

GAS TROUBLE III

REGULATORY LOOPHOLES IN TNPCB'S TOXIC EMISSIONS
MONITORING IN SIPCOT CUDDALORE, 2019-2020



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Introduction and Summary

The SIPCOT industrial complex at Cuddalore is a known toxic global hotspot [1]. The residents living within and around the industrial complex have been complaining about air pollution for nearly four decades now. Pollution impacted community administered studies conducted on air quality in the SIPCOT Cuddalore region in the early 2000s such as Gas trouble I, 2004 [2] and Gas trouble II, 2005 [3] are evidence of air pollution in the SIPCOT region.

According to a scientific study on volatile organic compounds in the SIPCOT Cuddalore in 2007 [4], the probability of developing cancer during lifetime in the SIPCOT area is one in a thousand due to their exposure to high levels of toxic gases from chemical industries in the region whereas the acceptable figure is less than one in 10 lakh.

In 2010, the Ministry of Environment and Forests imposed a temporary moratorium on new projects in 80 industrial clusters across India, including Cuddalore [5]. In February 2011, the moratorium was lifted for setting up of new industries in SIPCOT Cuddalore industrial complex on condition that a time-bound action plan for improvement of air and water quality would be executed by Tamil Nadu Pollution Control Board (TNPCB) [6].

However, as recently as 2021 and 2022, amidst the COVID situation, unabated incidents of accidents and pollution keep posing dangers to the residents of SIPCOT area. The occurrence of two industrial accidents, among which one lead to death of four workers, several injured [7] and the other one lead to chemical burns all over the body of a worker [8] reveals a serious threat to the safety, health of workers and the community. Among at least 12 pollution incidents reported by community monitors in the SIPCOT Cuddalore region, four are air environment pollution incidents [9, 10, 11, 12]. These expose inadequate implementation of such action plans mentioned above for improvement of air quality and irregular monitoring mechanisms in place.

Meanwhile, on requests from SIPCOT Cuddalore residents to verify the effectiveness of the functioning of the monitoring mechanism of air quality, a RTI based study was conducted on the continuous (real-time) stack emission monitoring data of the industries in the industrial complex for its compliance for a period of two years (2019 and 2020).

Methodology

1.Data collection:

The Continuous stack emission monitoring data was sought through RTI (**Annexure 1, 3 (as Link)**) for the list of industries in SIPCOT Cuddalore industrial complex connected to CARE AIR Centre (CAC) (**Table 1**), TNPCB for a period of two years- 2019 and 2020. The prescribed threshold values for each of the monitored stack-parameters were also obtained (**Annexure 2**).

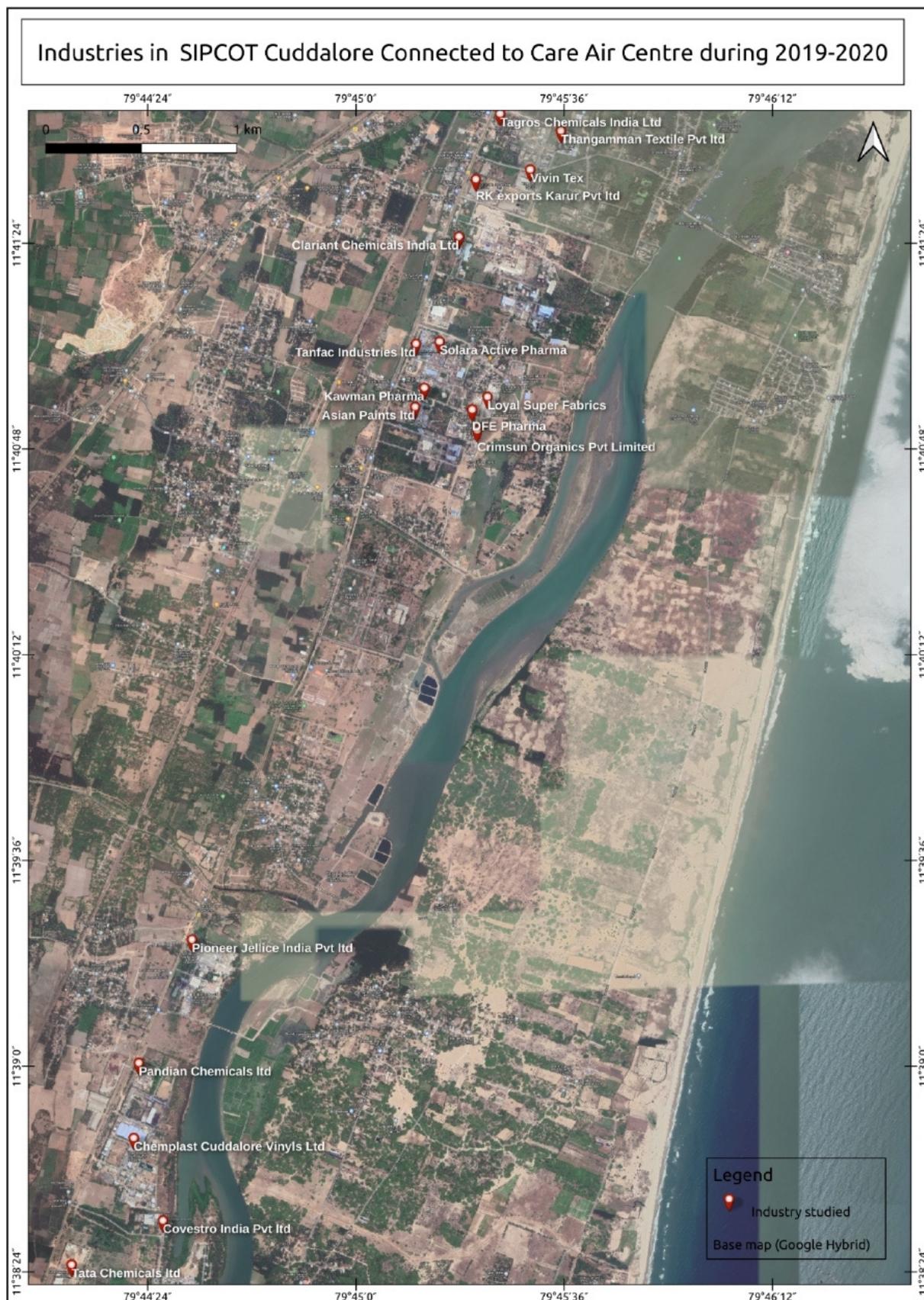
2.Data Analysis:

The RTI data cleaning and analysis were done using Google sheets. The magnitude of highest spikes of air pollutants in case of threshold exceedances (reading above which pollutant emission levels in a chimney stack is not legally permitted to emit) are plotted as graphs. Also, the magnitudes are checked for how far it is in excess of the prescribed threshold.

Table 1- List of SIPCOT industries connected to CARE AIR Centre in the study period 2019-2020

S.no	Industry category	Type	Industry
1	Highly polluting Red/Large	Pesticide	Crimsun Organics Pvt. Ltd.
2			Tagros Chemicals India Ltd.
3		Pharma	Kawman Pharma
4			Solara Active Pharma
5		Dye and Dye Intermediate	Clariant Chemicals India Ltd.
6	Red/Large	Chemical	Asian Paints Ltd.
7			TANFAC Industries Ltd.
8			TATA Chemicals Ltd.
9		Glue and gelatin	Pioneer Jellice India Pvt Ltd.
10		Pharma	DFE Pharma
11		Synthetic resins	Chemplast Cuddalore Vinyls Ltd.
12			Covestro India Pvt. Ltd.
13		Textile processing	Loyal Super Fabrics
14			R K Exports KARUR PVT Ltd
15			Vivin Tex
16	Red/Medium	Chemical	Pandian Chemicals Ltd
17		Textile processing	Thangamman Textile Pvt Ltd.

Map 1- Industries connected to Care Air centre in the study period 2019-2020



Key Findings

1. Thresholds are **not** even set for nearly **1/3rd** of the Stack-Parameters monitored by TNPCB in the period 2019-2020 in SIPCOT Cuddalore as shown in **figure 1**. This clearly indicates a flaw in the monitoring design in the first place.

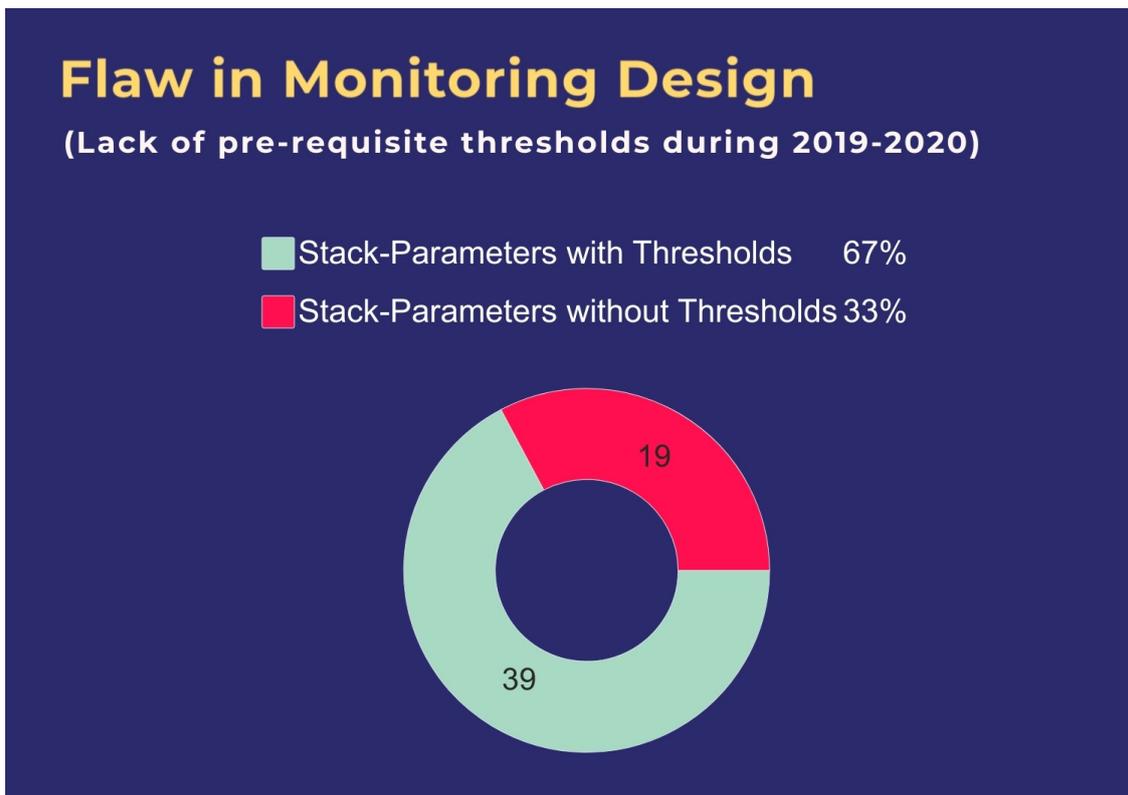


Figure 1- Flaw in Monitoring design- Lack of thresholds (2019-2020)

After a complaint was filed demanding setting up of unset thresholds to 19 stack- parameters in June 2021 by Sipcot area community environmental monitors to the regulators [13], three stack-parameters namely RD_Block_Stack - HCL, Reactors_3 - HCL and problock_I_II - HCL of Solara Active Pharma industry was observed to be set post June 2021 [14]. However, **16** stack-parameters are **not set with thresholds (at least until June 2021)**.

Key Findings

2. Exceedance spikes:

When a sharp increase in the magnitude (concentration) of a pollutant is observed above the prescribed threshold, the exceedance spikes are recorded. Occurrences of these spikes could potentially impact the ambient air quality levels thereby leading to health problems among the residents of SIPCOT area. The magnitude of highest Exceedance spike and period of Exceedance during 2019-2020 is shown in **Table 2**.

Table 2- Magnitude of highest Exceedance spike and period of Exceedance during 2019-2020

S. No	Industry	Parameter	Prescribed Threshold (mg/Nm ³)	Magnitude of highest Exceedance spike (mg/Nm ³)	Number of times the highest Exceedance spike is above threshold	Period of Exceedance (all spikes) (hours)
1	Kawman Pharma	Sulphur dioxide (SO ₂)	100	2000 (in 2019) 261.55 (in 2020)	20 (in 2019) 3 (in 2020)	96.5 (in 2019) 4.5 (in 2020)
2		Hydrogen Chloride (HCL)	35	1385.71 (in 2019)	40 (in 2019)	118 (in 2019)
3		Particulate matter (PM)	100	999 (in 2019)	10 (in 2019)	27.75 (in 2019)
4	Solara Active Pharma	Particulate matter (PM)	150	198.05 (in 2019) 219.98 (in 2020)	1.3 (in 2019) 1.5 (in 2020)	7.75 (in 2019) 4.75 (in 2020)
5	Chemplast Cuddalore Vinyls ltd (CCVL)	Vinyl Chloride Monomer (VCM)	1.96 ppm	13.28 ppm (in 2019)	7 (in 2019)	3 (in 2019)
6	Pandian Chemicals ltd	Chlorine (Cl ₂)	5.24 ppm	190.45 ppm (in 2019)	36 (in 2019)	10.75 (in 2019)

The flaw in the fundamental design of the monitoring system (Lack of pre-requisite thresholds) raises suspicion on various levels of the entire functioning of the continuous stack emission monitoring system in the first place.

The exceedance spikes amidst such a flawed existing monitoring system are even more troubling. SIPCOT Cuddalore industrial complex is one of the globally known air pollution intensive hotspots. The fact that TNPCB is still allowing industrial units in such a hotspot to violate emission and monitoring norms reveals a situation where local communities cannot expect regulation and regulators to maintain a breathable environment for their living.

Background

Based on the powers conferred under Section 18 (1)(b) of Air (Prevention & Control of Pollution) Act, 1981, the Central Pollution Control Board (CPCB) has recommended all the state and union territory PCBs to ensure the installation of online continuous Stack Emission Monitoring Systems in 17 categories of highly polluting industries. Hence, TNPCB has obligations to direct the highly polluting industries in the SIPCOT Cuddalore area to monitor and regulate emissions from their stacks for various parameters on a continuous real-time basis.

The continuous real-time monitored data will then be stored in the TNPCB's CARE Air Centre. TNPCB's CARE Air website [15] states that "When the emission levels exceed the norms, an inbuilt alarm system has been established to inform the concerned industry and the District Environmental Engineer/Member Secretary through automated SMS for remedial action immediately."

Similarly, as the industries of SIPCOT Cuddalore are in a notified Polluted Industrial Area, they have to comply with the following conditions pertaining to air pollution mitigation imposed by MOEF&CC Office memorandum Dt 24.10.2019 & 31.10.2019 for environmental management and consideration of activities/projects in such areas[16]:

1. Continuous Emission Monitoring System (CEMS) has to be installed in all **large/medium red category** industries (air polluting) and connected to State Pollution Control Board (SPCB) and CPCB servers.
2. Stack emission levels should be **stringent than the existing standards** in terms of the identified critical pollutants.

Based on these, this study was conducted to establish whether the existing continuous stack emission monitoring system in the Cuddalore SIPCOT industrial complex is effectively implemented in 17 industries connected to CARE AIR Centre in the period of two years 2019 to 2020.

Findings

1.No upper Limits- Stacks set free:

The Thresholds for **19** stack-parameters out of the 58 stack-parameters connected to CEMS of CARE AIR centre are **not** even set up (i.e) for **33%** of the stacks being connected, the limiting standards were not even set up by TNPCB (as shown in **Table 3**) during 2019-2020. This would enable those stacks to emit air pollutants freely without an upper limit.

After a complaint was filed demanding setting up of unset thresholds to 19 stack- parameters in June 2021 by Sipcot area community environmental monitors to the regulators [13], three stack-parameters namely RD_Block_Stack - HCL, Reactors_3 - HCL and problock_I_II - HCL of Solara Active Pharma industry was observed to be set post June 2021 [14]. However, **16** stack-parameters **do not have thresholds (at least until June 2021)**.

2.Exceedance Spikes

2.1 Kawman Pharma:

- SO₂ emissions' highest spike was **2000 mg/Nm³** which is **20 times higher** than the threshold level (100 mg/Nm³). The highest spike was observed for 6.5 hours in 4 different days in a single month in the year 2019 including for 2.5 continuous hours in a single day in 2019 (**Figure 2**). Overall, a varied range of exceedances were observed for 96.5 hours in 27 different days in the year 2019.
- HCL emission exceedances spiked **upto 1385.71 mg/Nm³** which is **40 times higher** than the threshold (35 mg/Nm³) (**Figure 3**). A varied range of exceedances were observed for nearly continuous 5 hours in a single day and overall 118 hours in 19 different days in the year 2019.
- PM emission exceedances spiked **upto 999 mg/Nm³** which is about **10 times higher** than the threshold (100 mg/Nm³) (**Figure 4**). The exceedances were observed for 27.75 hours at different ranges in 12 different days in the year 2019.

Table 3- Thresholds NOT set by TNPCB during 2019-2020, Source: RTI

S.no	Name of the industries	Parameter Connected to Care air centre	Threshold values
1	Tagros Chemicals India Limited	Scrubber - SO2 mg/Nm3	nil
2	Mls. Solara Active Pharma	RD_Block_Stack - HCL ppm	nil
		Reactors_3 - HCL ppm	nil
		problock_I_II - HCL ppm	nil
		problock_I_II - Mercaptan ppm	nil
		problock_I_II - VOC ppm	nil
3	Mls. Clariant Chemicals India Limited	S:PM_BLUEMILLING DUCT:mg/m3	nil
		S:SO2_BLUEALPHA_PLANT:ppm	nil
4	Mls. TANFAC Industries Ltd	S:SO2 PROCESS BOILER:ppm	nil
5	Asian Paints Limited	S:NO2 16 TPH BS:ppm	nil
6	Chemplast Sanmar Limited	S:CH_BOILER_CO:ppm	nil
		S:CH_BOILER_CO2:%	nil
7	TATA Chemicals Ltd	S:SO2_BLR:mg/m3	nil
		S:NOX_BLR:mg/m3	nil
		S:CO_BLR:mg/m3	nil
		S:SO2_CFHAG:mg/m3	nil
		S:NOX_CFHAG:mg/m3	nil
		S:CO_CFHAG:mg/m3	nil
8	Covestro India Pvt. Ltd	S:THERMOPAC_SO2_S:ppm	nil

Findings

2. Exceedance Spikes

2.1 Kawman Pharma:

- In 2020, SO₂ exceedances spiked **upto 261.55 mg/Nm³** which is nearly **3 times** higher than the limiting threshold level (100 mg/Nm³). The exceedances were observed for 4.5 hours for 3 different days in the year 2020.

Kawman- SO₂ Exceedance Spikes upto 20 times higher than threshold on 13/01/2019

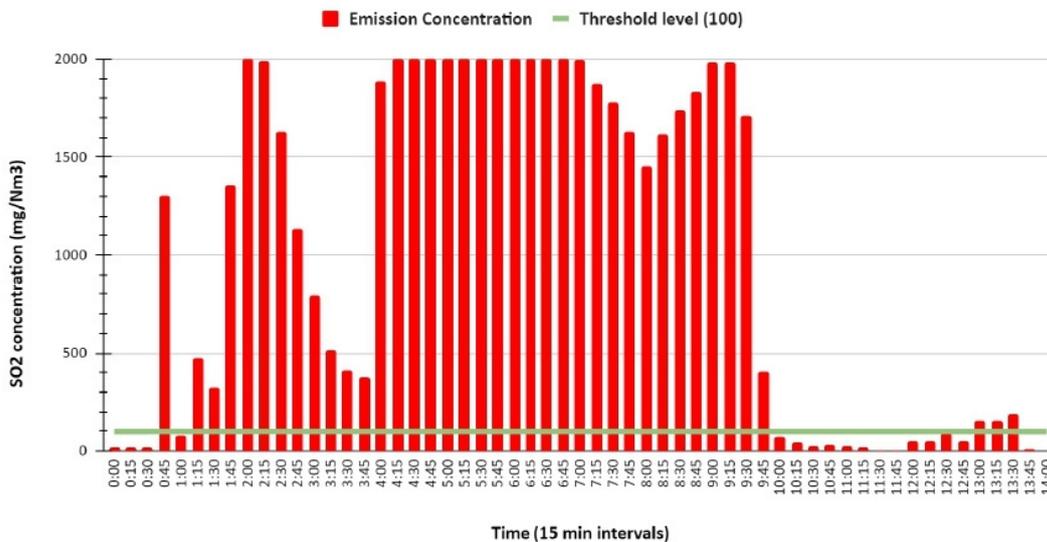


Figure 2- SO₂ Exceedance Spikes of Kawman Pharma

2.2 Solara Active Pharma:

- PM emissions from the boiler stack 1 exceeded the limits for 7.75 hours of the time the data was available in 2020. The exceedances spiked **upto 198.05 mg/Nm³** which is **1.3 times** the threshold (150 mg/Nm³). The exceedances were observed at different ranges for 10 different days in the year.

Findings

2. Exceedance Spikes

Kawman- HCL Exceedance Spikes upto 40 times higher than threshold on 06/01/2019

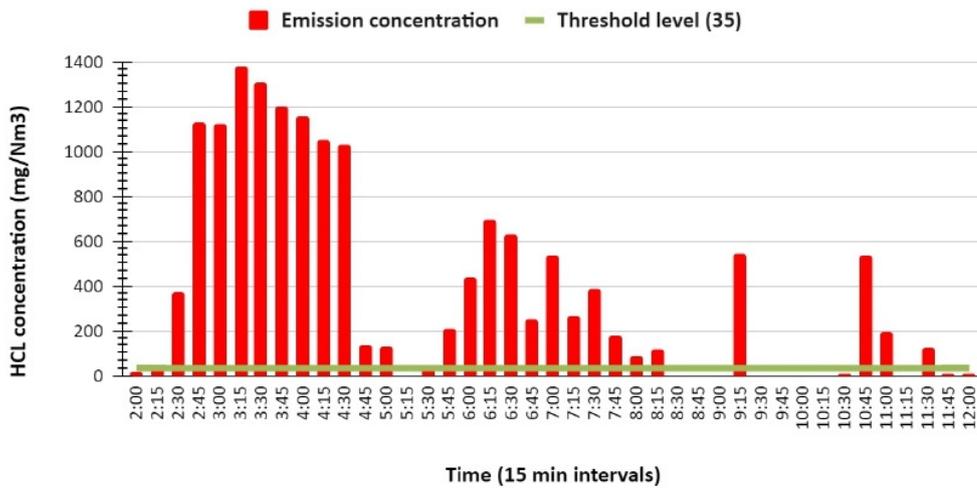


Figure 5- HCL Exceedance Spikes of kawman Pharma

Kawman- PM Exceedance Spikes upto 10 times higher than threshold on 13/01/2019

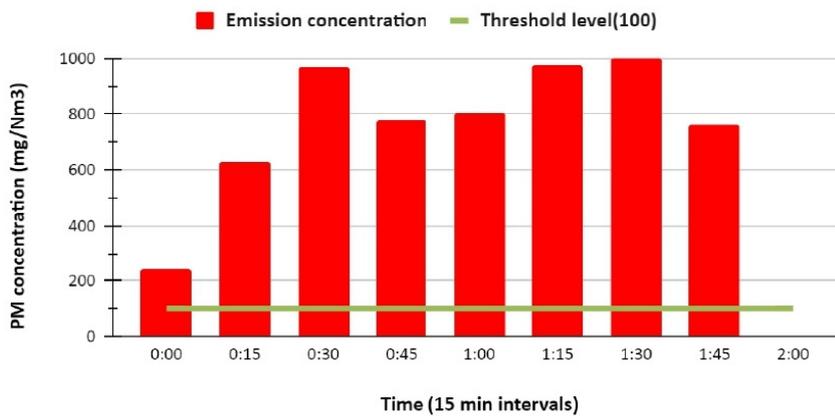


Figure 4- PM Exceedance Spikes of Kawman Pharma

Findings

2. Exceedance Spikes

2.2 Solara Active Pharma:

- PM emissions from the boiler stack 1 exceeded the limits for 4.75 hours of the time the data was available in 2020. The exceedances spiked upto **219.98 mg/Nm³** which is about **1.5 times** the threshold (150 mg/Nm³). The exceedances were observed at different ranges for 3 different days in the year.

2.3 Chemplast Cuddalore Vinyls ltd (CCVL):

- VCM emissions from the VCM stack (process) exceeded the threshold levels for 4.75 hours of the time the data was available in 2019. The exceedances spiked at different ranges for three hours in a single day (**Figure 5**). The highest spike was **13.28 ppm** which was **7 times** higher than the threshold (1.96 ppm).

2.4 Pandian Chemicals ltd:

- Chlorine emissions exceeded the limits for 10.75 hours of the time the data was available in 2019. The exceedances spiked upto **190.45 ppm** which is **36 times** higher than the threshold (5.24 ppm) (**Figure 6**). The exceedances were observed at different ranges for 2 different days in the year 2019.

Findings

2. Exceedance Spikes

Chemplast- VCM Exceedance Spikes upto 7 times higher than threshold on 27/11/2019

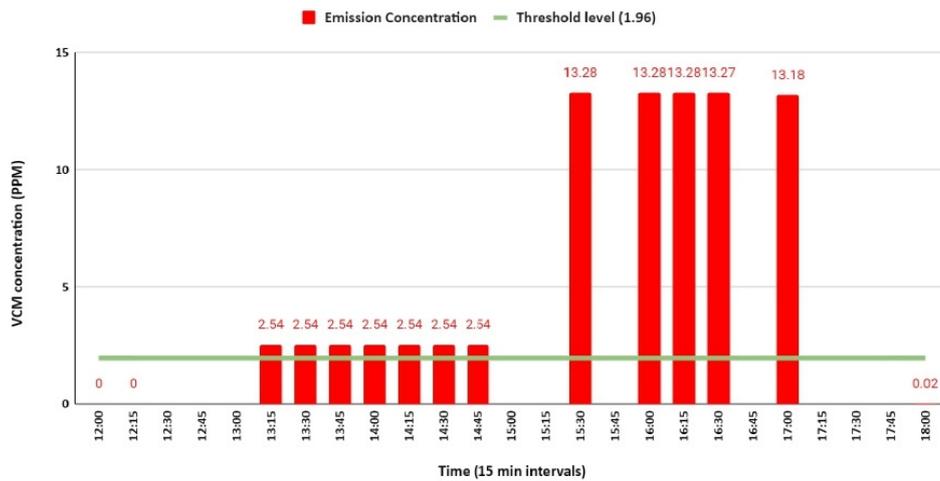


Figure 5- VCM Exceedance Spikes of Chemplast

Pandian chemicals- Cl2 exceedance Spikes upto 36 times higher than threshold on 26/06/2019

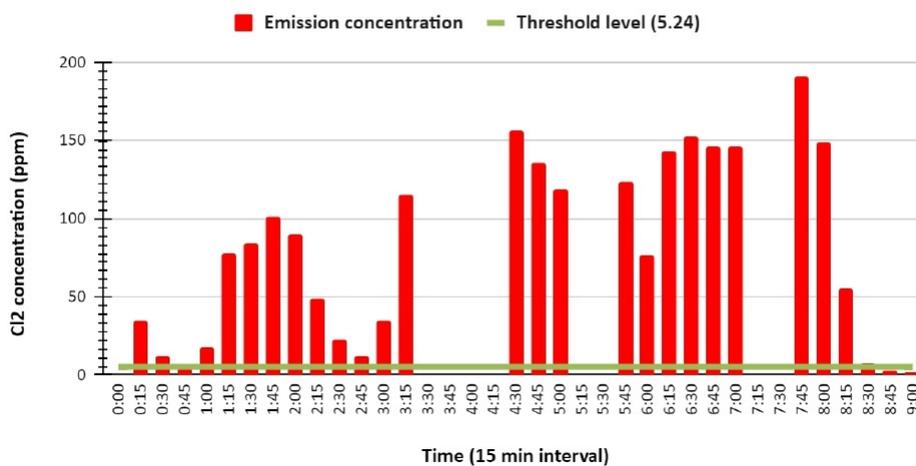


Figure 6- Cl2 Exceedance Spikes of Pandian Chemicals

Health effects of specified Parameters (without thresholds and with exceedances)

The district health department also has obligations to ensure livable air quality and safeguard public health. Under the Tamil Nadu Public Health Act, 1939, chimneys emitting noxious substances are considered a “nuisance.” The Health Officer of the local body is required to regularly survey the chimney stacks in his/her jurisdiction, and take steps to ensure that emissions of noxious substances are not at levels that will cause ill-health among the public.

The below mentioned stack-parameters are found to be without thresholds or with exceedances during the study period. These could potentially impact the ambient air quality levels thereby leading to health problems (as shown in **figure 7**) among the residents of SIPCOT area.

Sulphur dioxide (SO₂)

SO₂ travels deep into the human lungs and affects the respiratory system. Short term exposure to SO₂ causes Wheezing, shortness of breath and chest tightness. People with respiratory illnesses such as asthma are sensitive to SO₂. Long term exposure to a high level of SO₂ increases respiratory symptoms and reduces lung function ability[17].

Hydrogen chloride (HCL)

Hydrogen chloride gas can cause irritation of the eyes, skin, and respiratory tract. Exposure to high levels can result in corrosive damage to the eyes, skin, and respiratory tissues, and could lead to pulmonary edema and even death in extreme cases[18].

Mercaptan

Methyl Mercaptan gas rapidly gets absorbed in the lungs and is a central nervous system depressant that acts on the respiratory center to produce death by respiratory paralysis. Individuals with pre-existing respiratory, cardiac, nervous system, or liver impairment may be more susceptible to exposure to methyl mercaptan [19]

Health effects of specified Parameters (without thresholds and with exceedances)

Volatile Organic Compound (For instance, Benzene)

Volatile organic compounds (VOCs) are emitted as gases from certain solids or liquids. VOCs include a variety of chemicals, some of which may have short- and long-term adverse health effects. For instance, benzene is a VOC emitted from Solara Active Pharma[20]. People who breathe in high levels of benzene may develop rapid or irregular heartbeat, headaches, tremors, confusion, unconsciousness, death (at very high levels) within minutes to several hours. On long term exposure, Benzene causes harmful effects on the bone marrow and can cause a decrease in red blood cells, leading to anemia. It can also cause excessive bleeding and can affect the immune system, increasing the chance for infection[21].

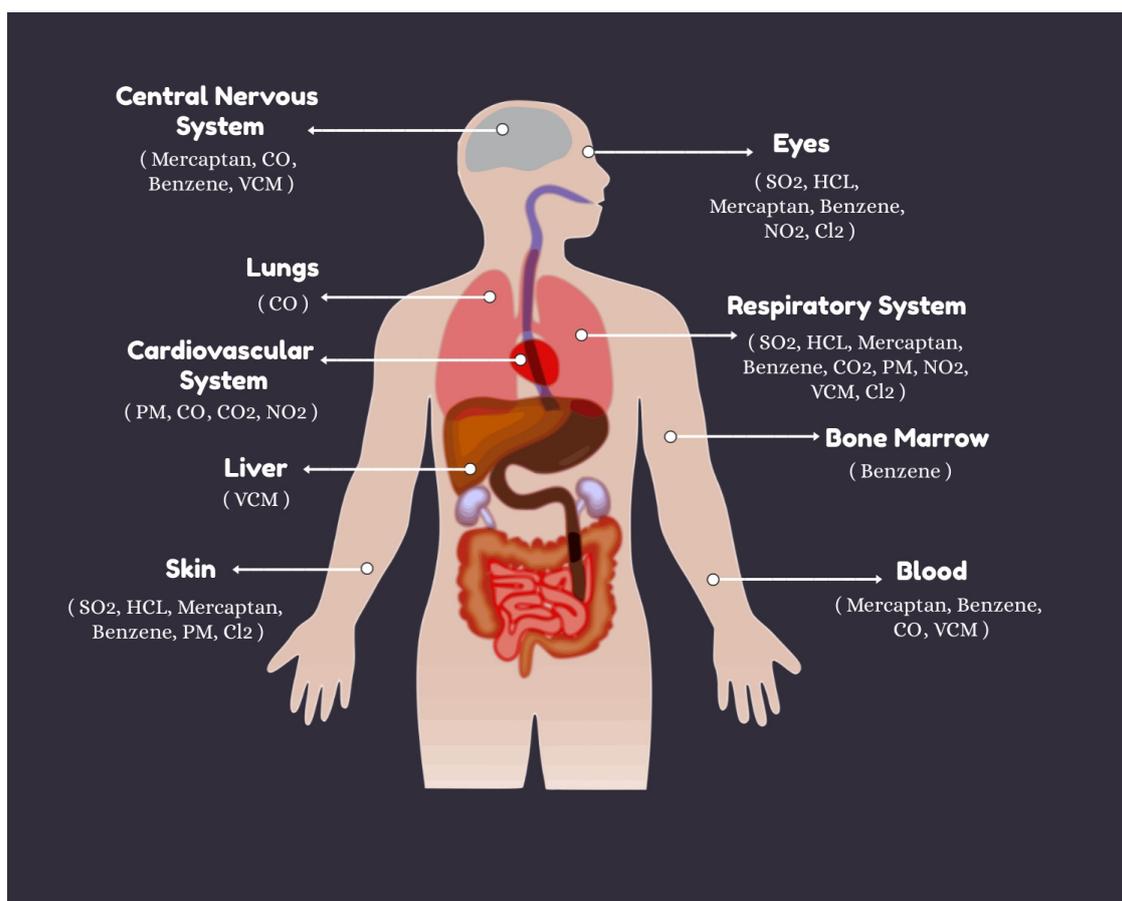


Figure 7- Target organs of specified parameters

Health effects of specified Parameters (without thresholds and with exceedances)

Particulate Matter (PM)

Based on the size of the particles, they get into the human lungs and even into the bloodstream and pose the greatest health risk. Apart from respiratory illnesses, PM affects the cardiovascular system and causes premature death in people with heart or lung disease; cardiac arrest, irregular heartbeat, aggravates asthma, decreases lung function, increases respiratory symptoms such as irritation of the airways, coughing or difficulty breathing[22].

Carbon Monoxide (CO)

CO has the ability to displace oxygen in the bloodstream. Thereby it deprives oxygen to vital organs such as the heart, brain, etc causing unconsciousness and suffocation. Short term exposure causes chest tightness, headache, fatigue, dizziness, drowsiness and nausea. On long term or high exposures, symptoms worsen and include vomiting, confusion and collapse in addition to the loss of consciousness and muscle weakness[23].

Carbon dioxide (CO₂)

Higher concentrations can affect respiratory function and cause excitation followed by depression of the central nervous system. A high concentration can displace oxygen in the air. If less oxygen is available to breathe, symptoms such as rapid breathing, rapid heart rate, clumsiness, emotional upsets and fatigue can result. As less oxygen becomes available, nausea and vomiting, collapse, convulsions, coma and death can occur. Symptoms occur more quickly with physical effort. Lack of oxygen can cause permanent damage to organs including the brain and heart[24].

Nitrogen dioxide (NO₂)

NO₂ irritates the respiratory system and short term exposure aggravates asthma and leads to cough, wheeze and breathing difficulty. Newer research has shown links between NO_x and cardiovascular diseases, lower birth weight in newborns and increased risk of premature death[25].

Health effects of specified Parameters (without thresholds and with exceedances)

Vinyl Chloride Monomer (VCM)

Breathing high concentrations of VCM fumes for a short time may cause headaches, dizziness, sleepiness, unconsciousness, and at extremely high levels, can lead to death. Breathing VCM fumes over a long period of time (many years) can result in impotence, permanent liver damage, immunological dysfunction and nerve damage. If VCM is spilt on the skin, it will cause numbness, redness and blisters and will cause symptoms similar to frostbite[26]. Vinyl chloride exposure is associated with an increased risk of a rare form of liver cancer (hepatic angiosarcoma), as well as brain and lung cancers, lymphoma, and leukemia[27].

Chlorine (Cl₂)

Immediate signs and symptoms of chlorine exposure include blurred vision, burning pain, redness, and blisters on the skin, chest tightness, difficulty breathing or shortness of breath, nausea and vomiting, watery eyes and wheezing. Long-term complications may occur after breathing in high concentrations of chlorine. Complications are more likely to be seen in people who develop severe health problems such as fluid in the lungs (pulmonary edema) following the initial exposure[28].

Discussion

This study reveals TNPCB's fundamentally flawed stack emission monitoring mechanism in SIPCOT Cuddalore region.

The prime pre-requisite of a monitoring mechanism would be to design and set thresholds(emission standards) for stack-parameters. Thresholds would indicate quantitative limits on the permissible amount of specific air pollutants from specific sources. These are set in line with air quality standards to protect human life. These thresholds for each prescribed parameter should correspond to legally permissible emissions prescribed under the Environment Protection Rules, 1986. Any exceedance above thresholds must relay information to TNPCB to take action to bring emission within limits.

Lack of Thresholds means that there is no proactive measure taken by TNPCB to bring air emissions within limits. Lack of thresholds by TNPCB for 19 stack-parameters during 2019-2020 and 16 stack-parameters until at least June 2021, including pollutants like Methyl Mercaptan, SO₂ shows the deliberate disregard of the regulators towards the health of residents around SIPCOT industrial area. Without upper limits TNPCB has given free reign to polluters who can continue to emit pollutants at harmful levels impacting health.

For instance, Methyl Mercaptan gas rapidly gets absorbed in the lungs and is a central nervous system depressant that acts on the respiratory center to produce death by respiratory paralysis[19].

The effectiveness of the monitoring system is questionable as lack of upper limit to check for exceedances cannot trigger regulatory action. No norms means no compliance. No norms means no enforcement and regulation. No norms means no clean Air.

Amidst such flawed monitoring mechanism, the emissions of six stack-parameters from four industries were violating emission norms by spiking above thresholds by 1.3 to 40 times where thresholds are available.

Discussion

CARE Air's website [15] states: "When the emission levels exceed the norms, an inbuilt alarm system has been established to inform the concerned industry and the District Environmental Engineer/Member Secretary through automated SMS for remedial action immediately." However, the recurring instances of exceedances ranging from one day to 27 different days for varied periods at high levels suggests that the alarm system is either disabled, or ignored by the TNPCB to benefit the offending industries.

Immediate regulatory action is crucial as short exposures of pollutants are enough to aggravate health effects. For instance, short exposures to peak levels of SO₂ in the air can make it difficult for people with asthma to breathe when they are active outdoors[17] and breathing high concentrations of VCM fumes for a short time may cause headaches, dizziness, sleepiness, unconsciousness, and at extremely high levels, can lead to death[26].

The RTI response for action taken details against errant industries- "Details not available at Care Air Centre" (**Annexure 1**) raises suspicion on whether any action was taken on the offending industries. The RTI application was not transferred to any another concerned public authority for proactively disclosing the information which is against the spirit of transparency of the RTI act, 2005.

Moreover, residents of SIPCOT area continue to complain of unabated air pollution incidents suggesting that no proper action is being taken on polluting industries.

As of 2020, at least 10 industries in the industrial complex were not in operation for various reasons. Even in this situation air pollution burden is severe. Instead of cleaning of airshed, TNPCB and other regulators are considering establishment of a new PVC plant, a new textile park and further expansions and new proposals like a petrochemical industrial complex in the SIPCOT industrial area.

The Focus should be on reduction on air pollution, protection of health and action on violating industries.

Recommendations

The Government should:

1. Hold TNPCB officials accountable for their failure to enforce the environmental laws effectively.
2. Take immediate action against industries for having violated emission norms:
 - Put in place a time-bound action plan to make TNPCB and district health department effective law enforcers
 - Put in place a time-bound action plan to make industries compliant
 - Take necessary action against offenders
3. Direct TNPCB
 - To set up stringent thresholds to all stack- parameters that are currently not set with thresholds in Cuddalore SIPCOT industrial complex.
 - To prescribe emission thresholds to stack-parameters at the stage of issuance of consent itself to industries.
 - To perform quarterly calibration audits to ensure proper performance of CEMS
 - To ensure transparency in stack emission trend data and environmental governance of all red category industries.
 - To intimate the data violations through automated SMS system to District Collector, District health officer, SIPCOT project officer and Inspectorate of factories for speedy remedial action.
4. Direct the Health Officer of the district and other relevant local bodies to exercise their responsibilities under the TN Public Health Act to ensure that public health is not affected by the air pollution nuisance of industrial units in the region.
5. Declare an indefinite moratorium on setting up of new industries or expansion of existing industrial activities in the SIPCOT Cuddalore region.
6. Carry out cumulative impact assessment and a region wide health and environment carrying capacity study to chart out a plan for remediation of environment, and restoration of health.

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25. <https://www.lung.org/clean-air/outdoors/what-makes-air-unhealthy/nitrogen-dioxide>
26. <http://www.npi.gov.au/resource/vinyl-chloride-monomer-vcm>
27. <https://www.cancer.gov/about-cancer/causes-prevention/risk/substances/vinyl-chloride>
28. <https://emergency.cdc.gov/agent/chlorine/basics/facts.asp>

Annexure 1- Continuous Stack Emission Data, Source: RTI



TAMIL NADU POLLUTION CONTROL BOARD

BY RPA

From
R. Kannan, M.Tech.,
Additional Chief Environmental Engineer,
Appellate Authority /
Tamil Nadu Pollution Control Board,
76, Mount Salai, Guindy,
Chennai - 600 032.

To
Ms. M. Chinnai
No. 92, Dr. C. Vivek,
Thiruvalluvar Nagar,
Besant Nagar,
Chennai - 600 090.

Letter No: TNPCB/RTIA/001605/A-19/2021, dt. 11.02.2021

Sub: TNPCB - RTI Act 2005 - Seeking Information under RTI Act - Information Furnished - Reg.

Ref: Your Appeal Petition dated: 19.01.2021, received here on 20.01.2021.

With reference to your Appeal Petition cited above, you have sought certain information under RTI Act 2005. In this connection, I am to inform that the reply is annexed to this letter.

Encl: As above.


Appellate Authority

No. 76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.
Telephone : 22353134 to 141, Fax : 044-22353068
Email : tnpcb-chn@gov.in Web : www.tnpcb.gov.in



TAMILNADU POLLUTION CONTROL BOARD

Reply for U.O. Note from Public Information Officer

Sub: TNPCB-Certain Information requested under RTI Act -Reg.
Ref: TNPCB/RTIA/001605/Appeal No.19/2021, dt:27.01.2021

With reference to the above, the detail requested by the petitioner Ms. M. Chinnai, Chennai Singh is enclosed as **Annexure I**.

Encl: **Compact disk**.


Assistant Director
Care Air Centre

Reply for U.O. Note No. TNPCB/RTIA/001605/Appeal No.19/2021, dt:27.01.2021

To:
Public Information Officer,
TNPCB
Chennai-32.

No. 76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.
Tel : 22353134, 22353135, 22353136, 22353137, 22353138, 22353139, 22343140, 22353141
Fax : 044 - 22353068

Annexure 1- Continuous Stack Emission Data, Source: RTI

ANNEXURE-I

Sl. no	Questionnaire	Reply
1	Provide a list of all industries in SIPCOT industrial park, Cuddalore that have been directed by TNPCB to install Continuous stack emission monitoring systems as of December 2020.	The details may be obtained from DEE, Cuddalore.
2	Provide a list of all industries in SIPCOT industrial park, Cuddalore that have installed Continuous stack emission monitoring systems connected to Care Air Centre as of December 2020.	ANNUXER-A
3	Provide a list of all the parameters that are to be measured by each stack of all industries in SIPCOT industrial parks, Cuddalore monitored by Care Air Centre.	ANNUXER-A
4	Provide threshold values of each of the parameters measured by each stack of all industries in SIPCOT industrial park, Cuddalore monitored by Care Air Centre.	ANNUXER-A
5	Provide stack emission monitoring data for all prescribed parameters from all stacks connected to Care air centre of all industries in SIPCOT industrial park, Cuddalore for the period from January 2019 to December 2020.	ANNUXER-B
6	Provide a list of Action taken against each of the industries in SIPCOT industrial park, Cuddalore found to be violating emission norms prescribed by TNPCB, along with a copy of all such correspondence.	Details not available at Care Air Centre.


11/2/21
Assistant Director
CAC, TNPCB.

Annexure 2- Thresholds set and NOT set by TNPCB, Source: RTI

ANNEXURE-A

Sl.no	Name of the industries	Parameter Connected to CAC	Threshold values
1	Mls. Tagros Chemicals India Limited	Coal_Boiler - PM mg/Nm3	150
		Coal_Boiler - SO2 mg/Nm3	511
		Scrubber - SO2 mg/Nm3	-
		Wood_boiler - PM mg/Nm3	150
2	Mls. Solara Active Pharma	BoilerStack_1 - PM mg/Nm3	150
		BoilerStack_2 - PM mg/Nm3	150
		RD_Block_Stack - HCL ppm	-
		Reactors_3 - HCL ppm	-
		problock_I_II - HCL ppm	-
		problock_I_II - Mercaptan ppm	-
		problock_I_II - VOC ppm	-
3	Mls. Kawman Pharma,	BOILER_STACK - Nox mg/Nm3	100
		BOILER_STACK - PM mg/Nm3	100
		BOILER_STACK - SO2 mg/Nm3	100
		SCRUBBER_STACK - HCL mg/Nm3	35
		SCRUBBER_STACK - NH3 mg/Nm3	100
4	Mls. Crimsun Organics Pvt. Ltd.,	BOILER_STACK - PM mg/Nm3	800
5	Mls. Clariant Chemicals India Limited,	S:IPSCS CL2 CCIL:ppm	5.24
		S:BOILER STACK PM:mg/m3	800
		S:PM_BLUEMILLING DUCT:mg/m3	-
		S:SO2_BLUEALPHA_PLANT:ppm	-
6	Mls. TANFAC Industries Ltd	S:HF CAS STACK:ppm	30.5
		S:HF ALF3 CAS STACK:ppm	30.5
		S:SAP1 SO2:ppm	477
		S:SAP2 SO2:ppm	477
		S:SO2 PROCESS BOILER:ppm	-
		S:PROCESS BOILER SPM:mg/m3	150
		S:HF SFL STACK:ppm	30.5
		S:SO2_GENSET STACK:ppm	150
		7	Mls. Asian Paints Limited
S:SO2 16TPH B.S:ppm	564		

ANNEXURE-A

Sl.no	Name of the industries	Parameter Connected to CAC	Threshold values
8	Mls. Chemplast Sanmar Limited	S:NO2 16 TPH BS:ppm	-
		S:SOX BOILER STAC:ppm	150
		S:NOX BOILER STACK:ppm	500
		S:SPM_BOILER:mg/m3	100
		S:SPM DRYER STACK:mg/m3	150
		S:VCM DRIER STACK:ppm	1.96
		S:VCM STACK:ppm	1.96
		S:CH_BOILER_CO:ppm	-
		S:CH_BOILER_CO2:%	-
		9	Mls. TATA Chemicals Ltd
S:NOX_BLR:mg/m3	-		
S:CO_BLR:mg/m3	-		
S:SO2_CFHAG:mg/m3	-		
S:NOX_CFHAG:mg/m3	-		
S:CO_CFHAG:mg/m3	-		
S:PM_BLR:mg/m3	150		
S:PM_CFHAG:mg/m3	150		
10	Mls. DFE Pharma	S:BOILER PM:mg/m3	150
11	Mls. Loyal Super Fabrics,	S:SPM_THERMOPAD:mg/m3	150
		S:SPM_BOILER:mg/m3	150
12	Mls. Vivin Tex,	S:PM_BOILER STACK:mg/m3	800
13	Mls. R K Exports KARUR PVT Ltd.	S:SPM_STACK:mg/m3	150
14	Mls. Covestro India Pvt. Ltd	S:THERMOPAC_SO2_S:ppm	-
		S:THERMOPAC_PM_STACK:mg/m3	150
15	Mls. Pioneer Jellice India Private Limited	S:PM_B:mg/m3	150
16	Mls. Thangamman Textile Private Ltd,	S:PM_S_CHIMNEY:mg/m3	150
17	Mls. Pandian Chemicals Ltd.,	S:CHLORINE_CHS STACK:ppm	5.24

Link to RTI Document- <https://sipcotcuddalore.com/wp-content/uploads/ANNEXURE-B.pdf>