

Dated: 28th November '2023

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 M/s. Reliance Sibur Elastomer Pvt. Ltd., Jamnagar, for the period ending 30th September '2023.

Dear Sir,

Please find herewith the Six-monthly EC compliance reports of M/s. Reliance Sibur Elastomer Pvt. Ltd., Jamnagar for the period 01st April '2023 to 30th September '2023.

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

Thanking you,

Yours truly, For M/s. Reliance Sibur Elastomer Pvt. Ltd.

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Authorized Signatory

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

ENVIRONMENT CLEARANCE COMPLIANCE & MONITORING REPORT

Six Monthly Report (01st April '2023 to 30th September '2023)

Reliance Sibur Elastomer Private Ltd. (RSEPL) Jamnagar

Reliance Sibur Elastomer Pvt. Limited, Jamnagar

Compliance Report for the conditions of Environment Clearance granted by MoEF&CC vide letter no.: No. J-11011/149/2007-IA.II (I) Dt. 03.06.2020, for Manufacturing of Butyl Rubber (120KTA) and Halo-Butyl Rubber (60 KTA) at Jamnagar, for six months ending 30th September '2023.

Project Status: The Rubber Complex project is operational, and CTO is obtained from GPCB.

Sr. No.	Stipulations	Status of Compliance
1.	This has reference to your online proposal No. IA/GJ/IND2/110022/2019 Dt. 19 th July 2019 for amendment/bifurcation of the environmental clearance (EC) dated 30 th March 2010 between M/s Reliance Industries Itd. & M/s Reliance Sibur Elastomers Pvt Ltd (RSEPL).	
В.	Specific Conditions:	
(i)	IIR plant effluent to be treated in ETP of C2 complex of RIL and HIIR effluent will be treated in designated ETP in HIIR plant so as to meet treated effluent standards notified by the Ministry. The treated effluent from HIIR ETP will be sent for tertiary treatment in C2 complex. The treated effluent will be resused in cooling tower make up, horticulture etc. to the maximum extent. Fresh Water for usage will be supplied by RIL from its desalination plant.	Complied with. The effluent from IIR complex is being treated in the ETP and the treated water is further treated in ETP of RIL C2 complex. For analysis report pl. refer ANNEXURE 1
(ii)	The company shall comply with effluent and emission standards for Petrochemical Plants of CPCB/MoEF.	The treated effluent quality is well within the prescribed standards.
(iii)	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 SO ₂ , NO _x , PM ₁₀ , Ozone, CO, Benzene and Benzo (a) pyrene and data submitted to MoEF/CPCB/SPCB.	Complied with. Stipulated number of AAQM stations have been setup. Please refer Annexure 2 for AAQMs results.
(iv)	The gaseous emissions (SO ₂ , PM ₁₀ , NO _x , 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.	Will be complied with. Gaseous emissions in the complex are designed to be within the stricter standards prescribed by the authorities. In case of any likelihood of exceedance corrective actions are laid down to avoid it. Presently there are no emissions from the IIR unit.
(v)	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.	Complied with. Suitable stack height as per the prescribed standards and acoustic enclosures are provided for all the DG sets. DG sets are used only for emergency purpose as power supply is from RIL CPP.

Six Monthly EC Compliance

Sr. No.	Stipulations	Status of Compliance
(vi)	The company shall use low sulphur fuel to minimize SO ₂ emission. Stacks which are contributing to more SO ₂ emissions shall be identified and SO ₂ emissions shall be reduced by changing the fuel or by increasing the height of major stacks to bring GLC within the prescribed limits.	The best available technology is incorporated & established in the Front- End Engineering Design (FEED) for the units for reduction & minimization of GLC. All stack heights are in accordance to standards and there is no exceedance on the GLCs monitored.
(vii)	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.	The best available technology is incorporated & established in the FEED for reduction & 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.
(viii)	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.	Being Complied with.
(ix)	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.	Included in the design that the safety and emergency discharges of HC are routed to the flare system & 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 .
(x)	Necessary authorization required under the Hazardous & other wastes (Management & Trans-boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to. 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.	GPCB has granted CTO for the complex which consist of Authorization i.e Consolidated Consent & Authorization (CC&A)
(xi)	M/s RJIL shall undertake measures for fire fighting facilities in case of emergency.	Firefighting facilities are established.
(xii)	All pressure vessels shall be of SIL -3 level product at par with the existing refineries.	Included in design
(xiii)	Any relief system for major hazardous releases shall have at least double or triple backup system against the possibility of human error.	Included in design
(xiv)	Th company shall submit reports of last 2-3 years regarding external safety audit.	Will be complied with.

Sr. No.	Stipulations	Status of Compliance	
(xv)	M/s RSEPL shall undertake rainwater harvesting measures, to recharge the ground water and also to minimize the water drawl from the weir.	Storm water pond is already established within the complex.	
(xvi)	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.	Being Complied with.	
(xvii)	Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health center shall be strengthened and the medical records of each employees shall be maintained separately.	Complied with. Annual Periodical Medical Examination for all employees are carried out and their records are maintained. During the last six months year ending 30 th Sept '2023 100% scheduled employees PME were covered.	
(xviii)	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.	Project is being supported by RIL with necessary infrastructure.	
	B. General Conditions:		
(i)	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.	Noted.	
(ii)	The project proponent shall ensure compliance of 'National Emission Standards' as applicable to the project, issued by the Ministry from time to time. The project proponent shall also abide by the rules/regulations issued by CPCB/SPCB for control/abatement of pollution.	Being Complied with.	
(iii)	The project authorities shall adhere to the situations made by SPCB/committee, CPCB, State Government and any statutory authority.		
(iv)	The PP shall prepare a site-specific Conservation Plan & Wildlife Management Plan in case of presence of schedule-I species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approved. The recommendations shall be implemented in	Not Applicable.	

Sr. No.	Stipulations	Status of Compliance	
	consultation with the State Forest/Wildlife Department in a time bound manner.		
(v)	No further expansion or modernization in the plant should be carried out without prior approval of the Ministry of Environment, Forests and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for Clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	Noted	
(vi)	The energy sources for lighting purposes shall preferably be LED based, or advance having preference in energy conservation and environment betterment.	Almost all the peripheral street lighting, plant area lighting and office buildings have been converted to LED based/ energy conservation lighting.	
(vii)	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.	Complied with. Please Refer Annexure 2 .	
(viii)	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.	Being complied with	
(ix)	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).	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. Please refer Annexure 3 .	
(x)	The company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge ground water, and to utilize the same for process requirements.	Rainwater Harvesting in Jamnagar complex is developed through a network of storm water ponds and is reused. The storm water run-off from the IIR complex is collected in these ponds.	
(xi)	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.	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 must undergo mandatory training modules which includes safe handling; safe operations, safety management systems etc for hazardous chemicals.	

Sr. No.	Stipulations	Status of Compliance	
		Occupational Health Department carries out regular medical checkups of all employees and records are maintained.	
(xii)	The company shall also 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.	Noted & complied with.	
(xiii)	The company shall undertake all relevant measures for improving socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villagers, administration and shall be implemented.	Being complied with as a common program for Jamnagar site.	
(xiv)	The company shall undertake eco- developmental measures including community welfare measures in the project area for overall improvement of the environment	Being complied with.	
(xv)	A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/ specialization in the project area) equipped with full-fledged laboratory facility shall be set up to carry out the Environmental Management and Monitoring functions.	Already the cell is established. Refer Departmental Organogram Annexure 4 .	
(xvi)	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.	Complied with. During the last Six Months ending 30 th Sept '2023, the total recurring environmental management/ pollution control measures expense was approximately Rs. 59,40,872/	
(xvii)	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.	Complied with.	
(xviii)	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&CC, the respective zonal office of CPCB and the State Pollution Control Board. A copy of EC & six monthly compliance status report shall be posted on the website of the company.	Complied with.	

Sr. No.	Stipulations	Status of Compliance
(xix)	The Environmental statement for each financial years ending 31 st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.	Noted & will be complied with.
(xx)	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 and at <u>http://parivesh.nic.in/.</u> 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.	Complied with. Pl. refer Annexure 5 for Advertisement copy
(xxi)	The project proponents shall inform the Regional Office as well as the Ministry, the date of financial closure & final approval of the project by the concerned authorities and the date of start of the project.	Will be complied with.
(xxii)	This Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.	Noted.
7.	The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environment clearance, if implementation of any of the above conditions is not found satisfactory.	Noted.
8.	Concealing factual data or submission of false/ fabricated data may result in revocation of this EC and attract action under the provisions of Environment (Protection) Act, 1986.	Noted.
9.	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.	

Sr. No.	Stipulations	Status of Compliance
10.	The above conditions will be enforced, inter- alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air, (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986 Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.	
11.	This issues with the approval of the competent authority.	

ANNEXURE II MONITORING DATA

Six Monthly Report (01st April '2023 to 30th September '2023)

Reliance Sibur Elastomer Private Ltd. (RSEPL) Jamnagar

Reliance Sibur Elastomer Private Ltd. (RSEPL), Jamnagar

List of Six-Monthly Monitoring Reports attached as Annexures

Annexure No. Description	
1 Treated Wastewater Quality Results – C2 Complex ETP	
2 Ambient Air Quality Monitoring Report	
3	Plant Peripheral Noise Monitoring Report
4	Organogram of Environment dept.
5	Copy of Advertisement in Local News Papers

Reliance Sibur Elastomer Pvt. Ltd. Jamnagar. (RSEPL Complex).

Sr.No.	PARAMETERS	Unit	Min Value	Max Value	Average Value
1	рН		7.5	7.7	7.6
2	Total Suspended Solids	mg/l	10	14	12.3
3	Biochemical Oxygen Demand	mg/l	5.0	8.0	6.0
4	Chemical Oxygen Demand	mg/l	40.0	44.0	42.7
5	Phenols (as C6H5OH)	mg/l	0.1	0.1	0.1
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	0.6	0.8	0.7

Treated Water Quality – RIL C2-COMPLEX ETP (01st April '2023 to 30th September '2023)

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

2) N.D. : Not Detectable

Reliance Sibur Elastomer Pvt. Ltd. Jamnagar. (RSEPL Complex).
AMBIENT AIR QUALITY MONITORING RESULTS
(01 st April '2023 to 30 th September '2023)

LOCATION	MINIMUM	MAXIMUM VALUE	AVERAGE VALUE
POLLUTANT – PM2.5 (μg/m3)			
IIR Old Gate	20	33	28
IIR Material Gate Office	19	37	27
Nr ETP (C2 Complex)	20.0	33.0	27.3
FWP (C2 Complex)	19.0	35.0	27.7
POLLUTANT – PM10 (μg/m3)			
IIR Old Gate	40	53	47
IIR Material Gate Office	40	53	48
Nr ETP (C2 Complex)	40.0	53.0	47.5
FWP (C2 Complex)	40.0	54.0	48.0
POLLUTANT - SO2 (µg/m3)			
IIR Old Gate	11	36	19
IIR Material Gate Office	9	30	18
Nr ETP (C2 Complex)	11.0	33.0	19.0
FWP (C2 Complex)	9.0	30.0	19.2
POLLUTANT – NO2 (µg/m3)			
IIR Old Gate	15	35	25
IIR Material Gate Office	15	38	25
Nr ETP (C2 Complex)	13.0	35.0	24.8
FWP (C2 Complex)	15.0	36.0	24.8
POLLUTANT - NH3 (μg/m3)			
IIR Old Gate	10	26	17
IIR Material Gate Office	10	27	16
Nr ETP (C2 Complex)	10.0	27.0	16.8
FWP (C2 Complex)	11.0	27.0	16.3
POLLUTANT - CO (mg/m3)			
IIR Old Gate	1.03	2.15	1.39
IIR Material Gate Office	1.04	2.05	1.46
Nr ETP (C2 Complex)	1.00	2.09	1.43
FWP (C2 Complex)	1.05	2.18	1.44
POLLUTANT – Benzene (µg/m3)			
IIR Old Gate	1.01	1.24	1.13
IIR Material Gate Office	1.04	1.18	1.12
Nr ETP (C2 Complex)	1.1	1.2	1.1
FWP (C2 Complex)	1.0	1.2	1.1

Reliance Sibur Elastomer Pvt Ltd. Jamnagar

Six Monthly EC Compliance

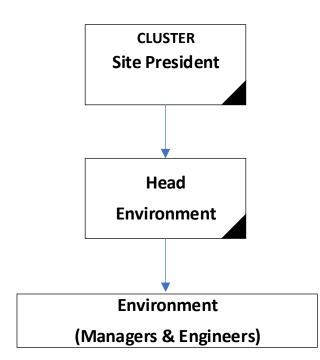
Reliance Sibur Elastomer Pvt. Ltd. Jamnagar. (RSEPL Complex).

NOISE QUALITY MONITORING RESULTS (01st April '2023 to 30th September '2023)

Sr. No.	Area /Location	Noise Level (dBA) Day-time	
		Minimum Value	Minimum Value
1	Laboratory & Admin Bldg	50	57
2	MMC Storage Yard	44	56
3	Material Gate	57	66
4	Storm Water Pond 20	54	67
5	Cooling Tower	51	59
6	Flare Area	56	65

Reliance Sibur Elastomer Pvt Ltd. Jamnagar

Organogram of Environment Department



Reliance Sibur Elastomer Pvt Ltd. Jamnagar

Copy of Advertisement in Local News Papers

Press Clippings

Publication	The Indian Express
Edition	Rajkot
Date	10-06-2020
Page	: 05



Press Clippings

Publication	:	Sandesh
Edition	:	Rajkot
Date	:	10-06-2020
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Reliance Sibur Elastomer Pvt Ltd. Jamnagar Six Monthly EC Compliance 01st Apr '23 To 30th Sept '23