

Date: 12th Dec 2022

Lr. No. CIPL/MoEF/Dec-2022/04

To

Additional Principal Chief Conservator of Forests ()

Ministry of Env., Forest and Climate Change

Regional Office (SEZ), Ist & IInd Floor, Handloom Export Promotion Council,

34, Cathedral Garden Road, Nungambakkam, Chennai - 34

Dear Sir,

Sub: Submission of Environmental Clearance - Compliance Conditions Status from the Period of 1st Apr 2022 to 30th Sep 2022 – Regards.

Ref: MoEF Lr. No. EP/12.1/20/2013-14/TN, Dated on 27.03.2014

With reference to the above cited subject, we have been furnishing the Environmental Clearance (EC) - Compliance Conditions Status covering the period of 1st Apr 2022 to 30th Sep 2022.

This is for your kind information & record please.

Thanking you,

Yours Faithfully

For Covestro (India) Private Limited

D.M. Senthil Kumar

Site Head.

Enclosures:

Annexure-I : EC – Compliance Conditions Status.

Annexure-II: ROA of AAQ & Stack Emission Conducted by TNPCB
Dated on 13.06.2022.

Annexure-III: HSEQ Policy of M/s Covestro (India) Private Limited.

RT941397246IN IVR:8284941397246
RL SIPCOT CUDDALORE S.O <607005>
Counter No:1,19/12/2022,14:39
To:ADDL PRINCIPA,NUNGAMBAKKAM
PIN:600034, Nungambakkam MD0
From:COVESTRO IN,SEMMANKUPPAM
Wt:65gms
Amt:40.00(Cash)
<Track on www.indianpost.gov.in>



Covestro (India) Pvt. Ltd.
Cin : U19113MH1995PTC179724

Semmankuppam Village,
Survey No. 135/1A, 135/2A,
135/1B2
Cuddalore - 607 005.

Telephone
+ 91 4142 239313
+ 91 4142 239913

Fax
+ 91 4142 239911

Registered Office
Unit No. SB-801, 8th Floor,
Empire Tower, Cloud Campus,
Thane - Belapur Road, Airoli,
Navi Mumbai- 400 708,
Maharashtra, India.

Covestro.com

M/s Covestro (India) Private Limited

Semmankuppam Village, Cuddalore – 607005



Environmental Clearance - Compliance Conditions Status From the Period of 01.04.2022 to 30.09.2022

Ref: F.No.J-11011/458/2011-IA II (I), Dated on 7th January 2014

S. No.	EC Conditions	Compliance Status
1	National emission standards for organic chemicals manufacturing industry issued by the ministry vide G.S.R.608(E) dated 21 st July, 2010 and amended time to time shall be followed by the unit.	Compiled with. We have monitored & analysed our stack emissions parameters by TNPCB laboratory dated on 13.06.2022 and reports attached as Annexure-I.
2	Stack of adequate height shall be provided to gas fired boiler to disperse the gaseous emission as per the standards prescribed.	Complied with. As per the Standards the Thermic Fluid Heater (Boiler) has been installed for the stack height 31.9 Meter from the Ground level .
3	Scrubber shall be provided to control process emissions. The scrubber water shall be sent to ETP for further treatment. Efficiency of scrubber shall be monitored regularly and maintained properly. Scrubber vent shall be provided with online detection and alarm system to indicate higher than permissible value of controlled parameters. At no time the emission levels shall go beyond the prescribed standards. The system shall be interlocked with pollution control equipment so that in case of any increase in pollutants beyond permissible limits, plant shall be automatically stopped. Stack monitoring shall be done regularly, and report shall be submitted to Tamil Nadu Pollution Control Board (TNPCB) and the Ministry's regional office at Bangalore.	Complied with. All the process emissions are taken through the wet scrubbing system and the scrubber water taken to ETP for further process and treatment. The efficiency of the scrubber is also monitored using periodic Stack Monitoring Survey by TNPCB Laboratory dated on 13.06.2022 reports attached as Annexure-I. The System is interlocked for alarm and trip in case of any deviation.
4	Ambient air quality data shall be collected as per NAAQS standards notified by the ministry vide G.S.R.NO.826(E) Dated 16 th September 2009. The levels of PM ₁₀ , PM _{2.5} , SO ₂ , CO, VOC and HC shall be monitored in the ambient air and emissions from the stacks and displayed at a convenient location near the main gate of the company and important public places. The company shall upload the results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the regional office of MOEF, the respective zonal office of CPCB and the Tamil Nadu Pollution Control Board.	<ul style="list-style-type: none"> • Complied with. The ambient air quality is monitored & analysed by TNPCB laboratory & report attached as Annexure-I. • The levels of SPM, SO_x, NO_x & VOC are monitored in the ambient air and stack emissions and the same are displayed in the main gate of our company. • The SPM, SO₂ and TVOC online data are being uploaded to CAC – TNPCB continuously.
5	In plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled Closed handling and conveyance of chemicals /materials, multi cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading areas to control dust emissions. Fugitive emissions in the work zone Environment, Product, Raw materials storage area etc., shall be regularly monitored	Complied with. Fugitive Emissions are not generated in the work zone environment, product & raw materials storage area etc. There is no dust generating process involved at our process.



M/s Covestro (India) Private Limited

Semmankuppam Village, Cuddalore – 607005



S. No.	EC Conditions	Compliance Status
6	Continuous monitoring system for VOC's shall be installed at all important places/areas. Effective measure shall be taken immediately, when monitoring results indicate above the permissible limits.	Complied with. Continuous monitoring system for VOC has been installed in production plant area. This signal has been connected with data acquisition system with alarm and tripping system if the results are above the permissible limits. The same data also connected to TNPCB - Care Air Centre for continuous monitoring.
7	The Gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.	Complied with. DG set is provided with adequate Stack of 11 meter height as per CPCB standards.
8	Total fresh water requirement ground water source shall not exceed 40 m3/day and prior Permission for drawl of water shall be obtained from the CGWA/SGWA.	Shall be complied with. Total fresh water requirement is limited to 40 m3/day.
9	Total industrial waste water generation shall not exceed 4.2 m3/day. Industrial effluent shall be treated in ETP followed by Reverse Osmosis. Effluent shall be treated in the ETP comprising primary, secondary and tertiary treatment followed by RO. RO permeate shall be recycled/ reused in the process. RO rejects shall be evaporated in MEE. No effluent shall be discharged outside the plant premises and zero effluent discharged condition shall be maintained.	Complied with. We have generated the average quantity of effluent is 1.5 KLD only & meter readings are submitted to TNPCB on monthly basis. We are operating our ETP efficiently with the setup of collection tank, equalization tank, sequential batch reactors (SBR), RO & Evaporator. The final RO reject water is treated by Kettle type Evaporator & final solids are disposed to authorized TSDF. The ZLD treated water is reused for our process or cooling tower make up. We are operating & maintaining the Zero Liquid Discharge system efficiently complying to the statutory norms.
10	Process effluent /any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond. As proposed, MEE salt and ETP sludge shall be sent to the TSDF. Spent catalyst/resin and Spent oil shall be sending authorized recycler/ re-processor	Complied with. We have installed the pH & TDS meter in the storm water drain for monitoring the parameters and ensuring the compliance. Storm water drains were passed through guard pond. We are sending the ETP & MEE solids to authorized TSDF (M/s Tamil Nadu Waste Management Limited) for disposal. Spent Oil & Catalyst are sent to TNPCB authorized recycler.



M/s Covestro (India) Private Limited

Semmankuppam Village, Cuddalore – 607005



S. No.	EC Conditions	Compliance Status
11	The company shall obtain authorization for collection, storage and disposal of hazardous waste under hazardous waste (management, handling and Tran's boundary movement) rules 2008 and amended as on date for management of hazardous wastes and prior permissions from TNPCB shall be obtained for disposal of solid / hazardous waste in the TSDF. Measures shall be taken for firefighting facilities in case emergency	Complied with. Waste Generated: 1. Spent oil 3.2 T/Year & Sent to Authorized recycler 2. Chemical sludge from ETP 4.0 T/Year & Disposed to TNWM Ltd. 3. Chemical sludge from Barrel decontamination 4.0 T/Year TNWM Ltd. 4. Discarded Barrels 170 T/Year & Sent to authorized recyclers. We have the agreement with TSDF (both disposal & recycler). Firefighting facilities has been provided as per the standards.
12	The company shall strictly comply with the rules and guidelines under manufactures, 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.	Complied with. The company is strictly complying with the rules and guidelines under manufactures, storage and import of hazardous chemicals (MSIHC) rules 1989 and all transportation of hazardous chemicals is carried out as per the motor vehicle act (MVA) 1989.
13	Unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire-fighting system shall be as per norms. Fire hydrant system shall be provided along with fire monitor and flame deduction system in the process as well as storage areas.	Complied with. Plant is protected with a full-fledged fire hydrant system. Fire station equipped with one diesel pump and a motor driven pump. The fire pumps start automatically on reduction of pressure in the hydrant header and are to be switched off manually. Fire-fighting system as per norms of the Tamil Nadu Fire & Rescue Services Department. Sixteen single headed hydrant points and three hose reels are connected to the hydrant mains, which are evenly distributed in the entire operational and storage area. Fire alarm /deduction system is also available.
14	The company shall comply with the recommendations made in the EIA/EMP/Risk assessment report. Risk assessment shall be included in the safety manual.	Complied with. Risk assessment included in the Safety Manual.
15	Training shall be imparted to all employees on safety and health aspect of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees and handling of chemicals shall be imparted. Occupation health surveillance of the workers shall be done on a regular basis and records maintained as per the factories Act.	Complied with. Regular training is given to all employees on Safety and Health aspect of chemicals handling. Pre-employment and routine periodical medical examinations for all employees is undertaken on regular basis. Occupation health surveillance of the workers is performed on a regular basis and records maintained as per the factories Act.



M/s Covestro (India) Private Limited

Semmankuppam Village, Cuddalore – 607005



S. No.	EC Conditions	Compliance Status
16	As proposed, Greenbelt shall be developed in 22031m ² out of total plant area. Selection of plant species shall be as per the CPCB guidelines.	Complied with. The greenbelt has been developed to a span of 15495 m ² out of the total plant area. The selection of the plant species is as per CPCB guidelines. Presently 2404 number of trees with different varieties around the plant are existing. Also, every year 200 trees have been planted additionally. One third of our plant contains green belt as per guidelines.
17	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the factories Act.	Complied with. Inspection report to Director, Industrial Safety & Health has been submitted.
18	The company shall submit within three months the policy towards corporate environment responsibility which should inter-alia address (i) standard operating process/ procedure to being into focus any infringement/deviation/violation of environmental or forest norms/ conditions (ii) hierarchical system or administrative order of the company to deal with environmental issues and ensuring compliance to the environmental clearance conditions and (iii) system of reporting of non-complaints / violation environmental norms to the board of directors of the company and/or stakeholders shareholders.	Complied with. Company's Policy on Health, Safety, Environment, Energy and Quality is provided & attached as Annexure -II .
19	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 toilet, 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 constructions wastes shall be managed so that there is no impact and surrounding environment.	Complied with. We have adequate facility like toilet, drinking water, medical health care & canteen at our factory for contract/construction labours during the construction work.





TAMIL NADU POLLUTION CONTROL BOARD

1. Name of the Industry : M/s. Covestro (India) Pvt Ltd,
2. Address of the Industry : Semmankuppam,
Cuddalore-5
3. Category / Classification : Orange - Large.
4. Land use classification : Industrial area
5. Date of Survey : 13.6.2022
6. Duration of Survey : 24 Hours.

Meteorological Conditions.

Ambient Temperature (°C)	Min	Max	Relative Humidity(%)	Min	Max
	31	35		54	71
Weather condition	Clear Sky		Rain Fall (mm)	Nil	
Predominant Wind Direction	SW - NE		Mean Wind Speed (Km/hr.)	9.1	

Ambient Air Quality Survey Results

Sl. No.	Location	Direction	Distance (m)*	Height from GL (m)	Pollutants Concentration (µg/m ³)			
					PM ₁₀	PM _{2.5}	SO ₂	NO ₂
1	Scaffolding behind Hazardous scrap yard	SW	100	2	69	33	12	15
2	Scaffolding Near ETP	E	100	2	73	-	15	17
3	Scaffolding Near Vehicle shed	SE	120	2	70	-	19	21
4	Scaffolding Near STP	NE	100	2	81	50	22	25
5	Scaffolding Near chilling plant	W	110	2	65	-	18	20
6	Scaffolding Near main store	NW	120	2	67	-	16	18

K. Rajaraman 29/6/22
Deputy Chief Scientific Officer
TNPCC/AEL/CUDDALORE



TAMIL NADU POLLUTION CONTROL BOARD

1. Name of the Industry : M/s. Covestro (India) Pvt Ltd,
2. Address of the Industry : Semmankuppam,
Cuddalore 607 005.
3. Date of Survey : 13.6.2022

Stack Monitoring Survey Results

Sl. No.	Stack attached to	Stack Temp °k	Flue Gas Velocity in (m/Sec)	Gas Discharge rate in (m ³ /day)	Pollutants (mg/Nm ³)			
					PM	SO ₂	NO _x	Acid Mist
1	Thermic Fluid Heater – 4 Lac K.Cal / hr Fuel: HSD APC: Stack	425	12.46	3953	37	27	36	-
2	Process stack – Alkali scrubber outlet Fuel: Nil APC: Web Scrubber	318	13.56	8984	-	-	-	2.012
3	DG – 600 KVA Fuel: HSD APC: Stack	583	32.91	1901	40	24	221	-
4	DG – 400 KVA Fuel: HSD APC: Stack	555	30.21	1834	37	18	217	-
5	DG – 200 KVA Fuel: HSD APC: Stack	422	16.43	1311	26	16	28	-

K. Rajaraman 29/6/22
Deputy Chief Scientific Officer
TNPCC/AEL/CUDDALORE



TAMIL NADU POLLUTION CONTROL BOARD

1	Name of the Industry	M/s. Covestro (India) Pvt Ltd,	
2	Address of the Industry	Semmankuppam, Cuddalore 607 005	
3	Date of Survey	13.6.2022	
Category	O-L	Land use Classification	Industrial
Type of Survey	Ambient	Time of Survey	Day
Meteorological conditions		Calm	

Report of Total Volatile Organic Compounds

Sl. No.	Location	TVOC in ppb
1	Near ETP area	10.2
2	Near Production Plant-I	8.4
3	Near Production Plant-II	8.0
4	Near Emergency gate	2.6
5	Near Raw material Storage room	9.0

H. P. Rajaraman - 29/6/22
Deputy Chief Scientific Officer
TNPCC/AEL/CUDDALORE



TAMIL NADU POLLUTION CONTROL BOARD

1	Name of the Industry	M/s. Covestro (India) Pvt Ltd,		
2	Address of the Industry	Semmankuppam, Cuddalore 607 005		
3	Date of Survey	13.6.2022		
Category		O-L	Land use Classification	Industrial
Type of Survey		Ambient	Time of Survey	Day
Meteorological conditions		Calm		

Logging Parameters

Instrument Used		Casella Serial No. 5007321			
Logging Interval		10 Minutes at each point		Measuring Range 50 – 110 dB(A)	
Weighting	"A"	Peak Weighting	"C"	Time Weighting	Fast
Sound Incidence	Frontal			Time in hrs.	10.45 – 12.15 Hrs

Report of Noise Level Monitoring

Sl. No	Location	Duration (min)	Distance (m)	Direction	Sound Level – dB(A)		
					Leq	Min	Max
1	Near Chemplast gate	10	60	N	54.0	52.0	63.6
2	Behind Hazardous storage area	10	80	NE	57.6	54.3	64.0
3	Behind ETP	10	100	E	56.0	52.6	64.9
4	Near Main gate	10	100	SE	54.9	49.6	62.6
5	Near Emergency gate	10	80	S	57.6	49.9	62.6
6	Near STP	10	110	SW	61.0	52.6	68.6
7	Behind chilling plant	10	90	WSW	60.3	53.0	69.0
8	Behind Main store	10	100	NW	58.6	54.8	63.8

H. Rajaraman 29/6/22
Deputy Chief Scientific Officer
TNPCB/AEL/CUDDALORE

HSEQA-III

HSEQ

Health, Safety, Environment & Energy and Quality



It is our core belief that health, safety, environmental protection and energy performance as well as product and process quality and commercial efficiency are of equal importance in achieving our corporate objectives. We are signatories to the Global Charter of Responsible Care® – a worldwide initiative of the chemical industry – as a commitment by management and all of our employees to drive continuous improvement and to achieve excellence in the HSEQ areas.

HEALTH

We make continual progress towards the goal of no harm to health from products and operations. We continually improve the quality of the health benefits provided for employees in many countries to prevent ill health. We encourage awareness of healthy lifestyles, especially in view of the challenges facing us as a result of demographic changes and the rising retirement age in many countries.

SAFETY

Safety management and the continuous development of our safety culture are cornerstones of our corporate responsibility. We distinguish three main fields: personal safety, process safety and product safety.

Regarding personal safety we strive to prevent accidents and incidents in day-to-day work and on work-related travel. According to our mantra "Nothing we do is worth getting hurt for" we strive for a reduction of hazards targeting a Recordable Incident Rate (RIR) – the total number of recordable incidents per 100 full-time employees – of zero.

Process safety relates to the secure and reliable operation of our plants. It is essential to the health and well-being of our employees and neighbors, and hence to our success. We continually identify, reduce and manage process safety risks. For example by monitoring the Loss of Primary Containment (LoPC) – which means the leakage of chemicals from primary containers, such as pipelines, pumps, tanks and drums – to improve the reliability of our operations. We handle dangerous substances in a fully responsible manner to maintain the trust of society and the authorities.

Product stewardship is about design and development, production, handling, packaging, storage, transportation and the use of our products. All of this must be safe and efficient and, after proper use, our products should be available for recycling and safe for disposal.

ENVIRONMENT & ENERGY

We constantly work to lessen the environmental impact of our activities, products and services, and to develop innovative solutions that support our customers in improving their resource efficiency and reducing emissions. Resource-efficient processes in our operations help to protect the environment and at the same time cut the costs associated with materials, energy, emissions and disposal management.

Economic and environmental considerations encourage us to use resources, materials and energy conscientiously. This also includes topics such as water scarcity and the purchase of resource and energy-efficient products and services as appropriate.

QUALITY

We set high standards in terms of the quality of the raw materials and their processing into high-tech materials. We strive to improve the quality of our activities and offerings to the satisfaction of our customers and stakeholders and hence to our benefit.

For the operational implementation of these commitments, we have established an Integrated Management System covering all HSEQ aspects. We have also defined rules and regulations that comply with internationally recognized standards. We are committed to continually improve our Integrated Management System through, for example, results of analysis and evaluation, open dialogue with stakeholders and the outputs from management reviews.

To this end, our objectives regarding health, occupational, process and plant safety, environment, energy and quality are expressed as specific and measurable targets on which we openly report. The achievement of these targets is supported with appropriate resources and information and the same diligence as economic goals.


Anand Srinivasan
Managing Director
Covestro (India) Pvt. Ltd