate by GPCB.		Date: 22/11/2024
11	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 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 concerned the Regional Office of the Ministry.
PPs Submission: Complied Complied.		Date: 22/11/2024
12	MISCELLANEOUS	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closures and final approval of the project by the concerned authorities and the date of start of the project.
PPs Submission: Complied Complied.		Date: 22/11/2024
13	MISCELLANEOUS	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

PPs Submission: Complied Noted.		Date: 22/11/2024
14	MISCELLANEOUS	The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.
PPs Submission: Complied The additional conditions if stipulated will be complied with.		Date: 22/11/2024
15	MISCELLANEOUS	Any appeal against this environmental clearance shall lie with the National Appellate Authority, if preferred, within a period of 30 days as prescribed under section 11 of the National Environment Appellate Authority Act, 1997.
PPs Submission: Complied ---		Date: 22/11/2024
16	MISCELLANEOUS	The above conditions will be enforced, interalia 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 and Handling) Rules, 2003/ 2008 and the Public Liability Insurance Act,1991 along with their amendments and rules.
PPs Submission: Complied ---		Date: 22/11/2024

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	All 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.

Half Yearly Compliance Report
2024
01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	Augmentation of Seawater Intake and Desalination Facilities at Sikka, Jamnagar - CRZ Clearance
Name of Entity / Corporate Office	RELIANCE INDUSTRIES LIMITED
Village(s)	N/A
District	JAMNAGAR

Proposal No.	11-63/2013-IA.III
Plot / Survey / Khasra No.	N/A
State	GUJARAT
MoEF File No.	11-63/2013-IA.III

Category	Only CRZ
Sub-District	N/A
Entity's PAN	*****5055K
Entity name as per PAN	RELIANCE INDUSTRIES LIMITED

Compliance Reporting Details

Reporting Year 2024

Remarks (if any)

Reporting Period 01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office RELIANCE INDUSTRIES LIMITED

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	0.01	0.01
Total	0.01	0.01

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	-	Others:-	N/A	-	-	

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details

1	Marine/Coastal	All the conditions/ recommendations stipulated by Gujarat Coastal Zone Management Authority (GCZMA) vide letter no. ENV-10-2013-37-E dated 05.06.2013, shall be strictly complied with.

PPs Submission: Complied Complied.	Date: 22/11/2024

2	Marine/Coastal	The depth of the stilling basins shall not exceed -12 m. The GMB shall monitor the dredging activity so as to check that the depth of stilling basin does not exceed -12m.

PPs Submission: Complied GMB has certified and established the depth of the stilling basin with a depth of -12 m CD.	Date: 22/11/2024

3	Marine/Coastal	The maintenance dredge material shall be used for low level raising in the plant area.

PPs Submission: Complied Complied.	Date: 22/11/2024

4	WATER QUALITY MONITORING AND PRESERVATION	The Project Proponent shall take the clearance of the concerned ground water authority for undertaking construction of stilling basins of desired depth of 12m.

PPs Submission: Complied Being complied.	Date: 22/11/2024

5	Statutory compliance	All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to MoEF&CC along with half yearly compliance report to MoEF&CC-RO.

PPs Submission: Complied Included in design and complied with and included as Annexure AA.	Date: 22/11/2024

6	Marine/Coastal	Screens and trash bars shall be provided to avoid entry of fishes and fish larvae in to the system.

PPs Submission: Complied Being included in design and complied.	Date: 22/11/2024

7	Marine/Coastal	The outfall shall be at 1 km from shore at 12 m CD.

PPs Submission: Complied The existing diffuser is installed at a location suggested by NIO and approved GPCB. The discharge from the proposed unit is through existing diffuser in compliance with the conditions as stipulated in the clearance.	Date: 22/11/2024

8	Marine/Coastal	There shall be no disturbance to the sand dunes.

PPs Submission: Complied Complied.	Date: 22/11/2024

9	Marine/Coastal	Periodic monitoring of coastal water shall be carried out at outfall location.

PPs Submission: Complied Being carried out at regular intervals		Date: 22/11/2024
10	Marine/Coastal	No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
PPs Submission: Complied Being complied with.		Date: 22/11/2024
11	MISCELLANEOUS	The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
PPs Submission: Complied The Environmental Management Cell is in place.		Date: 22/11/2024
12	Marine/Coastal	The Project Proponent shall not engage in any trenching, digging or dredging either for water intake into the sea.
PPs Submission: Complied Being complied.		Date: 22/11/2024
13	Marine/Coastal	a) The water quality especially for the salinity shall be monitored around the stilling basin & the outfall once in six months & report should be submitted to Regional Office, MoEF&CC. b) The NCSCM, Chennai at the cost of the project proponent, shall submit to the MoEF&CC the annual inspection report on the functioning of the system & comparative level of pollution, every year takin the year of approval as the base year.
PPs Submission: Complied Periodic monitoring around the outfall is carried out. Refer Annexure 9. Monitoring around the stilling basin is included in the report by NCSCM. The first monitoring report by NCSCM submitted vide compliance report submitted on 01/12/2019.		Date: 23/11/2024

General Conditions

Sr.No.	Condition Type	Condition Details
1	WATER QUALITY MONITORING AND PRESERVATION	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
PPs Submission: Complied Complied.		Date: 23/11/2024
2	MISCELLANEOUS	Full support shall be extended to the officers of this Ministry/ Regional Office at Bhopal by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
PPs Submission: Complied		Date:

Noted.		23/11/2024
3	Statutory compliance	A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bhopal regarding the implementation of the stipulated conditions.
PPs Submission: Complied Complied.		Date: 23/11/2024
4	MISCELLANEOUS	Ministry of Environment, Forests & Climate Change or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
PPs Submission: Complied Noted.		Date: 23/11/2024
5	MISCELLANEOUS	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.
PPs Submission: Complied Noted.		Date: 23/11/2024
6	MISCELLANEOUS	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment, Forests & Climate Change.
PPs Submission: Complied Noted.		Date: 23/11/2024
7	MISCELLANEOUS	The project proponents 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 land development work.
PPs Submission: Complied Noted.		Date: 23/11/2024
8	Statutory compliance	A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries centre and Collector's Office/ Tehsildar's office for 30 days.
PPs Submission: Complied Complied.		Date: 23/11/2024
9	MISCELLANEOUS	The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose. Year-wise expenditure shall be reported to this Ministry and its concerned Regional Office.
PPs Submission: Complied Complied.		Date:

	23/11/2024

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	All 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.

Half Yearly Compliance Report
2024
01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	Expansion of existing jetty by setting a new berth at Gulf of Kutch, Jamnagar - Environmental and CRZ Clearance
Name of Entity / Corporate Office	RELIANCE INDUSTRIES LIMITED
Village(s)	N/A
District	JAMNAGAR

Proposal No.	IA/MIS/GJ/23582/2014
Plot / Survey / Khasra No.	N/A
State	GUJARAT
MoEF File No.	11-34/2014-IA-III

Category	INFRA-2
Sub-District	N/A
Entity's PAN	*****5055K
Entity name as per PAN	RELIANCE INDUSTRIES LIMITED

Compliance Reporting Details

Reporting Year 2024

Remarks (if any)

Reporting Period 01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office RELIANCE INDUSTRIES LIMITED

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	0.01	0.01
Total	0.01	0.01

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Handling of liquid products like Glycols, Acetic Acid, Naphtha, PX, Diesel, Benzene, VAM & Phenol	Others:MMTPA	N/A	8	8	

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	Statutory compliance	'Consent to Establish' shall be obtained from State Pollution Control Board under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act 1974.
PPs Submission: Complied CTE and CTO are obtained from GPCB.		Date: 23/11/2024
2	WATER QUALITY MONITORING AND PRESERVATION	All the operational areas will be connected with the network of liquid waste collection corridor comprising of storm water, oily waste and sewage collection pipelines.
PPs Submission: Complied Complied with as applicable.		Date: 23/11/2024
3	Marine/Coastal	Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components as part of the management plan. Marine ecology shall be monitored regularly also in terms of all micro, macro and mega floral and faunal components of marine biodiversity.
PPs Submission: Complied Being done regularly by NIO.		Date: 23/11/2024
4	Marine/Coastal	Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
PPs Submission: Complied Present Oil Spill Response Plan will be extended to new berth.		Date: 23/11/2024
5	MISCELLANEOUS	All the mitigation measures submitted in the EIA report shall be prepared in a matrix format and the compliance for each mitigation plan shall be submitted to the RO, MoEF&CC along with half yearly compliance report.
PPs Submission: Complied Complied.		Date:

		23/11/2024
6	Marine/Coastal	Ships/barges shall not be allowed to release any oily bilge waste in the sea. Any effluents from the Jetty which have leachable characteristics shall be segregated and recycled/disposed as per SPCB guidelines.
PPs Submission: Complied Noted.		Date: 23/11/2024
7	AIR QUALITY MONITORING AND PRESERVATION	Location of DG sets and other emission generating equipment shall be decided keeping in view the predominant wind direction so that emissions do not effect nearby residential areas. Installation and operation of DG sets shall comply with the guidelines of CPCB.
PPs Submission: Complied Complied.		Date: 23/11/2024
8	Marine/Coastal	No product other than permitted under the CRZ Notification, 2011 shall be stored in the CRZ area.
PPs Submission: Complied No storage in CRZ area is envisaged.		Date: 23/11/2024
9	WASTE MANAGEMENT	Municipal solid wastes and hazardous wastes shall be managed as per Municipal Solid Waste Rule, 2016 and Hazardous Waste Management Rule, 2016.
PPs Submission: Complied Complied.		Date: 23/11/2024
10	MISCELLANEOUS	The Project Proponent shall take up and earmark adequate fund for socio-economic development and welfare measures as proposed under the CSR Programme. This shall be taken up on priority.
PPs Submission: Complied CSR plan is already being implemented.		Date: 23/11/2024
11	MISCELLANEOUS	The project proponent shall set up separate environmental management cell for effective implementation of the stipulated environmental safeguards under the supervision of a Senior Executive.
PPs Submission: Complied Already the cell is established.		Date: 23/11/2024
12	MISCELLANEOUS	The funds earmarked for environment management plan shall be included in the budget and this shall not be diverted for any other purposes.
PPs Submission: Complied Noted.		Date: 23/11/2024
13	Marine/Coastal	Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011. No construction work other

		than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
PPs Submission: Complied Noted and Complied with.		Date: 23/11/2024
14	Marine/Coastal	As proposed, the Company shall not carry out any construction activity in the Eco- Sensitive area.
PPs Submission: Complied Ensured.		Date: 23/11/2024
15	MISCELLANEOUS	The proponent shall abide by all the commitments and recommendations made in the EIA/EMP report so also during their presentation to the EAC.
PPs Submission: Complied Complied.		Date: 23/11/2024
16	MISCELLANEOUS	Company shall prepare operating manual in respect of all activities. It shall cover all safety & environment related issues and system. Measures to be taken for protection. One set of environmental manual shall be made available at the project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office.
PPs Submission: Complied Being complied and present set of SOPs applicable to the new berth.		Date: 23/11/2024
17	MISCELLANEOUS	Corporate Social Responsibility-The Company shall have a well laid down Environment Policy approved by the Board of Directors.
PPs Submission: Complied Pl. refer Annexure 15.		Date: 23/11/2024
18	MISCELLANEOUS	Corporate Social Responsibility- The Environment Policy shall prescribe for standard operating process/procedures to bring into focus any infringements/ deviation/violation of the environmental or forest norms/ conditions.
PPs Submission: Complied Noted.		Date: 23/11/2024
19	MISCELLANEOUS	Corporate Social Responsibility- The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions shall be furnished.
PPs Submission: Complied Organogram for the Environment department is attached as Annexure 14.		Date: 23/11/2024
20	MISCELLANEOUS	Corporate Social Responsibility- To have proper checks and balances, the company shall have a well laid down system of reporting of non-compliances/ violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large.

PPs Submission: Complied The facilities are certified with EMS ISO 14001:2015 which covers this required reporting. The same will be done for the berth also.		Date: 23/11/2024
21	Marine/Coastal	The Project proponent shall ensure that there shall be no damage to the existing mangroves patches near site and also ensure the free flow of water to avoid damage to the mangroves.
PPs Submission: Complied Existing mangroves are about 4Kms from the proposed project location.		Date: 23/11/2024
22	Marine/Coastal	As proposed, the Company shall undertake additional mangrove plantation in area of 100 ha.
PPs Submission: Complied The Forest Dept. Jamnagar has carried out 100 Ha of mangrove plantation. The letter confirming the same is submitted along with compliance reports vide dts:01/12/2019.		Date: 23/11/2024
23	Marine/Coastal	The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.
PPs Submission: Complied Noted, however the location will not cause any such disturbance.		Date: 23/11/2024
24	Marine/Coastal	Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
PPs Submission: Complied Already established in EIA. No dumping is envisaged. There will be no shoreline changes due to dumping. The shoreline changes are studied by NIO regularly.		Date: 23/11/2024
25	PUBLIC HEARING	The commitments made during the Public Hearing and recorded in the Minutes shall be complied with letter and spirit. A hard copy of the action taken shall be submitted to the Ministry.
PPs Submission: Complied Already established in EIA. No dumping is envisaged. There will be no shoreline changes due to dumping. The shoreline changes are studied by NIO regularly.		Date: 23/11/2024
26	Marine/Coastal	As proposed, no capital and maintenance dredging shall be carried out.
PPs Submission: Complied Not proposed.		Date: 23/11/2024
27	Marine/Coastal	While constructing berth/piles, an independent monitoring shall be carried out by Government Agency/Institute to check the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
PPs Submission: Complied NIO has monitored the marine environmental parameters during construction.		Date: 23/11/2024
28	Risk Mitigation and Disaster	All the conditions stipulated in the earlier Clearance including the

	Management	recommendations of Environment Management Plan, Disaster management Plan shall be strictly complied with.
PPs Submission: Complied Complied.		Date: 23/11/2024
29	WATER QUALITY MONITORING AND PRESERVATION	The ground water shall not be tapped within the CRZ areas by the PP to meet with the water requirement in any case.
PPs Submission: Complied Noted and complied with.		Date: 23/11/2024
30	WATER QUALITY MONITORING AND PRESERVATION	Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
PPs Submission: Complied Complied.		Date: 23/11/2024

General Conditions

Sr.No.	Condition Type	Condition Details
1	MISCELLANEOUS	A copy of the environmental clearance letter shall also be displayed on the website of the concerned State Pollution Control Board. The EC letter shall also be displayed at the Regional Office, District Industries center and Collector's Office/ Tehsildar's office for 30 days.
PPs Submission: Complied Complied.		Date: 23/11/2024
2	WATER QUALITY MONITORING AND PRESERVATION	Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality.
PPs Submission: Complied Noted. No digging is involved.		Date: 23/11/2024
3	MISCELLANEOUS	Full support shall be extended to the officers of this Ministry/ Regional Office at Bhopal by the project proponent during inspection of the project for monitoring purposes by furnishing full details and action plan including action taken reports in respect of mitigation measures and other environmental protection activities.
PPs Submission: Complied Noted and will be Complied with.		Date: 23/11/2024
4	Statutory compliance	A six-Monthly monitoring report shall need to be submitted by the project proponents to the Regional Office of this Ministry at Bhopal regarding the implementation of the stipulated conditions.

PPs Submission: Complied Complied.		Date: 23/11/2024
5	MISCELLANEOUS	Ministry of Environment, Forest and Climate Change or any other competent authority may stipulate any additional conditions or modify the existing ones, if necessary in the interest of environment and the same shall be complied with.
PPs Submission: Complied Noted.		Date: 23/11/2024
6	MISCELLANEOUS	The Ministry reserves the right to revoke this clearance if any of the conditions stipulated are not complied with the satisfaction of the Ministry.
PPs Submission: Complied Noted.		Date: 23/11/2024
7	MISCELLANEOUS	In the event of a change in project profile or change in the implementation agency, a fresh reference shall be made to the Ministry of Environment, Forest and Climate Change.
PPs Submission: Complied Noted.		Date: 23/11/2024
8	MISCELLANEOUS	The project proponents 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 land development work.
PPs Submission: Complied Complied.		Date: 23/11/2024
9	MISCELLANEOUS	A copy of the clearance letter shall be marked to concern Panchayat/local NGO, if any, from whom any suggestion/ representation has been made received while processing the proposal.
PPs Submission: Complied Complied.		Date: 23/11/2024
10	MISCELLANEOUS	These stipulations would be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification 1994, including the amendments and rules made thereafter.
PPs Submission: Complied Noted.		Date: 23/11/2024
11	MISCELLANEOUS	All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

PPs Submission: Complied Noted.		Date: 23/11/2024
12	Statutory compliance	The project proponent shall advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded Environmental and CRZ Clearance and copies of clearance letters are available with the State Pollution Control Board and may also be seen on the website of the Ministry of Environment, Forest and Climate Change at http://vvvvw.envfornic.in. The advertisement should be made within Seven days from the date of receipt of the Clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.
PPs Submission: Complied Complied.		Date: 23/11/2024
13	MISCELLANEOUS	This Clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.
PPs Submission: Complied Noted.		Date: 23/11/2024
14	MISCELLANEOUS	Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.
PPs Submission: Complied Complied with.		Date: 23/11/2024
15	MISCELLANEOUS	Any appeal against this Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
PPs Submission: Complied Noted.		Date: 23/11/2024
16	MISCELLANEOUS	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zilla Parisad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
PPs Submission: Complied Complied.		Date: 23/11/2024
17	MISCELLANEOUS	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEFCC, the respective Zonal Office of CPCB and the SPCB.

PPs Submission: Complied Complied.		Date: 23/11/2024
18	Statutory compliance	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEFCC by e-mail.
PPs Submission: Complied Noted and Complied with.		Date: 23/11/2024

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	All 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.

Half Yearly Compliance Report
2024
01 Dec(01 Apr - 30 Sep)

Acknowledgement

Proposal Name	Expansion of production capacity of SEZ refinery from 35.2 MMTPA to 41 MMTPA
Name of Entity / Corporate Office	RELIANCE INDUSTRIES LIMITED
Village(s)	N/A
District	JAMNAGAR

Proposal No.	IA/GJ/IND2/79902/2018	**Category**	Industrial Projects - 2
Plot / Survey / Khasra No.	N/A	**Sub-District**	N/A
State	GUJARAT	**Entity's PAN**	*****5055K
MoEF File No.	J-11011/351/2018-IA-II (I)	**Entity name as per PAN**	RELIANCE INDUSTRIES LIMITED

Compliance Reporting Details

Reporting Year 2024

Remarks (if any)

Reporting Period 01 Dec(01 Apr - 30 Sep)

Details of Production and Project Area

Name of Entity / Corporate Office RELIANCE INDUSTRIES LIMITED

	Project Area as per EC Granted	Actual Project Area in Possession
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	930	930
Total	930	930

Production Capacity

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Crude Oil Processing Capacity	Others:MMTPA	N/A	41	41	

Conditions

Specific Conditions

Sr.No.	Condition Type	Condition Details
1	WATER QUALITY MONITORING AND PRESERVATION	The company shall harvest rainwater from the roof tops of the buildings to recharge ground water, and to utilize the same for different industrial operations within the plant.
PPs Submission: Complied Rainwater Harvesting through a network of storm water ponds are developed having capacity around 1.56 million cum and is reused. The storm water run-off is collected in the ponds. Two recharge wells have also been established in the green belt for ground water recharge		Date: 23/11/2024
2	Human Health Environment	Training shall be imparted to all employees on safety and health aspects of chemical handling. Pre-employment and routine periodic medical examination for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
PPs Submission: Complied A dedicated Learning Center with state of Art infrastructure is established and well-structured training modules are developed which includes HSEF procedures. As per the training procedure every New Joiner has to undergo mandatory training modules which includes safe handling; safe operations, safety management systems etc for hazardous chemicals. Occupational Health Department carries out regular medical checkups of all employees and records are maintained.		Date: 23/11/2024
3	Risk Mitigation and Disaster Management	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 EIA/EMP in respect of environment management, risk mitigation measures and public hearing shall be implemented.
PPs Submission: Complied Noted and complied with.		Date: 23/11/2024
4	MISCELLANEOUS	The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.
PPs Submission: Complied CSR activities are planned as per the needs of the surrounding villagers aimed at socio-economic improvement and overall development of the area.		Date: 23/11/2024
5	MISCELLANEOUS	A separate Environmental Management Cell equipped with full-fledged laboratory facility shall be set up to carry out the Environmental Management and Monitoring functions.
PPs Submission: Complied Already the cell is established. Refer Departmental Organogram Annexure 14.		Date: 23/11/2024
6	MISCELLANEOUS	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by MoEF&CC well as state government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for Environmental Management/ pollution control measures shall not be diverted to any other purpose.
PPs Submission: Complied The capital expenditure towards environmental management is already used up for establishing the		Date:

necessary controls. The recurring expenditure will be continued to be committed as outlined in Annexure 12.		23/11/2024
7	MISCELLANEOUS	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila 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 There was no PH conducted and no suggestions / representations were received during the processing of the application.		Date: 23/11/2024
8	Statutory compliance	The project proponent shall also submit six monthly reports on the status of compliance of stipulated EC conditions including results of monitored data (both hard copy as well as by E-mail) to the respective Regional Office, Moef&CC, the respective zonal office of CPCB & SPCB. A copy of EC and six monthly compliance status report shall be posted on the website of the company.
PPs Submission: Complied The six-monthly EC compliance and monitoring report are being submitted.		Date: 23/11/2024
9	Statutory compliance	The Environmental Statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned SPCB as prescribed under the Environment (Protection) Act, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to respective Regional Office of MoEF&CC by e-mail.
PPs Submission: Complied Being complied with.		Date: 23/11/2024
10	Statutory compliance	The project proponent shall inform the public that the project has been accorded EC by the ministry and copies of the clearance letter are available with SPCB/Committee and may also be seen at website of the Ministry at http://moef.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 The copy of advertisement of the same has been submitted in the earlier Six-monthly report dated 29/06/2020.		Date: 23/11/2024
11	Statutory compliance	The project proponent shall strictly comply the sector specific conditions as mentioned in the Ministry's Office Memorandum No. 22-34/2019-IA.III dated 9th August, 2018. The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:-
PPs Submission: Complied Noted. Pl. refer attachment Annexure BB.		Date: 23/11/2024
12	Statutory compliance	The project proponent shall obtain all other statutory/necessary

		permissions/recommendations/ NOCs prior to start construction/operation of the project, which inter alia include, permission/approvals under the Forest (Conservation) Act, 1980; the Wildlife (Protection) Act, 1972; the Coastal Regulation Zone Notification, 2019, as amended from time to time, and other office memoranda/circular issued by the Ministry of Environment, Forest and Climate Change from time to time, as applicable to the project.

PPs Submission: Complied There is no construction activity involved in the project as the increase in the processing capacity is due to increase in number of working hours. The CTO is obtained from GPCB. No other approvals are applicable.	Date: 23/11/2024

13	MISCELLANEOUS	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board (SPCB), State Government and/or any other statutory authority.

PPs Submission: Complied Being complied with. There is no change in the present conditions envisaged.	Date: 23/11/2024

14	MISCELLANEOUS	No further expansion or modifications in the plant shall be carried out without prior approval of the MoEF&CC. In case of deviation or alteration in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental pollution control measures required, if any.

PPs Submission: Complied Noted.	Date: 23/11/2024

15	AIR QUALITY MONITORING AND PRESERVATION	The location of ambient air quality monitoring stations shall be decided in consultation with SPCB and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

PPs Submission: Complied AAQM stations have been setup based on the EIA findings of 2005. The monitoring parameters are as per the NAAQS dtd.18th November 2009. Please Refer Annexure 5B.	Date: 23/11/2024

16	AIR QUALITY MONITORING AND PRESERVATION	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.

PPs Submission: Complied Being complied with.	Date: 23/11/2024

17	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 level shall confirm to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) 70 dBA (night time).

PPs Submission: Complied Appropriate Engineering control measures are provided to identified sources of noise generation including acoustic hoods, silencers, enclosures etc. The overall noise levels in and around the plant area are kept well within the standards. Regular monitoring of the ambient noise levels is conducted and it conforms to the standards prescribed. The monitoring data are submitted to the authorities.	Date: 23/11/2024

Please refer Annexure 8-B.	

Visit Remarks

Last Site Visit Report Date:	N/A
Additional Remarks:	All 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.

List of Six-Monthly Monitoring Reports attached as Annexures.

Annexure No.	Description
1-A & 1-B	Monthly SO2 Emission Monitoring.
2-A, 2-B & 2C	Stack Emission Monitoring Report
3-B	Continuous Online Emission & Effluent Monitoring Reports
4-A & 4-B	Computerized Sulphur Recovery Unit Efficiency
5-A, 5-B & 5-C	Ambient Air Quality Monitoring Report
6	Mobile Van Monitoring
7-A, 7-B & 7C	Treated Wastewater Quality Results – Refinery ETP
8-A, 8-B & 8-C	Plant Peripheral Noise Monitoring Report
9	Marine Water Quality Results
10	Treated Wastewater Quality Results – MTF ETP
11	Groundwater Quality Monitoring Analysis Report.
12	Expenditure for Environmental Protection Measures
13	Sample LDAR Monitoring of plant
14	Organogram of Environment dept.
15	HSEF Policy

Note: In Annexures, “A” denotes reports for RIL, Refinery Division i.e. DTA refinery; “B” denotes reports for RIL, Unit of Reliance Jamnagar SEZ refinery and “C” denotes for RIL, J3 complex (i.e. PX4 complex & C2 complex).

ANNEXURE- 1A

Reliance Industries Ltd. (Refinery Division). Jamnagar
Monthly Sulphur Balance

Month: April '2024

(1) Inputs

	Quantity	S%	S
Total Crude Oil Intake	**2884771**	**1.84**	**53113**
Methanol/Nitrogen/Coke water/Natural Gas/Utility from SEZ	473186	0	0
Imported LSWR	4099	0.23	9
Naphtha	51932	0.02	10
Intermediate Stock	3800443	0.11	4007
GRAND TOTAL	**7214432**	**0.79**	**57139**

SO2 Emission, MT/DAY **22.73**

(2) Outputs

Product	Quantity	S%	S
LPG+Propane+Butane	372505	0.000	0
HSD Export	429042	0.03	146
HSD Domestic	471946	0.00	11.0
Kero+ATF	319022	0.22	707
MS	76872	0.01	8
Naptha	340459	0.02	68
Coke	318284	6.8	21643
Sulphur	28738	100.0	28738
FO	51977	0.42	219
CBFS	26820	1.2	334
Sulphur as Sulphide in ETP Influent			6.70
Intermediate Stock	416650	1.18	4918
Sub Total	**2852314**		**56798.0**
Polypropylene+propylene	113677	No sulphur	0.00
Utility to SEZ	1249	No sulphur	0.00
P-Xylene	107085	No sulphur	0.00
O-Xylene	29419	No sulphur	0.00
Benzene	26210	No sulphur	0.00
Heavy Aromatics	32926	No sulphur	0.0
Loss	3932998	0	0.0
TOTAL	**7095878**		**56798**

Reliance Industries Ltd. (Refinery Division). Jamnagar
Monthly Sulphur Balance

Month: May '2024

(1) Inputs

	Quantity	S%	S
Total Crude Oil Intake	**2926795**	**1.92**	**56267**
Methanol/Nitrogen/Coke water/Natural Gas/Utility from SEZ	466350	0	0
Imported LSWR	2471	0.23	6
Naphtha	33759	0.02	6
Intermediate Stock	3662435	0.08	3028
GRAND TOTAL	**7091811**	**0.84**	**59307**

SO2 Emission, MT/DAY **21.84**

(2) Outputs

Product	Quantity	S%	S
LPG+Propane+Butane	350977	0.000	0
HSD Export	344280	0.03	115
HSD Domestic	538125	0.00	12.2
Kero+ATF	304448	0.22	671
MS	35424	0.00	2
Naptha	397654	0.02	79
Coke	317548	4.8	15242
Sulphur	37046	100.0	37046
FO	54259	0.42	229
CBFS	37379	1.2	465
Sulphur as Sulphide in ETP Influent			6.70
Intermediate Stock	252244	2.02	5100
Sub Total	**2669383**		**58968.5**
Polypropylene+propylene	106245	No sulphur	0.00
Utility to SEZ	1300	No sulphur	0.00
P-Xylene	71802	No sulphur	0.00
O-Xylene	18874	No sulphur	0.00
Benzene	26220	No sulphur	0.00
Heavy Aromatics	43825	No sulphur	0.0
Loss	4034246	0	0.0
TOTAL	**6971896**		**58968**

Reliance Industries Ltd. (Refinery Division). Jamnagar
Monthly Sulphur Balance

Month: June '2024

(1) Inputs

	Quantity	S%	S
Total Crude Oil Intake	**2826479**	**1.96**	**55369**
Methanol/Nitrogen/Coke water/Natural Gas/Utility from SEZ	401250	0	0
Imported LSWR	119	0.23	0
Naphtha	103390	0.01	11
Intermediate Stock	3456878	0.12	3998
GRAND TOTAL	**6788116**	**0.87**	**59378**

(2) Outputs

Product	Quantity	S%	S
LPG+Propane+Butane	340252	0.000	0
HSD Export	360396	0.03	122
HSD Domestic	454458	0.00	11.9
Kero+ATF	260807	0.22	577
MS	77029	0.01	9
Naptha	351642	0.02	70
Coke	259481	5.0	12974
Sulphur	40360	100.0	40360
FO	49747	0.43	213
CBFS	33375	1.2	416
Sulphur as Sulphide in ETP Influent			6.70
Intermediate Stock	251245	1.71	4293
Sub Total	**2478791**		**59050.7**
Polypropylene+propylene	114215	No sulphur	0.00
Utility to SEZ	1259	No sulphur	0.00
P-Xylene	57357	No sulphur	0.00
O-Xylene	14826	No sulphur	0.00
Benzene	13416	No sulphur	0.00
Heavy Aromatics	57808	No sulphur	0.0
Loss	3918458	0	0.0
TOTAL	**6656131**		**59051**

SO2 Emission, MT/DAY **21.82**

Reliance Industries Ltd. (Refinery Division). Jamnagar
Monthly Sulphur Balance

Month: July '2024

(1) Inputs

	Quantity	S%	S
Total Crude Oil Intake	**2976695**	**1.76**	**52506**
Methanol/Nitrogen/Coke water/Natural Gas/Utility from SEZ	480514	0	0
Imported LSWR	4551	0.23	10
Naphtha	55352	0.01	5
Intermediate Stock	3654936	0.05	1657
GRAND TOTAL	**7172048**	**0.76**	**54178**

(2) Outputs

Product	Quantity	S%	S
LPG+Propane+Butane	371946	0.000	0
HSD Export	499489	0.03	173
HSD Domestic	422382	0.00	12.3
Kero+ATF	304960	0.22	673
MS	39734	0.01	3
Naptha	343476	0.02	68
Coke	320799	6.3	20210
Sulphur	31042	100.0	31042
FO	26016	0.50	129
CBFS	28442	1.2	354
Sulphur as Sulphide in ETP Influent			6.70
Intermediate Stock	153836	0.76	1168
Sub Total	**2542122**		**53838.7**
Polypropylene+propylene	117042	No sulphur	0.00
Utility to SEZ	1283	No sulphur	0.00
P-Xylene	94186	No sulphur	0.00
O-Xylene	30085	No sulphur	0.00
Benzene	26110	No sulphur	0.00
Heavy Aromatics	49003	No sulphur	0.0
Loss	4167080	0	0.0
TOTAL	**7026911**		**53839**

SO2 Emission, MT/DAY **21.91**

Reliance Industries Ltd. (Refinery Division). Jamnagar
Monthly Sulphur Balance

Month: August '2024

(1) Inputs

	Quantity	S%	S
Total Crude Oil Intake	**2921463**	**2.00**	**58413**
Methanol/Nitrogen/Coke water/Natural Gas/Utility from SEZ	453314	0	0
Imported LSWR	1432	0.23	3
Naphtha	96155	0.01	10
Intermediate Stock	3652441	0.15	5386
GRAND TOTAL	**7124805**	**0.90**	**63813**

(2) Outputs

Product	Quantity	S%	S
LPG+Propane+Butane	350501	0.000	0
HSD Export	478538	0.03	166
HSD Domestic	386930	0.00	9.2
Kero+ATF	275106	0.22	607
MS	40175	0.01	3
Naptha	356620	0.02	71
Coke	305539	6.4	19555
Sulphur	39179	100.0	39179
FO	73703	0.40	294
CBFS	32677	1.2	407
Sulphur as Sulphide in ETP Influent			6.70
Intermediate Stock	333901	0.95	3172
Sub Total	**2672868**		**63468.0**
Polypropylene+propylene	108012	No sulphur	0.00
Utility to SEZ	1279	No sulphur	0.00
P-Xylene	59212	No sulphur	0.00
O-Xylene	31181	No sulphur	0.00
Benzene	15459	No sulphur	0.00
Heavy Aromatics	61851	No sulphur	0.0
Loss	4036152	0	0.0
TOTAL	**6986014**		**63468**

SO2 Emission, MT/DAY **22.23**

ANNEXURE- 1A

Reliance Industries Ltd. (Refinery Division). Jamnagar

Monthly Sulphur Balance

Month: September '2024

(1) Inputs

	Quantity	S%	S
Total Crude Oil Intake	**2936463**	**1.88**	**55162**
Methanol/Nitrogen/Coke water/Natural Gas/Utility from SEZ	363888	0	0
Imported LSWR	944	0.23	2
Naphtha	134675	0.01	11
Intermediate Stock	3695624	0.13	4836
GRAND TOTAL	**7131594**	**0.84**	**60011**

SO2 Emission, MT/DAY **21.55**

(2) Outputs

Product	Quantity	S%	S
LPG+Propane+Butane	388213	0.000	0
HSD Export	592343	0.03	205
HSD Domestic	283114	0.00	10.4
Kero+ATF	305452	0.22	674
MS	69564	0.01	7
Naptha	395451	0.02	79
Coke	284244	5.8	16486
Sulphur	37615	100.0	37615
FO	45078	0.42	188
CBFS	46538	1.2	579
Sulphur as Sulphide in ETP Influent			6.70
Intermediate Stock	253916	1.51	3838
Sub Total	**2701527**		**59687.6**
Polypropylene+propylene	109034	No sulphur	0.00
Utility to SEZ	1286	No sulphur	0.00
P-Xylene	99017	No sulphur	0.00
O-Xylene	27614	No sulphur	0.00
Benzene	26393	No sulphur	0.00
Heavy Aromatics	53848	No sulphur	0.0
Loss	3941927	0	0.0
TOTAL	**6960647**		**59688**

ANNEXURE – 1B

Reliance Industries Ltd. (Unit of Reliance Jamnagar SEZ). Jamnagar
Monthly Sulphur Balance

Month: April '2024

	INPUT	Quantity (MT)	% S	S (T)
I	**Consumption**			
1	Total Crude	2513216.22	1.94	48781
2	Intermediate Stock	2728145.60	0.73	19937
3	Naphtha	0.00	0.00	0
4	MPG/Methanol/ Water in Pet Coke/ Nitogen	29549.93	0.00	0
5	HSGO/VGO	25454.63	0.00	613
6	LSFO/LSWR/VR	0.00	0.00	0
7	Natural Gas	43823.13	0.00	0
8	Pet Coke	0.00	0.00	0
	Sub Total	**5340189.51**		**69330**

Sulphur Emission	**Tonnes**	**342**
SO2 Emission	**Tonnes/day**	**22.77**

II	OUTPUT	Quantity (MT)	% S	S (T)
II	**Product**			
1	LPG + Mixpetgas+NG+Nbutane	445626.28	0.0009	3.87
2	High Speed Diesel (HSD)	1561987.27	0.0010	15.79
3	Motor Spirit (MS)+ Reformate	825990.89	0.0006	4.96
4	Alkylate	234473.54	0.0005	1.25
5	Naphtha	280464.84	0.0013	3.59
6	ATF	176794.58	0.00	114.92
7	Petroleum Coke (Non-Calcined)	265083.25	5.68	15043.47
8	Un-Refined Sulphur	47074.99	100.0	47074.99
9	CBFS+VGO+VR+Gas oil	49264.29	1.36	672.44
10	Intermediate Stock	786134.22	0.82	6048.69
11	"S" as sulphide in Effluent			4.91
	Sub Total			
1	Polypropylene	92750.39	0.00	0.00
	Loss	574544.99	0.01	341.59
	Grand Total	**5340189.51**		**69330**

ANNEXURE – 1B

Reliance Industries Ltd. (Unit of Reliance Jamnagar SEZ). Jamnagar
Monthly Sulphur Balance

Month: May '2024

	INPUT	Quantity (MT)	% S	S (T)
I	**Consumption**			
1	Total Crude	2649080.54	2.10	55646
2	Intermediate Stock	2513381.07	0.71	17857
3	Naphtha	0.00	0.00	0
4	MPG/Methanol/ Water in Pet Coke/ Nitogen	18069.24	0.00	0
5	HSGO/VGO	102704.72	0.00	2305
6	LSFO/LSWR/VR	0.00	0.00	0
7	Natural Gas	44602.06	0.00	0
8	Pet Coke	0.00	0.00	0
	Sub Total	**5327837.63**		**75808**

Sulphur Emission	**Tonnes**	**345**
SO2 Emission	**Tonnes/day**	**22.23**

II	OUTPUT	Quantity (MT)	% S	S (T)
II	**Product**			
1	LPG + Mixpetgas+NG+Nbutane	460870.49	0.0009	3.92
2	High Speed Diesel (HSD)	1515784.46	0.0105	159.51
3	Motor Spirit (MS)+ Reformate	932551.28	0.0006	5.60
4	Alkylate	225435.46	0.0005	1.21
5	Naphtha	211529.54	0.0014	2.95
6	ATF	182247.54	0.00	118.46
7	Petroleum Coke (Non-Calcined)	323941.46	6.80	22028.02
8	Un-Refined Sulphur	50483.21	100.0	50483.21
9	CBFS+VGO+VR+Gas oil	76406.16	2.36	1806.21
10	Intermediate Stock	656108.62	0.11	849.30
11	"S" as sulphide in Effluent			5.08
	Sub Total			
1	Polypropylene	98773.36	0.00	0.00
	Loss	593706.05	0.02	344.58
	Grand Total	**5327837.63**		**75808**

ANNEXURE – 1B

Reliance Industries Ltd. (Unit of Reliance Jamnagar SEZ). Jamnagar
Monthly Sulphur Balance

Month: June '2024

	INPUT	Quantity (MT)	% S	S (T)
I	**Consumption**			
1	Total Crude	2627524.82	2.05	53882
2	Intermediate Stock	2568803.48	0.47	12103
3	Naphtha	0.00	0.00	0
4	MPG/Methanol/ Water in Pet Coke/ Nitogen	30402.80	0.00	0
5	HSGO/VGO	2273.52	0.00	57
6	LSFO/LSWR/VR	0.00	0.00	0
7	Natural Gas	29038.65	0.00	0
8	Pet Coke	0.00	0.00	0
	Sub Total	**5258043.26**		**66042**

Sulphur Emission	**Tonnes**	**365**
SO2 Emission	**Tonnes/day**	**24.30**

II	OUTPUT	Quantity (MT)	% S	S (T)
II	**Product**			
1	LPG + Mixpetgas+NG+Nbutane	500500.14	0.0008	3.82
2	High Speed Diesel (HSD)	1476040.04	0.0106	156.75
3	Motor Spirit (MS)+ Reformate	748077.51	0.0006	4.49
4	Alkylate	275576.52	0.0005	1.47
5	Naphtha	214160.16	0.0013	2.68
6	ATF	141362.82	0.00	91.89
7	Petroleum Coke (Non-Calcined)	302211.70	6.84	20671.28
8	Un-Refined Sulphur	41562.04	100.0	41562.04
9	CBFS+VGO+VR+Gas oil	84425.89	1.45	1223.14
10	Intermediate Stock	830343.43	0.23	1955.33
11	"S" as sulphide in Effluent			4.91
	Sub Total			
1	Polypropylene	86327.18	0.00	0.00
	Loss	557455.85	0.03	364.57
	Grand Total	**5258043.26**		**66042**

ANNEXURE – 1B

Reliance Industries Ltd. (Unit of Reliance Jamnagar SEZ). Jamnagar
Monthly Sulphur Balance

Month: July '2024

	INPUT	Quantity (MT)	% S	S (T)
I	**Consumption**			
1	Total Crude	2503103.38	2.16	53951
2	Intermediate Stock	2833528.64	0.29	8245
3	Naphtha	14986.87	0.00	0
4	MPG/Methanol/ Water in Pet Coke/ Nitogen	20194.90	0.00	0
5	HSGO/VGO	85339.00	0.00	1877
6	LSFO/LSWR/VR	0.00	0.00	0
7	Natural Gas	32638.41	0.00	0
8	Pet Coke	0.00	0.00	0
	Sub Total	**5489791.18**		**64074**

Sulphur Emission	**Tonnes**	**356**
SO2 Emission	**Tonnes/day**	**22.94**

II	OUTPUT	Quantity (MT)	% S	S (T)
II	**Product**			
1	LPG + Mixpetgas+NG+Nbutane	525477.58	0.0009	4.67
2	High Speed Diesel (HSD)	1645620.62	0.0312	512.64
3	Motor Spirit (MS)+ Reformate	659351.89	0.0006	3.96
4	Alkylate	240413.47	0.0005	1.29
5	Naphtha	267934.96	0.0015	3.89
6	ATF	171411.72	0.00	111.42
7	Petroleum Coke (Non-Calcined)	299627.23	6.44	19295.99
8	Un-Refined Sulphur	42014.67	100.0	42014.67
9	CBFS+VGO+VR+Gas oil	14904.98	1.23	183.77
10	Intermediate Stock	924111.21	0.13	1580.77
11	"S" as sulphide in Effluent			5.08
	Sub Total			
1	Polypropylene	90734.02	0.00	0.00
	Loss	608188.85	0.02	355.54
	Grand Total	**5489791.18**		**64074**

ANNEXURE – 1B

Reliance Industries Ltd. (Unit of Reliance Jamnagar SEZ). Jamnagar
Monthly Sulphur Balance

Month: August '2024

	INPUT	Quantity (MT)	% S	S (T)
I	**Consumption**			
1	Total Crude	2474056.37	2.29	56730
2	Intermediate Stock	2827161.45	0.38	10870
3	Naphtha	18387.18	0.00	0
4	MPG/Methanol/ Water in Pet Coke/ Nitogen	16268.13	0.00	0
5	HSGO/VGO	44502.89	0.00	1157
6	LSFO/LSWR/VR	0.00	0.00	0
7	Natural Gas	21099.30	0.00	0
8	Pet Coke	0.00	0.00	0
	Sub Total	**5401475.30**		**68758**

Sulphur Emission	**Tonnes**	**367**
SO2 Emission	**Tonnes/day**	**23.67**

II	OUTPUT	Quantity (MT)	% S	S (T)
II	**Product**			
1	LPG + Mixpetgas+NG+Nbutane	477044.43	0.0008	3.88
2	High Speed Diesel (HSD)	1497465.41	0.0264	395.41
3	Motor Spirit (MS)+ Reformate	778385.03	0.0006	4.67
4	Alkylate	214059.94	0.0005	1.15
5	Naphtha	271329.55	0.0013	3.64
6	ATF	181570.33	0.00	118.02
7	Petroleum Coke (Non-Calcined)	324086.61	6.45	20903.59
8	Un-Refined Sulphur	44953.01	100.0	44953.01
9	CBFS+VGO+VR+Gas oil	55562.45	1.34	741.95
10	Intermediate Stock	859005.94	0.11	1261.13
11	"S" as sulphide in Effluent			5.08
	Sub Total			
1	Polypropylene	101574.92	0.00	0.00
	Loss	596437.71	0.02	366.86
	Grand Total	**5401475.30**		**68758**

ANNEXURE – 1B

Reliance Industries Ltd. (Unit of Reliance Jamnagar SEZ). Jamnagar
Monthly Sulphur Balance

Month: September '2024

	INPUT	Quantity (MT)	% S	S (T)
I	**Consumption**			
1	Total Crude	2694996.08	2.19	58900
2	Intermediate Stock	2564255.76	0.42	10678
3	Naphtha	5209.00	0.00	0
4	MPG/Methanol/ Water in Pet Coke/ Nitogen	27834.61	0.00	0
5	HSGO/VGO	141231.82	0.00	3560
6	LSFO/LSWR/VR	0.00	0.00	0
7	Natural Gas	19103.66	0.00	0
8	Pet Coke	0.00	0.00	0
	Sub Total	**5452630.93**		**73138**

	OUTPUT	Quantity (MT)	% S	S (T)
II	**Product**			
1	LPG + Mixpetgas+NG+Nbutane	405452.51	0.0007	2.98
2	High Speed Diesel (HSD)	1738980.96	0.0197	342.92
3	Motor Spirit (MS)+ Reformate	787636.23	0.0007	5.56
4	Alkylate	230942.07	0.0005	1.24
5	Naphtha	267848.63	0.0013	3.51
6	ATF	189604.04	0.00	123.24
7	Petroleum Coke (Non-Calcined)	305533.81	6.90	21081.83
8	Un-Refined Sulphur	48400.34	100.0	48400.34
9	CBFS+VGO+VR+Gas oil	3921.56	1.30	51.00
10	Intermediate Stock	888054.94	0.28	2748.67
11	"S" as sulphide in Effluent			4.91
	Sub Total			
1	Polypropylene	93585.35	0.00	0.00
	Loss	492670.51	0.03	371.83
	Grand Total	**5452630.93**		**73138**

Sulphur Emission	**Tonnes**	**372**
SO2 Emission	**Tonnes/day**	**24.79**

ANNEXURE – 2A

Reliance Industries Limited (Refinery Division, Jamnagar)
Stack Emission Monitoring Results
(1st Apr '24 to 30th Sept '24)

Sr. No.	Furnace	Stack No.	SO2 (mg/Nm3)			NOx (mg/Nm3)			PM (mg/Nm3)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
I	**Stacks Involving Fuel Burning**										
A.	**CPP**										
1	HRSG-1	MS-EE 951-201	10.2	11.2	10.7	42.0	46.0	44.5	1.0	1.1	1.1
2	HRSG-2	MS-EE 951-202	10.6	11.4	11.0	42.0	46.0	43.7	1.0	1.1	1.1
3	HRSG-3	MS-EE 951-203	11.2	13.4	12.6	42.0	48.0	44.8	1.1	1.3	1.2
4	HRSG-4	MM-RR 771-201	11.6	13.6	12.7	43.0	49.0	46.2	1.0	1.4	1.2
5	HRSG-5	MM-RR 771-202	10.9	12.8	12.1	46.0	48.0	47.0	1.2	1.4	1.3
6	HRSG-6	MM-RR 771-203	10.2	11.4	10.7	41.0	45.0	42.7	1.0	1.2	1.1
7	HRSG-7	MM-RR 771-204	11.2	11.6	11.4	41.0	44.0	42.5	1.0	1.1	1.1
8	HRSG-8	MS-EE 951-204	11.8	12.8	12.3	45.0	48.0	46.5	1.0	1.3	1.1
9	HRSG-9	MS-EE G-201	10.4	13.8	12.2	42.0	46.0	43.8	1.0	1.2	1.1
10	Aux- Blr -1*	MB-RU 771-B010	12.6	238.0	89.0	48.0	68.0	61.8	1.1	8.5	3.8
11	Aux- Blr -2*	MB-RU 771-B011	12.6	176.0	45.9	54.0	66.0	61.8	1.2	7.2	2.5
12	Aux- Blr -3*	MB-EE 951-B010	12.2	166.0	38.6	56.0	67.0	62.8	1.1	6.2	2.1
13	Aux- Blr -4*	MB-EE 951-B011	12.7	193.0	72.5	55.0	68.0	63.3	1.2	5.9	2.8
14	Aux- Blr -5*	MB-EE 952-B010	11.6	181.3	67.1	57.0	91.0	67.0	1.1	6.7	3.0
15	Aux- Blr -6*	MB-EE 952-B011	11.6	181.0	92.9	51.0	66.0	61.8	1.0	8.5	4.1
B.	**Crude Complex**										
1	CDU-1-FO1*	MB-RD311-F01	170.0	190.6	182.0	44.0	49.0	46.2	5.2	7.2	6.3
2	CDU-1 -F51*	MB-RD311-F51	161.0	178.0	172.5	44.0	47.0	45.8	4.6	7.2	5.7
3	VDU-1	MB-RD311-F02	10.2	12.2	11.0	34.0	37.0	35.7	1.0	1.1	1.1
4	CDU-2-FO1*	MB-RD312-F01	170.0	198.0	184.7	45.0	51.0	47.8	4.8	7.2	6.3
5	CDU-2 -F51*	MB-RD312-F51	12.6	185.0	149.2	45.0	48.0	46.5	1.2	7.4	5.2
6	VDU-2	MB-RD312-F02	10.2	12.4	10.9	33.0	36.0	34.5	1.0	1.1	1.1
7	DHT-1	MB-RH351-F01	10.8	11.8	11.2	34.0	36.0	35.0	1.0	1.1	1.1
8	DHT-2	MB-RH352-F01	10.4	12.2	11.3	33.0	36.0	34.8	1.0	1.1	1.1
9	VGO HT- 1	MB-RH361-F02	10.2	10.6	10.5	33.0	37.0	34.8	1.0	1.1	1.1
10	VGO HT- 2	MB-RH362-F02	10.8	11.6	11.2	33.0	36.0	34.7	1.0	1.1	1.0
11	LNHT	MB-RH471-F01	10.2	11.2	10.7	32.0	35.0	33.3	1.0	1.1	1.1
12	Hydrogen-1	MB-RH521-SO1	Not in Operation								
13	Hydrogen-2	MB-RH522-SO1	Not in Operation								
14	Hydrogen-3	MB-RH523-SO1	Not in Operation								
15	KHT	MB-RH-365-F02	10.6	12.2	11.3	33.0	36.0	34.7	1.0	1.2	1.1
16	CNHT	MB-RH-222-F01	10.9	11.8	11.4	32.0	35.0	34.0	1.0	1.2	1.1
C.	**Aromatics**										
1	Platforming	MB-AY231-F01	10.8	12.6	11.8	35.0	43.5	38.3	1.0	1.1	1.1
2	HNHT	MB-AY221-F01	10.8	11.9	11.5	34.0	39.0	36.7	1.0	1.1	1.1
3	Xylene -1	MB-AY241-F01	Not in Operation								
4	Xylene -2	MB-AY242-F01	12.2	85.6	30.7	39.0	48.0	43.0	1.0	4.1	1.7

Reliance Industries Limited (Refinery Division, Jamnagar)
Stack Emission Monitoring Results
(1st Apr '24 to 30th Sept '24)

Sr. No.	Furnace	Stack No.	SO2 (mg/Nm3)			NOx (mg/Nm3)			PM (mg/Nm3)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
5	Xylene -3	MB-AY243-F01	10.8	74.6	22.4	38.0	52.0	42.3	1.0	4.4	1.7
6	O-Xylene	MB-AY251-F01A	11.6	13.4	12.6	35.0	40.0	37.7	1.0	1.2	1.1
7	Isomar 1	MB-AY271-F01	Not in Operation								
8	Isomar 2	MB-AY272-F01	10.2	12.2	11.0	33.0	42.0	37.6	1.0	1.2	1.1
9	Isomar 3	MB-AY273-F01	10.4	11.8	11.0	34.0	39.0	36.8	1.0	1.1	1.0
10	Tatoray-1	MB-AY281-F01	Not in Operation								
11	Tatoray-2	MB-AY281-F51	11.6	12.8	12.2	35.0	40.0	37.4	ND	ND	ND
D.	**Coker**										
1	Coker-1	MB-RK371-F01	10.8	12.8	11.8	34.0	39.0	37.0	1.0	1.2	1.1
2	Coker-2	MB-RK371-F02	10.6	12.6	11.5	34.0	38.0	36.2	1.0	1.1	1.1
3	Coker-3	MB-RK371-F03	10.8	12.6	11.8	35.0	39.0	37.0	1.0	1.2	1.1
4	Coker-4	MB-RK371-F04	10.9	11.4	11.1	33.0	37.0	35.0	1.0	1.2	1.1
5	Coker-5	MB-RK371-F07	11.2	12.4	11.9	34.0	39.0	36.5	1.0	1.2	1.1
II	**Stacks Involving Process Emission**										
A.	**FCC Complex**										
1	FCCC-N	MB-RF412-S01	14.7	18.0	16.1	37.0	44.0	39.2	6.5	8.1	7.3
2	FCCC-S	MB-RF412-S51	14.5	16.2	15.2	35.0	40.0	37.2	6.4	7.8	7.0
B.	**Sulphur Complex**										
1	SRU-1	MB-RH451-SO1	1137	2008	1356.4	54.0	57.0	55.2	NA	NA	NA
2	SRU-2	MB-RH452-SO1	1385	2265	1895.2	55.0	58.0	56.6	NA	NA	NA
3	SRU-3	MB-RH453-SO1	1014	1650	1354.8	53.0	56.0	54.2	NA	NA	NA
C.	**ETP-Incinerator**										
1	Incinerator	_	22.8	26.5	24.8	33.0	38.0	35.5	7.8	8.9	8.2
III	**Stacks Involving Material Handling**										
A.	**SGU**										
1	SGU-1	MF-RH-465-Y-01	NA	NA	NA	NA	NA	NA	8.6	9.4	9.1
2	SGU-2	MF-RH-465-Y-02	NA	NA	NA	NA	NA	NA	8.4	9.3	8.9

Note: * Furnaces / Heaters were on dual (liquid+gas) firing & others were on gas firing during sampling.
NA : Not applicable; BDL -Below Detectable Level

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

Stack Emission Monitoring Results

(1st Oct '2023 to 31st Mar '2024)

Sr. No.	Stack Attached to	Stack No.	SO2 mg/Nm3			NOX mg/Nm3			PM mg/Nm3		
			MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG
I	**Stacks Involving Fuel Burning**										
A.	**CPP**										
1	HRSG-1	MB-BBZ9H1-B01	10.6	12.4	11.4	42.0	46.0	43.8	1.0	1.2	1.1
2	HRSG-2	MB-BBZ9H2-B01	10.8	14.8	13.1	44.0	46.0	45.0	1.0	1.2	1.1
3	HRSG-3	MB-BBZ9H3-B01	10.4	13.2	11.9	41.0	47.0	44.2	1.0	1.3	1.2
4	HRSG-4	MB-BBZ9H4-B01	10.2	13.4	11.6	41.0	48.0	45.0	1.0	1.2	1.1
5	HRSG-5	MB-BBZ9H5-B01	11.6	12.8	12.2	42.0	49.0	45.6	1.0	1.3	1.2
6	HRSG-6	MB-BBZ9H6-B01	10.7	13.2	12.1	40.0	47.0	44.6	1.0	1.2	1.1
7	Aux- Boiler-1*	MB-BBZ9B1-B01	12.4	362.6	155.2	59.0	68.0	65.4	1.1	16.8	9.1
8	Aux- Boiler-2*	MB-BBZ9B2-B01	11.9	202.0	104.8	54.0	66.0	61.8	1.0	13.2	7.1
9	Aux- Boiler-3*	MB-BBZ9B3-B01	10.2	159.0	60.6	62.0	64.0	63.0	1.1	8.2	3.5
10	Aux- Boiler-4*	MB-BBZ9B4-B01	13.4	13.8	13.6	56.0	68.0	60.3	1.2	1.3	1.2
B.	**Crude Complex**										
1	CDU-1-FO1*	MB-RDZ311-F01	11.6	162.4	37.5	41.0	44.0	42.3	1.1	5.8	2.0
2	CDU-1-F51*	MB-RDZ311-F51	11.8	158.6	58.3	39.0	44.0	42.2	1.2	7.6	3.1
3	VDU-1	MB-RDZ311-F02	10.1	10.6	10.3	34.0	37.0	35.7	1.0	1.1	1.1
4	CDU-2-FO1*	MB-RDZ312-F01	11.2	150.7	35.2	39.0	43.0	40.7	1.1	8.2	2.4
5	CDU-2-F51*	MB-RDZ312-F51	11.8	138.5	33.5	38.0	43.0	41.3	1.1	7.4	2.3
6	VDU-2	MB-RDZ312-F02	10.2	10.8	10.6	33.0	37.0	34.7	1.0	1.1	1.0
7	VGOHT- 1	MB-RHZ361-F01/F02	10.4	11.4	10.9	33.0	36.0	34.8	1.0	1.2	1.1
8	VGOHT- 1	MB-RHZ361-F03	10.9	12.2	11.5	34.0	37.0	35.6	1.0	1.2	1.1
9	VGOHT- 2	MB-RHZ362-F01/F02	10.5	11.8	11.2	32.0	35.0	33.7	1.0	1.1	1.1
10	VGOHT- 2	MB-RHZ362-F03	10.2	11.6	10.9	33.0	37.0	35.2	1.0	1.2	1.1
C.	**Hydrogen & Merox Complex**										
1	Hydrogen-4	MB-RHZ524-S01	Not in Operation								
2	Hydrogen-5	MB-RHZ523-S01	Not in Operation								
3	Hydrogen-6	MB-RHZ522-S01	Not in Operation								
4	Hydrogen-7	MB-RHZ521-S01	Not in Operation								
5	Hydrogen-8	MB-RHZ525-S01	Not in Operation								
D.	**Coker**										
1	Coker-1	MB-RKZ371-F01	10.6	12.6	11.5	34.0	38.0	36.0	1.0	1.2	1.1
2	Coker-2	MB-RKZ371-F02	10.8	12.6	11.5	34.0	37.0	35.3	1.0	1.2	1.1
3	Coker-3	MB-RKZ371-F03	10.8	13.2	11.8	33.0	38.0	35.3	1.0	1.1	1.1
4	Coker-4	MB-RKZ371-F04	10.6	12.1	11.1	35.0	37.0	36.0	1.1	1.1	1.1
5	Coker-5	MB-RKZ371-F07	10.2	12.6	10.9	32.0	34.0	33.2	1.0	1.0	1.0
E.	**Clean Fuel Project**										
1	DHDS-1	MBRHZ355-F01A	10.8	12.1	11.5	34.0	39.0	36.2	1.0	1.2	1.1
2	DHDS-1	MBRHZ355-F01B	10.6	12.4	11.2	33.0	38.0	35.0	1.0	1.2	1.1
3	DHDS-2	MBRHZ358-F01A	11.2	12.4	11.6	32.0	36.0	34.5	1.0	1.2	1.1

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

Stack Emission Monitoring Results
(1st Oct '2023 to 31st Mar '2024)

Sr. No.	Stack Attached to	Stack No.	SO2 mg/Nm3			NOX mg/Nm3			PM mg/Nm3		
			MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG
4	DHDS-2	MBRHZ358-F01B	10.8	12.8	11.7	33.0	39.0	34.8	1.0	1.2	1.1
5	DHDS-2	MBRHZ358-F02	11.2	12.4	11.9	32.0	37.0	34.2	1.0	1.3	1.2
6	Common Facilities	MBRHZ357-F01	10.4	11.4	10.9	32.0	36.0	34.5	1.0	1.2	1.1
7	LCOHC	MBRHZ354-F01	10.2	11.2	10.5	32.0	35.0	33.3	1.0	1.1	1.1
F.	**Aromatics**										
1	Platformer	MB-AYZ231-F02	11.8	12.6	12.2	34.0	37.0	35.3	1.0	1.2	1.1
2	Platformer	MB-AYZ231-F01/F03	11.2	12.6	12.0	32.0	38.0	34.7	1.0	1.2	1.2
3	Platformer	MB-AYZ231-F01A/F03A	10.6	12.8	11.9	34.0	36.0	35.2	1.0	1.2	1.1
4	HNUU	MB-AYZ221-F01/F02	10.2	11.8	10.8	32.0	34.0	33.2	1.0	1.2	1.1
G.	**Alkylation**										
1	SAR	MB-RFZ430-F41	10.8	12.2	11.3	34.0	39.0	35.8	1.0	11.0	6.0
II	**Stacks Involving Process Emission**										
A.	**FCC Complex**										
1	FCC-N	MB-RFZ412-S01	13.8	16.3	15.2	37.0	46.0	39.5	5.8	7.2	6.4
2	FCC-S	MB-RFZ412-S51	14.2	16.7	15.2	35.0	44.0	37.8	5.6	6.4	6.0
B.	**Sulphur Complex**										
1	SRU-1	MB-RHZ451-S01	583.0	640.0	605.2	52.0	57.0	54.8	NA	NA	NA
2	SRU-2	MB-RHZ452-S01	493.0	709.0	546.7	50.0	59.0	53.5	NA	NA	NA
3	SRU-3	MB-RHZ453-S01	485.0	611.0	520.6	51.0	57.0	53.8	NA	NA	NA
C.	**Alkylation**										
1	SAR	MB-RFZ430-S01	175.0	236.0	194.3	NA	NA	NA	NA	NA	NA
III	**Stacks Involving Material Handling**										
A.	**Sulphur Pestillation Unit**										
1	SPU-1	MA-RHZ465-F01A/B	NA	NA	NA	NA	NA	NA	8.2	8.7	8.2
2	SPU-2	MA-RHZ465-F02A/B	NA	NA	NA	NA	NA	NA	8.1	9.2	8.1

Note: 1. *Furnaces / Heaters were on duel (liquid + gas) firing and others were on gas firing during sampling.
2. ND: Not Detectable. 3. NA – Not Applicable

ANNEXURE - 2C

Reliance Industries Ltd. Jamnagar
STACK EMISSION MONITORING REPORT
(1st Oct '2023 to 31st Mar '2024)

Sr. No.	Stack Attached to	Stack No.	SO2 (mg/Nm3)			NOX (mg/Nm3)			PM (mg/Nm3)		
			MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG
	PX-4 Complex										
1	Xylene Recovery Column Reboiler	MB-AYZ241-F000001A/B	10.8	12.4	11.42	33.0	36.0	34.50	1.0	1.1	1.1
2	Isomer Charge Heater	MB-AYZ271-F000001A/B	10.6	12.4	11.60	33.0	38.0	35.67	1.0	1.2	1.0
3	TA Charge Heater	MB-AYZ281-F000001	10.6	12.6	11.70	32.0	37.0	33.83	ND	ND	ND
4	TA Stabilizer Heater	MB-AYZ281-F000002	10.8	13.2	11.70	33.0	38.0	35.67	ND	ND	ND
5	Toluene Column Reboiler	MB-AYZ281-F000003	10.6	12.2	11.25	35	38	36.33	1.0	1.2	1.0
6	HA Column Reboiler	MB-AYZ281-F000004	9.8	12.4	10.80	32.0	36.0	0.00	ND	ND	ND
A	**C2-COMPLEX "CPP"**										
1	HRSG - 1	MB-BBC9H1-B-001	11.6	12.8	12.2	41.0	45.0	43.6	1.1	1.1	1.5
2	HRSG - 2	MB-BBC9H2-B-001	11.2	13.1	12.4	41.0	46.0	44.0	1.0	1.0	1.4
3	AUX B'ER - 1	MB-BBC9B1-B-001	10.2	13.3	12.4	52.0	65.0	58.8	1.2	1.0	1.4
4	AUX B'ER - 2	MB-BBC9B2-B-001	9.8	13.7	12.2	49.0	66.0	59.4	1.1	1.0	1.3
B	**C2-COMPLEX "ROGC"**										
1	ROGC-1	MB-F010001	10.8	12.5	11.7	35.0	40.0	37.6	1.0	1.2	1.1
2	ROGC-2	MB-F010002	10.2	12.4	11.6	36.0	43.0	39.8	1.0	1.1	1.0
3	ROGC-3	MB-F010003	11.6	12.6	12.0	32.0	38.0	35.2	1.0	1.3	1.2
4	ROGC-4	MB-F010004	12.4	13.5	13.1	34.0	41.0	38.0	1.1	1.2	1.2
5	ROGC-5	MB-F010005	10.2	11.9	11.2	33.0	39.0	35.4	1.0	1.1	1.0
6	ROGC-6	MB-F010006	11.7	12.5	12.1	32.0	38.0	36.0	1.2	1.2	1.2
7	ROGC-HEATER-01	MB-F160001	11.0	12.2	11.8	31.0	36.0	34.0	1.0	1.2	1.1
8	ROGC-HEATER-02	MB-F160002	11.0	11.6	11.3	33.0	33.0	33.0	1.0	1.2	1.1
C.	**CPP**										
	HRSG-10	MB-BBD9H1-B-001	12.5	14.2	13.4	42.0	46.0	43.7	1.1	1.3	1.2
	HRSG-11	MB-BBD9H2-B-001	11.6	15.2	13.3	40.0	48.0	44.8	1.0	1.2	1.1
	HRSG-12	MB-BBD9H3-B-001	10.2	14.6	12.3	40.0	46.0	42.3	1.0	1.2	1.1
	HRSG-13	MB-BBD9H4-B-001	11.6	14.6	12.6	41.0	48.0	45.0	1.0	1.2	1.1

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar
Continuous Online Stack Emission & Effluent Monitoring Results

1. Continuous Online Stack Emission Monitoring Results (1st Apr '2024 to 30th Sept '2024)

Sr. No.	Stack Attached to	Stack No.	SO2 (mg/Nm3)			NOx (mg/Nm3)			PM (mg/Nm3)			CO (mg/Nm3)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
I	**Stacks Involving Fuel Burning**													
A.	**CPP**													
1	HRSG-1	MB-BBZ9H1-B01	3	97	5	13	48	25	0.3	6.4	0.5	5	17	10
2	HRSG-2	MB-BBZ9H2-B01	25	127	45	13	148	27	4.0	9.3	4.4	5	133	38
3	HRSG-3	MB-BBZ9H3-B01	3	66	42	13	248	98	0.3	7.4	0.8	5	90	22
4	HRSG-4	MB-BBZ9H4-B01	3	106	8	13	225	25	0.3	5.7	0.5	5	82	41
5	HRSG-5	MB-BBZ9H5-B01	3	514	28	13	300	124	0.5	7.5	0.8	5	134	16
6	HRSG-6	MB-BBZ9H6-B01	3	127	8	13	254	74	0.3	7.5	0.5	5	104	28
7	Aux- Boiler-1	MB-BBZ9B1-B01	3	128	85	15	53	35	0.5	7.5	5.0	7	23	15
8	Aux- Boiler-2	MB-BBZ9B2-B01	3	128	85	17	53	35	0.9	45.0	5.7	8	23	15
9	Aux- Boiler-3	MB-BBZ9B3-B01	3	127	72	14	53	33	0.3	40.7	4.2	5	23	14
10	Aux- Boiler-4	MB-BBZ9B4-B01	4	128	85	16	53	35	0.5	44.5	5.0	6	23	15
B.	**Crude Complex**													
1	CDU-1-FO1*	MB-RDZ311-F01	3	730	72	13	253	45	0.4	24.9	2.4	5	106	10
2	CDU-1-F51*	MB-RDZ311-F51	3	391	27	13	264	26	0.3	24.0	6.4	5	109	11
3	VDU-1	MB-RDZ311-F02	3	45	10	13	222	41	0.5	4.5	0.6	5	90	10
4	CDU-2-FO1*	MB-RDZ312-F01	3	378	28	13	244	27	0.3	25.2	5.0	5	109	14
5	CDU-2-F51*	MB-RDZ312-F51	3	127	22	13	227	24	0.3	39.3	4.0	5	90	9
6	VDU-2	MB-RDZ312-F02	3	45	7	13	221	25	0.3	4.5	0.5	5	84	10
7	VGOHT- 1	MB-RHZ361-F01/F02	5	45	12	25	221	37	0.9	4.5	2.1	10	88	15

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar
Continuous Online Stack Emission & Effluent Monitoring Results

1. Continuous Online Stack Emission Monitoring Results (1st Apr '2024 to 30th Sept '2024)

Sr. No.	Stack Attached to	Stack No.	SO2 (mg/Nm3)			NOx (mg/Nm3)			PM (mg/Nm3)			CO (mg/Nm3)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
8	VGOHT- 2	MB-RHZ362-F01/F02	5	45	19	25	222	38	0.5	2.5	1.7	10	90	16
C.	**Hydrogen & Merox Complex**													
1	Hydrogen-4	MB-RHZ524-S01	Not in Operation											
2	Hydrogen-5	MB-RHZ523-S01	Not in Operation											
3	Hydrogen-6	MB-RHZ522-S01	Not in Operation											
4	Hydrogen-7	MB-RHZ521-S01	Not in Operation											
5	Hydrogen-8	MB-RHZ525-S01	Not in Operation											
D.	**Coker**													
1	Coker-1	MB-RKZ371-F01	5	45	19	25	210	32	0.5	4.5	1.4	10	90	15
2	Coker-2	MB-RKZ371-F02	5	45	33	25	225	36	0.5	1.0	0.8	10	90	16
3	Coker-3	MB-RKZ371-F03	5	45	21	25	209	36	0.5	2.7	0.7	10	90	16
4	Coker-4	MB-RKZ371-F04	5	45	11	25	205	49	0.5	4.5	0.7	10	90	24
E.	**Clean Fuel Project**													
1	DHDS-1	MBRHZ355-F01A	5	45	21	25	219	38	0.5	1.0	0.8	10	90	22
2	DHDS-1	MBRHZ355-F01B	5	43	8	25	87	38	0.5	4.5	0.8	10	90	27
3	DHDS-2	MBRHZ358-F01A	5	45	20	25	215	38	0.5	1.0	0.8	10	90	42
4	DHDS-2	MBRHZ358-F01B	5	44	10	25	215	36	0.5	4.4	0.7	10	90	42
5	DHDS-2	MBRHZ358-F02	5	45	24	25	225	37	0.5	4.5	0.8	10	90	38
6	Common Facilities	MBRHZ357-F01	5	45	42	25	224	37	1.0	4.5	1.4	10	90	16
7	LCOHC	MBRHZ354-F01	5	45	25	25	218	37	0.7	4.5	2.2	10	88	16
F.	**Aromatics**													
1	Platformer	MB-AYZ231-F02	5	45	33	25	223	37	0.5	4.5	0.8	10	90	15

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar
Continuous Online Stack Emission & Effluent Monitoring Results

1. Continuous Online Stack Emission Monitoring Results (1st Apr '2024 to 30th Sept '2024)

Sr. No.	Stack Attached to	Stack No.	SO2 (mg/Nm3)			NOx (mg/Nm3)			PM (mg/Nm3)			CO (mg/Nm3)		
			Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg
2	Platformer	MB-AYZ231-F01/F03	5	45	21	25	225	43	0.5	4.5	0.8	10	89	15
3	HNUU	MB-AYZ221-F01/F02	6	45	27	25	222	37	0.5	4.5	1.6	10	90	16
G.	**Alkylation**													
1	SAR	MB-RFZ430-F41	5	45	22	25	216	47	0.5	4.5	0.8	10	90	15
II	**Stacks Involving Process Emission**													
A.	**FCC Complex**													
1	FCC-N	MB-RFZ412-S01	50	450	191	35	313	50	6	45	13	30	270	43
2	FCC-S	MB-RFZ412-S51	50	450	161	35	200	52	7	45	21	30	270	49
B.	**Sulphur Complex**													
1	SRU-1	MB-RHZ451-S01	30	270	62	25	216	61	NA			10	89	15
2	SRU-2	MB-RHZ452-S01	30	270	252	25	220	38	NA			10	58	16
3	SRU-3	MB-RHZ453-S01	30	258	45	25	118	61	NA			10	90	18
C.	**Alkylation**													
1	SAR	MB-RFZ430-S01	95	855	225	Not Applicable								

2. Continuous Online Effluent Monitoring Results (1st Apr '2024 to 30th Sept '2024):

Parameters	Units	MIN	MAX	AVG
Flow	Cum/hr	0	475	190
pH	-	6.6	8.2	7.4
TSS	ppm	2	18	8
BOD	ppm	2	12	6.3
COD	ppm	12	115	60

Reliance Industries Limited, Refinery Division Jamnagar

COMPUTERISED MONITORING OF SO2 EMISSION FROM SRUs — **MONTH: April '2024**

01-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	436.51	1072.0	99.60%
452	468.47	910.9	99.65%
453	452.32	738.1	99.70%
	1357.30	AVG >>	99.65%

02-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	389.14	903.4	99.67%
452	469.40	807.7	99.69%
453	468.84	622.4	99.75%
	1327.38	AVG >>	99.70%

03-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	466.62	870.4	99.66%
453	448.31	643.3	99.74%
	914.94	AVG >>	99.70%

04-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	507.05	831.9	99.76%
453	461.24	752.8	99.64%
	968.29	AVG >>	99.70%

05-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	497.94	807.7	99.76%
453	478.03	1100.9	99.60%
	975.97	AVG >>	99.68%

06-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	520.46	804.0	99.77%
453	500.95	527.3	99.79%
	1021.41	AVG >>	99.78%

07-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	534.54	809.6	99.76%
453	494.44	527.6	99.78%
	1028.98	AVG >>	99.77%

08-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	516.29	866.1	99.71%
453	534.95	746.7	99.76%
	1051.24	AVG >>	99.74%

09-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	530.22	884.5	99.71%
453	536.54	779.9	99.73%
	1066.76	AVG >>	99.72%

10-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	509.31	871.6	99.70%
453	497.04	593.3	99.74%
	1006.35	AVG >>	99.72%

11-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	509.31	885.9	99.67%
453	497.04	555.8	99.75%
	1006.35	AVG >>	99.71%

12-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	535.30	914.1	99.66%
453	528.85	586.6	99.74%
	1064.15	AVG >>	99.70%

13-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	536.30	926.6	99.65%
453	529.13	602.5	99.73%
	1065.43	AVG >>	99.69%

14-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	S/D		
452	542.78	936.1	99.66%
453	561.92	615.5	99.74%
	1104.70	AVG >>	99.70%

15-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
452	S/D		
453	532.68	1000.8	99.61%
453	549.35	681.3	99.71%
	1082.03	AVG >>	99.66%

Reliance Industries Limited, Refinery Division Jamnagar

COMPUTERISED MONITORING OF SO2 EMISSION FROM SRUs — **MONTH: April '2024**

16-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	531.79	1293.3	99.56%
453	549.28	979.8	99.60%
	1081.07	AVG >>	99.58%

17-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	551.43	1570.0	99.48%
453	557.84	1284.2	99.58%
	1109.27	AVG >>	99.53%

18-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	545.49	1272.7	99.52%
453	564.52	1199.1	99.62%
	1110.01	AVG >>	99.57%

19-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	551.59	1371.6	99.49%
453	571.63	1335.3	99.57%
	1123.22	AVG >>	99.53%

20-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	572.39	1289.5	99.57%
453	565.88	1299.9	99.56%
	1138.27	AVG >>	99.57%

21-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	587.23	1384.1	99.49%
453	583.78	1213.5	99.61%
	1171.01	AVG >>	99.55%

22-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	564.76	737.9	99.72%
453	545.29	602.6	99.74%
	1110.05	AVG >>	99.73%

23-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	546.11	567.4	99.78%
453	571.52	451.9	99.82%
	1117.63	AVG >>	99.80%

24-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	565.31	525.6	99.76%
453	578.61	415.1	99.82%
	1143.92	AVG >>	99.79%

25-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	553.89	495.1	99.75%
453	566.92	387.3	99.81%
	1120.81	AVG >>	99.78%

26-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	546.41	445.9	99.77%
453	548.41	338.6	99.83%
	1094.82	AVG >>	99.80%

27-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	540.55	452.6	99.75%
453	572.73	343.2	99.81%
	1113.28	AVG >>	99.78%

28-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	541.15	435.2	99.76%
453	559.81	336.3	99.82%
	1100.96	AVG >>	99.79%

29-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	540.91	482.8	99.75%
453	534.47	383.4	99.81%
	1075.38	AVG >>	99.78%

30-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451		S/D	
452	512.46	415.4	99.75%
453	506.36	319.3	99.81%
	1018.82	AVG >>	99.78%

Reliance Industries Limited, Refinery Division Jamnagar

COMPUTERISED MONITORING OF SO2 EMISSION FROM SRUs — **MONTH: May '2024**

01-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	367.62	636	99.77%
452	377.63	342	99.85%
453	370.30	247	99.89%
	1115.55	AVG >>	99.83%

02-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	388.39	726	99.78%
452	384.41	318	99.87%
453	398.78	219	99.91%
	1171.58	AVG >>	99.85%

03-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	363.76	671	99.75%
452	359.55	314	99.86%
453	386.57	235	99.90%
	1109.88	AVG >>	99.83%

04-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	412.07	750	99.73%
452	411.27	350	99.86%
453	425.38	263	99.89%
	1248.72	AVG >>	99.83%

05-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	444.85	582	99.75%
452	445.06	485	99.81%
453	456.25	395	99.84%
	1346.16	AVG >>	99.80%

06-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	452.94	588	99.77%
452	453.67	806	99.70%
453	466.26	714	99.71%
	1372.86	AVG >>	99.73%

07-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	457.86	586	99.77%
452	464.08	818	99.69%
453	462.59	715	99.71%
	1384.53	AVG >>	99.72%

08-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	446.63	411	99.84%
452	446.45	686	99.73%
453	446.71	583	99.76%
	1339.78	AVG >>	99.78%

09-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	454.44	452	99.82%
452	452.49	753	99.71%
453	452.90	640	99.74%
	1359.84	AVG >>	99.76%

10-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	440.85	418	99.83%
452	442.62	723	99.72%
453	441.98	604	99.75%
	1325.45	AVG >>	99.77%

11-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	440.40	467	99.81%
452	443.60	750	99.70%
453	443.70	629	99.74%
	1327.70	AVG >>	99.75%

12-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	447.98	454	99.82%
452	454.14	756	99.70%
453	454.11	628	99.74%
	1356.23	AVG >>	99.75%

13-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	448.19	482	99.81%
452	457.87	718	99.72%
453	458.17	597	99.75%
	1364.23	AVG >>	99.76%

14-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	451.56	570	99.78%
452	463.19	747	99.71%
453	464.77	628	99.74%
	1379.52	AVG >>	99.74%

15-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	441.54	572	99.77%
452	454.87	744	99.70%
453	454.72	622	99.74%
	1351.14	AVG >>	99.74%

Reliance Industries Limited, Refinery Division Jamnagar

16-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	454.28	544	99.79%
452	482.79	624	99.76%
453	457.23	585	99.75%
	1394.29	AVG >>	99.77%

17-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	469.99	611	99.76%
452	496.91	734	99.72%
453	476.47	611	99.74%
	1443.37	AVG >>	99.74%

18-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	516.79	739	99.72%
452	516.72	867	99.67%
453	515.98	717	99.71%
	1549.49	AVG >>	99.70%

19-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	525.03	786	99.70%
452	524.97	938	99.65%
453	525.44	778	99.69%
	1575.44	AVG >>	99.68%

20-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	523.83	475	99.82%
452	523.85	853	99.68%
453	523.28	687	99.72%
	1570.96	AVG >>	99.74%

21-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	518.97	489	99.81%
452	518.96	844	99.68%
453	518.26	673	99.73%
	1556.19	AVG >>	99.74%

22-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	514.00	630	99.76%
452	513.42	795	99.70%
453	508.96	633	99.74%
	1536.39	AVG >>	99.73%

23-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	531.84	634	99.76%
452	531.82	849	99.68%
453	532.93	673	99.73%
	1596.59	AVG >>	99.72%

24-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	534.67	615	99.76%
452	534.66	851	99.68%
453	534.07	669	99.73%
	1603.40	AVG >>	99.72%

25-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	514.82	579	99.77%
452	514.80	823	99.68%
453	513.96	644	99.73%
	1543.57	AVG >>	99.73%

26-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	521.37	592	99.76%
452	521.40	856	99.67%
453	522.98	671	99.72%
	1565.76	AVG >>	99.72%

27-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	535.67	618	99.76%
452	535.59	889	99.66%
453	535.23	698	99.71%
	1606.50	AVG >>	99.71%

28-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	519.38	523	99.79%
452	511.42	802	99.69%
453	501.03	618	99.74%
	1531.84	AVG >>	99.74%

29-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	480.89	290	99.89%
452	450.49	712	99.72%
453	419.34	520	99.77%
	1350.72	AVG >>	99.79%

30-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	470.92	647	99.78%
452	439.70	718	99.72%
453	408.25	520	99.77%
	1318.87	AVG >>	99.76%

31-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	465.90	604	99.78%
452	441.55	704	99.72%
453	418.88	522	99.77%
	1326.34	AVG >>	99.75%

Reliance Industries Limited, Refinery Division Jamnagar

COMPUTERISED MONITORING OF SO2 EMISSION FROM SRUs — **MONTH: June '2024**

01-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	454.78	488	99.82%
452	424.61	666	99.73%
453	393.84	477	99.78%
	1273.23	AVG >>	99.78%

02-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	445.21	470	99.82%
452	422.64	669	99.73%
453	399.84	474	99.79%
	1267.69	AVG >>	99.78%

03-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	431.47	241	99.90%
452	420.95	686	99.73%
453	411.09	494	99.78%
	1263.51	AVG >>	99.81%

04-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	451.24	200	99.92%
452	433.97	627	99.75%
453	416.63	442	99.81%
	1301.84	AVG >>	99.83%

05-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	455.78	405	99.84%
452	434.05	654	99.74%
453	412.44	470	99.79%
	1302.27	AVG >>	99.79%

06-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	474.34	488	99.80%
452	463.64	703	99.73%
453	453.94	518	99.78%
	1391.92	AVG >>	99.77%

07-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	476.63	503	99.80%
452	457.92	695	99.73%
453	438.85	513	99.78%
	1373.39	AVG >>	99.77%

08-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	476.70	247	99.90%
452	463.42	767	99.71%
453	450.88	571	99.76%
	1391.00	AVG >>	99.79%

09-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	481.15	408	99.86%
452	465.58	842	99.68%
453	449.87	633	99.72%
	1396.60	AVG >>	99.75%

10-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	479.80	428	99.85%
452	465.13	836	99.68%
453	450.67	631	99.73%
	1395.60	AVG >>	99.75%

11-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	479.92	451	99.83%
452	464.29	853	99.67%
453	448.51	647	99.72%
	1392.72	AVG >>	99.74%

12-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	479.04	461	99.82%
452	464.27	846	99.68%
453	449.36	637	99.73%
	1392.67	AVG >>	99.74%

13-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	477.58	568	99.78%
452	466.46	856	99.67%
453	456.00	640	99.73%
	1400.04	AVG >>	99.73%

14-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	478.66	593	99.77%
452	473.51	906	99.66%
453	467.94	689	99.71%
	1420.11	AVG >>	99.71%

15-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	475.91	594	99.77%
452	460.24	919	99.64%
453	443.35	693	99.70%
	1379.50	AVG >>	99.70%

Reliance Industries Limited, Refinery Division Jamnagar

16-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	474.48	608	99.77%
452	445.78	930	99.63%
453	417.51	696	99.68%
	1337.77	AVG >>	99.69%

17-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	476.28	595	99.77%
452	467.75	887	99.65%
453	459.94	582	99.75%
	1403.98	AVG >>	99.72%

18-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	462.20	472	99.82%
452	408.92	1468	99.38%
453	442.96	403	99.83%
	1314.08	AVG >>	99.68%

19-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	503.99	391	99.86%
452		Shutdown	
453	484.21	300	99.87%
	1111.71	AVG >>	99.87%

20-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	486.28	431	99.84%
452		Shutdown	
453	483.67	322	99.86%
	969.95	AVG >>	99.85%

21-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	479.28	489	99.76%
452		Shutdown	
453	474.67	358	99.81%
	953.95	AVG >>	99.79%

22-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	484.35	730	99.72%
452		Shutdown	
453	494.37	667	99.81%
	978.72	AVG >>	99.77%

23-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	460.35	725	99.74%
452		Shutdown	
453	463.37	643	99.75%
	923.72	AVG >>	99.75%

24-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	501.99	633	99.76%
452		Shutdown	
453	496.20	493	99.81%
	998.19	AVG >>	99.78%

25-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	451.44	555	99.75%
452		Shutdown	
453	455.43	375	99.82%
	906.87	AVG >>	99.78%

26-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	471.50	515	99.78%
452		Shutdown	
453	473.43	386	99.81%
	944.93	AVG >>	99.79%

27-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	485.83	653	99.76%
452		Shutdown	
453	475.83	473	99.78%
	961.66	AVG >>	99.77%

28-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	470.84	660	99.74%
452		Shutdown	
453	466.83	476	99.78%
	937.67	AVG >>	99.76%

29-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	485.04	649	99.70%
452		Shutdown	
453	488.83	492	99.76%
	973.86	AVG >>	99.73%

30-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	449.04	621	99.74%
452		Shutdown	
453	446.61	458	99.81%
	895.65	AVG >>	99.78%

Reliance Industries Limited, Refinery Division Jamnagar

COMPUTERISED MONITORING OF SO2 EMISSION FROM SRUs **MONTH: July '2024**

01-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	556.54	657	99.71%
452		Unit under shutdown	
453	556.54	486	99.77%
	1113.08	AVG >>	99.74%

02-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	533.13	668	99.69%
452		Unit under shutdown	
453	514.31	505	99.81%
	1047.44	AVG >>	99.75%

03-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	564.06	694	99.71%
452		Unit under shutdown	
453	544.16	513	99.73%
	1108.22	AVG >>	99.72%

04-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	536.56	696	99.68%
452		Unit under shutdown	
453	549.03	509	99.72%
	1085.59	AVG >>	99.70%

05-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	564.41	875	99.67%
452		Unit under shutdown	
453	533.39	717	99.69%
	1097.80	AVG >>	99.68%

06-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	589.03	979	99.68%
452		Unit under shutdown	
453	595.11	802	99.74%
	1184.14	AVG >>	99.71%

07-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	620.89	938	99.71%
452		Unit under shutdown	
453	589.21	770	99.75%
	1210.10	AVG >>	99.73%

08-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	604.97	986	99.66%
452		Unit under shutdown	
453	526.91	806	99.68%
	1131.88	AVG >>	99.67%

09-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	512.19	858	99.67%
452	373.04	1158	99.59%
453	491.97	674	99.69%
	1377.20	AVG >>	99.65%

10-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	524.14	773	99.71%
452	406.69	1058	99.61%
453	467.50	598	99.72%
	1398.33	AVG >>	99.68%

11-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	560.03	854	99.69%
452	301.91	544	99.65%
453	394.99	661	99.67%
	1256.93	AVG >>	99.67%

12-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	579.23	793	99.73%
452		Unit under shutdown	
453	378.28	592	99.67%
	957.51	AVG >>	99.70%

13-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	562.17	740	99.72%
452		Unit under shutdown	
453	391.08	549	99.70%
	953.25	AVG >>	99.71%

14-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	478.08	745	99.66%
452		Unit under shutdown	
453	471.87	564	99.70%
	949.95	AVG >>	99.68%

15-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	511.60	830	99.74%
452		Unit under shutdown	
453	504.95	663	99.72%
	1016.55	AVG >>	99.73%

Reliance Industries Limited, Refinery Division Jamnagar

16-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	498.84	925	99.65%
452		Unit under shutdown	
453	477.38	744	99.67%
	976.22	AVG >>	99.66%

17-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	600.29	1473	99.56%
452		Unit under shutdown	
453	612.79	1238	99.60%
	1213.08	AVG >>	99.58%

18-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	596.60	1476	99.55%
452		Unit under shutdown	
453	596.91	1701	99.51%
	1193.51	AVG >>	99.53%

19-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	596.15	1284	99.60%
452		Unit under shutdown	
453	583.73	1531	99.56%
	1179.88	AVG >>	99.58%

20-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	567.31	1320	99.56%
452		Unit under shutdown	
453	548.81	921	99.60%
	1116.12	AVG >>	99.58%

21-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	567.67	1070	99.66%
452		Unit under shutdown	
453	549.16	737	99.72%
	1116.83	AVG >>	99.69%

22-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	525.05	901	99.66%
452	203.53	410	99.84%
453	510.24	597	99.74%
	1238.83	AVG >>	99.75%

23-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	466.43	684	99.73%
452	310.71	737	99.60%
453	464.22	435	99.80%
	1241.36	AVG >>	99.71%

24-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	466.20	636	99.76%
452	309.63	951	99.52%
453	448.31	478	99.79%
	1224.14	AVG >>	99.69%

25-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	548.1	601	99.80%
452		Unit under shutdown	
453	535.92	634	99.78%
	1084.02	AVG >>	99.79%

26-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	537.73	581	99.78%
452		Unit under shutdown	
453	519.61	594	99.76%
	1057.34	AVG >>	99.77%

27-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	526.34	478	99.77%
452		Unit under shutdown	
453	496.77	569	99.75%
	1023.11	AVG >>	99.76%

28-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	538.005	374	99.82%
452		Unit under shutdown	
453	513.825	533	99.76%
	1051.83	AVG >>	99.79%

29-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	545.64	436	99.83%
452		Unit under shutdown	
453	569.37	591	99.85%
	1115.01	AVG >>	99.84%

30-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	490.23	569	99.73%
452	330.96	1515	99.55%
453	479.84	724	99.68%
	1301.03	AVG >>	99.65%

31-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	495.23	297	99.88%
452	418.02	1494	99.60%
453	484.83	508	99.78%
	1398.09	AVG >>	99.75%

Reliance Industries Limited, Refinery Division Jamnagar

COMPUTERISED MONITORING OF SO2 EMISSION FROM SRUs **MONTH: August '2024**

01-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	513.15	437.9	99.83%
452	451.07	1015.7	99.60%
453	495.14	621.9	99.73%
	1459.36	AVG >>	99.72%

02-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	566.51	323.1	99.88%
452	502.05	1278.3	99.56%
453	528.32	508.1	99.78%
	1596.88	AVG >>	99.74%

03-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	568.63	383.0	99.86%
452	510.07	1199.5	99.49%
453	530.48	541.3	99.77%
	1609.18	AVG >>	99.71%

04-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	570.16	394.7	99.86%
452	518.13	1459.3	99.49%
453	526.40	549.5	99.77%
	1614.69	AVG >>	99.69%

05-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	572.02	423.7	99.85%
452	523.61	1654.8	99.51%
453	545.41	593.6	99.75%
	1641.05	AVG >>	99.70%

06-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	569.63	449.6	99.84%
452	522.21	1699.8	99.47%
453	547.57	643.4	99.74%
	1639.41	AVG >>	99.68%

07-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	570.43	435.4	99.84%
452	519.05	1345.1	99.52%
453	570.13	638.5	99.75%
	1659.62	AVG >>	99.70%

08-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	598.66	554.7	99.80%
452	530.79	1460.6	99.52%
453	592.11	773.3	99.70%
	1721.57	AVG >>	99.67%

09-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	576.47	429.0	99.85%
452	537.27	1577.0	99.49%
453	529.35	675.4	99.73%
	1643.09	AVG >>	99.69%

10-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	571.70	438.9	99.84%
452	539.57	1572.8	99.51%
453	549.32	686.3	99.73%
	1660.59	AVG >>	99.65%

11-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	564.16	407.7	99.85%
452	548.42	1676.3	99.50%
453	517.76	670.4	99.73%
	1630.34	AVG >>	99.58%

12-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	565.66	426.8	99.84%
452	543.59	1446.9	99.55%
453	530.65	699.2	99.72%
	1639.89	AVG >>	99.70%

13-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	571.41	425.2	99.85%
452	544.81	1319.2	99.57%
453	523.62	705.6	99.72%
	1639.84	AVG >>	99.71%

14-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	565.80	380.7	99.86%
452	538.98	1315.6	99.62%
453	514.12	646.6	99.74%
	1618.90	AVG >>	99.74%

15-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	562.94	390.5	99.86%
452	540.43	1429.3	99.56%
453	514.88	653.8	99.74%
	1618.25	AVG >>	99.72%

ANNEXURE -4A

Reliance Industries Limited, Refinery Division Jamnagar

16-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	542.66	411.4	99.85%
452	513.19	1397.5	99.52%
453	487.25	708.4	99.70%
	1543.10	AVG >>	99.69%

17-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	544.54	364.5	99.87%
452	515.51	1376.0	99.54%
453	505.15	620.5	99.75%
	1565.21	AVG >>	99.72%

18-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	555.26	388.5	99.86%
452	531.93	1250.9	99.55%
453	540.25	636.0	99.75%
	1627.43	AVG >>	99.72%

19-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	566.37	417.3	99.85%
452	546.21	1247.5	99.58%
453	531.85	658.0	99.74%
	1644.43	AVG >>	99.72%

20-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	568.87	531.0	99.81%
452	545.00	1294.0	99.49%
453	513.68	899.7	99.63%
	1627.55	AVG >>	99.65%

21-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	569.03	522.0	99.81%
452	542.74	1544.9	99.51%
453	503.62	917.9	99.62%
	1615.39	AVG >>	99.65%

22-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	542.50	497.5	99.82%
452	523.87	1472.3	99.53%
453	482.80	777.9	99.67%
	1549.17	AVG >>	99.67%

23-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	533.56	450.6	99.83%
452	497.86	1347.1	99.52%
453	446.62	512.0	99.77%
	1478.04	AVG >>	99.71%

24-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	493.93	431.8	99.84%
452	451.75	1260.5	99.49%
453	417.83	522.3	99.78%
	1363.51	AVG >>	99.70%

25-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	459.28	408.6	99.84%
452	444.21	1225.3	99.52%
453	421.23	541.8	99.76%
	1324.72	AVG >>	99.72%

26-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	464.03	375.5	99.86%
452	440.61	1426.8	99.53%
453	403.70	474.1	99.79%
	1308.33	AVG >>	99.74%

27-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	417.21	266.7	99.89%
452	407.04	1589.8	99.47%
453	392.16	310.4	99.86%
	1216.41	AVG >>	99.74%

28-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	286.27	675.1	99.72%
452	190.26	1104.8	99.49%
453	276.14	716.9	99.64%
	752.67	AVG >>	99.60%

29-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	342.43	498.6	99.79%
452	210.36	1026.9	99.52%
453	368.36	502.8	99.74%
	921.15	AVG >>	99.68%

30-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	397.12	591.6	99.75%
452	362.54	1493.0	99.51%
453	323.43	512.8	99.70%
	1083.09	AVG >>	99.65%

31-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	492.95	561.6	99.73%
452	455.55	1172.6	99.52%
453	188.53	957.7	99.56%
	1137.03	AVG >>	99.61%

Reliance Industries Limited, Refinery Division Jamnagar

COMPUTERISED MONITORING OF SO2 EMISSION FROM SRUs — **MONTH: September '2024**

01-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	544.96	245.0	99.89%
452	495.83	1300.5	99.59%
453		453 S/D	
	1040.79	AVG >>	99.74%

02-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	537.29	236.0	99.90%
452	477.59	1640.0	99.52%
453		453 S/D	
	1014.88	AVG >>	99.71%

03-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	563.88	227.0	99.92%
452	494.12	1540.4	99.56%
453		453 S/D	
	1058.00	AVG >>	99.74%

04-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	538.85	238.1	99.91%
452	460.31	1679.2	99.51%
453	260.52	1255.2	99.48%
	1259.68	AVG >>	99.63%

05-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	490.79	240.5	99.90%
452	409.02	1705.1	99.52%
453	312.39	1412.9	99.51%
	1212.20	AVG >>	99.64%

06-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	523.56	229.5	99.91%
452	432.54	1622.0	99.50%
453	398.21	1590.5	99.49%
	1354.31	AVG >>	99.63%

07-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	504.07	214.7	99.92%
452	448.02	1629.1	99.53%
453	409.87	1749.0	99.49%
	1361.97	AVG >>	99.65%

08-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	488.36	213.0	99.92%
452	441.58	1452.1	99.56%
453	415.90	1235.8	99.52%
	1345.84	AVG >>	99.67%

09-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	507.39	222.0	99.91%
452	448.28	1336.3	99.57%
453	422.17	1428.1	99.51%
	1377.84	AVG >>	99.66%

10-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	510.48	257.7	99.90%
452	449.97	1461.8	99.52%
453	450.52	206.4	99.91%
	1410.97	AVG >>	99.77%

11-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	515.20	280.5	99.89%
452	442.02	1309.9	99.53%
453	484.42	210.1	99.91%
	1441.64	AVG >>	99.76%

12-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	498.05	377.3	99.85%
452	447.50	1250.0	99.59%
453	481.13	353.7	99.85%
	1426.68	AVG >>	99.76%

13-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	508.91	464.3	99.82%
452	445.23	1148.1	99.53%
453	495.17	376.8	99.85%
	1449.31	AVG >>	99.73%

14-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	548.39	624.9	99.77%
452	492.44	549.9	99.76%
453	524.08	504.2	99.80%
	1564.91	AVG >>	99.78%

15-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	575.73	700.0	99.74%
452	510.69	596.3	99.75%
453	531.80	538.2	99.78%
	1618.22	AVG >>	99.76%

ANNEXURE -4A

Reliance Industries Limited, Refinery Division Jamnagar

16-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	566.82	683.0	99.75%
452	514.18	570.6	99.76%
453	505.49	496.2	99.79%
	1586.49	AVG >>	99.77%

17-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	534.57	680.5	99.74%
452	521.28	548.8	99.77%
453	509.42	469.9	99.81%
	1565.26	AVG >>	99.77%

18-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	549.64	708.6	99.74%
452	505.81	560.2	99.76%
453	510.58	472.3	99.80%
	1566.03	AVG >>	99.77%

19-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	556.93	725.4	99.73%
452	508.37	552.7	99.76%
453	517.44	455.9	99.81%
	1582.74	AVG >>	99.77%

20-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	563.37	689.2	99.75%
452	508.40	523.2	99.78%
453	513.34	415.5	99.82%
	1585.10	AVG >>	99.78%

21-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	561.52	705.6	99.74%
452	498.80	540.8	99.77%
453	533.32	425.8	99.82%
	1593.64	AVG >>	99.78%

22-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	561.85	703.3	99.74%
452	501.00	514.8	99.78%
453	520.98	402.7	99.83%
	1583.82	AVG >>	99.78%

23-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	555.71	697.8	99.74%
452	499.98	570.4	99.75%
453	549.47	451.4	99.82%
	1605.16	AVG >>	99.77%

24-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	564.67	717.8	99.74%
452	504.79	550.1	99.76%
453	539.16	430.4	99.82%
	1608.62	AVG >>	99.77%

25-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	569.90	798.2	99.71%
452	508.99	615.0	99.74%
453	526.79	496.7	99.79%
	1605.68	AVG >>	99.75%

26-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	557.13	797.4	99.70%
452	497.84	584.3	99.75%
453	506.99	463.6	99.80%
	1561.95	AVG >>	99.75%

27-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	561.88	788.6	99.71%
452	496.44	566.9	99.76%
453	522.68	436.6	99.82%
	1581.00	AVG >>	99.76%

28-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	570.11	881.0	99.68%
452	515.04	666.5	99.72%
453	525.43	490.8	99.79%
	1610.58	AVG >>	99.73%

29-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	569.00	829.0	99.70%
452	515.30	610.1	99.75%
453	531.91	380.8	99.84%
	1616.22	AVG >>	99.76%

30-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
451	562.64	779.9	99.71%
452	500.19	543.3	99.77%
453	512.36	313.8	99.87%
	1575.19	AVG >>	99.78%

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

COMPUTERISED MONITORING OF SO_2 EMISSION FROM SRUs MONTH: APRIL 2024

01-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	391.21	250.0	99.92%
Z452	393.35	199.2	99.93%
Z453	393.93	197.0	99.93%
Total	1178.48	AVG >>	99.93%

02-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	391.79	250	99.90%
Z452	392.12	200.4	99.93%
Z453	392.90	197	99.93%
Total	1176.81	AVG >>	99.92%

03-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	430.18	250	99.91%
Z452	431.19	216.4	99.93%
Z453	434.92	197	99.93%
Total	1296.29	AVG >>	99.92%

04-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	512.78	250	99.93%
Z452	514.23	250.5	99.92%
Z453	513.71	197	99.93%
Total	1540.72	AVG >>	99.93%

05-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	524.54	250	99.92%
Z452	525.81	204.1	99.93%
Z453	525.01	197	99.93%
Total	1575.35	AVG >>	99.93%

06-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	526.32	250	99.92%
Z452	525.14	225.0	99.92%
Z453	528.69	197	99.93%
Total	1580.15	AVG >>	99.92%

07-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	528.27	250	99.92%
Z452	524.83	224.4	99.93%
Z453	528.14	197	99.92%
Total	1581.23	AVG >>	99.92%

08-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	527.70	250	99.92%
Z452	526.82	287.6	99.93%
Z453	529.45	197	99.93%
Total	1583.98	AVG >>	99.93%

09-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	532.23	250	99.92%
Z452	534.39	238.0	99.92%
Z453	533.88	197	99.93%
Total	1600.50	AVG >>	99.92%

10-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	488.06	250	99.93%
Z452	490.25	221.5	99.92%
Z453	488.75	197	99.93%
Total	1467.07	AVG >>	99.93%

11-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	447.85	250	99.91%
Z452	449.44	200.8	99.93%
Z453	450.56	197	99.93%
Total	1347.85	AVG >>	99.92%

12-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	489.17	250	99.92%
Z452	492.27	218.3	99.92%
Z453	493.45	197	99.92%
Total	1474.90	AVG >>	99.92%

13-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	452.81	250	99.93%
Z452	455.01	203.1	99.93%
Z453	455.14	197	99.93%
Total	1362.96	AVG >>	99.93%

14-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	422.06	250	99.91%
Z452	424.25	203.1	99.93%
Z453	426.03	197	99.93%
Total	1272.35	AVG >>	99.92%

15-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	413.12	250	99.92%
Z452	415.14	204.0	99.93%
Z453	418.77	197	99.93%
Total	1247.03	AVG >>	99.93%

ANNEXURE – 4B

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

16-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	447.67	250	99.93%
Z452	445.14	211.8	99.92%
Z453	450.97	197	99.93%
Total	1343.78	AVG >>	99.93%

17-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	459.33	250	99.91%
Z452	455.41	231.0	99.92%
Z453	461.48	197	99.93%
Total	1376.22	AVG >>	99.92%

18-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	492.79	250	99.92%
Z452	487.27	232.0	99.92%
Z453	495.28	197	99.93%
Total	1475.35	AVG >>	99.92%

19-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	476.49	250.0	99.93%
Z452	473.80	213.4	99.93%
Z453	479.64	197	99.92%
Total	1429.93	AVG >>	99.93%

20-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	459.89	250	99.91%
Z452	459.20	203.6	99.93%
Z453	465.82	197	99.92%
Total	1384.91	AVG >>	99.92%

21-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	475.06	250	99.91%
Z452	472.47	219.2	99.92%
Z453	479.45	197	99.92%
Total	1426.98	AVG >>	99.92%

22-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	497.91	250	99.91%
Z452	493.62	216.2	99.93%
Z453	502.82	197	99.93%
Total	1494.36	AVG >>	99.92%

23-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	553.08	250	99.91%
Z452	547.82	253.8	99.92%
Z453	555.96	197	99.93%
Total	1656.85	AVG >>	99.92%

24-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	580.72	250	99.93%
Z452	581.16	272.9	99.91%
Z453	595.74	197	99.93%
Total	1757.62	AVG >>	99.92%

25-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	545.69	250	99.93%
Z452	547.83	268.0	99.91%
Z453	567.55	197	99.92%
Total	1661.07	AVG >>	99.92%

26-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	492.27	250	99.92%
Z452	488.86	245.4	99.91%
Z453	489.47	197	99.92%
Total	1470.60	AVG >>	99.92%

27-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	448.71	250	99.93%
Z452	446.78	211.0	99.93%
Z453	445.98	197	99.92%
Total	1341.46	AVG >>	99.93%

28-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	466.60	250	99.92%
Z452	462.95	224.0	99.92%
Z453	465.56	197	99.93%
Total	1395.12	AVG >>	99.92%

29-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	494.92	250	99.91%
Z452	487.44	224.0	99.92%
Z453	488.70	197	99.92%
Total	1471.06	AVG >>	99.92%

30-Apr-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	508.09	250	99.91%
Z452	507.58	252.6	99.92%
Z453	474.54	197	99.93%
Total	1490.21	AVG >>	99.92%

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

COMPUTERISED MONITORING OF SO_2 EMISSION FROM SRUs — MONTH: MAY 2024

01-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	523.96	250.0	99.92%
Z452	516.78	233.1	99.92%
Z453	521.13	197.0	99.93%
Total	1561.87	AVG >>	99.92%

02-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	549.27	250.0	99.92%
Z452	561.59	290.4	99.90%
Z453	584.43	197.0	99.93%
Total	1695.29	AVG >>	99.92%

03-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	565.02	250.0	99.92%
Z452	585.46	314.0	99.89%
Z453	598.62	197.0	99.93%
Total	1749.10	AVG >>	99.91%

04-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	553.62	250.0	99.92%
Z452	575.54	284.7	99.90%
Z453	588.45	197.0	99.93%
Total	1717.61	AVG >>	99.92%

05-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	560.52	250.0	99.92%
Z452	604.06	289.9	99.90%
Z453	631.15	197.0	99.93%
Total	1795.73	AVG >>	99.92%

06-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	553.35	250.0	99.92%
Z452	593.49	276.4	99.91%
Z453	621.24	197.0	99.93%
Total	1768.08	AVG >>	99.92%

07-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	536.04	250.0	99.92%
Z452	564.30	211.9	99.93%
Z453	584.49	197.0	100.00%
Total	1684.83	AVG >>	99.95%

08-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	519.85	250.0	99.92%
Z452	526.24	267.7	99.91%
Z453	525.94	197.0	99.93%
Total	1572.04	AVG >>	99.92%

09-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	511.41	250.0	99.92%
Z452	519.13	235.2	99.92%
Z453	520.68	197.0	99.93%
Total	1551.22	AVG >>	99.92%

10-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	498.88	250.0	99.92%
Z452	503.53	233.4	99.92%
Z453	502.43	197.0	99.93%
Total	1504.84	AVG >>	99.92%

11-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	495.30	250.0	99.92%
Z452	501.14	223.6	99.92%
Z453	498.35	197.0	99.93%
Total	1494.79	AVG >>	99.92%

12-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	473.89	250.0	99.92%
Z452	478.86	217.2	99.92%
Z453	477.44	197.0	99.93%
Total	1430.20	AVG >>	99.92%

13-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	482.62	250.0	99.92%
Z452	487.46	211.9	99.92%
Z453	485.61	197.0	99.93%
Total	1455.69	AVG >>	99.92%

14-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	511.82	250.0	99.92%
Z452	517.28	210.7	99.93%
Z453	516.40	197.0	99.93%
Total	1545.50	AVG >>	99.93%

15-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	520.47	250.0	99.92%
Z452	531.34	228.5	99.92%
Z453	538.73	197.0	99.93%
Total	1590.54	AVG >>	99.92%

ANNEXURE – 4B

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

16-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	528.68	250.0	99.92%
Z452	555.93	252.5	99.91%
Z453	574.15	197.0	99.93%
Total	1658.77	AVG >>	99.92%

17-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	504.41	250.0	99.92%
Z452	510.17	232.3	99.92%
Z453	510.79	197.0	99.93%
Total	1525.37	AVG >>	99.92%

18-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	454.10	250.0	99.92%
Z452	458.83	205.1	99.93%
Z453	456.86	197.0	99.93%
Total	1369.79	AVG >>	99.93%

19-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	461.95	250.0	99.92%
Z452	464.94	189.7	99.93%
Z453	464.78	197.0	99.93%
Total	1391.67	AVG >>	99.93%

20-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	481.47	250.0	99.92%
Z452	485.96	210.3	99.93%
Z453	483.82	197.0	99.93%
Total	1451.25	AVG >>	99.93%

21-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	473.22	250.0	99.92%
Z452	476.26	235.5	99.92%
Z453	473.36	197.0	99.93%
Total	1422.84	AVG >>	99.92%

22-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	483.05	250.0	99.92%
Z452	481.82	221.2	99.92%
Z453	486.51	197.0	99.93%
Total	1451.38	AVG >>	99.92%

23-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	522.62	250.0	99.92%
Z452	534.13	259.3	99.91%
Z453	542.69	197.0	99.93%
Total	1599.44	AVG >>	99.92%

24-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	524.21	250.0	99.92%
Z452	527.85	240.1	99.92%
Z453	534.06	197.0	99.93%
Total	1586.11	AVG >>	99.92%

25-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	521.28	250.0	99.92%
Z452	522.56	244.5	99.92%
Z453	522.42	197.0	99.93%
Total	1566.26	AVG >>	99.92%

26-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	491.93	250.0	99.92%
Z452	490.94	234.1	99.92%
Z453	490.17	197.0	99.93%
Total	1473.03	AVG >>	99.92%

27-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	474.23	250.0	99.92%
Z452	475.72	210.1	99.93%
Z453	474.41	197.0	99.93%
Total	1424.36	AVG >>	99.93%

28-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	467.48	250.0	99.92%
Z452	466.75	216.5	99.92%
Z453	467.83	197.0	99.93%
Total	1402.06	AVG >>	99.92%

29-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	460.85	250.0	99.92%
Z452	461.72	204.4	99.93%
Z453	460.13	197.0	99.93%
Total	1382.70	AVG >>	99.93%

30-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	463.55	250.0	99.92%
Z452	472.08	215.9	99.92%
Z453	480.29	197.0	99.93%
Total	1415.92	AVG >>	99.92%

31-May-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	448.15	250.0	99.92%
Z452	449.93	210.2	99.93%
Z453	449.95	197.0	99.93%
Total	1348.03	AVG >>	99.93%

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

COMPUTERISED MONITORING OF SO_2 EMISSION FROM SRUs MONTH: JUNE 2024

01-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	416.79	250.0	99.92%
Z452	417.40	191.6	99.93%
Z453	417.54	197.0	99.93%
Total	1251.74	AVG >>	99.93%

02-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	392.38	250.0	99.92%
Z452	392.90	190.8	99.93%
Z453	392.56	197.0	99.93%
Total	1177.84	AVG >>	99.93%

03-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	384.56	250.0	99.92%
Z452	385.02	177.1	99.94%
Z453	384.43	197.0	99.93%
Total	1154.01	AVG >>	99.93%

04-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	373.18	250.0	99.92%
Z452	373.15	184.8	99.93%
Z453	374.47	197.0	99.93%
Total	1120.80	AVG >>	99.93%

05-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	384.36	250.0	100.02%
Z452	385.06	197.0	99.92%
Z453	387.30	197.0	99.93%
Total	1156.72	AVG >>	99.96%

06-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	441.10	250.0	99.92%
Z452	439.52	194.5	99.93%
Z453	443.48	197.0	99.93%
Total	1324.09	AVG >>	99.93%

07-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	458.11	250.0	99.92%
Z452	456.46	210.9	99.93%
Z453	460.15	197.0	99.93%
Total	1374.72	AVG >>	99.93%

08-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	476.39	250.0	99.92%
Z452	475.77	223.7	99.92%
Z453	478.46	197.0	99.93%
Total	1430.62	AVG >>	99.92%

09-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	493.27	250.0	99.92%
Z452	494.54	234.5	99.92%
Z453	496.66	197.0	99.93%
Total	1484.47	AVG >>	99.92%

10-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	506.73	250.0	99.92%
Z452	504.04	232.8	99.92%
Z453	508.16	197.0	99.93%
Total	1518.93	AVG >>	99.92%

11-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	509.30	250.0	99.92%
Z452	515.40	235.1	99.92%
Z453	522.93	197.0	99.93%
Total	1547.64	AVG >>	99.92%

12-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	503.13	250.0	99.92%
Z452	505.27	229.2	99.92%
Z453	503.91	197.0	99.93%
Total	1512.31	AVG >>	99.92%

13-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	503.95	250.0	99.92%
Z452	505.66	236.6	99.92%
Z453	501.53	197.0	99.93%
Total	1511.14	AVG >>	99.92%

14-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	487.82	250.0	99.92%
Z452	490.53	243.5	99.92%
Z453	485.15	197.0	99.93%
Total	1463.51	AVG >>	99.92%

15-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	496.71	250.0	99.92%
Z452	502.62	235.5	99.92%
Z453	387.17	197.0	99.93%
Total	1386.50	AVG >>	99.92%

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

16-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	479.33	250.0	99.92%
Z452	506.50	155.8	99.95%
Z453	453.47	197.0	99.93%
Total	1439.30	AVG >>	99.93%

17-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	476.34	250.0	99.92%
Z452	498.43	141.3	99.95%
Z453	459.13	197.0	99.93%
Total	1433.90	AVG >>	99.94%

18-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	457.27	250.0	99.92%
Z452	466.85	189.5	99.93%
Z453	452.86	197.0	99.93%
Total	1376.99	AVG >>	99.93%

19-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	445.17	250.0	99.92%
Z452	449.52	218.8	99.92%
Z453	444.13	197.0	99.93%
Total	1338.83	AVG >>	99.92%

20-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	443.51	250.0	99.92%
Z452	445.16	203.1	99.93%
Z453	444.67	197.0	99.93%
Total	1333.34	AVG >>	99.93%

21-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	441.51	250.0	99.92%
Z452	442.81	194.4	99.93%
Z453	440.70	197.0	99.93%
Total	1325.01	AVG >>	99.93%

22-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	450.45	250.0	99.92%
Z452	449.48	184.3	99.94%
Z453	450.19	197.0	99.93%
Total	1350.11	AVG >>	99.93%

23-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	460.96	250.0	99.92%
Z452	461.00	208.0	99.93%
Z453	460.00	197.0	99.93%
Total	1381.95	AVG >>	99.93%

24-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	488.72	250.0	99.92%
Z452	487.43	213.2	99.93%
Z453	487.08	197.0	99.93%
Total	1463.22	AVG >>	99.93%

25-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	512.30	250.0	99.92%
Z452	406.87	234.1	99.92%
Z453	518.73	197.0	99.93%
Total	1437.90	AVG >>	99.92%

26-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	484.74	250.0	99.92%
Z452	470.68	234.0	99.92%
Z453	477.14	197.0	99.93%
Total	1432.56	AVG >>	99.92%

27-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	456.52	250.0	99.92%
Z452	455.40	378.6	99.85%
Z453	442.43	197.0	99.93%
Total	1354.35	AVG >>	99.90%

28-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	463.74	250.0	99.92%
Z452	462.82	192.4	99.93%
Z453	460.45	197.0	99.93%
Total	1387.01	AVG >>	99.93%

29-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	442.81	250.0	99.92%
Z452	443.50	181.8	99.93%
Z453	441.62	197.0	99.93%
Total	1327.93	AVG >>	99.93%

30-Jun-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	427.15	250.0	99.92%
Z452	428.19	186.2	99.93%
Z453	426.75	197.0	99.93%
Total	1282.09	AVG >>	99.93%

COMPUTERISED MONITORING OF SO_2 EMISSION FROM SRUs MONTH: JULY 2024

01-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	406.16	250.0	99.92%
Z452	407.30	184.3	99.93%
Z453	406.00	197.0	99.93%
Total	1219.47	AVG >>	99.93%

02-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	378.63	250.0	99.92%
Z452	380.56	189.7	99.92%
Z453	378.92	197.0	99.93%
Total	1138.11	AVG >>	99.92%

03-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	392.28	250.0	99.92%
Z452	395.66	167.9	99.94%
Z453	395.20	197.0	99.93%
Total	1183.14	AVG >>	99.93%

04-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	421.58	250.0	99.92%
Z452	423.31	197.8	99.93%
Z453	421.75	197.0	99.93%
Total	1266.64	AVG >>	99.93%

05-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	420.01	250.0	99.92%
Z452	421.53	176.7	99.94%
Z453	419.36	197.0	99.93%
Total	1260.89	AVG >>	99.93%

06-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	400.69	250.0	99.92%
Z452	405.56	196.5	99.92%
Z453	404.01	197.0	99.93%
Total	1210.25	AVG >>	99.92%

07-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	399.24	250.0	99.92%
Z452	401.00	195.3	99.92%
Z453	400.37	197.0	99.93%
Total	1200.60	AVG >>	99.92%

08-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	407.05	250.0	99.92%
Z452	408.22	211.4	99.92%
Z453	408.22	197.0	99.93%
Total	1223.50	AVG >>	99.92%

09-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	434.73	250.0	99.92%
Z452	435.41	210.8	99.92%
Z453	436.00	197.0	99.93%
Total	1306.14	AVG >>	99.92%

10-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	464.59	250.0	99.92%
Z452	463.78	202.2	99.93%
Z453	462.43	197.0	99.93%
Total	1390.80	AVG >>	99.93%

11-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	447.49	250.0	99.92%
Z452	447.39	195.9	99.93%
Z453	444.29	197.0	99.93%
Total	1339.18	AVG >>	99.93%

12-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	404.16	250.0	99.92%
Z452	405.39	171.8	99.93%
Z453	402.78	197.0	99.93%
Total	1212.33	AVG >>	99.93%

13-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	399.77	250.0	99.92%
Z452	403.03	177.9	99.93%
Z453	400.78	197.0	99.93%
Total	1203.58	AVG >>	99.93%

14-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	406.30	250.0	99.92%
Z452	409.64	168.7	99.94%
Z453	407.74	197.0	99.93%
Total	1223.68	AVG >>	99.93%

15-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	434.84	250.0	99.92%
Z452	436.25	188.7	99.93%
Z453	435.45	197.0	99.93%
Total	1306.54	AVG >>	99.93%

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

16-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	461.86	250.0	99.92%
Z452	464.57	205.4	99.92%
Z453	462.44	197.0	99.93%
Total	1388.87	AVG >>	99.92%

17-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	481.75	250.0	99.92%
Z452	484.48	244.5	99.91%
Z453	485.71	197.0	99.93%
Total	1451.95	AVG >>	99.92%

18-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	462.43	250.0	99.92%
Z452	462.28	187.8	99.93%
Z453	460.21	197.0	99.93%
Total	1384.92	AVG >>	99.93%

19-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	443.76	250.0	99.92%
Z452	446.98	190.1	99.93%
Z453	429.18	197.0	99.93%
Total	1319.92	AVG >>	99.93%

20-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	450.68	250.0	99.92%
Z452	465.93	200.9	99.92%
Z453	470.82	197.0	99.93%
Total	1387.43	AVG >>	99.92%

21-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	502.38	250.0	99.92%
Z452	530.28	225.5	99.92%
Z453	549.75	197.0	99.93%
Total	1582.42	AVG >>	99.92%

22-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	486.30	250.0	99.92%
Z452	513.02	218.0	99.92%
Z453	514.55	197.0	99.93%
Total	1513.86	AVG >>	99.92%

23-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	491.20	250.0	99.92%
Z452	506.56	217.8	99.92%
Z453	526.22	197.0	99.93%
Total	1523.98	AVG >>	99.92%

24-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	480.20	250.0	99.92%
Z452	541.26	229.2	99.92%
Z453	490.16	197.0	99.93%
Total	1511.62	AVG >>	99.92%

25-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	479.35	250.0	99.92%
Z452	507.52	219.4	99.92%
Z453	477.06	197.0	99.93%
Total	1463.94	AVG >>	99.92%

26-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	460.55	250.0	99.92%
Z452	461.10	199.9	99.93%
Z453	460.03	197.0	99.93%
Total	1381.68	AVG >>	99.93%

27-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	436.96	250.0	99.92%
Z452	437.95	198.8	99.92%
Z453	435.97	197.0	99.93%
Total	1310.88	AVG >>	99.92%

28-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	431.98	250.0	99.92%
Z452	433.53	179.6	99.93%
Z453	434.05	197.0	99.93%
Total	1299.56	AVG >>	99.93%

29-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	474.96	250.0	99.92%
Z452	483.30	211.0	99.92%
Z453	496.44	197.0	99.93%
Total	1454.71	AVG >>	99.92%

30-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	498.88	250.0	99.92%
Z452	524.19	227.7	99.92%
Z453	553.07	197.0	99.93%
Total	1576.13	AVG >>	99.92%

31-Jul-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	495.57	250.0	99.92%
Z452	520.74	215.5	99.92%
Z453	549.84	197.0	99.93%
Total	1566.16	AVG >>	99.92%

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

COMPUTERISED MONITORING OF SO_2 EMISSION FROM SRUs — MONTH: AUGUST 2024

01-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	503.85	250.0	99.92%
Z452	539.28	233.4	99.92%
Z453	576.05	197.0	99.93%
Total	1619.18	AVG >>	99.92%

02-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	509.07	250.0	99.92%
Z452	543.14	223.6	99.92%
Z453	579.24	197.0	99.93%
Total	1631.44	AVG >>	99.92%

03-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	501.72	250.0	99.92%
Z452	518.21	229.1	99.92%
Z453	536.69	197.0	99.93%
Total	1556.63	AVG >>	99.92%

04-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	491.44	250.0	99.92%
Z452	500.77	222.1	99.92%
Z453	513.24	197.0	99.93%
Total	1505.45	AVG >>	99.92%

05-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	489.30	250.0	99.92%
Z452	495.68	212.5	99.92%
Z453	504.65	197.0	99.93%
Total	1489.63	AVG >>	99.92%

06-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	490.73	250.0	99.92%
Z452	498.12	229.0	99.92%
Z453	509.33	197.0	99.93%
Total	1498.18	AVG >>	99.92%

07-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	498.05	250.0	99.92%
Z452	515.67	219.1	99.92%
Z453	538.27	197.0	99.93%
Total	1551.98	AVG >>	99.92%

08-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	512.19	250.0	99.92%
Z452	535.75	224.1	99.92%
Z453	564.99	197.0	99.93%
Total	1612.93	AVG >>	99.92%

09-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	512.76	250.0	99.92%
Z452	536.86	224.0	99.92%
Z453	565.98	197.0	99.93%
Total	1615.60	AVG >>	99.92%

10-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	505.29	250.0	99.92%
Z452	533.07	228.9	99.92%
Z453	564.47	197.0	99.93%
Total	1602.83	AVG >>	99.92%

11-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	508.51	250.0	99.92%
Z452	531.94	238.6	99.92%
Z453	555.74	197.0	99.93%
Total	1596.19	AVG >>	99.92%

12-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	510.43	250.0	99.92%
Z452	539.28	230.3	99.92%
Z453	569.93	197.0	99.93%
Total	1619.65	AVG >>	99.92%

13-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	510.08	250.0	99.92%
Z452	541.05	227.7	99.92%
Z453	573.33	197.0	99.93%
Total	1624.46	AVG >>	99.92%

14-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	494.00	250.0	99.92%
Z452	497.26	231.3	99.92%
Z453	502.20	197.0	99.93%
Total	1493.46	AVG >>	99.92%

15-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	500.61	250.0	99.92%
Z452	519.34	217.4	99.92%
Z453	540.62	197.0	99.93%
Total	1560.58	AVG >>	99.92%

ANNEXURE – 4B

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

16-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	502.08	250.0	99.92%
Z452	521.33	209.5	99.93%
Z453	542.45	197.0	99.93%
Total	1565.85	AVG >>	99.93%

17-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	492.93	250.0	99.92%
Z452	494.09	237.0	99.91%
Z453	499.22	197.0	99.93%
Total	1486.24	AVG >>	99.92%

18-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	495.22	250.0	99.92%
Z452	495.59	223.1	99.92%
Z453	506.46	197.0	99.93%
Total	1497.27	AVG >>	99.92%

19-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	507.83	250.0	99.92%
Z452	528.19	226.4	99.92%
Z453	548.37	197.0	99.93%
Total	1584.39	AVG >>	99.92%

20-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	517.63	250.0	99.92%
Z452	553.86	273.6	99.90%
Z453	590.09	197.0	99.93%
Total	1661.59	AVG >>	99.92%

21-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	512.76	250.0	99.92%
Z452	540.78	250.1	99.91%
Z453	570.99	197.0	99.93%
Total	1624.53	AVG >>	99.92%

22-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	502.27	250.0	99.92%
Z452	520.92	254.6	99.91%
Z453	541.28	197.0	99.93%
Total	1564.47	AVG >>	99.92%

23-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	490.66	250.0	99.92%
Z452	504.64	225.1	99.92%
Z453	519.60	197.0	99.93%
Total	1514.90	AVG >>	99.92%

24-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	478.41	250.0	99.92%
Z452	491.44	250.7	99.91%
Z453	505.24	197.0	99.93%
Total	1475.09	AVG >>	99.92%

25-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	461.54	250.0	99.92%
Z452	460.71	206.8	99.92%
Z453	458.07	197.0	99.93%
Total	1380.32	AVG >>	99.92%

26-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	464.79	250.0	99.92%
Z452	463.42	219.1	99.92%
Z453	465.63	197.0	99.93%
Total	1393.84	AVG >>	99.92%

27-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	434.79	250.0	99.92%
Z452	468.46	232.0	99.91%
Z453	483.66	197.0	99.93%
Total	1386.90	AVG >>	99.92%

28-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	26.35	250.0	99.92%
Z452	362.80	244.1	99.90%
Z453	384.40	197.0	99.93%
Total	773.54	AVG >>	99.92%

29-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	374.30	250.0	99.92%
Z452	376.61	214.3	99.93%
Z453	354.67	197.0	99.93%
Total	1105.57	AVG >>	99.93%

30-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	441.00	250.0	99.92%
Z452	469.44	287.7	99.91%
Z453	204.91	197.0	99.93%
Total	1115.34	AVG >>	99.92%

31-Aug-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	444.60	250.0	99.92%
Z452	518.43	284.4	99.91%
Z453	12.87	197.0	99.93%
Total	975.89	AVG >>	99.92%

ANNEXURE – 4B

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

COMPUTERISED MONITORING OF SO2 EMISSION FROM SRUs — MONTH: September 2024

01-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	473.46	250.0	99.92%
Z452	576.44	284.0	99.92%
Z453	LPG- mode		
Total	1065.40	AVG >>	99.92%

02-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	519.42	250.0	99.92%
Z452	686.13	284.0	99.92%
Z453	LPG- mode		
Total	1224.60	AVG >>	99.92%

03-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	477.27	250.0	99.92%
Z452	598.29	284.0	99.92%
Z453	295.55	197.0	99.93%
Total	1371.11	AVG >>	99.92%

04-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	463.32	250.0	99.92%
Z452	619.16	284.0	99.92%
Z453	527.67	197.0	99.93%
Total	1610.14	AVG >>	99.92%

05-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	459.78	250.0	99.92%
Z452	560.95	284.0	99.92%
Z453	526.33	197.0	99.93%
Total	1547.05	AVG >>	99.92%

06-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	462.48	250.0	99.92%
Z452	567.69	230.0	99.92%
Z453	513.86	197.0	99.93%
Total	1544.03	AVG >>	99.92%

07-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	470.56	250.0	99.92%
Z452	580.03	234.4	99.92%
Z453	515.62	197.0	99.93%
Total	1566.21	AVG >>	99.92%

08-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	459.75	250.0	99.92%
Z452	553.48	234.2	99.92%
Z453	502.73	197.0	99.93%
Total	1515.96	AVG >>	99.92%

09-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	469.57	250.0	99.92%
Z452	540.61	226.9	99.92%
Z453	501.06	197.0	99.93%
Total	1511.23	AVG >>	99.92%

10-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	256.74	250.0	99.92%
Z452	499.90	219.7	99.92%
Z453	475.00	197.0	99.93%
Total	1231.63	AVG >>	99.92%

11-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	486.80	250.0	99.92%
Z452	492.06	197.8	99.93%
Z453	66.47	197.0	99.93%
Total	1045.33	AVG >>	99.93%

12-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	525.96	250.0	99.92%
Z452	531.09	215.8	99.92%
Z453	SHUT DOWN		
Total	1068.33	AVG >>	99.92%

13-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	546.77	250.0	99.92%
Z452	571.83	239.7	99.92%
Z453	SHUT DOWN		
Total	1129.60	AVG >>	99.92%

14-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	559.08	250.0	99.92%
Z452	565.31	237.3	99.92%
Z453	SHUT DOWN		
Total	1135.12	AVG >>	99.92%

15-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	542.49	250.0	99.92%
Z452	541.25	234.5	99.92%
Z453	SHUT DOWN		
Total	1093.68	AVG >>	99.92%

ANNEXURE – 4B

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ) Jamnagar

16-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	515.41	250.0	99.92%
Z452	524.58	232.2	99.92%
Z453	SHUT DOWN		
Total	1049.70	AVG >>	99.92%

17-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	500.56	250.0	99.92%
Z452	552.63	238.5	99.92%
Z453	SHUT DOWN		
Total	1063.00	AVG >>	99.92%

18-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	511.46	250.0	99.92%
Z452	553.21	234.0	99.92%
Z453	SHUT DOWN		
Total	1074.21	AVG >>	99.92%

19-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	520.31	250.0	99.91%
Z452	534.14	244.6	99.91%
Z453	SHUT DOWN		
Total	1063.69	AVG >>	99.91%

20-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	519.55	250.0	99.92%
Z452	538.81	262.9	99.92%
Z453	SHUT DOWN		
Total	1067.25	AVG >>	99.92%

21-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	519.92	250.0	99.92%
Z452	537.15	242.7	99.92%
Z453	SHUT DOWN		
Total	1070.33	AVG >>	99.92%

22-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	517.30	250.0	99.92%
Z452	548.26	247.0	99.92%
Z453	SHUT DOWN		
Total	1079.27	AVG >>	99.92%

23-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	484.95	250.0	99.92%
Z452	519.07	241.0	99.92%
Z453	SHUT DOWN		
Total	1017.42	AVG >>	99.92%

24-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	468.51	250.0	99.92%
Z452	541.42	244.9	99.92%
Z453	SHUT DOWN		
Total	1023.32	AVG >>	99.92%

25-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	527.64	250.0	99.92%
Z452	539.93	233.4	99.92%
Z453	SHUT DOWN		
Total	1081.27	AVG >>	99.92%

26-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	508.13	250.0	99.92%
Z452	506.96	212.6	99.92%
Z453	SHUT DOWN		
Total	1029.42	AVG >>	99.92%

27-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	529.58	250.0	99.92%
Z452	516.81	209.2	99.91%
Z453	SHUT DOWN		
Total	1061.42	AVG >>	99.92%

28-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	521.60	250.0	99.92%
Z452	521.16	239.5	99.92%
Z453	SHUT DOWN		
Total	1057.66	AVG >>	99.92%

29-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	533.95	250.0	99.92%
Z452	513.17	214.4	99.92%
Z453	SHUT DOWN		
Total	1062.07	AVG >>	99.92%

30-Sep-24

Unit	CBA production MT/day	SO2 emission ppm	Sulphur Recovery Efficiency
Z451	513.90	250.0	99.92%
Z452	462.97	198.0	99.93%
Z453	SHUT DOWN		
Total	990.91	AVG >>	99.92%

Reliance Industries Limited (Refinery Division), Jamnagar
AMBIENT AIR QUALITY MONITORING
(1st April '2024 to 30th September '2024)

LOCATION	MINIMUM VALUE	MAXIMUM VALUE	AVERAGE VALUE
POLLUTANT - PM 2.5 (µg/m3)			
Liquid Rail Gantry	15	33	25
SSO STP	16	25	21
RRTF Control Building	15	31	25
ETP	17	32	24
Solid Parking Area	15	32	26
Central LAB	16	29	21
POLLUTANT - PM 10 (µg/m3)			
Liquid Rail Gantry	33	52	46
SSO STP	34	49	42
RRTF Control Building	32	55	46
ETP	33	52	46
Solid Parking Area	33	52	46
Central LAB	34	52	44
POLLUTANT - SO2 (µg/m3)			
Liquid Rail Gantry	12	23	18
SSO STP	10	19	14
RRTF Control Building	12	24	18
ETP	10	22	16
Solid Parking Area	10	22	16
Central LAB	10	22	15
POLLUTANT – NOx (µg/m3)			
Liquid Rail Gantry	19	31	25
SSO STP	16	29	21
RRTF Control Building	20	31	26
ETP	18	32	24
Solid Parking Area	15	30	24
Central LAB	18	30	22
POLLUTANT – CO (mg/m3)			
Liquid Rail Gantry	1.1	1.55	1
SSO STP	1.09	1.63	1
RRTF Control Building	1.04	1.6	1
ETP	1.03	1.56	1
Solid Parking Area	1.03	1.65	1
Central LAB	1.07	1.53	1
POLLUTANT - NH3 (µg/m3)			
Liquid Rail Gantry	10	17	13
SSO STP	10	16	13
RRTF Control Building	10	18	13
ETP	10	17	13
Solid Parking Area	10	16	13
Central LAB	10	17	13
POLLUTANT - Benzene (µg/m3)			
Liquid Rail Gantry	BDL	BDL	BDL
SSO STP	BDL	BDL	BDL
RRTF Control Building	BDL	BDL	BDL
ETP	BDL	BDL	BDL
Solid Parking Area	BDL	BDL	BDL
Central LAB	BDL	BDL	BDL

Note : 1. Grab sampling for CO ; 2. BDL : Below Detectable level

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ), Jamnagar

AMBIENT AIR QUALITY MONITORING
(1st April '2024 to 30th September '2024)

LOCATION	MINIMUM VALUE	MAXIMUM VALUE	AVERAGE VALUE
POLLUTANT - PM 2.5 (µg/m3)			
Sulphur Recovery Unit	15	31	26
Sulphur Load Office	16	31	25
ZETP	15	30	25
RTF	16	30	21
POLLUTANT – PM 10 (µg/m3)			
Sulphur Recovery Unit	33	51	45
Sulphur Load Office	32	53	46
ZETP	33	54	46
RTF	32	51	43
POLLUTANT - SO_2 (µg/m3)			
Sulphur Recovery Unit	10	22	14
Sulphur Load Office	11	26	19
ZETP	10	23	16
RTF	10	21	13
POLLUTANT – NO2 (µg/m3)			
Sulphur Recovery Unit	18	30	23
Sulphur Load Office	18	30	25
ZETP	18	30	24
RTF	10	30	21
POLLUTANT - NH3 (µg/m3)			
Sulphur Recovery Unit	10	16	13
Sulphur Load Office	10	18	13
ZETP	10	19	13
RTF	10	18	13
POLLUTANT – CO (mg/m3)			
Sulphur Recovery Unit	1.08	1.59	1.30
Sulphur Load Office	1.05	1.65	1.28
ZETP	1.1	1.52	1.32
RTF	1.09	1.53	1.29
POLLUTANT – Benzene (µg/m3)			
Sulphur Recovery Unit	BDL	BDL	BDL
Sulphur Load Office	BDL	BDL	BDL
ZETP	BDL	BDL	BDL
RTF	BDL	BDL	BDL

Note : 1. Grab sampling for CO ; 2. BDL : Below Detectable level

Reliance Industries Limited. Jamnagar (C2 Complex)

AMBIENT AIR QUALITY MONITORING

(1st April '2024 to 30th September '2024)

LOCATION	MINIMUM VALUE	MAXIMUM VALUE	AVERAGE VALUE
POLLUTANT – PM2.5 (µg/m3)			
LC5	18	32	27
LC7	17	33	27
Nr ETP	18	33	26
FWP	18	32	26
POLLUTANT – PM10 (µg/m3)			
LC5	33	53	46
LC7	34	52	46
Nr ETP	33	54	46
FWP	34	53	47
POLLUTANT - SO2 (µg/m3)			
LC5	10	24	15
LC7	10	23	17
Nr ETP	11	24	17
FWP	10	20	15
POLLUTANT – NO2 (µg/m3)			
LC5	18	29	24
LC7	19	30	26
Nr ETP	20	31	26
FWP	15	29	25
POLLUTANT - NH3 (µg/m3)			
LC5	11	17	13
LC7	10	16	12
Nr ETP	10	17	13
FWP	10	17	13
POLLUTANT - CO (mg/m3)			
LC5	1.09	1.52	1
LC7	1.01	1.64	1
Nr ETP	1.05	1.67	1
FWP	1.04	1.53	1
POLLUTANT – Benzene (µg/m3)			
LC5	BDL	BDL	BDL
LC7	BDL	BDL	BDL
Nr ETP	BDL	BDL	BDL
FWP	BDL	BDL	BDL

Note : 1. Grab sampling for CO ; 2. BDL : Below Detectable level

ANNEXURE – 6

Reliance Industries Limited (Refinery Division, Jamnagar)

Mobile Van Monitoring

(1st April '2024 to 30th September '2024)

LOCATION	MINIMUM VALUE	MAXIMUM VALUE	AVERAGE VALUE
POLLUTANT – PM2.5 (µg/m3)			
Gagva	9	50	26
Padana	17	46	31
Township	11	38	20
MTF	9	50	23
POLLUTANT – PM10 (µg/m3)			
Gagva	12	63	35
Padana	22	63	42
Township	15	50	27
MTF	12	63	30
POLLUTANT - SO2 (µg/m3)			
Gagva	3.0	12.9	5.4
Padana	3.3	11.6	5.4
Township	3.5	7.3	5.0
MTF	3.9	7.0	5.3
POLLUTANT – NO2 (µg/m3)			
Gagva	0.2	36.2	4.5
Padana	0.4	8.0	1.6
Township	0.2	26.5	4.0
MTF	0.2	6.0	2.1
POLLUTANT - NH3 (µg/m3)			
Gagva	2.44	26.93	5.91
Padana	4.86	26.93	7.57
Township	1.01	12.44	4.70
MTF	0.74	23.95	5.54
POLLUTANT - CO (mg/m3)			
Gagva	0.27	71.56	2.13
Padana	0.33	9.21	1.31
Township	0.46	2.50	1.28
MTF	0.42	45.85	3.24
POLLUTANT – Ozone (µg/m3)			
Gagva	0.75	24.35	6.24
Padana	1.98	24.35	7.62
Township	0.75	14.27	3.78
MTF	0.99	22.21	4.06

Note: Sampling Time:- 24 hrs avg.

ANNEXURE – 7A

Reliance Industries Limited (Refinery Division, Jamnagar)

Treated Water Quality - Refinery ETP

(1st April '2024 to 30th September '2024)

Sr.No.	PARAMETERS	Unit	Min Value	Max Value	Average Value
1	pH	--	7.5	7.7	7.57
2	Suspended Solids	mg/l	10	13	11.33
3	Biochemical Oxygen Demand	mg/l	5.0	6.0	5.67
4	Chemical Oxygen Demand	mg/l	49.0	58.0	52.83
5	Oil & Grease	mg/l	1.8	2.6	2.08
6	Phenols (as C6H5OH)	mg/l	0.1	0.1	0.11
7	Sulphide (as S)	mg/l	N.D.	N.D.	N.D.
8	Cyanide (as CN)	mg/l	N.D.	N.D.	N.D.
9	Ammonical Nitrogen	mg/l	9.5	10.1	9.70
10	TKN	mg/l	11.9	12.4	12.08
11	Phosphorous (as P)	mg/l	1.0	1.4	1.13
12	Chromium (hexavalent)	mg/l	N.D.	N.D.	N.D.
13	Chromium (Total)	mg/l	N.D.	N.D.	N.D.
14	Lead as Pb	mg/l	N.D.	N.D.	N.D.
15	Mercury as Hg	mg/l	N.D.	N.D.	N.D.
16	Zinc as Zn	mg/l	N.D.	N.D.	N.D.
17	Copper as Cu	mg/l	N.D.	N.D.	N.D.
18	Nickel as Ni	mg/l	N.D.	N.D.	N.D.
19	Vanadium as V	mg/l	N.D.	N.D.	N.D.
20	Benzene	mg/l	N.D.	N.D.	N.D.
21	Benzo (a) - pyrene	mg/l	N.D.	N.D.	N.D.
22	Fluoride (as F)	mg/l	N.D.	N.D.	N.D.

Note: N.D. - Not Detectable

Remarks : 1) Minimum Detectable Limit : Sulphides=0.1mg/l, Cyanide=0.01mg/l, Metals(Cr,Pb,Hg,Zn,Ni,Cu,V)=0.01mg/l, Benzene=0.01mg/l, Benzo(a)Pyrene=0.01mg/l,

2) N.D. : Not Detectable

ANNEXURE – 7A

Reliance Industries Limited (Refinery Division, Jamnagar)

Brine Discharge Water Quality through Seawater Outfall

(1st April '2024 to 30th September '2024)

Sr.No.	PARAMETERS	Unit	Min Value	Max Value	Average Value
1	Temperature	^{O}C	33	34	33.67
2	pH	--	7.9	8.1	8.00
3	Total Dissolved Solids	mg/l	59210	58697	59482
4	Total Suspended Solids	mg/l	11	1.9	14.0
5	Biochemical Oxygen Demand	mg/l	5	5.0	7.0
6	Chemical Oxygen Demand*	mg/l	*----	*----	*----
7	Oil & Grease	mg/l	N.D.	N.D.	N.D.
8	Phenols (as C6H5OH)	mg/l	N.D.	N.D.	N.D.
9	Sulphide (as S)	mg/l	N.D.	N.D.	N.D.
10	Cyanide (as CN)	mg/l	N.D.	N.D.	N.D.
11	Ammonical Nitrogen	mg/l	9.9	10.7	10.28
12	TKN	mg/l	12.1	13.1	12.57
13	Phosphorous (as P)	mg/l	1.0	1.3	1.13
14	Chromium (hexavalent)	mg/l	N.D.	N.D.	N.D.
15	Chromium (Total)	mg/l	N.D.	N.D.	N.D.
16	Lead as Pb	mg/l	N.D.	N.D.	N.D.
17	Mercury as Hg	mg/l	N.D.	N.D.	N.D.
18	Zinc as Zn	mg/l	N.D.	N.D.	N.D.
19	Copper as Cu	mg/l	N.D.	N.D.	N.D.
20	Nickel as Ni	mg/l	N.D.	N.D.	N.D.
21	Vanadium as V	mg/l	N.D.	N.D.	N.D.
22	Benzene	mg/l	N.D.	N.D.	N.D.
23	Benzo (a) - pyrene	mg/l	N.D.	N.D.	N.D.

---* As per APHA,AWWA Standard methods for the Examination of Water & Waste Water, the COD analysis may not be representative due to positive interference of high chloride content in the sample, hence it is not analysed.

Remarks : 1) Minimum Detectable Limit : Sulphides=0.1mg/l, Cyanide=0.01mg/l,
Metals(Cr,Pb,Hg,Zn,Ni,Cu,V)=0.01mg/l, Benzene=0.01mg/l, Benzo(a)Pyrene=0.01mg/l,
2) N.D. : Not Detectable

ANNEXURE – 7B

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ, Jamnagar)

Treated Water Quality - ETP Outlet

(1st April '2024 to 30th September '2024)

Sr.No.	PARAMETERS	Unit	Min Value	Max Value	Average Value
1	pH	--	7.5	7.8	7.63
2	Total Suspended Solids	mg/l	11.0	14.0	12.50
3	Biochemical Oxygen Demand	mg/l	5.0	7.0	5.83
4	Chemical Oxygen Demand	mg/l	39.0	44.0	41.67
5	Oil & Grease	mg/l	1.3	1.9	1.55
6	Phenols (as C6H5OH)	mg/l	0.10	0.13	0.12
7	Sulphide (as S)	mg/l	0.0	0.0	0.00
8	Cyanide (as CN)	mg/l	0.0	0.0	0.00
9	Ammonical Nitrogen	mg/l	9.5	9.7	9.63
10	TKN	mg/l	10.8	12.8	11.45
11	Phosphorous (as P)	mg/l	1.1	1.4	1.17
12	Chromium (hexavalent)	mg/l	N.D.	N.D.	N.D.
13	Chromium(Total)	mg/l	N.D.	N.D.	N.D.
14	Lead as Pb	mg/l	N.D.	N.D.	N.D.
15	Mercury as Hg	mg/l	N.D.	N.D.	N.D.
16	Zinc as Zn	mg/l	N.D.	N.D.	N.D.
17	Copper as Cu	mg/l	N.D.	N.D.	N.D.
18	Nickel as Ni	mg/l	N.D.	N.D.	N.D.
19	Vanadium as V	mg/l	N.D.	N.D.	N.D.
20	Benzene	mg/l	N.D.	N.D.	N.D.
21	Benzo (a) - pyrene	mg/l	N.D.	N.D.	N.D.

Remarks : 1) Minimum Detectable Limit : Sulphides=0.1mg/l, Cyanide=0.01mg/l, Metals(Cr,Pb,Hg,Zn,Ni,Cu,V)=0.01mg/l, Benzene=0.01mg/l, Benzo(a)Pyrene=0.01mg/l,

2) N.D. : Not Detectable

ANNEXURE – 7B

Reliance Industries Limited (Unit of Reliance Jamnagar SEZ, Jamnagar)
Brine Discharge Through Seawater Outfall Water Quality
(1st April '2024 to 30th September '2024)

Sr.No.	PARAMETERS	Unit	Min Value	Max Value	Average Value
1	Temperature	^{0}C	33	34	33.67
2	pH	--	7.9	8.1	8.02
3	Total Dissolved Solids	mg/l	58967	59367	59121
4	Total Suspended Solids	mg/l	11	13	12
5	Biochemical Oxygen Demand	mg/l	1.9	6.0	4.65
6	Chemical Oxygen Demand	mg/l	*-----	*-----	*-----
7	Oil & Grease	mg/l	N.D.	N.D.	N.D.
8	Phenols (as C6H5OH)	mg/l	N.D.	N.D.	N.D.
9	Sulphide (as S)	mg/l	N.D.	N.D.	N.D.
10	Cyanide (as CN)	mg/l	N.D.	N.D.	N.D.
11	Ammonical Nitrogen	mg/l	10.2	11.2	10.53
12	TKN	mg/l	12.2	13.2	12.70
13	Phosphorous (as P)	mg/l	1.0	1.3	1.07
14	Chromium (hexavalent)	mg/l	N.D.	N.D.	N.D.
15	Chromium (Total)	mg/l	N.D.	N.D.	N.D.
16	Lead as Pb	mg/l	N.D.	N.D.	N.D.
17	Mercury as Hg	mg/l	N.D.	N.D.	N.D.
18	Zinc as Zn	mg/l	N.D.	N.D.	N.D.
19	Copper as Cu	mg/l	N.D.	N.D.	N.D.
20	Nickel as Ni	mg/l	N.D.	N.D.	N.D.
21	Vanadium as V	mg/l	N.D.	N.D.	N.D.
22	Benzene	mg/l	N.D.	N.D.	N.D.
23	Benzo (a) - pyrene	mg/l	N.D.	N.D.	N.D.

---* As per APHA, AWWA Standard methods for the Examination of Water & Waste Water, the COD analysis may not be representative due to positive interference of high chloride content in the sample, hence it is not analysed.

Remarks: 1) Minimum Detectable Limit: Sulphides=0.1mg/l, Cyanide=0.01mg/l,
Metals (Cr, Pb, Hg, Zn, Ni, Cu,8 V)=0.01mg/l, Benzene=0.01mg/l, Benzo(a)Pyrene=0.01mg/l,
2) N.D.: Not Detectable

ANNEXURE – 7C

Reliance Industries Limited, Jamnagar

Treated Water Quality - C2-COMPLEX ETP

(1st April '2024 to 30th September '2024)

Sr.No.	PARAMETERS	Unit	Min Value	Max Value	Average Value
1	pH	--	7.5	7.8	7.60
2	Total Suspended Solids	mg/l	10	14	11.17
3	Biochemical Oxygen Demand	mg/l	5.0	8.0	6.17
4	Chemical Oxygen Demand	mg/l	39.0	46.0	42.00
5	Phenols (as C6H5OH)	mg/l	0.1	1.9	0.41
6	Sulphide (as S)	mg/l	N.D.	N.D.	N.D.
7	Cyanide (as CN)	mg/l	N.D.	N.D.	N.D.
8	Chromium (hexavalent)	mg/l	N.D.	N.D.	N.D.
9	Chromium (Total)	mg/l	N.D.	N.D.	N.D.
10	Fluoride (as F)	mg/l	0.2	0.2	0.2

Remarks : 1) Minimum Detectable Limit : Sulphides=0.1mg/l, Cyanide=0.01mg/l, Metals (Cr, F) =0.01mg/l

2) N.D. : Not Detectable

ANNEXURE – 8A

Reliance Industries Limited. (Refinery Division) Jamnagar.
NOISE QUALITY MONITORING RESULTS
(1st April '2024 to 30th September '2024)

Sr. No.	Area /Location	Noise Level (dBA) Day-time		Noise Level (dBA) Night-time	
		Minimum Value	Maximum Value	Minimum Value	Maximum Value
1	Back side of Laboratory	47	55	40	50
2	Storm water pond no. 2 near fire station	45	57	43	51
3	Near ETP	58	67	52	58
4	Near Main Gate	52	65	44	49
5	Near Back Boundary Wall (PP Gate)	52	60	48	53
6	In front of Sulphur loading plant	53	65	50	55
7	Near flare stack	49	62	53	58

ANNEXURE – 8B

Reliance Industries Ltd. (Unit of Reliance Jamnagar SEZ). Jamnagar.

NOISE QUALITY MONITORING RESULTS

(1st April '2024 to 30th September '2024)

Sr. No.	Area /Location	Noise Level (dBA) Day-time		Noise Level (dBA) Night-time	
		Minimum Value	Maximum Value	Minimum Value	Maximum Value
1	Near Cargo Gate 1	51	58	39	47
2	Near MMC, Avenue L	48	56	42	48
3	Near PP Ware House, Avenue L	58	65	51	55
4	Near Pond 7	59	66	42	48
5	Near Cargo Gate -2	51	65	46	51
6	Near Sulfur Gate	57	66	48	52
7	Near Clean Fuel Project Nr. Avenue F	57	66	51	57

ANNEXURE – 8C

Reliance Industries Ltd. Jamnagar. (J3 Complex).

NOISE QUALITY MONITORING RESULTS

(1st April '2024 to 30th September '2024)

Sr. No.	Area /Location	Noise Level (dBA) Day-time		Noise Level (dBA) Night-time	
		Minimum Value	Maximum Value	Minimum Value	Maximum Value
	Px4 Complex				
1	SO	55	59	50	53
2	B/H CT	55	56	53	55
3	Scarp Bin	53	55	46	50
4	Crystalliser	54	58	53	55
	C2 Complex				
1	LC 5	50	53	44	46
2	LC 7	45	48	39	43
3	ETP	56	58	47	51
4	FWPH	54	55	44	46

ANNEXURE – 9

Reliance Industries Ltd. Jamnagar
Marine Water Quality Analysis Report
(1st April '2024 to 30th September '2024)

Sample location : Samples near Diffuser (Sea water)

Parameters	UOM	Sample Above Diffuser			Sample 100 m Upstream of Diffuser			Sample 100 m Downstream of Diffuser		
		Min	Max	AVG	Min	Max	AVG	Min	Max	AVG
pH	-	7.8	8.2	8.0	7.9	8.2	8.0	7.9	8.2	8.0
Conductivity	µS/cm	54971	56248	55660	55650	57550	56510	55330	56394	55871
Total Dissolved Solids (TDS)	mg/l	34357	39430	37643	35525	39487	38026	34799	39532	37855
Total Suspended Solids (TSS)	mg/l	3.8	4.8	4.2	3.5	4.4	4.0	3.1	4.2	3.8
Chemical Oxygen Demand (COD)	mg/l	12.0	14.0	13.0	12.0	15.0	13.7	11.0	14.0	12.3
Biochemical Oxygen Demand (BOD)	mg/l	6	6	6	8	8	8	7	7	7
O & G	mg/l	--	--	N.D.	--	--	N.D.	--	--	N.D.
Sulphide	mg/l	--	--	N.D.	--	--	N.D.	--	--	N.D.
Phenol	mg/l	--	--	N.D.	--	--	N.D.	--	--	N.D.

Remarks : 1) N.D. : Not Detectable
2) Minimum Detectable Limit : Oil & Grease=0.01mg/l, Sulphides=0.1mg/l, Phenol=0.1mg/l.
*APHA - AWWA Standard methods are followed for the Examination of Water & Waste Water, the COD analysis is a representative value due to positive interference of high chloride content in the sample.

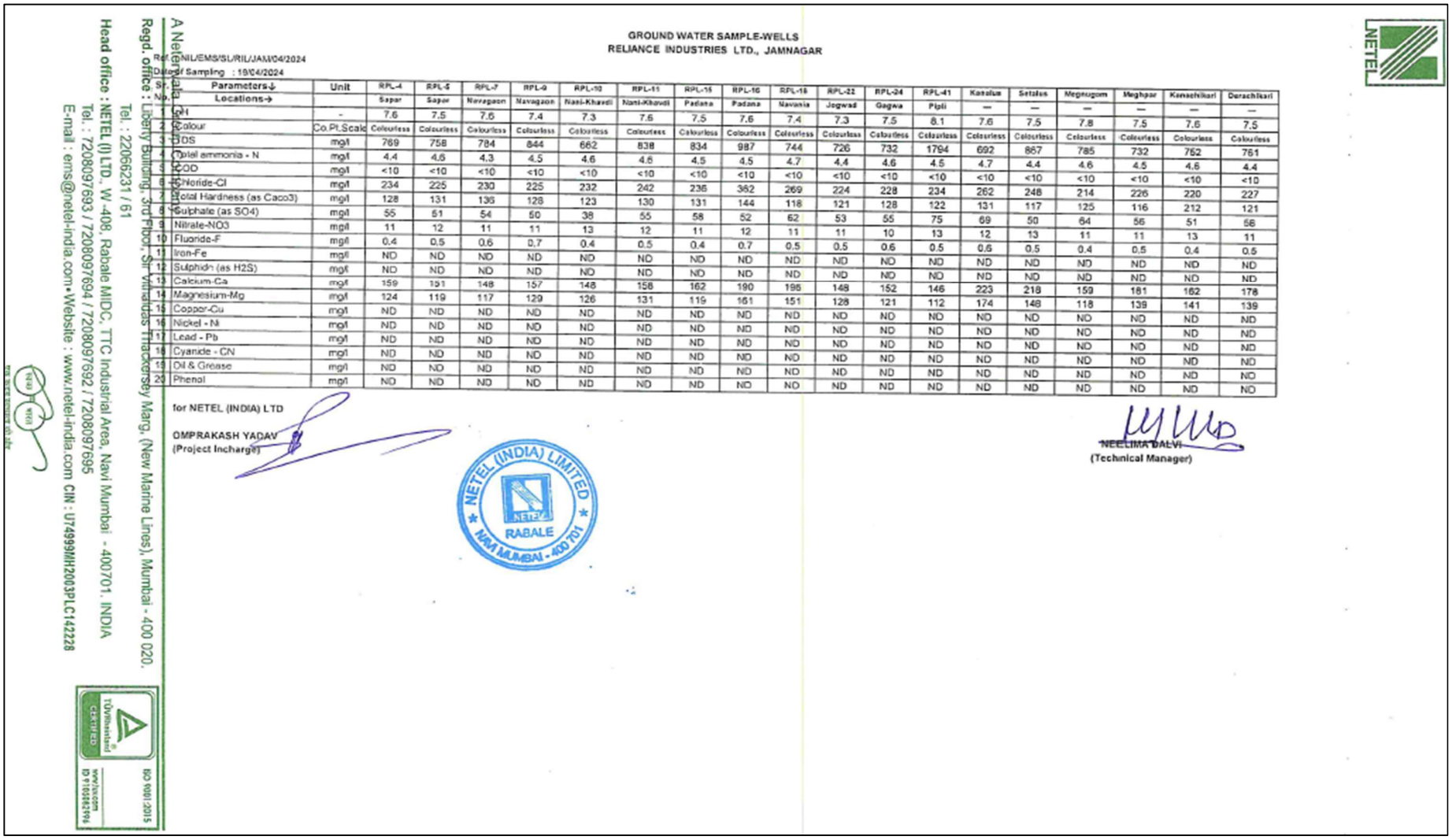
ANNEXURE – 10

Reliance Industries Ltd. (Refinery Division), Jamnagar
Treated Water Quality – MTF ETP
(1st April '2024 to 30th September '2024)

Sr.No.	PARAMETERS	Unit	Min Value	Max Value	Average Value
1	pH	--	7.6	8.0	7.75
2	Total Suspended Solids	mg/l	11	14	12.67
3	Biochemical Oxygen Demand	mg/l	5.0	6.0	5.50
4	Chemical Oxygen Demand*	mg/l	*----	*----	*----
5	Oil & Grease	mg/l	1.9	2.8	2.27
6	Phenols (as C6H5OH)	mg/l	0.1	0.1	0.12
7	Sulphide (as S)	mg/l	N.D.	N.D.	N.D.
8	Cyanide (as CN)	mg/l	N.D.	N.D.	N.D.
9	Ammonical Nitrogen	mg/l	9.8	10.2	9.98
10	TKN	mg/l	12.4	13.4	12.78
11	Phosphorous (as P)	mg/l	1.0	1.2	1.10
12	Chromium (hexavalent)	mg/l	N.D.	N.D.	N.D.
13	Chromium (Total)	mg/l	N.D.	N.D.	N.D.
14	Lead as Pb	mg/l	N.D.	N.D.	N.D.
15	Mercury as Hg	mg/l	N.D.	N.D.	N.D.
16	Zinc as Zn	mg/l	N.D.	N.D.	N.D.
17	Copper as Cu	mg/l	N.D.	N.D.	N.D.
18	Nickel as Ni	mg/l	N.D.	N.D.	N.D.
19	Vanadium as V	mg/l	N.D.	N.D.	N.D.
20	Benzene	mg/l	N.D.	N.D.	N.D.
21	Benzo (a) - pyrene	mg/l	N.D.	N.D.	N.D.

Note: N.D. - Not Detectable

---* As per APHA,AWWA Standard methods for the Examination of Water & Waste Water, the COD analysis may not be representative due to positive interference of high chloride content in the sample, hence it is not analysed.



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Ref. : NIL/EMS/SL/RIL/JAM/04/2024
Date of Sampling : 19/04/2024

GROUND WATER SAMPLE-WELLS
RELIANCE INDUSTRIES LTD., JAMNAGAR

Sr. No.	Parameters↓ Locations→	Unit	RPL-4 Sapar	RPL-6 Sapar	RPL-7 Navagaon	RPL-9 Navagaon	RPL-10 Nani-Khavdi	RPL-11 Nani-Khavdi	RPL-15 Padana	RPL-16 Padana	RPL-18 Navania	RPL-22 Jogwad	RPL-24 Gagwa	RPL-41 Pipli	Kanalus —	Setalus —	Megnugam —	Meghpar —	Kanachikari —	Derachikari —
1	pH	-	7.6	7.5	7.6	7.4	7.3	7.6	7.5	7.6	7.4	7.3	7.5	8.1	7.6	7.5	7.8	7.5	7.6	7.5
2	Colour	Co.Pt.Scale	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless	Colourless
3	TDS	mg/l	769	758	784	844	662	838	834	987	744	726	732	1784	692	867	785	732	752	761
4	Total ammonia - N	mg/l	4.4	4.6	4.3	4.5	4.6	4.6	4.5	4.5	4.7	4.4	4.6	4.5	4.7	4.4	4.6	4.5	4.6	4.4
5	COD	mg/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
6	Chloride-Cl	mg/l	234	225	230	225	232	242	236	362	269	224	228	234	262	248	214	226	220	227
7	Total Hardness (as Caco3)	mg/l	128	131	136	128	123	130	131	144	118	121	128	122	131	117	125	116	212	121
8	Sulphate (as SO4)	mg/l	55	51	54	50	38	55	58	52	62	53	55	75	69	50	64	56	51	56
9	Nitrate-NO3	mg/l	11	12	11	11	13	12	11	12	11	11	10	13	12	13	11	11	13	11
10	Fluoride-F	mg/l	0.4	0.5	0.6	0.7	0.4	0.5	0.4	0.7	0.5	0.5	0.6	0.5	0.6	0.5	0.4	0.5	0.4	0.5
11	Iron-Fe	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12	Sulphide (as H2S)	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13	Calcium-Ca	mg/l	159	151	148	157	148	158	162	190	196	148	152	146	223	218	159	181	162	178
14	Magnesium-Mg	mg/l	124	119	117	129	126	131	119	161	151	128	121	112	174	148	118	139	141	139
15	Copper-Cu	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
16	Nickel - Ni	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
17	Lead - Pb	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18	Cyanide - CN	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19	Oil & Grease	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
20	Phenol	mg/l	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

for NETEL (INDIA) LTD

OMPRAKASH YADAV
(Project Incharge)

NEELIMA DALVI
(Technical Manager)

NETEL (INDIA) LIMITED * RABALE * NAVI MUMBAI - 400 701

ISO 9001:2015

ANNEXURE – 12

Expenditure for Environmental Protection Measures

(1st April '2024 to 30th September '2024)

Sr. No.	Reliance Jamnagar Manufacturing Complex	*Expenditure Amount (Rs.)
1	DTA Refinery	9,64,65,261
2	SEZ Refinery	7,26,01,682
3	J3 Complex (PX4 & C2 complexes)	1,92,41,101
	Total	Rs. 18,83,08,044

***Expenditure Amount for Environment Management System which includes expenses incurred for operation cost of ETP; APC equipment; waste management etc**

Reliance Industries Ltd. Jamnagar

Sample : Monitoring of Leak Detection & Repair Procedure (LDAR) conducted during the last Quarter

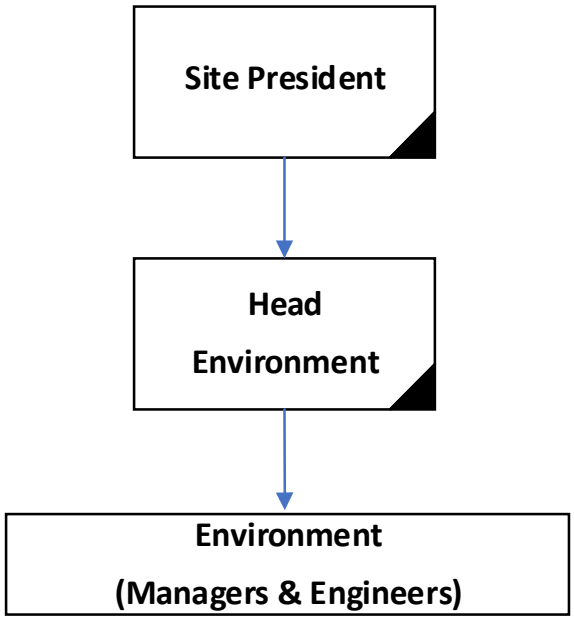
LDAR Summary sheet										
Complex:-		**AROMATICS - DTA**								
Period (Year, Quarter):- Q3		**July 2024 to Sept 2024**								
Plant Name and Unit no	**Equipment Type**	**Last monitoring period (Year, Quarter)**	**No Of Sources identified**	**Inaccesible & Insulated Sources**	**No. of sources checked**	**No of leaks**	**% Leak**	**No. of leaks attended**	**No. of leaks to be attended during shutdown**	**Remarks**
Aromatics	Valves	July 2024 to Sept 2024	1380	108	1272	3	0.24	3	0	
Aromatics	Flanges	July 2024 to Sept 2024	12010	562	11448	0	0.00	0	0	
Aromatics	Pump Seals	July 2024 to Sept 2024	210	3	207	0	0.00	0	0	
Aromatics	Compressor Seals	July 2024 to Sept 2024	15	0	15	0	0.00	0	0	
Aromatics	PRVs	July 2024 to Sept 2024	285	0	285	0	0.00	0	0	
Aromatics	Heat Exchangers	July 2024 to Sept 2024	171	0	171	0	0.00	0	0	
	Total		**14071**	**673**	**13398**	**3**	**0.24**	**3**	**0**	

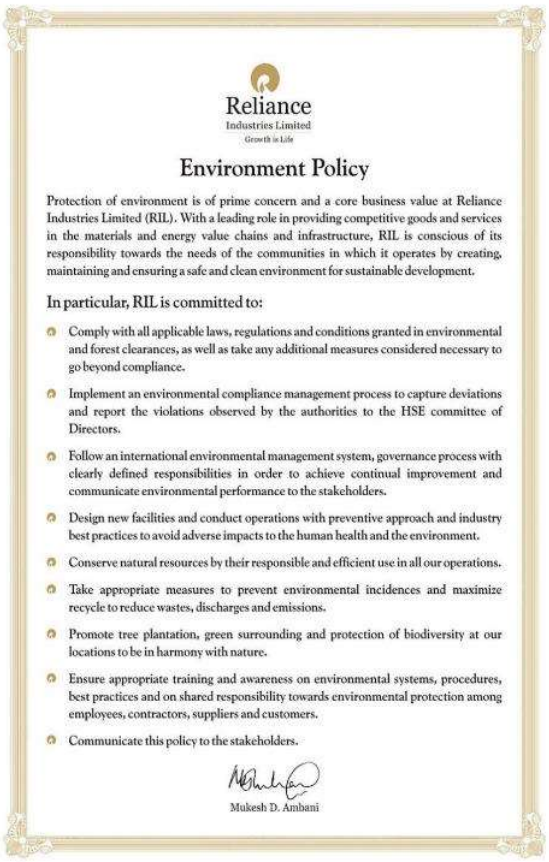
*All inaccessible sources for LDAR completed

ANNEXURE – 14

Reliance Industries Ltd. Jamnagar

Organogram of Environment Department





Reliance
Industries Limited
Growth is Life

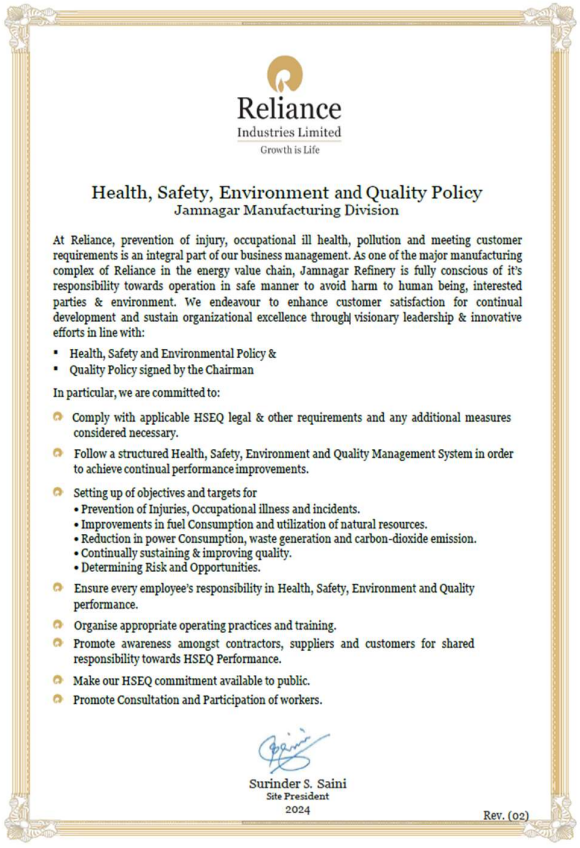
Environment Policy

Protection of environment is of prime concern and a core business value at Reliance Industries Limited (RIL). With a leading role in providing competitive goods and services in the materials and energy value chains and infrastructure, RIL is conscious of its responsibility towards the needs of the communities in which it operates by creating, maintaining and ensuring a safe and clean environment for sustainable development.

In particular, RIL is committed to:

- Comply with all applicable laws, regulations and conditions granted in environmental and forest clearances, as well as take any additional measures considered necessary to go beyond compliance.
- Implement an environmental compliance management process to capture deviations and report the violations observed by the authorities to the HSE committee of Directors.
- Follow an international environmental management system, governance process with clearly defined responsibilities in order to achieve continual improvement and communicate environmental performance to the stakeholders.
- Design new facilities and conduct operations with preventive approach and industry best practices to avoid adverse impacts to the human health and the environment.
- Conserve natural resources by their responsible and efficient use in all our operations.
- Take appropriate measures to prevent environmental incidences and maximize recycle to reduce wastes, discharges and emissions.
- Promote tree plantation, green surrounding and protection of biodiversity at our locations to be in harmony with nature.
- Ensure appropriate training and awareness on environmental systems, procedures, best practices and on shared responsibility towards environmental protection among employees, contractors, suppliers and customers.
- Communicate this policy to the stakeholders.

Mukesh D. Ambani



Reliance
Industries Limited
Growth is Life

Health, Safety, Environment and Quality Policy
Jamnagar Manufacturing Division

At Reliance, prevention of injury, occupational ill health, pollution and meeting customer requirements is an integral part of our business management. As one of the major manufacturing complex of Reliance in the energy value chain, Jamnagar Refinery is fully conscious of it's responsibility towards operation in safe manner to avoid harm to human being, interested parties & environment. We endeavour to enhance customer satisfaction for continual development and sustain organizational excellence through visionary leadership & innovative efforts in line with:

- Health, Safety and Environmental Policy &
- Quality Policy signed by the Chairman

In particular, we are committed to:

- Comply with applicable HSEQ legal & other requirements and any additional measures considered necessary.
- Follow a structured Health, Safety, Environment and Quality Management System in order to achieve continual performance improvements.
- Setting up of objectives and targets for
  - Prevention of Injuries, Occupational illness and incidents.
  - Improvements in fuel Consumption and utilization of natural resources.
  - Reduction in power Consumption, waste generation and carbon-dioxide emission.
  - Continually sustaining & improving quality.
  - Determining Risk and Opportunities.
- Ensure every employee's responsibility in Health, Safety, Environment and Quality performance.
- Organise appropriate operating practices and training.
- Promote awareness amongst contractors, suppliers and customers for shared responsibility towards HSEQ Performance.
- Make our HSEQ commitment available to public.
- Promote Consultation and Participation of workers.

Surinder S. Saini
Site President
2024

Rev. (02)