

**Item No. 11 to 13:**

BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI

**Original Application No. 76 of 2017 (SZ)**

*With*

**Original Application No.259 of 2017 (SZ) &**

**M.A. No. 209 to 214 of 2017 (SZ)**

*With*

**Original Application No. 260 of 2017 (SZ)**

(Through Video Conference)

IN THE MATTER OF:

Proceedings initiated based on the  
News item published in “Malayala Manorama News  
Paper” – Malayalam Edition dated 25.03.2017 on  
the Caption “BLACK CITY”.

...Applicant(s)

*Versus*

The Chief Secretary,  
Government of Kerala and others.

...Respondent(s)

*With*

Lawyers Environmental Awareness  
Forum (LEAF)

...Applicant(s)

*Versus*

State of Kerala and others.

...Respondent(s)

*With*

Lawyers Environmental Awareness  
Forum (LEAF)

...Applicant(s)

*Versus*

State of Kerala and others.

....Respondent(s)

**Date of hearing: 09.03.2021.**

**CORAM:**

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

**HON'BLE MR. SAIBAL DASGUPTA, EXPERT MEMBER**

O.A. No. 76 of 2017 (SZ):

For Applicant(s): Suo Motu by Court.

For Respondent(s): Mr. E.K. Kumaresan for R1 to R3 & R6  
Mrs. V.K.Rema Smrithi for R4.

O.A. No. 259 of 2017 (SZ) &  
M.A. No. 209 to 214/2017 (SZ)

For Applicant(s): None.

For Respondent(s): Mr.E.K. Kumaresan for R1, R3 & R4.  
Mrs. V.K.Rema Smrithi for R2.  
Mr. D.S. Ekambaram Ms. Jayalakshmi  
for CPCB.

O.A. No. 260 of 2017 (SZ)

For Applicant(s): None.

For Respondent(s): Mr.E.K. Kumaresan for R1, R3 & R4.  
Mrs. V.K. Rema Smrithi for R2.

**ORDER**

1. When these matters came up for hearing today, there is no representation for the applicant in O.A. Nos. 259 of 2017 and 260 of 2017. Mr. E.K. Kumaresan represented respondents 1 to 3 & 6 in O.A. No.76/2017, respondents 1, 3 & 4 in O.A. No.259/2017 & O.A. No.260/2017, Smt. V.K. Rema Smrithi represented 4<sup>th</sup> respondent in O.A. No.76/2017, 2nd respondent in O.A. No.259/2017 & 260/2017, and Mr. D.S. Ekambaram through Ms. Jayalakshmi represented Central Pollution Control Board.
2. As per order dated 20.01.2021, we have considered the Joint Committee report which was extracted in para-4 of the order and then passed the following order:

*“7.As per this Rules, they have only prohibited auto-rickshaws of more than 15 years using diesel fuel operation from 01.01.2021. Further, it is seen from the status report filed by the 1<sup>st</sup> respondent that they propose to purchase 310 CNG buses and electrically operated vehicles for KSRTC.*

*8. It is not known as to how many vehicles are there under the custody of the KSRTC which are more than 15 years old and using BS IV model fuel as even as per the directions of the NGT in **Vardhman Kaushik** case as approved by the Hon’ble Apex Court, there is nothing mentioned about phasing out the old public carrying vehicles including the buses owned by the Government as well as the private operators which are more than 15 years old which is permitted as per the Motor Vehicles Rules.*

*9. Further as per the direction in **Vardhman Kaushik** case, after 01.04.2020 no diesel vehicles can use BS IV fuel, but they will have to convert into BS VI. It is not known as to whether any such steps have been taken to implement that in the State of Kerala and if so, what is the number of vehicles which have been phased out to the new form of fuel.*

*10. Further, the Joint Committee report shows that except Vyttila in Ernakulam District, in all other areas the Ambient Air Quality is within the permissible level ‘Category Good’. It may be mentioned here that the Ambient Air Quality analysis was done at the time when the Covid restrictions were there.*

*11. Further, the report suggested certain short term and long term measures to be taken by each department, but it is not given any timeline for carrying out such long term and short term measures provided. Further, it is for the individual department also to come with their proper action plan as to how they are going to implement these*

*recommendations in an effective manner to control pollution in the State of Kerala.*

*12. Further, there was a direction given by this Tribunal to conduct Source Apportionment study and Emission Inventory study as per CPCB guidelines, but no such study was seen conducted by the committee.*

*13. So under such circumstances, we direct the committee to consider the observation made and conduct further Ambient Air Quality test when the activities in the State are in peak operation and then submit a further detailed report to this Tribunal regarding the result of the study that has been conducted and the remedial measures, if any, to be given for that purpose.*

*14. Further, the independent departments who have directed to carry out certain recommendations are also directed to file their independent status report regarding the action plan with shorter timeline as to how they are going to implement the recommendations made by the committee to check the air pollution in the State of Kerala.*

*15. It is true that in the study conducted by the Central Pollution Control Board, the State of Kerala is not shown as critically polluted State but that doesn't mean that the city can be allowed to be critically polluted and thereafter, take measures to prevent the same. The general rule is "To treat the cause, not the disease" so as to make the environment clean, for which due scientific approach must be adopted by the state instrumentalist so as to curb the source of pollution and make the environment free from pollution by providing clean air for the people in the State which is part of their obligation to protect the Right to Life as enshrined under Article 21 of the Constitution of India.*

*16. The committee as well as the independent State respondents are directed to submit their reports as well as the status report and action plan to this Tribunal on or before 09.03.2021 by e-filing in the form of Searchable PDF/OCR Supportable PDF and not in the form of Image PDF along with the necessary hardcopies to be produced as per Rules.*

*17. The Registry is directed to communicate this order to the members of the committee, officers mentioned in the Joint Committee report and also to the Chief Secretary, State of Kerala, Principal Secretaries of Motor Vehicle Department and Environment, Local Administration, Public Works Department by e-mail immediately so as to enable them to comply with the direction.*

3. The matter was posted to today for consideration of these reports. We have received the joint committee report dated nil e-filed and received today which reads as under:

*STATUS REPORT FILED BY THE COMMITTEE CONSTITUTED IN THE MATTER OF O.A. NO. 259/2017 IN ACCORDANCE WITH THE ORDER DATED 20.01.2021 OF HON'BLE NGT IN*

*Original Application No. 76 of 2017 (SZ)  
Original Application No. 259 of 2017 (SZ) &*

M.A. No. 209 to 214 of 2017 (SZ)  
With  
Original Application No. 260 of 2017 (SZ)

*The committee constituted as per the order dated 06.01.2020 in the matter of O.A. No. 259 of 2017, Lawyer's Environmental Awareness Forum (LEAF) versus the State of Kerala & Others, hereby submit the following as per order dated 20.01.2021:*

*It is respectfully submitted that the Committee had already conducted an air quality status study and submitted report of the eight cities mentioned in the application. As per the study report the air quality of all other areas except Vyttila in Eranakulam District were found to be within the permissible level. But that study was conducted soon after the covid-19 pandemic induced lock down and based on the data available with the Kerala State Pollution Control Board from the existing manual ambient monitoring stations under national Air Monitoring Programme, State Air Monitoring Programme and Continuous Ambient Air Quality Monitoring Stations collected immediately before, after and during the lockdown. Hence Hon'ble NGT vide order dated 20.01.2021 in the aforementioned applications 259 of 2017 directed the Committee to consider the observation made and conduct further Ambient Air Quality test when the activities in the State are in peak operation and then submit a further detailed report along with suggestions on remedial measures, if any.*

*Further, it was also directed that the independent departments who were directed to carry out certain recommendations to file their independent status report regarding the action plan with the shorter timeline as to how they are going to implement the recommendations made by the committee to check the air pollution in the State of Kerala.*

*The action plan comprising of the short term and long term steps already prepared and submitted by the committee before the Hon'ble NGT is reproduced below:*

<b>Short term steps suggested for improving Air Quality</b>		
<b>S.No.</b>	<b>Action</b>	<b>Implementing Agency</b>
1.	<i>Launching extensive awareness drive against polluting vehicles</i>	<i>Motor Vehicle Department</i>
2.	<i>Ensuring strict action against visibly polluting vehicles</i>	<i>Motor Vehicle Department</i>
3.	<i>Steps to prevent parking of vehicles in non designated areas</i>	<i>Motor Vehicle Department /State police-Traffic</i>
4.	<i>Introducing wet/Mechanized vacuum sweeping of roads</i>	<i>Local self-Government Department</i>
5.	<i>Controlling dust pollution at construction sites by providing an appropriate covering system</i>	<i>Local Self-Government Department</i>
6.	<i>Ensuring carriage of construction material in closed/covered vessels</i>	<i>Police Department</i>

<b>Long term steps suggested for improving Air Quality</b>		
<b>S.No.</b>	<b>Action</b>	<b>Implementing Agency</b>
1.	<i>Retrofitting of diesel vehicles with particulate filters</i>	<i>Motor Vehicle Department</i>
2.	<i>Installation of the vapour recovery system in fuelling stations</i>	<i>Petroleum and Explosives Safety organisation (PESO) /Pollution Control Board</i>
3.	<i>Promoting battery operated vehicles</i>	<i>Motor Vehicle Department</i>
4.	<i>Banning of old diesel vehicles in a phased manner</i>	<i>Motor Vehicle Department</i>
5.	<i>Undertaking greening of open areas</i>	<i>Local Self-Government Department/ Public works Department</i>
6.	<i>Creation of green buffers open areas</i>	<i>Local Self-Government Department/ Public works Department</i>
7.	<i>Development of a proper system for ensuring garbage/municipal solid waste/biomass/leaves connection and disposal and to avoid open burning</i>	<i>Local Self-Government Department</i>
8.	<i>Promoting the use of LPG only and to avoid the use of kerosene/firewood in restaurants/dhabas/roadside eateries</i>	<i>Local Self-Government Department</i>
9.	<i>Introduce water fountains at major traffic intersection, wherever feasible</i>	<i>State Highway Authority of Kerala (SHAK)/National Highways Authority of India/Public Works Department (PWD)</i>
10.	<i>Take steps for black topping/pavement of road shoulders to avoid road dust</i>	<i>Public Works Department (PWD)</i>
11.	<i>Prepare an action plan for public transport on CNG mode.</i>	<i>Motor Vehicle Department</i>
12.	<i>Ensure the proper collection of solid waste (biomass)</i>	<i>Local Self-Government Department (LSGD)</i>
13.	<i>Ensure strict enforcement of the ban on burning of agricultural waste and crop residues</i>	<i>Agriculture Department</i>
14.	<i>Ensure strict action against industrial units not complying with standards</i>	<i>Pollution Control Board</i>
15.	<i>Ensure DG sets meeting the standards only be allowed to operate</i>	<i>Department of Electrical Inspectorate/ Pollution Control Board (KSPCB)</i>
16.	<i>Undertake road widening and improvement of infrastructure for decongestion of road</i>	<i>Public works Department (PWD)</i>

*It is respectfully submitted that the Chief Secretary, Government of Kerala vide letter No. 46/EM Cell/SCO/2021(1) dated 02/02/2021 directed all concerned department mentioned in the action plan to submit their individual status report to Hon'ble NGT on or before 09.03.2021 mentioning how they are going to implement the recommendations in an effective manner. Copy of the letter is produced herewith and marked as AnnexureR(2)A.*

*In the action plan already submitted by the committee the following are the steps to be taken by the Pollution Control Board*

2	<i>Installation of the vapour recovery system in fuelling stations</i>	<i>Petroleum and Explosives Safety organisation (PESO) /Pollution Control Board</i>
14	<i>Ensure strict action against industrial units not complying with standards.</i>	<i>Pollution Control Board</i>
15	<i>Ensure DG sets meeting the standards only be allowed to operate</i>	<i>Department of Electrical Inspectorate/ Pollution Control Board (KSPCB)</i>

*Petrol refuelling stations are a major source of benzene emissions, volatile organic compounds and particulate matter 2.5 concentration. Therefore installation of vapour recovery system is an important step in improving air quality. This is to be implemented in coordination with Petroleum and Explosive Safety Organisation (PESO) shortly.*

*Periodical inspections are being conducted by the Board in industries and the pollution control measures adopted by them are being verified. The Board ensures connectivity of the Online Continuous Emission Monitoring System (OCEMS) of industries with the Board's portal. Adequate actions are also being taken to rectify the same if any, Non-compliance is noticed by the Board.*

*In connection with the National Clean Air programme (NCAP), with an intention to reduce the PM<sub>2.5</sub> and PM<sub>10</sub> concentration from DG sets, retro fitting of emission control devices of generators already in use was suggested or shift to gas based DG sets. Circular regarding the above was already issued by Kerala State Pollution Control Board on 09.12.2020. Copy of the same is produced herewith and marked as Annexure. R(2) B*

*It is submitted that the objectives of the previous report, the air quality which was routinely monitored by the Kerala State Pollution Control Board as the part of the Ambient Air Quality Monitoring program was analyzed with reference to the COVID-19 pandemic induced lockdowns.*

*Vide the order dated 20.01.2021 in O.A No. 259/2017, the Hon'ble NGT had directed the committee to conduct further Ambient Air Quality test when the activities in the State are in peak operation. It may kindly be noted that in the previous report the air quality status of eight districts with peak operation prior to Covid 19 was also incorporated in which all the parameters were within prescribed limit for all stations except Vyttila in Ernakulam District. As the Hon'ble NGT has direct to conduct study again with peak operation, it is brought to the kind attention that even though the restrictions of lockdown have been lifted, the educational institutions still remain closed except some higher degree level classes. Public conveyance services though started are yet to be fully functional. In the industrial sector, only large scale unit have resumed full scale production,*

some are working only intermittently and some still remain closed. Activities related to construction sector are also to come up in full fledged functioning. The entire activities of state are expected to be in peak operation by June 2021 when the educational institutions and public conveyance restart completely. Hence it is respectfully submitted that such ambient air quality study will be conducted thereafter. Hence, the Hon'ble NGT may be pleased to allow sufficient time to conduct air quality analysis after resuming the peak operational stage.

Dr. M.T. Karuppiah Scientist 'E' MoEF&CC Regional Office Chennai	Dr. S. Prabbhu Scientist 'C' Regional Office(SZ) MoEF&CC Regional Office Bengaluru	Smt. Bindu Radhakrishnan Member Convenor Senior Environmental Engineer Kerala State Pollution Control Board Thiruvananthapuram
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Dr. R. Sivacoumar, Sr. Principal Scientist CSIR-NEERI Zonal CSIR Complex, TTTI,	Sri. Bijumon K Regional Transport Officer Environmental Division, Thiruvananthapuram	Dr. Deepesh.V Scientist 'C' Regional Directorate-south (Bengaluru) Central Pollution Control Board
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4. We have also received the report submitted by third respondent- Kerala State Road Transport Corporation which reads as follows:

**REPORT FILED BY THE KSRTC/3<sup>RD</sup> RESPONDENT**

*The report submitted by the KSRTC sincerely states as follows:*

*1. It is submitted that KSRTC has floated tender for the procurement of 310 CNG buses to replace its upper class busses like Deluxe, Express, Super Fast & Fast Passenger which attain the age of 7 years and hence needed to be converted as ordinary class as per KMVR. The new CNG buses will be put on road in a year time.*

*2. Government of Kerala accorded sanction for KSRTC to convert 400 Nos of HSD buses to LNG. After converting 50 Nos in the initial phase for evaluating its merits and conversion of 400 HSI buses to LNG in tendering. Three firms participated in tender and 1<sup>st</sup> stage of pre-qualification evaluation by each successful bidder under proof of concept and those will be got approved at ARAI/CAT etc. thereafter massive conversion of buses will be started. The project is expected to be completed in a year time.*

*3. Conversion of I-ISD buses to CNG-KSRTC has floated tenders for the conversion of 5 Nos of I-JSD buses to CNG with a view to survive with CNG conversion if there is any uncertainty in the conversion of buses to LNG since it being a novel venture in the country itself and hence a lot of hurdles to overcome.*

*4. Promoting battery operated vehicle Government of India had sanctioned 250 e-buses to KSRTC under FAME-II scheme to operate on wet lease. But the per kilometre hiring rate obtained in tender was Rs. 75.90 where the revenue/KM is Rs.40/- Revenue, expenditure gap was round 70 crores every year. As such it is planned to go for procurement of 50 e-buses, for*



*Thiruvanthapuram zone instead of hiring to obtaining soft loans from KIIFB. The process is fast progressing. It is expected that the project can be completed in a year time. These are the steps taken by KSRTC to contribute to the steps taken by the State to reduce air pollution.*

*Therefore, it is most humbly prayed that this Hon'ble Tribunal may be pleased to take the said Report filed by the Mechanical Engineer incharge of Executive Director (M&W) on record and thus render justice.*

*Date at Chennai on this on the 8<sup>th</sup> day of March 2021.*

*(E.K. Kumaresan)*

*Counsel for 3<sup>rd</sup> Respondent*

*Standing Counsel for State Government of Kerala*

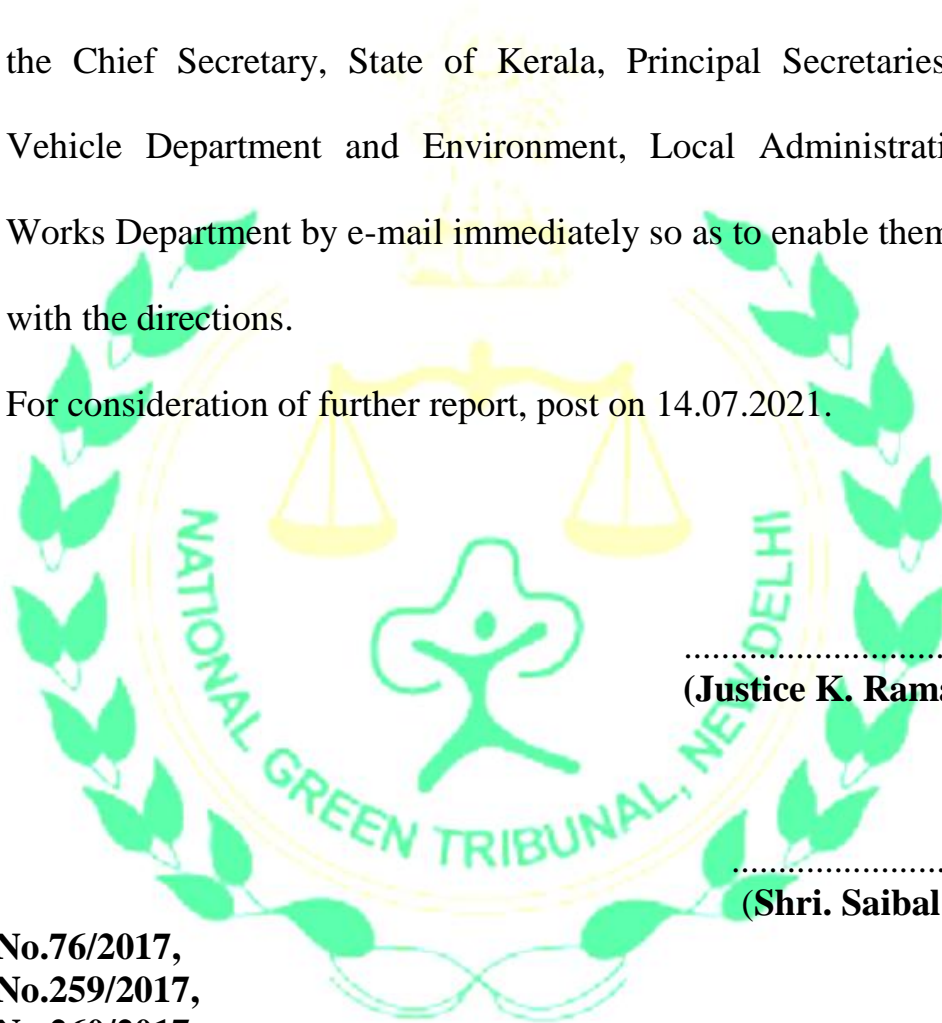
*NGT (SZ) Chennai Bench.*

5. The others State machineries have not filed any statements as directed.

Though, as per the joint committee report, they are also expected to do certain things from their side. The Joint Committee report shows that in order to ascertain the actual pollution level, it can be possible only when the analysis is done during peak operation i.e. by June, 2021 when the schools and other activities will be in full swing. So, they want further time for that purpose. During the pandemic seasons we do not know whether schools will open by June, 2021 as well. However, the Committee is directed to ascertain the probable peak period and conduct the ambient air quality test and suggest remedial measures after identifying the source and apportioning the liability of the person who will have to carry out the remedial measures in an effective manner to curb the air pollution in Cochin.

6. They are also directed to conduct Emission Inventory study in these areas so as to ascertain the nature of pollution for a long time and ascertain the source of pollution and then suggest remedial measures to curb the same.

7. They are directed to file the report on or before 14.07.2021 by e-filing in the form of searchable PDF/OCR supportable PDF and not in the form of image PDF along with necessary hardcopies to be produced as per Rules.
8. The Registry is directed to communicate this order to the members of the committee, officers mentioned in the Joint Committee report and also to the Chief Secretary, State of Kerala, Principal Secretaries of Motor Vehicle Department and Environment, Local Administration, Public Works Department by e-mail immediately so as to enable them to comply with the directions.
9. For consideration of further report, post on 14.07.2021.



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

.....E.M.  
(Shri. Saibal Dasgupta)

O.A. No.76/2017,  
O.A. No.259/2017,  
O.A. No.260/2017 ,  
09<sup>th</sup> March, 2021. (AM).