BEFORE THE NATIONAL GREEN TRIBUNAL (EASTERN ZONE BENCH, KOLKATA)

ORIGINAL APPLICATION No. 33/2014/EZ

IN THE MATTER OF:

Shri Subhas Datta,
 25/1, Guitendal Lane,
 Post Office, Police Station & District- Howrah,
 Pin- 711 101, West Bengal

.....Applicant

Versus

- State of West Bengal
 Notice through the Principal Secretary
 Department of Transport,
 Govt. of West Bengal, Paribahan Bhawan,
 12, R.N.Mukherjee Road
 Calcutta- 700 001
- 2. Ministry of Environment
 Govt. of West Bengal
 Through the Addl. Chief Secretary
 Department of Environment, Govt. of West Bengal
 "Poura Bhawan", Salt Lake City,
 Kolkata- 700 106
- 3. West Bengal Pollution Control Board,
 Paribesh Bhawan
 10A, Block L-A, Sector-III
 Salt Lake City,
 Kolkata- 700 098
- 4. Ministry of Environment and Forests,
 Through the Secretary, Govt. of India
 Paryavaran Bhawan, CGO Complex
 New Delhi- 110 003

- 5. Auto Emission Testers Association, Flat 3C, 122A, Motilal Nehru Road, Kolkata- 700029
- West Bengal Petroleum Dealers' Association, 1/1A, Vansittart Row 2nd floor, Kolkata- 700 001
- 7. Ministry of Petroleum & Natural Gas Govt. of India Through the Secretary to Govt. of India Sashtri Bhavan New Delhi- 110 001

.....Respondents

COUNSEL FOR APPLICANT:

Mr.Subhas Datta, in person

COUNSEL FOR RESPONDENTS:

Mr.Bikas Kargupta, Advocate, Respondent No.1 & 2 Ms.Arpita Chowdhury, Advocate, Respondent No.3 Mr.Gora Chand Roy Choudhury, Advocate, Respondent No.4 Mr. Pranab Kumar Chatterjee, Advocate, Respondent No.5 Mr.Rahul Ganguly, Advocate, Respondent No.6 Mr.Sanjoy Kumar Ghosh, Advocate, Respondent No.7

JUDGMENT

PRESENT:

Hon'ble Mr. Justice S.P.Wangdi, Judicial Member Hon'ble Prof. (Dr.) P. C. Mishra, Expert Member

Reserved On : 14.07.2016 Pronounced On : 11.08.2016 1. Whether the Judgment is allowed to be published on the net?

Yes

2. Whether the Judgment is allowed to be published in the NGT Reporter?

Yes

Hon'ble Mr.Justice S.P.Wangdi, JM:

Before constitution of this Tribunal, the Applicant, an environment activist and a public spirited person, had moved at least ten writ petitions before the Hon'ble Calcutta High Court on various issues concerning the cities of Kolkata and Howrah. Writ Petitions No. 6377 (W) of 2007 and 4813 (W) of 2005 were preferred by him raising questions of auto-emission and higher air pollution recorded during the night in the two cities. For sometime the cases were heard regularly and several directions issued by the Hon'ble High Court but, later as those were not taken up for a long time, on 4th September, 2014, the Applicant sought for transfer of all cases filed by him to the Eastern Zonal Bench of the National Green Tribunal which had been established in Kolkata with effect from May, 2014. The likelihood of the process of transfer of the cases getting delayed and the apprehension and anxiety of the environmental hazards escalating during the winter season felt by the Applicant prompted him to file this application before this Tribunal for remedy on certain issues which were urgent and imminent.

2. It is the case of the Applicant that in the aforesaid writ petitions the West Bengal Pollution Control Board had submitted reports that were alarming revealing the air quality of Kolkata to be highly polluted in the night hours during the period between mid-October to February end as it was stated to be not only higher than the day time but also five to six times in excess of the safe limit. The Applicant is concerned particularly with the magnitude of auto-emission in the city which, as per him, is the major contributor to pollution requiring urgent attention. It was the submission of the Applicant that the Hon'ble High Court, during the proceedings of the aforesaid writ petitions, had directed the concerned authorities to take the following steps amongst several others:-

- "a) Phasing out of old vehicle;
- b) Strict compliance of the Bharat Stage norms;
- c) Introduction of green-fuel;
- d) No. PUC (Pollution Under Control), no fuel,
- e)Strengthening the system of inspection, maintenance and certification of vehicles;
- f) Formation of High Power Monitoring Committee to control and regulate pollution in the Calcutta Metropolitan areas;
- g) Effective use/ operation of Remote Sensing Device (RSD) etc."

The Applicant states that the above directions have hardly been complied with.

It is stated that the causes for the high level of pollution in the city of Kolkata are the lack of clean fuel, old vehicles plying in the city which is stated to constitute 54% of

the total number, slow movement of traffic, high density of vehicles and deficient method in checking and control of emission. As directed by the Hon'ble High Court, the State Government procured one Remote Sensing Device (RSD) in the month of November, 2009, an instrument which instantly measures vehicular emissions with accuracy. As the single instrument was inadequate for the entire city of Kolkata and the districts of Howrah, North and South 24 Parganas, direction to procure three more still remains to be complied with although tenders were floated for the purpose at least three times in the years 2010, 2011 and 2012. In an apparent conflict of action, the State Government, in a meeting held on 02.07.2010, took a decision to relax even the Pollution Under Control (PUC) limits by resolving as follows:-

- "1. Vehicles detected by the RSD with the pollution level not exceeding 20% of the permissible level should not be penalised for the present.
 - 2. Report on pollution of vehicles detected by RSD in respect of vehicles plying within one year from the date of its first registration should be ignored and should not be penalised for the present.
- 3. In case a single vehicle is detected more than once by the RSD in a single calendar month, penalty is to be realised against a single case only once in a month and others be ignored.
- 4. In case a single vehicle is detected more than once by the RSD in consecutive 3 (three) calendar months, careful examination of the vehicle to ascertain the emission level within the prescribed limit by the Officer of M.V. Department is to be done in addition to imposition of penalty as usual. For repeated detection of any vehicles by the RSD in

consecutive 3 (three) months, the Registering Authority may also take action to suspend registration of the vehicle etc. in accordance with prescribed Acts & Rules. The vehicle may also be tested by the same RSD machine, if necessary."

Even the only RSD in operation was stopped from 18th November, 2014 thereby adding to the woes of the city.

- 3. A Monitoring Committee to monitor the activities relating to vehicular pollution constituted on the direction of the High Court, has remained non-functional and dormant. The Applicant emphasises the urgent need for either constituting another Committee or to reactivate the one constituted earlier considering the deteriorating condition of the environment in the Kolkata metropolis. Based on the above primary contentions the Applicant has sought for the following reliefs:-
 - " (i) To direct the respondents concerned to take immediate steps, actions and measures not to allow the air pollution in Calcutta Metropolitan areas beyond the permissible parameters arising from auto emission:
 - (ii) To further direct the respondent to procure and deploy three more Remote Sensing Devices (RSD) for checking/measuring the emissions from individual vehicles on roads;
 - (iii) To use and appropriately operate the existing Remote Sensing Device for measuring the level of pollution arising from the running of vehicles;
 - (iv) To direct the respondents concerned to take all immediate steps under The Air (Prevention and Control of Pollution) Act, 1981;
 - (v) To direct the concerned to take adequate measures for making the Calcutta Metropolitan Areas free from air and environmental hazards.

- (vi) To direct the concerned respondents to form a new monitoring committee or to activate the existing committee formed earlier by the order of the Hon'ble High Court, Calcutta to suggest ways and means to fight out air pollution in Calcutta and in its suburbs;
- (vii) To direct the respondents concerned to take all immediate steps under the Environment (Protection) Act, 1986.
- (viii) Any other or further relief as the Hon'ble Tribunal may deem fit and proper in the facts and circumstances of the case."
- 4. On 17th November, 2014, upon hearing the Applicant, this Tribunal issued notices upon the Respondents directing the Principal Secretary, Department of Transport, the Respondent No.1, to submit status report on the procurement of and operation of RSD and, the Member Secretary, West Bengal Pollution Control Board, the Respondent No.3, on the air pollution arising out of auto emission during both the day and night hours in Kolkata, Howrah, North and South 24 Parganas.
- 5. Before proceeding further, it is of relevance to note that consequential to the status report submitted by the West Bengal Pollution Control Board (WBPCB in short) in terms of our order dated 17th November, 2014 as per which PM10 and NO2 concentration during both the day and night were disconcerting, direction was issued on 22nd January, 2015 upon the WBPCB and the Principal Secretary, Department of Transport, Government of West Bengal to submit reports on the total

number of 'Pollution Under Control' (in short PUC) Testing Centres or Auto Emission Testing Centres (AETC) which were in operation in the city of Kolkata, their particulars and the number of such centres that would be adequate for catering to the need of the city. The direction was issued with the object of linking PUC/AETC Certificates with fuelling of vehicles at the petrol pumps on the principle of 'No PUC, No Fuel' as a regulatory measure. Vide order dated 24th February, 2015 similar list was also sought for in respect of the areas falling under KMDA.

6. On submission of such list by the WBPCB, on 25th February, 2015 the Auto Emission Testers Association, on their application, was impleaded as Respondent No. 5 granting them leave to file reply to the original application. Later, on 14th July, 2015, the West Bengal Petroleum Dealers' Association was also added as Respondent No. 6 as prayed for by them in view of the proposal of this Tribunal to consider linking PUC/AETC with fuelling of vehicles on the principle of 'NO PUC, NO FUEL' i.e., no fuel would be sold to vehicles if they failed to produce 'Pollution Under Control' certificates. While the Auto Emission Testers Association, Respondent No. 5 objected to increasing the number of PUC/AETC Centres in the city of Kolkata, the West Bengal Petroleum Dealers' Association on their part

asserted that the concept of 'NO PUC, NO FUEL' was impracticable for various reasons. This was also the stand of the Ministry of Petroleum and Natural Gas, Government of India which was added as Respondent No.7 vide order dated 1st September, 2015 considering the universality of the malaise in the entire country.

- of ensuring that no vehicle in the city and its precincts plied without undergoing pollution tests thereby substantially arresting air pollution caused by auto emission. The need to explore measures such as 'NO PUC, NO FUEL' arose primarily due to the alarming level of pollution caused by auto-emission as reported by the WBPCB and the procrastination, lack of commitment, initiative and drive on the part of the State machinery observed by us in discharging its responsibility and performing their statutory duties as shall be evident from the discussions that shall follow hereafter.
- of Remote Sensing Device (RSD) which is the second prayer of the Applicant in the Original Application. The genesis of this is traced to an order passed by the Hon'ble Calcutta High Court in September, 2007 in WP No. 4183 of 2005 whereby the State Government had been directed to procure, install and operate

RSD, an instrument which is said to measure emissions from vehicles automatically with speed and accuracy. This was complied with in November, 2009 i.e., after two long years, and the device thus procured was the only one which was used for the entire city of Kolkata and three other districts of Howrah, North 24 Parganas and South 24 Parganas. Considering the gross inadequacy, the High Court vide order dated 17.06.2010 directed procurement of three more of such device so that the four districts could be provided with at least one each for effective and meaningful monitoring. This order was followed more in breach than in compliance as it is revealed that three tenders floated for the purpose in the years 2010, 2011 and 2012 never achieved culmination.

9. When the matter travelled to this Tribunal, the Secretary, Department of Transport in his affidavit affirmed on 18th March, 2015, informed us that after the third attempt at floating tender in the year 2012, it was finally decided to form a Committee to look into the issue. Committee thus formed passed a resolution again after two years later on 24.11.2014 which is just after the present Application was filed, whereby scientists from IIT, Kharagpur and IIEST, Shibpur were to come up with a proposal for developing an indigenous technology within January, 2015. When such proposal was not received,

request was made by the Director, PVD, Kolkata vide his letter dated 13.02.2015 to expedite the process. On 20th March 2015, this Tribunal, upon consideration of the affidavit and the status report filed by Secretary, Department of Transport, accepted the contentions and appreciated the unreasonableness of the rates quoted by the only party participating in the tender process. Thus the Transport Department was directed to pursue with the two institutions to complete the process of preparing an indigenous prototype RSD at the earliest in the larger public interest. The Registry of the Tribunal was also directed to convey to the Director, IIT, Kharagpur and the Vice Chancellor, IIST, Shibpur the need to expedite the process and to submit a report on the progress made by the next date of hearing.

- 10. In response, letter dated 6th April, 2015 was received from the Officiating Registrar, IIT, Kharagpur, raising certain issues amongst which was the fact that the institution had not received any communication from the Department of Transport. The Secretary, Department of Transport, was thus directed to deal with the issues raised in the letter and to submit a compliance report. However, the records show that nothing has come about on the development of prototype RSD.
- Next is the issue of establishing more Auto EmissionTesting Centres so that the entire area within Kolkata and the

three other districts could be covered evenly with the facility. As per information provided by the WBPCB and other parties, there are only 60 Auto Emission Testing Centres out of the 62/63 which are functional and catering to the city of Kolkata. By order dated 9th July, 2015 we had expressed the view that there ought to be atleast one such centre within a radius of 3 Kilometres and in view of this, directed immediate steps to calculate on the number of additional number of such centres that should be required and to complete the process for grant of licence for such centres as per rules. In his affidavit of compliance affirmed on 5th August, 2015, the Secretary, Transport Department inter alia reported that application for setting up 16 (sixteen) new Auto Emission Centres were under active consideration of the Director, Public Vehicles Department and, as per the table provided in the report, there were 62 and 56 centres that were functional in the cities of Kolkata and Howrah respectively.

high content of particulate matter and Nitrogen dioxide in the ambient air in Kolkata and Howrah, it was felt essential to constitute an Expert Committee to recommend measures for dealing with the enormous task of arresting pollution caused by heavy vehicular movement in the two cities. In what follows we have dealt with the two orders passed by us at some length

even at the cost of prolixity as those are rather significant and substantial. First of such order is dated 17th November, 2015 which is reproduced below:-

"Heard Id. Counsel appearing for the applicant in person and the respondents present today.

In view of the order passed by this Tribunal on 16.11.2015, we propose to constitute an Expert Committee whose expertise will give assistance to the Hon'ble Tribunal to deal with the problem of air pollution in ambient air in twin cities of Kolkata and Howrah caused due to heavy traffic movement. At the same time, the Committee will make appropriate recommendation to ensure as to how the traffic control system in those areas is required to be monitored so as to limit the pollutant level or reduction of pollution.

In our opinion, it could be appropriate that the committee shall deal with the problem by submitting report with reference to the terms of reference which we have broadly prepared. The committee is free to add any points in terms of reference as per the requirement in view of the collective decision which they may take during the course of the first sitting.

In our view, the Member Secretary, West Bengal State Pollution Control Board will be the Member Convener and co-ordinate the activities of the Monitoring Committee constituted herein to prepare a detail report with recommendation in terms of reference which are stated in the order. The other members of the Committee are:-

- (i) Prof.(Dr.)S.C.Santra, Professor in Environmental Science, University of Kalyani, Kalyani, West Bengal.
- (ii) Prof.(Dr.) K.M.Agarwal, Institute Dean, Indian Institute of Social Welfare and Business Management, Management House, College Square, West Kolkata- 700073.
- (iii) Dr.R.C.Saxena, the Scientist E & in-charge, Regional Office, Central Pollution Control Board, Southern Conclave Block 502, 5th and 6th Floor, 1582, Rajdanga Main Road, Kolkata- 700107 (W.B).

- (iv) Principal Secretary, Home Deptt. Govt. of West Bengal, himself or any nominee appointed by him, who is well versed in traffic management of the twin cities of Kolkata and Howrah.
 - (v) The Principal Secretary, Environment or any scientist nominated by him from his department who is conversant with the air pollution in twin cities.

The Principal Secretary, Home or Principal Secretary, Environment which present personally at the time of such meeting, then the Senior most Principal Secretary should act as Chairperson in accordance with the inter se seniority among them as per the Government rules and if neither of them is personally present then the Professor (Dr.) S. C. Santra shall preside over the meeting.

Each private member of the Expert Committee i.e Prof(Dr.) S.C.Santra and Dr. K.M.Agarwal will be entitled to a token remuneration of Rs.10,000/- each per sitting which includes their conveyance etc. which shall be borne by the PCB.

Though already the State Pollution Control Board has taken survey of various places and collected data regarding the ambient air quality, yet the air quality of some places where there is heavy traffic shall be collected afresh by the concerned PCB officers as per the due procedure and analytical data shall be placed on record before the committee.

The PCB shall organise a team of officers, and if adequate number of such officers are not available at Kolkata they are at liberty to man such officers from its Regional offices spreading over the State of West Bengal, to collect air samples from the locations where there is excessive traffic during the day and night hours. The applicant may identify and point out so also the other parties may, if so desire, identify and point out inasmuch as this is not an adversarial litigation as such, and sample shall be collected from those places by the PCB officers in scientific manner which may be analysed in the Government laboratory as early as possible

and in any case, within a period of three weeks so as to place the data/record before the said committee.

The committee is free to express its opinion as per the manner in which monitoring has to be done during day time and night time because such variation may require having regard to the fact that during the day time the traffic is more whereas during the night time it becomes thin and thinner as the night advances towards and dawn. Thus monitoring at different time will indicate the locations where there is requirement to reduce pollution load through traffic management. The report on the functioning of Auto Emission Testing Centers located in the twin cities may also be prepared by the said committee.

The Committee will deliberate upon the following broad terms of reference:-

- 1. The State Pollution Control Board shall provide to the Committee the recent air pollution data from ambient air including morning and evening data collected from different locations of twin cities of Kolkata and Howrah and also the number and location of air pollution monitoring stations (both manual and automatic).
- 2. From such data the Committee shall shortlist the areas over which there are air pollutants in ambient air beyond the permissible limit.
- The Committee will also suggest the requirement of additional air monitoring stations in the twin cities for collection of air quality data if the existing numbers are not adequate.
- 4. The Pollution Control Board shall collect data from the Traffic Department about the number of different category of vehicles running on such high pollution contributing routes and the committee based on such data will suggest the proper movement of vehicles in these routes in order to avoid congestion, hereby reducing pollution.

- The Committee will also suggest how to streamline the efficiency of Autoemission Testing Centres existing in the twin cities, their effectiveness and to suggest action against those vehicle owners without having valid "Pollution under Control Certificates".
- 6. The Committee will also make other recommendations so as to reduce the pollution load in the ambient air of twin cities of Kolkata and Howrah.

The Member Secretary of State PCB shall inform all the members about the date, time and venue of the first meeting as directed above and provide all infrastructure for conduct of the meeting and preparation of the report.

The Committee shall submit an interim report by one and half month and final report by three months"

- 13. As a sequel to the above direction and the fact that the Expert Committee was likely to take some time to submit its report, order dated 19th January, 2016 was issued as an endeavour to reduce air pollution in the ambient air in the two cities after observing the criticality of the condition, relevant portion of which reads as under:-
 - "After hearing the submissions of the applicant, Ld. Advocate Mr.Kargupta and other respondents present today, we are inclined to issue some direction which may be helpful to reduce the air pollution level in the ambient air of the twin cities. Before we pass some order we wish to put on record some alarming facts on air pollution level in Kolkata collected from various sources.
 - 1. Air quality index in Kolkata remains as very poor next to Delhi only in most of the time. The

situation becomes worse during winter due to meteorological factors.

- **2.** The SPM level at B.T.Road, Shyambazar, Ultadanga & Moulali is close to three times of the same limit.
- **3.** A surge in construction contributes significantly to air pollution which is a significant contribution to suspended particulate matter. Though the government and the private firms are spending crores of rupees on projects, they do not spend a fraction needed to control dust.
- **4.** A study conducted by Kala Gopala Krishnan in 1997 reveals 50% of pollution to automobiles and 48% to industry and rest to other activities. But subsequently the situation has changed with a boom in construction and an explosion in plying of vehicles. The Thermal Power Plants and other industries located in the vicinity of Kolkata contribute SPM to Kolkata air through wind current.
- **5.** A study conducted by IIT, Kanpur reveals that the top contributor of PM10(56%) and PM2.5 (38%) in Delhi is road dust. Fuel burning contribution to PM2.5 is 20% and for SPM it is 9%. The study also shows that the percentage contribution of various sources like road dust, industrial point sources, domestic fuel burning, vehicles and other sources to PM10 & PM2.5 in ambient air.
- **6.** Air monitoring data of American consulate reveal that Kolkata Air is worse than Delhi with respect to PM2.5 which is one of the most dangerous elements in auto emission.
- 7. A study by Chittaranjan National Cancer Research Institute (CNCRI) shows how people of Kolkata are exposed to dangerous level of air pollutants because of high density of vehicular population on a limited road space of 6% compared to 26% road space in Delhi. The open space in Kolkata is only 1% for which emission in the city stays for a longer period. The low average speed of vehicles in Kolkata due to

heavy traffic in limited space leads to poor combustion of fuel and more pollution.

Thus with the present 'Business as Usual' attitude of the stakeholders, time is not far when Kolkata will be listed as worst polluted city in the world with large proportion of children and elderly people suffering from lung related diseases and even cancer. Therefore, it is high time that judiciary intervenes to stabilise and reduce the pollution load in the ambient air which may require some drastic step at the cost of comfort of some people for whom a large section of poor people, whose contribution to pollution is negligible, also suffer.

With the background and hearing the submission of the applicant and respondents, we pass the following order:-

- The Member Secretary, State Pollution Control Board is directed to make the semi-automatic air monitoring stations which were in operation till 2011, functional within two months and collect ambient air quality data on daily basis from a lapse of 30 days from today.
- The State Pollution Control Board shall consider the viability of installing low cost sensor to monitor PM2.5 at various highly polluted areas where vehicular movements contribute to more PM2.5 similar to action done in New Delhi recently. A report on viability of installing sensor be filed within four weeks.
 - 3. Centre of Science and Environment, New Delhi in their citizen's report on air quality and mobility in Kolkata published in 2011 has discussed many facets of air pollution in Kolkata & Howrah based on the survey/studies made up to 2009. The report reveals that contribution of road dust and vehicle movement contribute to 32% of the air pollution and out of 9 locations, nitrogen dioxide was in critical level in seven locations and high in two whereas PM10 was critical in

three locations and high in four locations. In Kolkata nearly 65% of all vehicles and 99% of commercial vehicles are diesel run which emit toxic carcinogens. Kolkata has earned the notoriety as diesel capital of India. The report also discusses the mobility crisis as 65% of the arterial roads in Kolkata are congested.

Interestingly the majority of Kolkata citizens who experience the air pollution problem want a change. Many suggestions have been made in each aspect to combat the air pollution level.

As there is no recent scientific data available on contribution of various sources to PM10, PM2.5 and Nitrogen Dioxide level of ambient air in the twin cities, the State Pollution Control Board shall engage a national level agencies to collect and generate data on contribution of various sources of pollution at important areas in both the city in order to formulate strategy to combat air pollution. Compliance report on engagement of agency to undertake the work be filed within four weeks & report of agencies within three months.

4. The Principal Secretary, Department of Transport, Govt. of West Bengal is granted four weeks time to submit a report on additional number of AETCs to be set up in Howrah and Kolkata based on actual survey in order to be sure that the vehicle owners do not face any difficulty to check their vehicles once in six months as per existing rules. The transport department will also ensure that all these additional AETCs are set up within three months and become operational. After AETCs become operational, the Tribunal will consider whether linking the PUC with purchase of fuel from approved fuel outlets will be useful to prevent air pollution from automobiles.

- 5. On 6th May, 2015, we directed the Commissioner of Police of Kolkata and Howrah and the Principal Secretary, Transport Dept. West Bengal to check each and every vehicle plying in twin cities for valid 'PUC' certificate and take steps and measure against the vehicles owners who are running their vehicles without valid 'PUC'. They are directed to file an affidavit in respect of number of vehicles checked till 31.12.2015, number of vehicles without valid PUC out of the total vehicle checked & steps taken against such non-complaint vehicle owners. Such affidavit to be filed within four weeks.
 - 6.It is also the contention of the parties that most of the machines in AETCs remain nonfunctional and certificates are issued without any check in exchange of fee. Sometimes the readings are manipulated in the centre to issue a valid certificate. This type of manipulation or issuing certificate even though the vehicles do not comply to the standard is largely due to absence of constant monitoring by the Pollution Control Board/Transport department. Such problem could be resolved if the system of all the AETCs are connected to the central server where the activities of all the centres will be monitored.

The Member Secretary, PCB and the Principal Secretary Transport Department shall submit proposal within four weeks an affidavit computerisation of AECTs and connecting them to a centralised server for monitoring. They are also directed to make surprise check of the AETCs units and impose heavy penalty on the owners for violation in terms of issuing certificate manipulating the data or keeping the system non-functional without prior intimation.

On the issue of disallowing new registration of Diesel vehicles in twin cities, imposing penalty for open burning of municipal and industrial wastes including burning of plastics and penalizing the real estate project owners for not taking control measures during demolition and construction activities and contributing dust to the ambient air and to formulate a scheme on combating air pollution in twin cities, further order will be passed after reports of the committee constituted by the Tribunal and affidavits and reply to be filed by the Govt. respondents as per today's order are available to us."

14. As would appear from the two orders, while by order dated 17th November, 2015 our endeavour was to seek long term solution to the vexed problem, the object of issuing order dated 19th January, 2016 was primarily to highlight the grave conditions prevailing in the city of Kolkata that called for serious attention of all concerned and to suggest certain urgent mitigation measures. Amongst those suggestions were (i) reactivation of the semi-automatic air monitoring stations which had ceased to function from the year 2011, (ii) installation of low cost sensor to monitor PM 2.5 in areas where traffic was heavy as was done recently in Delhi, by engaging national level agencies to collect scientific data of the sources of PM10 and PM 2.5 which were said to be very high in Kolkata and Howrah as per report of the Centre for Science and Environment, New Delhi, published in the year 2011, (iii) to regulate the functioning of the Auto-Emission Centres and most significant of it all, (iv) computerisation of such Centres and to connect those to a central server for proper monitoring.

15. The Expert Committee submitted its preliminary report vide letter dated 25.01.2016. It is observed that the Committee has been assiduous in its efforts and the assistance rendered by the WBPCB and the Department of Transport in the preparation of the report most commendable. After making studies of the various aspects the Committee found PM10, PM2.5 and NO2 level in both the cities of Kolkata and Howrah far exceed the acceptable limits. It has been further observed that major contributions on the road are from passenger carriers, both private and commercial, which ranged from 75% to 81% in different segments of Kolkata alone and, 35% in Howrah and, that the total number of vehicles found Registered/Applied only under PVD, Kolkata (From 01/01/2001 to 06/01/2016) with all types of vehicles taken together, was at staggering 6,76,756. Based on its preliminary studies the Committee observed as under :-

[&]quot;1.The air quality of Kolkata city (on the basis of 11 monitoring stations) exceeds short term NAAQS 2009 (24 hour average) for 3 major parameters i.e PM 10, PM 2.5 and NO2 for all the stations primarily for winter months. It was also observed that the concentration of PM10 and PM 2.5 exceed NAAQS 2009 for 40 to 60 percentile and that of NO2 exceed for 80 to 90 percentile.

^{2.} The air quality of Kolkata city (on the basis of 11 monitoring stations) exceeds long term NAAQS 2009 (Annual average of 104 observations) for 3 major parameters i.e PM10,PM2.5 and NO2 for all the stations.

- 3.The air quality of Howrah city (on the basis of 2 monitoring stations) exceeds short terms NAAQS 2009 (24 hour average) for 3 major parameters i.e PM10, PM2.5 and NO2 for all the stations primarily for winter months. It was also observed that the concentration of PM10 and PM2.5 exceed NAAQS 2009 for 40 to 60 percentile and that of NO2 exceed for 80 to 90 percentile.
- 4.The air quality of Howrah city (on the basis of 2 monitoring stations) exceeds long term NAAQS 2009 (Annual average of 104 observations) for 3 major parameters ie.e PM10, PM2.5 and NO2 for all the stations.
- 5.The air quality of Kolkata and Howrah is compliant for pollutants SO₂, Ozone, Benz (a) Pyrene, Ammonia, Nickel, Arsenic and Lead, Ozone(O₃) and Carbon Monoxide (CO).
- 6.The major problem of air pollution in both the cities is particulate air pollution and NO₂ and it behaves much the same way for both the cities. The seasonal variation of air quality of Kolkata and Howrah follows a uniform trend throughout the year.
 - 7. Analysis of air quality data reveals that while the night time concentrations in Kolkata and Howrah are higher than the day time concentration in winter time, the phenomena is reserved during the summer months. This happens due to change in weather conditions.
- 8. The ambient air quality network of 13 stations (including Kolkata and Howrah) currently operated by the WBPCB needs augmentation. Besides automobile emission, other sources like road dust and construction activities, burning of municipal wastes and industrial wastes including plastics, operation of DG sets and industrial emissions etc. are also contributing to the deterioration of air quality of these twin cities. Therefore, WBPCB should initiate a source apportionment study to assess the contribution from different emission sources in the air in Kolkata and Howrah.

- 9. On the basis of the distribution of traffic, the committee requested the WBPCB to initiate air quality monitoring at 5/6 more stations in Kolkata and 4/5 in Howrah city. The WBPCB has initiated air quality monitoring in 19 stations in Kolkata and 5 in Howrah from January 2016.
- 10. PM2.5 is considered to be the worst air polluter. WBPCB measured this parameter at two stations till 2015, and, considering the traffic density and migration profile, has increased two more stations in Kolkata. Further to this the two CAAQM stations at Victoria and RBU will have PM2.5 installation by this year and the new stations at Science City, BITM and Sector –V in Kolkata and Ramkrishna Mission University, Belur and Padmapukur Water Works in Howrah will have similar installations. The analysis in this relation is provided at Annexure-2
- 11. The Committee suggested that the WBPCB should explore possibility of displaying the air quality data in electronic display boards at the strategic locations in Kolkata and Howrah along with the website on regular basis.
- 12. The Committee suggests that WBPCB should integrate with the National Ambient Air Quality Index System being introduced by the MoEF & CC for major cities.
 - 13. The Committee observed that number and operational aspects of the AETCs need to be relooked for enhancement/ betterment."
- The final Report of the Expert Committee was submitted on 24th February, 2016. We record our appreciation of the fact that the Committee has dealt with the matter in meticulous detail in preparing the report which would serve as a data base for the concerned authorities, particularly the Departments of Transport and Environment as well the WBPCB,

in dealing with matters associated with ambient air in the cities of Kolkata and Howrah.

- 17. On 14.07.2016, the matter was taken up for hearing when Mr.Amber Majumdar, Learned Counsel for the Respondents No.5 and 6 i.e., the Auto Emission Testers' Association and the West Bengal Petroleum Dealers' Association, also filed his written arguments. The Applicant on his part had already placed on record his notes on suggestions on 11.05.2016.
- In his arguments, Mr. Majumdar would strongly urge that the Applicant had filed this application not to make out any cause of action as to the violation of the environmental laws but merely for execution of the orders passed by the Hon'ble Calcutta High Court which was not the purpose for which the National Green Tribunal had been constituted. He would next question the wisdom of procuring three more Remote Sensing Device (RSD) considering that its function, unlike the Auto Emission Test Centres (AETCs), was limited only to measuring pollution of an area and was incapable of measuring the specific nature of pollution or gases emitted by a vehicle which can be measured only when it was stationary. It was pointed out that the State Respondents had failed to come up with the number of additional number of AETCs if the

proposal for establishing one in a radius of every three Kilometres as suggested by us. The proposal 'NO PUC, NO FUEL' suggested by us also assailed as being contrary to the provisions of the Motor Vehicles Act, 1988 as under Section 130 (1) and Rule 139 of the Central Motor Vehicle Rules, it was only a Police who had the power to demand production certificates.

- Mr.Majumdar has already been answered in the very opening paragraph of this judgement where we have indicated that this matter was preferred after applications for transfer of cases to this Tribunal had been filed before the Hon'ble Calcutta High Court. Moreover, this is a case of continuing mandate dealt with earlier by it and all we have done is carried it forward. For this reason, in our considered view, the proceedings before the Hon'ble Calcutta High Court would be necessary implication merge with the one before us. We, therefore, find the contention bereft of any merit and accordingly reject it as such. So far as the other contentions are concerned, we need not delay ourselves on those as being irrelevant as would be revealed from the discussions that shall follow later.
- **20**. Mr. Subhas Datta, the Applicant on his part urged upon us to take notice of the grave environmental condition prevailing in the two cities Kolkata and Howrah caused primarily

by auto emission and expressed the urgent need to tackle the malaise by the State Respondents. Referring to the records, he stressed that although the Government had framed rules and issued order and notifications to tackle the problem, implementation of those were seriously lacking resulting in the present perilous situation faced by the citizens.

- 21. On behalf of the Ministry of Petroleum, Mr.S.K.Ghosh, Learned Advocate, conveyed the Ministry's view on the proposal of 'NO PUC, NO FUEL' as being impracticable on the curious ground of there being possibility of break down of law and order.
- 22. Having heard the parties and after deliberations and discussions at length, we find that much of our energy had been spent on establishment of pollution monitoring system and establishment of AETCs. These undoubtedly are essential to measure and regulate pollution caused by auto-emission but, in our opinion, it does not address the cause of the malaise. This appears to explain the relentless effort of the Applicant raising the issue.
- 23. Records reveal that concern of the Applicant regarding pollution caused by auto emission had been raised by him before the judicial forums since the year 2007 when he had

filed Writ Petition 6377 (W) of 2007 before the Hon'ble Calcutta High Court. It appears there were earlier proceedings also on the subject in the years 2001 and 2004 which is revealed by order dated 18.07.2008 in Writ Petition 6377 (W) of 2007. In the said order Government Notification dated 17th July, 2008, the High Court by which the efforts of the Government of West Bengal to reduce pollution in Kolkata city, if not bring it under complete control, was sought to be demonstrated. For convenience we may reproduce below relevant portion of the said notification:

"i) Transport vehicles of fifteen years old and more should not be allowed to operate and Motor Vehicles Department should not renew their R.C/C.F/Permit after expiry of the stipulated time mentioned below:-

Categories of the vehicles need to be phased out in the following manner:

Categories of vehicles	The data from which plying within Kolkata Metropolitan Area is prohibited	Category of vehicle eligible for replacement
Metered Taxi registered originally before 01-01-1993	31-03-2009	BS-III mass emission standard compliant metered Taxi (LPG or Diesel)
Stage Carriage as well as Contract Carriage omnibuses registered originally before 01-01-1993	31-03-2009	BS-III mass emission standard compliant vehicles of similar nature.
Mini Busses/ Special Stage Carriage omnibuses registered originally before 01-01-1993	31-03-2009	BS-III mass emission standard compliant State/Contract Carriage Vehicles of similar nature.
Trucks/Mini Trucks/all other categories of goods carriages including 3 wheeler goods vehicles registered originally before 01-01-1993	31-03-2009	BS-III mass emission standard compliant goods vehicles/BS II compliant 3- wheeler goods vehicles of similar nature.

ii) All registered auto rickshaws plying within Kolkata Municipal Area need to be converted into LPG or CNG mode by 31st March, 2009. Dual fuel option should not be permitted and

accordingly Motor Vehicles Department should regulate their registration as auto rickshaws in Kolkata Metropolitan area;

Similarly all registered auto rickshaws plying within Municipal area under Kolkata Metropolitan Development Authority need to be converted in LPG or CNG mode by 31st December, 2009.

Unauthorised auto should be seized by the Police Authority and stop their plying in conformity with the order of the Hon'ble High Court, Calcutta.

iii) Alternative green fuel should be introduced and along with necessary improvement of fuel should be done, particularly, in reference to supply of LPG and CNG and also necessary steps need to be taken for reduction of sulphur content of diesel and benzene content of petrol as per the Auto Fuel Policy of Govt. of India.

Oil Companies should comply with such direction and also arrange for LPG and CNG fuelling centre by which LPG or CNG driven vehicles should not face any problem during their plying in the route or may not face any scarcity of LPG or CNG required for their vehicles.

Such action should be taken by the oil companies under intimation to the Department of Environment and West Bengal Pollution Control and also submit their action taken bar chart within August, 2008;

iv) Registration of auto rickshaw (three wheelers) having 2-stroke engines should be stopped immediately by the Motor Vehicles Department and such auto rickshaw should be phased out completely by December, 2008;

Police Authority should ensure the implementation of the aforementioned direction :

- **v)** Air quality monitoring should be done by the West Bengal Pollution Control Board and regularly such report should be published in their website for public information;
- vi) Pollution Under Control Certificate issuance Centre (PUC) centres should be checked by the statutory authorities, i.e. West Bengal Pollution Control Board and Motor Vehicles Department, at a regular basis and if it is found that PUC Centres are issuing fake certificate or without complying with the statutory norms as prescribed by the West Bengal Pollution Control Board and Motor Vehicles Department , in such case, Licence of PUC Centres should be withdrawn immediately and such licences need to be suspended at least for two years with Rs.25,000/- (Rupees Twenty five thousand)

(vii) Oil Companies should take all precautionary steps to ensure that tanker supplying fuels from Refineries, Supply Depots to the petrol pumps, do not get adulterated during transit:

In case of any Tanker found to be informed in adulteration of fuel, immediately licence should be suspended for a minimum period of twelve weeks and licence of the driver of such vehicle shall be suspended for a period of two years.

The above action shall be taken in addition to any other action that may, otherwise, be initiated against Pump Owners.

viii) Urgent action should be taken by the police authority to control selling of adulterated oil and lubricants in open market "

Thus from the above it is apparent that apart from phasing out vehicles which were fifteen years and more, issue with regard to strict enforcement of PUC Certificate regime was emphasised. This is not to express that the other directions contained in the notification were no less of importance. We may also reproduce the observations of the Hon'ble High Court which reads as under:-

"The aforesaid contents of the Notification show that a decision has been taken to phase out the transport vehicles which are fifteen years old or more. The last date fixed for phasing out of the vehicles is 31st March, 2009. The Notification also provides that autorickshaws plying within the Kolkata Municipal Area would be converted into LPG or CNG mode by 31st March, 2009. The menace of unauthorised autos being piled is also sought to be addressed by providing that the police authorities should take effective steps to prevent the plying of unauthorised auto-rickshaws. The Notification also provides that alternative green fuel should also be introduced and along with necessary improvement of fuel should be done. Necessary steps have also been directed to be taken for reduction of sulphur content of diesel and benzene content of petrol. These are sought to be brought at par with the Auto Fuel Policy of the Government of India. The oil companies have also been issued necessary directions to arrange for adequate fuelling centre for LPG and CNG. A mandatory direction has also been issued to stop the registration of the two-stroke engines by the Motor Vehicles Department. Further direction has also been issued that such auto-rickshaws should be phased out completely by December, 2008. The police authorities have also been directed to implement the aforesaid directions.

We are of the considered opinion that the aforesaid Notification, if faithfully implemented, would certainly have a favourable impact on the effort of the State-authorities to reduce/control the auto pollution within the Kolkata Municipal Area. In order to ensure that the aforesaid Notification is duly implemented, we direct that the directions issued in the Notification shall also be read as orders of this Court.

Learned Advocate General has also informed us that in accordance with the desire of this Court, the Government shall set up a Monitoring Committee which would include representatives of different departments concerned with Pollution control and environment. The Committee would also include two experts one from Jadavpur University and the other from I.I.T, Kharagpur. The Monitoring Committee shall be constituted within fourteen days from today. As soon as the aforesaid Committee is constituted, it shall commence functioning forthwith. It shall also submit reports to this court periodically as directed by the Court. All the implementing authorities including police authority as well as West Bengal Pollution Control Board shall also file periodic reports with regards to the effective steps taken in accordance with the order passed by this Court."

Later, by notification dated 07.08.2012 which was issued in pursuance to an observation of the Hon'ble Calcutta High Court whereby it was *inter alia* prescribed that vehicles plying within Kolkata Municipal Corporation and areas under Salt Lake and Lake Town Police Stations should have Bharat Stage IV emission norms while in the rest of the State it was required to be of Bharat Stage III. This was followed by

Order dated 13.08.2012 which was again issued under orders of the Hon'ble Calcutta High Court, whereby no commercial vehicle, within Kolkata Metropolitan area, which was more than 15 years, would be allowed to ply. Notification dated 31st August, 2012 issued later to give effect to order dated 13.08.2012 prescribing certain procedures. By order dated 26.04.2013 guidelines were prescribed to be followed by the concerned authorities for registration of vehicles and issuance of permits in view of the previous orders and notifications.

- The above Issues as well the one with regard to improper functioning of the emission testing centres were matters of concern felt even by the Hon'ble High Court as would appear from order dated 30th March, 2004 in Writ Petition 2125 (W) of 2001 which is now more than fifteen years after the writ petition had been filed and twelve years since the said order was issued. Yet we are still grappling with the problem.
- 27. The reports filed by the WBPCB from time to time and by the Expert Committee undeniably establish the decline in the environment of the two cities and that pollution is still continuing unabated. There is also no dispute amongst all before us of the hazardous condition the people are forced to live in. Can the deleteriousness imposed on the life and health of the people by the condition be overlooked? The records,

some of which have been referred earlier, no doubt indicates that the State Government has been making efforts to combat the menace *albeit* under judicial intervention but, the efforts woefully lack the speed and the will to meet the rapidity at which pollution is growing.

28. As held in M.C. Mehta versus Union of India: (1999) 6 SCC 12, "decline in quality of environment shows failure of the authorities to perform their obligation under the Constitutional scheme and mandate of the Act". As noticed earlier, orders and directions have been issued not only by Hon'ble Calcutta High Court but also by this Tribunal and yet it appears that pollution level has grown unabated. As observed by the Hon'ble Supreme Court in Indian Council For Enviro-Legal Action: (1996) 5 SCC 281, "although laws have been passed for protection of environment, the enforcement of the same has been tardy, to say the least". What else can explain the reason for the present condition which is as it had been, if not worse, almost two decades ago? It is for this reason that we had observed earlier that the need for us to explore possibilities of some regulation to ensure compliance of pollution norms by vehicles arose concerned by the alarming level of pollution caused by auto emission and the manifest procrastination, lack of commitment, initiative and drive on the part of the State

machinery in discharging their responsibility and performing their statutory duties. We have referred to some innumerable orders passed by the Hon'ble Calcutta High in the years 2004 and 2008 exhorting them to do so, not discounting the ones passed by us. It is of relevance to note that this is a case brought as a continuation of the proceedings before the Hon'ble Calcutta High Court where it had been instituted before constitution of this Tribunal wherein there was continuing mandate and we have carried it forward at the behest of the Applicant. Despite the assurances held out to the Hon'ble High Court and also before us through various affidavits that actions are being taken by the authorities, we do not find any tangible result. By issuing circulars and orders and even amending the rules by itself would not serve the purpose if its enforcement is In Ashok (Dr.) Versus Union of India: (1997) 5 SCC 10 the Hon'ble Supreme Court while interpreting Article 21 of the Constitution of India brought health hazards due to pollution within its ambit and held that right to life enshrined in the Article means right to have something more than survival and mere existence. We may also remind ourselves that in Amarnath Shrine, In re: (2013) 3 SCC 247 right to clean and healthy environment has been brought within the ambit of Article 21 of the Constitution.

- There is a serious responsibility cast upon this Tribunal in matters relating implementation of pollution laws. The National Green Tribunal Act, 2010 was enacted to provide for establishment of National Green Tribunal *inter alia* for effective and expeditious disposal of cases relating to environment protection. As was held in *U.P. Pollution Control Board Versus Mohan Meakan Ltd.*: (2003) 3 SCC 745 the concern shown by the Parliament has to be shared by all the wings of the Government and judicial system.
- We have devoted much on the above discourse with the hope and expectation it will infuse energy and enthusiasm in the Government administration and galvanise them to deal with the problem canvassed in this case with the urgency it deserves.
- 31. Mr. Subhas Datta, the Applicant has proposed a number of measures in his notes on suggestions. During the course of hearing he had referred to the Bhure Lal Committee constituted by order of the Hon'ble Supreme Court dated 07.01.1998 which had submitted its reports from time to time based upon which directions were issued by the Hon'ble Supreme Court for compliance. We may indicate that phasing out different types of vehicles including those which were more than fifteen years, conversion of diesel run commercial vehicles

to CNG, restriction of inter-state heavy commercial vehicles entering Delhi region, etc., when enforced brought down pollution in Delhi considerably. We may reproduce below the suggestions placed by Mr.Datta:

"Suggestions in the matter of abatement of air pollution in the cities of Calcutta & Howrah

Night Pollution

1) That above 50000 heavily loaded goods carrying vehicles enter into the cities during night hours. There are no checks and control on their emissions. It is required to have emission test-centers and weighment arrangements at all the entry points to the State of West Bengal. Police should check the PUC certificate of all lorries at night hours.

Road Repairing

2) That most of the road repairing in the cities are being done through primitive process by burning firewood/tyre etc. In Delhi even Hot-mixing-machines are not allowed to operate. In our cities Micro-Surfacing System of road repairing/making needs to be introduced which is cost- effective, fast and environment-friendly.

Policy on Street Vendors

3)That the road space in Calcutta is less than 5% and in Howrah it is less than 3%, Street Vendors occupy a sizeable portion of footpaths and roads, causing less flow of traffic. National Policy on Street Vendors 2009 and earmarking of Vending Zones have not been done in West Bengal as yet. Such policy should be framed and followed strictly at the earliest.

(Synchronization of traffic signals(Green Channel)

4). The traffic signal synchronization will substantially improve the movement of vehicles. There have been repetitive directions by the High Court at Calcutta to synchronize all traffic signals surrounding the Victoria Memorial, which is yet to be done. At least for CBD there should be total synchronization of traffic signals.

Operation of diesel vehicles

5) That 90% of the public transport/goods carrying vehicles operate by diesel in Calcutta/Howrah. Phasing out of such polluting vehicles should be initiated. Till such time a cess may be imposed on diesel and the collected money can be utilised for improving the environmental health of the twin cities.

<u>PUC for Government and Municipal Corporation</u> <u>Vehicles</u>

6) That none of the State run Public Transport vehicles and highly polluting waste carrying vehicles of the Municipal Corporations hold any PUC. Those vehicles should also be brought under strict PUC umbrella.

Earmarking of parking space/no parking in CBD

7) That there should be marking of parking spaces at different areas of the city and no parking should be allowed within the CBD.

Shifting of wholesale markets from CBD

8) That Calcutta is having several wholesale markets and godowns well within the CBD. Govt. took a decision to relocate those markets but have not yet been done. Shifting of such markets should be initiated.

Odd No. and Even No. of Vehicles.

9) That Calcutta/Howrah should also go for allowing operations of odd and even no of vehicles on alternate day.

Road Capacity Study

10). That new permits are issued for stage carriage every now and then without caring for the capacity of the roads. All such new permits are given for routes through CBD. This practice cause terrible traffic congestions. It is, therefore, extremely urgent that no new permits be given through CBD and without making any study on road capacity.

Restrictions on slow moving vehicles

11) That no slow-moving carriers like rickshaw/van etc should be allowed to operate from 8 AM to 8 PM in the CBD of the cities. The battery operated rickshaw, called as TOTO, should be disallowed to operate within the city limits.

Miscellaneous

- 12) That other relevant aspects like quality of fuel (Kanta Tel), installation of air-filters in schools/colleges, introduction of BS V/IV, staggering of office hours, stopping of auto-rickshaws as stage carriage, better traffic management, improving surface road-conditions, better public transport system, introduction of cycle-way and walk-way in Salt Lake City and New Town, may be considered."
- 32. As noted earlier, the Expert Committee constituted by order dated 17th November, 2015, submitted its detailed report. Undeniably that the Expert Committee, consisted of not only high ranking officers of the State Government headed by the Principal Secretary, Home Department, Govt. of West Bengal, but also of eminent Scientists who are experts in the field of Environmental Science.
- 33. The Committee in its first meeting, amongst others, resolved to include D.C.P Traffic, Howrah and Director, Public Vehicles Department, (P.V.C) Kolkata as a member thereby making it an ideal blend of the authorities directly concerned with the matters in issue and eminent Scientists who are experts in the subject. It can therefore, be firmly concluded that the recommendations made by the Committee is a result of wide consultations amongst them taking into consideration the points of view and the perception of both the State Government and the experts.

34. We have noted that in its report, Committee had taken into consideration station wise ambient air quality monitoring data for the previous three years i.e., 2013, 2014 and 2015 compiled by the West Bengal Pollution Control Board and the report of air quality of Kolkata City monitored and maintained by the Central Pollution Control Board through National Environmental Engineering Research Institute (NEERI) at three locations. It is also noted by us that in preparing the final report, order of this Tribunal dated 19.01.2016 was also taken into consideration, apart from terms of reference set out in the order dated 17.11.2015. While examining the air quality of Kolkata and Howrah, the Committee had also taken into consideration the Ministry of Environment, Forest and Climate Change, Government of India Notification dated 16.11.2009 on the National Ambient Air Quality Standards (NAAQS) and based on the analysis of air quality monitoring data for the previous three years, the Committee made its detailed observations, the most significant of which is that in both the cities in Kolkata and Howrah, major problem of air pollution was particulate air pollution, i.e , PM10, PM2.5 and NO₂. It has also inter alia been observed that in winter, concentration of these was higher in the night than day time and, that the phenomenon are reversed during the summer months due to weather conditions.

The Committee further observed that the major contribution to traffic on road was from passenger carriers, both private and commercial, and that besides the direct contribution from the tale-pipe emission of vehicles, re-suspension of road dust has a direct correlation to the amount of particulate air pollution in the urban air.

Based on the above observations amongst several others, the Expert Committee gave the following recommendations:-

"6. Recommendations of the Expert Committee

The Committee looked into the issues of air quality of Kolkata and Howrah cities, traffic load at major traffic intersections and the status of functioning of the AETCs in these two cities in a holistic manner. The Committee also considered issues beyond its specified terms of reference in order to do justice to the basic goal of looking into ways and means of combating the air pollution problem by the automobile sector. After detailed analysis, the Committee makes the following recommendations for containment of air pollution in twin cities of Kolkata and Howrah caused due to heavy traffic movement:

A. Augmentation of air monitoring network

(i) The WBPCB has already made all semi-automatic air monitoring stations functional with effect from 01.01.2016, which were in operation till 2011. These monitoring stations operate in such a way that the air quality of Kolkata is being monitored every day. However, the ambient air quality network of twenty four (24) stations (in Kolkata and Howrah) currently operated by the WBPCB needs further augmentation through installation of five (5) additional continuous air monitoring stations near Science City, Ballygunge Phanri and Sector-V, Bidhannagar in Kolkata and at Ramkrishna Mission University, Belur and Padmapukur Water Works in Howrah.

- (ii) The WBPCB should make arrangement for continuous monitoring of PM2.5 at the existing automatic air monitoring stations at Victoria Memorial and Rabindrabharati University and also at the additional five (5) recommended stations as mentioned above. Therefore, PM2.5 which was monitored in two (2) stations only in Kolkata, should be monitored in nine (9) stations and in case of Howrah, PM2.5 should be monitored at four (4) stations in place of one (1) station.
- (iii) Since sources like road dust, construction activities, burning of municipal wastes and industrial wastes (including plastics), operation of DG sets and industrial emissions etc. are also contributing to the deterioration of air quality of these twin cities, the WBPCB should initiate a Source Apportionment Study to collect and generate data on contribution of various sources of pollution at important areas in Kolkata and Howrah in order to formulate strategy to combat air pollution. This study may be conducted by a national level agency, which has the expertise and experience in conducting such studies.
- (iv) Long-term Air Quality Management Plan for Kolkata and Howrah City may be evolved on the basis of the results of Source Apportionment Study to be carried out by WBPCB.
- (v) The Air Quality Index (AQI) is an important first step for improving air quality in urban areas as it leads to improvement in public awareness on local pollution levels and associated health advisories. For example, the AQI identifies sensitive populations that should take special precaution including people with asthma, lung ailments and heart disease. It also alerts people to make daily lifestyle adjustments on high severity days. Accordingly to protect citizens from air pollution, the Ministry of Environment, Forest and Climate Change, Government of India recently launched a National Air Quality Index (AQI) alert system for major cities that notifies the public about air pollution levels and associated health risks. The WBPCB should explore the possibility to integrate Kolkata and Howrah twin city with National AQI alert system.
- (vi) The WBPCB along with Kolkata Municipal Corporation (KMC) and Howrah Municipal Corporation (HMC) should display air quality data in electronic display boards at strategic locations in Kolkata and Howrah.

B. Traffic management

- (i) Phasing out/scrapping of commercial vehicles that are more than 15 years old.
- (ii) Traffic re-engineering to remove congestion from densely populated/most frequented road stretches.

- (iii) Traffic signals may be replaced with circular round about for removal of congestion from densely populated/most frequented road stretches.
- (iv) Underpasses may be constructed in major crossings where large scale cross over of pedestrian takes place.
- (v) Strict enforcement of possession of valid PUC Certificate in all the vehicles plying within Kolkata and Howrah city and imposition of penalty for noncompliance of the same.
- (vi) Operationalisation of E-Rickshaws and E-Carts as the mode of transport for last mile connectivity.
- (vii) Strict enforcement of No Parking Rules and compounding of offences committed.
- (viii) Construction of multi-layered or underground car parking space.
- (ix) KMC and HMC should insist on either underground or multitier parking arrangement within the premises while sanctioning building plans for Malls etc.
- (x) Construction of pavements for all city streets to increase space for smooth traffic movement.
- (xi) Provision of cycling and walk ways throughout the two cities.

C. Streamlining efficiency of Auto Emission Testing Centres

- (i) Number and operational aspects of the AETCs need to be relooked by the State Transport Department enhancement/betterment.
- (ii) AETCs should be connected to a centralized server for better monitoring and enforcement.
- (iii) Following the order of the Hon'ble Tribunal dated 19 January 2016, the WBPCB has already conducted surprise raids in February 2016. Surprise inspection of the AETCs to check the calibration of the emission testing equipment and proper functioning of the AETCs, should be continued. Strict penalties to be imposed on AETCs for violation under the relevant Acts and Rules by the authority.

D. Other recommendations

- (i) Open burning of coal and wood in Kolkata and Howrah should be stopped.
- (ii) Strict implementation of direction issued by Department of Environment, Govt. of West Bengal vide

- no. EN/3170/T-IV-7/001/2009 dated 10 December 2009 (Annexure-C) by the concerned Municipal Authorities (KMC and HMC) and all concerned Government Departments for controlling air pollution.
- (iii) Complete banning of open burning of solid waste including dry leaves in the city areas.
- (iv) Plantation of new leafy saplings in the available space in different parts of the twin cities to mitigate the level of air pollution.
- (v) Sprinkling of water daily at important traffic junctions of the twin cities of Kolkata and Howrah during the peak winter months (October to February) by Kolkata Municipal Corporation and Howrah Municipal Corporation to mitigate suspension of particulate matters to the air.
- (vi) Air pollution problem of Kolkata and Howrah twin city has become complex due to multiplicity and complexity of air polluting sources (e.g. industries, automobiles, generator sets, domestic fuel burning, road side dusts, construction activities, etc.).The proposed Apportionment Study, which would be primarily based on measurements and tracking down the sources through receptor modelling, would help in identifying the sources and extent of their contribution in deteriorating the air quality of twin city Kolkata and Howrah. Once results of Source Apportionment Study are available, a costeffective integrated approach for managing air quality would be evolved including (a) identification of emission sources; (b) assessment of extent of contribution of these sources on ambient environment; (c) prioritizing the sources that need to be tackled; (d) evaluate various options for controlling the sources with regard to feasibility and economic viability; and (e) formulation and implementation of most appropriate action plans for managing air quality of Kolkata & Howrah twin city."
- As the recommendations are well considered having dealt with all aspects that have been a cause of concern, we have no hesitation accepting it and accordingly direct the State Respondents to implement those. In any case, from the various orders issued by the Government of which we made reference, some of the steps recommended by the

Committee had already been taken and all that is now required is to infuse fresh energy in the implementation and enforcement.

- 37. Phasing out of commercial vehicle that are more than 15 years old suggested under head "Traffic Management", appears to have been addressed by the State Government when it issued Notification dated 17th July, 2008 which was placed before the Hon'ble Calcutta High Court on 18.07.2008 in W.P 6377 (W) of 2007 when it was observed by the Bench headed by the Hon'ble Chief Justice that the Notification, if have a favourable faithfully implemented, would certainly impact on the effort of the state authorities to reduce/control the auto pollution within Kolkata Municipal area. As will appear from the Order, the relevant portions of which were reproduced earlier. It was directed that the Notification shall also be read as orders of the Court. In view of this Notification dated 17th July, 2008, has since acquired a statutory character making it mandatory on the part of the state to implement it in harmony with the later Notification No. 3077-WT/3M-60/2012 dated 31st August, 2012 issued by the Transport Department, Government of West Bengal in terms of the direction that will follow, inter alia in this regard.
- **38.** We find that each of the recommendations made by the Committee are crucial. There are also suggestions made

by the Applicant, Mr. Subhas Datta, which we have reproduced above and find that those contain useful inputs for the state to consider adopting as supplement to recommendation of the Committee.

- **39.** Apart from the recommendations, and in furtherance thereto, we would also direct as under :-
 - (i) Notification dated 17th July, 2008 shall be strictly complied with along with Notifications No. TS(5)-777/09 dated 7th October, 2009 and No.3077-WT/3M-60/2012 dated 31st August, 2012, the latter Notification having been issued in pursuance of Order dated 19.07.2012 passed by the Hon'ble Calcutta High Court in W.P NO.6377 (W) of 2007.
 - (ii) It has been observed by the Committee that when vide Notification dated 07.08.2012, the permissible specification within the limits of Kolkata and Howrah is Bharat Stage IV, a large number of vehicles which are of Bharat Stage III specification prescribed for the rest of west Bengal enter the two cities from various points and, many amongst those continue to remain there. In order to ensure strict monitoring and to enforce compliance of the regulation, the department of Transport in

collaboration with State police shall ensure that such vehicles enter the cities only on production of PUC certificates, and on payment of prescribed entry fee. The date of entry and exit from the city be monitored by adopting measures to share information amongst the Check Posts set up at the entry points. Any vehicle plying within the twin city limits registered outside its territorial limits shall not be permitted to remain in the city beyond a period to be specified which shall not in any case be more than one week. This, of course, is left to be decided by the concerned authority.

(iii) Since the suggestion of adopting the rule of 'NO PUC, NO FUEL' has been opposed as impracticable, we direct that the vehicles which have undergone pollution test at the Auto-Emission Test Centres, shall be mandatorily required to affix luminescent stickers which will indicate that the vehicles have been tested, mentioning the validity of the certificates. This will come in aid of the traffic police in enforcing the requirement of PUC and consequently pollution caused by auto emission.

- 40. The report of the Expert Committee shall form part of this Judgement and recommendations of the Committee and the directions contained herein shall be complied with within a period of six months.
- In the process of implementing the proposals, the respondents may seek guidance from the Experts who are members of the Committee and also from the Applicant, if felt necessary.
- 42. Respondent No.1, Principal Secretary, Department of Transport, Government of West Bengal shall submit a compliance report on 07.02.2017. If 7th February, 2017 is a holiday, the report shall be filed on the next working day.
- **43**. With the above directions, the Original Application stands disposed of.
- **44**. No order as to costs.

Mr. Justice S.P.Wangdi , JM

Prof.(Dr.) P.C. Mishra , EM

Kolkata, Dated 11th August, 2016