

**REPORT OF TNPCB AS PER THE HON'BLE NATIONAL GREEN**  
**TRIBUNAL(SZ),CHENNAI ORDER DATED 15/04/2021 IN**  
**O.A.NO.256 OF 2020**

**Submitted to**  
**Hon'ble National Green Tribunal (SZ)**  
**Chennai**

**July 2021**

REPORT OF TNPCB AS PER THE HON'BLE NATIONAL GREEN

TRIBUNAL(SZ) CHENNAI ORDER DATED 18/04/2021 IN

O.A.NO.258 OF 2020

Submitted to  
Hon'ble National Green Tribunal (SZ)  
Chennai

July 2021



## **1. Orders of the Hon'ble Tribunal**

It is respectively submitted that the Hon'ble National Green Tribunal(SZ), Chennai in the order dated 15.04.2021 in O.A.No.256 of 2020 directed vide,

**Para 07** – The Pollution Control Board is also directed to file their independent status cum action taken report before the next hearing date.

**Para 08** – The committee as well the other respondents are directed to submit their joint committee report as well as independent responses on or before 05.07.2021 by e-filing in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF along with necessary hard copies to be produced as per rules.

**The copy of the order is enclosed as Annexure-I.**

## **2. Action taken by TNPC Board**

In due compliance with the directions of the Hon'ble National Green Tribunal(SZ), Chennai, a team of engineers from TNPCB has inspected the following industries, in question, during first week of January 2021.

1. M/s. Manali Petrochemicals Ltd Plant-I, Manali.
2. M/s. Manali Petrochemicals Ltd Plant -II, Manali.
3. M/s. Chennai Petroleum Corporation Limited Refinery I, II and III, Manali.
4. M/s. North Chennai Thermal Power Station-I, Puzhuthivakam village, Ponneri Taluk, Tiruvallur District.
5. M/s. NTPC Tamilnadu Energy Company Ltd, Vellivoil village, Ponneri Taluk, Tiruvallur District.
6. M/s. Madras Fertilizers Limited, Manali.
7. M/s. Taminadu Petroproducts Ltd -ECH Plant, Manali.
8. M/s. Taminadu Petroproducts Ltd -LAB Plant, Manali.
9. M/s. Taminadu Petroproducts Ltd -Heavy Chemical Division, Manali.

Based on the observations noticed during the inspection, directions were issued under section 33A of Water (P&CP) Act 1974 as amended and under section 31A of Air (P&CP) Act 1981 as amended to the following 8 units for implementing improvement measures.

**The Copies of the directions issued are attached vide Annexure II.**



**1. M/s. Manali Petrochemicals Ltd Plant-I, Manali.**

- a) The unit shall remove the Lime sludge dumped outside the earmarked area immediately.
- b) The unit shall store the lime sludge generated from the rotary drum vacuum filter and un-burnt lime from lime slacker unit in the earmarked area only and sent to brick kiln for further beneficial use.
- c) The unit shall maintain records on the quantity of generation and disposal of lime sludge for further beneficial use.
- d) The unit shall ensure that the temporary lime storage yard and its leachate collection arrangements provided are properly maintained, so as to avoid any groundwater pollution.
- e) The unit shall ensure that the OCEMS installed in the Boiler stack and the continuous ambient air quality monitoring (CAAQM) sensors provided are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers.
- f) The unit shall ensure that the OCEMS installed at the outlet of the treated trade effluent holding tank (ETP) for the parameters TOC (BOD & COD), TSS, pH & Temperature and flow sensors provided are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers
- g) The unit shall ensure for the continuous data transmission from the OCEMS and CAAQM sensors to the CAC and WQW of the Board and CPCB servers.
- h) The unit shall comply with the minutes of the meeting held on 09.02.2021.

**2. M/s. Manali Petrochemicals Ltd Plant -II, Manali.**

- a) The unit shall maintain records on the quantity of generation and disposal of lime sludge for further beneficial use.
- b) The unit shall ensure that the temporary lime storage yard and its leachate collection arrangements provided are properly maintained, so as to avoid any groundwater pollution.
- c) The unit shall ensure that the OCEMS installed in the Boiler stack and the continuous ambient air quality monitoring (CAAQM) sensors provided are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers.



- d) The unit shall ensure that the OCEMS installed at the outlet of the treated trade effluent holding tank (ETP) for the parameters TOC (BOD & COD), TSS, pH & Temperature and flow sensors provided are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers.
- e) The unit shall ensure for the continuous data transmission from the OCEMS and CAAQM sensors to the CAC of the Board and CPCB servers.
- f) The unit shall furnish time bound action plan to remove/clear the old accumulated lime sludge stored in the backyard of the unit.
- g) The unit shall take immediate action to get supply of LNG from IOCL to switch over the fuel from furnace oil to LNG for the boiler.
- h) The unit shall comply with the minutes of the meeting held on 09.02.2021.

**3. M/s. Chennai Petroleum Corporation Limited Refinery I, II and III, Manali.**

- a) The unit shall improve oil water separation in the ETP for effective removal of oil.
- b) The unit shall quantify the amount of water received from each source, Utilization of that water in process and treated water utilization and their distribution system.
- c) The unit shall provide EMFM to all the inlets and outlets of STPs, ETPs, and all the treated sewage/effluent distribution system.
- d) The unit shall expedite the provision of online analyser at the outlet of ETP IV and connect the same to the WQW, TNPCB, Guindy.
- e) The unit shall furnish details on wet slop oil collection and utilization since it is not known whereabouts of wet slop oil from ETP.
- f) The unit shall take necessary action to improve the existing APC measures or provide new control measures to achieve the standards prescribed by the Board as the parameters CO, PM, SO<sub>2</sub> and NO<sub>x</sub> have exceeded many times over a period of 2 years.
- g) The unit shall conduct studies regarding the emission level inside and outside the premises and take necessary effective steps to reduce the emission load let out from the premises and maintain records for the same.

**4. M/s. North Chennai Thermal Power Station-I, Puzhuthivakam village, Ponneri Taluk, Tiruvallur District.**

- 1. The unit shall comply with the following findings of the committee constituted by the Hon'ble National Green Tribunal order dated.20.05.2019, communicated and agreed by the Hon'ble NGT within the time limit as reported.



- a) The unit shall remove the fly ash deposited on the land in and around the ash carrying pipeline and ash disposed inside the premises for quantity of 3,95,979 Tonnes and shall store in temporary storage area and/or sent directly for beneficial purposes.
- b) The unit shall completely remove the ash deposited in Buckingham canal for a quantity of 93,096 m<sup>3</sup> Tonnes and shall store in temporary storage area and/or sent directly for beneficial purposes.
- c) The unit shall completely remove the ash deposited in Kosathaliyar River for a quantity of 3,25,000 Tonnes from NCTPS main gate to KPL main gate for a length of 2.4Kms for a average width of 130m and depth of 1m and shall store in temporary storage area and/ or sent directly for beneficial purposes.
- d) The unit shall completely remove the ash deposited in Kosathaliyar river for a quantity of 4,68,000 Tonnes form Ennore creek to NCTPS-I main gate for a distance of 1.7Km and from KPL main gate to Kattupalli downstream for a distance of 1.9 Km for a average width of 130m and depth 1m and shall store in temporary storage area and/or sent directly for beneficial purposes.
- e) The unit shall replace the existing Ash Slurry pipe lines No.1,2,3&4 with new Cast Basalt Lined pipe lines for a total length of 20523m length.
- f) The unit shall provide impervious Toe drain around the Ash dyke for a length of 6000m for the collection of seepage water and to be connected to the existing Recovery Water sump and reuse for Ash slurry making.
- g) The unit shall provide 6000 Nos. of trees in and around the ash dykes and grow it well so as to prevent the dust emission from the ash dyke.
- h) The unit shall make existing ash pond impervious so as to prevent the seepages as per the technical consultancy of IITM, Chennai.
- i) The unit shall obtain technical study report from IITM Chennai for the remedial measures such as strengthening of Ash Dyke and other related works in Ash dyke and implement the recommendations.
- j) The unit shall provide sufficient number of piezometric wells/monitoring wells around the dykes and upstream of the industry to monitor the ground water quality.
- k) The unit shall bring back Recovery water Pump No.3 in to service and to replace the existing worn-our Recover water pipe Line.1 for a entire length of 2815 m.



- l) The unit shall modify existing three Electrostatic precipitator attached to the 3 No. boilers CC notification dated 07.12.2015.
  - m) The unit shall replace the worn-out boiler roof tubes in Unit-II and Unit-III so as to arrest the discharge of fugitive emission.
  - n) The unit shall develop Mangroves plantations and other costal vegetation in both sides Kosasthaliyar river banks, Buckingham canal and nearby by affected coastal areas, in consultation with M.S.Swaminathan foundation (or) Annamalai University.
  - o) The unit shall ensure complete utilization of fly ash as per the Ministry of Environment, Forest & Climate Change fly ash notification of 2016.
  - p) The unit shall carry out ground water, surface water monitoring once in six months through any NABL accredited laboratory in the affected areas. Further detailed study may be carried out by Ground water department or any reputed institution on the status of ground water, surface water quality once in year.
  - q) The unit shall adhere the consent order condition issued by Tamil Nadu Pollution Control Board.
2. The unit shall install Flue Gas Desulphurisation (FGD) System based on Lime/Ammonia dosing to capture Sulphur in the flue gases to meet the SO<sub>2</sub> emissions standard of 600mg/Nm<sup>3</sup> (Power Plants smaller than 500MW installed before 31<sup>st</sup> December 2002 ) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015.
  3. The unit shall install Selective Catalytic Reduction (SCR) system or the Selective Non-Catalytic Reduction (SNCR) system or Low NO<sub>x</sub> Burners with Over Fire Air (OFA) system to achieve NO<sub>x</sub> emission standard of 600 mg/Nm<sup>3</sup> (Power Plants smaller than 500MW installed before 31<sup>st</sup> December 2002 ) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015.
  4. The unit shall ensure that the Particulate Matter (PM) emission in each 3 boiler stacks is within the standard of 100mg/ Nm<sup>3</sup> at all times (Power Plants smaller than 500MW installed before 31<sup>st</sup> December 2002 ) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015.
  5. The unit shall ensure that the OCEMS for the emission parameters SPM, SO<sub>2</sub> & NO<sub>x</sub> are provided to each three Boiler stacks which are calibrated regularly and operated at all times and ensure that the output of the sensors are connected to CAC, TNPCB & CPCB server at all times.



6. The unit shall ensure that the sensors for the parameters PM10, PM2.5, SO<sub>2</sub> & NO<sub>2</sub> installed in 2 Continuous Ambient Air Quality Monitoring Station (CAAQMS) are calibrated regularly and operated effectively and ensure that the output of the sensors are connected to CAC, TNPCB at all times.
7. The unit shall continue to develop green belt either within or outside the premises to attain an area of 33% of the total area with indigenous native tree species and the green belt shall inter – alia cover an entire periphery of the unit.

**5. M/s. NTPC Tamilnadu Energy Company Ltd, Vellovoil village, Ponneri Taluk,  
Tiruvallur District**

- a) The unit shall install Flue Gas Desulphurisation (FGD) System based on Lime/Ammonia dosing to capture Sulphur in the flue gases to meet the SO<sub>2</sub> emissions standard of 200mg/Nm<sup>3</sup> (500MW and above power plants installed after 1<sup>st</sup> January 2003 up to 31<sup>st</sup> December 2016) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015 as reported. (Before November 2022).
- b) The unit shall install Selective Catalytic Reduction (SCR) system or the Selective Non-Catalytic Reduction (SNCR) system or Low NO<sub>x</sub> Burners with Over Fire Air (OFA) system to achieve NO<sub>x</sub> emission standard of 300 mg/Nm<sup>3</sup> (500MW and above power plants installed after 1<sup>st</sup> January 2003 up to 31<sup>st</sup> December 2016) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015 as reported. (Before November 2022).
- c) The unit shall ensure that the Particulate Matter (PM) emission in each 3 boiler stacks is within the standard of 50mg/ Nm<sup>3</sup> at all times (Power Plants installed after 1<sup>st</sup> January 2003 up to 31<sup>st</sup> December 2016) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015.
- d) The unit shall ensure that the online continuous effluent monitoring sensors (OCEMS) provided for the parameters pH, TSS, BOD, COD, Conductivity, Turbidity & Temperature at the outlet of Central Monitoring Basin are connected to WQW, TNPCB Chennai & CPCB server at all times and calibrated regularly and also ensure the continuous online data transfer.
- e) The unit shall ensure that the OCEMS for the emission parameters SPM, SO<sub>2</sub> & NO<sub>x</sub> provided to each three Boiler stacks are calibrated regularly and operated at all times and ensure that the output of the sensors are connected to CAC, TNPCB & CPCB server at all times.



- f) The unit shall ensure that the EMFMs are provided at the inlet & outlet of the Sewage Treatment Plant I & II and at the outlet of Central Monitoring Basin and connected to WQW, TNPCB, Chennai for continuous monitoring.
- g) The unit shall ensure that the sensors for the parameters PM10, PM2.5, SO2 & NO2 installed in 4 Continuous Ambient Air Quality Monitoring Station (CAAQMS) are calibrated regularly and operated effectively and ensure that the output of the sensors are connected to CAC, TNPCB at all times.
- h) The unit shall ensure that the sewage including canteen waste water arising from the unit and colony is completely collected and treated through the STP I&II and it shall operate and maintain the Sewage Treatment Plant I&II components efficiently and continuously so as to achieve the treated sewage standards prescribed by the Board consistently and ensure that the treated sewage is completely utilized for gardening / tree plantation within the unit/colony premises without any stagnation.
- i) The unit shall ensure that the trade effluent discharged from the Central Monitoring Basin is meeting the marine disposal standards prescribed by the Board at all times.
- j) The unit shall ensure that no water is discharged from the ash pond to creek nearby either directly and indirectly under any circumstances.
- k) The unit shall handle the ash from ash dyke with utmost care and ensure that there shall not be any spillages of ash around the ash dyke area.
- l) The unit shall ensure that the fly ash is completely collected in dry form and disposed 100% for beneficial use in cement industries and hollow block brick manufacturing industries, without any accumulation within the unit premises.
- m) The unit shall continue to develop green belt either within or outside the premises to attain an area of 33% of the total area with indigenous native tree species and the green belt shall inter-alia cover an entire periphery of the unit.

**6. M/s. Madras Fertilizers Limited, Manali.**

- a) The unit shall provide Flow meter at the inlet and outlet of STP. Provide Flow meter at the inlet and outlet of NPK plant- ETP connect the readings of flow meters at the inlet and outlet of NPK plant- ETP to the WQW centre of TNPCB.
- b) The unit shall provide flow metres, energy meters and monitoring sensors for the parameters DO, TDS pH, pressure and levels to the RO plants as per CPCB guidelines and connect the readings to the WQW centre of TNPCB.



- c) The unit shall complete the conversion of fuel from Furnace oil to LNG in the 55 TPH boilers (2 Nos.).
- d) The unit shall install, commission and connect the Analyser for PM, SO<sub>x</sub> & NO<sub>x</sub> for the common stack attached with Boilers 1 & 2 (55T/hr each) early.
- e) The unit shall restore the remaining 4 CAAQMS stations and connect to CAC before June 2021, as committed.
- f) The unit shall plant green belt by planting native & local specific species in the old SEPs (lagoons) area.
- g) The unit shall dispose the accumulated hazardous wastes to the authorized facilities immediately as per the conditions stipulated in the authorization order issued under the Hazardous Waste (Management, Handling & Transboundary Movement) Rules 2008 and comply with the provisions of Hazardous & Other Wastes (Management, & Transboundary Movement) Rules 2016.
- h) The unit shall ensure that the OCEMS installed for the parameters NH<sub>3</sub> in Urea Prill Tower, HF & PM in NPK train C, PM analyser installed for the common stack attached with process condensate boiler 70T/hr & 110T/hr Boiler, 11 Ammonia sensors within the premises and the continuous ambient air quality monitoring (CAAQM) sensors are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers.
- i) The unit shall ensure that the OCEMS installed for the EMFM in the HSP Plant is calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers.
- j) The unit shall ensure for the continuous data transmission from the OCEMS and CAAQM sensors to the CAC and WQW of the Board and CPCB servers.

**7. M/s. Taminadu Petroproducts Ltd -ECH Plant, Manali.**

- a) The unit shall ensure that the online continuous effluent monitoring sensors(OCEMS) provided for the parameters pH, TSS, COD & BOD at the outlet ETP are connected to WQW, TNPCB Chennai & CPCB server and calibrated regularly and also ensure the continuous online data transfer.
- b) The unit shall ensure that the online continuous emission monitoring sensors (OCEMS) for the parameters PM, Sox, NO<sub>x</sub> & CO provided with a Boiler stack and Chlorine provided with a stack attached to scrubber in chlorine handling area are calibrated regularly and operated and also to ensure that the output of the sensors are connected to CAC of TNPCB/CPCB server at all times.



- c) The EMFMs installed at the inlet to the ETP & RO reject from LAB Plant along with the HCD Plant treated effluent reuse to ECH Plant process shall be connected to WQW of TNPCB/CPCB web portal.
- d) The unit shall ensure that the EMFMs are provided at the inlet & outlet of the Common Sewage Treatment Plant, inlet to STP from ECH Plant, inlet to STP from HCD Plant and inlet to STP from LAB Plant and connected to WQW, TNPCB, Chennai for continuous monitoring.
- e) The unit shall ensure that the sensors for the parameters PM2.5, PM10, Chlorine and VOC installed in 1 Continuous Ambient Air Quality Monitoring Station (CAAQMS) are calibrated regularly and operated effectively and ensure that the output of the sensors are connected to CAC, TNPCB at all times.
- f) The unit shall ensure that the temporary lime storage yard and its leachate collection arrangements provided are properly maintained so as to curtail ground water pollution. The unit shall collect and dispose the lime sludge generated then and there to brick kilns for further beneficial.
- g) The unit shall continue to develop green belt outside the premises by approaching Zonal Officer (Zone-II), Greater Chennai Corporation/Highways Department to attain an area of 40% of the total area with indigenous native tree species and the green belt shall inter-alia cover an entire periphery of the unit.

**8. M/s. Taminadu Petroproducts Ltd -LAB Plant, Manali.**

- a) The unit shall ensure that the online continuous effluent monitoring sensors (OCEMS) provided for the parameters pH, TSS, COD & BOD at the outlet of ETP are connected to WQW, TNPCB Chennai & CPCB server at all times and calibrated regularly and also ensure the continuous online data transfer.
- b) The unit shall ensure that the online continuous emission monitoring sensors (OCEMS) provided for the parameters PM, Sox, NOx & CO for stack attached with Hot Oil Heater, PACOL Heater, Hydro Treater, DG sets and Boilers are calibrated regularly and operated at all times and also to ensure that the output of the sensors are connected to CAC of TNPCB/CPCB server at all times.
- c) The EMFMs installed at the RO-I feed, RO-I permeate, RO-II permeate, RO-II reject and RO-II reject & HCD Plant treated effluent reuse to ECH Plant process shall be connected to the WQW of TNPCB/CPCB web portal immediately.
- d) The unit shall ensure that the EMFMs are provided at the inlet & outlet of the Common Sewage Treatment Plant, inlet to STP from ECH Plant, inlet to



STP from HCD Plant and inlet to STP from LAB Plant and connected to WQW, TNPCB, Chennai for continuous monitoring.

- e) The unit shall ensure that the sensors for the parameters PM2.5, PM10, SO2, NOx, CO and Benzene installed in 1 Continuous Ambient Air Quality Monitoring Station (CAAQMS) are calibrated regularly and operated effectively and ensure that the output of the sensors are connected to CAC, TNPCB at all times.
- f) The unit shall continue to develop green belt outside the premises by approaching Zonal Officer (Zone-II), Greater Chennai Corporation/Highways Department to attain an area of 40% of the total area with indigenous native tree species and the green belt shall inter-alia cover an entire periphery of the unit.

Also, the TNPCB is taking action to impose Environmental Compensation (EC) to the above 9 industries, for the exceedance if any in the Online Continuous Emission Monitoring System (OCEMS) data, monitored during April 2019 to December 2020, through Care Air Centre (CAC), TNPC Board Chennai comparing with the stack emission levels prescribed by the Board.



Joint Chief Environmental Engineer (M),  
Tamil Nadu Pollution Control Board,  
Chennai Zone.



# ANNEXURE-I

Item No.01:

BEFORE THE NATIONAL GREEN TRIBUNAL

SOUTHERN ZONE, CHENNAI

Original Application No. 256 of 2020 (SZ)

*(Through Video Conference)*

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 polluting the air

For more than half the year, the North Chennai

Thermal Power Station alone Ennore Port.”

...Applicant(s)

**Versus**

Union of India and others.

...Respondent(s)

Date of hearing: 15.04.2021.

CORAM:

HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER

HON'BLE MR. DR. K. SATYAGOPAL MEMBER

For Applicant(s): By Court

For Respondent(s): Mrs. M. Sumathi for R1  
Sri. Dr. V.R. Thirunarayanan for R2 to R6 & R10  
Sri. T.N.C. Koushik for R7  
Sri .C. Kasirajan through  
Ms. D. Ashwini for R8  
Smt. P.T. Ramadevi though  
Sri. Raghul Adithya for R9  
Sri. M. Vijayameghanath for R11  
Sri. M. Vijayan represented



M/s. King & Partidge for R12  
Sri. Abdul Saleem through  
Sri. Saravanan for R13  
Sri. A.R.L. Sundaresan, Senior Advocate along with  
Smt. A.R.L. Gandhimathy for 14 & 15  
Sri. Jayesh B Dolia represented  
M/s. Aiyar & Dollia & K. Nagesh for R16

### ORDER

1. The above case has been Suo Motu registered by this Tribunal as per order dated 15.12.2020, on the basis of the news paper 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**” and this Tribunal had constituted a Joint Committee to go into the question and submit the report and it was originally posted to 15.12.2020 for that purpose. Thereafter, the matter has been adjourned from time to time by successive notification and lastly the matter was adjourned to today by notification dated 10.03.2021.
2. When the matter came up for hearing today through Video Conference, Smt. M. Sumathi represented 1<sup>st</sup> respondent, Dr. V.R. Thirunarayanan represented respondents 2 to 6 & 10, Sri. T.N.C. Koushik represented 7<sup>th</sup> respondent, Sri. C. Kasirajan through Ms. D. Ashwini represented 8<sup>th</sup> respondent, Smt. P.T. Ramadevi through Raghul Adithya represented 9<sup>th</sup> respondent, Sri. M. Vijaya Meghanath represented 11<sup>th</sup> respondent. Mr. V. Vijayan represented M/s. King & Patridge counsel for 12<sup>th</sup>

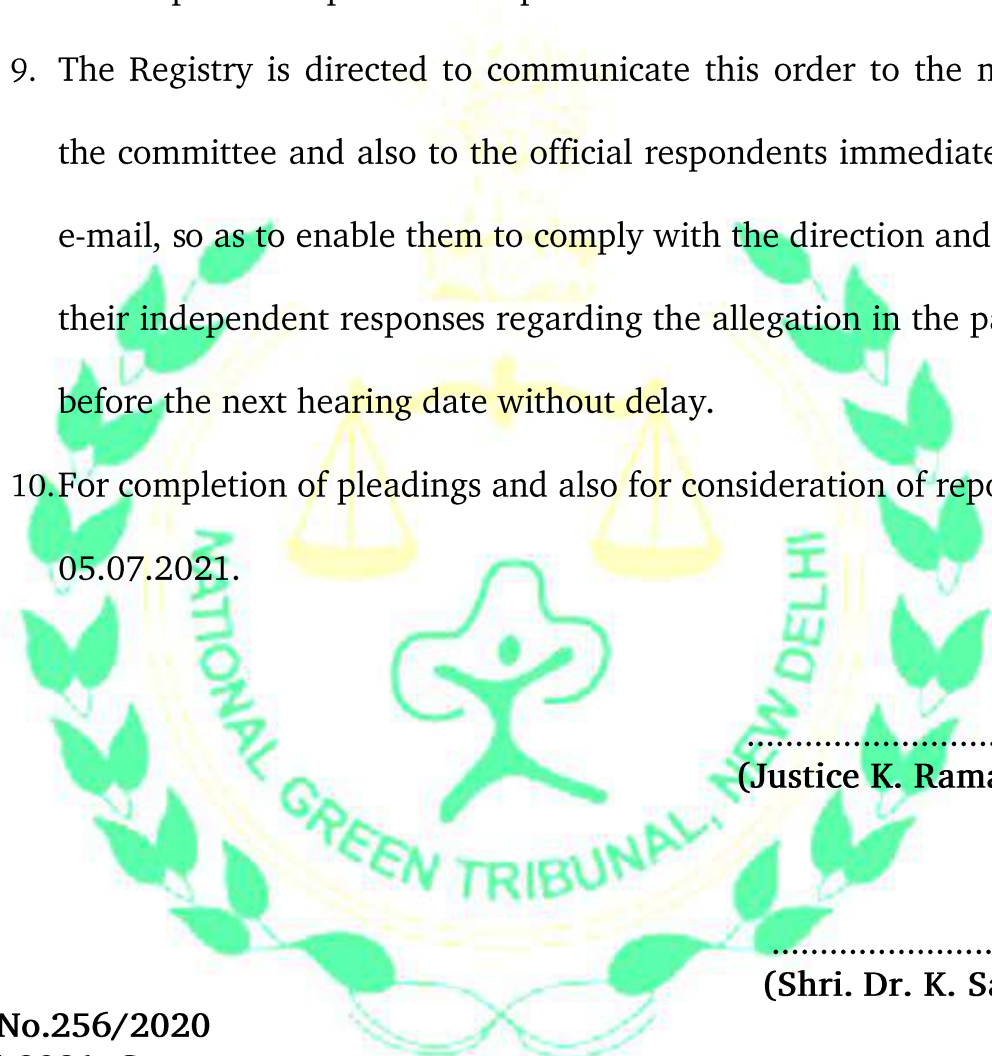


respondent, Sri. Abdul Saleem and Mr. Saravanan represented 13<sup>th</sup> respondent, Sri. A.R. L. Sundaresan Senior, Advocate along with Smt. A.R.L. Gandhimathy represented counsel for respondents 14 & 15, Sri. Jayesh B Dolia represented M/s. Aiyar & Dolia & K. Nagesh counsel for 16<sup>th</sup> respondent. So service is complete.

3. The 12<sup>th</sup> respondent had filed their reply statement along with documents. The other respondents wanted some time to file their respective statements.
4. Mrs. M. Sumathi who is appearing for first respondent represented the committee wanted four months time for filing the report.
5. It may be mentioned here, the matter was admitted on 15.12.2020 and though almost four months has lapsed, not even an interim report has been filed by the committee as to what are all the steps taken by them and what are the further steps to be taken for preparation of report.
6. However considering the circumstances, we felt that some more time can be granted to the committee as well as the respondents to file their independent statement regarding the allegations made against them in the newspaper report and the mechanism that has been adopted by them to curb the alleged pollution raised as on environmental issue in the newspaper report.
7. The Pollution Control Board is also directed to file their independent status cum action taken report before the next hearing date.



8. The committee as well as the other respondents are directed to submit their joint committee report as well as independent responses on or before 05.07.2021 by e-filing in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF along with necessary hard copies to be produced as per rules.
9. The Registry is directed to communicate this order to the members of the committee and also to the official respondents immediately through e-mail, so as to enable them to comply with the direction and also to file their independent responses regarding the allegation in the paper report before the next hearing date without delay.
10. For completion of pleadings and also for consideration of report, post on 05.07.2021.



.....J.M.  
(Justice K. Ramakrishnan)

.....E.M.  
(Shri. Dr. K. Satyagopal)

O.A. No.256/2020  
15.04.2021, Sr.





## TAMIL NADU POLLUTION CONTROL BOARD

Proc. No: T5/TNPCB/F.106 AMB/17 Category/2021 dated: 11.03.2021

**SUB:** TNPCB – Industries – M/s. MANALI PETROCHEMICALS LIMITED -PLANT- I , S.F.No. 266 part, 275/1 part, MANALI village, Thiruvottiyur Taluk and Tiruvallur District – A report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone"-Certain directions under Section 33(A) of the Water (Prevention and Control of Pollution) act, 1974 as Amended & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended - Issued – Regarding.

**REF:** JCEE (M) 's Letter No.F.0214/ JCEE (M)/ TNPCB/ CHN.ZONE/ Misc/ 2020, dated 22.01.2021 enclosed with inspection report.

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Whereas Chennai Climate Action Group has published a report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone" during November 2020. Based on the above report of Climate Action Group, the Hon'ble NGT SUO MOTU taken up the case vide O.A.No.256 of 2020 (SZ) and formed a Joint Committee to furnish a report on the above.

Whereas, the news paper 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" is based on the stack emissions data recorded at the CAC, TNPCB for the period from 01.01.2019 to 15.12.2019.

Whereas, it is alleged in the news paper report that air quality in Ennore – Manali region has been seriously affected on account of the emission made by some of the industries namely, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO's) North Chennai Thermal Power Station (NCTPS) Stage 1, NTECL Vallur Power Plant, Chennai Petroleum Corporation Limited (CPCL), Tamil Nadu Petro products Limited (TPL) , Manali Petrochemicals Limited (MPL), and Madras Fertilizers Limited (MFL).



Whereas, in this regard, the unit of M/s. MANALI PETROCHEMICALS LIMITED - PLANT- I , S.F.No. 266 part, 275/1 part, MANALI village, Thiruvottiyur Taluk and Tiruvallur District has been inspected by JCEE (M) on 05.01.2021 and based on the observations, JCEE (M) has recommended to for issue of certain direction to the unit for compliance.

Therefore, in exercise of the powers conferred under Section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended, Board issues the following directions to the unit of M/s. MANALI PETROCHEMICALS LIMITED -PLANT- I , S.F.No. 266 part, 275/1 part, MANALI village, Thiruvottiyur Taluk and Tiruvallur District:

- 1) The unit shall remove the Lime sludge dumped outside the earmarked area immediately.
- 2) The unit shall Store the lime sludge generated from the rotary drum vacuum filter and un-burnt lime from lime slacker unit in the earmarked area only and sent to brick kiln for further beneficial use.
- 3) The unit shall maintain records on the quantity of generation and disposal of lime sludge for further beneficial use.
- 4) The unit shall ensure that the temporary lime storage yard and its leachate collection arrangements provided are properly maintained, so as to avoid any groundwater pollution.
- 5) The unit shall ensure that the OCEMS installed in the Boiler stack and the continuous ambient air quality monitoring (CAAQM) sensors provided are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers.
- 6) The unit shall ensure that the OCEMS installed at the outlet of the treated trade effluent holding tank (ETP) for the parameters TOC (BOD & COD), TSS, pH & Temperature and flow sensors provided are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers
- 7) The unit shall ensure for the continuous data transmission from the OCEMS and CAAQM sensors to the CAC and WQW of the Board and CPCB servers.
- 8) The unit shall comply with the minutes of the meeting held on 09.02.2021.



## TAMIL NADU POLLUTION CONTROL BOARD

Failure to comply with the above said directions, will lead to issue of further directions for closure and stoppage of power supply to your unit under section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended.

The receipt of the proceeding shall be acknowledged.

S. Srinivasan  
16/3/14  
For Chairman  
15.3.21

✓  
To

The Director,  
**M/s. Manali Petrochemicals Limited -Plant- I,**  
Manali Petrochemicals Limited,  
Spic House 88, Mount Road  
Guindy, Chennai

### Copy to

1. The Joint Chief Environmental Engineer (M),  
Tamil Nadu Pollution Control Board,  
Chennai Region
2. The District Environmental Engineer,  
Tamil Nadu Pollution Control Board,  
Ambattur.
3. Technical file.





*Handwritten signatures and initials.*

## TAMIL NADU POLLUTION CONTROL BOARD

Proc. No: T5/TNPCB/F.112 AMB/17 Category/2021 dated: 11.03.2021

**SUB:** TNPCB – Industries – M/s. MANALI PETROCHEMICALS LIMITED-PLANT-II, S.F.No. 1/6, 1/8, 23 to 30 & 30/3, SATHANGADU Village, Thiruvottiyur Taluk and Tiruvallur District – A report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone"-Certain directions under Section 33(A) of the Water (Prevention and Control of Pollution) act, 1974 as Amended & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended - Issued – Regarding.

**REF:** JCEE (M) 's Letter No.F.0214/ JCEE (M)/ TNPCB/ CHN.ZONE/ Misc/ 2020, dated 22.01.2021 enclosed with inspection report.

\*\*\*\*\*

Whereas Chennai Climate Action Group has published a report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone" during November 2020. Based on the above report of Climate Action Group, the Hon'ble NGT SUO MOTU taken up the case vide O.A.No.256 of 2020 (SZ) and formed a Joint Committee to furnish a report on the above.

Whereas, the news paper 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" is based on the stack emissions data recorded at the CAC, TNPCB for the period from 01.01.2019 to 15.12.2019.

Whereas, it is alleged in the news paper report that air quality in Ennore – Manali region has been seriously affected on account of the emission made by some of the industries namely, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO's) North Chennai Thermal Power Station (NCTPS) Stage 1, NTECL Vallur Power Plant, Chennai Petroleum Corporation Limited (CPCL), Tamil Nadu Petro products Limited (TPL), Manali Petrochemicals Limited (MPL), and Madras Fertilizers Limited (MFL).

Whereas, the unit of **M/s. MANALI PETROCHEMICALS LIMITED-PLANT-II**, S.F.No. 1/6, 1/8, 23 to 30 & 30/3, SATHANGADU Village, Thiruvottiyur Taluk and Tiruvallur District has been inspected by JCEE (M) on 05.01.2021 and based on the observations, JCEE (M) has recommended to for issue of certain direction to the unit for compliance.

Therefore, in exercise of the powers conferred under Section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended, Board issues the following directions to the unit of **M/s. MANALI PETROCHEMICALS LIMITED-PLANT-II**, S.F.No. 1/6, 1/8, 23 to 30 & 30/3, SATHANGADU Village, Thiruvottiyur Taluk and Tiruvallur District:

- 1) The unit shall maintain records on the quantity of generation and disposal of lime sludge for further beneficial use.
- 2) The unit shall ensure that the temporary lime storage yard and its leachate collection arrangements provided are properly maintained, so as to avoid any groundwater pollution.
- 3) The unit shall ensure that the OCEMS installed in the Boiler stack and the continuous ambient air quality monitoring (CAAQM) sensors provided are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers.
- 4) The unit shall ensure that the OCEMS installed at the outlet of the treated trade effluent holding tank (ETP) for the parameters TOC (BOD & COD), TSS, pH & Temperature and flow sensors provided are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers.
- 5) The unit shall ensure for the continuous data transmission from the OCEMS and CAAQM sensors to the CAC of the Board and CPCB servers.
- 6) The unit shall eurnish time bound action plan to remove/clear the old accumulated lime sludge stored in the backyard of the unit.
- 7) The unit shall take immediate action to get supply of LNG from IOCL to switch over the fuel from furnace oil to LNG for the boiler.
- 8) The unit shall comply with the minutes of the meeting held on 09.02.2021.





## TAMIL NADU POLLUTION CONTROL BOARD

Failure to comply with the above said directions, will lead to issue of further directions for closure and stoppage of power supply to your unit under section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended.

The receipt of the proceeding shall be acknowledged.

S. Sreejith  
15/3/21  
For Chairman  
15.3.21

✓ To

The Director,  
M/s. Manali Petrochemicals Limited - Plant - II,  
Manali Petrochemicals Limited,  
Spic House 88, Mount Road  
Guindy, Chennai.

### Copy to

1. The Joint Chief Environmental Engineer (M),  
Tamil Nadu Pollution Control Board,  
Chennai Region
2. The District Environmental Engineer,  
Tamil Nadu Pollution Control Board,  
Ambattur.
3. Technical file.



**TAMIL NADU POLLUTION CONTROL BOARD**

**Proc. No: T5/TNPCB/F.3693/ AMB/17 Category/2021 dated: 11.03.2021**

**SUB:** TNPCB – Industries – M/s. Chennai Petroleum Corporation Limited, Refinery I,II,III and CPP, Resid Upgradation Plant, Propylene, Butylene and Lube Expan. Plant, DHDS Plant, Hexane Plant, GTG Power Plant Manali Village, Thiruvottiyur Taluk and Chennai District – A report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone"-Certain directions under Section 33(A)of the Water (Prevention and Control of Pollution) act, 1974 as Amended & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended - Issued – Regarding.

**REF:** JCEE (M) 's Letter No.F.0214/ JCEE (M)/ TNPCB/ CHN.ZONE/ Misc/ 2020, dated 22.01.2021 enclosed with inspection report.

\*\*\*\*\*

Whereas Chennai Climate Action Group has published a report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone" during November 2020. Based on the above report of Climate Action Group, the Hon'ble NGT SUO MOTU taken up the case vide O.A.No.256 of 2020 (SZ) and formed a Joint Committee to furnish a report on the above.

Whereas, the news paper 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" is based on the stack emissions data recorded at the CAC, TNPCB for the period from 01.01.2019 to 15.12.2019.

Whereas, it is alleged in the news paper report that air quality in Ennore – Manali region has been seriously affected on account of the emission made by some of the industries namely, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO's) North Chennai Thermal Power Station (NCTPS) Stage 1, NTECL Vallur Power Plant, Chennai Petroleum Corporation Limited (CPCL), Tamil Nadu Petro products Limited (TPL) , Manali Petrochemicals Limited (MPL), and Madras Fertilizers Limited (MFL).

Whereas, the units of M/s. Chennai Petroleum Corporation Limited, Refinery I,II,III and CPP, Resid Upgradation Plant, Propylene, Butylene and Lube Expan. Plant, DHDS Plant, Hexane Plant, GTG Power Plant Manali Village, Thiruvottiyur Taluk and Chennai District has been inspected by JCEE (M) on 06.01.2021 and based on the observations, JCEE (M) has recommended to for issue of certain direction to the unit for compliance.



Therefore, in exercise of the powers conferred under Section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended, Board issues the following directions to the units of M/s. Chennai Petroleum Corporation Limited, Refinery I,II,III and CPP, Resid Upgradation Plant, Propylene, Butylene and Lube Expan. Plant, DHDS Plant, Hexane Plant, GTG Power Plant Manali Village, Thiruvottiyur Taluk and Chennai District:

1. The unit shall improve oil water separation in the ETP for effective removal of oil.
2. The unit shall quantify the amount of water received from each source, Utilization of that water in process and treated water utilization and their distribution system.
3. The unit shall provide EMFM to all the inlets and outlets of STPs, ETPs, and all the treated sewage/effluent distribution system.
4. The unit shall expedite the provision of online analyser at the outlet of ETP IV and connect the same to the WQW, TNPCB, Guindy.
5. The unit shall furnish details on wet slop oil collection and utilization since it is not known whereabouts of wet slop oil from ETP.
6. The unit shall take necessary action to improve the existing APC measures or provide new control measures to achieve the standards prescribed by the Board as the parameters CO, PM, SO<sub>2</sub> and NO<sub>x</sub> have exceeded many times over a period of 2 years.
7. The unit shall conduct studies regarding the emission level inside and outside the premises and take necessary effective steps to reduce the emission load let out from the premises and maintain records for the same.

Failure to comply with the above said directions, will lead to issue of further directions for closure and stoppage of power supply to your unit under section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended.

The receipt of the proceeding shall be acknowledged.

To

The Director,  
**M/s. Chennai Petroleum Corporation Limited,**  
 Manali Village, Thiruvottiyur Taluk  
 Chennai District, Pin:6000 68

S. Sripada  
 15/3/24  
**For Chairman**  
 2.1k  
 15.3.24

Copy to

1. The Joint Chief Environmental Engineer (M),  
 Tamil Nadu Pollution Control Board,  
 Chennai Region
2. The District Environmental Engineer,  
 Tamil Nadu Pollution Control Board,  
 Ambattur.
3. Technical file.



## TAMIL NADU POLLUTION CONTROL BOARD

**Proc. No: T2/TNPCB/F.0048GMP/17 Category/2021 Dated: 15.04.2021**

**Sub:** TNPCB – Industries – M/s. North Chennai Thermal Power Station, Stage-I, (3x210 MW) , SF. No. 44, 45 etc Puzhuthivakam Village, Ponneri Taluk, Tiruvallur District – A report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone"-Certain directions under Section 33(A) of the Water (Prevention and Control of Pollution) act, 1974 as Amended & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended - Issued – Regarding.

- Ref:**
1. TNPCB Proc. No.F.25860/ RL-17C/ TNPCB/ TVLR/ A&W/ 2014-1&2 Dated: 25.06.2014
  2. Report on POISON IN THE AIR -The Regulatory black hole over Ennore Manali Industries Zone By Chennai Climate Action Group- November 2020.
  3. JCEE (M) Letter No.F.0214/JCEE (M)/TNPCB/CHN.ZONE/ Misc/ 2020, dated 22.01.2021 enclosed with inspection report

Whereas, the unit of M/s. North Chennai Thermal Power Station, Stage-I, (3x210 MW), SF. No. 44, 45 etc Puzhuthivakam Village, Ponneri Taluk, Tiruvallur District was issued with renewal of consent under Water (Prevention and Control of Pollution) Act, 1974 as amended and Air (Prevention and Control of Pollution) Act, 1981 as amended for generation of electric power –400 Million Units/Month subject to certain conditions to be complied by the unit.

Whereas Chennai Climate Action Group has published a report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone" during November 2020. Based on the above report of Climate Action Group, the Hon'ble NGT SUO MOTU taken up the case vide O.A. No. 256 of 2020 (SZ) and formed a Joint Committee to furnish an investigation report.

Whereas, the news paper 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" is based on the stack emissions data recorded at the CAC, TNPCB for the period from 01.01.2019 to 15.12.2019.



Whereas, it is alleged in the news paper report that air quality in Ennore – Manali region has been seriously affected on account of the emission made by some of the industries.

Whereas, in this regard, the unit of M/s. North Chennai Thermal Power Station, Stage-I, (3x210 MW) SF. No. 44, 45 etc Puzhuthivakam Village, Ponneri Taluk, Tiruvallur District was inspected by TNPCB inspection team officials and based on the observations, JCEE (M) has recommended for the issue of certain direction to the unit for compliance.

Therefore, in exercise of the powers conferred under Section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended, Board issues the following directions to the unit of M/s. North Chennai Thermal Power Station, Stage-I, (3x210 MW) at SF. No. 44, 45 etc Puzhuthivakam Village, Ponneri Taluk, Tiruvallur District to comply within two months time:

1. The unit shall comply with the following findings of the committee constituted by the Hon'ble National Green Tribunal order dated.20.05.2019, communicated and agreed by the Hon'ble NGT within the time limit as reported.
  - a. The unit shall remove the fly ash deposited on the land in and around the ash carrying pipeline and ash disposed inside the premises for quantity of 395979 Tonnes and shall store in temporary storage area and/or sent directly for beneficial purposes.
  - b. The unit shall completely remove the ash deposited in Buckingham canal for a quantity of 93096 m<sup>3</sup> Tonnes and shall store in temporary storage area and/or sent directly for beneficial purposes.
  - c. The unit shall completely remove the ash deposited in Kosathaliyar river for a quantity of 325000 Tonnes from NCTPS main gate to KPL main gate for a length of 2.4Kms for a average width of 130m and depth of 1m and shall store in temporary storage area and/ or sent directly for beneficial purposes.
  - d. The unit shall completely remove the ash deposited in Kosathaliyar river for a quantity of 468000 Tonnes form Ennore creek to NCTPS-I main gate for a distance of 1.7Km and from KPL main gate to Kattupalli downstream for a distance of 1.9 Km for a average width of 130m and depth 1m and shall store in temporary storage area and/or sent directly for beneficial purposes.
  - e. The unit shall replace the existing Ash Slurry pipe lines No.1,2,3&4 with new Cast Basalt Lined pipe lines for a total length of 20523m length.
  - f. The unit shall provide impervious Toe drain around the Ash dyke for a length of 6000m for the collection of seepage water and to be connected to the existing Recovery Water sump and reuse for Ash slurry making.



## TAMIL NADU POLLUTION CONTROL BOARD

- g. The unit shall provide 6000 Nos. of trees in and around the ash dykes and grow it well so as to prevent the dust emission from the ash dyke.
- h. The unit shall make existing ash pond impervious so as to prevent the seepages as per the technical consultancy of IITM, Chennai.
- i. The unit shall obtain technical study report from IITM Chennai for the remedial measures such as strengthening of Ash Dyke and other related works in Ash dyke and implement the recommendations.
- j. The unit shall provide sufficient number of piezometric wells/monitoring wells around the dykes and upstream of the industry to monitor the ground water quality.
- k. The unit shall bring back Recovery water Pump No.3 in to service and to replace the existing worn-out Recover water pipe Line.1 for a entire length of 2815 m.
- l. The unit shall modify existing three Electrostatic precipitator attached to the 3 No. boilers CC notification dated 07.12.2015.
- m. The unit shall replace the worn-out boiler roof tubes in Unit-II and Unit-III so as to arrest the discharge of fugitive emission.
- n. The unit shall develop Mangroves plantations and other costal vegetation in both sides Kosasthaliyar river banks, Buckingham canal and nearby by affected coastal areas, in consultation with M.S.Swaminathan foundation (or) Annamalai University.
- o. The unit shall ensure complete utilization of fly ash as per the Ministry of Environment, Forest & Climate Change fly ash notification of 2016.
- p. The unit shall carry out ground water, surface water monitoring once in six months through any NABL accredited laboratory in the affected areas. Further detailed study may be carried out by Ground water department or any reputed institution on the status of ground water, surface water quality once in year.
- q. The unit shall adhere the consent order condition issued by Tamil Nadu Pollution Control Board.

02.The unit shall install Flue Gas Desulphurisation (FGD) System based on Lime/Ammonia dosing to capture Sulphur in the flue gases to meet the SO<sub>2</sub> emissions standard of 600mg/Nm<sup>3</sup> (Power Plants smaller than 500MW installed before 31<sup>st</sup> December 2002 ) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015.



03. The unit shall install Selective Catalytic Reduction (SCR) system or the Selective Non-Catalytic Reduction (SNCR) system or Low NOx Burners with Over Fire Air (OFA) system to achieve NOx emission standard of 600 mg/N<sup>m3</sup> (Power Plants smaller than 500MW installed before 31<sup>st</sup> December 2002 ) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015.
04. The unit shall ensure that the Particulate Matter (PM) emission in each 3 boiler stacks is within the standard of 100mg/ Nm<sup>3</sup> at all times (Power Plants smaller than 500MW installed before 31<sup>st</sup> December 2002 ) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015.
05. The unit shall ensure that the OCEMS for the emission parameters SPM, SO<sub>2</sub> & NOx are provided to each three Boiler stacks which are calibrated regularly and operated at all times and ensure that the output of the sensors are connected to CAC, TNPCB & CPCB server at all times.
06. The unit shall ensure that the sensors for the parameters PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> & NO<sub>2</sub> installed in 2 Continuous Ambient Air Quality Monitoring Station (CAAQMS) are calibrated regularly and operated effectively and ensure that the output of the sensors are connected to CAC, TNPCB at all times.
07. The unit shall continue to develop green belt either within or outside the premises to attain an area of 33% of the total area with indigenous native tree species and the green belt shall inter – alia cover an entire periphery of the unit.

Failure to comply with the above said directions, will lead to issue of further directions for closure and stoppage of power supply to your unit under section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended.

The receipt of the proceeding shall be acknowledged.

  
For Chairman  


To

The Chief Engineer,  
**M/s. North Chennai Thermal Power Station, Stage-I, (3x210 MW)**  
SF. No. 44, 45 etc  
Puzhuthivakam Village,  
Ponneri Taluk, Tiruvallur District

Copy to

- ✓ 1. The Joint Chief Environmental Engineer (M),  
Tamil Nadu Pollution Control Board,  
Chennai Region
2. The District Environmental Engineer,  
Tamil Nadu Pollution Control Board,  
Gummidipoondi
3. Technical file.



## TAMIL NADU POLLUTION CONTROL BOARD

**Proc. No: T2/TNPCB/F.0318GMP/RL/2021 Dated: 15.04.2021**

**Sub:** TNPCB – Industries M/s. NTPC Tamilnadu Energy Company Limited, S.F.No.1556, Vellivoyal Village, Ponneri Taluk, Tiruvallur District – A report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone"-Certain directions under Section 33(A)of the Water (Prevention and Control of Pollution) act, 1974 as Amended & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended - Issued – Regarding.

- Ref:**
1. TNPCB Proc. No./F.0318GMP/RL/GMP/A&W/2021 Dated: 04.02.2021.
  2. Report on POISON IN THE AIR -The Regulatory black hole over Ennore Manali Industries Zone By Chennai Climate Action Group- November 2020.
  3. JCEE (M) Letter No.F.0214/JCEE (M)/TNPCB/CHN.ZONE/ Misc/ 2020, dated 22.01.2021 enclosed with inspection report

Whereas, the unit of M/s. NTPC Tamilnadu Energy Company Limited, S.F.No.1556, Vellivoyal Village, Ponneri Taluk, Tiruvallur District was issued with renewal of consent under Water (Prevention and Control of Pollution) Act, 1974 as amended and Air (Prevention and Control of Pollution) Act, 1981 as amended for power generation (3X500) MW –1500 MW subject to certain conditions to be complied by the unit.

Whereas Chennai Climate Action Group has published a report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone" during November 2020. Based on the above report of Climate Action Group, the Hon'ble NGT SUO MOTU taken up the case vide O.A.No.256 of 2020 (SZ) and formed a Joint Committee to furnish an investigation report.

Whereas, the news paper 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" is based on the stack emissions data recorded at the CAC, TNPCB for the period from 01.01.2019 to 15.12.2019.



Whereas, it is alleged in the news paper report that air quality in Ennore – Manali region has been seriously affected on account of the emission made by some of the industries.

Whereas, in this regard, the unit of M/s. NTPC Tamilnadu Energy Company Limited, S.F.No.1556, Vellivoyal Village, Ponneri Taluk, Tiruvallur District was inspected by TNPCB inspection team officials and based on the observations, JCEE (M) has recommended for the issue of certain direction to the unit for compliance.

Therefore, in exercise of the powers conferred under Section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended, Board issues the following directions to the unit of M/s. NTPC Tamilnadu Energy Company Limited, S.F.No.1556, Vellivoyal Village, Ponneri Taluk, Tiruvallur District to comply within Six months time:

01. The unit shall install Flue Gas Desulphurisation (FGD) System based on Lime/Ammonia dosing to capture Sulphur in the flue gases to meet the SO<sub>2</sub> emissions standard of 200mg/Nm<sup>3</sup> (500MW and above power plants installed after 1<sup>st</sup> January 2003 up to 31<sup>st</sup> December 2016) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015 as reported. (Before November 2022).
02. The unit shall install Selective Catalytic Reduction (SCR) system or the Selective Non-Catalytic Reduction (SNCR) system or Low NO<sub>x</sub> Burners with Over Fire Air (OFA) system to achieve NO<sub>x</sub> emission standard of 300 mg/Nm<sup>3</sup> (500MW and above power plants installed after 1<sup>st</sup> January 2003 up to 31<sup>st</sup> December 2016) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015 as reported. (Before November 2022).
03. The unit shall ensure that the Particulate Matter (PM) emission in each 3 boiler stacks is within the standard of 50mg/ Nm<sup>3</sup> at all times (Power Plants installed after 1<sup>st</sup> January 2003 up to 31<sup>st</sup> December 2016) as per MoEF&CC's Notification S.O. 3305(E) dated: 07.12.2015.
04. The unit shall ensure that the online continuous effluent monitoring sensors (OCEMS) provided for the parameters pH, TSS, BOD, COD, Conductivity, Turbidity & Temperature at the outlet of Central Monitoring Basin are connected to WQW, TNPCB Chennai & CPCB server at all times and calibrated regularly and also ensure the continuous online data transfer.



## TAMIL NADU POLLUTION CONTROL BOARD

05. The unit shall ensure that the OCEMS for the emission parameters SPM, SO<sub>2</sub> & NO<sub>x</sub> provided to each three Boiler stacks are calibrated regularly and operated at all times and ensure that the output of the sensors are connected to CAC, TNPCB & CPCB server at all times.
06. The unit shall ensure that the EMFMs are provided at the inlet & outlet of the Sewage Treatment Plant I & II and at the outlet of Central Monitoring Basin and connected to WQW, TNPCB, Chennai for continuous monitoring.
07. The unit shall ensure that the sensors for the parameters PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> & NO<sub>2</sub> installed in 4 Continuous Ambient Air Quality Monitoring Station (CAAQMS) are calibrated regularly and operated effectively and ensure that the output of the sensors are connected to CAC, TNPCB at all times.
08. The unit shall ensure that the sewage including canteen waste water arising from the unit and colony is completely collected and treated through the STP (I&II) and it shall operate and maintain the Sewage Treatment Plant (I&II) components efficiently and continuously so as to achieve the treated sewage standards prescribed by the Board consistently and ensure that the treated sewage is completely utilized for gardening / tree plantation within the unit/colony premises without any stagnation.
09. The unit shall ensure that the trade effluent discharged from the Central Monitoring Basin is meeting the marine disposal standards prescribed by the Board at all times.
10. The unit shall ensure that no water is discharged from the ash pond to creek nearby either directly and indirectly under any circumstances.
11. The unit shall handle the ash from ash dyke with utmost care and ensure that there shall not be any spillages of ash around the ash dyke area.
12. The unit shall ensure that the fly ash is completely collected in dry form and disposed 100% for beneficial use in cement industries and hollow block brick manufacturing industries, without any accumulation within the unit premises.



13. The unit shall continue to develop green belt either within or outside the premises to attain an area of 33% of the total area with indigenous native tree species and the green belt shall inter-alia cover an entire periphery of the unit.

Failure to comply with the above said directions, will lead to issue of further directions for closure and stoppage of power supply to your unit under section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended.

The receipt of the proceeding shall be acknowledged.

*[Handwritten Signature]*  
15/07  
**For Chairman**  
*[Handwritten Initials]*  
13/4/21

**To**

The Chief Executive Officer,  
**M/s. NTPC Tamilnadu Energy Company Limited,**  
S.F.No.1556, Vellivoyal Village,  
Ponneri Taluk,  
Tiruvallur District

**Copy to**

1. The Joint Chief Environmental Engineer (M),  
Tamil Nadu Pollution Control Board,  
Chennai Region
2. The District Environmental Engineer,  
Tamil Nadu Pollution Control Board,  
Gummidipoondi.
3. Technical file.

**By Speed Post**



## **TAMIL NADU POLLUTION CONTROL BOARD**

**Proc. No: T1/TNPCB/F.214/ AMB/17 Category/2021 dated: 11.03.2021**

**SUB:** TNPCB – Industries – M/s. MADRAS FERTILIZERS LIMITED, S.F.No. R.S.NO.212 TO 248, MANALI village, Thiruvottiyur Taluk and Chennai District– A report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone"-Certain directions under Section 33(A)of the Water (Prevention and Control of Pollution) act, 1974 as Amended & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended - Issued – Regarding.

**REF:** JCEE (M) 's Letter No.F.0214/JCEE (M)/ TNPCB/ CHN.ZONE/ Misc/ 2020, dated 22.01.2021 enclosed with inspection report.

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Whereas Chennai Climate Action Group has published a report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone" during November 2020. Based on the above report of Climate Action Group, the Hon'ble NGT SUO MOTU taken up the case vide O.A.No.256 of 2020 (SZ) and formed a Joint Committee to furnish a report on the above.

Whereas, the news paper 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" is based on the stack emissions data recorded at the CAC, TNPCB for the period from 01.01.2019 to 15.12.2019.

Whereas, it is alleged in the news paper report that air quality in Ennore – Manali region has been seriously affected on account of the emission made by some of the industries namely, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO's) North Chennai Thermal Power Station (NCTPS) Stage 1, NTECL Vallur Power Plant, Chennai Petroleum Corporation Limited (CPCL), Tamil Nadu Petro products Limited (TPL) , Manali Petrochemicals Limited (MPL), and Madras Fertilizers Limited (MFL).

Whereas, the unit of M/s. MADRAS FERTILIZERS LIMITED , S.F.No. R.S.NO.212 TO 248, MANALI village, Thiruvottiyur Taluk and Chennai District has been inspected by JCEE (M) on 05.01.2021 and based on the observations, JCEE (M) has recommended to for issue of certain direction to the unit for compliance.



Therefore, in exercise of the powers conferred under Section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended, Board issues the following directions to the unit of M/s. MADRAS FERTILIZERS LIMITED, S.F.No. R.S.NO.212 TO 248, MANALI village, Thiruvottiyur Taluk and Chennai District:

- 1) The unit shall provide Flow meter at the inlet and outlet of STP. Provide Flow meter at the inlet and outlet of NPK plant- ETP connect the readings of flow meters at the inlet and outlet of NPK plant- ETP to the WQW centre of TNPCB.
- 2) The unit shall provide flow metres, energy meters and monitoring sensors for the parameters DO, TDS pH, pressure and levels to the RO plant proposed for the cooling water blow down as per CPCB guidelines and connect the readings to the WQW centre of TNPCB.
- 3) The unit shall complete the conversion of fuel from Furnace oil to LNG in the 55 TPH boilers (2 Nos.).
- 4) The unit shall install, commission and connect the Analyser for PM, SO<sub>x</sub> & NO<sub>x</sub> for the common stack attached with Boilers 1 & 2 (55T/hr each) early.
- 5) The unit shall restore the remaining 4 CAAQMS stations and connect to CAC before June 2021, as committed.
- 6) The unit shall plant green belt by planting native & local specific species in the old SEPs (lagoons) area.
- 7) The unit shall dispose the accumulated hazardous wastes to the authorized facilities immediately as per the conditions stipulated in the authorization order issued under the Hazardous Waste (Management, Handling & Transboundary Movement) Rules 2008 and comply with the provisions of Hazardous & Other Wastes (Management, & Transboundary Movement) Rules 2016.
- 8) The unit shall ensure that the OCEMS installed for the parameters NH<sub>3</sub> in Urea Prill Tower, HF & PM in NPK train C, PM analyser installed for the common stack attached with process condensate boiler 70T/hr & 110T/hr Boiler, 11 Ammonia sensors within the premises and the continuous ambient air quality monitoring (CAAQM) sensors are calibrated regularly, operated continuously and connected to the CAC of the Board and CPCB servers.
- 9) The unit shall ensure that the EMFM installed in the HSP Plant is calibrated regularly, operated continuously and connected to the WQW of the Board and CPCB servers
- 10) The unit shall ensure for the continuous data transmission from the OCEMS and CAAQM sensors to the CAC and WQW of the Board and CPCB servers.



## TAMIL NADU POLLUTION CONTROL BOARD

Failure to comply with the above said directions, will lead to issue of further directions for closure and stoppage of power supply to your unit under section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended.

The receipt of the proceeding shall be acknowledged.

*V. Reddy*  
12/03/2021  
For Chairman  
*Mary*  
12.3.2021

### To

Director Technical,  
**M/s. MADRAS FERTILIZERS LIMITED,**  
MADRAS FERTILIZERS LIMITED  
MANALI, CHENNAI,  
Pin: 600068

### Copy to

1. The Joint Chief Environmental Engineer (M),  
Tamil Nadu Pollution Control Board,  
Chennai Region
2. The District Environmental Engineer,  
Tamil Nadu Pollution Control Board,  
Ambattur.
3. Technical file.





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**TAMIL NADU POLLUTION CONTROL BOARD**

**Proc. No: T5/TNPCB/F.280 AMB/17 Category/2021 dated: 11.03.2021**

**SUB:** TNPCB – Industries – M/s. TAMILNADU PETROPRODUCTS LIMITED - EPICHLOROHYDRIN PLANT, S.F.No. R.S.No.254/3 (part),259/2, 260/2, 261/2, 262/2, 263/2A, 265/1A1, 265/1A2, 266/1A.1A1B (part), 266/1A1B/2B1A2 (part), MANALI village, Thiruvottiyur Taluk and Chennai District – A report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone"-Certain directions under Section 33(A)of the Water (Prevention and Control of Pollution) act, 1974 as Amended & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended - Issued – Regarding.

**REF:** JCEE (M)'s IR No.F.280 AMB/RL/JCEE (M)/CHN/2021, dated 21.01.2021

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Whereas Chennai Climate Action Group has published a report in News Desk Magazine "Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone" during November 2020. Based on the above report of Climate Action Group, the Hon'ble NGT SUO MOTU taken up the case vide O.A.No.256 of 2020 (SZ) and formed a Joint Committee to furnish a report on the above.

Whereas, the news paper 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" is based on the stack emissions data recorded at the CAC, TNPCB for the period from 01.01.2019 to 15.12.2019.

Whereas, it is alleged in the news paper report that air quality in Ennore – Manali region has been seriously affected on account of the emission made by some of the industries namely, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO's) North Chennai Thermal Power Station (NCTPS) Stage 1, NTECL Vallur Power Plant, Chennai Petroleum Corporation Limited (CPCL), Tamil Nadu Petro products Limited (TPL) , Manali Petrochemicals Limited (MPL), and Madras Fertilizers Limited (MFL).

Whereas, in this regard, the unit of M/s. TAMILNADU PETROPRODUCTS LIMITED - EPICHLOROHYDRIN PLANT, S.F.No. R.S.No.254/3 (part),259/2, 260/2, 261/2, 262/2, 263/2A, 265/1A1, 265/1A2, 266/1A.1A1B (part), 266/1A1B/2B1A2 (part), MANALI village, Thiruvottiyur Taluk and Chennai District has been inspected by JCEE (M) on 06.01.2021 and based on the observations, JCEE (M) has recommended to for issue of certain direction to the unit for compliance.

Therefore, in exercise of the powers conferred under Section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended, Board issues the following directions to the unit of M/s. TAMILNADU PETROPRODUCTS LIMITED - EPICHLOROHYDRIN PLANT, S.F.No. R.S.No.254/3 (part),259/2, 260/2, 261/2, 262/2, 263/2A, 265/1A1, 265/1A2, 266/1A.1A1B (part), 266/1A1B/2B1A2 (part), MANALI village, Thiruvottiyur Taluk and Chennai District:

- 1) The unit shall ensure that the online continuous effluent monitoring sensors(OCEMS) provided for the parameters pH, TSS, COD & BOD at the outlet ETP are connected to WQW, TNPCB Chennai & CPCB server and calibrated regularly and also ensure the continuous online data transfer.
- 2) The unit shall ensure that the online continuous emission monitoring sensors (OCEMS) for the parameters PM, Sox, NOx & CO provided with a Boiler stack and Chlorine provided with a stack attached to scrubber in chlorine handling area are calibrated regularly and operated and also to ensure that the output of the sensors are connected to CAC of TNPCB/CPCB server at all times.
- 3) The EMFMs installed at the inlet to the ETP & RO reject from LAB Plant along with the HCD Plant treated effluent reuse to ECH Plant process shall be connected to WQW of TNPCB/CPCB web portal.
- 4) The unit shall ensure that the EMFMs are provided at the inlet & outlet of the Common Sewage Treatment Plant, inlet to STP from ECH Plant, inlet to STP from HCD Plant and inlet to STP from LAB Plant and connected to WQW, TNPCB, Chennai for continuous monitoring.
- 5) The unit shall ensure that the sensors for the parameters PM2.5, PM10, Chlorine and VOC installed in 1 Continuous Ambient Air Quality Monitoring Station (CAAQMS) are calibrated regularly and operated effectively and ensure that the output of the sensors are connected to CAC, TNPCB at all times.
- 6) The unit shall ensure that the temporary lime storage yard and its leachate collection arrangements provided are properly maintained so as to curtail ground water pollution. The unit shall collect and dispose the lime sludge generated then and there to brick kilns for further beneficial.





## TAMIL NADU POLLUTION CONTROL BOARD

- 7) The unit shall continue to develop green belt outside the premises by approaching Zonal Officer (Zone-II), Greater Chennai Corporation/Highways Department to attain an area of 40% of the total area with indigenous native tree species and the green belt shall inter-alia cover an entire periphery of the unit.

Failure to comply with the above said directions, will lead to issue of further directions for closure and stoppage of power supply to your unit under section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended.

The receipt of the proceeding shall be acknowledged.

S. Srinivasan  
15/3/21  
For Chairman  
S.S.  
15.3.21

To

The Director,  
**M/s.TAMILNADU PETROPRODUCTS LIMITED - EPICHLOROHYDRIN PLANT,**  
Post Box No.9, Manali Express Highway, Manali, Chennai,  
Pin: 600068

Copy to

1. The Joint Chief Environmental Engineer (M),  
Tamil Nadu Pollution Control Board,  
Chennai Region
2. The District Environmental Engineer,  
Tamil Nadu Pollution Control Board,  
Ambattur.
3. Technical file.



file.  
11/3

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## **TAMIL NADU POLLUTION CONTROL BOARD**

**Proc. No: T5/TNPCB/F.200 AMB/17 Category/2021 dated: 11.03.2021**

**SUB:** TNPCB – Industries – M/s. TAMILNADU PETROPRODUCTS LIMITED - LAB PLANT , S.F.No. 267, MANALI village, Thiruvottiyur Taluk and Chennai District – A report in News Desk Magazine “Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone”-Certain directions under Section 33(A)of the Water (Prevention and Control of Pollution) act, 1974 as Amended & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended - Issued – Regarding.

**REF:** JCEE (M)'s IR No.F.200 AMB/RL/JCEE (M)/CHN/2021, dated 21.01.2021

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Whereas Chennai Climate Action Group has published a report in News Desk Magazine “Poison in the Air- The Regulatory Black hole over Ennore Manali Industrial Zone” during November 2020. Based on the above report of Climate Action Group, the Hon'ble NGT SUO MOTU taken up the case vide O.A.No.256 of 2020 (SZ) and formed a Joint Committee to furnish a report on the above.

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Whereas, it is alleged in the news paper report that air quality in Ennore – Manali region has been seriously affected on account of the emission made by some of the industries namely, Tamil Nadu Generation and Distribution Corporation Limited (TANGEDCO's) North Chennai Thermal Power Station (NCTPS) Stage 1, NTECL Vallur Power Plant, Chennai Petroleum Corporation Limited (CPCL), Tamil Nadu Petro products Limited (TPL) , Manali Petrochemicals Limited (MPL), and Madras Fertilizers Limited (MFL).

Whereas, in this regard, the unit of M/s. TAMILNADU PETROPRODUCTS LIMITED - LAB PLANT , S.F.No. 267, MANALI village, Thiruvottiyur Taluk and Chennai District has been inspected by JCEE (M) on 06.01.2021 and based on the observations, JCEE (M) has recommended to for issue of certain direction to the unit for compliance.



Therefore, in exercise of the powers conferred under Section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended, Board issues the following directions to the unit of M/s. TAMILNADU PETROPRODUCTS LIMITED - LAB PLANT , S.F.No. 267, MANALI village, Thiruvottiyur Taluk and Chennai District:

- 1) The unit shall ensure that the online continuous effluent monitoring sensors (OCEMS) provided for the parameters pH, TSS, COD & BOD at the outlet of ETP are connected to WQW, TNPCB Chennai & CPCB server at all times and calibrated regularly and also ensure the continuous online data transfer.
- 2) The unit shall ensure that the online continuous emission monitoring sensors (OCEMS) provided for the parameters PM, SO<sub>x</sub>, NO<sub>x</sub> & CO for stack attached with Hot Oil Heater, PACOL Heater, Hydro Treater, DG sets and Boilers are calibrated regularly and operated at all times and also to ensure that the output of the sensors are connected to CAC of TNPCB/CPCB server at all times.
- 3) The EMFMs installed at the RO-I feed, RO-I permeate, RO-II permeate, RO-II reject and RO-II reject & HCD Plant treated effluent reuse to ECH Plant process shall be connected to the WQW of TNPCB/CPCB web portal immediately.
- 4) The unit shall ensure that the EMFMs are provided at the inlet & outlet of the Common Sewage Treatment Plant, inlet to STP from ECH Plant, inlet to STP from HCD Plant and inlet to STP from LAB Plant and connected to WQW, TNPCB, Chennai for continuous monitoring.
- 5) The unit shall ensure that the sensors for the parameters PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO and Benzene installed in 1 Continuous Ambient Air Quality Monitoring Station (CAAQMS) are calibrated regularly and operated effectively and ensure that the output of the sensors are connected to CAC, TNPCB at all times.
- 6) The unit shall continue to develop green belt outside the premises by approaching Zonal Officer (Zone-II), Greater Chennai Corporation/Highways Department to attain an area of 40% of the total area with indigenous native tree species and the green belt shall inter-alia cover an entire periphery of the unit.



## TAMIL NADU POLLUTION CONTROL BOARD

Failure to comply with the above said directions, will lead to issue of further directions for closure and stoppage of power supply to your unit under section 33 A of Water (P&CP) Act 1974 as amended in 1988 & Section 31A of the Air (Prevention and Control of Pollution) Act, 1981 as amended.

The receipt of the proceeding shall be acknowledged.

S. Srinivasan  
15/3/24  
For Chairman  
15.3.24

To  
The Director,  
**M/s. TAMILNADU PETROPRODUCTS LIMITED - LAB PLANT,**  
Manali Express Highway, Manali, Chennai - 600 068,  
Pin: 600068

### Copy to

- ✓ 1. The Joint Chief Environmental Engineer (M),  
Tamil Nadu Pollution Control Board,  
Chennai Region
2. The District Environmental Engineer,  
Tamil Nadu Pollution Control Board,  
Ambattur.
3. Technical file.