

**BEFORE HONBLE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA.**

Original Application No-~~218~~-of 2024

IN THE MATTER OF:

SANJAY KUMAR NAYAK

...APPLICANTS

VERSUS

STATE OF ODISHA AND OTHERS

... RESPONDENTS

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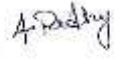
PLACE: Bhubaneswar

SANKAR PRASAD PANI



DATE: 22/10/2024

ASHUTOSH PADHY



ADVOCATE

Plot 2132/4814, NageswarTangi, Bhubaneswar 751002 Cell-
9437279278, Email: sankarprasadpani@gmail.com

SYNOPSIS

That the present application is being filed challenging the inaction of state government in following the Judgement passed by Hon'ble Supreme Court in the matter of Arjun Gopal and Ors vs. Union Of India and Ors. and also the state government is failed to enforce the order of Special Relief Commissioner Government of Odisha dated 31/10/2021 pursuant to order of Hon'ble High court of Odisha.

That the petitioner in the present application prays for a direction to enforce the order passed by Hon'ble Supreme Court in the matter of Arjun Gopal and Ors vs. Union Of India and Ors. and also to enforce the order dated 31/10/2021 passed by Government of Odisha Office of Special Relief Commissioner.

LIST OF DATES

31/10/2021	Order passed by Odisha Special Relief Commissioner
29/10/2021	Order passed by Hon'ble Supreme Court
01/12/2020	Order passed by Hon'ble NGT PB
20/10/2024	Complaint to all concerned authority by the applicant
29/05/2024	Firecracker accident leading to death of 15 people during Chandan Yatra festival at puri.
19/10/2024	Four minor children critically injured while binding the firecrackers.

**BEFORE HONBLE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA.**

(Under Section 18(1) read with Section 14(1), 15 and 20 of the National Green
Tribunal Act 2010)

Original Application No-----of 2024

IN THE MATTER OF:-

Sanjay Kumar Nayak, aged about 46 years, S/o Maheswar Nayak, At/po-
Babanpur, P.s.- Kotinada, Aska, Dist- Ganjam, Pin- 761111 ..**APPLICANT**

VERSUS

1. State of Odisha represented by Chief Secretary, Govt. of Odisha, At: LokSeva Bhawan, Sachivalaya Marg, Bhubaneswar, Dist.: Khurda, Odisha, Pin: 751001.
E-mail ID : csori@nic.in
2. Director General of Police, Odisha, At/po- Police Headquarters, Bakshi Bazar, City-Cuttack, Pincode-753001, Email-dgp.odpol@nic.in
3. **Member Secretary**, Odisha State Pollution Control Board A/118, Unit-VII, Nilakantha Nagar, Bhubaneswar, PIN-751012, Odisha Email:
member.secy@ospcboard.org

4. **Member Secretary**, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi-110032, Email- mccb.cpcb@nic.in
5. Chief Administrator, Shree Jagannatha Temple Administration, At/po- Grand Road, Puri, 752001-jagannath.or@nic.in
6. Special Relief Commissioner, Government of Odisha,At/Po- GROUND FLOOR, RAJIB BHAWAN, UNIT-V,BHUBANESWAR, Pin-751001, Email- src.or@nic.in, srcodishagov@gmail.com
7. Deputy Chief Controller of Explosives, At/Po- Office Space-201, 2nd Floor, NSIC-IMDC building, Dharmapada Bhawan, Plot No.6, Block-D, Mancheswar Industrial Estate, Bhubaneswar-751010, Email- dyccebhub@explosives.gov.in

...RESPONDENTS

- I. The address of the Applicant is given above for the service of notices of this Application.
- II. The addresses of the Respondents are given above for the service of notices of this Application.
- III. That the present application is being filed challenging the rampant use of crackers in broad day light in violation of Hon'ble Supreme Court's order in Arjun Gopal v. Union of India, (2019) 13 SCC 523.

BRIEF FACTS

1. That the applicant in the present application is an environmental activist, who works for the protection of environment and also the present Sarpanch of Babanpur Grampanchayat in Aska, Ganjam District, Odisha. The applicant is engaged in rescue and protection of wild animal and a leader in mobilizing community to protect the BalckBucks in and around Aska. His contribution for protection and conservation of Forest, Wildlife and Environment has been acknowledged by the State Govt in Terms of Prakruti Bandhu Award to the applicant in the year 2023. Apart from that for his dedication towards the environment he has received many prestigious awards and accolades from various organization as well as from the Governor of Odisha .Copy of recognition by Governor of odisha is annexed here with as ANNEXURE-1
2. That the present application is filled challenging the rampant use of Firecrackers in the state of Odisha in every occasions and for that the pollution is increasing day by day and the vulnerable population facing different types of health problems. The applicant has brought issue of use of Fire Cracker during election rally and victory procession to the notice of Election Commissioner during this general election of 2024 and recently on 20th October 2024 brought to the notice of Chief Secretary and DGP Odisha about the use of Fire Crackers demanded an total ban in Non-attainment

Cities and enforcement of restrictions in other areas as per the order of Honble Supremecourt. Copy of **Email dated 20/10/2024 and news item published in The Pioneer are annexed here with as ANNEXURE-2**

3. That the firecrackers in the state of Odisha is restricted on paper since 2021 but due to lack of enforcement the sellers and users of the banned firecrackers are increasing day by day, and because of the rampant use of firecrackers in every single occasion the air quality of the state is getting worse day by day. That it is pertinent to mention here that in the garb of green crackers many of the manufacturers of firecracker within the state are manufacturing the hazardous and harmful banned firecrackers which are creating noise as well as air pollution.
4. That the fireworks when burnt release a number of emissions into the atmosphere, including particulate matter, sulphur dioxide, and nitric oxide. Particulate matter and nitric oxide can stay in the atmosphere for a longer duration, causing these contaminants to be carried over to different regions, and in the state of Odisha most of the manufacturers use the barium salts which is already banned, but due to lack of enforcement by the state authority most of the firecracker industries are using barium salts in their product.

5. It is pertinent to mention here that in the state of Odisha in every single occasion folks are using these banned products to celebrate, occasions like Zero Night, New year's eve, Christmas, Diwali, Chandana Yatra (A holy festival of Lord Jagganath), during BISARJAN of Lord Ganesh and Goddess Durga, Marriage parties, Birthday celebration and all other functions.
6. It is not out of place to mention here that recently on 29th May 2024 during the Chandan Jatra of Lord Jagganath in Puri a major fire accident OCCURRED due to blast of illegal and banned of firecrackers resulting in death of 15 peoples and more than 22 people were severely injured due to the accident. It is stated that the ritual of Lord Jagannath Temple is managed by the Temple Administration which is an extension of the state government and one Senior IAS officer of the government looks after the day to day affair of Temple. Copy of the Times Of India newspaper dated 06/06/2024 is here unto annexed as **ANNEXURE-3**.
7. It is pertinent to mention here that every year many lives were lost due to the fire accidents caused due to the firecrackers, and the number of accident is in the top during Diwali. Further during the manufacturing of the firecrackers also many accidents happens for which the lives of the laborers working in the unit as well as the peoples residing nearby were also lost.

8. That recently on dated **19/10/2024 Four minor boys got severely injured in Ganjam District of Odisha**. The accident took place when the **firecrackers were allegedly being prepared by the minor's inside a cowshed**. Many news articles were also published in this regard. This incident suggest there is free availability of gunpowder/ chemicals in the market and there is no enforcement of the District Administration so as to ensure the direction of the Honble SC and NGT are fully implemented in letter and spirit. It is further stated there are few places in Ganjam district where crackers are manufactured in large scale and being sold in the market for use on different occasions. Copy of the newspaper dated 19/10/2024 is annexed here unto as **ANNEXURE-4**

9. It is not out of place to mention that in the guise of green crackers , there is no verification by the competent authority and there are mislabeling of the crackers posing as green crackers and same were never been verified or seized by the authorities in the state of Odisha.

10.It is needless to mention that on the last Diwali (2023) in Bhubaneswar the air quality has deteriorated because of the particulate matters has gone up more than 900 PPM and use of firecrackers even after 10PM in night and day following Diwali the crackers use to burst with high decibel noise in Bhubaneswar itself and there was no enforcement to that effect. Copy of the

Ambient Air Quality Report day of Diwali of dated 14/11/2023 in Bhubaneswar is annexed here unto as **ANNEXURE-5**.

11. It is pertinent to mention here that In India, in order to counter growing air pollution, a National Clean Action Plan (NCAP) was made operational in 2018. Under the Plan, all Indian cities have to meet National Ambient Air Quality Standards (NAAQS). Cities that do not meet these Standards are termed non-attainment cities. In all, Central Pollution Control Board (CPCB) identified 102 non-attainment cities in the country. **Seven of these cities are in Odisha Bhubaneswar, Cuttack, Angul, Talcher, Balasore, Kalinganagar and Rourkela.** In these cities, the ambient air quality does not meet NAAQS with respect to PM10 and PM2.5. Hence any kind of use of firecrackers will further deteriorate the air quality in all such cities and Honble NGT has prohibited the use of firecrackers in all such cities.

12. That even after the order of Hon'ble Supreme Court and Hon'ble NGT regarding the complete ban of firecrackers in the non-attainment cities, last year in Bhubaneswar people busted firecrackers even after 10 PM and also in the day after Diwali for which the Ambient Air Quality exceeded 900 ppm. This also confirms that the order of Hon'ble Supreme Court and Hon'ble NGT are not followed in letter and spirit.

13. That the Hon'ble Supreme Court in **ARJUN GOPAL AND OTHERS VERSUS UNION OF INDIA AND OTHERS**, vide order dated 23/10/2018 has given certain directions, the directions given in the afore mentioned case is reproduced as follows;

Para-42) *We are of the opinion that the aforesaid suggestions strive 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 concerned authorities to implement the same with immediate effect. In view thereof, following specific directions are issued:*

(i) The crackers with reduced emission (improved crackers) and green crackers, as mentioned in Suggestion Nos. II and III above only would be permitted to be manufactured and sold.

(ii) As a consequence, production and sale of crackers other than those mentioned in Suggestion Nos. II and III is hereby banned.

(iii) 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.

(iv) 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.

(v) 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.

(vi) Barium salts in the fireworks is also hereby banned.

(vii) PESO is directed to review the clinical composition of fireworks, particularly reducing Aluminum 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.

(viii) Even those crackers which have already been produced and they do not fulfill the conditions mentioned in Suggestion Nos. II and III above will not be allowed to be sold in Delhi and NCR.

(ix) 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.

(x) PESO will ensure suspension of the licenses of manufacturers of such fireworks items and appropriate disposal of such stock.

(xi) 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 licenses of the manufacturers on such violations and disposal of such lots. To add to it, as mentioned in the order dated September 12, 2017, the directions issued and restrictions imposed in the order passed by this Court on July 18, 2005 in Noise Pollution (V) shall continue to be in force.

(xii) Direction Nos. 4 to 9 and 11 contained in the order dated September 12, 2017 shall continue to operate and are reiterated again.

(xiii) 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.

(xiv) On Diwali days or on any other festivals like Gurpurab etc., when such fireworks generally take place, it would strictly be from 8:00 p.m. till 10:00 p.m. only. On Christmas even and New Year 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.

(xv) The Union of India, Government of NCT of Delhi and the State Governments of the 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 pre-designated by the concerned authorities. 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 No. (xiv) pertaining to the duration within which fireworks can take place on all such occasions would be applicable throughout India. Similarly, Direction No. (xiii) for extensive public awareness campaigns is also a pan India direction.

(xvi) 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 concerned Police Station of the area 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.

*(xvii) 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, Aluminum, 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 Aluminum, Barium and Iron used in the manufacture of firecrackers. Copy of SC order dated 23/10/2018 is annexed here with as **ANNEXURE-6.***

14. That the Hon'ble National Green Tribunal Principal Bench vide its order dated **01/12/2020** in OA 249 of 2020, also reiterated the Judgment of Hon'ble Supreme Court in the matter of **ARJUN GOPAL AND OTHERS VERSUS UNION OF INDIA AND OTHERS** order dated **23/10/2018**. Copy of the NGT order dated 01/12/2020 is annexed here unto as **ANNEXURE-7.**

15. That the Hon'ble Supreme Court in its order dated 29/10/2021 in the matter of Arjun Gopal and Others Versus Union Of India and Others observed that,

“Para 9. “Before passing any further orders and while adjourning the present application, we again reiterate the directions issued by this Court earlier reproduced hereinabove including banning the use of Barium Salts in the firecrackers and manufacturing and selling joined firecrackers and other directions issued by this Court reproduced hereinabove. We direct all the States/Union Territories to see that the directions issued earlier by this Court and issued by this Court today are strictly complied with in its true spirit and in toto. Any lapse on the part of the State Governments/State Agencies and Union Territories **shall be viewed very seriously** and if it is found that any banned firecrackers are manufactured, sold and used in any particular area, the Chief Secretary of the concerned State(s), the Secretary (Homes) of the concerned State(s) and the Commissioner of Police of the concerned area, District Superintendent of Police of the concerned area and the SHO/Police Officer in-charge of the concerned police station shall be held personally liable. Nobody can be permitted to flout and/or disobey the directions issued by this Court/Courts. Any wilful and deliberate disobedience shall have to be viewed **very seriously**”. Copy of the Hon'ble Supreme Court order dated 29/10/2021 is annexed here unto as **ANNEXURE-8**.

16. That the Special Relief Commission of Odisha vide its order dated 31/10/2021 has also issued certain directions for sale and use of fireworks during the festival of Diwali, the relevant portion of the order dated 31/10/2021 is reproduced as follows;

In light of the order dated 29.10.2021 passed by the Hon'ble Supreme Court, the following directions are passed in respect of sale and use of fireworks during the festival of Diwali:

A. Sale and use of fireworks shall be limited to only "green fireworks that conform to the definition and formulation as proposed by CSIR-NEERI

B. Sale and use of other fireworks shall be completely banned. Sale and use of joined firecrackers (series crackers or laris) shall also remain banned.

C. Only those traders dealers who obtain and produce a certificate from the PESO, after due inspection of their existing stock certifying that the green fireworks stocks in their possession conform to the definition and formulation proposed by CSIR-NEERI and are genuine shall be allowed to sell their products.

D. Authenticated copy of the PESO certificate granted after due inspection of existing stocks lying in possession of the traders/ dealers shall be deposited with the District Administration/ Police Commissioner for getting permission to sell the green fireworks.

E. Traders/ dealers who fail to obtain and produce the certificate from PESO shall not be allowed to sell their products, keeping the "precautionary principle" in mind. Mere labelling of fireworks boxes as "green fireworks" and providing QR codes shall not entitle any trader/ dealer to sell the same.

F. Only those retailers who obtain a license from the concerned authorities under the provisions of the Indian Explosives Act, 1884 shall be allowed to sell green fireworks.

G. Retailers shall be allowed to set up shops and sell green fireworks only in special zones designated by the respective District Administrations/ Police Commissionerate.

H. Green Fireworks shall only be sold at designated sites and all COVID-19 protocols shall be strictly followed. Sale of Fireworks on the internet shall be strictly banned.

I. Wholesale Traders and Retailers shall have to produce original invoices on demand by the District Administration/Police Commissionerate.

J. The use of fireworks shall be limited to 8:00 pm to 10:00 pm on Diwali day, i.e., 04.11.2021 only. Use of fireworks beyond the said time frame shall be visited with strict penal action.

K. Violation of any of the aforesaid conditions shall be dealt with strictly and penal action shall be taken in accordance with law.

L. The District Administration/ Police Commissionerate is directed to ensure strict compliance with the above conditions.

M. The District Administration/ Police Commissionerate shall ensure full & complete compliance of the orders above through proper verification of the documents as mentioned supra and proper enforcement so as to ensure no spurious/ unauthorised/banned fire crackers are sold anywhere within their jurisdiction. Further the local officers shall be personally liable for violations of the orders of Hon'ble Apex Court. Hon'ble National Green Tribunal and Hon'ble High Court of Odisha. Copy of the Special Relief Commission order dated 31/10/2021 is annexed here unto as

ANNEXURE-9

17. That the two incidents happened in Odisha in last six months and many incidents not get reported, suggest there is lack of monitoring and enforcement of Orders and Direction passed by Honble Supremecourt and for that there is need for an explanation from the Chief Secretary on steps taken to ensure the compliance of Honble SC order and officers responsible for their lapses in the two accidents reported widely be called for.

18. That the applicant apprehends that this time too the order of SC will be flouted as no exemplary steps have been taken to ensure the compliance of Order of Honble SC

19. That the Applicant could not find any report in the website of State pollution Control Board OR Central Pollution control Board in respect of compliance direction No XVII of SC Order directing *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, Aluminum, 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 Aluminum, Barium and Iron used in the manufacture of firecrackers.*

GROUND

A. That the Health of citizen and protection of environment is paramount as a constitutional mandate on the part of the state and same has not been followed in state of Odisha

B. That the state sponsored use of Fire Crackers in different occasion and rituals of Lord Jagannath clearly depicts the state as an instrument of promoting use of crackers

C. That Precautionary Principle is the foundation of Preventive Measure for Pollution anticipated and appropriate remedial measures is the responsibility of the state

D. That the Order of Honble SC is law of the land under Art 141 of Constitution of India same is apparently violated in the present case

LIMITATION

That there is a subsisting cause of action because of the continuing manufacturing and selling of the firecrackers and the last incident was occurred on dated 19/10/2024 hence the application is not barred by limitation.

PRAYER

The Hon'ble Tribunal may please to consider to pass the following directions.

- a. DIRECT THE DGP ODISHA AND CHIEF SECRETARY ODISHA TO PRODUCE THE RECORDS OF ACTION TAKEN SO AS TO ENFORCE THE DIRECTION OF HONBLE SC AND NGT IN RESPECT OF USE OF FIRE CRACKERS IN THE STATE.
- b. CALL FOR A REPORT FROM CHIEF ADMINSTRATOR OF JAGANNATH TEMPLE ASKING THE STEPS TAKEN TO PROHIBIT CRACKERS DURING RITUALS OF LORD JAGANNATH
- c. CALL FOR A REPORT FROM STATE POLLUTION CONTROL BOARD ON THE AIR QUALITY AND SOUND POLLUTION IN THE STATE DUE TO USE OF CRACKERS ON DIFFERENT OCCASIONS AND ACTION PLAN TO COMBAT THE AIR AND NOISE POLLUTION
- d. That the Hon'ble Tribunal may pass any other order as deem fit in the interest of justice

And for this act of Kindness the Humble petitioner shall
as in duty bound ever pray

Place: Bhubaneswar

By The Applicant Through



Date: 22/10/2024

ADVOCATE

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
EASTERN ZONE BENCH, KOLKATA**

ORIGINAL APPLICATION NO - OF 2024/EZ

IN THE MATTER OF:

SANJAY KUMAR NAYAK

APPLICANT

VERSUS

STATE OF ODISHA AND OTHERS

RESPONDENTS

AFFIDAVIT

22.OCT 2024

I, Sanjay Kumar Nayak S/o Maheswar Nayak, Aged about 46 years At/Po- Babanpur, PS- Kotinada, Dist-Ganjam, Odisha, 761111, do hereby solemnly affirm, and declare as under:

1. That I am the applicant in the abovementioned application and I am fully conversant with the facts and circumstances of the case and therefore competent to swear this affidavit.
2. That I have read over the contents of the accompanying original application and the same is true and correct and is drafted on my instruction.

Sanjay Kumar Nayak
DEPONENT

VERIFICATION

Verified on this 22.OCT 2024 day of2024 at PO.....that the contents of the above affidavit are true and correct. No part of it is false and nothing material has been concealed there from.

Identified By

19/10/23
Advocate

Sanjay Kumar Nayak
DEPONENT



The above named deponent(s) being duly identified or identified by S.P. Jena Advocate, Bhubaneswar. Appears before me on 22.OCT.2024 at PO on oath the contents of this affidavit are true to the best of his / her / their knowledge and belief.

Dependent(s) Notary, Bhubaneswar

JANMEJAYA RAUTRAY
NOTARY, GOVT OF ODISHA
BHUBANESWAR
REGD. NO-ON-85/2012
Mob. No. - 9337121273

Prof. Ganeshi Lal

Governor, Odisha

ପ୍ରଫେସର ଗଣେଶୀ ଲାଲ

ରାଜ୍ୟପାଳ, ଓଡ଼ିଶା



RAJ BHAVAN
BHUBANESWAR - 751 008

ରାଜଭବନ
ଭୁବନେଶ୍ୱର-୭୫୧ ୦୦୮

May 29, 2023

MESSAGE

I extend my good wishes to Shri Sanjay Kumar Nayak, Sarapanch of Babanpur Gram Panchayat, Block- Aska, Dist- Ganjam and also the founder of GOD (Green Organic Development) organisation for his campaign "**Nature is the natural God for all Religions**" and establishment of a **PRAKRUTI MATA** temple at Gadagada Hill, Babanpur GP. In our tradition Nature is manifestation of God. So, the holy "**DEBASHIS SCHEME**" of GOD is highly appreciable for enhancing people's livelihood, tracking Climate Change and containing Bio-Diversity loss in achieving sustainable Development Goals (SDG) for the welfare of whole the humanity.

I wish the endeavor all success.

(Ganeshi Lal)



Regarding the ban on use of firecrackers in the eve of festive occasions and Diwali

3 messages

Sanjaya kumar Nayak <greenorganicdevelopment@gmail.com>

Sun, 20 Oct 2024 at 11:35

To: dgp.odpol@nic.in, csori@nic.in, member.secy@ospboard.org, jagannath.or@nic.in

Dear Sir,

I Sanjaya Kumar Nayak, president of Green Organic Development (GOD), resident of Banbanpur, Aska, Dist- Ganjam, wants to draw your kind attention, that as you know there is a detailed restriction on use of firecrackers considering it's hazardous nature leading to death and critical injury as well as ailments in various age groups of people. That the Puri town of Odisha has witnessed a serious tragedy because of the illegal use of firecrackers during "Chandana Jatra" on 31/05/2024 leading to death of 16 peoples in a span of 6 days and many more critically injured this is not the only instance of death due to use of firecrackers in Odisha but there has been many such incidents through out Odisha which were reported on many newspapers on day to day basis. Use of fire is not only lead to Diwali such as victory procession , Election, kartika Purnima, Marriage Processions, zero night celebration, New year , inauguration of various sports events, political rallies, Ravana Dahana. This suggests the rampant use of crackers in broad day light in violation of Hon'ble Supreme Court's order in Arjun Gopal v. Union of India, (2019) 13 SCC 523.

it is not out of place to mention that the SC has also observed that in the garb of green crackers , there is no verification by the competent authority and there are mislabeling of the crackers posing as green crackers and same were never been verified or seized by the authorities, needless to mention that on the last Dipavali in Bhubaneswar the air quality has deteriorated because of the particulate matters has gone up more than 900 PPM and use of firecrackers even after 10PM in night the crackers use to burst in Bhubaneswar itself and there was no enforcement to that effect.

That recently yesterday 6 minor were injured on Ganjam while binding the firecrackers.

In view of this I would request you to direct the District collectors to form a monitoring committee and flying squads at police station level to verify the existing stocks of firecrackers if it is confirming to the standards of green cracker. We would further request you to seize both at the manufacturing level and retail level in the state of Odisha so as to make this Dipavali is a safe Dipavali, further I would like to draw your attention to the use of crackers in various celebrations/rituals of lord Jagannath wherein the rampant use of crackers has give a message throughout Odisha to replicate as part of rituals in the backdrop of last unfortunate incident on 31/05/2024 leading to death of so many peoples in Puri, I would request you to kindly emphasize the ban of firecrackers strictly in Puri and other parts of the state.

Warm regards

Sanjaya Kumar Nayak

Environmentalist

At/Po- Babanapur,Aska,Dist- Ganjam

Cell- 9439156446

Mail Delivery Subsystem <mailer-daemon@googlemail.com>

Sun, 20 Oct 2024 at 11:35

To: greenorganicdevelopment@gmail.com



Address not found

Your message wasn't delivered to **member.secy@ospboard.org** because the address couldn't be found or is unable to receive email.

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The response was:

550 5.1.1 The email account that you tried to reach does not exist. Please try double-checking the recipient's email address for typos or unnecessary spaces. For more information, go to <https://support.google.com/mail/?p=NoSuchUser> d75a77b69052e-460d398a5c8sor4529481cf.0 - gsmtip

----- Forwarded message -----

From: Sanjaya kumar Nayak <greenorganicdevelopment@gmail.com>

To: dgp.odpol@nic.in, csori@nic.in, member.secy@ospcboard.org, jagannath.or@nic.in

Cc:

Bcc:

Date: Sun, 20 Oct 2024 11:35:26 +0530

Subject: Regarding the ban on use of firecrackers in the eve of festive occasions and Diwali

----- Message truncated -----

Sanjaya kumar Nayak <greenorganicdevelopment@gmail.com>
To: paribesh1@ospcboard.org <paribesh1@ospcboard.org>

Sun, 20 Oct 2024 at 11:38

----- Forwarded message -----

From: **Sanjaya kumar Nayak** <greenorganicdevelopment@gmail.com>

Date: Sun, 20 Oct 2024, 11:35

Subject: Regarding the ban on use of firecrackers in the eve of festive occasions and Diwali

[Quoted text hidden]

[Quoted text hidden]

'Ban cracker explosions post poll results'

Ganjam green activist urges SEC

RAJEEV RATHAN
■ BRAHMAPUR

Sanjay Kumar Nayak, an environmentalist and founder of the Green Organic Development (GOD) Institute of Babanapur villager in Ganjam district presented a memorandum to the State Election Commission on Monday, urging a ban on the use of firecrackers during victory celebrations.

This year, the oppressive summer heat has exacerbated making life hellish both for the humans and wild lives. The wild animals in particular are struggling with a severe lack of oxygen and drinking wa-



ter. The use of firecrackers during electoral celebrations further endangers both humans and animals, leading to a deteriorating situation for the society as a whole.

In his request to the State Election Commission, Nayak demanded immediate action to prohibit the hazardous practice. The letter highlighted the tragic consequences of firecracker use re-

cently in Puri where several fatalities occurred, while over 15 people died in Sundergarh due to injuries caused by firecrackers.

"This practice poses a significant risk not only to human life but also to the environment," Nayak stated. "We must prioritize the safety and well-being of all living beings and protect our natural surroundings," he added.

Nayak's initiative has garnered widespread support and sparked a broader conversation about the impact of electoral celebrations on the environment. While his plea has inspired many, he also called on political parties to exercise restraint and avoid activities that could harm people and nature.

As the nation awaits the election results, Nayak's call to action serves as a stark reminder of the need to balance celebratory traditions with environmental and societal responsibilities. The proposed ban on firecrackers is seen as a necessary step towards ensuring the safety and sustainability of both human and wildlife populations during such significant national events.

Puri cracker blast toll touches 15

TNN | Jun 6, 2024, 03.45 PM IST



BHUBANESWAR: Toll in the Puri cracker blast on May 29 went up to 15 on Wednesday. The rise in deaths coincided with special relief commissioner Satyabrata Sahu starting his probe into the mishap at Narendra pond during the annual Chandan Yatra festival.

We also published the following articles recently

Puri cracker explosion toll rises to 6
Death toll in the explosion in Puri, Odisha rose to six as three more patients died of burn injuries. Locals illegally stored fireworks near Jagannath

Temple.110604114

Four men arrested in Puri cracker blast case, another on the run
Four men arrested for the May 29 cracker explosion at Narendra pond during Chandan Yatra festival. Accused supplied explosives illegally, leading to 13 deaths, including minors.110675581

Puri firecracker explosion: Toll mounts to eight, 22 others undergoing treatment
The death toll in the Puri firecracker explosion has reached eight, with two more fatalities. Chief Minister Naveen Patnaik has ordered an inquiry and announced an ex-gratia amount of Rs 4 lakh for the deceased's families.110615170

Blast in fire cracker making unit; four minors critical

POST NEWS NETWORK

Khallikote, Oct 19: Four minor boys were critically injured in an explosion at an illegal fire cracker manufacturing unit at Satabandha Sahi of Manikpur village under Khallikote police limits in Ganjam district Saturday.

The injured minors were identified as Prasad Gouda, Badal Gouda, Babula Gouda and Samir Duhudi, who are residents of Manikpur village.

According to sources, the blast occurred when the four boys were preparing fire crackers in a house at Satabandha Sahi in the village ahead of Diwali festival for sale.

The blast was so severe that



the tin roof of the house was blown up. One of the boys, Badal Gouda, was severely injured as one each of his legs and hands were also blown up in the explosion.

All the injured were immediately rushed to Khallikote hospital in a critical condition.

As their conditions deterio-

rated, all were forwarded to MKCG Medical College and Hospital at Berhampur for better treatment.

On being informed, Khallikote police along with a forensic team, bomb squad and fire brigade team rushed to the spot. An investigation into the incident is ongoing, said the police.



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

ANNEXURE-5

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

Station: Lingraj Mandir, Bhubaneswar - OSPCB

State: Odisha

City: Bhubaneswar

Parameter: PM2.5,PM10,NO,NO2,NOx,NH3,SO2,CO,Ozone,Benzene,Toluene,Eth-Benzene,MP-Xylene,O
Xylene,RH,WS,WD,SR,Xylene,AT,TOT-RF,RF

Average Period: 1 Hours

From: 12-11-2023T19:00:00Z 00:00

To: 14-11-2023T23:09:59Z 00:00

Prescribed Standards		0-60	0-100	0-80	0-80	0-80
Exceeding Standards		NA	NA	NA	NA	NA
Remarks						
From Date	To Date	PM2.5 (ug/m3)	PM10 (ug/m3)	NO (ug/m3)	NO2 (ug/m3)	NOx (ppb)
12-11-2023 19:00	12-11-2023 20:00	496.5	490.0	14.93	84.45	57.05
12-11-2023 20:00	12-11-2023 21:00	855.0	None	4.35	65.72	38.47
12-11-2023 21:00	12-11-2023 22:00	978.0	None	3.75	61.07	35.55
12-11-2023 22:00	12-11-2023 23:00	905.0	811.0	2.6	45.02	26.05
12-11-2023 23:00	13-11-2023 00:00	618.25	733.5	1.85	26.85	15.83
13-11-2023 00:00	13-11-2023 01:00	416.25	508.75	1.95	36.1	20.78
13-11-2023 01:00	13-11-2023 02:00	581.0	532.0	4.17	42.75	26.1
13-11-2023 02:00	13-11-2023 03:00	772.5	521.0	1.45	23.23	13.53
13-11-2023 03:00	13-11-2023 04:00	383.5	452.25	0.97	24.12	13.62
13-11-2023 04:00	13-11-2023 05:00	396.0	463.5	1.07	17.92	10.4
13-11-2023 05:00	13-11-2023 06:00	342.0	409.75	0.98	13.32	7.88
13-11-2023 06:00	13-11-2023 07:00	239.25	310.25	1.32	17.38	10.3
13-11-2023 07:00	13-11-2023 08:00	198.25	297.5	1.88	18.73	11.48
13-11-2023 08:00	13-11-2023 09:00	175.75	298.0	1.48	15.48	9.43
13-11-2023 09:00	13-11-2023 10:00	159.0	269.75	1.48	14.25	8.75
13-11-2023 10:00	13-11-2023 11:00	136.75	231.0	1.52	14.0	8.68
13-11-2023 11:00	13-11-2023 12:00	125.0	217.25	1.3	12.3	7.6
13-11-2023 12:00	13-11-2023 13:00	112.0	192.75	1.6	13.88	8.68



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

13-11-2023 13:00	13-11-2023 14:00	109.25	195.0	1.7	11.48	7.53
13-11-2023 14:00	13-11-2023 15:00	97.5	185.25	1.02	7.95	5.08
13-11-2023 15:00	13-11-2023 16:00	88.25	150.25	0.72	9.78	5.78
13-11-2023 16:00	13-11-2023 17:00	87.5	153.75	0.33	12.3	6.83
13-11-2023 17:00	13-11-2023 18:00	102.25	165.25	0.65	27.35	15.1
13-11-2023 18:00	13-11-2023 19:00	137.0	229.25	1.08	40.83	22.57
13-11-2023 19:00	13-11-2023 20:00	147.5	251.25	1.2	26.27	14.95
13-11-2023 20:00	13-11-2023 21:00	144.75	212.5	0.58	20.0	11.12
13-11-2023 21:00	13-11-2023 22:00	154.0	223.0	0.55	21.9	12.12
13-11-2023 22:00	13-11-2023 23:00	129.25	209.5	0.53	24.05	13.22
13-11-2023 23:00	14-11-2023 00:00	149.0	237.5	1.38	27.55	15.77
14-11-2023 00:00	14-11-2023 01:00	152.5	230.0	0.65	16.47	9.3
14-11-2023 01:00	14-11-2023 02:00	147.75	190.5	1.57	34.4	19.57
14-11-2023 02:00	14-11-2023 03:00	161.0	217.5	1.43	43.5	24.33
14-11-2023 03:00	14-11-2023 04:00	158.0	208.75	1.35	23.05	13.35
14-11-2023 04:00	14-11-2023 05:00	136.5	169.5	0.9	15.67	9.07
14-11-2023 05:00	14-11-2023 06:00	129.25	180.0	0.9	19.12	10.93
14-11-2023 06:00	14-11-2023 07:00	120.5	206.75	1.05	21.48	12.25
14-11-2023 07:00	14-11-2023 08:00	121.75	242.25	2.5	30.23	18.1
14-11-2023 08:00	14-11-2023 09:00	118.0	249.25	3.0	28.82	17.75
14-11-2023 09:00	14-11-2023 10:00	107.5	219.5	2.85	28.45	17.43
14-11-2023 10:00	14-11-2023 11:00	104.5	207.75	1.58	23.2	13.6
14-11-2023 11:00	14-11-2023 12:00	99.0	181.25	1.88	19.4	11.85
14-11-2023 12:00	14-11-2023 13:00	93.5	164.5	1.6	15.85	9.68
14-11-2023 13:00	14-11-2023 14:00	84.25	148.5	1.27	15.25	9.18
14-11-2023 14:00	14-11-2023 15:00	78.25	131.75	1.18	13.75	8.28
14-11-2023 15:00	14-11-2023 16:00	80.75	118.25	1.27	11.22	6.98
14-11-2023 16:00	14-11-2023 17:00	89.5	129.5	0.65	14.32	8.15
14-11-2023 17:00	14-11-2023 18:00	99.5	158.5	0.97	25.3	14.25



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

14-11-2023 18:00	14-11-2023 19:00	110.25	182.5	0.77	30.3	16.77
14-11-2023 19:00	14-11-2023 20:00	128.75	203.0	2.15	41.65	23.9
14-11-2023 20:00	14-11-2023 21:00	121.0	218.0	1.7	31.47	18.1
14-11-2023 21:00	14-11-2023 22:00	114.25	221.75	1.5	30.45	17.43
14-11-2023 22:00	14-11-2023 23:00	98.0	210.0	1.27	32.07	18.07
14-11-2023 23:00	14-11-2023 23:09	None	None	None	None	None
Prescribed Standards		0-400	0-80	0-4	0-180	0-5
Exceeding Standards		NA	NA	NA	NA	NA
Remarks						
From Date	To Date	NH3 (ug/m3)	SO2 (ug/m3)	CO (mg/m3)	Ozone (ug/m3)	Benzene (ug/m3)
12-11-2023 19:00	12-11-2023 20:00	22.8	128.23	3.97	26.25	5.55
12-11-2023 20:00	12-11-2023 21:00	26.57	104.97	3.56	38.95	4.68
12-11-2023 21:00	12-11-2023 22:00	27.73	81.92	3.71	34.05	3.98
12-11-2023 22:00	12-11-2023 23:00	36.6	49.8	3.66	52.75	4.2
12-11-2023 23:00	13-11-2023 00:00	39.97	28.12	2.76	72.15	4.25
13-11-2023 00:00	13-11-2023 01:00	41.52	20.55	1.95	33.8	4.55
13-11-2023 01:00	13-11-2023 02:00	40.43	21.32	1.86	37.0	5.3
13-11-2023 02:00	13-11-2023 03:00	37.27	13.62	1.74	52.02	3.88
13-11-2023 03:00	13-11-2023 04:00	37.45	10.97	1.65	50.3	4.65
13-11-2023 04:00	13-11-2023 05:00	37.6	11.3	1.59	46.55	3.8
13-11-2023 05:00	13-11-2023 06:00	35.67	10.27	1.59	55.95	3.45
13-11-2023 06:00	13-11-2023 07:00	29.32	10.93	1.8	69.45	3.52
13-11-2023 07:00	13-11-2023 08:00	33.38	11.9	1.86	93.62	4.12
13-11-2023 08:00	13-11-2023 09:00	32.9	12.15	1.74	108.72	3.55
13-11-2023 09:00	13-11-2023 10:00	30.23	12.02	1.65	122.28	3.17
13-11-2023 10:00	13-11-2023 11:00	26.4	12.45	1.61	121.5	3.02
13-11-2023 11:00	13-11-2023 12:00	24.95	13.15	1.47	127.7	2.55
13-11-2023 12:00	13-11-2023 13:00	26.68	13.82	1.48	133.0	2.15
13-11-2023 13:00	13-11-2023 14:00	28.52	11.75	1.47	131.62	2.03



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

13-11-2023 14:00	13-11-2023 15:00	21.58	9.88	1.36	132.3	1.77
13-11-2023 15:00	13-11-2023 16:00	17.67	9.25	1.37	128.73	1.68
13-11-2023 16:00	13-11-2023 17:00	17.3	8.6	1.52	112.3	1.82
13-11-2023 17:00	13-11-2023 18:00	21.55	9.6	1.95	76.3	2.95
13-11-2023 18:00	13-11-2023 19:00	21.83	9.55	2.05	53.92	5.35
13-11-2023 19:00	13-11-2023 20:00	20.9	9.22	1.52	71.9	4.58
13-11-2023 20:00	13-11-2023 21:00	19.43	9.6	1.51	76.38	3.25
13-11-2023 21:00	13-11-2023 22:00	18.38	10.6	1.62	77.9	2.98
13-11-2023 22:00	13-11-2023 23:00	18.33	11.73	1.62	77.57	3.35
13-11-2023 23:00	14-11-2023 00:00	18.12	8.8	1.7	64.9	3.5
14-11-2023 00:00	14-11-2023 01:00	20.9	7.97	1.42	82.9	3.1
14-11-2023 01:00	14-11-2023 02:00	20.17	7.03	1.66	28.33	3.17
14-11-2023 02:00	14-11-2023 03:00	18.3	6.7	1.56	24.62	4.1
14-11-2023 03:00	14-11-2023 04:00	19.35	6.8	1.31	52.7	3.22
14-11-2023 04:00	14-11-2023 05:00	20.02	8.62	1.25	68.48	2.45
14-11-2023 05:00	14-11-2023 06:00	19.2	10.68	1.36	68.62	2.3
14-11-2023 06:00	14-11-2023 07:00	19.55	22.95	1.58	74.38	2.4
14-11-2023 07:00	14-11-2023 08:00	20.53	32.4	1.78	75.78	3.2
14-11-2023 08:00	14-11-2023 09:00	17.88	26.32	1.61	103.27	2.9
14-11-2023 09:00	14-11-2023 10:00	21.27	21.08	1.61	116.58	2.9
14-11-2023 10:00	14-11-2023 11:00	21.62	16.55	1.5	125.33	3.25
14-11-2023 11:00	14-11-2023 12:00	20.38	15.43	1.44	130.55	2.65
14-11-2023 12:00	14-11-2023 13:00	18.85	10.93	1.38	132.32	1.82
14-11-2023 13:00	14-11-2023 14:00	16.9	10.15	1.32	140.6	1.55
14-11-2023 14:00	14-11-2023 15:00	16.12	10.4	1.27	144.53	1.43
14-11-2023 15:00	14-11-2023 16:00	15.43	10.72	1.3	145.1	1.6
14-11-2023 16:00	14-11-2023 17:00	17.78	10.38	1.49	118.75	1.77
14-11-2023 17:00	14-11-2023 18:00	18.07	9.92	1.73	86.28	2.67
14-11-2023 18:00	14-11-2023 19:00	17.45	10.65	1.75	75.42	4.0



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

14-11-2023 19:00	14-11-2023 20:00	17.77	10.32	2.29	59.73	4.83
14-11-2023 20:00	14-11-2023 21:00	18.67	10.23	1.89	76.57	5.63
14-11-2023 21:00	14-11-2023 22:00	16.82	10.3	1.83	82.05	3.65
14-11-2023 22:00	14-11-2023 23:00	16.13	10.47	2.03	71.33	3.47
14-11-2023 23:00	14-11-2023 23:09	None	None	None	None	None
Prescribed Standards		0-5	0-5	0-5	NA	
Exceeding Standards		NA	NA	NA	NA	NA
Remarks						
From Date	To Date	Toluene (ug/m3)	Eth-Benzene (ug/m3)	MP-Xylene (ug/m3)	O Xylene (ug/m3)	RH (%)
12-11-2023 19:00	12-11-2023 20:00	17.52	2.93	4.38	68.0	
12-11-2023 20:00	12-11-2023 21:00	13.15	2.1	3.22	72.5	
12-11-2023 21:00	12-11-2023 22:00	9.88	1.38	2.08	75.0	
12-11-2023 22:00	12-11-2023 23:00	11.15	1.77	2.35	75.75	
12-11-2023 23:00	13-11-2023 00:00	12.15	1.33	2.4	77.0	
13-11-2023 00:00	13-11-2023 01:00	10.53	1.12	2.08	82.0	
13-11-2023 01:00	13-11-2023 02:00	15.68	2.15	3.48	81.75	
13-11-2023 02:00	13-11-2023 03:00	12.85	1.3	2.1	83.25	
13-11-2023 03:00	13-11-2023 04:00	13.35	1.9	2.62	85.25	
13-11-2023 04:00	13-11-2023 05:00	10.15	1.35	1.8	86.75	
13-11-2023 05:00	13-11-2023 06:00	8.93	1.28	1.15	86.75	
13-11-2023 06:00	13-11-2023 07:00	8.6	0.95	1.42	83.5	
13-11-2023 07:00	13-11-2023 08:00	9.65	1.45	2.05	76.5	
13-11-2023 08:00	13-11-2023 09:00	7.55	0.85	1.4	70.0	
13-11-2023 09:00	13-11-2023 10:00	7.1	0.8	1.25	65.0	
13-11-2023 10:00	13-11-2023 11:00	7.47	0.82	1.25	61.75	
13-11-2023 11:00	13-11-2023 12:00	7.35	0.7	1.08	53.0	
13-11-2023 12:00	13-11-2023 13:00	6.7	0.5	0.85	48.75	
13-11-2023 13:00	13-11-2023 14:00	7.45	0.55	1.2	46.0	
13-11-2023 14:00	13-11-2023 15:00	6.28	0.52	0.75	47.0	



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

13-11-2023 15:00	13-11-2023 16:00	5.92	0.47	0.68	49.75	
13-11-2023 16:00	13-11-2023 17:00	7.58	1.4	1.05	55.0	
13-11-2023 17:00	13-11-2023 18:00	11.95	1.75	1.98	60.0	
13-11-2023 18:00	13-11-2023 19:00	20.2	3.25	4.5	64.25	
13-11-2023 19:00	13-11-2023 20:00	14.98	2.4	3.42	68.75	
13-11-2023 20:00	13-11-2023 21:00	11.55	1.25	1.95	68.5	
13-11-2023 21:00	13-11-2023 22:00	10.1	1.02	2.02	70.5	
13-11-2023 22:00	13-11-2023 23:00	11.85	1.73	2.87	73.0	
13-11-2023 23:00	14-11-2023 00:00	12.2	1.8	3.0	75.25	
14-11-2023 00:00	14-11-2023 01:00	12.0	0.28	2.38	78.25	
14-11-2023 01:00	14-11-2023 02:00	11.35	1.25	2.15	84.5	
14-11-2023 02:00	14-11-2023 03:00	16.12	1.07	3.5	85.25	
14-11-2023 03:00	14-11-2023 04:00	11.1	1.25	2.3	81.25	
14-11-2023 04:00	14-11-2023 05:00	7.15	0.85	1.15	77.75	
14-11-2023 05:00	14-11-2023 06:00	6.45	0.67	0.9	75.5	
14-11-2023 06:00	14-11-2023 07:00	6.68	0.47	1.07	70.0	
14-11-2023 07:00	14-11-2023 08:00	9.2	1.02	2.0	63.5	
14-11-2023 08:00	14-11-2023 09:00	7.92	0.85	1.7	56.25	
14-11-2023 09:00	14-11-2023 10:00	8.08	1.05	1.7	53.75	
14-11-2023 10:00	14-11-2023 11:00	8.65	1.05	1.8	49.75	
14-11-2023 11:00	14-11-2023 12:00	7.65	0.83	1.35	49.5	
14-11-2023 12:00	14-11-2023 13:00	6.83	0.68	0.77	45.0	
14-11-2023 13:00	14-11-2023 14:00	6.42	0.5	0.68	41.0	
14-11-2023 14:00	14-11-2023 15:00	5.6	0.33	0.53	42.5	
14-11-2023 15:00	14-11-2023 16:00	5.27	0.15	0.5	47.0	
14-11-2023 16:00	14-11-2023 17:00	5.2	0.2	0.55	51.0	
14-11-2023 17:00	14-11-2023 18:00	8.93	0.12	1.45	56.25	
14-11-2023 18:00	14-11-2023 19:00	13.77	0.17	2.9	61.75	
14-11-2023 19:00	14-11-2023 20:00	18.52	0.08	4.53	63.75	



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

14-11-2023 20:00	14-11-2023 21:00	24.93	1.63	6.93	64.0	
14-11-2023 21:00	14-11-2023 22:00	15.22	0.75	4.17	64.75	
14-11-2023 22:00	14-11-2023 23:00	15.9	1.97	4.5	67.0	
14-11-2023 23:00	14-11-2023 23:09	None	None	None	None	
Prescribed Standards		NA	NA	NA	0-5	NA
Exceeding Standards		NA	NA	NA	NA	NA
Remarks						
From Date	To Date	WS (m/s)	WD (degree)	SR (W/mt2)	Xylene (ug/m3)	AT (degree C)
12-11-2023 19:00	12-11-2023 20:00	0.6	48.75	14.5	None	28.98
12-11-2023 20:00	12-11-2023 21:00	0.57	85.25	14.25	None	28.3
12-11-2023 21:00	12-11-2023 22:00	0.22	121.75	14.0	None	27.73
12-11-2023 22:00	12-11-2023 23:00	0.25	53.0	14.0	None	27.38
12-11-2023 23:00	13-11-2023 00:00	0.27	103.0	14.25	None	27.05
13-11-2023 00:00	13-11-2023 01:00	0.28	270.25	14.25	None	26.52
13-11-2023 01:00	13-11-2023 02:00	0.3	64.25	14.0	None	26.25
13-11-2023 02:00	13-11-2023 03:00	0.43	348.5	14.0	None	26.23
13-11-2023 03:00	13-11-2023 04:00	0.55	259.0	14.0	None	25.82
13-11-2023 04:00	13-11-2023 05:00	0.98	93.5	13.5	None	25.45
13-11-2023 05:00	13-11-2023 06:00	1.05	6.25	21.75	None	25.25
13-11-2023 06:00	13-11-2023 07:00	0.9	12.25	129.75	None	25.7
13-11-2023 07:00	13-11-2023 08:00	1.35	20.25	179.5	None	26.62
13-11-2023 08:00	13-11-2023 09:00	1.6	22.75	237.0	None	27.43
13-11-2023 09:00	13-11-2023 10:00	1.75	35.75	318.5	None	28.25
13-11-2023 10:00	13-11-2023 11:00	1.65	36.5	362.25	None	29.2
13-11-2023 11:00	13-11-2023 12:00	1.85	34.0	338.75	None	30.27
13-11-2023 12:00	13-11-2023 13:00	1.78	36.75	345.25	None	30.98
13-11-2023 13:00	13-11-2023 14:00	1.8	31.25	330.25	None	31.35
13-11-2023 14:00	13-11-2023 15:00	1.55	51.0	227.25	None	31.35
13-11-2023 15:00	13-11-2023 16:00	1.18	49.5	147.5	None	31.1



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

13-11-2023 16:00	13-11-2023 17:00	0.88	56.0	56.5	None	30.18
13-11-2023 17:00	13-11-2023 18:00	0.53	51.0	14.25	None	29.43
13-11-2023 18:00	13-11-2023 19:00	0.52	80.5	13.75	None	28.92
13-11-2023 19:00	13-11-2023 20:00	0.57	96.75	14.0	None	28.1
13-11-2023 20:00	13-11-2023 21:00	0.55	94.75	14.0	None	27.75
13-11-2023 21:00	13-11-2023 22:00	0.53	69.25	14.25	None	27.27
13-11-2023 22:00	13-11-2023 23:00	0.5	52.25	14.0	None	26.85
13-11-2023 23:00	14-11-2023 00:00	0.22	144.67	14.0	None	26.52
14-11-2023 00:00	14-11-2023 01:00	0.22	137.0	14.0	None	26.12
14-11-2023 01:00	14-11-2023 02:00	0.33	329.75	13.25	None	25.6
14-11-2023 02:00	14-11-2023 03:00	0.55	349.25	13.0	None	25.12
14-11-2023 03:00	14-11-2023 04:00	0.82	264.0	13.0	None	25.0
14-11-2023 04:00	14-11-2023 05:00	1.03	1.25	12.75	None	25.27
14-11-2023 05:00	14-11-2023 06:00	1.18	4.25	24.75	None	25.2
14-11-2023 06:00	14-11-2023 07:00	1.12	11.5	152.25	None	25.65
14-11-2023 07:00	14-11-2023 08:00	1.57	9.5	227.25	None	26.43
14-11-2023 08:00	14-11-2023 09:00	1.68	15.75	326.0	None	27.65
14-11-2023 09:00	14-11-2023 10:00	1.75	27.5	382.5	None	28.52
14-11-2023 10:00	14-11-2023 11:00	1.67	36.5	420.5	None	29.38
14-11-2023 11:00	14-11-2023 12:00	1.8	43.0	379.75	None	29.55
14-11-2023 12:00	14-11-2023 13:00	1.73	39.25	477.5	None	30.35
14-11-2023 13:00	14-11-2023 14:00	1.75	47.75	376.25	None	30.78
14-11-2023 14:00	14-11-2023 15:00	1.62	69.0	258.75	None	30.8
14-11-2023 15:00	14-11-2023 16:00	1.25	70.0	141.0	None	30.33
14-11-2023 16:00	14-11-2023 17:00	0.73	84.5	65.25	None	29.52
14-11-2023 17:00	14-11-2023 18:00	0.4	79.5	12.25	None	28.48
14-11-2023 18:00	14-11-2023 19:00	0.33	87.0	12.0	None	27.68
14-11-2023 19:00	14-11-2023 20:00	0.35	55.0	12.0	None	27.2
14-11-2023 20:00	14-11-2023 21:00	0.57	56.0	12.0	None	26.97



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

14-11-2023 21:00	14-11-2023 22:00	0.6	40.75	12.0	None	26.55
14-11-2023 22:00	14-11-2023 23:00	0.47	33.0	12.0	None	26.2
14-11-2023 23:00	14-11-2023 23:09	None	None	None	None	None
Prescribed Standards		NA	NA			
Exceeding Standards		NA	NA			
Remarks						
From Date	To Date	RF (mm)	TOT-RF (mm)			
12-11-2023 19:00	12-11-2023 20:00	0.0	0.0			
12-11-2023 20:00	12-11-2023 21:00	0.0	0.0			
12-11-2023 21:00	12-11-2023 22:00	0.0	0.0			
12-11-2023 22:00	12-11-2023 23:00	0.0	0.0			
12-11-2023 23:00	13-11-2023 00:00	0.0	0.0			
13-11-2023 00:00	13-11-2023 01:00	0.0	0.0			
13-11-2023 01:00	13-11-2023 02:00	0.0	0.0			
13-11-2023 02:00	13-11-2023 03:00	0.0	0.0			
13-11-2023 03:00	13-11-2023 04:00	0.0	0.0			
13-11-2023 04:00	13-11-2023 05:00	0.0	0.0			
13-11-2023 05:00	13-11-2023 06:00	0.0	0.0			
13-11-2023 06:00	13-11-2023 07:00	0.0	0.0			
13-11-2023 07:00	13-11-2023 08:00	0.0	0.0			
13-11-2023 08:00	13-11-2023 09:00	0.0	0.0			
13-11-2023 09:00	13-11-2023 10:00	0.0	0.0			
13-11-2023 10:00	13-11-2023 11:00	0.0	0.0			
13-11-2023 11:00	13-11-2023 12:00	0.0	0.0			
13-11-2023 12:00	13-11-2023 13:00	0.0	0.0			
13-11-2023 13:00	13-11-2023 14:00	0.0	0.0			
13-11-2023 14:00	13-11-2023 15:00	0.0	0.0			
13-11-2023 15:00	13-11-2023 16:00	0.0	0.0			
13-11-2023 16:00	13-11-2023 17:00	0.0	0.0			



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

13-11-2023 17:00	13-11-2023 18:00	0.0	0.0			
13-11-2023 18:00	13-11-2023 19:00	0.0	0.0			
13-11-2023 19:00	13-11-2023 20:00	0.0	0.0			
13-11-2023 20:00	13-11-2023 21:00	0.0	0.0			
13-11-2023 21:00	13-11-2023 22:00	0.0	0.0			
13-11-2023 22:00	13-11-2023 23:00	0.0	0.0			
13-11-2023 23:00	14-11-2023 00:00	0.0	0.0			
14-11-2023 00:00	14-11-2023 01:00	0.0	0.0			
14-11-2023 01:00	14-11-2023 02:00	0.0	0.0			
14-11-2023 02:00	14-11-2023 03:00	0.0	0.0			
14-11-2023 03:00	14-11-2023 04:00	0.0	0.0			
14-11-2023 04:00	14-11-2023 05:00	0.0	0.0			
14-11-2023 05:00	14-11-2023 06:00	0.0	0.0			
14-11-2023 06:00	14-11-2023 07:00	0.0	0.0			
14-11-2023 07:00	14-11-2023 08:00	0.0	0.0			
14-11-2023 08:00	14-11-2023 09:00	0.0	0.0			
14-11-2023 09:00	14-11-2023 10:00	0.0	0.0			
14-11-2023 10:00	14-11-2023 11:00	0.0	0.0			
14-11-2023 11:00	14-11-2023 12:00	0.0	0.0			
14-11-2023 12:00	14-11-2023 13:00	0.0	0.0			
14-11-2023 13:00	14-11-2023 14:00	0.0	0.0			
14-11-2023 14:00	14-11-2023 15:00	0.0	0.0			
14-11-2023 15:00	14-11-2023 16:00	0.0	0.0			
14-11-2023 16:00	14-11-2023 17:00	0.0	0.0			
14-11-2023 17:00	14-11-2023 18:00	0.0	0.0			
14-11-2023 18:00	14-11-2023 19:00	0.0	0.0			
14-11-2023 19:00	14-11-2023 20:00	0.0	0.0			
14-11-2023 20:00	14-11-2023 21:00	0.0	0.0			
14-11-2023 21:00	14-11-2023 22:00	0.0	0.0			



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CENTRAL POLLUTION CONTROL BOARD
CONTINUOUS AMBIENT AIR QUALITY

Date: Tuesday, Nov 14 2023

Time: 11:14:05 PM

14-11-2023 22:00	14-11-2023 23:00	0.0	0.0			
14-11-2023 23:00	14-11-2023 23:09	None	0.0			

REPORTABLE**IN THE SUPREME COURT OF INDIA****CIVIL ORIGINAL JURISDICTION****IA NOS. 6 AND 8 OF 2016****IA NOS. 10, 11, 80176, 96202, 109668, 109720 AND 122778 OF 2017****IA NOS. 68888 AND 68897 OF 2018****IN****WRIT PETITION (CIVIL) NO. 728 OF 2015**

ARJUN GOPAL AND OTHERSAPPELLANT(S)

VERSUS

UNION OF INDIA AND OTHERSRESPONDENT(S)

WITH**WRIT PETITION (CIVIL) NO. 891 OF 2016****WRIT PETITION (CIVIL) NO. 895 OF 2016****WRIT PETITION (CIVIL) NO. 899 OF 2016****AND****WRIT PETITION (CIVIL) NO. 213 OF 2017****J U D G M E N T****A.K. SIKRI, J.**

Writ Petition (Civil) No. 728 of 2015 was filed on September 24, 2015 on behalf of three infants, who are made petitioners in this writ petition. Petitioner No.1 and 2, on the date of filing of this

writ petition, were six months old and petitioner No.3 was fourteen months old. This petition has been filed through their next friends, i.e. their fathers, who are concerned about the health of their children as they feel that due to the alarming degradation of the air quality, leading to severe air pollution in the city of Delhi (where these petitioners reside), the petitioners may encounter various health hazards. Poor, very poor or severe air quality/air pollution affects all citizens, irrespective of their age. However, claim the petitioners, children are much more vulnerable to air pollutants as exposure thereto may affect them in various ways, including aggravation of asthma, coughing, bronchitis, retarded nervous system breakdown and even cognitive impairment. The petition accepts that there are number of reasons which have contributed to poor air quality in Delhi and National Capital Region (for short, 'NCR'). At the same time, it is emphasised that air pollution hits its nadir during *Diwali* time because of indiscriminate use of firecrackers, the chemical composition whereof increases harmful particulate matters such as PM_{2.5} or PM₁₀ at alarming level thereby bringing the situation of 'emergency'. The petitioners have, thus, prayed for direction to the official respondents to take possible measures for checking the pollution by striking at the causes of the pollution, which

includes seasonal crop burning, indiscriminate dumping of dust/*malba* and other pollutants, etc. The prayer also includes banning the use, in any form, of firecrackers, sparkles and minor explosives, in any form, during festivals or otherwise.

2) This petition came up for preliminary hearing on October 08, 2015 when notice was issued and the matter was directed to be listed on October 16, 2015 at 2:00 p.m. since the petitioners wanted stay on burning of crackers during Diwali, which was around the corner in that year. When the matter was taken up on October 16, 2015, certain suggestions were made by the learned counsel appearing for the petitioners, which were as under:

- “1. Restrict licenses to low hazard fireworks.
2. Period of grant of license is too early – need not be from 2 days prior to Dussehra.
3. Restrict window for use of fireworks to be from 7:00 p.m. to 9:00 p.m.
4. RWAs to hold community fireworks for a brief period of 30 minutes on a single day.
5. Government be directed to give wide publicity to the ill effects of fireworks and encourage restraint on responsible use.
6. Encourage teachers to tell students not to buy and use fireworks.”

3) Suggestion Nos. 5 and 6 were accepted and the relevant portion of the order that was passed reads as under:

“In our view for the present, if we accept suggestion Nos. 5 and 6 it will not in any way affect the interest of the respondents.

Shri Ranjit Kumar, learned Solicitor General appearing for the Union of India states that the Union Government has already taken enough and effective steps to give wide publicity to the ill effects of fireworks.

In spite of the submission so made by the learned Solicitor General, we intend to pass the following order:

“The Union Government and all the State Governments will give wide publicity both in print and Electronic media to the ill effects of fireworks and advise people accordingly.

We also direct the Teachers/Lecturers/Assistant Professors/ Professors of the Schools and Colleges to educate the students about the ill effects of the fireworks.”

- 4) Thereafter, this petition was taken up along with certain other connected petitions, including Writ Petition (Civil) No. 13029 of 1985 titled '*M.C. Mehta v. Union of India*' and orders dated December 16, 2015 were passed issuing several directions with a view to reducing the levels of air pollution within the NCR, as the issues in those writ petitions pertained to air pollution in Delhi and NCR as well. It may be mentioned that the directions issued therein were general in nature though concerning the problem of air pollution. Thereafter also the instant writ petition, along with the *M.C. Mehta* case and other cases, came up for hearing and it is not necessary to take note of all those orders.

- 5) Pertinently, during *Diwali* of 2016, which was celebrated on October 30, 2016, the air quality in Delhi and NCR worsened alarmingly. In fact, certain reports indicated that the air quality standards in early November of that year were the worst in the world. This prompted the Court to take up IA No.4 filed in this writ petition. After hearing the parties, it passed orders dated November 11, 2016.

- 6) The petitioners had pressed for interim relief in respect of fireworks, drawing the attention of this Court to the emergent situation that has resulted in worsening the air quality standards in Delhi and National Capital Region (NCR) because of extensive use of fireworks, including firecrackers during *Diwali* last year. It was pointed out that onset of winter itself deteriorates air quality in this region and it gets aggravated because of festival/marriage season that occurs during these very months. Taking note of the aforesaid factors, particularly impact of fireworks on the ambient air and unhealthy effects thereof which had created unprecedented situation in Delhi, with air pollution going up at alarming levels and making it the most polluted city in the world, the order dated November 11, 2016 was passed. Air pollution had gone up to 29 times above the World Health Organisation

(WHO) standards. In the aforesaid scenario, this Court deemed it proper to pass certain directions vide its order dated November 11, 2016 in IA No.4. Snapping the supply chain of fireworks was considered to be the more practical way of addressing the menace instead of banning the burning the crackers by individuals as it would have been difficult to monitor and enforce the burning of the crackers by the citizenry.

- 7) In paragraph 18 of the Order dated November 11, 2016 it was clarified that much was left to be heard, discussed and said about the rival claims and contentions. However, the Court hastened to add that harmful effects of fireworks on the ambient air and the lungs, eyes and ears of people was also an acknowledged fact, as can be seen from the following portion of the said paragraph:

“18. We are aware that we are only issuing interim directions, and much is left to be heard, discussed and said about the rival claims and contentions. What is however indisputable is that the harmful effects of fireworks on the ambient air and the lungs, eyes and ears of people. What is also obvious is the extreme nuisance, noise the fireworks cause to citizens particularly the ailing and the aged. Therefore, though much can be argued as always about the significance and even joy of bursting fireworks, but at the same time (*sic*), *prima facie*, a just constitutional balance must overwhelmingly prioritize the harmful effects of this hazardous air on present and future generations, irreversible and imperceptible as they are, over the immediate commercial constraints of the manufacturers and suppliers of fireworks...”

8) In the process, this Court also recognised the duty of the State to ensure a healthy environment in terms of Article 48A of the Constitution of India as well as the duty of the citizens to ensure the same under Article 51A(g) of the Constitution. The Court also reminded itself of the “precautionary principle” which mandates that 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. In the order the Court had taken note of the deleterious effects of air pollution on the health of the people, particularly the children. Going by all these considerations, the Court passed the following directions:

“19. We thus consider it inappropriate that explosives which are used as fireworks should be available in the market in the NCR till further orders. The mechanism of the law in this regard is clear. Rule 118 of the Explosive Rules, 2008, framed under the Explosives Act, 1884, provides for the manner in which licenses issued under the Explosives Act to store and sell explosives could be suspended or cancelled. Sub-Rule (5) thereof specifically confers on the Central Government a power to suspend or cancel a license if it considers that it is in public interest. This provision also makes it clear that an opportunity to hear the licensee could be dispensed with if the Central Government considers that in public interest. This Court finds that the grave air quality situation in NCR is one such case, where this Court, can intervene and suspend the licenses to store and sell fireworks in the NCR. 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.

20. In addition to the above, we direct the CPCB to study and prepare a report on the harmful effects of the materials which are currently being used in the manufacture of fireworks. The report shall be submitted within a period of three months to this Court.”

- 9) Since direction was given to the Central Pollution Control Board (CPCB) to study and prepare a report of the harmful effects of the materials which are currently being used in the manufacture of fireworks and submit a report within three months, the matter was taken up for consideration thereafter from time to time.
- 10) Thereafter, the manufacturers of firecrackers as well as license holders also filed applications for modification of the aforesaid interim order. It included IA No. 52448 of 2017. Because of these applications, the matter was heard by a Bench of this Court and orders dated September 12, 2017 were passed in the aforesaid IA. In this order also, the Court recognised severity of air pollution in Delhi and NCR. The Court also discussed the manner in which air quality had worsened due to fireworks during *Diwali* days in the year 2016. The Court took note of the steps that were taken by different authorities aiming to reduce air

pollution after the passing of orders dated November 11, 2016; the legal provisions contained in the Explosives Act, 1884 and the Explosive Rules, 2008 framed thereunder; and further steps which were needed in this behalf to reduce the pollution in Delhi and NCR. The Court took note of the fact that number of measures were required to be taken for improving air quality as various factors were contributing to the air pollution. It also specifically mentioned that one of the reasons was burning of crackers/fireworks during *Diwali*. On that basis, the Court also accepted that one of the possible methods for reducing it during *Diwali* is by continuing the suspension of licenses for the sale of fireworks, thereby implicitly prohibiting the bursting of fireworks. However, at the same time, the Court expressed the opinion that continuing the suspension of licenses might be too radical a step to take for the present. It was deemed appropriate to adopt a graded and balanced approach, which is necessary, that will reduce and gradually eliminate air pollution in Delhi and in the NCR caused by the bursting of fireworks. In the process, the Court took into consideration the interest of those who had already been granted a valid permanent licence to possess and sell fireworks in Delhi and the NCR. We would like to reproduce the following paragraphs from the said order:

“67. The right to health coupled with the right to breathe clean air leaves no manner of doubt that it is important that air pollution deserves to be eliminated and one of the possible methods of reducing it during Diwali is by continuing the suspension of licences for the sale of fireworks and therefore implicitly, prohibiting the bursting of fireworks.

68. In our considered opinion, continuing the suspension of licences might be too radical a step to take for the present – a graded and balanced approach is necessary that will reduce and gradually eliminate air pollution in Delhi and in the NCR caused by the bursting of fireworks. At the same time it is necessary to ensure that injustice is not caused to those who have already been granted a valid permanent licence to possess and sell fireworks in Delhi and the NCR. The graded and balanced approach is not intended to dilute our primary concern which is and remains the health of everybody and the human right to breathe good quality air or at least not be compelled to breathe poor quality air. Generally speaking this must take precedence over the commercial or other interest of the applicant and those granted a permanent licence to possess and sell fireworks.

69. But, from the material before us, it cannot be said with any great degree of certainty that the extremely poor quality of air in Delhi in November and December 2016 was the result only of bursting fireworks around Diwali. Certainly, there were other causes as well, but even so the contribution of the bursting of fireworks cannot be glossed over. Unfortunately, neither is it possible to give an accurate or relative assessment of the contribution of the other identified factors nor the contribution of bursting fireworks to the poor air quality in Delhi and in the NCR. Consequently, a complete ban on the sale of fireworks would be an extreme step that might not be fully warranted by the facts available to us. There is, therefore, some justification for modifying the interim order passed on 11th November, 2016 and lifting the suspension of the permanent licences.

70. At the same time, it cannot be forgotten that admittedly there is a huge quantity of fireworks in Delhi and in the NCR and the figure has been provided to us by the applicant. Similarly, there can be no doubt that the Delhi Police had issued a large number of temporary licences in

2016 and it would not be unreasonable to assume that around and during Diwali, there would have been some illegal temporary shops set up, whether known or not known to the police. We do not have the figures with regard to the NCR, but we assume that like in Delhi, a large number of temporary licences have been issued for the possession and sale of fireworks. Therefore, there is a need to regulate the availability and sale of fireworks in Delhi and the NCR.”

11) It was followed by the following directions:

“71. As mentioned above, the health of the people in Delhi and in the NCR must take precedence over any commercial or other interest of the applicant or any of the permanent licensees and, therefore, a graded regulation is necessary which would eventually result in a prohibition. Taking all factors into consideration, we are of the view that the following orders and directions are required to be issued and we do so:

(1) The directions issued by this Court in **Sadar Bazar Fire Works (Pucca Shop) Association** shall stand partially modified to the extent that they are not in conformity with the Explosives Rules which shall be implemented in full by the concerned authorities. Safety from fire hazards is one of our concerns in this regard.

(2) Specifically, Rule 15 relating to marking on explosives and packages and Rule 84 relating to temporary shops for possession and sale of fireworks during festivals of the Explosives Rules shall be strictly enforced. This should not be construed to mean that the other Rules need not be enforced – all Rules should be enforced. But if the fireworks do not conform to the requirements of Rules 15 and 84, they cannot be sold in the NCR, including Delhi and this prohibition is absolute.

(3) The directions issued and restrictions imposed in the order passed by this Court on 18th July, 2005 in **Noise Pollution (V)** shall continue to be in force.

(4) The concerned police authorities and the District Magistrates will ensure that fireworks are not burst in silence zones that is, an area at least 100 meters away from hospitals, nursing homes, primary and district health-

care centres, educational institutions, courts, religious places or any other area that may be declared as a silence zone by the concerned authorities.

(5) The Delhi Police is directed to reduce the grant of temporary licences by about 50% of the number of licences granted in 2016. The number of temporary licences should be capped at 500. Similarly, the States in the NCR are restrained from granting more than 50% of the number of temporary licences granted in 2016. The area of distribution of the temporary licences is entirely for the authorities to decide.

(6) The Union of India will ensure strict compliance with the Notification GSR No. 64(E) dated 27th January, 1992 regarding the ban on import of fireworks. The Union of India is at liberty to update and revise this notification in view of the passage of time and further knowledge gained over the last 25 years and issue a fresh notification, if necessary.

(7) The Department of Education of the Government of NCT of Delhi and the corresponding Department in other States in the NCR shall immediately formulate a plan of action, in not more than 15 days, to reach out to children in all the schools through the school staff, volunteers and NGOs to sensitize and educate school children on the health hazards and ill-effects of breathing polluted air, including air that is polluted due to fireworks. School children should be encouraged to reduce, if not eliminate, the bursting of fireworks as a part of any festivities.

(8) The Government of NCT of Delhi and other States in the NCR may consider interacting with established medical institutions for issuing advisories cautioning people about the health hazards of bursting fireworks.

(9) The interim direction issued by this Court on 31st July, 2017 prohibiting the use of compounds of antimony, lithium, mercury, arsenic and lead in the manufacture of fireworks is made absolute. In addition, the use of strontium chromate in the manufacture of fireworks is prohibited.

(10) Fireworks containing aluminum, sulphur, potassium and barium may be sold in Delhi and in the NCR, provided the composition already approved by PESO is maintained.

It is the responsibility of PESO to ensure compliance of the standards it has formulated.

(11) Since there are enough fireworks available for sale in Delhi and the NCR, the transport of fireworks into Delhi and the NCR from outside the region is prohibited and the concerned law enforcement authorities will ensure that there is no further entry of fireworks into Delhi and the NCR till further orders. In our opinion, even 50,00,000 kg of fireworks is far more than enough for Dussehra and Diwali in 2017. The permanent licensees are at liberty to exhaust their existing stock of fireworks in Delhi and the NCR and, if that is not possible, take measures to transport the stocks outside Delhi and the NCR.

(12) The suspension of permanent licences as directed by the order dated 11th November, 2016 is lifted for the time being. This might require a review after Diwali depending on the ambient air quality post Diwali. However, it is made explicit that the sale of fireworks by the permanent licensees must conform to the directions given above and must be fully in compliance with the Explosives Rules. We were informed that the permanent licences were issued by PESO and therefore the responsibility is on PESO to ensure compliance.

(13) While lifting the suspension on the permanent licences already granted, we put these licensees on notice for Dussehra and Diwali in 2018 that they will be permitted to possess and sell only 50% of the quantity permitted in 2017 and that this will substantially reduce over the next couple of years. The permanent licensees are at liberty to file objections to this proposed direction within 30 days from today and thereafter the objections if any will be heard and decided. If no objections are filed, this direction will become absolute without any further reference to any licensee.

(14) Since there is a lack of clarity on the safety limits of various metals and constituents used in fireworks, a research study must be jointly carried out by the CPCB and the FRDC laying down appropriate standards for ambient air quality in relation to the bursting of fireworks and the release of their constituents in the air. While Schedule VII of the Environment (Protection) Rules, 1986 does deal with several metals, but as we have seen there are several other metals or constituents of fireworks that have not been

studied by the CPCB and no standards have been laid down with regard to the concentration of these metals or constituents in the ambient air. The CPCB has assured us that it will complete the exercise by 15th September, 2017 but keeping in mind its track record subsequent to the order dated 11th November, 2016 this does not seem possible. Therefore, we grant time to the CPCB to come out with definite standards on or before 30th September, 2017.

(15) In any event, a research study also needs to be conducted on the impact of bursting fireworks during Dussehra and Diwali on the health of the people. We, therefore, appoint a Committee to be chaired by the Chairperson of the CPCB and consisting of officers at the appropriate level from the National Physical Laboratory, Delhi, the Defence Institute of Physiology and Allied Sciences, Timarpur, Delhi, the Indian Institute of Technology-Kanpur, scientists from the State Pollution Control Boards, the Fire Development and Research Centre, Sivakasi and Nagpur and the National Environment Engineering Research Institute (NEERI) nominated by the Chairperson of the CPCB to submit a report in this regard preferably on or before 31st December, 2017.

(16) Keeping in mind the adverse effects of air pollution, the human right to breathe clean air and the human right to health, the Central Government and other authorities should consider encouraging display fireworks through community participation rather than individual bursting of fireworks.”

- 12) After the aforesaid order was passed, many applications were filed, from both sides, seeking modification of some of the aforesaid directions. Insofar as the petitioners are concerned, in their application for modification, they prayed for removal of Directions Nos. 5 and 10 to 13, which was in essence a prayer for restoration of earlier order dated November 11, 2016. Insofar as fireworks manufacturers, traders and license holders of the

fireworks/firecrackers are concerned, they wanted that relaxation given in the order dated September 12, 2017 be further liberalised.

- 13) After hearing both the parties, orders dated October 09, 2017 were passed. The Court accepted the fact that burning of firecrackers during *Diwali* was not the only reason for air pollution in Delhi and NCR and there was a need to tackle those factors as well. However, it was observed that the immediate impact of use of fireworks and firecrackers bursting during *Diwali* is an altogether different aspect. The Court noted that there is direct evidence of deterioration of air quality at alarming levels, which happens every year. Burning of these firecrackers during *Diwali* in 2016 had shot up PM levels by three times, making Delhi the worst city in the world insofar as air pollution is concerned. Direct and immediate cause thereof was burning of crackers during *Diwali*. The Court also remarked that every year before *Diwali* there are attempts on the part of the Government (Ministry of Environment, Government of India as well as Delhi Government), Media, NGOs and various other groups to create awareness in the general public about the ill-effects of bursting of these crackers. Campaigns are held in the schools wherein children are discouraged to have fireworks. Thus, there is virtually a

consensus in the society that crackers should not be burnt during *Diwali*, which can be celebrated with equal fervour by various other means as well. Irony is that when causes are brought in the Court, there is a resistance from certain quarters. Moreover, there are adequate statutory provisions, aid whereof can be taken to ban the sale of these crackers.

- 14) The Court also took into consideration three substantial submissions which were made by the petitioners, viz.: (a) CPCB had taken a stand, nearly twenty years ago, that Sulphur in fireworks should not be permitted as Sulphur on combustion produces Sulphur Dioxide and the same is extremely harmful to health. The CPCB has stated that between 9:00 p.m. to midnight on *Diwali* day the levels of Sulphur Dioxide content in the air are dangerously high. Moreover, all the above authorities were also unanimous in their view that crackers should only be burst in designated places. Also the CPCB had specifically stated that joined crackers should be banned. Secondly, in the order dated November 11, 2016, licenses were suspended primarily for the reason that rising in the PM levels at alarming proportion was because of burning of crackers during *Diwali*, which had adverse harmful affect and, therefore, there was no reason to relax this

condition. Another significant argument which was taken note of was that the order dated November 11, 2016 was passed immediately after the *Diwali* in the year 2016 and the effect of that order had not been tested. Going by these considerations, the Court decided to suspend the order dated September 12, 2017 at least during the *Diwali* of 2017 with the following directions:

“14...To put it clearly, though we are not tweaking with the various directions contained in the Orders dated September 12, 2017, the effect of that Order would not be given during this Diwali and, therefore, we are making it effective only from November 01, 2017. We are conscious of the fact that after the said order was passed, the police may have issued temporary licences. Accordingly, those are suspended forthwith so that there is no further sale of the crackers in Delhi and NCR. Further orders in this behalf can be passed on assessing the situation that would emerge after this Diwali season...”

- 15) As expected, spate of applications have been filed, most of which emanate from the aforesaid orders dated October 09, 2017. Many parties have intervened. Most of the interventionists are supporting the petitioners and want permanent ban on the burning of crackers during *Diwali*. Some have even prayed that this ban be extended to the whole country and should not be limited to only Delhi and NCR. IAs were also filed seeking ban on crop burning. The opposite group consists of manufacturers of crackers, manufacturers' association and license holders. The State of Tamil Nadu has come forward to support this category.

Additionally, one interventionist, namely Indic Collective (applicant in IA No. 105355 of 2017), is also opposing the ban contending that burning of crackers during *Diwali* is a religious activity which is in vogue for time immemorial and, therefore, it should not be banned.

16) It is not necessary to take note of the arguments of each of the counsel appearing on either side. For the sake of convenience, arguments of the petitioners as well as those who have supported the petitioners' cause and the arguments of the other group which is opposing the prayers made by the petitioners, are collated and we state below these arguments and counter arguments in consolidated manner:

17) *Petitioners' Arguments:*

(a) As far as the petitioners are concerned, they have proceeded on the premise that undeniable fact is that as a result of burning of crackers during *Diwali* PM_{2.5} reach an alarmingly high level which certainly is injurious to health. It is argued that the adverse affect thereof on the health of citizens, particularly children, is irreversible. It causes asthma, coughing, bronchitis, retarded nervous system breakdown and even cognitive impairment.

(b) The official respondents had failed to address the issues and carry out desired studies in spite of the directions of this Court. Various committees set up are examining the question as to what kind of metal should be used in the manufacture of crackers. So far no study has been conducted on the ill-effect caused by PM_{2.5}.

(c) Studies by CPCB had categorically found that burning of crackers during *Diwali* was contributing to air as well as noise pollution in an alarming manner. Copies of these studies showing continuous ambient air quality during *Diwali* annexed with IA No. 109720 of 2017 is referred to. Contents of the affidavit of CPCB dated January 05, 2018 has also been relied upon.

The petitioners also rely upon the report filed by the Union of India, through the Ministry of Environment, Forest and Climate Change, wherein ill-effects of fireworks are accepted and measures suggested to tackle the same.

Opinions of prominent doctors mentioning spike in the respiratory problems among children and patients are also pointed out.

(d) Dealing with the argument of the manufacturers and traders of firecrackers based on Article 19(1)(g) of the Constitution of India, namely, fundamental right to carry on business, the

submission of the petitioners is that going by the ill-effects of the firecrackers, no such right can be claimed as principle of *res extra commercium* would apply. In support, additional affidavit filed on July 26, 2017 as well as in July 2018 are referred to wherein the petitioners have sought to highlight the following aspects:

(i) These manufacturers were employing child labour. At one point of time, almost one lakh children were employed in this industry. Though it was admitted that this position does not exist any longer in view of strict measures taken by the Government.

(ii) The manufacturing of firecrackers generates a lot of waste which adds to pollution as sufficient measures are not undertaken to deal with this waste.

(iii) Number of deaths as well as injuries to persons are caused every year due to poor storage which results in occasional accidents. Likewise, the burning of these crackers also results in injuries.

(iv) Firework also leads to lot of noise and air pollution as well. Judgments of this Court in ***Vellore Citizens' Welfare Forum v. Union of India and Others***, (1996) 5 SCC 647; and ***A.P. Pollution Control Board v. Prof. M.V. Nayudu***

(Retd.) and Others, (1999) 2 SCC 718, have been relied upon.

In the alternative, it was argued that even if it is accepted that argument of Article 19(1)(g) of the Constitution is available to the manufacturers and traders, such a ban on burning crackers during *Diwali* would amount to reasonable restriction having regard to the fact that right to health was also a fundamental right guaranteed under Article 21 of the Constitution. It was also submitted that the cost in the form of medical expenses which are incurred for treatment of those who suffered as a result of burning of crackers is equally high or even may be higher.

(e) One of the arguments of the opposite side was that there were no sufficient studies as to what extent the burning of crackers is contributing towards air and noise pollution and whether it was such a serious problem which warrants ban. To this, reply of the petitioners was that in the field of environmental laws, precautionary principle was also applicable which does not need exact studies or material.

(f) Insofar as argument of burning of crackers during *Diwali*, as a part of right of religious practice is concerned, the refutation of the petitioners is that such an argument has already been

rejected by this Court in **Vellore Citizens' Welfare Forum** case. It was further submitted that burning of crackers during *Diwali* is not a core and essential religious practice and even if it is so, Article 25 was subject to Article 21 of the Constitution. Judgment in **Noise Pollution (V), in Re**, (2005) 5 SCC 733, was relied upon in this regard.

18) *Arguments of the opposite side:*

The respondents, who are opposing the prayers made in the writ petitions and the IAs, made the submissions to the following effect:

(i) Burning of crackers during *Diwali* does not have any significant adverse affect on the environment. It is argued that there is no study till date which has come to such a conclusion. The Deepawali Monitoring Report, 2017 of CPCB is relied upon for this purpose and on that basis it is contended that the factors which contributed to the problem were not because of crackers burning during *Diwali*. Ambient air quality before and after *Diwali* reflects that there was no spike immediately after *Diwali*. It was accepted that situation of air pollution in Delhi and NCR is 'generally' worrying. However, there are multiple causes which lead to polluting air and such a position existed even before *Diwali*, which showed that other factors played dominant role.

(ii) Insofar as presence of PM_{2.5} in the air is concerned, studies of CPCB are relied upon, on the basis of which attempt is made to show that: (a) spike was not so much during *Diwali* days; (b) increase in PM_{2.5} in the air does not remain for long, i.e. it does not linger for many days; and (c) it is manageable as well.

Reports of Indian Institute of Technology, Kanpur; National Aeronautics and Space Administration (NASA), USA; a professor from Harvard University; and an affidavit dated January 05, 2018 filed by CPCB were referred to in support.

(iii) It is submitted that pursuant to orders dated September 12, 2017 whereby the Court had directed that a research study needs to be conducted on the impact of bursting fireworks during *Dussehra* and *Diwali* on the health of people, no such empirical data has emerged so far for want of detailed studies.

In nutshell, the argument was that in the absence of any definite study attributing the worsening of air quality to the fireworks during *Diwali*, the right of the manufacturers and traders under Article 19(1)(g), which is a fundamental right to carry on trade, should not be made to suffer till the time there is a complete study in this behalf.

(iv) It is also argued that the revenue generated from the manufacturing and sale of fireworks is to the tune of Rs.6,000

crores per annum. Further, this industry has given employment to five lakh families. Such a revenue to the State as well as employment to large number of workers on which five lakh families sustain cannot be put in jeopardy by imposing a total ban. It was emphasised that there is a necessity to adopt a balanced approach. For this purpose, Status Report and affidavit of the Ministry of Environment, Forest and Climate Change has been relied upon which suggested eco-friendly firecrackers. Advisory dated March 07, 2008 issued by the Petroleum and Explosives Safety Organisation (PESO), which comes under the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry, Government of India, was also relied upon, as per which the fireworks manufacturers in India were advised to ensure that the firecrackers manufactured by them are within the limits prescribed in Annexure-I to the said Advisory dated March 07, 2008.

(v) The State of Tamil Nadu also supported the cause of the manufacturers and traders of the firecrackers. It was argued that the study undertaken by CPCB pursuant to the directions issued by this Court was conducted by the Committee which did not have a representative from the Fireworks Research and Development Centre (FRDC) which was not even informed about

the development of this case. It was emphasised that any proper study in this behalf should address following aspects:

- a) Socio-economic effect of the ban needs to be examined as it may cause extreme economic hardship,
- b) There should be a proper study about the other factors which were leading to air pollution, like construction activity, etc., which are not banned.
- c) Banning of an activity is an extreme measure. The study should focus on the alternatives available in the present day technology which may be deployed to ensure that pollution free firecrackers can be manufactured.

(vi) Indic Collective (applicant in IA No. 105355 of 2017) opposed the prayer of banning of fireworks during *Diwali* on the ground that it was a religious practice scrupulously followed by the Hindus from time immemorial and it had become a core and essential religious practice which was protected under Article 25 of the Constitution as their fundamental right.

- 19) The arguments of the parties recorded above would show that the submissions for and against almost remain the same, which were advanced on earlier occasions, though the focus of both the sides was more nuanced. In the process, the events and developments which have taken place after passing the order

dated October 09, 2017 have also been relied upon by both the parties.

- 20) Before proceeding to deal with these submissions, it may be apposite to take note of the study that has been undertaken by CPCB on the basis of the directions of this Court in its order dated September 12, 2017.
- 21) Following the directions of this Court, a Committee was appointed to be chaired by the Chairperson of the CPCB. This Committee invited Dr. M.K. Daga, Professor Director, Maulana Azad Medical College (MAMC), as health expert to study the methodology. Dr. Daga suggested that considering the time available, a short-term study based on questionnaire survey, hospital data collection and sampling at a few locations can be conducted. This methodology proposed by Dr. Daga was agreed to by the Committee. The Committee requested MAMC to submit a proposal accordingly. On submission of project proposal, the Committee awarded the project on *'Health Impact Assessment on Firecracker Burning During Dussehra And Diwali'* to MAMC. The scope included questionnaire survey for respiratory, skin, air, eye and relevant symptoms during pre and post *Diwali*, clinical study on lung function and urine samples of randomly selected subjects, and

data analysis. After conducting this survey, a draft report was prepared and ultimately it was finalised after incorporating the comments from the Members of the Committee. As per this study on the afore-mentioned subject, following are the major findings:

"The respiratory system related symptoms and signs were not much different during pre and post Dussehra and Diwali. Although there was some increase in cough and breathlessness, but this did not translate into any significant illness requiring immediate medical attention. Other system related complaints were also not much different during pre and post Dussehra and Diwali.

There was evidence of increased values of barium and strontium in urine samples of many subjects. These are some of the metals used in firecracker manufacturing. Increased levels in urine do reflect a probability of exposure. However, all other elements are not increased to substantiate the effect of bursting of firecrackers. It is also possible that the individuals were exposed due to bursting of firecrackers directly or indirectly in their locality.

Air quality did worsen during Diwali and symptoms of eye, increased coughing, relatively more hospital visits, increased noise levels and high metal levels in urine do reflect adverse impact of firecracker bursting. However, it was not significant statistically. A long term study would be required to assess long term health impacts of firecracker bursting."

- 22) Affidavit filed by CPCB also states that in compliance of the orders dated October 09, 2017 of this Court the Air Quality Monitoring Committee during *Dussehra* and *Diwali* was conducted by CPCB, a report whereof is annexed with its affidavit. As per that report, the salient features are as under:

- a) That, slight increase in PM₁₀ concentration was observed in two locations i.e. Pitampura and Siri Fort on Dussehra day.
- b) That, PM_{2.5} mass concentrations were found lower on post Dussehra day at all stations and it was highest on pre Dussehra day.
- c) That the concentrations of SO₂ and NO₂ during pre Dussehra, Dussehra and post Dussehra days remained within limits.
- d) That, though the actual PM_{2.5} mass concentrations were declined on Dussehra day, certain specific elemental concentration like Aluminum, Potassium and Barium showed increment on Dussehra day, which indicate some firecracker bursting has affected air quality.
- e) That, on Diwali day both PM₁₀ and PM_{2.5} increased 2-3.5 fold of the levels recorded seven days before Diwali and the Diwali peaks of PM_{2.5} declined in three days.
- f) Both PM₁₀ and PM_{2.5} were reported higher in post Diwali day compared to pre Diwali at all stations.
- g) SO₂ remained within prescribed standard limit with slight increment on Diwali day. NO₂ also reported within standard limit at all locations on Diwali day.
- h) That, the elements like Al, S, K, Cl₂, Ba, Sr all have registered their presence in PM_{2.5} collected on Diwali day, and the concentration of Al observed 4 to 6 times higher than that of short-term standards/critical values of 40 ug/m³ proposed by CPCB.
- i) PM_{2.5} was reduced by 39% compared to 2016 Diwali day.
- j) Sulphur got reduced by 20%, Potassium by 30%, Ca, Cu, Zn, Sb by about 35-40%, Fe&Ba by about 50%, Strontium by 64% and Al and Cl₂ by 11%."

- 23) It can be discerned from the above that the air quality had worsened during *Diwali*. There were more patients with symptoms of eye, increased coughing and patients with high metal levels in urine. Even noise level had increased. These are the adverse impacts of firecracker bursting, though the study mentions that statistically it was not a significant increase.
- 24) The study has also found that actual $PM_{2.5}$ mass concentrations increased due to firecracker bursting, which had affected air quality. On *Diwali* day both PM_{10} and $PM_{2.5}$ had 2-3.5 fold increase. Also, PM_{10} and $PM_{2.5}$ were reported higher in post-*Diwali* day compared to pre-*Diwali* at all stations. Another significant finding is that $PM_{2.5}$ was reduced by 39% compared to 2016 *Diwali*, presumably due to the ban order on the sale of crackers which was passed on October 09, 2017, which led to lesser quantum of fireworks.
- 25) Two significant features emerge from the above. First, due to fireworks on *Diwali* day, $PM_{2.5}$ levels go up. Secondly, when there was lesser fireworks in 2017, it had reduced the $PM_{2.5}$ levels as compared to the earlier *Diwali* in the absence of ban.
- 26) It is an accepted fact that bursting of firecrackers during *Diwali* is not the only reason for deterioration of air quality. There are other

factors as well. It calls for necessity to tackle the other contributory factors for air pollution and making the air quality as 'very poor' and even 'poor'. Unregulated construction activity which generates lot of dust and crop burning in the neighbouring States are the two other major reasons, apart from certain other reasons, including vehicular pollution etc. The moot question in such a scenario is as to whether the menace due to fireworks during *Diwali* or other festivals/occasions should be left untouched and the Court should allow the situation to prevail as it is, only because it is not the sole reason for causing air pollution? Answer has to be in the negative.

- 27) Once it is accepted that PM_{2.5} level goes alarmingly higher on *Diwali* and post-*Diwali*, which is the result of bursting of firecrackers, it is necessary to understand the adverse affect on health of persons of this particulate in air, even if such a situation remains only for few days. In this behalf, we may refer to the opinions of some experts/prominent doctors in the field, which have been placed on record by the petitioners.
- 28) Dr. Arvind Kumar, who interfered in the matter, filed his affidavit on August 14, 2018, wherein he has *inter alia* stated as under:

"7. I have consistently found that in the immediate aftermath of *Diwali*, there is an increase in the number of

people coming with chest ailments and many of my operated patients returned with complaints of cough and breathlessness without any other cause for the same. This has forced me to carry out innumerable chest x-rays and CT scans to confirm that the complaints are due to the exposure to toxins. For the sake of relief to the patient and in order to relieve them from bronchospasms, my colleagues and I are compelled to prescribe inhalers which have bronchodilators and inhaled steroids, apart from cough suppressants and antibiotics. Media reports suggest that there has been an increase in asthma medicine sales by 43% due to pollution (Hindustan Times, May 02, 2017). While earlier, it was believed that children with asthma would outgrow the affliction, in the present circumstances, this seems challenging.

8. Both at AIIMS and at Sir Ganga Ram Hospital, there has been a significant increase in the number of patients I would see in my OPD in the days immediately following Diwali, and I have no doubt that this was on account of sudden exposure to the deadly cocktail consisting of extremely high levels of toxic gases, particulate matter and metallic compounds. Each exposure to firework emissions not only leads to acute disastrous effects but also causes cumulative long-term irreversible damage. Once the PM_{2.5} particle gets deposited in the lungs, it never leaves, thereby affecting the linking for life and diminishing breathing capacity. This affects not only the respiratory system, but also the cardio-vascular system (heart attacks and hypertension), nervous system (strokes and developmental abnormalities in children), reproductive system and virtually every other health function including the bladder and kidneys.

9. It would be useful to refer to two studies conducted ten years apart by a team including Prof. Sundeep Salvi, Director Chest Research Foundation, Pune and Member of the Government of India's Steering Committee on Air Pollution & Health. The first one in 2007 was presented at the Annual Congress of the European Respiratory Society at Stockholm and reveals the harmful health effects of CO, SO_x and NO_x from fireworks.

10. The second is a detailed study on the amount of Particulate Matter in various types of fireworks in India and this was presented at the meeting of the European

Respiratory Society at Milan in 2017. This has since been published in the European Respiratory Journal, and examines the personal exposure levels of fireworks (as against a general study of ambient air). In these isolated and controlled circumstances, the exposure to PM_{2.5} was found to be as high as 64,5000 u/m₃."

- 29) From the aforesaid it can be gathered that when PM_{2.5} crosses the normal limits, even if it remains in the air for few days, it becomes severe health hazard thereby causing serious health problems. Unfortunately such problems are virtually irreversible, which means that a person whose health gets affected because of this particulate has a long suffering. In view thereof, argument in opposition that air quality that gets worsened during *Diwali* remains only for few days would be of no consequence as even in few days it causes severe harm to the health of the people, that too for prolonged duration.
- 30) From the aforesaid discussion, the position can be summed up by stating that though burning of crackers during *Diwali* is not the only reason for worsening air quality, at the same time, it definitely contributes to air pollution in a significant way. Again, even when no studies are undertaken on long-term impact thereof, the CPCB Committee, which did this exercise taking it as a short-term project which was assigned to MAMC, has returned a definite finding about deterioration in air quality during *Diwali*

because of burning of crackers. It has also shown that post-*Diwali* air pollution in 2017 was less compared to the 2016 *Diwali* which was the result of lesser fireworks in 2017. This again indicates a direct causal connection between burning crackers during *Diwali* and air pollution. Another immediate effect of burning of crackers is that it results in substantial increase in PM_{2.5} level which is a very serious health hazard. In fact, this results in severe noise pollution as well which has acute psychological, mental and even physical affect on animals. In the application seeking intervention and directions (IA No. 68897 of 2018) filed by Gauri Maulekhi, the applicant has placed on record plethora of literature based on various studies depicting profound affect of noise/sound on the health of animals, extending to their neuroendocrine system, reproduction and development, metabolism, cardiovascular health, cognition and sleep, audition, immune system, DNA integrity and gene expression. Fireworks sometimes results in temporary or permanent hearing impairment in animals. Further, dogs are also known to display psychological symptoms of stress during this time. So much so, fireworks has traumatising affect even on birds. Deafening sound which the crackers produce on bursting are known to disorient birds and responsible for their displacement from their nests. Even the

respiratory system of the birds gets affected. Studies also show that the sound of crackers has affect on milch cattle. As the cattle is scared, adrenaline is released in its body which inhibits oxytocin, a hormone which helps the milk cattle to release milk thereby affecting the production of milk.

- 31) The aforesaid findings are sufficient to negate the arguments of the opposite side that there is absence of scientific study about the adverse affect 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**, this Court explained the principle in the following manner:

"11. Some of the salient principles of "Sustainable Development", as culled out from Brundtland Report and other international documents, are Inter-Generational Equity, Use and Conservation of Natural Resources, Environmental Protection, the Precautionary Principle, Polluter Pays Principle, Obligation to Assist and Cooperate, Eradication of Poverty and Financial Assistance to the developing countries. We are, however, of the view that "The Precautionary Principle" and "The Polluter Pays Principle" are essential features of "Sustainable

Development". The "Precautionary Principle" — in the context of the municipal law — means:

(i) Environmental measures — by the State Government and the statutory authorities — must anticipate, prevent and attack the causes of environmental degradation.

(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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14. In view of the above-mentioned constitutional and statutory provisions we have no hesitation in holding that the Precautionary Principle and the Polluter Pays Principle are part of the environmental law of the country.

15. Even otherwise once these principles are accepted as part of the Customary International Law there would be no difficulty in accepting them as part of the domestic law. It is almost an accepted proposition of law that the rules of Customary International Law which are not contrary to the municipal law shall be deemed to have been incorporated in the domestic law and shall be followed by the courts of law. To support we may refer to Justice H.R. Khanna's opinion in *A.D.M. v. Shivakant Shukla*, *Jolly George Varghese case* and *Gramophone Co. case*.

16. The constitutional and statutory provisions protect a person's right to fresh air, clean water and pollution-free environment, but the source of the right is the inalienable common law right of clean environment..."

- 32) The precautionary principle accepted in the aforesaid judgment was further elaborated in ***A.P. Pollution Control Board's*** case as under:

"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* 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. The relevant observations in the *Vellore case* in this behalf read as follows: (SCC p. 660, para 14)

"14. In view of the above-mentioned constitutional and statutory provisions we have no hesitation in holding that the *precautionary principle* and the polluter-pays principle are part of the environmental law of the country."

(emphasis supplied)

The Court observed that even otherwise, the abovesaid principles are accepted as part of the customary international law and hence there should be no difficulty in accepting them as part of our domestic law. In fact, on the facts of the case before this Court, it was directed that the authority to be appointed under Section 3(3) of the Environment (Protection) Act, 1986

"shall implement the 'precautionary principle' and the 'polluter-pays principle'".

The learned Judges also observed that the new concept which places the burden of proof on the developer or industrialist who is proposing to alter the status quo, has also become part of our environmental law.

32. The *Vellore judgment* has referred to these principles briefly but, in our view, it is necessary to explain their meaning in more detail, so that courts and tribunals or environmental authorities can properly apply the said principles in the matters which come before them.

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”, and this was reiterated in the Rio Conference of 1992 in its Principle 15 which reads as follows:

“*Principle 15.*—In order to protect the environment, the *precautionary approach* shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full *scientific certainty* shall not be used as a reason for proposing cost-effective measures to prevent environmental degradation.”

34. In regard to the cause for the emergence of this principle, Charmian Barton, in the article earlier referred to in Vol. 22, Harv. Envtt. L. Rev. (1998), p. 509 at p. 547 says:

“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.”

In other words, the inadequacies of science is the real basis that has led to the precautionary principle of 1982. It is based on the theory that it is better to err on the side of caution and prevent environmental harm which may indeed become irreversible.

35. The principle of precaution involves the anticipation of environmental harm and taking measures to avoid it or to choose the least environmentally harmful activity. It is *based* on scientific uncertainty. Environmental protection should not only aim at protecting health, property and economic interest but also protect the environment for its own sake. Precautionary duties must not only be triggered by the suspicion of concrete danger but also by (justified) concern or risk potential. The precautionary principle was recommended by the UNEP Governing Council (1989). The Bomako Convention also lowered the threshold at which scientific evidence might require action by not referring to “serious” or “irreversible” as adjectives qualifying harm. However, summing up the legal status of the precautionary principle, one commentator characterised the principle as still “evolving” for though it is accepted as part of the international customary law, “the consequences of its application in any potential situation will be influenced by the circumstances of each case”. (See First Report of Dr Sreenivasa Rao Pemmaraju — Special Rapporteur, International Law Commission dated 3-4-1998, paras 61 to 72.).”

- 33) In such cases which pertain to the protection of environment, thrusting of '*onus of proof*' on the developer/industrialist in **Vellore Citizens' Welfare Forum** was also elaborated by the Court in the following manner:

"36. We shall next elaborate the new concept of burden of proof referred to in the *Vellore case* at p. 658. In that case, Kuldip Singh, J. stated as follows: (SCC p. 658, para 11)

“(iii) The ‘onus of proof’ is on the actor or the developer/industrialist to show that his action is environmentally benign.”

37. It is to be noticed that while the inadequacies of science have led to the “precautionary principle”, the said “precautionary principle” in its turn, has led to the special principle of *burden of proof* in environmental cases where burden as to the absence of injurious effect of the actions proposed, — is placed on those who want to change the status quo [Wynne, *Uncertainty and Environmental Learning*, 2 Global Env'tl. Change 111 (1992) at p. 123]. This is often termed as a reversal of the burden of proof, because otherwise in environmental cases, those opposing the change would be compelled to shoulder the evidentiary burden, a procedure which is not fair. Therefore, it is necessary that the party attempting to preserve the status quo by maintaining a less polluted state should not carry the burden of proof and the party who wants to alter it, must bear this burden. [See James M. Olson: “*Shifting the Burden of Proof*”, 20 Env'tl. Law, p. 891 at p. 898 (1990).] [Quoted in Vol. 22 (1998), Harv. Env. Law Review, p. 509 at pp. 519, 550.]

38. The precautionary principle suggests that where there is an identifiable risk of serious or irreversible harm, including, for example, extinction of species, widespread toxic pollution in major threats to essential ecological processes, it may be appropriate to place the burden of proof on the person or entity proposing the activity that is potentially harmful to the environment. (See Report of Dr Sreenivasa Rao Pemmaraju, Special Rapporteur, International Law Commission, dated 3-4-1998, para 61.)”

- 34) This brings us to the next argument which is predicated on Article 19(1)(g) of the Constitution. Mr. Shankarnarayanan had submitted that principle of *res extra commercium* shall apply inasmuch as firecrackers are a health hazard, the manufacturers and traders thereof cannot claim any fundamental right to carry

on business in this field. Such a plea may not be tenable. Therefore, it calls for a measure that would amount to a reasonable restriction.

35) It may be stressed that in ***Vellore Citizens' Welfare Forum*** case, this Court had banned the tanneries when it was found that they were causing immense damage to the environment. Thus, environment protection, which is a facet of Article 21, was given supremacy over the right to carry on business enshrined in Article 19(1)(g). We state at the cost of repetition that right of health, which is recognised as a facet of Article 21 of the Constitution and, therefore, is a fundamental right, assumes greater importance. It is not only the petitioners and other applicants who have intervened in support of the petitioners but the issue involves millions of persons living in Delhi and NCR, whose right to health is at stake. However, for the time being, without going into this debate in greater details, our endeavour is to strive at balancing of two rights, namely, right of the petitioners under Article 21 and right of the manufacturers and traders under Article 19(1)(g) of the Constitution.

36) Almost for the same reasons, argument predicated on Article 25 of the Constitution need not detain us. We proceed on the

assumption that burning of crackers during *Diwali* is a part of religious practice. The question is as to whether it should be allowed to be continued in the present form without any regulatory measures, as a part of religious practice, even if it is proving to be a serious health hazard. We feel that Article 25 is subject to Article 21 and if a particular religious practice is threatening the health and lives of people, such practice is not entitled to protection under Article 25. In any case, balancing can be done here as well by allowing the practice subject to those conditions which ensure nil or negligible effect on health.

- 37) We now deal with the argument that banning the sale of firecrackers may lead to extreme economic hardship, namely, on the one hand loss of substantial revenue and on the other hand unemployment to lakhs of persons. This brings up the issue of connect or relationship between the law and economics. This aspect was considered by this Court in ***Shivashakti Sugars Limited v. Shree Renuka Sugar Limited and Others***, (2017) 7 SCC 729, and the relevant portion whereof is reproduced below:

"43...Interface between Law and Economics is much more relevant in today's time when the country has ushered into the era of economic liberalisation, which is also termed as "globalisation" of economy. India is on the road of economic growth. It has been a developing economy for number of decades and all efforts are made, at all levels, to ensure that it becomes a fully developed economy. Various

measures are taken in this behalf by the policy-makers. The judicial wing, while undertaking the task of performing its judicial function, is also required to perform its role in this direction. It calls for an economic analysis of law approach, most commonly referred to as “Law and Economics” [Richard A. Posner in his book *Frontiers of Legal Theory* explains this concept as follows:“Economic analysis of law has heuristic, descriptive and normative aspects. As a heuristic, it seeks to display underlying unities in legal doctrines and institutions; in its descriptive mode, it seeks to identify the economic logic and effects of doctrines and institutions and the economic causes of legal change; in its normative aspect it advises Judges and other policy-makers on the most efficient methods of regulating conduct through law. The range of its subject-matter has become wide, indeed all-encompassing. Exploiting advances in the economics of nonmarket behaviour, economic analysis of law has expanded far beyond its original focus on antitrust, taxation, public utility regulation, corporate finance, and other areas of explicitly economic regulation. (And within that domain, it has expanded to include such fields as property and contract law.) The “new” economic analysis of law embraces such nonmarket, or quasi-nonmarket, fields of law as tort law, family law, criminal law, free speech, procedure, legislation, public international law, the law of intellectual property, the rules governing the trial and appellate process, environmental law, the administrative process, the regulation of health and safety, the laws forbidding discrimination in employment, and social norms viewed as a source of, an obstacle to, and a substitute for formal law.”Posner also mentioned that this interface between Law and Economics might grandly be called “Economic Theory of Law”, which is built on a pioneering article by Ronald Coase [R.H. Coase, “The Problem of Social Cost”, 3 Journal of Law and Economics 1 (1960)]:“The “Coase Theorem” holds that where market transaction costs are zero, the law's initial assignment of rights is irrelevant to efficiency, since if the assignment is inefficient the parties will rectify it by a corrective transaction. There are two important corollaries. The first is that the law, to the extent interested in promoting economic efficiency, should try to minimize transaction costs, for example by defining property rights clearly, by making them readily transferable, and by creating cheap and effective remedies for breach of contract....The second corollary of the Coase Theorem is that where, despite the law's best efforts, market transaction costs remain high, the law

should simulate the market's allocation of resources by assigning property rights to the highest-valued users. An example is the fair-use doctrine of copyright law, which allows writers to publish short quotations from a copyrighted work without negotiating with the copyright holder. The costs of such negotiations would usually be prohibitive; if they were not prohibitive, the usual result would be an agreement to permit the quotation, and so the doctrine of fair use brings about the result that the market would bring about if market transactions were feasible.”] . In fact, in certain branches of Law there is a direct impact of Economics and economic considerations play predominant role, which are even recognised as legal principles. Monopoly laws (popularly known as “Antitrust Laws” in USA) have been transformed by Economics. The issues arising in competition laws (which has replaced monopoly laws) are decided primarily on economic analysis of various provisions of the Competition Commission Act. Similar approach is to be necessarily adopted while interpreting bankruptcy laws or even matters relating to corporate finance, etc. The impress of Economics is strong while examining various facets of the issues arising under the aforesaid laws. In fact, economic evidence plays a big role even while deciding environmental issues. There is a growing role of Economics in contract, labour, tax, corporate and other laws. Courts are increasingly receptive to economic arguments while deciding these issues. In such an environment it becomes the bounden duty of the Court to have the economic analysis and economic impact of its decisions.”

- 38) 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.

- 39) With this, we come to the most important issue, viz. whether there has to be a complete ban on display of fireworks during *Diwali* or

it can be controlled/regulated in a manner which may not result into air pollution or may be least intrusive.

- 40) It would be significant to mention at this stage that there have been lots of efforts for production of firecrackers which do not contain harmful chemicals and thereby not causing air pollution, which are even termed as '*Green Crackers*'. The Union of India was asked to delve on this aspect. In fact, during the hearing of this matter, order was passed on August 14, 2018 giving direction to respondent No.1 to give its complete suggestions to deal with the problems and issues involved which have been recapitulated above. This order reads as under:

"Further arguments heard in these matters. Arguments have not been concluded.

We are of the opinion that Union of India/Ministry of Environment should come out with its concrete suggestions to deal with problems and issues which are involved in these petitions and what short term measures can be adopted to tackle the pollution problem which occurs due to firecrackers during Diwali. Such affidavit shall be filed by or before next date of hearing.

List on 21.8.2018."

- 41) Pursuant to the aforesaid direction, respondent No.1 has filed its affidavit on August 21, 2018. This affidavit states that the Ministry consulted : (i) The Council of Scientific & Industrial Research (CSIR) - National Environment Engineering Research Institute

(NEERI), (ii) PESO, and (iii) CPCB regarding concrete solutions and short-term measures to be adopted to tackle the pollution problem which occurs due to firecrackers during *Diwali*. Suggestions are received from the aforesaid bodies which are annexed as Annexures R-1, R-2 and R-3 respectively. Based on those suggestions, the Ministry has given the following short-term measures/actions which it proposes to tackle the pollution problem due to firecrackers during forthcoming *Diwali* in November 2018:

- I. To address issue of high contents of unburnt material or partially combusted material due to usage of poor quality of raw material, Raw Material Characterisation Facilities shall be established to maintain quality of the raw materials in gun powder and flash powder as per specifications of PESO. Testing of raw materials shall be initiated at CSIR - Kaliswari Joint Facility or PESO or any of the other manufacturer with requisite facilities.
- II. Use of Reduced Emission firecrackers (Improved crackers) - (a) Avoidance of use of ash as desiccant or filler materials in crackers for reduction in particulate mater by 15-20%. These can be implemented subject to approval by PESO, and (b) usage of charcoal meeting specifications of explosives and pyrotechnics as prescribed by PESO.
- III. Use of Reduced Emission firecrackers (Green crackers: Safe water and air sprinklers (SWAS) - Low emission sound and light emitting functional crackers with PM reduction by 30-35% and significant reduction in NO_x and SO₂ due to in-situ water generation as dust suppressant and low cost due to usage of low cost oxidants. These can be implemented subject to approval by PESO.

- IV. PESO will ensure fireworks with permitted chemicals only to be purchased/possessed/sold/used during Diwali and shall test and check for the presence of banned chemicals like lithium/arsenic/antimony/lead/mercury. PESO will ensure suspension of the licenses of manufacturers of such fireworks items and appropriate disposal of such stock.
- V. 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 licenses of the manufacturers on such violations and disposal of such lots.
- VI. Diwali data of 2017 shows that average PM_{2.5} was 604 ug/m³, whereas, Aluminum and Barium in PM_{2.5} were 159 ug/m³ (about 4 times of AAQCVs) and 35 ug/m³ (about 9 times of AAQCVs) respectively. Iron was well within the prescribed limits. Aluminum is used as fuel in fireworks in and to give white brilliant sparkle. Ba is added to give only attractive green colour which is not essential for pyrotechnics. Aluminum may cause dermatitis and having bio-accumulation potential in case of long exposure. Ba salts emit poisonous gas causing respiratory problem in short-term exposure too and may have other health complications in long-term exposure. Therefore, as immediate measure, banning of Barium salts in fireworks may be considered. PESO may be asked to review the chemical composition of fireworks, particularly reducing Aluminum content.
- VII. 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, Aluminum, 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 Aluminum, Barium and Iron used in the manufacture of firecrackers.

- VIII. The manufacture, sale and use of joined firecrackers (series crackers or laris) may be banned as the same causes huge air, noise and solid waste problems.
- IX. Major Indian cities may explore the option of community firecracking with strict time restriction as adopted in some countries. Other restriction that can be explored include - bursting of firecrackers may be allowed only in the areas/fields pre-identified and pre-designated by respective State Governments.
- X. 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."

42) We are of the opinion that the aforesaid suggestions strive 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 concerned authorities to implement the same with immediate effect. In view thereof, following specific directions are issued:

- (i) The crackers with reduced emission (improved crackers) and green crackers, as mentioned in Suggestion Nos. II and III above only would be permitted to be manufactured and sold.
- (ii) As a consequence, production and sale of crackers other than those mentioned in Suggestion Nos. II and III is hereby banned.

- (iii) 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.
- (iv) 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.
- (v) 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.
- (vi) Barium salts in the fireworks is also hereby banned.
- (vii) PESO is directed to review the clinical composition of fireworks, particularly reducing Aluminum 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.
- (viii) Even those crackers which have already been produced and they do not fulfill the conditions mentioned in Suggestion Nos. II and III above will not be allowed to be sold in Delhi and NCR.

- (ix) 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.
- (x) PESO will ensure suspension of the licenses of manufacturers of such fireworks items and appropriate disposal of such stock.
- (xi) 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 licenses of the manufacturers on such violations and disposal of such lots. To add to it, as mentioned in the order dated September 12, 2017, the directions issued and restrictions imposed in the order passed by this Court on July 18, 2005 in **Noise Pollution (V)** shall continue to be in force.
- (xii) Direction Nos. 4 to 9 and 11 contained in the order dated September 12, 2017 shall continue to operate and are reiterated again.
- (xiii) 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.

- (xiv) On *Diwali* days or on any other festivals like *Gurpurab* 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 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.
- (xv) The Union of India, Government of NCT of Delhi and the State Governments of the 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 pre-designated by the concerned authorities. 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 No. (xiv) pertaining to the duration within which fireworks can take place on all such occasions would be applicable throughout India. Similarly, Direction No. (xiii) for extensive public awareness campaigns is also a pan India direction.

- (xvi) 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 concerned Police Station of the area 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.
- (xvii) 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, Aluminum, 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 Aluminum, Barium and Iron used in the manufacture of firecrackers.

- 43) 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.
- 44) 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.

- 45) All the interlocutory applications seeking impleadment, intervention, directions, modification, etc. are disposed of in the aforesaid terms.
- 46) The writ petitions be listed on December 11, 2018.

.....J.
(A.K. SIKRI)

.....J.
(ASHOK BHUSHAN)

**NEW DELHI;
OCTOBER 23, 2018.**

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.*

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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
2.	Xxx	Xxx		Xxx
3.	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:

xxx

xxx

xxx

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

8.

xxx

xxx

xxx

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

- 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

IN THE SUPREME COURT OF INDIA
CIVIL ORIGINAL JURISDICTIONI.A. No. 44727/2021 in WRIT PETITION(C) NO. 728/2015

Arjun Gopal and others ...Petitioners

Versus

Union of India and others ...Respondents

WITH

WRIT PETITION(C) NO. 891/2016WRIT PETITION(C) NO. 895/2016WRIT PETITION(C) NO. 899/2016WRIT PETITION(C) NO. 213/2017ORDER

1. The present application has been preferred by the applicants praying for the following directions:

- a) ban the sale, purchase and use of firecrackers in India;
- b) State Governments and police to take immediate appropriate steps against anyone seeking to manufacture, sell or purchase firecrackers;
- c) District Magistrates and Superintendents of Police of every district be made personally accountable if the order for a complete ban on the manufacture, sale, purchase and use of firecrackers is violated;
- d) The Delhi Police be directed to state on affidavit the senior level officer(s) that are to be responsible and personally accountable for ensuring that the ban on transportation of fireworks into Delhi and NCR from outside regions is properly enforced and violators caught and punished; and
- e) suspend the licenses of all manufacturers selling fake 'green crackers' that contained banned substances

and seeking to bring on record the tests done by 'Awaaz Foundation' alleging that the banned firecrackers are being manufactured, used and sold though they are specifically banned by this Court and alleging that 'green crackers'

are being sold in the market by fireworks manufacturers containing chemicals that have been banned by this Court and not only that but even the fake QR codes are printed on the boxes and mislabelling them as 'green crackers'.

2. Earlier by order dated 11.11.2016, by way of interim directions, this Court directed the Central Government to:

- i) suspend all such licences 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; and
- iii) no such licences shall be granted or renewed till further orders.

While issuing the aforesaid interim directions, this Court took into consideration the harmful effects of fireworks on the ambient air and the lungs, eyes and ears of the people. This Court also took note of the fact that extreme nuisance, noise the fireworks cause to citizens particularly the ailing and the aged.

3. That thereafter, this Court issued further directions in terms of order dated 12.09.2017, reported in (2017) 16 SCC 280 (para 72), which reads as under:

"72. As mentioned above, the health of the people in Delhi and in NCR must take precedence over any commercial or other interest of the applicant or any of the permanent licensees and, therefore, a graded regulation is necessary which would eventually result in a prohibition. Taking all factors into consideration, we are of the view that the following orders and directions are required to be issued and we do so:

72.1. The directions issued by this Court in *Sadar Bazar Fire Works (Pucca Shop) Assn. [Sadar Bazar Fire Works (Pucca Shop) Assn. v. Pankaj Traders, SLP (C) No. 17327 of 1993, order dated 1-11-1993 (SC)]* · [*Sadar Bazar Fire Works (Pucca Shop) Assn. v. Pankaj Traders, SLP (C) No. 17327 of 1993, order dated 22-10-1993 (SC)*] shall stand partially modified to the extent that they are not in conformity with the Explosives Rules which shall be implemented in full by the authorities concerned. Safety from fire hazards is one of our concerns in this regard.

72.2. Specifically, Rule 15 relating to marking on explosives and packages and Rule 84 relating to temporary shops for possession and sale of fireworks during festivals of the Explosives Rules shall be strictly enforced. This should not be construed to mean that the other Rules need not be enforced — all Rules should be enforced. But if the fireworks do not conform to the requirements of Rules 15 and 84, they cannot be sold in NCR, including Delhi and this prohibition is absolute.

72.3. The directions issued and restrictions imposed in the order passed by this Court on 18-7-2005 in *Noise Pollution (5)* [*Noise Pollution (5), In re*, (2005) 5 SCC 733] shall continue to be in force.

72.4. The police authorities and the District Magistrates concerned will ensure that fireworks are not burst in silence zones, that is, an area at least 100 m away from hospitals, nursing homes, primary and district health-care centres, educational institutions, courts, religious places or any other area that may be declared as a silence zone by the authorities concerned.

72.5. The Delhi Police is directed to reduce the grant of temporary licences by about 50% of the number of licences granted in 2016. The number of temporary licences should be capped at 500. Similarly, the States in NCR are restrained from granting more than 50% of the number of temporary licences granted in 2016. The area of distribution of the temporary licences is entirely for the authorities to decide.

72.6. The Union of India will ensure strict compliance with the Notification GSR No. 64 (E) dated 27-1-1992 regarding the ban on import of fireworks. The Union of India is at liberty to update and revise this notification in view of the passage of time and further knowledge gained over the last 25 years and issue a fresh notification, if necessary.

72.7. The Department of Education of the Government of NCT of Delhi and the corresponding Department in other States in NCR shall immediately formulate a plan of action, in not more than 15 days, to reach out to children in all the schools through the school staff, volunteers and NGOs to sensitise and educate school children on the health hazards and ill-effects of breathing polluted air, including air that is polluted due to fireworks. School children should be encouraged to reduce, if not eliminate, the bursting of fireworks as a part of any festivities.

72.8. The Government of NCT of Delhi and other States in NCR may consider interacting with established medical institutions for issuing advisories cautioning people about the health hazards of bursting fireworks.

72.9. The interim direction issued by this Court on 31-7-2017 [*Arjun Gopal v. Union of India* (2017) 16 SCC 310] prohibiting the use of compounds of antimony, lithium, mercury, arsenic and lead in the manufacture of fireworks is made absolute. In addition, the use of strontium chromate in the manufacture of fireworks is prohibited.

72.10. Fireworks containing aluminium, sulphur, potassium and barium may be sold in Delhi and in NCR, provided the composition already approved by PESO is maintained. It is the responsibility of PESO to ensure compliance with the standards it has formulated.

72.11. Since there are enough fireworks available for sale in Delhi and NCR, the transport of fireworks into Delhi and NCR from outside the region is prohibited and the law enforcement authorities concerned will ensure that there is no further entry of fireworks into Delhi and NCR till further orders. In our opinion, even 50,00,000 kg of fireworks is far more than enough for Dussehra and Diwali in 2017. The permanent licensees are at liberty to exhaust their existing stock of fireworks in Delhi and NCR and, if that is not possible, take measures to transport the stocks outside Delhi and NCR.

72.12. The suspension of permanent licences as directed by the order dated 11-11-2016 [*Arjun Gopal v. Union of India*, (2017) 1 SCC 412] is lifted for the time being. This might require a review after Diwali depending on the ambient air quality post Diwali. However, it is made explicit that the sale of fireworks by the permanent licensees must conform to the directions given above and must be fully in compliance with the Explosives Rules. We were informed that the permanent licences were issued by PESO and therefore the responsibility is on PESO to ensure compliance.

72.13. While lifting the suspension on the permanent licences already granted, we put these licensees on notice for Dussehra and Diwali in 2018 that they will be permitted to possess and sell only 50% of the quantity permitted in 2017 and that this will substantially reduce over the next couple of years. The permanent licensees are at liberty to file objections to this proposed direction within 30 days from today and thereafter the objections if any will be heard and decided. If no objections are filed, this direction will become absolute without any further reference to any licensee.

72.14. Since there is a lack of clarity on the safety limits of various metals and constituents used in fireworks, a research study must be jointly carried out by the

CPCB and the FDRC laying down appropriate standards for ambient air quality in relation to the bursting of fireworks and the release of their constituents in the air. While Schedule VII to the Environment (Protection) Rules, 1986 does deal with several metals, but as we have seen there are several other metals or constituents of fireworks that have not been studied by the CPCB and no standards have been laid down with regard to the concentration of these metals or constituents in the ambient air. The CPCB has assured us that it will complete the exercise by 15-9-2017 but keeping in mind its track record subsequent to the order dated 11-11-2016 [*Arjun Gopal v. Union of India*, (2017) 1 SCC 412] this does not seem possible. Therefore, we grant time to the CPCB to come out with definite standards on or before 30-9-2017.

72.15. In any event, a research study also needs to be conducted on the impact of bursting fireworks during Dussehra and Diwali on the health of the people. We, therefore, appoint a Committee to be chaired by the Chairperson of the CPCB and consisting of officers at the appropriate level from the National Physical Laboratory, Delhi; the Defence Institute of Physiology and Allied Sciences, Timarpur, Delhi; the Indian Institute of Technology, Kanpur; scientists from the State Pollution Control Boards, the Fire Development and Research Centre, Sivakasi and Nagpur and the National Environment Engineering Research Institute (NEERI) nominated by the Chairperson of the CPCB to submit a report in this regard preferably on or before 31-12-2017.

72.16. Keeping in mind the adverse effects of air pollution, the human right to breathe clean air and the human right to health, the Central Government and other authorities should consider encouraging display of fireworks through community participation rather than individual bursting of fireworks.”

4. That thereafter, vide further directions dated 23.10.2018 and after considering the affidavit filed on behalf of the Ministry of Environment, this Court issued further interim directions/directions contained in para 48 (reported in (2019) 13 SCC 523), which reads as under:

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:

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 chemical 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 [*Arjun Gopal v. Union of India*, (2017) 16 SCC 280], the directions issued and restrictions imposed in the order passed by this Court on 18-7-2005 in *Noise Pollution (5)* [*Noise Pollution (5), In re*, (2005) 5 SCC 733] shall continue to be in force.

48.12. Directions 4 to 9 and 11 contained in the order dated 12-9-2017 [*Arjun Gopal v. Union of India*, (2017) 16 SCC 280] 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.

5. That thereafter, this Court had an occasion to consider the prayer made on behalf of the Fireworks Manufacturers to permit manufacture of fireworks with Barium substitute, i.e, Barium Nitrate. However, the same has not been permitted till date and use of Barium Salts in the fireworks is continued to be banned.

6. It is unfortunate that despite the various directions issued by this Court referred to hereinabove, there is a blatant violation of various directions issued by this Court and it is alleged that manufacture, sale and use of banned fireworks have been continued. Even though they are banned, the manufacturing, selling and using of joined firecrackers have been continued and the same is being used in blatant violation of the directions issued by this Court. It is reported that even under the guise of 'green crackers' banned chemicals firecrackers are being sold and there is a mislabelling on the boxes and even the QR codes provided on the boxes of 'green crackers' are alleged to be fake.

7. There is a report submitted by the CBI submitted pursuant to the earlier directions/orders passed by this Court and it prima facie appears that there is a blatant violation of the directions issued by this Court by the respective manufacturers and the banned firecrackers are being sold and used in the

markets. The allegations, if found to be true, are very serious and cannot be tolerated. Everybody including the implementing agencies are bound to see that the directions issued by the Courts are implemented and followed in its true spirit and in toto. It prima facie appears that the implementing agencies of the concerned States either lack desire to implement the directions issued by this Court or they close their eyes for whatever reasons. Despite the use of Barium Salts in the firecrackers was banned; manufacture and use of the joined fireworks have been banned and transporting and selling them across the country have also been banned physically and/or online, the banned firecrackers are being manufactured, transported, sold and used. From the earlier directions, it can be seen that even the responsibility to see that the directions issued by this Court are complied with by all concerned was on the concerned District Magistrates and the Police officials.

8. Considering the fact that earlier directions issued by this Court which have been issued by this Court from time to time in the larger public interest and having found that such use of banned fireworks affects the health of the other innocent citizens including the senior citizens and the children, it is the duty of all the States/State Agencies to see that the directions issued by this Court in the earlier orders reproduced hereinabove are strictly complied with. No authority can be permitted the violation of the directions issued by this Court and permit banned firecrackers under the guise of celebration. Celebration cannot be at the cost of the other's health. Under the guise of

celebration, nobody can be permitted to infringe the right to health of the others, guaranteed under Article 21 of the Constitution of India and nobody can be permitted to play with the life of the others, more particularly the senior citizens and the children. It is made clear that there is no total ban on use of firecrackers. Only those firecrackers are banned, as directed hereinabove, which are found to be injurious to health and affecting the health of the citizens, more particularly the senior citizens and the children.

9. Before passing any further orders and while adjourning the present application, we again reiterate the directions issued by this Court earlier reproduced hereinabove including banning the use of Barium Salts in the firecrackers and manufacturing and selling joined firecrackers and other directions issued by this Court reproduced hereinabove. We direct all the States/Union Territories to see that the directions issued earlier by this Court and issued by this Court today are strictly complied with in its true spirit and in toto. Any lapse on the part of the State Governments/State Agencies and Union Territories shall be viewed very seriously and if it is found that any banned firecrackers are manufactured, sold and used in any particular area, the Chief Secretary of the concerned State(s), the Secretary (Homes) of the concerned State(s) and the Commissioner of Police of the concerned area, District Superintendent of Police of the concerned area and the SHO/Police Officer in-charge of the concerned police station shall be held personally liable. Nobody can be permitted to flout and/or disobey the directions issued

by this Court/Courts. Any wilful and deliberate disobedience shall have to be viewed very seriously.

10. All States/Union Territories are directed to give due publicity through electronic media/print media/local cable services to make the people aware and know the directions issued by this Court issued hereinabove with respect to manufacture, use and sale of banned firecrackers.

11. With the above directions, the present application is adjourned to 30.11.2021 for further hearing.

.....J.
[M.R. SHAH]

NEW DELHI;
OCTOBER 29, 2021.

.....J.
[A.S. BOPANNA]

ITEM NO.31
(Part-Heard)

Court 13 (Video Conferencing)

SECTION PIL-W

S U P R E M E C O U R T O F I N D I A
RECORD OF PROCEEDINGS
Writ Petition (Civil) No. 728/2015

ARJUN GOPAL & ORS.

Petitioner(s)

VERSUS

UNION OF INDIA . & ORS.

Respondent(s)

(IA No. 178878/2018 - APPROPRIATE ORDERS/DIRECTIONS
IA No. 76593/2019 - APPROPRIATE ORDERS/DIRECTIONS
IA No. 72421/2019 - APPROPRIATE ORDERS/DIRECTIONS
IA No. 15541/2021 - APPROPRIATE ORDERS/DIRECTIONS
IA No. 24794/2020 - APPROPRIATE ORDERS/DIRECTIONS
IA No. 119396/2017 - CLARIFICATION/DIRECTION
IA No. 110450/2021 - CLARIFICATION/DIRECTION
IA No. 44727/2021 - CLARIFICATION/DIRECTION
IA No. 13877/2019 - EXEMPTION FROM FILING O.T.
IA No. 178876/2018 - INTERVENTION/IMPLEADMENT
IA No. 10915/2019 - INTERVENTION/IMPLEADMENT
IA No. 4/2019 - INTERVENTION/IMPLEADMENT
IA No. 58280/2021 - INTERVENTION/IMPLEADMENT
IA No. 179554/2018 - INTERVENTION/IMPLEADMENT
IA No. 179145/2018 - INTERVENTION/IMPLEADMENT
IA No. 179036/2018 - INTERVENTION/IMPLEADMENT
IA No. 105478/2021 - PERMISSION TO FILE ADDITIONAL
DOCUMENTS/FACTS/ANNEXURES)

WITH

W.P.(C) No. 891/2016 (PIL-W)

W.P.(C) No. 895/2016 (PIL-W)

W.P.(C) No. 899/2016 (PIL-W)

W.P.(C) No. 213/2017 (PIL-W)

Date : 29-10-2021 These matters were called on for hearing today.

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Ms. Sweena Nair, Adv.

Mr. Avijit Mani Tripathi, AOR,
Mr. Shaurya Sahay, Adv.
Ms. Tarini K. Nayak, Adv.

UPON hearing the counsel the Court made the following
O R D E R

I.A. No. 44727/2021 in WRIT PETITION(C) NO. 728/2015

With the directions as mentioned in the signed order, the present application is adjourned to 30.11.2021 for further hearing.

(NEETU SACHDEVA)
COURT MASTER (SH)

(signed order is placed on the file)

(NISHA TRIPATHI)
BRANCH OFFICER



**Government of Odisha
Office of Special Relief Commissioner**

ORDER

(As per direction of Hon'ble High Court of Odisha in WP(C) No.33208 of 2021)

No. 6076 /R&DM(DM)

Date: 31/10/2021

In exercise of the powers under the Disaster Management Act, 2005, the State Government vide order No. 5659/R dated 30.09.2021 passed the following directions for application across the State:

“With a view to protecting the health of general public and to curb the spread of infection, sale and use of fire crackers shall remain prohibited during this festive month.”

The All Odisha Fireworks Dealers Association preferred a writ petition being W.P.(C) No. 33208 of 2021 before the Hon'ble High Court of Orissa challenging the aforesaid order prohibiting the sale and use of fire crackers in Odisha during the festival of Diwali, which is scheduled to be held on 04.11.2021. The Petitioners therein had sought the following reliefs:

“The petitioner, therefore, prays that this Hon'ble Court be graciously pleased to admit this writ application, issue notice to the Opposite Parties and after hearing the parties issue appropriate writ/writs/order/direction/ directing the Opposite Party to modify its direction vide Annexure-2 to allow the sale and use of green firecrackers during the upcoming festive season in terms of the order of the Hon'ble Supreme Court in the case of Arjun Gopal and the order dated 01.12.20 by the National Green Tribunal is O.A.24912020;

AND to pass appropriate order/direction to allow the petitioners a short window to sell their stock of firecrackers within a specified period by granting them the requisite permissions and licenses.

AND to pass such other order/orders and to issue such other writ/writs as would afford complete relief to the petitioner”

The Hon'ble High Court, on 29.10.2021, in the aforesaid writ petition was pleased to pass the following directions:

“6. In view of the above affidavit, and in the light of the fact that the Supreme Court of India is stated to be still seized of the applications in the Arjun Gopal case, this Court issues the following directions:

- (i) The SRC will hear the Petitioners tomorrow, i.e. 30th October, 2021 at 11 am in his office.*
- (ii) The SRC will take into account the orders passed by the Supreme Court of India in the Arjun Gopal case including any order that may be passed today, the guidelines issued by the NGT and further the current status of the prevalence of the Covid-19.*
- (iii) The SRC will conclude the hearing tomorrow itself i.e. 30th October, 2021 by 1 pm and pass a reasoned order on the Petitioners" request on or before 1st November, 2021 10.30 am with a copy thereof being made available to the Petitioners and another being presented before this Court.”*

In obedience to the orders of the Hon'ble High Court, the Special Relief Commissioner granted an opportunity of hearing to the Petitioners in the writ petition at 11:00 am on 30.10.2021. The hearing was attended by the following persons:

1. Sri Pradeep Jena, IAS
Special Relief Commissioner &
Addl. Chief Secretary to Govt.
Disaster Management
2. Sri Soumendra Ku. Priyadarshi, IPS
Commissioner of Police
Bhubaneswar- Cuttack
3. Prof. C.B.K. Mohanty
D.M.E.T
4. Sri Bishikeshan Nayak
Sr. Environmental Scientist
State Pollution Control Board, Bhubaneswar
5. Sri Debakanta Mohanty
Addl. Govt. Advocate
6. Sri Arnav Behera
Advocate
7. Sri Goutam Mukharjee
Senior Advocate for Petitioners

8. Sri Mark Wright
Advocate for Petitioners
9. Sri Manoj Kumar Sahoo
Representative of Odisha Fire Crackers Association
10. Sri Trilochan Pattnaik
Representative of Odisha Fire Crackers Association
11. Sri Bishu Prasad Sahoo
Representative of Odisha Fire Crackers Association
12. Sri Aswini Kumar Behera
Representative of Odisha Fire Crackers Association

Sh. Gautam Mukherji, Senior Advocate, placed his submissions on behalf of the All Odisha Fireworks Dealers Association. He also submitted a convenience compilation of judgments and orders of the Hon'ble Supreme Court, the Hon'ble National Green Tribunal and the Hon'ble High Court of Orissa.

Sh. Mukherji emphasised that use of fireworks is an expression of celebration which is protected as a fundamental right. However, he submitted that the Right to Life and Healthy Living under Article 21 must undeniably be prioritised. He submitted that the State Government ought not to ban fireworks altogether but must make a balanced approach to phase out hazardous fireworks.

He thereafter, referred to the judgment of the Hon'ble Supreme Court in the case of Arjun Gopal v. Union of India, (2019) 13 SCC 523, and the judgment of the Hon'ble National Green Tribunal dated 01.12.2020. He emphasized that whereas, the Hon'ble National Green Tribunal has banned fireworks only in towns/ cities where the ambient air quality falls under the 'poor' category, and restricted the use of fireworks to only green fireworks in towns/ cities where air quality is 'moderate', the air quality in the State of Odisha as per the data from the State Pollution Control Board has never been worse than 'moderate'.

He then referred to the order dated 29.10.2021 passed by the Hon'ble Supreme Court of India wherein the Hon'ble Court has clarified that there is no total ban on use of fireworks. However, only those fireworks which are termed as "green fireworks" have been permitted for sale and use. He also referred to the affidavit filed by PESO before the Hon'ble High Court in W.P.(C) No. 33208 of 2021 wherein PESO has stated that it has no objection to the sale and use of green fireworks conforming to the standards set by Council for Scientific and Industrial Research- National Environmental Engineering Research Institute (CSIR-NEERI).

He further submitted that while the Fireworks Traders have in their stock of both green fireworks and hazardous fireworks, they undertake that only green fireworks shall be put up for sale by them. He finally submitted that there are

‘black sheep’ amongst genuine traders who have been dealing with fake green fireworks, but the presence of a few ‘black sheep’ cannot be used to ban fireworks altogether, thereby gravely affecting the businesses of genuine and honest traders.

Sh. Mukherji requested that the State Government may balance the concerns raised in light of the COVID-19 pandemic, the concerns of Fireworks Traders who are faced with major economic loss, and the concerns of common citizens who wish to express their joy during the festivities. He requested that the State Government may allow the sale and use of green fireworks.

Sh. Saumendra Priyadarshi, Commissioner of Police, Bhubaneswar-Cuttack Police Commissionerate submitted that it will be difficult to regulate retailers so as to ensure that retailers only sell genuine green fireworks obtained from authorised dealers, instead of cheap, hazardous, locally manufactured fireworks.

Dr. CBK Mohanty, DMET, Odisha raised concerns regarding the effect of unregulated hazardous fireworks causing irreparable damage to people recuperating from COVID-19.

The representative of the State Pollution Control Board submitted that in deference to the directions of the Hon’ble Supreme Court to monitor ambient air quality and noise levels seven days prior to, and after Diwali, the State Pollution Control Board has started the said exercise on 29.10.2021.

The Hon’ble Supreme Court in the case of Arjun Gopal v. Union of India, (2019) 13 SCC 523 has recognised that prima facie, the fundamental right to life and healthy living under Article 21 must be prioritised over the fundamental right to carry on trade or business under Article 19(1)(g), as well the fundamental right to carry on religious practice under Article 25. This finding of the Hon’ble Supreme Court is enshrined in paragraphs 41 and 42 of the judgment which are reproduced hereunder:

“41. It may be stressed that in Vellore Citizens' Welfare Forum case [Vellore Citizens' Welfare Forum v. Union of India, (1996) 5 SCC 647] this Court had banned the tanneries when it was found that they were causing immense damage to the environment. Thus, environment protection, which is a facet of Article 21, was given supremacy over the right to carry on business enshrined in Article 19(1)(g). We state at the cost of repetition that right to health, which is recognised as a facet of Article 21 of the Constitution and, therefore, is a fundamental right, assumes greater importance. It is not only the petitioners and other applicants who have intervened in support of the petitioners, but the issue involves millions of persons living in Delhi and NCR, whose right to health is at stake. However, for the time being, without going into this

debate in greater details, our endeavour is to strive at balancing of two rights, namely, right of the petitioners under Article 21 and right of the manufacturers and traders under Article 19(1)(g) of the Constitution.

42. Almost for the same reasons, argument predicated on Article 25 of the Constitution need not detain us. We proceed on the assumption that burning of crackers during Diwali is a part of religious practice. The question is as to whether it should be allowed to be continued in the present form without any regulatory measures, as a part of religious practice, even if it is proving to be a serious health hazard. We feel that Article 25 is subject to Article 21 and if a particular religious practice is threatening the health and lives of people, such practice is not entitled to protection under Article 25. In any case, balancing can be done here as well by allowing the practice subject to those conditions which ensure nil or negligible effect on health.”

Finally, the Hon’ble Supreme Court passed the following directions for regulation of fireworks in paragraph 48 of the judgment which are reproduced hereunder:

“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:

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 [Arjun Gopal v. Union of India, (2017) 16 SCC 280] , the directions issued and restrictions imposed in the order passed by this Court on 18-7-2005 in Noise Pollution (5) [Noise Pollution (5), In re, (2005) 5 SCC 733] shall continue to be in force.

48.12. Directions 4 to 9 and 11 contained in the order dated 12-9-2017 [Arjun Gopal v. Union of India, (2017) 16 SCC 280] 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.”

It may be pertinent to state herein that the judgment of the Hon'ble Supreme Court in Arjun Gopal (supra) was issued prior to the COVID-19 pandemic era.

Subsequently, on 03.03.2020, the Hon'ble Supreme Court in W.P.(C) No. 728 of 2015 being Arjun Gopal & Ors. v. Union of India & Ors., took cognizance of the issue that several manufacturers of fireworks had been wilfully flouting the directions laid down by it in Arjun Gopal (supra) and have continued to use banned items, namely Barium and Barium salts. The Hon'ble Supreme Court



directed an investigation by the Central Bureau of Investigation (CBI) into the alleged violations of the Hon'ble Supreme Court's orders.

In the meantime, taking into account the effect of air pollution on COVID-19, a disease which primarily affects the respiratory system, the Hon'ble National Green Tribunal, on 01.12.2020 also passed the following directions, supplementing the directions passed by the Hon'ble Supreme Court:

“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 Court.*
- 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 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, PM2.5 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*
 - 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"*

It may be stated herein that undeniably, the second wave of the COVID-19 pandemic placed a greater strain on the people as well as the resources of the State than the first wave. Indeed, the number of casualties from the second wave are much higher than those of the first wave. Hundreds of people who have recovered from COVID-19, which affects the respiratory system, are convalescing and any increase in air pollution levels (however mild) can cause irreparable damage to the respiratory system of COVID-19 survivors. Needless to state, close proximity and crowding during festivities, exposure to harmful chemical pollutants from fireworks also increases the risk of contracting COVID-19. It was in this light that the State Government had passed the earlier direction to ban the sale and use of fireworks across the State.

Now, on 29.10.2021, the Hon'ble Supreme Court, after hearing various stakeholders, including representatives of Fireworks Traders, has reiterated the earlier directions passed by it in Arjun Gopal (supra). The relevant paragraphs from the order dated 29.10.2021 passed by the Hon'ble Supreme Court in W.P.(C) No. 728 of 2015 are reproduced hereunder:

"6. It is unfortunate that despite the various directions issued by this Court referred to hereinabove, there is a blatant violation of

*various directions issued by this Court and it is alleged that manufacture, sale and use of banned fireworks have been continued. Even though they are banned, the manufacturing, selling and using of joined firecrackers have been continued and the same is being used in blatant violation of the directions issued by this Court. **It is reported that even under the guise of 'green crackers' banned chemicals firecrackers are being sold and there is a mislabelling on the boxes and even the QR codes provided on the boxes of 'green crackers' are alleged to be fake.***

7. There is a report submitted by the CBI submitted pursuant to the earlier directions/orders passed by this Court and it prima facie appears that there is a blatant violation of the directions issued by this Court by the respective manufacturers and the banned firecrackers are being sold and used in the markets. The allegations, if found to be true, are very serious and cannot be tolerated. Everybody including the implementing agencies are bound to see that the directions issued by the Courts are implemented and followed in its true spirit and in toto. It prima facie appears that the implementing agencies of the concerned States either lack desire to implement the directions issued by this Court or they close their eyes for whatever reasons. Despite the use of Barium Salts in the firecrackers was banned; manufacture and use of the joined fireworks have been banned and transporting and selling them across the country have also been banned physically and/or online, the banned firecrackers are being manufactured, transported, sold and used. From the earlier directions, it can be seen that even the responsibility to see that the directions issued by this Court are complied with by all concerned was on the concerned District Magistrates and the Police officials.

8. Considering the fact that earlier directions issued by this Court which have been issued by this Court from time to time in the larger public interest and having found that such use of banned fireworks affects the health of the other innocent citizens including the senior citizens and the children, it is the duty of all the States/State Agencies to see that the directions issued by this Court in the earlier orders reproduced hereinabove are strictly complied with. No authority can be permitted the violation of the directions issued by this Court and permit banned firecrackers under the guise of celebration. Celebration cannot be at the cost of the other's health. Under the guise of celebration, nobody can be permitted to infringe the right to health of the others, guaranteed

under Article 21 of the Constitution of India and nobody can be permitted to play with the life of the others, more particularly the senior citizens and the children. It is made clear that there is no total ban on use of firecrackers. Only those firecrackers are banned, as directed hereinabove, which are found to be injurious to health and affecting the health of the citizens, more particularly the senior citizens and the children.

9. Before passing any further orders and while adjourning the present application, we again reiterate the directions issued by this Court earlier reproduced hereinabove including banning the use of Barium Salts in the firecrackers and manufacturing and selling joined firecrackers and other directions issued by this Court reproduced hereinabove. We direct all the States/Union Territories to see that the directions issued earlier by this Court and issued by this Court today are strictly complied with in its true spirit and in toto. Any lapse on the part of the State Governments/State Agencies and Union Territories shall be viewed very seriously and if it is found that any banned firecrackers are manufactured, sold and used in any particular area, the Chief Secretary of the concerned State(s), the Secretary (Homes) of the concerned State(s) and the Commissioner of Police of the concerned area, District Superintendent of Police of the concerned area and the SHO/Police Officer in-charge of the concerned police station shall be held personally liable. Nobody can be permitted to flout and/or disobey the directions issued by this Court/Courts. Any wilful and deliberate disobedience shall have to be viewed very seriously.”

The Hon’ble Supreme Court has clarified that there is no total ban on use of fireworks. However, only those fireworks which are termed as “green fireworks” have been permitted for sale and use.

Even in respect of green fireworks, the Hon’ble Supreme Court has raised the concern that “*even under the guise of ‘green crackers’ banned chemicals firecrackers are being sold and there is a mislabelling on the boxes and even the QR codes provided on the boxes of ‘green crackers’ are alleged to be fake*”.

The Hon’ble Supreme Court has made it clear that it is for the “*States/State Agencies to see that the directions issued by this Court in the earlier orders reproduced hereinabove are strictly complied with*”.

Further, the Ministry of Environment, Forest and Climate Change, in their Affidavit dated 29.10.2021 filed before the Hon’ble High Court in W.P.(C) No.



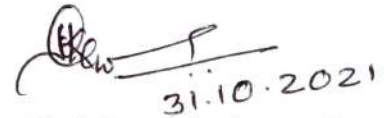
33208 of 2021 in paragraph 5 have stated that PESO grants an approval and final authorisation to manufacturers of green fireworks.

In light of the order dated 29.10.2021 passed by the Hon'ble Supreme Court, the following directions are passed in respect of sale and use of fireworks during the festival of Diwali:

- A. Sale and use of fireworks shall be limited to only "green fireworks" that conform to the definition and formulation as proposed by CSIR-NEERI.
- B. Sale and use of other fireworks shall be completely banned. Sale and use of joined firecrackers (series crackers or *laris*) shall also remain banned.
- C. Only those traders/ dealers who obtain and produce a certificate from the PESO, after due inspection of their existing stock, certifying that the green fireworks stocks in their possession conform to the definition and formulation proposed by CSIR-NEERI and are genuine shall be allowed to sell their products.
- D. Authenticated copy of the PESO certificate granted after due inspection of existing stocks lying in possession of the traders/ dealers shall be deposited with the District Administration/ Police Commissioner for getting permission to sell the green fireworks.
- E. Traders/ dealers who fail to obtain and produce the certificate from PESO shall not be allowed to sell their products, keeping the "precautionary principle" in mind. Mere labelling of fireworks boxes as "green fireworks" and providing QR codes shall not entitle any trader/ dealer to sell the same.
- F. Only those retailers who obtain a license from the concerned authorities under the provisions of the Indian Explosives Act, 1884 shall be allowed to sell green fireworks.
- G. Retailers shall be allowed to set up shops and sell green fireworks only in special zones designated by the respective District Administrations/ Police Commissionerate.
- H. Green Fireworks shall only be sold at designated sites and all COVID-19 protocols shall be strictly followed. Sale of Fireworks on the internet shall be strictly banned.



- I. Wholesale Traders and Retailers shall have to produce original invoices on demand by the District Administration/ Police Commissionerate.
- J. The use of fireworks shall be limited to 8:00 pm to 10:00 pm on Diwali day, i.e., 04.11.2021 only. Use of fireworks beyond the said time frame shall be visited with strict penal action.
- K. Violation of any of the aforesaid conditions shall be dealt with strictly and penal action shall be taken in accordance with law.
- L. The District Administration/ Police Commissionerate is directed to ensure strict compliance with the above conditions.
- M. The District Administration/ Police Commissionerate shall ensure full & complete compliance of the orders above through proper verification of the documents as mentioned supra and proper enforcement so as to ensure no spurious/ unauthorised/ banned fire crackers are sold anywhere within their jurisdiction. Further, the local officers shall be personally liable for violations of the orders of Hon'ble Apex Court, Hon'ble National Green Tribunal and Hon'ble High Court of Odisha.

A handwritten signature in black ink, followed by a horizontal line and the date "31.10.2021" written below it.

Special Relief Commissioner &
Additional Chief Secretary to Govt.
(Disaster Management)

BEFORE THE NATIONAL GREEN TRIBUNAL

Original Application No. _____ of 2024

In re:

SANJAY KUMAR NAYAK

APPLICANT

Versus

STATE OF ODISHA AND OTHERS

RESPONDENTS

KNOW ALL to whom these present shall come I Sanjay Kumar Nayak S/o Maheswar Nayak, Aged about 46 years At/Po-Babanpur, PS- Kotinada, Dist-Ganjam, Odisha, 761111 the above named APPLICANT do hereby appoint (herein after called the advocate/s) to be my/our Advocate in the above noted case authorized him :-**Sankar Prasad Pani**, Advocates, Plot No 2132/4814 B, Nageswartangi, Bhubaneswar, 751002, Mob-no.9437279278, Email-sankarprasadpani@gmail.com Enrollment no. O-785/07 and **Ashutosh Padhy** Enrollment no.O-1018/23.

To act, appear and plead in the above-noted case in this Court or in any other Court in which the same may be tried or heard and also in the appellate Court including High Court subject to payment of fees separately for each Court by me/ us. To sign, file verify and present pleadings, appeals cross objections or petitions for execution review, revision, withdrawal, compromise or other petitions or affidavits or other documents as may be deemed necessary or proper for the prosecution of the said case in all its stages. To file and take back documents to admit and/or deny the documents of opposite party.

To withdraw or compromise the said case or submit to arbitration any differences or disputes that may arise touching or in any manner relating to the said case. To take execution proceedings. The deposit, draw and receive money, cheques, cash and grant receipts thereof and to do all other acts and things which may be necessary to be done for the progress and in the course of the prosecution of the said case. To appoint and instruct any other Legal Practitioner, authorizing him to exercise the power and authority hereby conferred upon the Advocate whenever he may think it to do so and to sign the Power of Attorney on our behalf.

And I/We the undersigned do hereby agree to ratify and confirm all acts done by the Advocate or his substitute in the matter as my/our own acts, as if done by me/us to all intents and purposes.

And I/We undertake that I / we or my /our duly authorized agent would appear in the Court on all hearings and will inform the Advocates for appearance when the case is called.

And I /we undersigned do hereby agree not to hold the advocate or his substitute responsible for the result of the said case. The adjournment costs whenever ordered by the Court shall be of the Advocate, which he shall receive and retain himself.

And I /we the undersigned do hereby agree that in the event of the whole or part of the fee agreed by me/us to be paid to the Advocate remaining unpaid he shall be entitled to withdraw from the prosecution of the said case until the same is paid up. The fee settled is only for the above case and above Court. I/We hereby agree that once the fee is paid. I /we will not be entitled for the refund of the same in any case whatsoever. If the case lasts for more than three years, the advocate shall be entitled for additional fee equivalent to half of the agreed fee for every addition three years or part thereof.

IN WITNESS WHEREOF I/We do hereunto set my /our hand to these presents the contents of which have been understood by me/us on this 22nd day of October 2024.

Accepted subject to the terms of fees.


Advocate




Client