

Item Nos. 01 to 04

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 249/2020

Tribunal on its own Motion Applicant(s)
Versus

Ministry of Environment, Forest
& Climate Change & Ors. Respondent(s)

WITH

Original Application No. 254/2020

Shobhit Shukla Applicant(s)
Versus

Govt. of NCT of Delhi Respondent(s)

WITH

Original Application No. 255/2020

Chirag Jain Applicant(s)
Versus

Govt. of NCT of Delhi Respondent(s)

WITH

Original Application No. 93/2020(CZ)

Dr. P. G. Najpande & Anr. Applicant(s)
Versus

State of M. P. & Ors. Respondent(s)

Date of hearing: 01.12.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. SATYAWAN SINGH GARBYAL, EXPERT MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Applicants: Mr. Raj Panjwani, Senior Advocate with Ms. Shibani Ghosh, Advocate
(Amicus Curiae)
Mr. Shobhit Shukla Applicant in Person in OA 254/2020
Mr. Chirag Jain Applicant in Person in OA 255/2020
Mr. Prabhat Yadav, Advocate for Applicant in OA 93/2020 (CZ)

Respondents: Mr. Balendu Shekhar, Advocate for MoEF & CC
Mr. Raj Kumar, Advocate for CPCB
Ms. Jyoti Mendiratta, Advocate for GNCTD
Mr. Pradeep Misra, Advocate & Mr. Daleep Dhyani, Advocate for

State of UP
Mr. Rahul Khurana, Advocate for State of Haryana
Mr. Gaurav M. Liberahan Advocate for State of Punjab
Ms. Parul Bhadoria, Advocate for State of Madhya Pradesh
Ms. K. Enatoli Sema, Advocate for State of Nagaland
Mr. Ram Shankar Adv for State of Tamil Nadu
Ms. G. Indira, Advocate for UT of Andaman & Nicobar
Mr. Narender Pal Singh, Advocate for DPCC
Mr. Mukesh Verma, Advocate for UKPCB
Mr. TVS Raghavendra Sreyas Advocate for APPCB
Mr. Dhananjay Bajjal Advocate for TSPCB

ORDER

The Issue

1. Question for consideration in these matters is the remedial action against pollution by use of fire crackers, aggravating the menace of Covid-19 pandemic, posing higher danger to the lives and health of the vulnerable groups.

Procedural History

2. While control and regulation of fire crackers has been considered by the Hon'ble Supreme Court earlier, **aggravation of the problem during Covid-19 pandemic and remedial action for the same** has been taken up in the present matter. On 09.11.2020, after a detailed consideration, the Tribunal issued directions against sale or use of all kinds of fire crackers from midnight of November, 9-10, 2020 to the midnight of November 30 – December 1, 2020 in the NCR and all cities/towns in the country **where the average of ambient air quality during November fell under 'poor' and above category.** Direction was also issued for **restricting use of fire crackers to green crackers in cities/towns where air quality was 'moderate' or below, only for two hours and only during festivals like Diwali, Chatt, New Year/Christmas Eve etc.,** as may be specified by the concerned State. The conclusion and directions in the said order are quoted below for ready reference:

“VIII Conclusion and Directions

44. *In view of above, having regard to increased adverse health impact of pollution by use of crackers on Covid-19, aggravating risk to lives and health which has led to ban by the Governments of Odisha, Rajasthan, Sikkim, UT Chandigarh, DPCC and by the Calcutta High Court on sale and use of crackers,, applying the ‘Sustainable Development’ and ‘Precautionary’ principles, a case is made out for issuing directions for banning sale and use of fire crackers during November 9 to 30 in areas where air quality is ‘poor’, ‘very poor’ and ‘severe’.*

45. *Further, case is made out for restricting sale and use of fire crackers in areas with moderate and poor air quality where also on account of Covid19, there will be serious adverse effects, though less than areas where air quality is poor and above. In such areas, unless covered by the ban or restrictions by the authorities, restrictions on the pattern of those imposed by the Hon’ble Supreme Court vide order dated 23.10.2018, (2019) 13 SCC 523, reproduced in para 32 above will apply i.e. only green crackers be sold and use of crackers will be allowed only for two hours during festivals and not on any other day during November 9 to 30.*

46. *It is well known that in NCR, this threshold is continuously crossed during November. Thus, ban will be absolute in NCR.*

47. *Outside the NCR, where air quality standards are poor or more than poor during November, the sale and use of fire cracker has to be banned. It is not necessary to distinguish between non-attainment and other cities. Even in non-attainment cities, though average air quality may not be as per norms for five years, it may be poor or above during November. On the other hand, even in non-attainment cities, air quality may not be as per norms but may not be ‘poor’ or more than that. This is demonstrated by the data from CPCB website in respect of certain cities quoted above. In Haryana, there is no non-attainment cities in the list of 122, but as per air quality data of CPCB ‘Fatehabad’, falling outside NCR has ‘severe’ air quality in November. Similarly, Hisar, Bahadurgarh, Ballabgarh, Dharuhera, Kaithal, Kurukshetra and Manesar are falling under ‘very poor’ category of air quality and Ambala, Narnaul, Palwal and Sirsa in ‘poor’ air quality. Similarly, for the State of Punjab, only Amritsar, Jalandhar, Khanna and Ludhiana are shown in the ‘poor’ category of air quality out of eight non-attainment cities. This will not be read as debarring the authorities from taking more cautious approach in prohibiting/restricting fire crackers to any other areas not covered by prohibition or restrictions under this order, as has already been done by some of the States.*

48. *Accordingly, we direct as follows:*

- i. There will be total ban against sale or use of all kinds of fire crackers in the NCR from midnight of November,***

- 9 -10, 2020 to the midnight of November 30 - December 1, 2020, to be reviewed thereafter.**
- ii. Direction (i) will also apply to all cities/towns in the country where the average of ambient air quality during November (as per available data of last year) fall under 'poor' and above category.**
 - iii. The cities/towns where air quality is 'moderate' or below, only green crackers be sold and the timings for use and bursting of crackers be restricted to two hours during festivals, like Diwali, Chatt, New Year/Christmas Eve etc., as may be specified by the concerned State. This direction is on pattern of direction of the Hon'ble Supreme Court in (2019) 13 SCC 523 which we are applying to areas moderately polluted or below air quality due to aggravated effect during Covid-19, as already noted. If nothing is specified by the State, timing will be 8 to 10 pm on Diwali and Gurupurb, 6 am to 8 am on Chatt and 11.55 pm to 12.30 am during Christmas and New year eve (which have yet to come and do not fall in November but if ban continues) and not otherwise.**
 - iv. At other places, ban/restrictions are optional for the authorities but if there are more stringent measures under orders of the authorities, the same will prevail.*
 - v. All States/UTs/PCBs/PCCs may initiate special drives to contain air pollution from all sources in view of potential of aggravation of Covid-19*
 - vi. The Chief Secretaries and DGPs of all the States/UTs may issue and circulate an appropriate order in above terms with appropriate enforcement guidelines to all the District Magistrates and Superintendents of Police, PCBs/PCCs.*
 - vii. The CPCB and the State PCBs/PCCs may regularly monitor the air quality during this period which may be uploaded on their respective websites. CPCB may compile information on the subject, including the status of compliance of this order from all the States/UTs and file a consolidated report with data compiled till filing of report, before the next date by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.*

Consideration Today

3. The mater has been taken up today to consider whether any further direction on the subject is required after November 30, 2020.

4. As already mentioned, the Hon'ble Supreme Court considered the matter **at pre-covid stage**. The health impacts of air quality beyond norms were noted as follows¹:

Table 1

<i>AQI</i>	<i>Associated Health Impacts</i>
<i>Good (0-50)</i>	<i>Minimal impact.</i>
<i>Satisfactory (51-100)</i>	<i>May cause minor breathing discomfort to sensitive people.</i>
<i>Moderately polluted (101-200)</i>	<i>May cause breathing discomfort to people with lung disease such as asthma, and discomfort to people with heart disease, children and older adults.</i>
<i>Poor (201-300)</i>	<i>May cause breathing discomfort to people on prolonged exposure, and discomfort to people with heart disease.</i>
<i>Very Poor (301-400)</i>	<i>May cause respiratory illness to the people on prolonged exposure. Effect may be more pronounced in people with lung and heart diseases.</i>
<i>Severe May (401-500)</i>	<i>May cause respiratory impact even on healthy people, and serious health impacts on people with lung/heart disease. The health impacts may be experienced even during light physical activity.</i>

5. Air quality grading was noted as follows:

Table 2

<i>AQI Category, Pollutants and Health Breakpoints</i>								
<i>AQI category (Range)</i>	<i>PM₁₀ 24-hr</i>	<i>PM_{2.5} 24-hr</i>	<i>NO₂ 24-hr</i>	<i>O₃ 8-hr</i>	<i>CO 8-hr (mg/m³)</i>	<i>SO₂ 24-hr</i>	<i>NH₃ 24-hr</i>	<i>Pb 24-hr</i>
<i>Good (0-50)</i>	<i>0-50</i>	<i>0-30</i>	<i>0-40</i>	<i>0-50</i>	<i>0-1.0</i>	<i>0-40</i>	<i>0-200</i>	<i>0-0.5</i>
<i>Satisfactory (51-100)</i>	<i>51-100</i>	<i>31-60</i>	<i>41-80</i>	<i>51-100</i>	<i>1.1-2.0</i>	<i>41-80</i>	<i>201-400</i>	<i>0.5-1.0</i>
<i>Moderately polluted (101-200)</i>	<i>101-250</i>	<i>61-90</i>	<i>81-180</i>	<i>101-168</i>	<i>2.1-10</i>	<i>81-380</i>	<i>401-800</i>	<i>1.1-2.0</i>
<i>Poor (201-300)</i>	<i>251-350</i>	<i>91-120</i>	<i>181-280</i>	<i>169-208</i>	<i>10-17</i>	<i>381-800</i>	<i>801-1200</i>	<i>2.1-3.0</i>
<i>Very poor (301-400)</i>	<i>351-430</i>	<i>121-250</i>	<i>281-400</i>	<i>209-748*</i>	<i>17-34</i>	<i>801-1600</i>	<i>1200-1800</i>	<i>3.1-3.5</i>
<i>Severe (401-500)</i>	<i>430+</i>	<i>250+</i>	<i>400+</i>	<i>748+*</i>	<i>34+</i>	<i>1600+</i>	<i>1800+</i>	<i>3.5+</i>

¹ in Arjun Gopal v Union of India, (2017) 1 SCC 413

6. The Hon'ble Supreme Court, considering the adverse impact of crackers on air quality and adverse impact of air pollution on health, directed, vide Order dated 11.11.2016 as follows²:

“We direct the Central Government to:

- (i) Suspend all such licenses as permit sale of fireworks, wholesale and retail, within the territory of NCR.*
- (ii) The suspension shall remain in force till further orders of this Court.*
- (iii) No such licenses shall be granted or renewed till further orders.”*

7. Thereafter, on 12.09.2017, in *Arjun Gopal v. Union of India (2017) 16 SCC 280*³ it was observed that instead of total prohibition, graded regulation of fire crackers was necessary, which would eventually result in prohibition. Accordingly, the earlier order was modified to restrict the temporary licenses to 50%, pending further consideration.

8. Thereafter, vide order dated 23.10.2018, in *Arjun Gopal v. Union of India, (2019) 13 SCC 523*,⁴ while banning certain categories of fire crackers and directing regulation of the remaining, it was inter-alia directed that on Diwali days or other festivals, fire crackers will be used strictly between 8 p.m. to 10 p.m. only with different timings for some other festivals. Further, the Union of India, Government of NCT of Delhi and the State Governments of NCR would permit **community fire crackers** only (for Diwali and other festivals, etc. as mentioned above), wherever it can be done. The operative part of the order is as follows:

“48. We are of the opinion that the aforesaid suggestions strike a nice balance between the two competing interests. We accept the aforesaid measures as suggested by the Union of India and direct the Union of India and other authorities concerned to implement the same with immediate effect. In view thereof, the following specific directions are issued:

² Arjun Gopal vs. UOI, supra

³ Para 69 to 72

⁴ Para 48

- 48.1. ***The crackers with reduced emission (improved crackers) and green crackers, as mentioned in Suggestions II and III above only would be permitted to be manufactured and sold.***
- 48.2. ***As a consequence, production and sale of crackers other than those mentioned in Suggestions II and III is hereby banned.***
- 48.3. ***The manufacture, sale and use of joined firecrackers (series crackers or laris) is hereby banned as the same causes huge air, noise and solid waste problems.***
- 48.4. ***The sale shall only be through licensed traders and it shall be ensured that these licensed traders are selling those firecrackers which are permitted by this order.***
- 48.5. ***No e-commerce websites, including Flipkart, Amazon, etc., shall accept any online orders and effect online sales. Any such e-commerce companies found selling crackers online will be hauled up for contempt of court and the Court may also pass, in that eventuality, orders of monetary penalties as well.***
- 48.6. ***Barium salts in the fireworks is also hereby banned.***
- 48.7. ***PESO is directed to review the clinical composition of fireworks, particularly reducing Aluminium content, and shall submit its report in respect thereof within a period of two weeks from today. For undertaking this exercise, PESO would also associate FRDC.***
- 48.8. ***Even those crackers which have already been produced and they do not fulfil the conditions mentioned in Suggestions II and III above will not be allowed to be sold in Delhi and NCR.***
- 48.9. ***PESO will ensure fireworks with permitted chemicals only to be purchased/possessed/sold/used during Diwali and all other religious festivals, of any religion whatsoever, and other occasions like marriages, etc. It shall test and check for the presence of banned chemicals like lithium/arsenic/antimony/lead/mercury.***
- 48.10. ***PESO will ensure suspension of the licences of manufacturers of such fireworks items and appropriate disposal of such stock.***
- 48.11. ***PESO will ensure that only those crackers whose decibel (sound) level are within the limits are allowed in the market and will ensure to take action by suspending the licences of the manufacturers on such violations and disposal of such lots. To add to it, as mentioned in the order dated 12-9-2017, the directions issued and restrictions imposed in the order passed by this Court on 18-7-2005 in Noise Pollution shall continue to be in force.***
- 48.12. ***Directions 4 to 9 and 11 contained in the order dated 12-9-2017 shall continue to operate and are reiterated again.***
- 48.13. ***Extensive public awareness campaigns shall be taken up by the Central Government/State Governments***

- /Schools/ Colleges informing the public about the harmful effects of firecrackers.*
- 48.14.** *On Diwali days or on any other festivals like Gurupurab, etc., when such fireworks generally take place, it would strictly be from 8.00 p.m. till 10.00 p.m. only. On Christmas eve and New Year's eve, when such fireworks start around midnight i.e. 12.00 a.m., it would be from 11.55 p.m. till 12.30 a.m. only.*
- 48.15.** *The Union of India, Government of NCT of Delhi and the State Governments of NCR would permit community firecracking only (for Diwali and other festivals, etc. as mentioned above), wherever it can be done. For this purpose, particular area/fields would be pre-identified and predesignated by the authorities concerned. This exercise shall be completed within a period of one week from today so that the public at large is informed about the designated places one week before Diwali. The areas designated now for the purpose of Diwali shall be valid for community firecracking on other occasions/festivals as well, as mentioned above. Even for marriages and other occasions, sale of improved crackers and green crackers is only permitted. Insofar as other States are concerned, an endeavour shall be made by them also to explore the feasibility of community firecracking. However, it is made clear that Direction 48.14 pertaining to the duration within which fireworks can take place on all such occasions would be applicable throughout India. Similarly, Direction 48.13 for extensive public awareness campaigns is also a pan India direction.*
- 48.16.** *All the official respondents, and particularly the police, shall ensure that fireworks take place only during the designated time and at designated places, as mentioned above. They shall also ensure that there is no sale of banned firecrackers. In case any violation is found, the Station House Officer (SHO) of the police station of the area concerned shall be held personally liable for such violation and this would amount to committing contempt of the Court, for which such SHO(s) would be proceeded against.*
- 48.17.** *CPCB and respective State Pollution Control Boards/Pollution Control Committees (SPCBs/PCCs) of the States and Union Territories shall carry out short-term monitoring in their cities for 14 days (commencing from 7 days prior to Diwali and ending 7 days after Diwali) for the parameters namely, aluminium, barium, iron apart from the regulatory parameters against the short-term Ambient Air Quality Criteria Values (AAQCVs) proposed by CPCB with regard to bursting of firecrackers. This will help in generation of data on pollution caused by the bursting of firecrackers and would be helpful for regulation and control quantity of aluminium, barium and iron used in the manufacture of firecrackers.*

49. ***One clarification needs to be given at this stage. Our discussion pertaining to the arguments based on Article 19(1)(g), Article 25 as well as the argument of loss of substantial revenue and unemployment, in cases the manufacture and sale of the firecrackers is totally banned, is prima facie and we have not given our conclusive determination. It is because of want of detailed studies on various aspects which have been mentioned and taken note of during discussion in this order. However, we also make it clear that, prima facie, we do not find much merit in these arguments for which we have given our reasons in brief.***
50. ***Having regard to the overall circumstances, we have decided that, for the time being, a balanced approach to tackle this problem is needed, which may take care of the concerns of both the parties and, at the same time, provide a reasonable and adequate solution. When the picture would become clearer after the requisite studies/research is undertaken, more stringent measures can be adopted in future if the situation so warrants.”***

9. While issuing the above directions, ‘Precautionary’ principle was invoked with the following observations:

“ xxx xxx xxx
 37 ***The aforesaid findings are sufficient to negate the arguments of the opposite side that there is absence of scientific study about the adverse effect of firecrackers during Diwali. In environmental law, “precautionary principle” is one of the well-recognised principles which is followed to save the environment. It is rightly argued by the petitioners that this principle does not need exact studies/material. The very word “precautionary” indicates that such a measure is taken by way of precaution which can be resorted to even in the absence of definite studies. In Vellore Citizens' Welfare Forum [Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647], this Court explained the principle in the following manner: (SCC pp. 658 & 660, paras 11 & 14-16)***

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- (ii) ***Where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.***
- (iii) ***The “onus of proof” is on the actor or the developer/industrialist to show that his action is environmentally benign.***

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38. The precautionary principle accepted in the aforesaid judgment was further elaborated in A.P. Pollution Control Board case [A.P. Pollution Control Board v. M.V. Nayudu, (1999) 2 SCC 718] as under: (SCC pp. 732-34, paras 31-35)

“31. The “uncertainty” of scientific proof and its changing frontiers from time to time has led to great changes in environmental concepts during the period between the Stockholm Conference of 1972 and the Rio Conference of 1992. In Vellore Citizens' Welfare Forum v. Union of India [Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647] a three-Judge Bench of this Court referred to these changes, to the “precautionary principle” and the new concept of “burden of proof” in environmental matters. Kuldip Singh, J. after referring to the principles evolved in various international conferences and to the concept of “sustainable development”, stated that the precautionary principle, the polluter pays principle and the special concept of onus of proof have now emerged and govern the law in our country too, as is clear from Articles 47, 48-A and 51-A(g) of our Constitution and that, in fact, in the various environmental statutes, such as the Water Act, 1974 and other statutes, including the Environment (Protection) Act, 1986, these concepts are already implied. The learned Judge declared that these principles have now become part of our law.

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33. A basic shift in the approach to environmental protection occurred initially between 1972 and 1982. Earlier, the concept was based on the “assimilative capacity” rule as revealed from Principle 6 of the Stockholm Declaration of the U.N. Conference on Human Environment, 1972. The said principle assumed that science could provide policy-makers with the information and means necessary to avoid encroaching upon the capacity of the environment to assimilate impacts and it presumed that relevant technical expertise would be available when environmental harm was predicted and there would be sufficient time to act in order to avoid such harm. But in the 11th Principle of the U.N. General Assembly Resolution on World Charter for Nature, 1982, the emphasis shifted to the “precautionary principle”

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“There is nothing to prevent decision-makers from assessing the record and concluding that there is

inadequate information on which to reach a determination. If it is not possible to make a decision with “some” confidence, then it makes sense to err on the side of caution and prevent activities that may cause serious or irreversible harm. An informed decision can be made at a later stage when additional data is available or resources permit further research. To ensure that greater caution is taken in environmental management, implementation of the principle through judicial and legislative means is necessary.’

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44. Applying the aforesaid principle, in the first blush it may appear that the aforesaid argument has substantial force in it. However, that would be only one side of the picture as there are two contra-arguments which are sufficient to take the sheen out of the aforesaid plea. First aspect is that the argument of economic hardship is pitched against right to health and life. When the Court is called upon to protect the right to life, economic effect of a particular measure for the protection of such right to health will have to give way to this fundamental right. Second factor, which is equally important, is that the economic loss to the State is pitched against the economic loss in the form of cost of treatment for treating the ailments with which people suffer as a result of burning of these crackers. Health hazards in the form of various diseases that are the direct result of burning of crackers have already been noted above. It leads to asthma, coughing, bronchitis, retarded nervous system breakdown and even cognitive impairment. Some of the diseases continue on a prolonged basis. Some of these which are caused because of high level of PM_{2.5} are even irreversible. In such cases, patients may have to continue to get the medical treatment for much longer period and even for life. Though there are no statistics as to what would be the cost for treating such diseases which are as a direct consequence of fireworks on these occasions like Diwali, it can safely be said that this may also be substantial. It may be more than the revenue which is generated from the manufacturers of the crackers. However, we say no more for want of precise statistical data in this behalf.”

Discussion in Tribunal’s earlier Order

10. The effect of air pollution, aggravated by use of crackers on Covid-19 pandemic was considered by this Tribunal in the order dated 09.11.2020 as follows:

*“14. Shri Panjwani referred to the articles referred to above during hearing. In ‘A. Pozzer et al, ‘Regional and global contributions of air pollution to risk of death from COVID-19’ Cardiovascular Research, which is an article published by the **European Society of***

Cardiology, revised on 03.10.2020, a study has been conducted about the nexus of Covid-19 and air pollution using relevant data and attributable fraction. It is opined that both **the air pollutant PM_{2.5} and the SARS-CoV-2 virus enter the lungs via the bronchial system (portal organ), with potential systemic health impacts through the blood circulation. Both PM_{2.5} and SARS-CoV-2 cause vascular endothelial dysfunction, oxidative stress, inflammatory responses, thrombosis, and an increase in immune cells. The SARSCoV-2 infection facilitates the induction of endothelial inflammation in several organs as a direct consequence of viral cytotoxic effects and the host inflammatory response, which can aggravate pre-existing chronic respiratory and vascular (coronary) dysfunction, and cause lung injury by alveolar damage, as well as stroke and myocardial infarction by inducing plaque rupture. Potential common pathophysiological mechanisms of increased risk thus relate to endothelial injury and pathways that regulate immune function. Further, there are strong indications of increased susceptibility to viral infections from exposure to air pollution.**

Lung injuries, including the life-threatening acute respiratory distress syndrome and respiratory failure, as well as acute coronary syndrome, arrhythmia, myocarditis, and heart failure, were shown to be clinically dominant, leading to critical complications of COVID-19. Recent studies in China, the USA, as well as Europe indicate that patients with cardiovascular risk factors or established cardiovascular disease and other comorbid conditions are predisposed to myocardial injury during the course of COVID-19. From the available information, it thus follows that air pollution-induced inflammation leads to greater vulnerability and less resiliency, and the pre-conditions increase the host vulnerability. Air pollution causes adverse events through myocardial infarction and stroke, and it is an additional factor capable of increasing blood pressure, while there is emerging evidence for a link with type 2 diabetes and a possible contribution to obesity and enhanced insulin resistance. Bronchopulmonary and cardiovascular pre-conditions, including hypertension, diabetes, coronary artery disease, cardiomyopathy, asthma, COPD, and acute lower respiratory illness, all negatively influenced by air pollution, lead to a substantially higher mortality risk in COVID-19. Furthermore, it seems likely that fine particulates prolong the atmospheric lifetime of infectious viruses, thus favouring transmission. It is possible that future research will reveal additional pathways that mediate the relationship between air pollution and the risk of death from COVID-19.

15. In article by Aparna Banerjea titled '**After studies, it's clear that air pollution contributes to Covid mortality: ICMR**' Mint, 27 October 2020', it is mentioned that **the ICMR studies have proved that long-term exposure to air pollution has been linked to an increased risk of dying from Covid-19. It is further stated that there have been studies from Europe and US, where they have looked at polluted areas and have compared mortality during lockdown and correlation with pollution. "It is found that**

pollution is contributing to mortality in COVID, that's well established by studies," said Dr. Balram Bhargava, DG ICMR, in a health ministry briefing today.

According to a study, published in Cardiovascular Research, scientists estimated that about 15% of deaths worldwide from COVID-19 could be attributed to long-term exposure to air pollution. In Europe the proportion was about 19%, in North America it was 17%, and in East Asia about 27%.

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The study further mentions that the Air Quality Index (AQI) (as on 04.11.2020) was recorded at 346 in Rohini, 329 in RK Puram, 377 in Anand Vihar, and 363 in Mundka, all four in the 'very poor' category, as per Central Pollution Control Board (CPCB) data. In an attempt to curb the increasing air pollution in the national capital, the Delhi government recently launched the 'Red Light On, Gaadi Off' campaign as part of its 'Yuddh Pradushan Ke Viruddh' (War Against Pollution) initiative. Along with this, Delhi Environment Minister Gopal Rai had also announced the launch of a campaign starting on Monday to include the citizens of the capital in raising awareness on air pollution.

16. In article by Sandipan Talukdar titled 'Air Pollution May Account for 15% of COVID-19 Deaths Worldwide, Says New Study', News Click, 28 October 2020, similar observations have been made.

It is stated that Prof. Jos Lelieveld of Max Planck Institute of Chemistry, Mainz, Germany, and a corresponding author of the study said "Since the numbers of deaths from COVID-19 are increasing all the time, it's not possible to give exact or final numbers of COVID-19 deaths per country that can be attributed to air pollution. However, as an example, in the UK there have been over 44,000 coronavirus deaths and we estimate that the fraction attributable to air pollution is 14%, meaning that more than 6,100 deaths could be attributed to air pollution. In the USA, more than 220,000 COVID deaths with a fraction of 18% yields about 40,000 deaths attributable to air pollution."

On the mechanism of how PM_{2.5} can aggravate the respiratory disease, Prof. Thomas Munzel of Gutenberg University, Germany, said "When people inhale polluted air, the very small polluting particles, the PM_{2.5}, migrate from the lungs to the blood and blood vessels, causing inflammation and severe oxidative stress, which is an imbalance between free radicals and oxidants in the body that normally repair damage to cells. This causes damage to the inner lining of arteries, the endothelium, and leads to the narrowing and stiffening of the arteries. The COVID-19 virus also enters the body via the lungs, causing similar damage to blood vessels, and it is now considered to be an endothelial disease."

“If both long-term exposure to air pollution and infection with the COVID-19 virus come together then we have an additive adverse effect on health, particularly with respect to the heart and blood vessels, which leads to greater vulnerability and less resilience to COVID-19. If you already have heart disease, then air pollution and coronavirus infection will cause trouble that can lead to heart attacks, heart failure and stroke,” he further added. **The study also shows a country wide estimation of COVID-19 deaths attributable to long term air pollution exposure. According to it, Czech Republic has a share of 29%, China 26%, Germany 22%, Italy 15% and so on. New Zealand has a very low share of 1%.**

Extending this analogy to Indian conditions, it is possible to infer that deaths attributable to pollution in India may not be less than 15%.”

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19. In ‘State of Global Air 2020’ report released by the Health Effects Institute and the Institute for Health Metrics and Evaluation’s Global Burden of Disease Project, it is stated that:

“Extensive evidence links exposure to air pollution with higher rates of respiratory and cardiovascular diseases including lower-respiratory infections. **Could air pollution also increase a person’s risk of developing a COVID-19 respiratory infection or suffering its most severe complications?**

There is reason to believe it could SARS-CoV-2, the corona virus that causes COVID-19, is a respiratory virus that can affect the lungs, blood vessels, and many other parts of the body. Exposure to air pollution has been shown to affect the body’s immune defense, making an individual more susceptible to respiratory and other infections. In addition, many of the health conditions that have been associated with increased vulnerability to COVID-19-such as diabetes, cardiovascular disease, and chronic obstructive lung diseases-are also caused by long-term exposure to air pollution.

What we learned from the SARS-CoV-1 outbreak in 2002-2004 offers some insight into the interaction between air pollution and the effects of COVID-19. Several studies reported an association between higher air pollution concentrations and higher than expected death rates from SARS-CoV-1 handful of early studies of COVID-19 appear to suggest that areas with higher air pollution concentrations-PM_{2.5} or NO₂ in particular-might similarly experience either higher infection rates or higher case fatality rates. Investigators around the world are hard at work trying to understand fully the linkages between COVID-19 and air pollution, and how exposure to air pollution might affect rates of COVID-19 infection, the severity of disease, or the likelihood of dying.”

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Media Reports Referred

22. Following media reports have also been referred to by learned Amicus:

- i. ‘Coronavirus: Delhi health minister blames pollution, winters, festive season for rise in cases’, Scroll.in, 31 October 2020⁵
- ii. Abantika Ghosh, ‘Covid virus found on pollution particles, masks & social distancing a must, say govt experts’, ThePrint, 27 October 2020.⁶
- iii. Durgesh Nandan Jha, ‘From Record 5.9k Last Fri, City Cases Soar To 6,725’, The Times of India, 4 November 2020⁷.”

The above media reports refer to the nexus between air pollution and deaths and diseases particularly during winter and festive season with reference to the statements of the Delhi Health Minister and the Union Health Minister in support of the said statement. **There is further reference to apprehended increase of Covid cases on account of air increased pollution.**

The news item in ‘Times of India’ dated 04.11.2020 mentions that Delhi recorded 6,725 new cases of Covid-19 – its highest single-day tally – on Tuesday, taking the total number of cases to over 4,00,000 even as hospitals struggled to accommodate the critically ill patients due to paucity of ICU beds. This is leading to increased demand for the hospital beds and increased mortality figures. The increasing trend is clearly attributable to the deteriorating air pollution level.

Other Media reports and Global Trends

23. Apart from the media reports relied upon by the learned Amicus, there are other media reports to which reference may be made as follows:

- a) ASRP Mukesh, ‘Ban firecrackers or prepare for Covid disaster, warn docs’ Times of India, 30 October, 2020.⁸
- b) Science, ‘Smoky firecrackers can spread coronavirus faster: Experts, Deccan Chronical, 4 November, 2020.⁹

⁵ <https://scroll.in/latest/977303/coronavirus-delhi-health-minister-blames-pollution-winters-festive-season-for-rise-in-cases>

⁶ <https://theprint.in/health/covid-virus-found-on-pollution-particles-masks-social-distancing-a-must-say-govt-experts/531981/>

⁷ <https://timesofindia.indiatimes.com/city/delhi/Covid-19-From-record-5900-last-Friday-Delhi-cases-soar-to-6725/articleshow/79031687.cms>

⁸ <https://timesofindia.indiatimes.com/city/ranchi/ban-firecrackers-or-prepare-for-covid-disaster-warn-docs/articleshow/78941525.cms>

⁹ <https://www.deccanchronicle.com/nation/in-other-news/031120/smoky-firecrackers-can-spread-coronavirus-faster-experts.html>

- c) Cole Sullivan, 'COVID cancellations hit fireworks display companies hard' 10 News, 11.06.2020.¹⁰
- d) 'BEFORE BURNING CRACKERS LOOK AT US AND BE CONSIDERATE, SYMPATHETIC AND HUMANE' URGES COVID RECOVERED PATIENTS "DEEPAVALI DOES NOT MEAN BURNING CRACKERS FOR ENJOYMENT"- BISWAJIT MUKHERJEE 07.11.2020, PIB Kolkata.¹¹
- e) 'After falling for 7 weeks, Covid-19 cases in India rise', Times of India, 09.11.2020.¹²
- f) Stephanie Pagones, 'Coronavirus-prompted July 4th cancellations leave fireworks display companies 'on life support', FOX Business, 02.07.2020.¹³
- g) Joanna York, 'What will France's July 14 celebrations look like this year? Celebrations will still take place in France on 14 July this year, but with some differences due to the Covid-19 crisis, the Connexion, 06.11.2020.¹⁴
- h) Tim Baker, 'Coronavirus: London's New Year's Eve fireworks cancelled due to pandemic', Sky News, 18.09.2020.¹⁵
- i) Wong Shiyong, 'No fireworks display at Marina Bay New Year's Eve countdown this year', the Straits Times, 05.11.2020.¹⁶

As per (a), there is a statement by Jharkhand chapter of Indian Medical Association (IMA) that smoke from firecrackers during Diwali can turn out to be fatal for Covid-19 patients. The report particularly mentions the names of the State President Dr. A.K. Singh and Dr. Pradeep Bhattacharjee. It is also further mentioned that winter dry air can aggravate breathing difficulties, especially among those suffering from lung ailments. Smoke from crackers can turn out to be recipe for disaster. Pollutants released will remain suspended in cool air for a long duration.

¹⁰ <https://www.wbir.com/article/news/health/coronavirus/covid-cancellations-hit-fireworks-display-companies-hard/51-f16191a3-fdbb-44a3-8447-de4454d761b5>

¹¹ <https://pib.gov.in/PressReleasePage.aspx?PRID=1671145>

¹² <https://timesofindia.indiatimes.com/india/after-falling-for-7-weeks-covid-19-cases-in-india-rise-again/articleshow/79119707.cms>

¹³ <https://www.foxbusiness.com/lifestyle/fireworks-displays-july-4-coronavirus>

¹⁴ <https://www.connexionfrance.com/French-news/What-will-France-s-July-14-celebrations-look-like-this-year>

¹⁵ <https://news.sky.com/story/coronavirus-londons-new-years-eve-fireworks-cancelled-due-to-pandemic-12074859>

¹⁶ https://www.straitstimes.com/singapore/no-fireworks-display-at-marina-bay-countdown-this-year?utm_medium=Social&utm_campaign=STFB&utm_source=Facebook&fbclid=IwAR1_4Gj7dYzCg-8BNdxiy1GLEgGgvC3hPTgdOsd-wa-TUyGNED4k3JpQi-o#Echobox=1604550165

The reports (b) & (e) show discussion that ban on fire crackers is imperative to prevent harm on account of Covid-19 which will be aggravated by use of fire crackers.

The media reports from (f) to (i) show that having regard to the Covid situation, fireworks display was cancelled in several other countries.”

11. The Tribunal also considered the CPCB report backed by data of incremental pollution during festivals in and around November month, attributable to the use of fire crackers. Further consideration was of the grievance that there was non-compliance by the manufacturers by using prohibited chemicals in manufacture of crackers which led to initiation of contempt proceedings by the Hon'ble Supreme Court vide order dated 03.03.2020 in *Writ Petition No. 728/2015, Arjun Gopal (supra)*. The products were not being labeled in terms of directions of the Hon'ble Supreme Court dated 10.02.2017.

Supreme Court orders dated 11.11.2020 and 13.11.2020

12. We note that vide order dated 13.11.2020 in *SLP (Civil) Diary No(s). 24650/2020, The Telangana Fire Works Dealers Association v. P. Indra Prakash & Ors.*, **the Hon'ble Supreme Court directed, by an interim order, that order of this Tribunal dated 09.11.2020 be followed** in the State of Telangana which was the State for consideration in the matter before the Hon'ble Supreme Court. Further, *SLP(Civil) Diary No(s). 24645/2020, Gautam Roy & Anr. vs. The State of West Bengal & Ors.* against order of the Calcutta High Court dated 05.11.2020 in WPA No. 1984 of 2020, *Ms. Anasua Bhattacharya vs. State of West Bengal & Ors.*, banning crackers in the State of West Bengal during Deepawali and other festivals in the month of November was dismissed vide order dated 11.11.2020.

Further consideration in Today's Proceedings

13. CPCB has filed its report dated 27.11.2020 in pursuance of order of this Tribunal dated 09.11.2020, compiling the relevant data pre-Deepawali and on Deepawali day in Delhi and in 131 other cities. The report mentions the data of noise level and air quality at certain locations. 'Overall observation' and conclusion in the report are as follows:

"Overall Observation

This year Deepawali was celebrated in mid-November, which, has unfavorable meteorological conditions for dispersal of pollutants in comparison to 2019 when the festival was in the last week of October. The surface temperature was recorded lowest, which might have attributed to more inversion condition with lowest average mixing height, which limits vertical dispersion. It was among lowest in last five years. Wind speed in both pre Diwali and Diwali day was similar. As such, impact of meteorology in air pollution levels during festival season is evident.

*As observed from real-time monitoring network (37 CAAQM stations), the hourly **average concentration of PM_{2.5} started increasing since 11 PM on 14th November, it reached peak in most of the stations at around 1 am and continued at higher levels till 5 am. The city level average calculated for PM₁₀ and PM_{2.5} concentrations on Deepawali day (14.11.2020) were 645 µg/m³ and 483 µg/m³ respectively.** Contribution of stubble burning on PM_{2.5} (Source: SAFAR, IITM) was 32% on Diwali day (14.11.2020) compared to 38% on pre Diwali day (09.11.2020).*

The contribution of stubble burning on both pre Diwali (12 % on 21.10.2019) and Diwali day (19 % on 27.10.2019) in 2019 was less. Therefore, it may be inferred that elevated PM_{2.5} concentrations in 2020 in comparison to previous year had enhanced contribution of stubble burning and same is also reflected in elevated levels of CO and NO₂.

In 2019 the PM₁₀ was increased by 70% on Diwali day compared to Pre Diwali day. PM_{2.5} was increased by 149% on Diwali day over Pre Diwali day. In 2020, on Diwali day decrease in PM₁₀ and PM_{2.5} was observed compared to Pre Diwali day by about 16% and 18%. This reduction is perhaps due to about 6% reduction in contribution of stubble burning this year.

Overall, this year Deepawali has witnessed higher background levels of pollutants during pre-diwali days and further addition of particulates during night from firecrackers."

14. We have heard learned Amicus and other learned Counsel for the parties. We have also considered the report of the CPCB dated 27.11.2020 and the media reports. Learned amicus has filed following media reports:

- “1. PTI, Guwahati (2020). ‘Assam Health Minister says no restriction on firecrackers despite ban by police’, *Deccan Herald*, 10 November.
2. PTI (2020). ‘Delhi’s air quality turns ‘severe’ firecrackers add to misery’, *The Hindu*, 14 November.
3. Peeyush Khandelwal (2020). ‘Despite ban on crackers, Diwali in Noida and Ghaziabad more polluted this year’, *The Hindustan Times*, 15 November.
4. ANI (2020). ‘Despite Ban, People Burst Firecrackers in UP’s Ghaziabad to celebrate Diwali’, *Business World*, 30 November.
5. PTI (2020). ‘Delhi Police receives over 2,000 PCR calls about bursting of crackers on Diwali night’, *The Tribune*, 15 November.
6. PTI (2020). ‘Firecrackers heard across Delhi on Diwali night despite ban’, *The Hindu*, 15 November.
7. Agence France – Presse (2020). ‘Toxic smog blankets Delhi after revellers ignore ban on bursting firecrackers for Diwali’, *First Post*, 16 November.”

15. Learned Amicus submitted that the media reports establish that there was blatant violation of order of this Tribunal dated 09.11.2020 at various places. This affected the air quality adversely and also added to the noise pollution to the detriment of the public health. There are other **media reports also indicating flouting of the ban imposed on use of fire crackers, thereby having deleterious effect on air quality.**¹⁷

¹⁷ (i) “Delhi Air Quality Plunges to ‘Severe’ Category, Cracker Ban Goes Up in Smoke on Diwali Despite Pandemic Fears”, News18 India dated 15.11.2020: <https://www.news18.com/news/india/delhi-air-quality-turns-severe-on-diwali-farm-fires-calm-winds-worsen-crisis-3080405.html>

(ii) “Air quality ‘very poor’ in Delhi post Deepavali”, *The Hindu* dated 28.10.2019: <https://www.thehindu.com/news/cities/Delhi/delhi-air-quality-dips-to-very-pooron-diwali/article29811526.ece><https://www.thehindu.com/news/cities/Delhi/delhi-air-quality-dips-to-very-pooron-diwali/article29811526.ece>

(iii) “Air quality dips to ‘severe’ in Delhi post Diwali”, *The Hindustan Times*, 15.11.2020: https://m.hindustantimes.com/india-news/air-quality-dips-to-severe-in-delhi-post-diwali/story-ykHxSpaTcy2IX8YRCdPk0K_amp.html

(iv) “Air quality in Delhi further deteriorates post-Diwali; breaches emergency mark for a time”, *DownToEarth*, dated 15.11.2020: <https://www.downtoearth.org.in/news/air/air-quality-in-delhi-further-deteriorates-post-diwali-breaches-emergency-mark-for-a-time-74243>

(v) “As Delhi flouts cracker ban, air quality dips day after diwali”, *The Indian Express* dated 15.11.2020: <https://indianexpress.com/article/cities/delhi/delhi-air-quality-pollution-diwali-7051960/>

(vi) “Air quality worsens in the national capital post-diwali”, *The Economic Times* dated 15.11.2020: <https://economictimes.indiatimes.com/news/politics-and-nation/air-quality-worsens-in-the-national-capital-post-diwali/articleshow/79228838.cms?from=mdr>

16. Learned amicus further submitted that the use of fire crackers is not confined to the month of November but continues even thereafter to celebrate different occasions, including marriages, sports, etc. The Precautionary principle, thus, continues to remain relevant atleast till Covid-19 ends to avoid damage to the environment and public health. The use of crackers needs to be controlled and regulated, depending upon the air quality at the location where fire crackers are to be used. Thus, a graded response to air pollution appears to be essential, even beyond November till the Covid-19 pandemic is controlled.

17. *I.A. No. 112/2020* has been filed in *OA No. 93/2020(CZ), Dr. P.G. Najpande & Anr. vs. State of M.P. & Ors.*, by the applicant stating that inspite of order of this Tribunal, the bursting of fire crackers took place at Jabalpur, Bhopal, Indore and Gwalior. As a result, there was increase in Covid cases in Madhya Pradesh after Deepawali.

18. Learned Amicus and the counsel appearing for the applicants submitted that there is an established relation of increase of pollution due to use of fire crackers and consequential increase of Covid cases. Thus, it was submitted that use of fire crackers be not allowed so long as Covid continues in the interest of public health. Alternatively, such use may be

(vii) "Firecrackers' ban flouted in Capital", The Pioneer dated 16.11.2020: <https://www.dailypioneer.com/2020/page1/firecrackers----ban-flouted-in-capital.html#:~:text=The%20National%20Green%20Tribunal%20>

(viii) "Pollution levels severe in Delhi as cracker ban is flouted", mint dated 15.11.2020: <https://www.livemint.com/news/india/pollution-levels-severe-in-delhi-as-cracker-ban-flouted-11605417950168.html>

(ix) "In a week, 40 flout firecracker ban in Ghaziabad, arrested", Times of India dated 16.11.2020: https://m.timesofindia.com/city/ghaziabad/in-a-week-40-flout-firecracker-ban-in-ghaziabad-arrested/amp_articleshow/79239001.cms

(x) "11 arrested in Chandigarh for flouting ban on firecrackers, UT administration had banned the sale and use of firecrackers this year", The Tribune dated 15.11.2020: <https://www.tribuneindia.com/news/chandigarh/11-arrested-in-chandigarh-for-flouting-ban-on-firecrackers-170716>

(xi) "850 held for flouting curbs, 1.2k cases filed", The Hindustan Times dated 16.11.2020: <https://www.hindustantimes.com/cities/1206-case-registered-for-bursting-crackers-on-diwali-850-people-held/story-2lQKkR1Ms66kuHCb7LE93M.html>

permitted only where the air quality is 'moderate' and below where adverse impact on public health is comparatively lesser. **If the air quality is 'poor' and above, it has been held by the Hon'ble Supreme Court in the table quoted in para 4 above that there is danger of heart diseases, respiratory illness and other serious health impact** even before Covid. Covid is going to further aggravate the situation and therefore atleast in areas where air quality is 'poor' and above, no bursting of fire crackers should be permitted in view of 'Precautionary' principle, to be statutorily enforced by this Tribunal under Section 20 read with section 15 of the National Green Tribunal Act, 2010. It was further submitted that in view of the large-scale violation of the directions of this Tribunal, there should be further directions for meaningful enforcement by the authorities by using coercive methods, including recovery of compensation. There should also be a mechanism to compensate individual victims if such victims come forward with evidence of harm suffered. If no individual victim comes forward, the compensation amount should be utilized for restoration of the environment and to enforce the rule of law. This requires availability of air quality data and designated nodal agencies for enforcement.

Conclusion and Directions

19. We have given due consideration to the above submissions. Only opposition to this submission is on behalf of the fire crackers manufacturers association on the ground that once license is granted, there can be no restriction on right to carry on business even if it results in damage to the environment and public health.

20. As already laid down by the Hon'ble Supreme Court, discussed in the order of this Tribunal dated 09.11.2020, the laid down air quality and noise level norms under the Air (Prevention and Control of Pollution) Act,

1981 and noise level under the Environment (Protection) Act, 1986 have to be maintained to give effect to the principle of Sustainable Development of which Precautionary principle is a part. Since mere passing of order does not ensure compliance, necessary coercive measures have to be taken. Even if there are other sources of pollution and meteorological conditions contributing to the air pollution, it does not justify ignoring acknowledged pollution by bursting of fire crackers adding to the air and noise pollution, beyond statutory norms. Right to business is not absolute. There is no right to violate air quality and noise level norms. This being a crime under the law of the land cannot be a right. Exceeding of the norms, adversely affect the health and cannot be allowed. Nobody has a right to carry on business at the cost of health of others. All licenses already given or which may be given are inherently subject to overriding requirement of preventing damage to the environment and the public health.

21. We have already quoted the air quality norms. We may also note the standards of noise level, prescribed under Rule 3 read with the Schedule to the Noise Pollution (Regulation & Control) Rules, 2000 (Noise Control Rules) as follows:

**“SCHEDULE
(see rule 3(l) and 4(l))**

Ambient Air Quality Standards in respect of Noise

Area Code	Category of Area/Zone	Limits in dB(A) Leq *	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note:-

1. Day time shall mean from 6.00 a.m. to 10.00 p.m.
2. Night time shall mean from 10.00 p.m. to 6.00 a.m.

3. *Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority.*

**dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.*

A "decibel" is a unit in which noise is measured.

"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq : It is an energy mean of the noise level, over a specified period."

22. As per the Noise Control rules, the responsibility for enforcement of noise pollution control measures is of the 'authority', which includes authorized officers, District Magistrates, Police Commissioner or any officer not below the rank of Deputy Superintendent of Police designated for the maintenance of air quality standards in respect of noise. There is further provision that any loudspeaker or sound producing instrument /equipment can be used **only after obtaining written permission.** Festive occasions are defined as **notified National or State functions, including the Republic Day, the Independence Day, State Day or other notified day.**

23. Remedial action against violation of noise level norms as well as air quality norms has been subject matter of judgements of the Hon'ble Supreme Court. Reference may be made to the judgment of the Hon'ble Supreme Court dealing with the noise pollution in *Re: Noise Pollution-implementation of the Laws for Restricting Use of Loudspeakers and High-Volume Producing Sound Systems, (2005) 5 SCC 733.*

24. This Tribunal in *O.A No. 519/2016, Hardeep Singh & Ors. v. SDMC & Ors.* dealt with the steps for enforcement of the directions of the Hon'ble Supreme Court on the subject of noise pollution. Noise pollution is an offence under the Noise Control Rules as also under IPC Sections 268,

285, 286, 290, 291 etc. Noticing large scale violation of Noise norms, this Tribunal required CPCB to lay down compensation regime. After expert studies, report dated 12.06.2020 was filed which was considered by this Tribunal vide order dated 11.08.2020. The compensation regime suggested by the CPCB is as follows:

Sr. No.	Violation of Noise Rules	Compensation (in Rupees) to be paid by defaulter		Action to be taken by designated authority
1.	Xxx	Xxx	Xxx	Xxx
2.	Xxx	Xxx	Xxx	Xxx
3.	Xxx	Xxx	Xxx	Xxx
4.	Bursting of Firecrackers beyond the prescribed time limit prescribed (Hon'ble Supreme Court and Clause 5A (2) and 6 (iv)⁷⁻⁸			
		Residential / Commercial/Mixed Zone	Silence Zone	
4(1)	Violation by Individual/Household	1,000	3,000	
4(2)	Violation during Procession a. Public Rallies b. Barat during marriage Religious event	10,000	20,000	Fine to be paid by Organizer
4(3)	First Violation within a fixed Premises: a. Function organized by RWA, b. Marriage Function c. Public Function d. Institution function e. Banquet Hall f. Open ground functions	20,000		Fine to be paid by Organizer and Owner of the place.
4(4)	Second Violation within a fixed Premises: a. Function organized by RWA, b. Marriage Function c. Public Function d. Institution function e. Banquet Hall Open ground Function	40,000		
4(5)	More than Two Violation within a fixed Premises: a. Function organized by RWA, b. Marriage Function c. Public Function d. Institution function e. Banquet Hall Open ground function	1,00,000 and action under EP Act.		Sealing of Premises

Note:

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7. *Sound emitting fire crackers shall not be burst in silence zone or during' night time in each zone."*

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9. *It may be noted that imposition of fine for notification of Rule 5A (1) falls within the purview of Motor Vehicle Rules, 2019"*

25. The above recommendation was approved by the Tribunal vide order dated 11.08.2020 as follows:

*"12.We are of the view that the compensation scale laid down by the CPCB may be enforced throughout India. **The CPCB may issue appropriate statutory orders for the purpose for being complied with in all the States/UTs."***

26. The matter was also considered in OA 681/2018, *News item published in "The Times of India" Authored by Shri Vishwa Mohan titled "NCAP with multiple timelines to clean air in 102 cities to be released around August 15."* dealing with the control of air pollution in non-attainment cities. The direction in the above order dated 11.08.2020 in OA 519/2016, *Hardeep Singh (supra)* was reiterated.

27. **Accordingly, the above needs to be followed against violation of prohibition/restriction on bursting of crackers. Apart from the scale of compensation, applicable for noise, equal amount of compensation is liable to be paid for violation of air norms. Thus, the rate of compensation has to be double of the above scale. The word 'fine' is infact compensation. Polluter pays principle is part of environmental law not only under section 20 of the NGT Act but also has to be applied by law enforcing agency to enforce environmental norms. For second violation and more than two violations, deterrent amount in the form of double compensation will be payable for cases covered by**

Para 4(1) & 4(2) of the above table also. Further, it is clarified that 'second' violation does not mean second day. Second violation includes violation on same day or continuous violation.

The amount of compensation collected may be credited to a separate account to be called 'District Environment Compensation Fund' to be maintained by the District Magistrate.

28. Further, in above matter (OA681/2018), the issue of setting up of monitoring stations for monitoring of air quality was also considered by the Tribunal vide order dated 21.8.2020, in continuation of earlier proceedings, in the light of report of the CPCB dated 18.08.2020. The report was in compliance of order dated 20.11.2019 directing that assessed number of air monitoring stations be installed within one year i.e. till 20.11.2020 and such stations be connected to the server of the CPCB to display data on real time basis in public domain giving all the 12 notified parameters. The equipments be procured through GeM portal as per specifications of CPCB from recruited venders notified on the Gem Portal. The report mentioned that air quality was being monitored manually at 793 locations covering 344 cities/towns in 28 States and 7 Union Territories (UTs) across the country under National Air Quality Monitoring Programme (NAMP) and through real time stations in 219 stations covering 123 cities in 18 States and 2 UTs under Continuous Ambient Air Quality Monitoring. Further, the SPCBs/PCCs are also monitoring ambient air quality manually at 126 locations covering 86 cities/ towns in 13 States under State Air Quality Monitoring Programme (SAMP).

29. The Tribunal, vide order dated 21.08.2020, directed that the work at remaining monitoring stations be completed within six months, which may commence within one month and monitored by the CPCB.

30. The fact remains that there are 740 Districts in the country and above 4000 cities. It is absolutely necessary that at least at every District Headquarter in all the 740 Districts, there should be an air quality monitoring station. Wherever such stations have not yet been set up so far (though Air Act is 39 years old), manual stations, which are very easy to set up and are not costly, must be installed at the earliest using simpler procedure like GeM. This step should not exceed three months in any case. This will be the responsibility of the State PCBs/PCCs, using funds available under 'consent mechanism' / 'environmental compensation'. As per data furnished by the CPCB in its report dated 14.11.2019, it was mentioned that as against requirement of CAAQMS being 800, only 176 had been installed and as against required manual stations being 1250, only 658 had been installed. The gap was directed to be filled up by the Tribunal till 20.11.2020 which was extended vide order dated 21.08.2020 for six months, which will now expire on 21.02.2021.

31. Since Pandemic is still continuing and is aggravated by the addition of pollution by fire crackers, having potential of damage to public health, invoking precautionary principle under section 15 and 20 of the NGT Act, 2010, we are satisfied that there is need to continue directions for prohibition and regulation of use of fire crackers during pandemic Covid-19, depending upon air quality with further direction to take coercive measures for non-compliance, including recovery of compensation and for redressal of claims of victims of such pollution and restoration of environment.

Directions

32. In view of above discussion, following directions are issued:

- i. There will be total ban on sale and use of all kinds of fire crackers during Covid-19 pandemic in the NCR and all cities/towns in the country **where the ambient air quality falls under the 'poor' and above category.**
- ii. Direction to restrict use of fire crackers in cities/towns where air quality is 'moderate' or below to green crackers only and for duration of not more than two hours and only for celebration of any specified festivals or permitted occasions will continue. Such festivals be specified by the States. Other than specified festivals, prior permission of the District Magistrate of the area will be required for use of crackers for limited period which will be given having regard to air quality.
- iii. During Christmas and New Year, green crackers can be used from 11:55 pm to 12:30 am only at places where air quality is 'moderate' or below as directed by the Hon'ble Supreme Court¹⁸.
- iv. With a view to ensure availability of air quality data, atleast one air quality monitoring station must be set up at every district headquarter at the earliest. Where no such monitoring station exists, atleast a manual monitoring station which is very easy to set up and is not costly must be installed at the earliest, using simpler procedure like GeM. This should not exceed three months in any case. This will be the responsibility of the State PCBs/PCCs from

¹⁸ (2019) 13 SCC 523 para 48.14

available funds under ‘consent mechanism’ / ‘environmental compensation’. The air quality data may be placed on the website of the District administration and also at prominent locations in the towns, in the form of AQI, PM_{2.5} and PM₁₀.

- v. We further direct that the Air Quality Monitoring Committees (AQMC) in terms of order of this Tribunal dated 08.10.2018 in OA No. 681/2018¹⁹ to coordinate with the District Magistrates.²⁰ for compliance of the above directions.
- vi. The District Magistrates in every district may take steps to ensure that banned fire crackers are not sold in terms of order of the Hon’ble Supreme Court dated 23.10.2018.²¹
- vii. The District Magistrate, on a complaint or otherwise, will recover compensation from violators of the above directions on the parameters already mentioned in Para 24 above.
- viii. Any victim of pollution, apart from other remedies, can approach the District Magistrate for compensation, by showing evidence of individual damage and the person responsible for the damage. Such claim may be dealt with by a reasoned order.

¹⁹ The said order is as follows:

“15. xxx xxx xxx
i. xxx xxx xxx
ii. The Action Plans may be prepared by six-member committee comprising of **Directors of Environment, Transport, Industries, Urban Development, Agriculture and Member Secretary, State Pollution Control Board or Committee of the concerned State**. The Committee may be called Air Quality Monitoring Committee (AQMC). The AQMC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory. This may be further supervised by the Chief Secretaries concerned or their counterparts in Union Territories by ensuring intra-sectoral co-ordination.”

²⁰ The District Environment Committee has been directed to be constituted by this Tribunal to prepare and execute District Environment Plan vide order dated 15.07.2019 in OA No. 710/2017, Shailesh Singh vs. Sheela Hospital & Trauma Centre, Shahjanhanpur & Ors.

²¹ Order dated 23.10.2018 (2019) 13 SCC 523

- ix. If no such claim is made for six months after collection of the compensation, the amount credited to the 'District Environment Compensation Fund' can be spent for restoration of the Environment in the District.
- x. The State PCBs/PCCs may compile data of compliance from all the Districts by 28.2.2021 and furnish the same to the CPCB by 15.3.2021. CPCB may file consolidated report in this regard in OA 681/2018 by 31.3.2021.

The applications are disposed of.

An amount of Rs. 1 lac and Rs. 25,000/- respectively may be paid by the CPCB to Shri Raj Panjwani, Senior Advocate and Ms. Shibani Ghosh, Advocate, as a token honorarium for assisting the Tribunal as Amicus.

We place on record our sincere thanks to learned Amicus for the assistance rendered.

A copy of this order be forwarded to the MoEF&CC, CPCB, Chief Secretaries and DGPs, State PCBs/PCCs and District Magistrates of all the States/UTs by e-mail for Compliance.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. S.S. Garbyal, EM

Dr. Nagin Nanda, EM

December 01, 2020
OA No. 249/2020, OA No. 254/2020
OA No. 255/2020 & OA No. 93/2020(CZ)
DV