

**BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE AT CHENNAI**

**ORIGINAL APPLICATION NO. 256 OF 2020 (SZ)**

Tribunal on its own motion – Suo Motu

... Applicant

Vs

Union of India and Ors.

... Respondents

**STATUS REPORT FILED BY THE 13<sup>th</sup> RESPONDENT –  
(CHENNAI PETROLEUM CORPORATION LIMITED)**



**M/s. ABDUL SALEEM  
S SARAVANAN**

**COUNSEL FOR 13<sup>th</sup> RESPONDENT**

74-76, II Floor, Sukh Sagar, Marshall's Enclave,  
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**BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE AT CHENNAI**

**Original Application No. 256 of 2020 (SZ)**

**IN THE MATTER OF**

Tribunal on its own motion- SUO MOTU  
Based on The News item in News Desk  
Magazine Dated 11.11.2020, Air Pollution  
and Industries, "These Six Industries in  
North Chennai are pollution the air for  
more than half the year, the North Chennai  
Thermal Power Station alone Ennore Port."

...Applicant

Versus

1. Union of India,  
Ministry of Environment, Forest and Climate Change,  
Rep. by its Secretary,  
Indira Paryavaran Bhavan,  
Jorbagh Road, New Delhi – 100 003.
2. The Chief Secretary to Govt. of Tamil Nadu  
Govt. Secretariat, Fort St. George,  
Chennai, Tamil Nadu – 600009
3. The Secretary to Govt. of Tamil Nadu,  
Department of Environment,  
Govt. Secretariat, Fort St. George,  
Chennai, Tamil Nadu – 600009
4. The Principal Secretary to Govt. of Tamil Nadu,  
Industries Department,  
Govt. Secretariat, Fort St. George,  
Chennai, Tamil Nadu – 600009
5. Additional Chief Secretary to Govt. of Tamil Nadu,  
Municipal Administration and Water Supply Department,  
Govt. Secretariat, Fort St. George,  
Chennai, Tamil Nadu – 600009

*P. Shankar*

**P. SHANKAR**

कंपनी सचिव

Company Secretary

चेन्नी पेट्रोलियम कॉर्पोरेशन लिमिटेड  
Chennai Petroleum Corporation Ltd.  
तेनाम्पेट/Teynampet, चेन्नी/Chennai-600 018

6. Principal Secretary to Government,  
Health and Family Welfare Department,  
Secretariat, Chennai 600 009.
7. The Chairman,  
Central Pollution Control Board (CPCB),  
Parivesh Bhawan, East Arjun Nagar,  
Shahdara, Delhi 110 032.
8. The Chairman, Tamil Nadu Pollution Control Board (TNPCB),  
No.76, Anna Salai, Guindy, Chennai - 600032
9. The Greater Chennai Corporation,  
Rep. by its Commissioner,  
Ripon Building, Chennai - 600 003.
10. The District Collector,  
Chennai District,  
District Collectorate Office,  
No. 62, Rajaji Salai,  
4th Floor, Chennai 600 001.
11. North Chennai Thermal Power Station,  
Rep. by its Chairman cum Managing Director (TANGEDCO),  
Attpattu Main Road, Thiruvallur District,  
Athipattu, Tamil Nadu 600 120.
12. NTPC Tamil Nadu Energy Company Limited (NTECL),  
Rep. by its General manager (TS),  
Vallur Thermal Power Project,  
P.O: Vellivoyal Chavadi, Ponneri Taluk,  
Thiruvallur District, Chennai 600 103.
13. Chennai Petroleum Corporation Limited (CPCL),  
Rep. by its Managing Director,  
New No. 536, Anna Salai,  
Teynampet Chennai 600018.
14. Tamil Nadu Petro Products Limited (TPL),  
Rep. by its Chairperson  
Manali Express Highway, Manali,  
Chennai 600 068.

*P. Shankar*

पी. शंकर

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Company Secretary

चेन्नई पेट्रोलीयम कॉर्पोरेशन लिमिटेड  
Chennai Petroleum Corporation Ltd.  
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15. Manali Petrochemicals Limited (MPL),  
Rep. by its Chairman, SPIC House,  
VI Floor, No. 88 Mount Road,  
Guindy, Chennai 600 032.

16. Madras Fertilizers Limited (MFL),  
Rep by its Chairman & Managing Director,  
SH 104, Harikrishna Puram, Manali,  
Chennai, Tamil Nadu 600 068

... Respondents


**REPLY STATEMENT FILED BY THE 13<sup>th</sup> RESPONDENT**

I, P.Shankar, Son of (Late) Mr.P.S.Parameswaran, aged 56 years, residing at VILLA 408 Phase-2, Alliance Humming Gardens, Old Mahaballipuram Road, Kelambakkam, Pincode-603 103, working as Company Secretary of Chennai Petroleum Corporation Limited (CPCL), having office at No. 536, Anna Salai, Teynampet, Chennai - 600 018, do hereby solemnly affirm and sincerely state as follows:

1. I state that I am the Company Secretary of Chennai Petroleum Corporation Limited (CPCL), representing the 13<sup>th</sup> Respondent herein and as such I am well acquainted with the facts of the case from the records and I am authorized to file this Report on behalf of the 13<sup>th</sup> Respondent.

2. I humbly submit that the above case has been Suo Motu taken on file by this Hon'ble Tribunal on the basis of the newspaper report published in News Desk Magazine dated, 11.11.2020 under the caption "*These Six Industries in North Chennai are polluting the air for more than half the year*".

3. I humbly submit that this Hon'ble Tribunal in its order dated 15.12.2020 constituted a Joint Committee comprising of various officials, to inspect the area in question and submit a factual as well as action taken report, if there is any violation found. Further, this Hon'ble Tribunal also directed the Respondents to file their independent response as to the allegation in the news article.

  
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P. SHANKAR  
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Company Secretary  
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Chennai Petroleum Corporation Ltd.  
तेयनापेट/Teynampet, चेन्नै/Chennai-600 018



4. I humbly submit that pursuant to the above direction of this Hon'ble Tribunal, this Respondent filed a detailed Reply Statement along with supporting documents, for its consideration.

5. I humbly submit that this Hon'ble Tribunal in its orders dated 25.08.2022 and 12.09.2022 has directed the units to file their respective reply statement on the following:-


- "i. Nature of pollution control mechanism provided;
- ii. Age of such mechanism provided;
- iii. Whether any steps have been taken by them for calibrating the same or upgrading the same with advance technology, so as to strengthen the pollution control mechanism to control pollution that is likely to be caused on account of their operation;"

6. I humbly submit that in compliance of the above direction of this Hon'ble Tribunal, this Respondent is filing the present report for the consideration of this Hon'ble Tribunal. The Reply Statement and the Documents filed by this Respondent may be treated as part and parcel of this present Report. The following is the reply to the query raised by this Hon'ble Tribunal:

#### **I. Nature of pollution control mechanism provided**

CPCL i.e., this Respondent is having the following Pollution Control Measures:

- a. Conversion to use RLNG in Boilers, Furnaces, Gas Turbines and Hydrogen generation units (HGU) were carried out at the cost of Rs.312.6 Cr since March 2019 in a phased manner as part of Environmental friendly initiative and was completed. Work order for RLNG conversion is attached as **Annexure-1a**.
- i. Consumption progressively increased to 23,600 T/Month and equivalent quantity of Liquid fuel was reduced. Annual report on fuel consumption for the last three years is attached as **Annexure-1b**. Subsequent to RLNG conversion, Fuel Oil consumption is reduced & RLNG consumption is increased substantially.

  
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- ii. RLNG conversion will have a positive impact on the Carbon footprint with reduction in CO2 emissions and will reduce Specific Feed & Fuel consumption for production of Hydrogen. This project in addition to above benefits will reduce SO2 & PM emission considerably.
- b. Low Sulphur Fuel are being used for process heaters & Boilers.
- c. Installed low NOx burners in major furnaces to reduce NOx emission.
- d. Maintaining excess O2 in the flue gas to ensure complete combustion & to ensure prevention of CO emission. Excess Oxygen is maintained in the furnaces and are attached as **Annexure-2**.
- e. All the stacks are installed with online SOx, NOx, PM & CO analyser and are connected to both TNPCB & CPCB and real time data transfer is continuous.
- f. Volatile Organic Compounds (VOC) adsorption system has been commissioned in ETP-II & ETP-IV to prevent the fugitive emission from oil handling facilities. VOC adsorption is being installed in ETP-III at the cost of 11.49 Cr. Work order for VOC adsorption system is attached as **Annexure-3** and work will be completed by January 2023.
- g. Leak Detection And Repair (LDAR) programme is being carried out periodically in line with Environment regulations. Leaky components were identified during LDAR monitoring and the same is communicated to the respective plant in charge to arrest the leak. Once after arresting the leak, the leaky points are being checked again. LDAR programme was carried out in Nov'21 – Feb'22 and again started in August 2022. LDAR Report for the year 2021-22 is attached as **Annexure-4a** & the Interim report for the year 2022-23 is attached as **Annexure-4b**.
- h. Primary & Secondary (Dual) seals were provided in all floating roof tanks for avoiding VOC emission.



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i. Further, Rim seal Fire Protection system is also installed in 32 no. of tanks to prevent any accidental release of Hydrocarbon from tanks to atmosphere as well as a safety measure. Work order for Rim Seal Fire Protection system is attached as **Annexure-5**.

j. Open effluent receiving surge ponds were converted to closed tanks to avoid VOC. Images of open surge ponds & the closed tanks is attached as **Annexure-6**.

k. Approx. 1200 Gas detectors are installed in the plant and tank farm area to detect Hydro carbon leak and if there is any leak, the detector will generate alarm in control room and action would be initiated immediately to arrest the leak.

l. CPCL installed dust suppression system in Delayed Coker unit & the Trucks are covered immediately after loading inside CPCL to prevent the Particulate emission. Work order for the installation of Dust Suppression system is attached as **Annexure-7**.


m. 6 Continuous Ambient Air Quality Monitoring Stations (CAAQMS) were installed in phased manner and the parameters are connected to both TNPCB & CPCB and real time data transfer is continuous. Images of AAQM stations is attached as **Annexure-8**. All the values are within the limit.

n. Mobile Continuous Ambient Air Quality Monitoring Van was commissioned in 2010 and is deployed in & around CPCL. In addition to that the CAAQM van is deployed on demand to TNPCB also. Images of CAAQM van is attached as **Annexure-9**.

## II. Age of such mechanism provided;

### a. AAQM:

CPCL is having 6 nos. of Continuous Ambient Air Quality Monitoring (CAAQM) stations. The details of CAAQM stations including commissioning & upgradation etc are given below:

  
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 तेनामेट/Teaynamet, चेन्नै/Chennai-600 018

SI No	STATION	SYSTEM VERSION	TOTAL NO. OF ANALYSERS	Year of commissioning subsequent upgradation
1	EAST GATE	windows 7	5 (SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> & CO WIND DIRECTION, WIND SPEED, RELATIVE HUMIDITY, & TEMP)	<ul style="list-style-type: none"> <li>• 2000</li> <li>• All the analysers were replaced by new in 2013-14</li> <li>• 2014 (Software upgraded)</li> <li>• Again Software upgradation done in 2022</li> </ul>
2	ETP-2	windows 7	3 (SO <sub>2</sub> , NO <sub>x</sub> & PM 2.5)	<ul style="list-style-type: none"> <li>• 2000</li> <li>• All the analysers were replaced by new in 2013-14</li> <li>• 2014 (Software upgraded)</li> <li>• Again Software upgradation done in 2022</li> </ul>
3	REF-3 CPP	windows 7	6 (SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> & CO)	<ul style="list-style-type: none"> <li>• 2005</li> <li>• 2014 (Software upgraded)</li> <li>• SO<sub>2</sub> &amp; CO analysers were replaced by new in 2021-22</li> <li>• Software upgradation done in 2022</li> </ul>
4	REF-3 SRU	windows 7	5 (SO <sub>2</sub> , NO <sub>x</sub> , PM <sub>10</sub> , PM <sub>2.5</sub> & CO)	<ul style="list-style-type: none"> <li>• 2005</li> <li>• 2014 (Software upgraded)</li> <li>• NO<sub>x</sub> &amp; CO analysers were replaced by new in 2021-22</li> <li>• Software upgradation done in 2022</li> </ul>



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5	SS-5	windows 7	5 (SO <sub>2</sub> , NO <sub>X</sub> , PM <sub>10</sub> , CO, PM <sub>2.5</sub> )	<ul style="list-style-type: none"> <li>• 2000</li> <li>• 2014 (Software upgraded)</li> <li>• All the analysers were replaced by new in 2022.</li> <li>• Software upgradation done in 2022</li> </ul>
6	R&D	windows 7	3 (SO <sub>2</sub> , NO <sub>X</sub> & PM <sub>2.5</sub> )	<ul style="list-style-type: none"> <li>• 2000</li> <li>• 2014 ((Software upgraded)</li> <li>• Software upgradation done in 2022 (SAMWI – 6.6)</li> </ul>

**b. STACK:**

i. CPCL has commenced stack analysers installation from 2011. Progressively, Stack analyzers population was increased and by 2015-16 all the major 23 stacks were connected to TNPCB & online real time data transfer was ensured.

ii. In the year 2017, additional online stack analyser with direct IP connectivity were installed at a cost of Rs. 742 lakhs to monitor all the process stacks, Boilers & Gas Turbines. (PO attached as **Annexure-10**).

iii. Further in 2019, to enable remote calibration facility & for removal of multiplexing of analyser CPCL has procured 54 no. of analyzers at a cost of Rs. 906 Lakhs. (PO attached as **Annexure-11**).

iv. All the Pollution Control measures are continuously being operated / maintained. In 2019-20, four new furnaces (16 analyzers) were newly commissioned.

v. It is to be noted that stack and Ambient air quality Monitoring analyzers are calibrated monthly once to ensure the healthiness of the equipment.

*P. Shankar*

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**III. Whether any steps have been taken by them for calibrating the same or upgrading the same with advance technology, so as to strengthen the pollution control mechanism to control pollution that is likely to be caused on account of their operation;**

- a. Yes, CPCL is adopting the latest available technology. Further, CPCL always equipped to implement the latest technology available readily.
- b. In line with the CPCB protocol, CPCL has upgraded the software installed for data communication to enable effective data transfer.
- c. Upgradation details are furnished under Age of Pollution control mechanism (Sl.No: II)

**14.** I humbly submit that taking into account the reports annexed herein and the above statements, it is a proven fact that this Respondent has been taking steps to protect the environment without any violation and has spent huge sum on the installation and upgradation of pollution control measures. This apart, this Respondent has not violated any of the norms or procedures prescribed and issued by TNPCB and CPCB. This Respondent is strictly complying with all statutory norms without any default.

**15.** I humbly submit that this Respondent has always sought to ensure the strictest compliance to the safety norms and the maintenance of environmental protection standards and will further comply with all norms prescribed in the future.

For the reasons stated above, I humbly pray that this Hon'ble Tribunal may be pleased to record the above report and close this application as against this Respondent and pass such further or other orders as this Hon'ble Tribunal may deem fit and proper in the circumstances of the case and thus render justice.

Dated at Chennai on this the 28<sup>th</sup> day of September, 2022.


  
 पी. शंकर  
**P. SHANKAR**  
 कंपनी सचिव  
 Company Secretary  
 चेन्नै पेट्रोलियम कॉर्पोरेशन लिमिटेड  
 Chennai Petroleum Corporation Ltd.  
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**13<sup>th</sup> RESPONDENT**

**VERIFICATION**

I, P.Shankar, Son of Late Mr.P.S.Parameswaran, aged 56 years, residing at VILLA 408 Phase-2, Alliance Humming Gardens, Old Mahaballipuram Road, Kelambakkam, Pincode-603 103, working as Company Secretary of Chennai Petroleum Corporation Limited (CPCL), having office at No. 536, Anna Salai, Teynampet, Chennai - 600 018, do hereby verify that the contents of the above paragraph are true to the best of my knowledge and are believed to be true on legal advice and that I have not suppressed any material fact.

Verified at Chennai on this the 28<sup>th</sup> day of September, 2022.

  
पी. शंकर  
P. SHANKAR  
कंपनी सचिव  
Company Secretary  
चेन्नई पेट्रोलियम कॉर्पोरेशन लिमिटेड  
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**13<sup>th</sup> RESPONDENT**