

By Email/Web-Portal April 30, 2024

To,

Ministry of Environment, Forest and Climate Change, Integrated Regional Office, A-Wing- 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector 10A, Gandhinagar, Gujarat – 382010; Email: <a href="mailto:iro.gandhingr-mefcc@gov.in">iro.gandhingr-mefcc@gov.in</a>, rowz.bpl-mef@nic.in

Sub.: Tata Chemicals Limited, Mithapur (Gujarat)- Half Yearly Compliance Status Report for the Environmental Clearance (F. No. J-11011/140/2016.IA-II(I) dated July 05, 2019)

Madam/Sir,

We are here with enclosing half Yearly (October 2023 to March 2024) status report for the above referred Environmental Clearance.

Thanking you Yours sincerely,

For Tata Chemicals Limited

Sanjeev Jain AGM-EMS

### Copy to:

- The Regional Officer, Gujarat Pollution Control Board, Sardar Patel Bhavan, Rameshwar Nagar, Jamnagar – 361 008 Email: <u>ro-gpcb-jamn@gujarat.gov.in</u>
- The Regional Director, Central Pollution Control Board, Parivesh Bhawan, Opp. VMC Ward Office No. 10, Subhanpura Vadodara -390 023 Email: <u>ec-rdw.cpcb@gov.in</u>
- 3. Copy of compliance Report upload on MoEFCC-Parivesh and TCL portal

Enclosed: As above



By Email/Web-Portal April 30, 2024

To,

Ministry of Environment, Forest and Climate Change, Integrated Regional Office, A-Wing- 407 & 409, Aranya Bhawan, Near CH-3 Circle, Sector 10A, Gandhinagar, Gujarat – 382010;

Email: iro.gandhingr-mefcc@gov.in, rowz.bpl-mef@nic.in

Sub.: Tata Chemicals Limited, Mithapur (Gujarat)- Half Yearly Compliance Status Report for the Environmental Clearance (F. No. J-11011/66/1999.IA-II(I) dated June 18, 2019)

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# Half Yearly Compliance status report of Environmental Clearance F. No. J-11011/140/2016- IAII (I) Dated 5th July, 2019

S.No.	Compliance of terms and Conditions	Compliance Status (Oct-23 to Mar'2024)
9.	Based on the proposal submitted by the project the EAC (Industry-2), Ministry of Environment accords environmental clearance to the project 1091000 TPA to 1316000 TPA and Captive P M/s Tata Chemicals Ltd at villages Mithapur Devbhumi Dwarka (Gujarat), under the provision to the compliance of terms and conditions as I	nt, Forest and Climate change hereby for Expansion of Soda Ash Plant from ower Plant from 85 MW to 125 MW by and Surajkaradi, Taluka Dwarka, District ons of the EIA Notification, 2006, subject below:-
(a)	The environmental clearance shall be subject to obtaining prior clearance from the wildlife angle, including clearance from the Standing Committee of the National Board for Wildlife, as applicable.	No notified area falls in existing plant premises wherein expansion is being done; hence clearance from the standing committee of the National Board for Wildlife is not applicable. However, the treated waste water discharge system is passing through notified Marine Sanctuary for which NBWL clearance has been obtained vide letter no. WLP/32/B/1813-18/2017-18 dated 01.06.2017.
(b)	Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board.	Company has obtained Consent to Establish from Gujarat Pollution Control Board for expansion capacity vide consent no. 85533 dated 19.06.2017. Consent to Operate has been obtained from Gujarat Pollution Control Board vide consent no. AWH - 129468 dated 04.10.2023 (valid up to 11.08.2027).
(C)	Necessary authorization required under the Hazardous and Other Wastes (Management and 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.	Company has obtained Authorization as per Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 from Gujarat Pollution Control Board vide CCA order no. AWH - 129468 dated 04.10.2023 (valid up to 11.08.2027).
(d)	National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.	National Emission Standards for Organic Chemicals Manufacturing Industry are not applicable; as the proposed expansion is in Soda Ash (Inorganic Industry) production capacity & Captive Co-generation thermal power plant. Company has submitted clarification letter to MoEFCC, New Delhi vide TCL letter No. A/WG/294-A/2019 dated 12.07.2019.
(e)	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	To control source emissions, adequate air pollution control equipment's have been installed and for control of fugitive emissions, Bag filters have been provided at transfer points.

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# Half Yearly Compliance status report of Environmental Clearance F. No. J-11011/140/2016- IAII (I) Dated 5th July, 2019

276000 cum/day. No additional fresh water/Sea water shall be required for proposed expansion.  (g) Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance within 276000 M3/day. No additional fresh/sea water is required for expansion project beyond this granted capacity.  Process Effluent/ wastewater is conveyed through closed pipelines (from filtration plant to settling ponds). Final treated waste water is mixed with spent sea water.	/ <b>f</b> /		
allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. through closed pipelines (from filtration plant to settling ponds). Final treate waste water is mixed with spent sea water and discharged into Sea as per prescribe		276000 cum/day. No additional fresh water/Sea water shall be required for proposed expansion.	
The storm water from the premises	(g)	allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance	The storm water from the premises is collected and discharged through separate
<u> </u>	(h)	tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm, and solvent	,
shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF  generate organic residue and sper carbon. Effluent solids from Soda as manufacturing process are filtered an utilised in Cement plant and construction of bunds in settling ponds and greenbed development. Company has submitted	(i)	shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be	carbon. Effluent solids from Soda ash manufacturing process are filtered and utilised in Cement plant and construction of bunds in settling ponds and greenbelt development. Company has submitted clarification vide TCL letter No A/WG/294-
and guidelines under Manufacture, Storage and Import of hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.  guidelines under Manufacture, Storage and Import of hazardous Chemical (MSIHC) Rules, 1989 as amended time time.  All transportation of Hazardous Chemical	(j)	and guidelines under Manufacture, Storage and Import of hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be	(MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals is being done as per the Motor Vehicle Act
guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash & dust should be avoided.  By pneumatically; so, there is no direct exposure of workers to fly ash & dust However, workers working in fly ast loading/handling area are provided with PPE's.  Fly ash is transported in Closed Bulker	(k)	guidelines so that it may not adversely affect the air quality. Direct exposure of workers to fly ash	Fly ash is transported in Closed Bulker/covered vehicles for utilisation in cement
(I) The company shall undertake waste Company has implemented integrate minimization measures as below:- waste management practices for	(1)	, ,	Company has implemented integrated waste management practices for
(i)   Wetering and control of quantities of active	(i)		utilisation of waste in cement manufacturing. Following practices are in

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# Half Yearly Compliance status report of Environmental Clearance F. No. J-11011/140/2016- IAII (I) Dated 5th July, 2019

(ii)	Reuse of by-products from the process as raw	place for waste minimisation:		
	materials or as raw material substitutes in other	1. Metering & Control of quantities		
	processes.	2. Reuse of undersize limestone, Effluent		
(iii)	Use of automated filling to minimize spillage.	Solids and Fly ash		
(iv)	Use of Close Feed system into batch reactors.	3. Automated filling system- Fly ash		
(v)	Venting equipment through vapour recovery system.	handling 4. Closed Feed system- Coal Charging		
(vi)	Use of high pressure hoses for equipment clearing to reduce wastewater generation	system & Soda Ash manufacturing 5. Ammonia still process- Recovery of ammonia and recycle into same process		
(m)	The green belt of at least 5-10 m width shall be developed in nearly 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	Greenbelt has been developed as per Environment Management Plan (EMP) given in EIA report.		

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# Half Yearly Compliance status report of Environmental Clearance F. No. J-11011/140/2016- IAII (I) Dated 5th July, 2019

(n)	All the commitments made to the public during	Tata Chemicals Society for Rural
	public hearing/consultation shall be	Development has been working for CSR
	satisfactorily implemented.	activities. TCSRD'S Programmes:
	, '	A.Building Economic Capital Farm Based
		Livelihood (Unnati):
		1)Agriculture Development
		2)Livestock Management
		3)Centre For Sustainable Agriculture &
		Farm Excellence (C-SAFE) Non-Farm Based
		Livelihood
		a)Skill Training Programme (Badte Kadam)
		b)Cluster & Rural Enterprise Development
		Programme
		c)Okhai Centre For Empowerment
		B.Ensuring Environmental Integrity Natural
		Resource Management
		1)Watershed Development and Water
		Management (Jal Dhan)
		2)Soil and Land Improvement
		3)Waste Management
		4)Biodiversity Conservation Centre for
		Sustainable Conservation Action for the
		Protection of the Ecosystems of the Seas
		(C-SCAPES)
		C.Enablers for Sustainable Development
		1)Education (Shiksha Maitree)
		2)Health & Nutrition
		3)Drinking Water & Sanitation
		D.Building Social Capital
		1)Women Empowerment
		2)Community-Based Organisations (CBOs)
		3)Institution Building
		4)Reducing Inequality Of Marginalised
		Communities Through Armative Action
		E.Employee Volunteering
		Annual Report of TCSRD is published with
		details on project implementation.
(o)	At least 0.25% of the total project cost shall be	0.25 % of the total project cost has been
	allocated for Corporate Environment	allocated towards Corporate Environment
	Responsibility (CER) and item-wise details along	Responsibility (CER) and plan with item-
	with time bound action plan shall be prepared	wise details along with time bound action
	and submitted to the Ministry's Regional Office.	plan and submitted to MoEFCC, New Delhi
		along with EIA/EMP report.
		Details of the expenditures are published
		in TCSRD annual reports.

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# Half Yearly Compliance status report of Environmental Clearance F. No. J-11011/140/2016- IAII (I) Dated 5th July, 2019

(p)	For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	Emission limits and the stack height are in conformity with the prescribed norms. Acoustic enclosures are provided for controlling the noise pollution. However, D.G. Sets are only for emergency start up.
(q)	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per the norms.	Fire prevention and control System is in place as a part of Emergency Plan.
(r)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	TCL has established procedures and formats as per ISO 45001:2018 for occupational health management system (QSW-730-GEN-11).  Pre-employment, periodic and exit medical examination is being conducted for employees & contractors.  Employees involved in hazardous area are medically tested once in six months in compliance to Rule 68 (R) legal requirement under Gujarat Factories Rule, 1963.  TCL has Full-fledged Occupational Health center having qualified medical officer and staff. Ambulance van available for round the clock basis with the dedicated driver.
(s) 9.1	Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.  The grant of Environmental Clearance is further conditions as under:-	Online monitoring system has been installed as per CPCB guidelines. The system is connected to CPCB and GPCB server.
(i)	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.	The Company adheres to the stipulations made by GPCB.

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# Half Yearly Compliance status report of Environmental Clearance F. No. J-11011/140/2016- IAII (I) Dated 5th July, 2019

(ii)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest 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.	No further Expansion or modifications in the plant will be carried out without prior approval of the Ministry of Environment, Forest and Climate Change.
(iii)	The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	<ul> <li>AAQ monitoring is conducted in locations selected as per CPCB guidelines (by NABL Lab) and in consultation with the GPCB.</li> <li>1. Manual Ambient Air Quality Monitoring Stations.</li> <li>2. Continuous Ambient Air Quality Monitoring Stations</li> <li>It has been ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.</li> </ul>
(iv)	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.	Ambient air quality is monitored for prescribed parameters and National Ambient Air Quality Standards.
(v)	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	Ambient Noise Levels around the plant area conform to the prescribed standards. Adequate noise control measures are provided.
(vi)	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.	Company has existing rainwater harvesting facilities in township area.
(vii)	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.	Company has established process for training on Safety & health aspects of chemicals handling and periodical medical examinations are conducted as per schedule.

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# Half Yearly Compliance status report of Environmental Clearance F. No. J-11011/140/2016- IAII (I) Dated 5th July, 2019

(viii)	The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing shall be implemented.	Company is complying with the environmental management program (EIA/EMP).
(ix)	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.	Tata Chemicals Society for Rural Development is working for CSR activities.
(x)	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	Environmental Management Cell is equipped with full-fledged laboratory facilities and conducts the Environmental Monitoring for the prescribed parameters.
(xi)	The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.	Company has earmarked sufficient funds to implement the environment management program.
(xii)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal.	Copies of environment clearance has been submitted to Okha Nagarpalika, Taluka Development Officer and District Development Officer vide letter no A/WG/278/2019 dated 04.07.2019.
(xiii)	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company	Six- monthly compliance report is submitted along with results of monitored data.

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# Half Yearly Compliance status report of Environmental Clearance F. No. J-11011/140/2016- IAII (I) Dated 5th July, 2019

(xiv)	The environmental statement for each financial	Environment Statement (Form-V) is
	year ending 31st March in Form-V as is	submitted to the GPCB and copy of the
	mandated shall be submitted to the concerned	same is uploaded on Company's Web
	State Pollution Control Board as prescribed	portal.
	under the Environment (Protection) Rules, 1986,	Copy of the Form-V and status of
	as amended subsequently, shall also be put on	compliance of environmental clearance
	the website of the company along with the	conditions are being submitted to Regional
	status of compliance of environmental clearance	offices of MoEF&CC by e-mail.
	conditions and shall also be sent to the	
	respective Regional offices of MoEF&CC by e-	
	mail.	
(xv)	The project proponent shall inform the public	Advertisement has been published in
	that the project has been accorded	News Papers. Copies of the
	environmental clearance by the Ministry and	advertisements have been submitted to
	copies of the clearance letter are available with	the Ministry.
	the 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.	

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	TATA CHEMICALS LIMITED, MITHAPUR									
	STACK EMISSIONS MONITORING REPORT									
MONTH: October 2023 (  Sr.   Stack   Paramete Permissible limits   Date of Results (										
Sr. No	Stack	k Stack Attached To Paramete Permissible limits Date of Results		Results	CEMS Result					
	No.	Stack Attached 10	rs	(mg/Nm³)	Sampling	(mg/Nm <sup>3</sup> )	(mg/Nm3)			
		Boiler-1 (CEHP1)	PM	100		25	44			
1	RCC-1	Boiler-2 (CEHP2)	SO2	600	25.10.2023	146	37			
		Boiler-3 (B&W)	NOx	600		159	210			
			PM	100		39	64			
2	RCC 2	Boiler-4 (IBIL)	SO2	600	25.10.2023	98	40			
			NOx	600		73	181			
			PM	100		52	44			
3	RCC 3	Boiler –5 (HPB3)	SO2	600	25.10.2023	348	139			
			NOx	600		224	14			
			PM	100		72	13			
3	RCC 3	Boiler –6 (HPB4)	SO2	600	25.10.2023	383	138			
			NOx	600		272	39			
5	1	HCL Furnace	HCl	20	25.10.2023 1.4		0.7			
6	2	Chlorine Plant	Chlorine	9	25.10.2023	BDL	0.6			
7		Bromine Plant	Bromine		25.10.2023	0.9	0.0			
$\bigsqcup'$	3	Bromine Plant	NCP 1	2	25.10.2025		-			
		Cement Plant Raw	PM	30		8	11			
8	4	Mill and Kiln	SO2	100	26.10.2023	7	0.2			
			NOx	1000		384	620			
		Cement Plant Coal	PM	30		2	3			
9	5	Mill Old	SO2		26.10.2023	BDL	0.0			
			NOx	O2 100 26 Ox 1000		BDL	26			
		Cement Plant Coal	PM	30		1	10			
10	6	Mill New	SO2	100	26.10.2023	BDL	1.6			
			NOx	1000		BDL	112			
15	7	Alkali Bypass	PM	30	26.10.2023	6	9			
13	8	Dryer Crusher PM 30		30	26.10.2023	3	3			
14	9	Cooler	PM	30	26.10.2023	1	4			
11	10	Cement Mill	PM	30	_	-	4			
12	11	Cement Packer-1	PM	30	26.10.2023	3	5			
		Cement Packer-2	PM	30	26.10.2023	3	4			
16	12	Drying unit of  Monohydrate	PM	150	25.10.2023	85	-			
		etectable Limit peration								
	NO- Not in Operation									

<sup>Monthly Report- October 2023 Uploaded in XGN on 18/12/2023 17:43:40 from IP No: 172.16.31.15.
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			TATA CHEI	MICALS LIMI	TATA CHEMICALS LIMITED, MITHAPUR	UR				
		AMBIE	NT AIR QUAL	ITY MONITO	AMBIENT AIR QUALITY MONITORING REPORT (NABL Lab)	T (NABL Lab)				
			Σ	MONTH: October 2023	ber 2023					
Sr. No.	LOCATION	DATE	PM 10 (μg/m3)	PM 2.5 (μg/m3)	Sulphur dioxide (µg/m3)	Oxides of Nitrogen (µg/m3)	Cl <sub>2</sub> (µg/m3)	Ammonia (µg/m3)	HCI (µg/m3)	CO (µg/m3)
н	Sewage Treatment Plant	25.10.2023	38	18	6	13				
7	Padli Substation (Nursery)	25.10.2023	49	14	8	14	1	1	1	
4	Effluent Analyser at Final Discharge Point	26.10.2023	45	20	∞	14		,		
	BDL= Below detectable limit									
	CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT	<b>BIENT AIR Q</b>	<b>UALITY M</b>	ONITORING	REPORT					
Sr. No.	Location	Date	PM10	PM2.5	205	NOX				
1	CAAQMS - Director Bunglow	Oct-23	42	18	0.5	8.0				
7	CAAQMS - Malara Green Cap	Oct-23	52	26	1.0	5.9				

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### TATA CHEMICALS LIMITED, MITHAPUR

## EFFLUENT ANALYSIS REPORT MONTH: October 2023

### **Final Treated Waste Water**

Date	Suspended Solids	Ammonical Nitrogen	рН	Temp	Oil & Grease	Color	Treated waste water Quantity	Bioassay Test
Unit	mg/l	mg/l	NIL	°c	mg/l	Pt-Co scale	M3/Day	90 % Survival of the fish after 96
GPCB Prescribed Limit	500	5	6.5 to 9.5	Max. 40	2	100	2,40,000	hrs. in 100 % effluent
27.10.2023	188	0.73	8.2	30	BDL	10	-	Pass
Online Analyser (Monthly Avg)	72	-	7.7	27	-	-	1,71,720	-

### BDL= Below detectable limit

### **STP FINAL OUTLET**

Date	pН	BOD 3 days 27 °C	Suspended Solids	Fecal Colifrom	Qty.of Treated STP outlet Recycled	Qty.of Treated STP outlet Disharged into Sea
Unit	-	mg/l	mg/l	MPN/ml	KLPD	KLPD
GPCB Prescribed Limit	6.5 to 9.0	30	100	1000/100		2,400
27.10.2023	7.7	7.1	26.3	220	1,213	0

o.  1 R 2 F	Stack No. RCC-1 RCC 2			Permissible limits (mg/Nm³)  100  600  600  100	Date of Sampling	Results (mg/Nm³) 23 86	Monitoring System (Monthly Avg)  CEMS Result (mg/Nm3)
o.  1 R 2 F	No. RCC-1	Stack Attached To  Boiler-1 (CEHP1) Boiler-2 (CEHP2) Boiler-3 (B&W)	Paramete rs PM SO2 NOx PM SO2	Permissible limits (mg/Nm³)  100  600  600	Sampling	(mg/Nm <sup>3</sup> )	Avg) CEMS Result (mg/Nm3) 46
o.  1 R 2 F	No. RCC-1	Boiler-1 (CEHP1) Boiler-2 (CEHP2) Boiler-3 (B&W)	rs PM SO2 NOx PM SO2	(mg/Nm³) 100 600 600	Sampling	(mg/Nm <sup>3</sup> )	(mg/Nm3) 46
1 R	RCC-1	Boiler-1 (CEHP1) Boiler-2 (CEHP2) Boiler-3 (B&W)	PM SO2 NOx PM SO2	100 600 600		23	46
2 F	RCC 2	Boiler-2 (CEHP2) Boiler-3 (B&W)	SO2 NOx PM SO2	600 600	17.10.2023		
2 F	RCC 2	Boiler-3 (B&W)	NOx PM SO2	600	17.10.2023	86	
3 F		` ,	PM SO2				101
3 F		Boiler-4 (IBIL)	SO2	100		186	478
3 F		Boiler-4 (IBIL)				60	52
	RCC 3		NOx	600	18.10.2023	116	73
	RCC 3			600		160	315
	RCC 3		PM	100		20	47
		Boiler –5 (HPB3)	SO2	600	09.11.2023	11	178
			NOx	600		11	14
_   _			PM	100		39	65
3   F	RCC 3	Boiler –6 (HPB4)	SO2	600	18.10.2023	166	195
		, ,	NOx	600		90	38
5	1	HCL Furnace	HCl	20	21.10.2023	2.3	0.7
6	2	Chlorine Plant	Chlorine	9	09.11.2023	0.3	0.6
7	3	Bromine Plant	Bromine NCP 1	2	09.11.2023	BDL	-
		Coment Plant Pau	PM	30		4	12
8	4	Cement Plant Raw Mill and Kiln	SO2	100	19.10.2023	15	0.0
		IVIIII alla Kiili	NOx	1000		70	644
		Coment Dient Cool	PM	30		4	2
9	5	Cement Plant Coal Mill Old	SO2	100	19.10.2023	17	0.1
		IVIIII OIG	NOx	1000		92	28
		Cement Plant Coal	PM	30		4	8
10	6	Mill New	SO2	100	20.10.2023	11	0.7
		IVIIII IVEV	NOx	1000		90	133
15	7	Alkali Bypass	PM	30	20.10.2023	4	5
13	8	Dryer Crusher	PM	30	19.10.2023	4	6
14	9	Cooler	PM	30	20.10.2023	4	5
11	10	Cement Mill	PM	30	21.10.2023	4	3
12	11	Cement Packer-1	PM	30	22.11.2023	4	4
	_ <del>-</del>	Cement Packer-2	PM	30	20.10.2023	3	5
16	12	Drying unit of  Monohydrate	PM	150	21.10.2023	72	-
3DL - Belo VIO- Not		ectable Limit					

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	ТАТА	CHEMICALS L	IMITED, MIT	HAPUR		
	AMBIENT AIR	QUALITY MON	IITORING REI	PORT (CAAQ	MS)	
		MONTH: No	vember 2023	3		
Sr.	LOCATION	DATE	PM 10	PM 2.5	Sulphur	Oxides of
No.			(µg/m3)	(µg/m3)	dioxide	Nitrogen
					(µg/m3)	(μg/m3)
1	Sewage Treatment Plant	Nov-23	82	49	1	12
2	Padli Substation (Nursery)	Nov-23	81	52	2	10
3	Effluent Analyser at Final Discharge Point	Nov-23	58	52	1	7
	BDL= Below detectable limit	l	1			<b>!</b>
	CONTINUOUS AM	BIENT AIR C	UALITY MO	ONITORING	REPORT	
Sr. No.	Location	Date	PM10	PM2.5	SO2	NOx
1	CAAQMS - Director Bunglow	Nov-23	83	42	0.4	8.9
2	CAAQMS - Malara Green Cap	Nov-23	87	55	1.7	8.8

### TATA CHEMICALS LIMITED, MITHAPUR

### **EFFLUENT ANALYSIS REPORT MONTH: November 2023**

### **Final Treated Waste Water**

Date	Suspended Solids	Ammonical Nitrogen	рН	Temp	Oil & Grease	Color	Treated waste water Quantity	Bioassay Test
Unit	mg/l	mg/l	NIL	°c	mg/l	Pt-Co scale	M3/Day	90 % Survival of the fish after 96
GPCB Prescribed Limit	500	5	6.5 to 9.5	Max. 40	2	100	2,40,000	hrs. in 100 % effluent
09.11.2023	44	0.56	8.09	30	BDL	10	-	Pass
Online Analyser (Monthly Avg)	53	-	7.9	25	-	-	1,85,542	-

### BDL= Below detectable limit

	STP FINAL OUTLET												
Data	mU	BOD 3 days	Suspended	Fecal	Qty.of Treated STP outlet	Qty.of Treated STP outlet							
Date	рН	27 °C	Solids	Colifrom	Recycled	Disharged into Sea							
Unit	-	mg/l	mg/l	MPN/ml	KLPD	KLPD							
GPCB Prescribed Limit	6.5 to 9.0	30	100	1000/100	2,400								
07.11.2023	7.4	3.2	10	170	1,096	0							

	TATA CHEMICALS LIMITED, MITHAPUR STACK EMISSIONS MONITORING REPORT													
	STACK EMISSIONS MONITORING REPORT													
	MONTH: December 2023													
Sr.N	Stack	Stack Attached To	Paramete	Permissible limits	Date of	Results	CEMS Result							
о.	No.	Stack Attached 10	rs	(mg/Nm³)	Sampling	(mg/Nm <sup>3</sup> )	(mg/Nm3)							
		Boiler-1 (CEHP1)	PM	100		44	42							
1	RCC-1	Boiler-2 (CEHP2)	SO2	600	26.12.2023	119	84							
		Boiler-3 (B&W)	NOx	600		485	450							
			PM	100		38	38							
2	RCC 2	Boiler-4 (IBIL)	SO2	600	26.12.2023	93	43							
			NOx	600		48	74							
			PM	100		49	54							
3	RCC 3	Boiler –5 (HPB3)	SO2	600	26.12.2023	232	196							
		, ,	NOx	600		14	16							
			PM	100		65	40							
3														
		,	NOx	600		49	37							
5	1	HCL Furnace	HCl	20	26.12.2023	3.6	0.5							
6	2	Chlorine Plant	Chlorine	9	26.12.2023	2.8	0.6							
			Bromine				0.0							
7	3	Bromine Plant	NCP 1	2	26.12.2023	0.9	-							
		Cement Plant Raw Mill and Kiln	PM	30		ND	12							
8	4		SO2	100	27.12.2023	9	0.0							
		TVIIII GITG TXIII	NOx	1000		597	591							
		Cement Plant Coal	PM	30		ND	2							
9	5	Mill Old	SO2	100	27.12.2023	ND	0.1							
		5.0	NOx	1000		102	45							
		   Cement Plant Coal	PM	30		ND	9							
10	6	Mill New	SO2	100	27.12.2023	ND	1.0							
		IVIIII IVEVV	NOx	1000		334	139							
15	7	Alkali Bypass	PM	30	27.12.2023	ND	5							
13	8	Dryer Crusher	PM	30	27.12.2023	ND	3							
14	9	Cooler	PM	30	27.12.2023	ND	4							
11	10	Cement Mill	PM	30	27.12.2023	ND	1							
12	11	Cement Packer-1	PM	30	27.12.2023	ND	4							
_ <b></b>	<b></b>	Cement Packer-2	PM	30	27.12.2023	ND	3							
16	12	Drying unit of  Monohydrate	PM	150	27.12.2023	16	-							
	ot detecta ot in Ope	able as per NABL certific	ate											
INIO- N	ot in Ope	เฉนบท					I							

<sup>Monthly Report- December 2023 Uploaded in XGN on 24/01/2024 18:44:17 from IP No: 172.16.31.15.
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#### TATA CHEMICALS LIMITED, MITHAPUR AMBIENT AIR QUALITY MONITORING REPORT (NABL Lab) **MONTH: December 2023** PM 10 Oxides of Sr. LOCATION DATE PM 2.5 Sulphur No. $(\mu g/m3)$ $(\mu g/m3)$ dioxide Nitrogen $(\mu g/m3)$ $(\mu g/m3)$ 1 Malara 23 25.12.2023 58 ND ND 2 | Effluent Analyser (Padli) 25.12.2023 64 30 ND 8 **Director Bunglow** 25.12.2023 60 26 ND 10 Mithamahal 25.12.2023 72 34 ND 20 ND= Not detectable as per NABL certificate **CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT** Sr. Location Date PM10 PM2.5 SO<sub>2</sub> NOx No. CAAQMS - Director Bunglow 34 0.6 6.2 Dec-23 65 72 0.7 **CAAQMS - Malara Green Cap** Dec-23 35 1.3 AMBIENT NOISE LEVEL MONITORING REPORT (NABL Lab) **Noise Observation** LOCATION DATE Sr. No. Day Time dB(A) Night Time dB(A) Malara 55.7 53.2 26.12.2023 53.6 2 Effluent Analyser (Padli) 26.12.2023 61.3 54.2 51.6 3 **Director Bunglow** 26.12.2023 Mithamahal 26.12.2023 56.4 52.4

### TATA CHEMICALS LIMITED, MITHAPUR

## EFFLUENT ANALYSIS REPORT MONTH: December 2023

### **Final Treated Waste Water**

Date	Suspended Solids	Ammonical Nitrogen	рН	Temp	Oil & Grease	Color	Treated waste water Quantity	Bioassay Test
Unit	mg/l	mg/l	NIL	°c	mg/l	Pt-Co scale	M3/Day	90 % Survival of the fish after 96
GPCB Prescribed Limit	500	5	6.5 to 9.5	Max. 40	2	100	2,40,000	hrs. in 100 % effluent
26.12.2023	37	2.8	8.57	29.8	ND	5	-	Pass
Online Analyser (Monthly Avg)	49	-	8.3	22	-	-	1,76,190	-

### BDL= Below detectable limit

### STP FINAL OUTLET

	311 THAL GOTEL										
Data	mU	BOD 3 days	Suspended	Fecal	Qty.of Treated STP outlet	Qty.of Treated STP outlet					
Date	рН	27 °C	Solids	Colifrom	Recycled	Disharged into Sea					
Unit	-	mg/l	mg/l	MPN/ml	KLPD	KLPD					
GPCB Prescribed Limit	6.5 to 9.0	30	100	1000/100	0 2,400						
07.12.2023	7.3	3.0	8	158	1,097	0					

	TATA CHEMICALS LIMITED, MITHAPUR  STACK EMISSIONS MONITORING REPORT												
	STACK EMISSIONS MONITORING REPORT												
			MONTH: J	anuary 2024			System (Monthly Avg)						
Sr.N	Stack	Stack Attached To	Paramete	Permissible limits	Date of	Results	CEMS Result						
о.	No.	Stack Attached 10	rs	(mg/Nm <sup>3</sup> )	Sampling	(mg/Nm <sup>3</sup> )	(mg/Nm3)						
		Boiler-1 (CEHP1)	PM	100		61	43						
1	RCC-1	Boiler-2 (CEHP2)	SO2	600	23.01.2024	104	94						
		Boiler-3 (B&W)	NOx	600		457	443						
			PM	100		65	46						
2	RCC 2	Boiler-4 (IBIL)	SO2	600	23.01.2024	71	147						
		,	NOx	600		78	267						
			PM	100		22	46						
3	RCC 3	Boiler –5 (HPB3)	SO2	600	23.01.2024	396	248						
			NOx	600		247	11						
			PM	100		30	33						
3	RCC 3	Boiler –6 (HPB4)	SO2	600	23.01.2024	384	95						
		,	NOx	600		23	19						
5	1	HCL Furnace	HCl	20	23.01.2024	4.1	0.5						
6	2	Chlorine Plant	Chlorine	9	23.01.2024	3.6	1.0						
7	3	Bromine Plant	Bromine NCP 1	2	23.01.2024	0.9	-						
		Coment Plant Paul	PM	30		16	11						
8	4	Cement Plant Raw Mill and Kiln	SO2	100	22.01.2024	7	0.0						
		IVIIII aliu Kiiii	NOx	1000		541	359						
		Carrage Blanck Carl	PM	30		ND	2						
9	5	Cement Plant Coal Mill Old	SO2	100	22.01.2024	ND	0.0						
		IVIIII Old	NOx	1000		98	32						
			PM	30		ND	8						
10	6	Cement Plant Coal Mill New	SO2	100	22.01.2024	ND	1.0						
		IVIIII New	NOx	1000		306	111						
15	7	Alkali Bypass	PM	30	22.01.2024	ND	4						
13	8	Dryer Crusher	PM	30	22.01.2024	ND	2						
14	9	Cooler	PM	30	22.01.2024	ND	3						
11	10	Cement Mill	PM	30	22.01.2024	ND	1						
12	11	Cement Packer-1	PM	30	22.01.2024	ND	5						
		Cement Packer-2	PM	30	22.01.2024	ND	2						
16	12	Drying unit of  Monohydrate	PM	150	25.01.2024	39	-						
	ot detecta ot in Ope	ble as per NABL certific ration	ace										

<sup>Monthly Report- January 2024 Uploaded in XGN on 21/02/2024 18:22:18 from IP No: 172,16,31.15.
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#### TATA CHEMICALS LIMITED, MITHAPUR AMBIENT AIR QUALITY MONITORING REPORT (NABL Lab) **MONTH: January 2024** LOCATION Oxides of Sr. DATE PM 10 PM 2.5 Sulphur Nitrogen No. $(\mu g/m3)$ $(\mu g/m3)$ dioxide $(\mu g/m3)$ $(\mu g/m3)$ 1 Malara **37** 7 22.01.2024 68 ND 2 Effluent Analyser (Padli) 22.01.2024 60 28 ND 10 **Director Bunglow** 22.01.2024 48 23 ND 12 Mithamahal 22.01.2024 55 30 ND **17** ND= Not detectable as per NABL certificate **CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT** Sr. SO<sub>2</sub> NOx Location Date PM10 PM2.5 No. 42 **CAAQMS - Director Bunglow** Jan-24 26 1.2 6.0 63 **CAAQMS - Malara Green Cap** Jan-24 18 1.8 2.0 AMBIENT NOISE LEVEL MONITORING REPORT (NABL Lab) LOCATION DATE **Noise Observation** Sr. No. Day Time dB(A) Night Time dB(A) Malara 55.7 53.2 26.12.2023 53.6 Effluent Analyser (Padli) 26.12.2023 61.3 26.12.2023 54.2 51.6 3 **Director Bunglow** Mithamahal 26.12.2023 56.4 52.4

### TATA CHEMICALS LIMITED, MITHAPUR

## EFFLUENT ANALYSIS REPORT MONTH: January 2024

### **Final Treated Waste Water**

Date	Suspended Solids	Ammonical Nitrogen	рН	Temp	Oil & Grease	Color	Treated waste water Quantity	Bioassay Test
Unit	mg/l	mg/l	NIL	°c	mg/l	Pt-Co scale	M3/Day	90 % Survival of the fish after 96
GPCB Prescribed Limit	500	5	6.5 to 9.5	Max. 40	2	100	2,40,000	hrs. in 100 % effluent
23.01.2024	76	2.4	8.12	29.6	ND	4	-	Pass
Online Analyser (Monthly Avg)	48	-	8.1	21	-	-	1,49,056	-

### BDL= Below detectable limit

### STP FINAL OUTLET

	STP FINAL COTTET												
Data		BOD 3 days	Suspended	Fecal	Qty.of Treated STP outlet	Qty.of Treated STP outlet							
Date	pН	27 °C	Solids	Colifrom	Recycled	Disharged into Sea							
Unit	-	mg/l	mg/l	MPN/ml	KLPD	KLPD							
GPCB Prescribed Limit	6.5 to 9.0	30	100	1000/100	0 2,400								
13.01.2024	7.6	3.1	14	100	1,010	0							

	TATA CHEMICALS LIMITED, MITHAPUR													
	STACK EMISSIONS MONITORING REPORT													
		N	<mark>//ONTH: Fe</mark>	bruary 2024			System (Monthly Avg)							
Sr.N	Stack	Charle Assault and Ta	Paramete	Permissible	Date of	Results	CEMS Result							
o.	No.	Stack Attached To	rs	limits (mg/Nm <sup>3</sup> )	Sampling	(mg/Nm <sup>3</sup> )	(mg/Nm3)							
		Boiler-1 (CEHP1)	PM	100		56	44							
1	RCC-1	Boiler-2 (CEHP2)	SO2	600	28.02.2024	181	68							
		Boiler-3 (B&W)	NOx	600		466	358							
			PM	100		51	42							
2	RCC 2	Boiler-4 (IBIL)	SO2	600	28.02.2024	101	66							
			NOx	600		75	185							
			PM	100		34	39							
3	RCC 3	Boiler –5 (HPB3)	SO2	600	28.02.2024	203	193							
			NOx	600		53	16							
			PM	100		30	46							
3	RCC 3	Boiler –6 (HPB4)	SO2	600	28.02.2024	430	198							
			NOx	600		46	38							
5	1	HCL Furnace	HCl	20	29.02.2024	3.6	0.615							
6	2	Chlorine Plant	Chlorine	9	29.02.2024	4.2	0.620							
7	3	Bromine Plant	Bromine NCP 1	2	29.02.2024	0.8	-							
		Cement Plant Raw Mill and Kiln	PM	30		15	11							
8	4		SO2	100	29.02.2024	7	0.0							
		IVIIII dila Kiiii	NOx	1000		451	493							
		Cement Plant Coal	PM	30		-	2							
9	5	Mill Old	SO2	100	-	-	0.0							
		IVIIII GIG	NOx	1000		-	53							
		Cement Plant Coal	PM	30		ND	8							
10	6	Mill New	SO2	100	29.02.2024	6	0.6							
		17111111011	NOx	1000		315	228							
15	7	Alkali Bypass	PM	30	29.02.2024	ND	5							
13	8	Dryer Crusher	PM	30			2							
14	9	Cooler	PM	30	12.02.2024	ND	5							
11	10	Cement Mill	PM	30	06.02.2024	ND	6							
12	11	Cement Packer-1	PM	30	29.02.2024	14	4							
		Cement Packer-2	PM	30	29.02.2024	11	1							
16	12	Drying unit of  Monohydrate	PM	150	-	-	-							
		ble as per NABL certific	ate											
NIO- N	ot in Ope	ration												

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#### TATA CHEMICALS LIMITED, MITHAPUR AMBIENT AIR QUALITY MONITORING REPORT (NABL Lab) **MONTH: February 2024** PM 10 Oxides of Sr. LOCATION DATE PM 2.5 Sulphur No. $(\mu g/m3)$ $(\mu g/m3)$ dioxide Nitrogen $(\mu g/m3)$ $(\mu g/m3)$ 1 Malara 74 27 9 28.02.2024 8 2 | Effluent Analyser (Padli) 28.02.2024 64 25 6 13 **Director Bunglow** 28.02.2024 56 19 8 16 Mithamahal 28.02.2024 78 30 9 19 ND= Not detectable as per NABL certificate **CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT** Sr. Location Date PM10 PM2.5 SO<sub>2</sub> NOx No. CAAQMS - Director Bunglow Feb-24 39 2.6 5.4 13 2.2 **CAAQMS - Malara Green Cap** Feb-24 59 **17** 10.2 AMBIENT NOISE LEVEL MONITORING REPORT (NABL Lab) LOCATION DATE **Noise Observation** Sr. No. Day Time dB(A) Night Time dB(A) Malara 55.7 53.2 26.12.2023 53.6 2 Effluent Analyser (Padli) 26.12.2023 61.3 54.2 51.6 3 **Director Bunglow** 26.12.2023

Mithamahal

26.12.2023

56.4

52.4

### TATA CHEMICALS LIMITED, MITHAPUR

## EFFLUENT ANALYSIS REPORT MONTH: February 2024

### **Final Treated Waste Water**

Date	Suspended Solids	Ammonical Nitrogen	рН	Temp	Oil & Grease	Color	Treated waste water Quantity	Bioassay Test
Unit	mg/l	mg/l	NIL	°c	mg/l	Pt-Co scale	M3/Day	90 % Survival of the fish after 96
GPCB Prescribed Limit	500	5	6.5 to 9.5	Max. 40	2	100	2,40,000	hrs. in 100 % effluent
29-02-2024	71	2.18	7.86	30.1	Not Detected	3	-	Pass
Online Analyser (Monthly Avg)	69	-	7.8	23	-	-	1,73,881	-

### BDL= Below detectable limit

### STP FINAL OUTLET

			311	FINAL OUTL	El	
Data		BOD 3 days	Suspended	Fecal	Qty.of Treated STP outlet	Qty.of Treated STP outlet
Date	pН	27 °C	Solids	Colifrom	Recycled	Disharged into Sea
Unit	-	mg/l	mg/l	MPN/ml	KLPD	KLPD
GPCB Prescribed Limit	6.5 to 9.0	30	100	1000/100		2,400
13.02.2024	7.5	3.6	12	110	897	0

		ТАТА СН	EMICALS LI	MITED, MITHAPU	R		Online	
		STACK FM	ISSIONS M	ONITORING REPO	RT		Monitoring System (Monthly	
	MONTH: March 2024							
6 1								
Sr.N	Stack No.	Stack Attached To	Paramete		Date of	Results	CEMS Result (mg/Nm3)	
0.	NO.		rs	limits (mg/Nm³)	Sampling	(mg/Nm³)		
	5004	Boiler-1 (CEHP1)	PM	100	40.00.0004	43	43	
1	RCC-1	Boiler-2 (CEHP2)	SO2	600	13.03.2024	374	51	
		Boiler-3 (B&W)	NOx	600		505	332	
			PM	100		64	43	
2	RCC 2	Boiler-4 (IBIL)	SO2	600	13.03.2024	192	42	
			NOx	600		135	132	
			PM	100		13	41	
3	RCC 3	Boiler –5 (HPB3)	SO2	600	12.03.2024	379	227	
			NOx	600		21	13	
			PM	100		14	44	
3	RCC 3	Boiler –6 (HPB4)	SO2	600	12.03.2024	456	186	
			NOx	600		54	34	
			PM	30		11	7	
4	4 RCC 4	Boiler –7 (HPB5)	SO2	100	13.03.2024	70	34	
			NOx	100		50	41	
5	1	HCL Furnace	HCl	20	12.03.2024	3.7	0.59	
6	2	Chlorine Plant	Chlorine	9	12.03.2024	3.6	0.69	
			Bromine				0.03	
7	3	Bromine Plant	NCP 1	2	12.03.2024	0.9	-	
		Cement Plant Raw	PM	30		ND	11	
8	4	Mill and Kiln	SO2	100	12.03.2024	13	0.3	
		IVIIII aria kiiri	NOx	1000		517	637	
		Carrage Blanck Carl	PM	30		ND	2	
9	5	Cement Plant Coal Mill Old	SO2	100	13.03.2024	3	0.3	
		IVIIII Old	NOx	1000		91	62	
			PM	30		ND	9	
10	6	Cement Plant Coal	SO2	100	13.03.2024	7	0.3	
		Mill New	NOx	1000		575	396	
15	7	Alkali Bypass	PM	30	13.03.2024	ND	5	
13	8	Dryer Crusher	PM	30	12.03.2024	ND	2	
14	9	Cooler	PM	30	13.03.2024	ND	6	
11	10	Cement Mill	PM	30	13.03.2024	ND	8	
12	11	Cement Packer-1	PM	30	13.03.2024	ND	5	
	11	Cement Packer-2	PM	30	13.03.2024	ND	1	
16	12	Drying unit of Monohydrate	PM	150	16.03.2024	15	-	
		ble as per NABL certific	ate					
ию- И	ot in Ope	เลเเปท					l	

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#### TATA CHEMICALS LIMITED, MITHAPUR AMBIENT AIR QUALITY MONITORING REPORT (NABL Lab) **MONTH: March 2024** Oxides of Sr. LOCATION DATE PM 10 PM 2.5 Sulphur No. $(\mu g/m3)$ $(\mu g/m3)$ dioxide Nitrogen $(\mu g/m3)$ $(\mu g/m3)$ 1 Malara 23 19 12.03.2024 51 9 2 | Effluent Analyser (Padli) 13.03.2024 77 41 7 16 **Director Bunglow** 12.03.2024 66 38 10 **17** Mithamahal 13.03.2024 59 27 11 23 ND= Not detectable as per NABL certificate **CONTINUOUS AMBIENT AIR QUALITY MONITORING REPORT** Sr. Location Date PM10 PM2.5 SO<sub>2</sub> NOx No. CAAQMS - Director Bunglow Mar-24 2.1 3.2 38 12 **CAAQMS - Malara Green Cap** Mar-24 58 14 1.6 12.0 AMBIENT NOISE LEVEL MONITORING REPORT (NABL Lab) **Noise Observation** LOCATION DATE Sr. No. Day Time dB(A) Night Time dB(A) Malara 54.7 49.9 Mar-24 54.1 2 Effluent Analyser (Padli) Mar-24 58.2 60.4 56.5 3 **Director Bunglow** Mar-24 Mithamahal Mar-24 55.1 52.3

### TATA CHEMICALS LIMITED, MITHAPUR

## EFFLUENT ANALYSIS REPORT MONTH: March 2024

### **Final Treated Waste Water**

Date	Suspended Solids	Ammonical Nitrogen	рН	Temp	Oil & Grease	Color	Treated waste water Quantity	Bioassay Test
Unit	mg/l	mg/l	NIL	°c	mg/l	Pt-Co scale	M3/Day	90 % Survival of the fish after 96
GPCB Prescribed Limit	500	5	6.5 to 9.5	Max. 40	2	100	2,40,000	hrs. in 100 % effluent
15-03-2024	62	2.31	7.87	30.5	Not Detected	4	-	Pass
Online Analyser (Monthly Avg)	43	-	8.0	25	-	-	1,82,416	-

### BDL= Below detectable limit

### STP FINAL OUTLET

	STI TIMAL COTLLI							
Data	mU	BOD 3 days	Suspended	Fecal	Qty.of Treated STP outlet	Qty.of Treated STP outlet		
Date	рН	27 °C	Solids	Colifrom	Recycled	Disharged into Sea		
Unit	-	mg/l	mg/l	MPN/ml	KLPD	KLPD		
GPCB Prescribed Limit	6.5 to 9.0	30	100	1000/100		2,400		
27.03.2024	7.5	2.6	25	110	860	0		



# List of CSR Projects and Programs FY 2023-24 as per Schedule VII of the Companies Act 2013 CSR Annual Action Plan

Key Themes	Key Programs	Amount allocated (Rs. Crore)
Building Economic Capital	Agriculture and Livestock Development	1.20
	Handicrafts and Cluster Development	0.50
	Skill Development	1.50
Ensuring Environmental Integrity	Natural Resources Management and Environment Conservation	3.50
Enablers for Social, Economic & Environmental	Health Care, Nutrition, Safe drinking water & Sanitation	1.00
Development	Education	2.00
Building Social Capital	Inclusive growth	1.50
Support for Infrastructure &	Disaster Relief	2.50
Support for Innovation R&D	and Sustainability	3.00
Others		0.80
Total		17.50

### **BIODIVERSITY**

## **BIODIVERSITY (MITHAPUR)**

PARAMETERS	UNIT	17-18	18-19	19-20	20-21	21-22	22-23	CUMULATIVE
Mangroves planted - Mithapur	Nos	20,200	60,000	28,700	60,000	65,000	0	6,60,400
Mangroves planted - Sundarbans	Nos	62,000	55,000	75,000	55,000	10,5000	2,04,000	9,82,000
Development of dry deciduous forest plot	Acres			5	10	10	7	32
Environment awareness program	Nos	-	155	155	181	146	172	-
People reached (Outreach of environment & conservation awareness program)	Nos	8,544	7,670	11,675	6,084	8,379	7,811	2,08,966
Whale shark rescued	Nos	30	20	44	34	37	44	910
Avi-fauna (bird) species recorded	Nos	84	90	83	2	10	126	126
Indigenous flora species introduced	Nos	5	5	5	5	5	5	164
Eco clubs promoted	Nos	30	40	54	56	56	30	56

### **EDUCATION**

### **EDUCATION (MITHAPUR)**

PARAMETERS	UNIT	17-18	18-19	19-20	20-21	21-22	22-23	CUMULATIVE
Schools covered (quality of education )	Nos	26	96	96	96	96	67	96
Children covered (scholarship program)	Nos	291	340	1,584	785	613	174	4521
Children covered - Science activity	Nos	-	375		-	2451	1899	4,725
Children covered - Competitive exam Navoday preparation	Nos	-	-	52	50	41	126	269
Children's covered - Summer camp	Nos	-	-	141	-	43	118	302
Students covered - Career Resource Counselling	Nos	-	-	57	92	1,400	210	1,759
Total children covered	Nos	-	-	-	-	40,248	22842	63,090

## **SUMMARY OF EXPENDITURE**

	EXPENDI	TURE DURING T	HE YEAR 2022-23 (I	IN LACS)
PROJECT	TCL/TCSRD	AGENCIES	BENEFICIARIES	
Sustainable Resource Base & Biodiversity Initiatives	583.51	450.11	13.95	1047.57
Sustainable Livelihood Creation	299.31	41.82	3.45	344.58
Improving Quality of Life (Health Care)	39.45	42.25	0.22	81.92
Improving Quality of Life (Access to Education)	121.62	115.75	2.10	239.47
Affirmative Action for SC & ST	32.45	113.59	0.00	146.04
Relief Activity	9.84	0.00	0.00	9.84
Innovation R & D	73.20	0.00	0.00	73.20
Administrative (Office & Miscellaneous.)	63.15	0.22	0.00	63.37
Total	1222.53	763.74	19.72	2005.99





# SAFETY, HEALTH AND ENVIRONMENT POLICY TARGET ZERO HARM

Tata Chemicals aspires to be leader in the industry by conducting all its activities in a manner that is protective of the environment and in ensuring the health & safety of its employees, contractors, visitors and the community around which it operates. These include activities across all manufacturing locations, mines, offices, research laboratories and supply chain partners.

### To fulfill this commitment, we strive to:

- Achieve ZERO HARM by following world class standards of SHE management systems, Responsible care codes, Process safety management, Good asset management, enhancement strategies for the environmental improvements and prevention of pollution for sustainable development
- Enhance Safety, Health and Environment (SHE) awareness, competency and responsibility among all work levels of employees and associated stakeholders including contractor/transport personnel, valued customers through effective participation, consultation, communication and training to achieve ZERO HARM Zero Harm to People, Zero Harm to Assets and Zero Harm to Environment
- Comply and endeavour to exceed with all applicable Safety, Health and Environmental laws, regulations and other requirements to set highest standards by adopting benchmark practices as part of continual improvement
- Integrate SHE considerations into business planning and decision making to give priority in implementation of SHE protection measures over economic considerations
- Embody principles of product stewardship by enhancing health, safety, environmental and social impacts of products and services across their lifecycles
- Proactively identify and mitigate our risks through risk assessment, process improvements, periodic SHE audits, investigation of all workplace & process safety incidents and illnesses
- Make SHE performance an important parameter that would govern key decisions around employee life cycle or continued business relations as applicable
- Increase stakeholder value through SHE excellence

**Date:** 12<sup>th</sup> May, 2022

This policy shall be periodically reviewed in order to ensure its alignment to the business and all applicable regulatory requirements and shall be communicated to all concerned and on request be made available to the public as well.

R Mukundan Managing Director





### KADAM ENVIRONMENTAL CONSULTANTS

An ISO 9001-2015 Certified Company

(MoEF Approved)

871/B/3, Near Himalaya Machinery, GIDC Makarpura, Vadodara-10. Phone : **(O)** 0265 - 6131000, 6131001



### **ENVIRONMENTAL MONITORING REPORT**

### **LABORATORY TEST REPORT - NOISE**

REPORT NO.: OCT23/108/39 (ULR-TC709923000021363F)

### SAMPLE DETAILS

1.	Name & Address of Client: M/s. TATA Chemicals Ltd. Mithapur okhamandal -361 345 Dist. Jamnagar Gujarat		
2.	Sample ID: 2146728246 - 108OC23NO01	3.	Client Representative: Mr. Sanjeev Jain
4.	Sample Date: 17.10.2023	5.	Sample Collected By: Mr. Gaurang Rana
6.	Analysis commenced on: 17.10.2023	7.	Analysis Completed on: 17.10.2023
8.	Reporting Date: 02.11.2023	9.	Sampling Location: -
10.	Discipline: Chemical	13.	Sample Received Date: 17.10.2023
11.	Group: Atmospheric Pollution		
12.	Product: Ambient Noise Levels/ Source Noise Levels		

### **TEST RESULTS**

		Da	ay	Nig		
S. No.	Location	Time	Reading dB(A)	Time	Reading dB(A)	Method
1	Sewage Treatment Plant	13.30 AM	51.4	22.10 PM	50.1	IS 9989: 1981
2	Padli Gate	13.50 AM	48.2	22.15 PM	45.9	IS 9989: 1981
3	Devpura	14.10 AM	53.4	22.20 PM	51.0	IS 9989: 1981
4	Padli Effluent Analyzer	14.35 AM	58.5	22.25 PM	56.6	IS 9989: 1981

Remark: CPCB Limits in (B(A) Leq (Industrial Area) Day Time 75 dB(A)/Night Time 70 dB(A)

Authorized By

Name : Sapana Amin

NOTE:

Designation : Lab Incharge

1) Reports may be reproduced, if required, but only in full and only with written approval of the laboratory.

 Re analysis of sample will be done, if requested within 7 days from the date of Reporting of sample if the samples are not consumed during analysis.

The results reported above relate to the sample identified under Sample Details.

	TEST REPORT FORMAT - NOISE	
DOC. NO.: LAB-FMT-087	Issue No.: 01	Revision No.: 03
Effective Date:. 01.03.2021	Issue Date: 01-05-2015	Revision Date: 01.03.2021





TC-8945

### TEST CERTIFICATE FOR AMBIENT NOISE LEVEL MONITORING

QF/7.8/63-EX

ULR:TC594524000000408F

Customer's Name and Address:

Page: 1 of 1

TATA CHEMICALS LIMITED

MITHAPUR - 361 345,

**DISTRICT: DEVBHOOMI DWARKA,** 

**GUJARAT, INDIA.** 

Test Report No. : PL/TCM/23/0017

Issue Date : 12/01/2024

Customer's Ref. : PO No -2110003079 DATED 09.12.2023

### NOISE LEVEL MONITORING REPORT

Sampling Date : 26/12/2023

Test Method : IS 9876 / IS 9989

Sampling Location : As per table

Sampling By : Pollucon Laboratories Pvt. Ltd.

Protocol (purpose) : Environmental Monitoring

### RESULT TABLE

SR.	POLLICON POLLICON POLL FON POLLICON POLLIC N	NOISE OBSERVATIONS					
NO.	NAME OF THE LOCATION	DAY TIME dB(A)	NIGHT TIME dB(A)				
1	Near Malara	55.7 ON POLLUCON	OLLUCON POL 53.2 POLLUCON				
2	Near Mithamhal	FOLLION 56.4 ON POLLICON	52.4				
3	Near DB	54.2 54.2	51.6				
4	Near Analyser	61.3	53.6				
ELICON CON I	LIMIT**	75 dB(A)	70 dB(A)				

<sup>\*\*</sup>Limit as per the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000. Day time shall mean from 6.00 a.m. to 10.00 p.m. Night time shall mean from 10.00 p.m. to 6.00 a.m.

H. T. Shah Lab. Manager Dr. Arun Bajpai Lab Manager (Q)

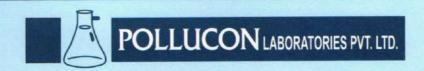
Note: This report is subject to terms & conditions mentioned overleaf.

Recognition under E.P. Act 1986 MoEF/CPCB

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• ISO 45001

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POLITICON

### TEST CERTIFICATE FOR AMBIENT NOISE LEVEL MONITORING

QF/7.8/63-EX

ULR:TC594524000003758F

JLK:1C59452400

Page: 1 of 1

Customer's Name and Address:

TATA CHEMICALS LIMITED MITHAPUR - 361 345,

DISTRICT : DEVBHOOMI DWARKA,

GUJARAT, INDIA.

Test Report No. : PL/TCM/24/0081

Issue Date : 27/03/2024

Customer's Ref. : PO No -2110003079 DATED 09.12.2023

### NOISE LEVEL MONITORING REPORT

Sampling Date : 13/03/2024

Test Method : IS 9876 / IS 9989

Sampling Location : As per table

Sampling By : Pollucon Laboratories Pvt. Ltd.

Protocol (purpose) : Environmental Monitoring

### RESULT TABLE

SR. NO.	RESOURCEMENT RECOVERS THE OWNERS HEREOVERS HOPETHEON WATER	NOISE OBSERVATIONS		
	NAME OF THE LOCATION	DAY TIME dB(A)	NIGHT TIME dB(A)	
1	Near Malara	54.7	49.9	
2	Near Mithamhal	55.1 CON POLICE STATE OF THE POLICE OF THE P	52.3	
3	Near DB	60.4	56.5	
4	Near Analyser	58.2	54.1	
FLIXCO	LIMIT**	75 dB(A)	70 dB(A)	

<sup>\*\*</sup>Limit as per the specified norms as per The Noise Pollution (Regulation and Control) Rules 2000. Day time shall mean from 6.00 a.m. to 10.00 p.m. Night time shall mean from 10.00 p.m. to 6.00 a.m.

H. T. Shah Lab. Manager Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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ISO 45001

• ISO 9001





QF/7.8/63-WT

ULR:TC594524000000428F

Page: 1 of 2

Customer's Name and Address:

Test Report No.:

PL/TCM/23/0035

TATA CHEMICALS LIMITED MITHAPUR - 361 345,

Issue Date 12/01/2024

**DISTRICT: DEVBHOOMI DWARKA, GUJARAT, INDIA.** 

Customer's Ref.:

PO No -2110003079 **DATED 09.12.2023** 

Description of Sample

**Ground Water** 

Quantity/No. of Samples

05 Lit/One

Date of Sampling

27/12/2023

Sampling Procedure

As per table

Sampling By

Pollucon Laboratories Pvt. Ltd.

Protocol (purpose)

QC

Sample Receipt Date

29/12/2023

Lab ID

TCM/2312/35

Packing/ Seal

Sealed

**Test Parameters** 

As per table

Date of Starting of Test: Identification of Sample: 29/12/2023 Bhimrana#

Date of Completion of Test

08/01/2024

### RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
LI 1 OF	ph. ucon Pollucon Pol	AICON POLITICON FOL ILLACON PARLUCON PO LICON POLLUCON FOLI	7.70	IS 3025 (Part 11)
2	Colour	Hazen	3.0	IS 3025 (Part 4)
3	Turbidity	NTU	0.08	APHA (23 <sup>rd</sup> Edition) 2130 B
4	Odour	LLUCON POLLUCON FOL	Agreeable	IS 3025 (Part 5)
5	Conductivity	µmhos/cm	4403	IS 3025 (Part 14)
6	Total Dissolved Solids	mg/L	1274	IS 3025 (Part 16)
7	Total Suspended Solids	mg/L	7.0	IS 3025 (Part 17)
8	Total Hardness	mg/L	1020	IS 3025 (Part 21)
9	Calcium as Ca	mg/L	224	IS 3025 (Part 40)
10	Magnesium as Mg	mg/L	86.4	IS 3025 (Part 46)
CON R	OLLUCON POLLUCON POLLUCON POLL	UCON POLLUCON POLL	UCON POLLUCON POLLUC	Continue.

H. T. Shah Lab. Manager Dr. Arun Baipai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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QF/7.8/63-WT

ULR:TC594524000000428F

Page: 2 of 2

Customer's Name and Address:

TATA CHEMICALS LIMITED

MITHAPUR - 361 345,

**DISTRICT: DEVBHOOMI DWARKA,** 

**GUJARAT, INDIA.** 

Test Report No.:

PL/TCM/23/0035

Issue Date

12/01/2024

Customer's Ref.:

PO No -2110003079 **DATED 09.12.2023** 

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
11	Alkalinity	mg/L	296	IS 3025 (Part 23)
12	Ammonical Nitrogen	mg/L	Not Detected	IS 3025 (Part 34)
13	Chloride as Cl	mg/L	549	IS 3025 (Part 32)
14	Fluoride as Fe	mg/L	0.162	APHA(23 <sup>rd</sup> Edition) 4500F D
15	Sulphate as SO <sub>4</sub>	mg/L	84.07	IS 3025 (Part 24)
16	Sodium as Na	mg/L	11.61	SOP/INS/W/015
17	Potassium as K	mg/L	2.45	SOP/INS/W/015
18	Iron as Fe	mg/L	0.125	SOP/INS/W/015
19	Copper as Cu	mg/L	Not Detected	SOP/INS/W/015
20	Manganese as Mn	mg/L	Not Detected	SOP/INS/W/015
21	Mercury as Hg	mg/L	Not Detected	SOP/INS/W/016
22	Cadmium as Cd	mg/L	Not Detected	SOP/INS/W/015
23	Arsenic as As	mg/L	Not Detected	SOP/INS/W/017
24	Lead as Pb	mg/L	Not Detected	SOP/INS/W/015
25	Chromium as Cr+3	mg/L	Not Detected	SOP/INS/W/015
26	Nickel as Ni	mg/L	Not Detected	SOP/INS/W/015
27	Vanadium as V	mg/L	Not Detected	SOP/INS/W/015
28	Zinc as Zn	mg/L	Not Detected	SOP/INS/W/015

#Detail given by Customer.

Minimum Detection Limit as per NABL certificate No TC 5945 for: Copper as Cu:0.02 mg/L, Manganese as Mn:0.05 mg/L, Mercury as Hg:0.0005 mg/L, Cadmium as Cd:0.002 mg/L, Arsenic as As:0.005 mg/L, Lead as Pb:0.005 mg/L, Chromium as Cr<sup>+3</sup>:0.025 mg/L, Nickel as Ni:0.01 mg/L, Vanadium as V:0.25 mg/L, Zinc as Zn:0.05

H. T. Shah Lab. Manager Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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- ISO 9001
- Food & Drug Control Administration [FDA]-Gujarat





QF/7.8/63-WT

ULR:TC594524000000427F

Customer's Name and Address:

Page: 1 of 2

TATA CHEMICALS LIMITED

MITHAPUR - 361 345,

**DISTRICT: DEVBHOOMI DWARKA,** 

**GUJARAT, INDIA.** 

Test Report No.:

PL/TCM/23/0034

Issue Date

12/01/2024

Customer's Ref.:

PO No -2110003079

**DATED 09.12.2023** 

Description of Sample : **Ground Water** 

Quantity/No. of Samples

05 Lit/One

Date of Sampling

27/12/2023

Sampling Procedure Protocol (purpose)

As per table QC

Sampling By

Pollucon Laboratories Pvt. Ltd.

Lab ID

TCM/2312/34

Sample Receipt Date Packing/ Seal

29/12/2023

As per table

Sealed

**Test Parameters** 

Date of Starting of Test: Identification of Sample:

29/12/2023 Lalpur#

Date of Completion of Test 08/01/2024

### RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
ICON I	ph. Ison Pollucon Pollucon Pol	UODN POLLUCON POL LLUCON POLLUCON PO LICON POLLUCON FOLL	7.73	IS 3025 (Part 11)
2	Colour OLLHEON POLLEG N POLL	Hazen	LICON PO 2.0	IS 3025 (Part 4)
3	Turbidity	NTU	0.07	APHA (23 <sup>rd</sup> Edition) 2130 B
4	Odour NOLLICON OLLICON POL	ELECON POLLUCON POL UCON POLLUCON POL	Agreeable	IS 3025 (Part 5)
5	Conductivity	μmhos/cm	538	IS 3025 (Part 14)
6	Total Dissolved Solids	mg/L	282	IS 3025 (Part 16)
7	Total Suspended Solids	mg/L	18 on Politic	IS 3025 (Part 17)
8	Total Hardness	mg/L	102 POLLUC	IS 3025 (Part 21)
9	Calcium as Ca	mg/L	27.2	IS 3025 (Part 40)
10	Magnesium as Mg	mg/L	8.16	IS 3025 (Part 46)
EDW	COLLEGON ROLLECON PORTUGON FOLD	UCON POLLUCON POLL	LICON POLITICON POLITIC	Continue

H. T. Shah Lab. Manager Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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QF/7.8/63-WT

ULR:TC594524000000427F

Page: 2 of 2

Customer's Name and Address:

TATA CHEMICALS LIMITED MITHAPUR - 361 345,

**GUJARAT, INDIA.** 

**DISTRICT: DEVBHOOMI DWARKA,** 

Test Report No.:

PL/TCM/23/0034

Issue Date

12/01/2024

Customer's Ref.:

PO No -2110003079 DATED 09.12.2023

### RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
11	Alkalinity	mg/L	TOLLICON 120	IS 3025 (Part 23)
12	Ammonical Nitrogen	mg/L	Not Detected	IS 3025 (Part 34)
13	Chloride as Cl	mg/L	65.97	IS 3025 (Part 32)
14	Fluoride as Fe	mg/L	Not Detected	APHA(23 <sup>rd</sup> Edition) 4500F D
15	Sulphate as SO <sub>4</sub>	mg/L	11.87	IS 3025 (Part 24)
16	Sodium as Na	mg/L	34.6	SOP/INS/W/015
17	Potassium as K	mg/L	8.67	SOP/INS/W/015
18	Iron as Fe	mg/L	0.204	SOP/INS/W/015
19	Copper as Cu	mg/L	Not Detected	SOP/INS/W/015
20	Manganese as Mn	mg/L	Not Detected	SOP/INS/W/015
21	Mercury as Hg	mg/L	Not Detected	SOP/INS/W/016
22	Cadmium as Cd	mg/L	Not Detected	SOP/INS/W/015
23	Arsenic as As	mg/L	Not Detected	SOP/INS/W/017
24	Lead as Pb	mg/L	Not Detected	SOP/INS/W/015
25	Chromium as Cr+3	mg/L	Not Detected	SOP/INS/W/015
26	Nickel as Ni	mg/L	Not Detected	SOP/INS/W/015
27	Vanadium as V	mg/L	Not Detected	SOP/INS/W/015
28	Zinc as Zn	mg/L	Not Detected	SOP/INS/W/015

#Detail given by Customer.

Minimum Detection Limit as per NABL certificate No TC 5945 for: Copper as Cu:0.02 mg/L, Manganese as Mn:0.05 mg/L, Mercury as Hg:0.0005 mg/L, Cadmium as Cd:0.002 mg/L, Arsenic as As:0.005 mg/L, Lead as Pb:0.005 mg/L, Chromium as Cr\*3:0.025 mg/L, Nickel as Ni:0.01 mg/L, Vanadium as V:0.25 mg/L, Zinc as Zn:0.05 mg/L, Fluoride as Fe:0.05 mg/L.

H. T. Shah Lab. Manager Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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- GPCB Approved Schedule II Auditor
- ISO 14001
- ISO 45001
- ISO 9001
- Food & Drug Control Administration [FDA]-Gujarat





QF/7.8/63-WT

ULR:TC594524000000426F

Page: 1 of 2

Customer's Name and Address:

TATA CHEMICALS LIMITED

MITHAPUR - 361 345,

**DISTRICT: DEVBHOOMI DWARKA,** 

**GUJARAT, INDIA.** 

Test Report No.:

PL/TCM/23/0033

Issue Date

12/01/2024

Customer's Ref.:

PO No -2110003079

**DATED 09.12.2023** 

Description of Sample: **Ground Water** 

Quantity/No. of Samples

05 Lit/One

Date of Sampling

27/12/2023

Sampling Procedure

As per table

Sampling By

Pollucon Laboratories Pvt. Ltd.

Protocol (purpose)

QC

Sample Receipt Date

29/12/2023

Lab ID

TCM/2312/33

Packing/ Seal

Sealed

**Test Parameters** 

As per table

Date of Starting of Test:

29/12/2023

Date of Completion of Test

08/01/2024

Identification of Sample: Hamusar#

### RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
L 1 OF	philicon politicon politic	UCON POLLUCON FO ILLOCON POLLUCON FO	8.34	IS 3025 (Part 11)
2	Colour	Hazen	2.0	IS 3025 (Part 4)
3	Turbidity	NTU	0.06	APHA (23 <sup>rd</sup> Edition) 2130 B
4	Odour	ILLINEON POLILICON POLILICON POLI	Agreeable	IS 3025 (Part 5)
5	Conductivity	μmhos/cm	625	IS 3025 (Part 14)
6	Total Dissolved Solids	mg/L	372	IS 3025 (Part 16)
7	Total Suspended Solids	mg/L	Not Detected	IS 3025 (Part 17)
8	Total Hardness	mg/L	170 CON POLICE	IS 3025 (Part 21)
9	Calcium as Ca	mg/L	38 ON POLICE	IS 3025 (Part 40)
10	Magnesium as Mg	mg/L	INCON FO 18	IS 3025 (Part 46)
CON	POLLIKON POLLUTON POLLUCON POLL	UCON PULLUEUN POI	EUCON POLLUCON POLLUC	Continue.

H. T. Shah Lab. Manager

Note: This report is subject to terms & conditions mentioned overleaf.

Recognition under E.P. Act 1986 MoEF/CPCB

 GPCB Approved Schedule II Auditor ISO 14001

• ISO 45001

● ISO 9001

 Food & Drug Control Administration [FDA]-Gujarat

Dr. Arun Bajpai

Lab Manager (Q)





QF/7.8/63-WT

Page: 2 of 2

ULR:TC594524000000426F

Customer's Name and Address:

TATA CHEMICALS LIMITED MITHAPUR - 361 345,

**GUJARAT, INDIA.** 

DISTRICT: DEVBHOOMI DWARKA,

Test Report No.:

PL/TCM/23/0033

Issue Date

12/01/2024

Customer's Ref.:

PO No -2110003079 **DATED 09.12.2023** 

### RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
11	Alkalinity RON POLLUCON POLL	mg/L	POLLUCON 238 CON POLLU	IS 3025 (Part 23)
12	Ammonical Nitrogen	mg/L	Not Detected	IS 3025 (Part 34)
13	Chloride as Cl	mg/L	36.48	IS 3025 (Part 32)
14	Fluoride as Fe	mg/L	Not Detected	APHA(23 <sup>rd</sup> Edition) 4500F D
15	Sulphate as SO <sub>4</sub>	mg/L	6.83	IS 3025 (Part 24)
16	Sodium as Na	mg/L	38.3	SOP/INS/W/015
17	Potassium as K	mg/L	9.84	SOP/INS/W/015
18	Iron as Fe	mg/L	0.169	SOP/INS/W/015
19	Copper as Cu	mg/L	Not Detected	SOP/INS/W/015
20	Manganese as Mn	mg/L	Not Detected	SOP/INS/W/015
21	Mercury as Hg	mg/L	Not Detected	SOP/INS/W/016
22	Cadmium as Cd	mg/L	Not Detected	SOP/INS/W/015
23	Arsenic as As	mg/L	Not Detected	SOP/INS/W/017
24	Lead as Pb	mg/L	Not Detected	SOP/INS/W/015
25	Chromium as Cr+3	mg/L	Not Detected	SOP/INS/W/015
26	Nickel as Ni	mg/L	Not Detected	SOP/INS/W/015
27	Vanadium as V	mg/L	Not Detected	SOP/INS/W/015
28	Zinc as Zn	mg/L	Not Detected	SOP/INS/W/015

#Detail given by Customer.

Minimum Detection Limit as per NABL certificate No TC 5945 for: Total Suspended Solids:2.0 mg/L, Copper as Cu:0.02 mg/L, Manganese as Mn:0.05 mg/L, Mercury as Hg:0.0005 mg/L, Cadmium as Cd:0.002 mg/L, Arsenic as As:0.005 mg/L, Lead as Pb:0.005 mg/L, Chromium as Cr\*3:0.025 mg/L, Nickel as Ni:0.01 mg/L, Vanadium as V:0.25 mg/L, Zinc as Zn:0.05 mg/L, Fluoride as Fe:0.05 mg/L, Ammonical Nitrogen:0.2 mg/L.

H. T. Shah Lab. Manager

Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

- Recognition under E.P. Act 1986 MoEF/CPCB
- GPCB Approved Schedule II Auditor
- ISO 14001
- ISO 45001
- ISO 9001
- Food & Drug Control Administration [FDA]-Gujarat





TC-5945 QF/7.8/63-WT

ULR:TC594524000000425F

2594524000000425F Page: 1 of 2

Customer's Name and Address:

TATA CHEMICALS LIMITED

Test Report No.:

PL/TCM/23/0032

MITHAPUR - 361 345,

Issue Date

12/01/2024

DISTRICT : DEVBHOOMI DWARKA,

Customer's Ref.:

PO No -2110003079 DATED 09.12.2023

Description of Sample :

**GUJARAT, INDIA.** 

Ground Water

Quantity/No. of Samples

05 Lit/One

Date of Sampling

27/12/2023

Sampling Procedure

As per table

Sampling By

Pollucon Laboratories Pvt. Ltd.

Protocol (purpose)

: QC

Sample Receipt Date

29/12/2023

Lab ID

TCM/2312/32

Packing/ Seal

29/12/2023

Lau ID

As per table

Date of Starting of Test:

Sealed 29/12/2023

Test Parameters

Date of Completion of Test

08/01/2024

Identification of Sample:

Devpara#

### RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
U1ON	phucon Pollucon Pollu	TOOM LOTTINGON LOFT THEOM LOTTINGON LOFT TOOM LOTTINGON LOFT	8.08	IS 3025 (Part 11)
2	Colour	Hazen	3.0 NO	IS 3025 (Part 4)
3	Turbidity	NTU	0.08	APHA (23 <sup>rd</sup> Edition) 2130 B
4	Odour	ALICON POLLUCON POL UCDN POLLUCON FOLL	Agreeable	IS 3025 (Part 5)
5	Conductivity	µmhos/cm	3239	IS 3025 (Part 14)
6	Total Dissolved Solids	mg/L	1608	IS 3025 (Part 16)
7	Total Suspended Solids	mg/L	8.0	IS 3025 (Part 17)
8	Total Hardness	mg/L	360	IS 3025 (Part 21)
9	Calcium as Ca	mg/L	88	IS 3025 (Part 40)
10	Magnesium as Mg	mg/L	33.6	IS 3025 (Part 46)
LEW I	GLIUCON POLITICON POLITICON POR	BOON POLEBOON POLE	UCON POLLECON POLLER	Continue.

3/2

H. T. Shah Lab. Manager Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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• ISO 45001

• ISO 9001





QF/7.8/63-WT

ULR:TC594524000000425F

Page: 2 of 2

Customer's Name and Address:

TATA CHEMICALS LIMITED MITHAPUR - 361 345,

**DISTRICT: DEVBHOOMI DWARKA,** 

**GUJARAT, INDIA.** 

Test Report No.:

PL/TCM/23/0032

Issue Date

12/01/2024

Customer's Ref.:

PO No -2110003079 **DATED 09.12.2023** 

### RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
11	Alkalinity	mg/L	264	IS 3025 (Part 23)
12	Ammonical Nitrogen	mg/L	Not Detected	IS 3025 (Part 34)
13	Chloride as Cl	mg/L	651	IS 3025 (Part 32)
14	Fluoride as Fe	mg/L	0.808	APHA(23 <sup>rd</sup> Edition) 4500F D
15	Sulphate as SO <sub>4</sub>	mg/L	142	IS 3025 (Part 24)
16	Sodium as Na	mg/L	322	SOP/INS/W/015
17	Potassium as K	mg/L	N POLLUCO 11.4 UCON POL	SOP/INS/W/015
18	Iron as Fe	mg/L	0.088	SOP/INS/W/015
19	Copper as Cu	mg/L	Not Detected	SOP/INS/W/015
20	Manganese as Mn	mg/L	Not Detected	SOP/INS/W/015
21	Mercury as Hg	mg/L	Not Detected	SOP/INS/W/016
22	Cadmium as Cd	mg/L	Not Detected	SOP/INS/W/015
23	Arsenic as As	mg/L	Not Detected	SOP/INS/W/017
24	Lead as Pb	mg/L	Not Detected	SOP/INS/W/015
25	Chromium as Cr+3	mg/L	Not Detected	SOP/INS/W/015
26	Nickel as Ni	mg/L	Not Detected	SOP/INS/W/015
27	Vanadium as V	mg/L	Not Detected	SOP/INS/W/015
28	Zinc as Zn	mg/L	Not Detected	SOP/INS/W/015

#Detail given by Customer.

Minimum Detection Limit as per NABL certificate No TC 5945 for: Copper as Cu:0.02 mg/L, Manganese as Mn:0.05 mg/L, Mercury as Hg:0.0005 mg/L, Cadmium as Cd:0.002 mg/L, Arsenic as As:0.005 mg/L, Lead as Pb:0.005 mg/L, Chromium as Cr\*3:0.025 mg/L, Nickel as Ni:0.01 mg/L, Vanadium as V:0.25 mg/L, Zinc as Zn:0.05 mg/L, Ammonical Nitrogen:0.2 mg/L.

H. T. Shah Lab. Manager

Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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- ISO 9001
- Food & Drug Control Administration [FDA]-Gujarat





QF/7.8/63-WT

ULR:TC594524000000424F

Page: 1 of 2

Customer's Name and Address:

TATA CHEMICALS LIMITED

MITHAPUR - 361 345. **DISTRICT: DEVBHOOMI DWARKA,** 

**GUJARAT, INDIA.** 

Test Report No.:

PL/TCM/23/0031

Issue Date

12/01/2024

Customer's Ref.:

PO No -2110003079 **DATED 09.12.2023** 

Description of Sample :

**Ground Water** 

Quantity/No. of Samples

05 Lit/One

Date of Sampling

27/12/2023

Sampling Procedure

As per table QC

Sampling By

Pollucon Laboratories Pvt. Ltd. 29/12/2023

Protocol (purpose) Lab ID

TCM/2312/31

Packing/ Seal

Sealed

**Test Parameters** 

As per table

Date of Starting of Test:

Sample Receipt Date

29/12/2023

Date of Completion of Test

08/01/2024

Identification of Sample:

Padli#

### **RESULT TABLE**

SR. NO.	TEST PARAMETERS	UNIT OL	RESULT	TEST METHOD
LON I LILON LONEI	pH ucon politicon politico Politico	LLUCON POLLUCON FOL LLUCON POLLUCON FOL	7.45	IS 3025 (Part 11)
2	Colour	Hazen	2.0	IS 3025 (Part 4)
3	Turbidity	NTU	0.06	APHA (23 <sup>rd</sup> Edition) 2130 B
4	Odour NOTIFICAN ALLICON FOLL	LLUCON POLLUCON POL LICON POLICICON FOLI	Agreeable	IS 3025 (Part 5)
5	Conductivity	µmhos/cm	1126	IS 3025 (Part 14)
6	Total Dissolved Solids	mg/L	562	IS 3025 (Part 16)
7	Total Suspended Solids	mg/L	27	IS 3025 (Part 17)
8	Total Hardness	mg/L	188	IS 3025 (Part 21)
9	Calcium as Ca	mg/L	DELLICON POLICION POL	IS 3025 (Part 40)
10	Magnesium as Mg	mg/L	13.92	IS 3025 (Part 46)
CON	CALLICON POLICION POLICION POLI	UEUN PURRUCAN OLI	NUMBER OF THE OWNERS OF THE OW	Continue.

H. T. Shah

Lab. Manager

Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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ISO 45001

• ISO 9001





QF/7.8/63-WT

ULR:TC594524000000424F

Page: 2 of 2

Customer's Name and Address:

TATA CHEMICALS LIMITED MITHAPUR - 361 345,

DISTRICT: DEVBHOOMI DWARKA,

**GUJARAT, INDIA.** 

Test Report No.:

PL/TCM/23/0031

Issue Date

12/01/2024

Customer's Ref.:

PO No -2110003079 DATED 09.12.2023

### RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
11	Alkalinity	mg/L	128	IS 3025 (Part 23)
12	Ammonical Nitrogen	mg/L	Not Detected	IS 3025 (Part 34)
13	Chloride as Cl	mg/L	196	IS 3025 (Part 32)
14	Fluoride as Fe	mg/L	Not Detected	APHA(23rd Edition) 4500F D
15	Sulphate as SO <sub>4</sub>	mg/L	25.03	IS 3025 (Part 24)
16	Sodium as Na	mg/L	90.62	SOP/INS/W/015
17	Potassium as K	mg/L	12.2	SOP/INS/W/015
18	Iron as Fe	mg/L	0.176	SOP/INS/W/015
19	Copper as Cu	mg/L	Not Detected	SOP/INS/W/015
20	Manganese as Mn	mg/L	Not Detected	SOP/INS/W/015
21	Mercury as Hg	mg/L	Not Detected	SOP/INS/W/016
22	Cadmium as Cd	mg/L	Not Detected	SOP/INS/W/015
23	Arsenic as As	mg/L	Not Detected	SOP/INS/W/017
24	Lead as Pb	mg/L	Not Detected	SOP/INS/W/015
25	Chromium as Cr+3	mg/L	Not Detected	SOP/INS/W/015
26	Nickel as Ni	mg/L	Not Detected	SOP/INS/W/015
27	Vanadium as V	mg/L	Not Detected	SOP/INS/W/015
28	Zinc as Zn	mg/L	Not Detected	SOP/INS/W/015

#Detail given by Customer.

Minimum Detection Limit as per NABL certificate No TC 5945 for: Copper as Cu:0.02 mg/L, Manganese as Mn:0.05 mg/L, Mercury as Hg:0.0005 mg/L, Cadmium as Cd:0.002 mg/L, Arsenic as As:0.005 mg/L, Lead as Pb:0.005 mg/L, Chromium as Cr\*3:0.025 mg/L, Nickel as Ni:0.01 mg/L, Vanadium as V:0.25 mg/L, Zinc as Zn:0.05 mg/L, Ammonical Nitrogen:0.2 mg/L, Fluoride as Fe:0.05 mg/L.

H. T. Shah Lab. Manager Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

- Recognition under E.P. Act 1986 MoEF/CPCB
- GPCB Approved Schedule II Auditor
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- ISO 9001
- Food & Drug Control Administration [FDA]-Gujarat





TC-5945 QF/7.8/63-WT

ULR:TC594524000000423F

Page: 1 of 2

Customer's Name and Address:

TATA CHEMICALS LIMITED MITHAPUR - 361 345,

DISTRICT : DEVBHOOMI DWARKA,

GUJARAT, INDIA.

Test Report No.: PL/TCM/23/0030

Issue Date : 12/01/2024

Customer's Ref.: PO No -2110003079 DATED 09.12.2023

Description of Sample : Gr

Ground Water

Quantity/No. of Samples

Date of Completion of Test

05 Lit/One

Date of Sampling

27/12/2023

Sampling Procedure

: As per table

Sampling By

Pollucon Laboratories Pvt. Ltd.

Protocol (purpose)

QC TCM (2242 (2

Packing/ Seal

29/12/2023 Sealed

Lab ID

TCM/2312/30

Date of Starting of Test:

Sample Receipt Date

29/12/2023

Test Parameters

As per table 08/01/2024

Identification of Sample:

Aarambhada#

### RESULT TABLE

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
ELTO CON	ph ucon politicon politicon politicon politicon politicon politicon politico politico	MEDN POLLUCON TO MEDN POLLUCON TO MEDN POLLUCON TO	7.57	IS 3025 (Part 11)
2	Colour	Hazen	OLLICON PO CON A LEG	IS 3025 (Part 4)
3	Turbidity	NTU	0.07	APHA (23 <sup>rd</sup> Edition) 2130 B
4	Odour	ELECON POLLUCON F UCON POLLUCON FOI	Agreeable	IS 3025 (Part 5)
5	Conductivity	µmhos/cm	1485	IS 3025 (Part 14)
6	Total Dissolved Solids	mg/L	806	IS 3025 (Part 16)
7	Total Suspended Solids	mg/L	Not Detected	IS 3025 (Part 17)
8	Total Hardness	mg/L	380	IS 3025 (Part 21)
9	Calcium as Ca	mg/L	116	IS 3025 (Part 40)
10	Magnesium as Mg	mg/L	21.12	IS 3025 (Part 46)
UCOL	CHERTON FOLLOWS POLICION FOR	BLOW FORMEDIC OF	CLERON POLLEGON POLLEGON	Continue

18/D-

H. T. Shah Lab. Manager Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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• ISO 900





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Page: 2 of 2

ULR:TC594524000000423F

Customer's Name and Address:

TATA CHEMICALS LIMITED MITHAPUR - 361 345,

**GUJARAT, INDIA.** 

**DISTRICT: DEVBHOOMI DWARKA,** 

Test Report No.:

PL/TCM/23/0030

Issue Date

12/01/2024

Customer's Ref.:

PO No -2110003079 **DATED 09.12.2023** 

SR. NO.	TEST PARAMETERS	UNIT	RESULT	TEST METHOD
11	Alkalinity CON POLITICON POLIT	mg/L	POLLUCON 246 CON POLLU	IS 3025 (Part 23)
12	Ammonical Nitrogen	mg/L	Not Detected	IS 3025 (Part 34)
13	Chloride as Cl	mg/L	200	IS 3025 (Part 32)
14	Fluoride as Fe	mg/L	0.338	APHA(23 <sup>rd</sup> Edition) 4500F D
15	Sulphate as SO <sub>4</sub>	mg/L	80.72	IS 3025 (Part 24)
16	Sodium as Na	mg/L	127	SOP/INS/W/015
17	Potassium as K	mg/L	10.2	SOP/INS/W/015
18	Iron as Fe	mg/L	0.179	SOP/INS/W/015
19	Copper as Cu	mg/L	Not Detected	SOP/INS/W/015
20	Manganese as Mn	mg/L	Not Detected	SOP/INS/W/015
21	Mercury as Hg	mg/L	Not Detected	SOP/INS/W/016
22	Cadmium as Cd	mg/L	Not Detected	SOP/INS/W/015
23	Arsenic as As	mg/L	Not Detected	SOP/INS/W/017
24	Lead as Pb	mg/L	Not Detected	SOP/INS/W/015
25	Chromium as Cr+3	mg/L	Not Detected	SOP/INS/W/015
26	Nickel as Ni	mg/L	Not Detected	SOP/INS/W/015
27	Vanadium as V	mg/L	Not Detected	SOP/INS/W/015
28	Zinc as Zn	mg/L	Not Detected	SOP/INS/W/015

#Detail given by Customer.

Minimum Detection Limit as per NABL certificate No TC 5945 for: Total Suspended Solids: 2.0 mg/L, Copper as Cu: 0.02 mg/L, Manganese as Mn: 0.05 mg/L, Mercury as Hg: 0.0005 mg/L, Cadmium as Cd: 0.002 mg/L, Arsenic as As: 0.005 mg/L, Lead as Pb: 0.005 mg/L, Chromium as Cr<sup>+3</sup>: 0.025 mg/L, Nickel as Ni: 0.01 mg/L, Vanadium as V:0.25 mg/L, Zinc as Zn:0.05 mg/L, Ammonical Nitrogen:0.2 mg/L

H. T. Shah Lab. Manager

Dr. Arun Bajpai Lab Manager (Q)

Note: This report is subject to terms & conditions mentioned overleaf.

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